**396377** 2014 $DW_{113}$ 4 6.9 84°.93 8°.7/15.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 36.78 | −33 42.4 | 2.420 | 3.079 | 15.6 | 20.9 |
| 3 12 | 13 30.32 | −35 4.2 | 2.341 | 3.098 | 13.7 | 20.8 |
| 3 22 | 13 21.45 | −36 5.6 | 2.282 | 3.116 | 11.8 | 20.7 |
| 4 1 | 13 10.82 | −36 42.2 | 2.247 | 3.134 | 10.0 | 20.6 |
| 4 11 | 12 59.42 | −36 52.6 | 2.237 | 3.151 | 8.8 | 20.5 |
| 4 21 | 12 48.35 | −36 38.3 | 2.253 | 3.169 | 8.9 | 20.6 |
| 5 1 | 12 38.66 | −36 4.3 | 2.295 | 3.187 | 9.9 | 20.7 |
| 5 11 | 12 31.14 | −35 17.8 | 2.361 | 3.204 | 11.6 | 20.8 |

**403862** 2011 $UT_{389}$ 4 6.9 174°.62 2°.5/ 9.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.04 | −15 14.6 | 1.879 | 2.667 | 15.4 | 22.3 |
| 3 12 | 13 27.58 | −15 16.2 | 1.792 | 2.670 | 12.2 | 22.1 |
| 3 22 | 13 19.73 | −15 1.1 | 1.728 | 2.672 | 8.5 | 21.9 |
| 4 1 | 13 10.16 | −14 30.2 | 1.689 | 2.674 | 4.5 | 21.7 |
| 4 11 | 12 59.88 | −13 47.0 | 1.678 | 2.675 | 2.7 | 21.5 |
| 4 21 | 12 50.02 | −12 57.0 | 1.695 | 2.675 | 6.0 | 21.8 |
| 5 1 | 12 41.61 | −12 7.1 | 1.739 | 2.675 | 10.0 | 22.0 |
| 5 11 | 12 35.38 | −11 23.6 | 1.808 | 2.674 | 13.6 | 22.2 |

**369665** 2011 $HF_{14}$ 4 6.9 82°.45 0°.9/ 5.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.47 | − 9 19.7 | 1.906 | 2.729 | 13.9 | 20.4 |
| 3 12 | 13 20.86 | − 8 6.4 | 1.832 | 2.737 | 10.5 | 20.2 |
| 3 22 | 13 15.29 | − 6 37.8 | 1.781 | 2.745 | 6.6 | 19.9 |
| 4 1 | 13 8.41 | − 4 59.6 | 1.757 | 2.753 | 2.4 | 19.7 |
| 4 11 | 13 1.08 | − 3 19.7 | 1.762 | 2.760 | 2.4 | 19.7 |
| 4 21 | 12 54.19 | − 1 46.3 | 1.796 | 2.768 | 6.5 | 20.0 |
| 5 1 | 12 48.56 | − 0 26.6 | 1.856 | 2.776 | 10.4 | 20.2 |
| 5 11 | 12 44.74 | + 0 34.7 | 1.939 | 2.784 | 13.7 | 20.4 |

**25410** Abejar 4 6.9 115°.49 2°.7/ 9.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.92 | −17 13.0 | 1.837 | 2.624 | 15.8 | 19.4 |
| 3 12 | 13 25.10 | −16 55.0 | 1.763 | 2.639 | 12.5 | 19.2 |
| 3 22 | 13 18.04 | −16 17.4 | 1.710 | 2.653 | 8.7 | 19.0 |
| 4 1 | 13 9.47 | −15 22.1 | 1.683 | 2.667 | 4.7 | 18.8 |
| 4 11 | 13 0.39 | −14 14.1 | 1.684 | 2.681 | 2.8 | 18.7 |
| 4 21 | 12 51.84 | −13 0.2 | 1.713 | 2.694 | 5.8 | 18.9 |
| 5 1 | 12 44.77 | −11 48.3 | 1.768 | 2.707 | 9.6 | 19.1 |
| 5 11 | 12 39.82 | −10 45.3 | 1.847 | 2.719 | 13.1 | 19.4 |

**384024** 2008 $UJ_{102}$ 4 6.9 208°.16 1°.1/ 8.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.32 | −13 20.6 | 2.208 | 3.006 | 13.1 | 21.8 |
| 3 12 | 13 22.14 | −12 51.6 | 2.116 | 3.003 | 10.2 | 21.6 |
| 3 22 | 13 16.10 | −12 7.8 | 2.047 | 2.999 | 6.8 | 21.4 |
| 4 1 | 13 8.74 | −11 11.6 | 2.005 | 2.995 | 3.1 | 21.1 |
| 4 11 | 13 0.85 | −10 7.5 | 1.991 | 2.991 | 1.6 | 21.0 |
| 4 21 | 12 53.27 | − 9 1.2 | 2.007 | 2.987 | 5.2 | 21.2 |
| 5 1 | 12 46.78 | − 7 58.8 | 2.049 | 2.982 | 8.8 | 21.4 |
| 5 11 | 12 41.99 | − 7 5.7 | 2.117 | 2.977 | 12.1 | 21.6 |

**497989** 2007 $DD_{40}$ 4 7.0 347°.94 1°.0/ 6.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.97 | − 5 34.3 | 1.294 | 2.147 | 17.4 | 20.5 |
| 3 12 | 13 23.04 | − 5 27.7 | 1.218 | 2.138 | 13.3 | 20.3 |
| 3 22 | 13 17.25 | − 5 9.0 | 1.161 | 2.130 | 8.5 | 20.0 |
| 4 1 | 13 9.31 | − 4 42.3 | 1.127 | 2.123 | 3.2 | 19.6 |
| 4 11 | 13 0.46 | − 4 14.0 | 1.118 | 2.117 | 2.9 | 19.6 |
| 4 21 | 12 52.06 | − 3 51.2 | 1.133 | 2.113 | 8.3 | 19.9 |
| 5 1 | 12 45.42 | − 3 39.9 | 1.171 | 2.110 | 13.4 | 20.1 |
| 5 11 | 12 41.43 | − 3 44.3 | 1.228 | 2.108 | 17.8 | 20.4 |

**421575** 2014 $OA_{194}$ 4 7.0 232°.04 1°.0/ 6.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.87 | − 7 12.7 | 1.925 | 2.742 | 14.0 | 22.9 |
| 3 12 | 13 25.95 | − 6 33.0 | 1.826 | 2.728 | 10.7 | 22.7 |
| 3 22 | 13 18.74 | − 5 40.3 | 1.751 | 2.713 | 6.8 | 22.4 |
| 4 1 | 13 9.82 | − 4 38.5 | 1.702 | 2.697 | 2.6 | 22.1 |
| 4 11 | 13 0.12 | − 3 33.8 | 1.682 | 2.680 | 2.5 | 22.0 |
| 4 21 | 12 50.67 | − 2 32.8 | 1.691 | 2.663 | 6.9 | 22.3 |
| 5 1 | 12 42.47 | − 1 42.1 | 1.726 | 2.644 | 11.1 | 22.5 |
| 5 11 | 12 36.31 | − 1 6.5 | 1.784 | 2.625 | 14.9 | 22.7 |

**116200** 2003 $XY_{14}$ 4 7.0 264°.77 3°.3/ 4.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 39.05 | + 2 6.9 | 1.814 | 2.637 | 14.5 | 18.8 |
| 3 12 | 13 32.44 | + 2 7.5 | 1.712 | 2.615 | 11.2 | 18.5 |
| 3 22 | 13 23.06 | + 2 9.4 | 1.632 | 2.593 | 7.4 | 18.3 |
| 4 1 | 13 11.54 | + 2 8.6 | 1.580 | 2.570 | 3.8 | 18.0 |
| 4 11 | 12 58.95 | + 2 0.1 | 1.557 | 2.547 | 4.5 | 18.0 |
| 4 21 | 12 46.56 | + 1 40.4 | 1.563 | 2.524 | 8.5 | 18.2 |
| 5 1 | 12 35.62 | + 1 7.2 | 1.596 | 2.500 | 12.8 | 18.4 |
| 5 11 | 12 27.07 | + 0 19.9 | 1.651 | 2.475 | 16.6 | 18.5 |

**299860** 2006 $SK_{267}$ 4 7.0 121°.96 1°.5/ 8.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.31 | −13 58.9 | 2.634 | 3.419 | 11.6 | 21.2 |
| 3 12 | 13 21.75 | −13 46.1 | 2.552 | 3.430 | 9.0 | 21.0 |
| 3 22 | 13 15.66 | −13 21.5 | 2.495 | 3.441 | 6.1 | 20.8 |
| 4 1 | 13 8.53 | −12 46.7 | 2.465 | 3.452 | 3.0 | 20.7 |
| 4 11 | 13 1.04 | −12 5.1 | 2.464 | 3.462 | 1.7 | 20.6 |
| 4 21 | 12 53.87 | −11 20.6 | 2.492 | 3.472 | 4.3 | 20.8 |
| 5 1 | 12 47.66 | −10 37.7 | 2.549 | 3.482 | 7.3 | 21.0 |
| 5 11 | 12 42.90 | −10 0.2 | 2.632 | 3.492 | 10.0 | 21.2 |

**497975** 2007 $CZ_{10}$ 4 7.0 119°.28 3°.2/ 2.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 24.25 | + 2 44.2 | 2.843 | 3.674 | 9.6 | 22.2 |
| 3 12 | 13 20.01 | + 3 42.3 | 2.778 | 3.687 | 7.2 | 22.1 |
| 3 22 | 13 14.45 | + 4 42.7 | 2.740 | 3.700 | 4.8 | 21.9 |
| 4 1 | 13 8.04 | + 5 40.6 | 2.730 | 3.713 | 3.2 | 21.9 |
| 4 11 | 13 1.37 | + 6 31.6 | 2.750 | 3.726 | 4.1 | 21.9 |
| 4 21 | 12 55.02 | + 7 12.1 | 2.799 | 3.738 | 6.4 | 22.1 |
| 5 1 | 12 49.52 | + 7 39.4 | 2.875 | 3.750 | 8.7 | 22.3 |
| 5 11 | 12 45.28 | + 7 52.7 | 2.973 | 3.761 | 10.8 | 22.4 |

**439122** 2011 $SH_{152}$ 4 7.0 172°.64 0°.1/ 6.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.19 | − 7 55.4 | 2.865 | 3.668 | 10.3 | 22.3 |
| 3 12 | 13 21.55 | − 7 35.7 | 2.777 | 3.671 | 7.8 | 22.1 |
| 3 22 | 13 15.49 | − 7 8.3 | 2.714 | 3.673 | 5.0 | 21.9 |
| 4 1 | 13 8.47 | − 6 35.4 | 2.680 | 3.674 | 1.9 | 21.7 |
| 4 11 | 13 1.08 | − 6 0.4 | 2.676 | 3.675 | 1.3 | 21.6 |
| 4 21 | 12 53.95 | − 5 26.8 | 2.702 | 3.676 | 4.5 | 21.9 |
| 5 1 | 12 47.66 | − 4 58.0 | 2.756 | 3.677 | 7.4 | 22.1 |
| 5 11 | 12 42.68 | − 4 36.7 | 2.836 | 3.677 | 9.9 | 22.2 |

**42619** 1998 $FE_{12}$ 4 7.0 325°.60 7°.3/31.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 21.16 | + 2 46.1 | 1.169 | 2.047 | 17.1 | 19.2 |
| 3 12 | 13 19.69 | + 4 33.2 | 1.091 | 2.025 | 13.1 | 18.9 |
| 3 22 | 13 15.29 | + 6 33.1 | 1.034 | 2.004 | 9.2 | 18.6 |
| 4 1 | 13 8.63 | + 8 33.1 | 1.000 | 1.983 | 7.3 | 18.4 |
| 4 11 | 13 0.91 | +10 17.8 | 0.989 | 1.963 | 9.6 | 18.5 |
| 4 21 | 12 53.56 | +11 34.1 | 1.000 | 1.945 | 14.1 | 18.6 |
| 5 1 | 12 47.96 | +12 14.0 | 1.030 | 1.928 | 18.7 | 18.8 |
| 5 11 | 12 45.09 | +12 15.9 | 1.076 | 1.912 | 22.8 | 19.1 |

**165352** 2000 $WQ_{26}$ 4 7.0 71°.52 0°.9/ 7.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.96 | −11 32.7 | 1.434 | 2.257 | 17.7 | 20.8 |
| 3 12 | 13 26.27 | −11 13.1 | 1.376 | 2.277 | 13.6 | 20.6 |
| 3 22 | 13 18.93 | −10 35.7 | 1.338 | 2.297 | 8.8 | 20.3 |
| 4 1 | 13 9.83 | − 9 44.3 | 1.325 | 2.317 | 3.7 | 20.1 |
| 4 11 | 13 0.22 | − 8 45.7 | 1.337 | 2.338 | 2.0 | 20.0 |
| 4 21 | 12 51.37 | − 7 48.0 | 1.376 | 2.358 | 6.9 | 20.4 |
| 5 1 | 12 44.36 | − 6 58.7 | 1.440 | 2.378 | 11.5 | 20.7 |
| 5 11 | 12 39.86 | − 6 23.3 | 1.526 | 2.398 | 15.3 | 21.0 |

**502162** 2015 $BQ_{57}$ 4 7.0 113°.79 1°.0/ 6.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.29 | − 6 4.6 | 1.977 | 2.798 | 13.5 | 21.8 |
| 3 12 | 13 24.41 | − 5 36.9 | 1.905 | 2.809 | 10.2 | 21.6 |
| 3 22 | 13 17.52 | − 4 59.7 | 1.857 | 2.820 | 6.4 | 21.4 |
| 4 1 | 13 9.27 | − 4 16.9 | 1.835 | 2.830 | 2.4 | 21.1 |
| 4 11 | 13 0.57 | − 3 33.6 | 1.842 | 2.840 | 2.3 | 21.2 |
| 4 21 | 12 52.34 | − 2 55.3 | 1.877 | 2.850 | 6.3 | 21.4 |
| 5 1 | 12 45.40 | − 2 26.4 | 1.939 | 2.859 | 10.0 | 21.7 |
| 5 11 | 12 40.37 | − 2 10.1 | 2.023 | 2.868 | 13.2 | 21.9 |

**265794** 2005 $WK_{180}$ 4 7.0 184°.55 2°.4/ 4.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.34 | − 2 27.5 | 2.098 | 2.927 | 12.6 | 20.6 |
| 3 12 | 13 23.66 | − 1 41.4 | 2.018 | 2.927 | 9.5 | 20.4 |
| 3 22 | 13 17.06 | − 0 47.8 | 1.962 | 2.927 | 6.0 | 20.2 |
| 4 1 | 13 9.13 | + 0 8.3 | 1.934 | 2.926 | 2.8 | 20.0 |
| 4 11 | 13 0.70 | + 1 1.1 | 1.934 | 2.925 | 3.5 | 20.0 |
| 4 21 | 12 52.63 | + 1 45.1 | 1.962 | 2.924 | 7.0 | 20.2 |
| 5 1 | 12 45.74 | + 2 15.9 | 2.017 | 2.922 | 10.5 | 20.4 |
| 5 11 | 12 40.63 | + 2 31.3 | 2.095 | 2.920 | 13.5 | 20.6 |

**169021** 2001 $DP_{90}$ 4 7.0 39°.13 7°.1/12.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.38 | −23 3.2 | 1.254 | 2.047 | 21.4 | 19.3 |
| 3 12 | 13 25.75 | −23 46.4 | 1.196 | 2.063 | 17.7 | 19.1 |
| 3 22 | 13 18.96 | −24 0.7 | 1.155 | 2.081 | 13.6 | 18.9 |
| 4 1 | 13 9.95 | −23 43.8 | 1.134 | 2.100 | 9.5 | 18.7 |
| 4 11 | 13 0.18 | −22 58.6 | 1.136 | 2.119 | 7.2 | 18.6 |
| 4 21 | 12 51.21 | −21 52.8 | 1.161 | 2.139 | 8.5 | 18.8 |
| 5 1 | 12 44.36 | −20 37.7 | 1.210 | 2.159 | 12.0 | 19.0 |
| 5 11 | 12 40.47 | −19 24.9 | 1.280 | 2.180 | 15.8 | 19.3 |

**381569** 2008 $UG_{80}$ 4 7.0 183°.00 3°.5/10.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.05 | −20 11.7 | 2.265 | 3.029 | 13.8 | 21.1 |
| 3 12 | 13 22.74 | −20 5.4 | 2.172 | 3.030 | 11.2 | 20.9 |
| 3 22 | 13 16.51 | −19 41.2 | 2.101 | 3.030 | 8.2 | 20.7 |
| 4 1 | 13 8.94 | −18 59.7 | 2.056 | 3.030 | 5.2 | 20.5 |
| 4 11 | 13 0.83 | −18 3.8 | 2.039 | 3.029 | 3.5 | 20.4 |
| 4 21 | 12 53.03 | −16 58.5 | 2.050 | 3.028 | 5.3 | 20.5 |
| 5 1 | 12 46.36 | −15 50.1 | 2.088 | 3.027 | 8.3 | 20.7 |
| 5 11 | 12 41.42 | −14 45.1 | 2.152 | 3.026 | 11.4 | 20.9 |

**502964** 2015 $EP_{72}$ 4 7.0 341°.70 0°.0/ 6.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.68 | −10 21.1 | 1.596 | 2.429 | 15.7 | 20.3 |
| 3 12 | 13 20.05 | − 9 38.3 | 1.512 | 2.421 | 12.0 | 20.0 |
| 3 22 | 13 15.10 | − 8 37.4 | 1.450 | 2.414 | 7.7 | 19.8 |
| 4 1 | 13 8.46 | − 7 22.8 | 1.412 | 2.407 | 3.0 | 19.5 |
| 4 11 | 13 1.13 | − 6 2.0 | 1.400 | 2.400 | 2.0 | 19.4 |
| 4 21 | 12 54.18 | − 4 43.6 | 1.415 | 2.395 | 7.0 | 19.7 |
| 5 1 | 12 48.62 | − 3 36.0 | 1.455 | 2.390 | 11.5 | 19.9 |
| 5 11 | 12 45.19 | − 2 45.4 | 1.515 | 2.386 | 15.5 | 20.1 |

**28702** 2000 $GH_{91}$ 4 7.0 268°.40 3°.1/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 25.73 | − 3 4.0 | 1.773 | 2.613 | 14.0 | 17.6 |
| 3 12 | 13 22.15 | − 1 48.8 | 1.685 | 2.601 | 10.6 | 17.4 |
| 3 22 | 13 16.34 | − 0 21.4 | 1.621 | 2.588 | 6.7 | 17.1 |
| 4 1 | 13 8.93 | + 1 11.4 | 1.584 | 2.576 | 3.4 | 16.9 |
| 4 11 | 13 0.82 | + 2 40.8 | 1.574 | 2.563 | 4.6 | 16.9 |
| 4 21 | 12 53.03 | + 3 58.3 | 1.591 | 2.550 | 8.6 | 17.1 |
| 5 1 | 12 46.53 | + 4 57.1 | 1.633 | 2.537 | 12.6 | 17.3 |
| 5 11 | 12 42.03 | + 5 33.7 | 1.696 | 2.524 | 16.1 | 17.5 |

**413477** 2005 $GR_{182}$ 4 7.0 31°.86 2°.5/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.00 | − 3 16.3 | 1.259 | 2.113 | 17.7 | 20.5 |
| 3 12 | 13 25.16 | − 2 48.3 | 1.200 | 2.122 | 13.4 | 20.2 |
| 3 22 | 13 18.43 | − 2 9.8 | 1.162 | 2.131 | 8.4 | 20.0 |
| 4 1 | 13 9.72 | − 1 27.3 | 1.147 | 2.142 | 3.5 | 19.7 |
| 4 11 | 13 0.36 | − 0 48.8 | 1.157 | 2.153 | 4.1 | 19.8 |
| 4 21 | 12 51.73 | − 0 21.6 | 1.191 | 2.164 | 9.0 | 20.1 |
| 5 1 | 12 45.05 | − 0 10.7 | 1.248 | 2.177 | 13.7 | 20.4 |
| 5 11 | 12 41.04 | − 0 18.5 | 1.325 | 2.189 | 17.6 | 20.6 |

**430466** 2001 $QZ_{196}$ 4 7.0 260°.88 2°.3/ 4.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.58 | − 1 17.0 | 2.429 | 3.254 | 11.2 | 21.7 |
| 3 12 | 13 23.00 | − 0 42.2 | 2.327 | 3.234 | 8.5 | 21.5 |
| 3 22 | 13 16.64 | − 0 1.6 | 2.251 | 3.214 | 5.4 | 21.2 |
| 4 1 | 13 9.00 | + 0 41.0 | 2.202 | 3.194 | 2.7 | 21.0 |
| 4 11 | 13 0.78 | + 1 20.6 | 2.183 | 3.173 | 3.3 | 21.0 |
| 4 21 | 12 52.74 | + 1 53.0 | 2.192 | 3.152 | 6.5 | 21.2 |
| 5 1 | 12 45.64 | + 2 14.2 | 2.229 | 3.131 | 9.8 | 21.4 |
| 5 11 | 12 40.07 | + 2 22.0 | 2.289 | 3.109 | 12.7 | 21.5 |

**169191** 2001 $RF_{30}$ 4 7.0 143°.34 0°.8/ 6.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.19 | − 6 17.0 | 2.505 | 3.320 | 11.2 | 21.0 |
| 3 12 | 13 21.72 | − 5 43.3 | 2.426 | 3.326 | 8.5 | 20.8 |
| 3 22 | 13 15.67 | − 5 1.3 | 2.371 | 3.333 | 5.3 | 20.6 |
| 4 1 | 13 8.57 | − 4 14.5 | 2.344 | 3.339 | 2.0 | 20.4 |
| 4 11 | 13 1.10 | − 3 27.3 | 2.347 | 3.345 | 2.0 | 20.4 |
| 4 21 | 12 53.96 | − 2 44.0 | 2.380 | 3.351 | 5.3 | 20.6 |
| 5 1 | 12 47.79 | − 2 8.6 | 2.440 | 3.356 | 8.4 | 20.8 |
| 5 11 | 12 43.08 | − 1 43.9 | 2.524 | 3.361 | 11.1 | 21.0 |

**238972** 2006 $BN_{154}$ 4 7.0 212°.38 3°.0/ 3.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.79 | − 1 3.5 | 2.082 | 2.916 | 12.5 | 20.9 |
| 3 12 | 13 22.54 | − 0 8.1 | 2.001 | 2.913 | 9.4 | 20.6 |
| 3 22 | 13 16.37 | + 0 54.3 | 1.945 | 2.910 | 6.0 | 20.4 |
| 4 1 | 13 8.89 | + 1 58.1 | 1.915 | 2.906 | 3.2 | 20.2 |
| 4 11 | 13 0.89 | + 2 57.0 | 1.915 | 2.902 | 4.2 | 20.3 |
| 4 21 | 12 53.23 | + 3 45.2 | 1.942 | 2.898 | 7.5 | 20.5 |
| 5 1 | 12 46.72 | + 4 18.4 | 1.995 | 2.894 | 10.9 | 20.7 |
| 5 11 | 12 41.96 | + 4 34.4 | 2.070 | 2.889 | 13.9 | 20.9 |

**179184** 2001 $TT_{144}$ 4 7.0 249°.35 3°.3/ 3.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.60 | + 2 22.0 | 2.246 | 3.078 | 11.8 | 20.3 |
| 3 12 | 13 23.75 | + 2 50.7 | 2.165 | 3.074 | 8.9 | 20.1 |
| 3 22 | 13 17.07 | + 3 22.0 | 2.109 | 3.071 | 5.8 | 19.9 |
| 4 1 | 13 9.14 | + 3 51.2 | 2.081 | 3.068 | 3.5 | 19.8 |
| 4 11 | 13 0.73 | + 4 13.5 | 2.081 | 3.065 | 4.3 | 19.8 |
| 4 21 | 12 52.66 | + 4 25.3 | 2.109 | 3.062 | 7.2 | 20.0 |
| 5 1 | 12 45.70 | + 4 24.0 | 2.164 | 3.058 | 10.4 | 20.2 |
| 5 11 | 12 40.41 | + 4 8.5 | 2.241 | 3.055 | 13.1 | 20.3 |

**275996** 2001 $XZ_{165}$ 4 7.0 96°.77 3°.6/ 3.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.63 | + 0 15.3 | 1.828 | 2.667 | 13.7 | 20.9 |
| 3 12 | 13 24.02 | + 1 9.2 | 1.764 | 2.678 | 10.3 | 20.7 |
| 3 22 | 13 17.32 | + 2 8.7 | 1.724 | 2.689 | 6.6 | 20.5 |
| 4 1 | 13 9.23 | + 3 7.3 | 1.710 | 2.699 | 3.8 | 20.4 |
| 4 11 | 13 0.70 | + 3 58.2 | 1.724 | 2.710 | 4.8 | 20.5 |
| 4 21 | 12 52.69 | + 4 35.7 | 1.766 | 2.721 | 8.2 | 20.7 |
| 5 1 | 12 46.08 | + 4 56.1 | 1.832 | 2.731 | 11.7 | 20.9 |
| 5 11 | 12 41.44 | + 4 58.2 | 1.920 | 2.741 | 14.7 | 21.1 |

**118376** 1999 $HE_{4}$ 4 7.0 71°.93 0°.1/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.99 | − 9 1.5 | 1.714 | 2.538 | 15.2 | 20.4 |
| 3 12 | 13 23.76 | − 8 32.9 | 1.643 | 2.547 | 11.6 | 20.2 |
| 3 22 | 13 17.28 | − 7 50.4 | 1.594 | 2.556 | 7.4 | 20.0 |
| 4 1 | 13 9.25 | − 6 58.2 | 1.571 | 2.565 | 2.8 | 19.7 |
| 4 11 | 13 0.68 | − 6 2.3 | 1.575 | 2.574 | 1.9 | 19.7 |
| 4 21 | 12 52.63 | − 5 9.5 | 1.606 | 2.584 | 6.5 | 20.0 |
| 5 1 | 12 46.03 | − 4 26.0 | 1.663 | 2.593 | 10.7 | 20.2 |
| 5 11 | 12 41.55 | − 3 56.2 | 1.742 | 2.602 | 14.3 | 20.5 |

**473280** 2015 $NR_{22}$ 4 7.0 327°.85 3°.5/ 3.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.50 | − 0 33.2 | 1.955 | 2.801 | 12.7 | 20.8 |
| 3 12 | 13 19.46 | + 0 37.6 | 1.872 | 2.790 | 9.5 | 20.6 |
| 3 22 | 13 14.51 | + 1 56.6 | 1.813 | 2.780 | 6.2 | 20.4 |
| 4 1 | 13 8.21 | + 3 17.3 | 1.781 | 2.770 | 3.7 | 20.2 |
| 4 11 | 13 1.36 | + 4 32.0 | 1.776 | 2.761 | 4.9 | 20.3 |
| 4 21 | 12 54.81 | + 5 33.9 | 1.799 | 2.752 | 8.2 | 20.4 |
| 5 1 | 12 49.39 | + 6 18.0 | 1.846 | 2.743 | 11.7 | 20.6 |
| 5 11 | 12 45.70 | + 6 41.6 | 1.914 | 2.735 | 14.8 | 20.8 |

**500964** 2013 $QX_{56}$ 4 7.0 150°.54 2°.9/ 3.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.39 | − 0 42.0 | 2.228 | 3.056 | 12.0 | 21.9 |
| 3 12 | 13 23.53 | + 0 11.9 | 2.156 | 3.064 | 9.0 | 21.7 |
| 3 22 | 13 16.89 | + 1 11.4 | 2.108 | 3.072 | 5.7 | 21.5 |
| 4 1 | 13 9.06 | + 2 11.4 | 2.089 | 3.079 | 3.1 | 21.4 |
| 4 11 | 13 0.83 | + 3 6.0 | 2.099 | 3.086 | 3.9 | 21.4 |
| 4 21 | 12 53.00 | + 3 50.1 | 2.138 | 3.092 | 7.0 | 21.6 |
| 5 1 | 12 46.31 | + 4 20.2 | 2.203 | 3.097 | 10.2 | 21.8 |
| 5 11 | 12 41.30 | + 4 34.3 | 2.290 | 3.102 | 12.9 | 22.0 |

**23543** 1993 $UK$ 4 7.0 220°.60 1°.5/ 5.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.04 | − 4 28.6 | 2.191 | 3.015 | 12.3 | 17.8 |
| 3 12 | 13 22.66 | − 3 54.6 | 2.106 | 3.012 | 9.3 | 17.6 |
| 3 22 | 13 16.44 | − 3 12.4 | 2.044 | 3.008 | 5.8 | 17.4 |
| 4 1 | 13 8.92 | − 2 25.8 | 2.010 | 3.004 | 2.3 | 17.2 |
| 4 11 | 13 0.90 | − 1 40.0 | 2.004 | 3.000 | 2.7 | 17.2 |
| 4 21 | 12 53.19 | − 1 0.0 | 2.027 | 2.996 | 6.2 | 17.4 |
| 5 1 | 12 46.57 | − 0 30.1 | 2.077 | 2.991 | 9.7 | 17.6 |
| 5 11 | 12 41.63 | − 0 13.2 | 2.150 | 2.987 | 12.8 | 17.8 |

**501906** 2014 $WO_{467}$ 4 7.0 121°.04 4°.0/ 2.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.63 | + 2 23.9 | 2.164 | 2.999 | 12.0 | 21.1 |
| 3 12 | 13 22.95 | + 3 32.7 | 2.102 | 3.013 | 9.0 | 20.9 |
| 3 22 | 13 16.50 | + 4 44.9 | 2.065 | 3.027 | 6.0 | 20.7 |
| 4 1 | 13 8.91 | + 5 54.1 | 2.056 | 3.040 | 4.0 | 20.6 |
| 4 11 | 13 0.96 | + 6 53.9 | 2.076 | 3.052 | 5.1 | 20.7 |
| 4 21 | 12 53.47 | + 7 39.5 | 2.124 | 3.065 | 7.9 | 20.9 |
| 5 1 | 12 47.16 | + 8 7.6 | 2.197 | 3.076 | 10.9 | 21.1 |
| 5 11 | 12 42.53 | + 8 17.3 | 2.292 | 3.088 | 13.4 | 21.3 |

**459056** 2012 $BD_{16}$ 4 7.0 36°.33 7°.2/12.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.54 | −23 30.4 | 1.459 | 2.235 | 19.7 | 20.8 |
| 3 12 | 13 26.49 | −24 20.7 | 1.385 | 2.241 | 16.5 | 20.5 |
| 3 22 | 13 19.46 | −24 46.2 | 1.328 | 2.247 | 12.8 | 20.3 |
| 4 1 | 13 10.22 | −24 43.6 | 1.293 | 2.254 | 9.3 | 20.1 |
| 4 11 | 13 0.05 | −24 14.0 | 1.282 | 2.261 | 7.3 | 20.0 |
| 4 21 | 12 50.41 | −23 22.5 | 1.295 | 2.268 | 8.4 | 20.1 |
| 5 1 | 12 42.64 | −22 18.4 | 1.333 | 2.276 | 11.7 | 20.3 |
| 5 11 | 12 37.64 | −21 12.4 | 1.392 | 2.284 | 15.2 | 20.6 |

**65195** 2002 $CD_{266}$ 4 7.0 284°.19 1°.7/ 8.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.08 | −13 43.7 | 2.354 | 3.147 | 12.5 | 19.9 |
| 3 12 | 13 21.99 | −13 40.3 | 2.251 | 3.133 | 9.9 | 19.7 |
| 3 22 | 13 16.07 | −13 24.1 | 2.170 | 3.118 | 6.8 | 19.5 |
| 4 1 | 13 8.82 | −12 56.4 | 2.116 | 3.103 | 3.4 | 19.2 |
| 4 11 | 13 0.97 | −12 20.0 | 2.090 | 3.089 | 1.9 | 19.1 |
| 4 21 | 12 53.30 | −11 39.1 | 2.093 | 3.074 | 4.9 | 19.3 |
| 5 1 | 12 46.61 | −10 58.6 | 2.124 | 3.059 | 8.4 | 19.4 |
| 5 11 | 12 41.52 | −10 23.4 | 2.179 | 3.045 | 11.6 | 19.6 |

**401841** 1999 $VZ_{75}$ 4 7.0 133°.97 1°.1/ 6.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.00 | − 6 21.6 | 1.936 | 2.754 | 13.9 | 22.4 |
| 3 12 | 13 25.74 | − 5 44.5 | 1.865 | 2.767 | 10.5 | 22.2 |
| 3 22 | 13 18.40 | − 4 57.0 | 1.817 | 2.779 | 6.6 | 22.0 |
| 4 1 | 13 9.66 | − 4 3.4 | 1.797 | 2.791 | 2.5 | 21.8 |
| 4 11 | 13 0.47 | − 3 9.6 | 1.805 | 2.802 | 2.4 | 21.8 |
| 4 21 | 12 51.78 | − 2 21.5 | 1.842 | 2.813 | 6.5 | 22.1 |
| 5 1 | 12 44.46 | − 1 44.1 | 1.905 | 2.823 | 10.3 | 22.3 |
| 5 11 | 12 39.12 | − 1 20.7 | 1.992 | 2.832 | 13.5 | 22.5 |

**498160** 2007 $TL_{132}$ 4 7.0 184°.16 1°.0/ 6.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.29 | − 5 34.2 | 2.351 | 3.169 | 11.8 | 22.2 |
| 3 12 | 13 22.71 | − 5 8.7 | 2.267 | 3.169 | 8.9 | 22.0 |
| 3 22 | 13 16.40 | − 4 35.2 | 2.206 | 3.169 | 5.6 | 21.8 |
| 4 1 | 13 8.91 | − 3 57.0 | 2.174 | 3.168 | 2.1 | 21.5 |
| 4 11 | 13 0.95 | − 3 18.4 | 2.170 | 3.168 | 2.1 | 21.5 |
| 4 21 | 12 53.31 | − 2 43.8 | 2.196 | 3.167 | 5.6 | 21.8 |
| 5 1 | 12 46.70 | − 2 17.2 | 2.248 | 3.166 | 9.0 | 22.0 |
| 5 11 | 12 41.67 | − 2 1.4 | 2.325 | 3.165 | 11.9 | 22.2 |

**522771** 2016 $NS_{76}$ 4 7.0 243°.06 0°.0/ 6.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.03 | − 9 9.0 | 2.466 | 3.273 | 11.6 | 22.0 |
| 3 12 | 13 21.79 | − 8 43.2 | 2.367 | 3.262 | 8.9 | 21.8 |
| 3 22 | 13 15.85 | − 8 6.9 | 2.293 | 3.251 | 5.7 | 21.6 |
| 4 1 | 13 8.71 | − 7 22.7 | 2.246 | 3.240 | 2.2 | 21.4 |
| 4 11 | 13 1.06 | − 6 34.6 | 2.229 | 3.229 | 1.5 | 21.3 |
| 4 21 | 12 53.63 | − 5 47.3 | 2.241 | 3.217 | 5.1 | 21.5 |
| 5 1 | 12 47.14 | − 5 5.4 | 2.280 | 3.205 | 8.5 | 21.7 |
| 5 11 | 12 42.15 | − 4 32.7 | 2.344 | 3.193 | 11.5 | 21.9 |

**344070** 1996 $VN_{35}$ 4 7.0 162°.78 2°.0/ 9.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.16 | −17 25.3 | 3.267 | 4.026 | 10.1 | 22.5 |
| 3 12 | 13 21.41 | −17 7.9 | 3.174 | 4.033 | 8.0 | 22.4 |
| 3 22 | 13 15.37 | −16 38.7 | 3.106 | 4.039 | 5.6 | 22.2 |
| 4 1 | 13 8.47 | −15 59.2 | 3.066 | 4.045 | 3.2 | 22.1 |
| 4 11 | 13 1.25 | −15 11.6 | 3.056 | 4.051 | 2.0 | 22.0 |
| 4 21 | 12 54.28 | −14 19.6 | 3.077 | 4.056 | 3.7 | 22.1 |
| 5 1 | 12 48.09 | −13 27.0 | 3.128 | 4.060 | 6.2 | 22.3 |
| 5 11 | 12 43.08 | −12 37.6 | 3.205 | 4.063 | 8.5 | 22.5 |

**55361** 2001 $SN_{176}$ 4 7.0 29.°45 3.°7/ 4.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.67 | + 1 54.9 | 1.491 | 2.334 | 16.0 | 18.5 |
| 3 12 | 13 28.36 | + 2 1.0 | 1.425 | 2.340 | 12.2 | 18.2 |
| 3 22 | 13 20.35 | + 2 9.4 | 1.381 | 2.346 | 7.9 | 18.0 |
| 4 1 | 13 10.47 | + 2 14.9 | 1.362 | 2.353 | 4.1 | 17.8 |
| 4 11 | 12 59.96 | + 2 12.0 | 1.370 | 2.360 | 4.9 | 17.9 |
| 4 21 | 12 50.11 | + 1 56.9 | 1.403 | 2.368 | 8.9 | 18.1 |
| 5 1 | 12 42.06 | + 1 27.5 | 1.461 | 2.376 | 13.0 | 18.4 |
| 5 11 | 12 36.54 | + 0 43.7 | 1.540 | 2.384 | 16.6 | 18.6 |

**346359** 2008 $RW_{138}$ 4 7.0 241.°26 2.°2/ 4.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.00 | − 1 38.6 | 2.170 | 2.994 | 12.4 | 21.1 |
| 3 12 | 13 24.99 | − 1 13.0 | 2.077 | 2.983 | 9.4 | 20.9 |
| 3 22 | 13 17.99 | − 0 41.6 | 2.008 | 2.972 | 6.0 | 20.6 |
| 4 1 | 13 9.56 | − 0 8.3 | 1.967 | 2.960 | 2.7 | 20.4 |
| 4 11 | 13 0.52 | + 0 22.0 | 1.955 | 2.947 | 3.3 | 20.4 |
| 4 21 | 12 51.74 | + 0 44.9 | 1.971 | 2.935 | 6.8 | 20.6 |
| 5 1 | 12 44.09 | + 0 56.6 | 2.014 | 2.922 | 10.4 | 20.8 |
| 5 11 | 12 38.20 | + 0 55.0 | 2.081 | 2.908 | 13.5 | 21.0 |

**189056** 2000 $SU_{363}$ 4 7.0 257.°75 5.°2/ 1.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.68 | + 4 49.7 | 2.126 | 2.965 | 12.1 | 20.4 |
| 3 12 | 13 23.35 | + 6 10.4 | 2.032 | 2.944 | 9.3 | 20.2 |
| 3 22 | 13 17.02 | + 7 35.7 | 1.963 | 2.921 | 6.6 | 20.0 |
| 4 1 | 13 9.21 | + 8 58.6 | 1.922 | 2.898 | 5.2 | 19.9 |
| 4 11 | 13 0.74 | +10 11.2 | 1.909 | 2.875 | 6.5 | 19.9 |
| 4 21 | 12 52.46 | +11 7.1 | 1.923 | 2.851 | 9.5 | 20.0 |
| 5 1 | 12 45.26 | +11 42.0 | 1.963 | 2.826 | 12.6 | 20.2 |
| 5 11 | 12 39.82 | +11 54.4 | 2.023 | 2.801 | 15.5 | 20.3 |

**196204** 2003 $BQ_{12}$ 4 7.0 57.°11 2.°6/ 5.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.97 | − 3 17.1 | 1.209 | 2.060 | 18.5 | 19.8 |
| 3 12 | 13 27.46 | − 2 46.5 | 1.155 | 2.075 | 13.9 | 19.6 |
| 3 22 | 13 19.91 | − 2 5.1 | 1.121 | 2.089 | 8.8 | 19.3 |
| 4 1 | 13 10.31 | − 1 19.8 | 1.110 | 2.105 | 3.7 | 19.1 |
| 4 11 | 13 0.11 | − 0 39.2 | 1.124 | 2.120 | 4.2 | 19.2 |
| 4 21 | 12 50.77 | − 0 10.6 | 1.163 | 2.136 | 9.2 | 19.5 |
| 5 1 | 12 43.54 | + 0 0.8 | 1.225 | 2.151 | 14.0 | 19.8 |
| 5 11 | 12 39.15 | − 0 7.0 | 1.306 | 2.167 | 18.0 | 20.1 |

**391473** 2007 $HE_{29}$ 4 7.0 295.°08 0.°7/ 6.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.83 | − 8 58.6 | 1.766 | 2.594 | 14.6 | 21.6 |
| 3 12 | 13 21.53 | − 8 8.9 | 1.674 | 2.582 | 11.2 | 21.4 |
| 3 22 | 13 16.00 | − 7 2.9 | 1.605 | 2.569 | 7.1 | 21.1 |
| 4 1 | 13 8.85 | − 5 45.2 | 1.562 | 2.557 | 2.6 | 20.8 |
| 4 11 | 13 0.99 | − 4 22.9 | 1.546 | 2.545 | 2.3 | 20.7 |
| 4 21 | 12 53.43 | − 3 4.2 | 1.557 | 2.532 | 7.0 | 21.0 |
| 5 1 | 12 47.15 | − 1 56.8 | 1.593 | 2.521 | 11.3 | 21.2 |
| 5 11 | 12 42.89 | − 1 6.4 | 1.652 | 2.509 | 15.1 | 21.4 |

**362626** 2011 $SZ_{115}$ 4 7.0 134.°05 0.°7/ 6.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.82 | − 9 38.3 | 1.728 | 2.546 | 15.3 | 21.5 |
| 3 12 | 13 25.11 | − 8 35.6 | 1.657 | 2.559 | 11.6 | 21.2 |
| 3 22 | 13 18.11 | − 7 16.6 | 1.609 | 2.571 | 7.3 | 21.0 |
| 4 1 | 13 9.59 | − 5 46.9 | 1.587 | 2.582 | 2.7 | 20.7 |
| 4 11 | 13 0.56 | − 4 14.7 | 1.594 | 2.593 | 2.3 | 20.7 |
| 4 21 | 12 52.09 | − 2 48.6 | 1.629 | 2.603 | 6.9 | 21.1 |
| 5 1 | 12 45.13 | − 1 36.1 | 1.690 | 2.612 | 11.1 | 21.3 |
| 5 11 | 12 40.31 | − 0 42.0 | 1.774 | 2.621 | 14.7 | 21.6 |

**64707** 2001 $XA_{91}$ 4 7.0 275.°35 1.°8/ 8.5 18 R

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.50 | −13 13.0 | 1.825 | 2.631 | 15.1 | 19.3 |
| 3 12 | 13 24.39 | −13 8.1 | 1.726 | 2.616 | 11.9 | 19.1 |
| 3 22 | 13 17.90 | −12 47.2 | 1.648 | 2.600 | 8.1 | 18.8 |
| 4 1 | 13 9.61 | −12 11.7 | 1.595 | 2.585 | 3.9 | 18.5 |
| 4 11 | 13 0.48 | −11 25.3 | 1.569 | 2.569 | 2.1 | 18.4 |
| 4 21 | 12 51.57 | −10 33.9 | 1.571 | 2.553 | 6.1 | 18.6 |
| 5 1 | 12 43.95 | − 9 44.4 | 1.599 | 2.537 | 10.5 | 18.8 |
| 5 11 | 12 38.44 | − 9 3.1 | 1.650 | 2.521 | 14.4 | 19.0 |

**496686** 2016 $CA_{264}$ 4 7.0 290.°50 4.°9/10.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.51 | −19 39.0 | 1.511 | 2.304 | 18.3 | 21.0 |
| 3 12 | 13 24.97 | −19 57.2 | 1.417 | 2.292 | 15.0 | 20.7 |
| 3 22 | 13 18.57 | −19 52.4 | 1.342 | 2.279 | 11.1 | 20.4 |
| 4 1 | 13 9.94 | −19 23.0 | 1.290 | 2.267 | 7.1 | 20.2 |
| 4 11 | 13 0.24 | −18 31.4 | 1.263 | 2.254 | 4.9 | 20.0 |
| 4 21 | 12 50.82 | −17 23.8 | 1.261 | 2.242 | 7.4 | 20.1 |
| 5 1 | 12 43.01 | −16 9.8 | 1.283 | 2.230 | 11.7 | 20.3 |
| 5 11 | 12 37.81 | −14 59.6 | 1.327 | 2.218 | 15.9 | 20.5 |

**96113** 5083 $T_{-2}$ 4 7.0 168.°48 4.°7/11.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.98 | −21 32.2 | 2.256 | 3.004 | 14.3 | 20.3 |
| 3 12 | 13 26.57 | −22 3.2 | 2.164 | 3.007 | 11.8 | 20.1 |
| 3 22 | 13 19.04 | −22 17.6 | 2.094 | 3.010 | 9.0 | 19.9 |
| 4 1 | 13 9.98 | −22 14.3 | 2.050 | 3.012 | 6.2 | 19.7 |
| 4 11 | 13 0.27 | −21 54.4 | 2.033 | 3.014 | 4.7 | 19.6 |
| 4 21 | 12 50.85 | −21 21.3 | 2.044 | 3.015 | 6.0 | 19.7 |
| 5 1 | 12 42.65 | −20 40.1 | 2.084 | 3.017 | 8.7 | 19.9 |
| 5 11 | 12 36.34 | −19 57.3 | 2.147 | 3.017 | 11.6 | 20.1 |

**140129** 2001 $SG_{143}$ 4 7.0 32.°33 4.°2/10.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.78 | −17 52.3 | 1.868 | 2.651 | 15.7 | 18.4 |
| 3 12 | 13 25.15 | −18 29.5 | 1.791 | 2.660 | 12.7 | 18.2 |
| 3 22 | 13 18.22 | −18 50.3 | 1.735 | 2.669 | 9.2 | 18.0 |
| 4 1 | 13 9.67 | −18 53.9 | 1.704 | 2.679 | 5.9 | 17.9 |
| 4 11 | 13 0.49 | −18 42.1 | 1.700 | 2.690 | 4.2 | 17.8 |
| 4 21 | 12 51.73 | −18 18.9 | 1.723 | 2.701 | 6.2 | 17.9 |
| 5 1 | 12 44.38 | −17 49.9 | 1.772 | 2.712 | 9.5 | 18.1 |
| 5 11 | 12 39.16 | −17 21.3 | 1.844 | 2.723 | 12.7 | 18.4 |

**22456** Salopek 4 7.0 167.°62 4.°2/ 3.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.82 | + 1 42.4 | 1.795 | 2.633 | 14.0 | 19.6 |
| 3 12 | 13 25.83 | + 2 37.1 | 1.723 | 2.636 | 10.6 | 19.4 |
| 3 22 | 13 18.58 | + 3 36.7 | 1.675 | 2.638 | 7.0 | 19.1 |
| 4 1 | 13 9.79 | + 4 34.5 | 1.654 | 2.641 | 4.3 | 19.0 |
| 4 11 | 13 0.43 | + 5 23.2 | 1.660 | 2.642 | 5.4 | 19.1 |
| 4 21 | 12 51.57 | + 5 57.0 | 1.693 | 2.644 | 8.9 | 19.3 |
| 5 1 | 12 44.14 | + 6 12.2 | 1.752 | 2.645 | 12.4 | 19.5 |
| 5 11 | 12 38.81 | + 6 7.8 | 1.831 | 2.645 | 15.6 | 19.7 |

**69108** 2003 $CH_{8}$ 4 7.0 178.°44 4.°9/30.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 23.61 | + 6 51.8 | 2.612 | 3.451 | 10.1 | 19.6 |
| 3 12 | 13 19.77 | + 8 26.6 | 2.543 | 3.452 | 7.8 | 19.5 |
| 3 22 | 13 14.46 | +10 2.5 | 2.500 | 3.452 | 5.7 | 19.3 |
| 4 1 | 13 8.16 | +11 33.2 | 2.486 | 3.453 | 4.9 | 19.3 |
| 4 11 | 13 1.50 | +12 52.3 | 2.501 | 3.453 | 6.1 | 19.4 |
| 4 21 | 12 55.13 | +13 55.0 | 2.545 | 3.453 | 8.3 | 19.5 |
| 5 1 | 12 49.64 | +14 38.6 | 2.613 | 3.452 | 10.6 | 19.6 |
| 5 11 | 12 45.51 | +15 2.2 | 2.703 | 3.452 | 12.7 | 19.8 |

**62172** 2000 $SV_{34}$ 4 7.0 229.°89 0.°4/ 6.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.20 | − 8 9.3 | 2.160 | 2.973 | 12.8 | 20.8 |
| 3 12 | 13 23.67 | − 7 37.9 | 2.065 | 2.963 | 9.8 | 20.6 |
| 3 22 | 13 17.18 | − 6 55.0 | 1.993 | 2.953 | 6.3 | 20.3 |
| 4 1 | 13 9.27 | − 6 3.7 | 1.948 | 2.942 | 2.3 | 20.1 |
| 4 11 | 13 0.75 | − 5 9.2 | 1.932 | 2.931 | 1.9 | 20.0 |
| 4 21 | 12 52.49 | − 4 16.8 | 1.945 | 2.920 | 5.9 | 20.2 |
| 5 1 | 12 45.34 | − 3 32.1 | 1.985 | 2.908 | 9.7 | 20.4 |
| 5 11 | 12 39.94 | − 2 59.2 | 2.049 | 2.895 | 13.0 | 20.6 |

**101884** 1999 $ND_{38}$ 4 7.0 276.°58 1.°3/ 6.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.10 | − 6 0.7 | 1.623 | 2.454 | 15.5 | 20.5 |
| 3 12 | 13 25.91 | − 5 33.8 | 1.523 | 2.433 | 12.0 | 20.2 |
| 3 22 | 13 19.05 | − 4 54.0 | 1.446 | 2.410 | 7.7 | 19.9 |
| 4 1 | 13 10.11 | − 4 5.2 | 1.393 | 2.388 | 2.9 | 19.5 |
| 4 11 | 13 0.14 | − 3 13.8 | 1.367 | 2.365 | 2.9 | 19.4 |
| 4 21 | 12 50.36 | − 2 27.1 | 1.368 | 2.342 | 7.9 | 19.7 |
| 5 1 | 12 41.99 | − 1 52.0 | 1.394 | 2.319 | 12.7 | 19.9 |
| 5 11 | 12 35.98 | − 1 33.4 | 1.441 | 2.296 | 17.0 | 20.1 |

**139483** 2001 $PZ_{8}$ 4 7.0 206.°63 0.°9/ 5.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.28 | − 5 59.4 | 2.417 | 3.234 | 11.5 | 20.4 |
| 3 12 | 13 21.94 | − 5 28.1 | 2.329 | 3.231 | 8.7 | 20.2 |
| 3 22 | 13 15.92 | − 4 48.2 | 2.266 | 3.228 | 5.5 | 20.0 |
| 4 1 | 13 8.75 | − 4 3.2 | 2.230 | 3.225 | 2.1 | 19.7 |
| 4 11 | 13 1.12 | − 3 17.6 | 2.224 | 3.221 | 2.1 | 19.7 |
| 4 21 | 12 53.77 | − 2 35.9 | 2.247 | 3.218 | 5.5 | 19.9 |
| 5 1 | 12 47.40 | − 2 2.2 | 2.297 | 3.214 | 8.8 | 20.1 |
| 5 11 | 12 42.55 | − 1 39.6 | 2.371 | 3.210 | 11.7 | 20.3 |

**259204** 2003 $AL_{51}$ 4 7.0 61.°63 0.°7/ 7.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.03 | − 9 51.6 | 1.562 | 2.384 | 16.5 | 20.1 |
| 3 12 | 13 26.23 | − 9 48.5 | 1.499 | 2.400 | 12.7 | 19.9 |
| 3 22 | 13 18.93 | − 9 31.3 | 1.456 | 2.416 | 8.2 | 19.7 |
| 4 1 | 13 9.92 | − 9 2.9 | 1.439 | 2.432 | 3.4 | 19.4 |
| 4 11 | 13 0.38 | − 8 28.5 | 1.448 | 2.449 | 1.9 | 19.4 |
| 4 21 | 12 51.48 | − 7 54.1 | 1.484 | 2.465 | 6.6 | 19.7 |
| 5 1 | 12 44.26 | − 7 25.8 | 1.546 | 2.482 | 10.9 | 20.0 |
| 5 11 | 12 39.42 | − 7 8.2 | 1.629 | 2.499 | 14.6 | 20.3 |

**384770** 2012 $ML_{4}$ 4 7.0 230.°11 0.°8/ 6.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.06 | − 7 49.1 | 2.288 | 3.103 | 12.1 | 21.5 |
| 3 12 | 13 21.92 | − 6 58.3 | 2.193 | 3.094 | 9.2 | 21.3 |
| 3 22 | 13 16.00 | − 5 55.6 | 2.122 | 3.084 | 5.8 | 21.0 |
| 4 1 | 13 8.80 | − 4 45.0 | 2.078 | 3.073 | 2.2 | 20.8 |
| 4 11 | 13 1.08 | − 3 32.0 | 2.064 | 3.062 | 2.1 | 20.8 |
| 4 21 | 12 53.61 | − 2 22.6 | 2.079 | 3.051 | 5.9 | 21.0 |
| 5 1 | 12 47.15 | − 1 22.6 | 2.122 | 3.039 | 9.4 | 21.2 |
| 5 11 | 12 42.29 | − 0 36.1 | 2.188 | 3.027 | 12.6 | 21.4 |

**409802** 2006 $HN_{44}$ 4 7.0 3.°09 2.°1/ 5.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.67 | − 4 56.1 | 1.178 | 2.036 | 18.4 | 21.0 |
| 3 12 | 13 23.74 | − 4 24.5 | 1.111 | 2.035 | 14.0 | 20.8 |
| 3 22 | 13 17.77 | − 3 38.8 | 1.064 | 2.035 | 8.8 | 20.5 |
| 4 1 | 13 9.59 | − 2 45.3 | 1.040 | 2.035 | 3.5 | 20.2 |
| 4 11 | 13 0.57 | − 1 53.0 | 1.039 | 2.037 | 3.9 | 20.2 |
| 4 21 | 12 52.17 | − 1 11.0 | 1.062 | 2.039 | 9.3 | 20.5 |
| 5 1 | 12 45.71 | − 0 46.4 | 1.107 | 2.042 | 14.4 | 20.8 |
| 5 11 | 12 42.06 | − 0 42.7 | 1.171 | 2.046 | 18.8 | 21.1 |

**219549** 2001 $RT_{73}$ 4 7.0 206°.33 0°.3/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.46 | −10 58.8 | 2.546 | 3.341 | 11.7 | 23.6 |
| 3 12 | 13 23.56 | −10 20.0 | 2.446 | 3.334 | 9.0 | 23.4 |
| 3 22 | 13 16.96 | − 9 29.0 | 2.371 | 3.326 | 5.8 | 23.1 |
| 4 1 | 13 9.16 | − 8 28.4 | 2.324 | 3.317 | 2.3 | 22.9 |
| 4 11 | 13 0.86 | − 7 22.7 | 2.307 | 3.307 | 1.4 | 22.8 |
| 4 21 | 12 52.80 | − 6 16.9 | 2.321 | 3.297 | 5.0 | 23.0 |
| 5 1 | 12 45.70 | − 5 16.5 | 2.363 | 3.286 | 8.3 | 23.2 |
| 5 11 | 12 40.11 | − 4 25.8 | 2.431 | 3.273 | 11.3 | 23.4 |

**383723** 2007 $UR_{81}$ 4 7.0 182°.20 1°.5/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.61 | − 4 18.9 | 2.340 | 3.162 | 11.7 | 21.8 |
| 3 12 | 13 22.21 | − 3 41.9 | 2.257 | 3.162 | 8.8 | 21.6 |
| 3 22 | 13 16.10 | − 2 57.2 | 2.199 | 3.163 | 5.5 | 21.4 |
| 4 1 | 13 8.82 | − 2 8.7 | 2.168 | 3.162 | 2.2 | 21.1 |
| 4 11 | 13 1.11 | − 1 21.3 | 2.167 | 3.162 | 2.6 | 21.2 |
| 4 21 | 12 53.70 | − 0 39.8 | 2.194 | 3.161 | 5.9 | 21.4 |
| 5 1 | 12 47.32 | − 0 8.1 | 2.249 | 3.161 | 9.2 | 21.6 |
| 5 11 | 12 42.51 | + 0 11.0 | 2.327 | 3.159 | 12.1 | 21.8 |

**368750** 2005 $UZ_{454}$ 4 7.0 191°.78 1°.5/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.42 | − 4 58.6 | 2.415 | 3.231 | 11.6 | 22.4 |
| 3 12 | 13 23.54 | − 4 11.2 | 2.327 | 3.229 | 8.7 | 22.2 |
| 3 22 | 13 16.94 | − 3 15.1 | 2.264 | 3.226 | 5.5 | 22.0 |
| 4 1 | 13 9.15 | − 2 14.4 | 2.229 | 3.223 | 2.2 | 21.7 |
| 4 11 | 13 0.89 | − 1 14.3 | 2.225 | 3.219 | 2.6 | 21.8 |
| 4 21 | 12 52.93 | − 0 19.9 | 2.249 | 3.215 | 6.0 | 22.0 |
| 5 1 | 12 45.98 | + 0 24.2 | 2.302 | 3.209 | 9.2 | 22.2 |
| 5 11 | 12 40.60 | + 0 55.0 | 2.378 | 3.203 | 12.1 | 22.3 |

**302040** 2000 $SU_{302}$ 4 7.0 208°.47 3°.9/11.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.25 | −22 33.2 | 2.694 | 3.437 | 12.4 | 21.2 |
| 3 12 | 13 21.93 | −22 37.4 | 2.594 | 3.433 | 10.2 | 21.0 |
| 3 22 | 13 15.94 | −22 25.6 | 2.516 | 3.429 | 7.8 | 20.8 |
| 4 1 | 13 8.78 | −21 57.8 | 2.463 | 3.425 | 5.3 | 20.7 |
| 4 11 | 13 1.13 | −21 15.9 | 2.439 | 3.421 | 4.0 | 20.6 |
| 4 21 | 12 53.70 | −20 23.3 | 2.443 | 3.416 | 5.0 | 20.6 |
| 5 1 | 12 47.21 | −19 25.1 | 2.476 | 3.412 | 7.4 | 20.8 |
| 5 11 | 12 42.20 | −18 26.7 | 2.534 | 3.407 | 9.9 | 20.9 |

**382762** 2003 $OJ_{19}$ 4 7.0 206°.81 5°.2/13.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.49 | −26 33.5 | 2.595 | 3.312 | 13.4 | 21.6 |
| 3 12 | 13 23.76 | −26 40.6 | 2.490 | 3.307 | 11.3 | 21.5 |
| 3 22 | 13 17.18 | −26 28.9 | 2.407 | 3.300 | 9.0 | 21.3 |
| 4 1 | 13 9.28 | −25 57.4 | 2.348 | 3.294 | 6.6 | 21.1 |
| 4 11 | 13 0.80 | −25 7.6 | 2.316 | 3.286 | 5.2 | 21.0 |
| 4 21 | 12 52.55 | −24 3.0 | 2.313 | 3.278 | 5.8 | 21.1 |
| 5 1 | 12 45.33 | −22 49.3 | 2.338 | 3.270 | 8.0 | 21.2 |
| 5 11 | 12 39.76 | −21 33.2 | 2.389 | 3.261 | 10.5 | 21.3 |

**506057** 2015 $LC_{7}$ 4 7.0 237°.18 0°.5/ 6.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 23.40 | − 9 4.8 | 2.466 | 3.279 | 11.5 | 21.2 |
| 3 12 | 13 19.76 | − 8 10.5 | 2.375 | 3.275 | 8.7 | 21.0 |
| 3 22 | 13 14.54 | − 7 4.4 | 2.309 | 3.270 | 5.5 | 20.8 |
| 4 1 | 13 8.23 | − 5 50.2 | 2.271 | 3.265 | 2.0 | 20.6 |
| 4 11 | 13 1.50 | − 4 33.3 | 2.262 | 3.261 | 1.7 | 20.6 |
| 4 21 | 12 55.04 | − 3 19.4 | 2.283 | 3.256 | 5.3 | 20.8 |
| 5 1 | 12 49.49 | − 2 13.8 | 2.331 | 3.251 | 8.6 | 21.0 |
| 5 11 | 12 45.38 | − 1 20.6 | 2.404 | 3.246 | 11.5 | 21.2 |

**480434** 2015 $KU_{128}$ 4 7.0 285°.76 0°.3/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 23.98 | − 9 21.3 | 2.218 | 3.034 | 12.5 | 21.3 |
| 3 12 | 13 20.46 | − 8 37.0 | 2.118 | 3.018 | 9.5 | 21.1 |
| 3 22 | 13 15.14 | − 7 39.4 | 2.042 | 3.003 | 6.1 | 20.8 |
| 4 1 | 13 8.51 | − 6 32.1 | 1.992 | 2.987 | 2.3 | 20.5 |
| 4 11 | 13 1.31 | − 5 20.4 | 1.972 | 2.971 | 1.8 | 20.5 |
| 4 21 | 12 54.32 | − 4 10.5 | 1.980 | 2.955 | 5.7 | 20.7 |
| 5 1 | 12 48.33 | − 3 8.3 | 2.014 | 2.939 | 9.4 | 20.9 |
| 5 11 | 12 43.95 | − 2 18.7 | 2.073 | 2.924 | 12.7 | 21.1 |

**277771** 2006 $DH_{177}$ 4 7.0 166°.72 0°.4/ 7.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.65 | − 9 49.4 | 2.088 | 2.897 | 13.4 | 21.4 |
| 3 12 | 13 24.00 | − 9 35.3 | 2.004 | 2.899 | 10.3 | 21.2 |
| 3 22 | 13 17.37 | − 9 9.5 | 1.943 | 2.900 | 6.7 | 21.0 |
| 4 1 | 13 9.34 | − 8 34.6 | 1.908 | 2.901 | 2.7 | 20.7 |
| 4 11 | 13 0.78 | − 7 54.8 | 1.902 | 2.903 | 1.5 | 20.6 |
| 4 21 | 12 52.57 | − 7 15.0 | 1.925 | 2.903 | 5.6 | 20.9 |
| 5 1 | 12 45.55 | − 6 40.3 | 1.974 | 2.904 | 9.3 | 21.1 |
| 5 11 | 12 40.36 | − 6 14.8 | 2.048 | 2.905 | 12.6 | 21.3 |

**210896** 2001 $SD_{162}$ 4 7.0 56°.93 1°.1/ 6.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.18 | − 2 10.5 | 2.010 | 2.824 | 13.6 | 19.1 |
| 3 12 | 13 30.24 | − 2 34.4 | 1.946 | 2.845 | 10.3 | 18.9 |
| 3 22 | 13 21.19 | − 2 54.4 | 1.906 | 2.867 | 6.5 | 18.7 |
| 4 1 | 13 10.75 | − 3 12.6 | 1.894 | 2.888 | 2.5 | 18.5 |
| 4 11 | 12 59.92 | − 3 31.6 | 1.912 | 2.910 | 2.3 | 18.5 |
| 4 21 | 12 49.72 | − 3 53.7 | 1.960 | 2.932 | 6.1 | 18.8 |
| 5 1 | 12 41.00 | − 4 20.6 | 2.036 | 2.954 | 9.7 | 19.0 |
| 5 11 | 12 34.37 | − 4 53.9 | 2.136 | 2.975 | 12.8 | 19.3 |

**406338** 2007 $RU_{59}$ 4 7.0 182°.82 1°.6/ 5.5 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.37 | − 4 57.9 | 2.031 | 2.849 | 13.3 | 22.5 |
| 3 12 | 13 26.07 | − 4 14.4 | 1.948 | 2.851 | 10.1 | 22.3 |
| 3 22 | 13 18.70 | − 3 20.9 | 1.888 | 2.851 | 6.3 | 22.0 |
| 4 1 | 13 9.86 | − 2 22.2 | 1.857 | 2.851 | 2.5 | 21.8 |
| 4 11 | 13 0.46 | − 1 24.2 | 1.854 | 2.849 | 2.9 | 21.8 |
| 4 21 | 12 51.45 | − 0 33.0 | 1.880 | 2.847 | 6.8 | 22.1 |
| 5 1 | 12 43.71 | + 0 6.5 | 1.934 | 2.844 | 10.5 | 22.3 |
| 5 11 | 12 37.88 | + 0 30.9 | 2.010 | 2.841 | 13.8 | 22.5 |

**489357** 2006 $UZ_{99}$ 4 7.0 112°.71 2°.7/ 3.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.84 | + 0 46.4 | 2.615 | 3.442 | 10.5 | 21.9 |
| 3 12 | 13 22.10 | + 1 25.0 | 2.548 | 3.456 | 7.8 | 21.8 |
| 3 22 | 13 15.88 | + 2 6.6 | 2.507 | 3.469 | 5.0 | 21.6 |
| 4 1 | 13 8.71 | + 2 47.3 | 2.494 | 3.483 | 2.8 | 21.5 |
| 4 11 | 13 1.24 | + 3 22.6 | 2.511 | 3.496 | 3.5 | 21.6 |
| 4 21 | 12 54.14 | + 3 49.1 | 2.556 | 3.509 | 6.1 | 21.7 |
| 5 1 | 12 48.00 | + 4 4.3 | 2.629 | 3.522 | 8.8 | 21.9 |
| 5 11 | 12 43.28 | + 4 6.9 | 2.725 | 3.534 | 11.2 | 22.1 |

**176907** 2002 $VL_{71}$ 4 7.0 238°.82 2°.4/ 4.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.48 | − 3 3.2 | 2.018 | 2.845 | 13.1 | 21.1 |
| 3 12 | 13 24.80 | − 2 15.3 | 1.923 | 2.831 | 9.9 | 20.8 |
| 3 22 | 13 18.00 | − 1 18.1 | 1.851 | 2.816 | 6.3 | 20.6 |
| 4 1 | 13 9.64 | − 0 16.5 | 1.807 | 2.800 | 2.9 | 20.3 |
| 4 11 | 13 0.58 | + 0 43.1 | 1.792 | 2.784 | 3.6 | 20.3 |
| 4 21 | 12 51.77 | + 1 34.4 | 1.804 | 2.767 | 7.4 | 20.5 |
| 5 1 | 12 44.14 | + 2 12.2 | 1.843 | 2.749 | 11.2 | 20.7 |
| 5 11 | 12 38.39 | + 2 33.2 | 1.905 | 2.731 | 14.6 | 20.9 |

**25106** Ryoojungmin 4 7.0 110°.87 0°.0/ 6.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.69 | − 8 42.1 | 2.043 | 2.859 | 13.4 | 19.5 |
| 3 12 | 13 23.28 | − 8 21.3 | 1.963 | 2.863 | 10.2 | 19.3 |
| 3 22 | 13 16.91 | − 7 49.3 | 1.906 | 2.866 | 6.5 | 19.1 |
| 4 1 | 13 9.17 | − 7 9.0 | 1.876 | 2.870 | 2.5 | 18.8 |
| 4 11 | 13 0.93 | − 6 25.2 | 1.874 | 2.874 | 1.7 | 18.8 |
| 4 21 | 12 53.07 | − 5 43.2 | 1.900 | 2.877 | 5.7 | 19.0 |
| 5 1 | 12 46.41 | − 5 7.9 | 1.953 | 2.881 | 9.5 | 19.3 |
| 5 11 | 12 41.57 | − 4 43.4 | 2.029 | 2.884 | 12.8 | 19.5 |

**205908** 2002 $GV_{95}$ 4 7.0 325°.33 1°.6/ 8.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.22 | −11 7.5 | 1.307 | 2.141 | 18.4 | 19.8 |
| 3 12 | 13 24.98 | −11 17.8 | 1.222 | 2.129 | 14.4 | 19.5 |
| 3 22 | 13 18.70 | −11 11.0 | 1.157 | 2.118 | 9.7 | 19.2 |
| 4 1 | 13 10.05 | −10 48.4 | 1.114 | 2.106 | 4.4 | 18.8 |
| 4 11 | 13 0.29 | −10 14.6 | 1.096 | 2.096 | 2.4 | 18.7 |
| 4 21 | 12 50.88 | − 9 36.6 | 1.102 | 2.086 | 7.7 | 19.0 |
| 5 1 | 12 43.25 | − 9 2.6 | 1.131 | 2.077 | 13.0 | 19.2 |
| 5 11 | 12 38.42 | − 8 39.7 | 1.180 | 2.069 | 17.7 | 19.5 |

**58172** 1990 $SD_{8}$ 4 7.0 168°.59 1°.7/ 4.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.89 | − 2 50.5 | 2.856 | 3.673 | 9.9 | 20.4 |
| 3 12 | 13 21.35 | − 2 10.0 | 2.774 | 3.677 | 7.4 | 20.3 |
| 3 22 | 13 15.41 | − 1 24.0 | 2.718 | 3.681 | 4.7 | 20.1 |
| 4 1 | 13 8.55 | − 0 36.0 | 2.691 | 3.684 | 2.1 | 19.9 |
| 4 11 | 13 1.35 | + 0 9.8 | 2.694 | 3.686 | 2.6 | 20.0 |
| 4 21 | 12 54.42 | + 0 49.8 | 2.727 | 3.689 | 5.3 | 20.1 |
| 5 1 | 12 48.34 | + 1 20.6 | 2.788 | 3.690 | 8.0 | 20.3 |
| 5 11 | 12 43.54 | + 1 40.2 | 2.874 | 3.691 | 10.4 | 20.5 |

**21026** 1989 $SE_{4}$ 4 7.0 147°.02 1°.4/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.18 | − 6 31.5 | 1.895 | 2.716 | 14.1 | 20.6 |
| 3 12 | 13 25.22 | − 5 36.7 | 1.822 | 2.726 | 10.6 | 20.4 |
| 3 22 | 13 18.15 | − 4 29.9 | 1.772 | 2.735 | 6.6 | 20.1 |
| 4 1 | 13 9.64 | − 3 16.4 | 1.750 | 2.744 | 2.5 | 19.9 |
| 4 11 | 13 0.65 | − 2 3.3 | 1.756 | 2.752 | 2.8 | 19.9 |
| 4 21 | 12 52.15 | − 0 57.5 | 1.791 | 2.760 | 6.9 | 20.2 |
| 5 1 | 12 45.02 | − 0 4.8 | 1.852 | 2.766 | 10.7 | 20.4 |
| 5 11 | 12 39.88 | + 0 31.2 | 1.936 | 2.773 | 14.0 | 20.6 |

**277747** 2006 $DQ_{108}$ 4 7.0 340°.98 0°.2/ 6.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.48 | − 9 31.4 | 1.707 | 2.536 | 15.0 | 20.4 |
| 3 12 | 13 21.29 | − 8 52.9 | 1.625 | 2.531 | 11.5 | 20.2 |
| 3 22 | 13 15.86 | − 7 58.7 | 1.564 | 2.527 | 7.4 | 19.9 |
| 4 1 | 13 8.83 | − 6 53.0 | 1.528 | 2.523 | 2.8 | 19.6 |
| 4 11 | 13 1.16 | − 5 42.5 | 1.519 | 2.519 | 2.0 | 19.6 |
| 4 21 | 12 53.86 | − 4 34.8 | 1.537 | 2.516 | 6.7 | 19.8 |
| 5 1 | 12 47.91 | − 3 37.1 | 1.580 | 2.513 | 11.0 | 20.1 |
| 5 11 | 12 44.00 | − 2 54.9 | 1.646 | 2.510 | 14.8 | 20.3 |

**289169** 2004 $VG_{59}$ 4 7.0 99°.69 1°.4/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.83 | −12 14.4 | 1.578 | 2.389 | 16.9 | 21.2 |
| 3 12 | 13 27.62 | −12 6.1 | 1.512 | 2.406 | 13.1 | 21.0 |
| 3 22 | 13 19.85 | −11 41.0 | 1.467 | 2.422 | 8.7 | 20.7 |
| 4 1 | 13 10.32 | −11 1.7 | 1.447 | 2.438 | 3.9 | 20.5 |
| 4 11 | 13 0.23 | −10 13.7 | 1.453 | 2.453 | 2.0 | 20.4 |
| 4 21 | 12 50.79 | − 9 23.8 | 1.487 | 2.469 | 6.5 | 20.7 |
| 5 1 | 12 43.08 | − 8 39.1 | 1.547 | 2.483 | 10.9 | 21.0 |
| 5 11 | 12 37.80 | − 8 5.4 | 1.629 | 2.498 | 14.7 | 21.3 |

**37395** 2001 $XJ_{30}$ 4 7.1 63°.44 4°.0/10.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.36 | −18 56.6 | 1.354 | 2.157 | 19.6 | 19.0 |
| 3 12 | 13 25.43 | −18 50.0 | 1.291 | 2.174 | 15.7 | 18.8 |
| 3 22 | 13 18.64 | −18 17.2 | 1.247 | 2.190 | 11.2 | 18.6 |
| 4 1 | 13 9.89 | −17 19.5 | 1.226 | 2.207 | 6.5 | 18.4 |
| 4 11 | 13 0.51 | −16 3.1 | 1.229 | 2.225 | 4.0 | 18.3 |
| 4 21 | 12 51.87 | −14 37.5 | 1.258 | 2.242 | 7.0 | 18.5 |
| 5 1 | 12 45.17 | −13 13.6 | 1.312 | 2.259 | 11.4 | 18.8 |
| 5 11 | 12 41.13 | −12 0.8 | 1.387 | 2.277 | 15.4 | 19.0 |

**402877** 2007 $RS_{239}$ 4 7.1 168°.73 3°.1/ 3.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.26 | − 0 34.0 | 2.095 | 2.921 | 12.7 | 22.6 |
| 3 12 | 13 25.87 | + 0 24.6 | 2.020 | 2.927 | 9.6 | 22.4 |
| 3 22 | 13 18.49 | + 1 29.5 | 1.969 | 2.932 | 6.1 | 22.2 |
| 4 1 | 13 9.77 | + 2 35.0 | 1.946 | 2.936 | 3.4 | 22.0 |
| 4 11 | 13 0.57 | + 3 34.6 | 1.953 | 2.939 | 4.3 | 22.1 |
| 4 21 | 12 51.80 | + 4 22.6 | 1.988 | 2.941 | 7.6 | 22.3 |
| 5 1 | 12 44.28 | + 4 55.0 | 2.050 | 2.943 | 10.9 | 22.5 |
| 5 11 | 12 38.61 | + 5 10.0 | 2.135 | 2.943 | 13.9 | 22.7 |

**191381** 2003 $SD_{17}$ 4 7.1 171°.66 0°.3/ 6.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.04 | − 7 55.7 | 2.266 | 3.077 | 12.4 | 20.6 |
| 3 12 | 13 23.38 | − 7 31.8 | 2.182 | 3.079 | 9.4 | 20.4 |
| 3 22 | 13 16.90 | − 6 57.9 | 2.121 | 3.081 | 6.0 | 20.1 |
| 4 1 | 13 9.18 | − 6 17.1 | 2.088 | 3.083 | 2.3 | 19.9 |
| 4 11 | 13 0.97 | − 5 33.7 | 2.084 | 3.084 | 1.7 | 19.9 |
| 4 21 | 12 53.10 | − 4 52.5 | 2.109 | 3.084 | 5.5 | 20.1 |
| 5 1 | 12 46.32 | − 4 18.1 | 2.162 | 3.085 | 9.0 | 20.3 |
| 5 11 | 12 41.19 | − 3 54.0 | 2.238 | 3.085 | 12.0 | 20.5 |

**71724** 2000 $GB_{186}$ 4 7.1 31°.92 0°.3/ 6.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.41 | − 9 0.3 | 2.612 | 3.424 | 10.9 | 19.6 |
| 3 12 | 13 18.91 | − 8 16.3 | 2.527 | 3.426 | 8.3 | 19.5 |
| 3 22 | 13 13.95 | − 7 22.1 | 2.467 | 3.428 | 5.2 | 19.3 |
| 4 1 | 13 8.02 | − 6 20.9 | 2.435 | 3.430 | 1.9 | 19.0 |
| 4 11 | 13 1.73 | − 5 17.3 | 2.433 | 3.432 | 1.5 | 19.0 |
| 4 21 | 12 55.71 | − 4 16.2 | 2.459 | 3.434 | 4.8 | 19.2 |
| 5 1 | 12 50.56 | − 3 22.2 | 2.513 | 3.436 | 7.9 | 19.4 |
| 5 11 | 12 46.74 | − 2 38.7 | 2.592 | 3.439 | 10.6 | 19.6 |

**504504** 2008 $MS$ 4 7.1 283°.13 9°.5/27.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.52 | +16 39.4 | 1.917 | 2.755 | 13.2 | 21.6 |
| 3 12 | 13 25.15 | +18 22.2 | 1.830 | 2.724 | 11.2 | 21.4 |
| 3 22 | 13 18.41 | +20 1.0 | 1.767 | 2.692 | 9.8 | 21.2 |
| 4 1 | 13 9.87 | +21 25.5 | 1.730 | 2.660 | 9.8 | 21.2 |
| 4 11 | 13 0.47 | +22 26.2 | 1.718 | 2.627 | 11.3 | 21.2 |
| 4 21 | 12 51.27 | +22 56.8 | 1.729 | 2.594 | 13.9 | 21.3 |
| 5 1 | 12 43.32 | +22 55.1 | 1.762 | 2.561 | 16.6 | 21.4 |
| 5 11 | 12 37.44 | +22 22.6 | 1.811 | 2.527 | 19.2 | 21.5 |

**34987** 4065 $T\text{-}_3$ 4 7.1 357°.71 3°.2/ 3.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.95 | + 0 26.0 | 2.105 | 2.944 | 12.1 | 18.7 |
| 3 12 | 13 21.14 | + 1 13.0 | 2.029 | 2.943 | 9.1 | 18.5 |
| 3 22 | 13 15.52 | + 2 5.0 | 1.978 | 2.943 | 5.9 | 18.3 |
| 4 1 | 13 8.66 | + 2 56.6 | 1.953 | 2.942 | 3.4 | 18.1 |
| 4 11 | 13 1.34 | + 3 42.1 | 1.956 | 2.942 | 4.3 | 18.2 |
| 4 21 | 12 54.37 | + 4 16.6 | 1.987 | 2.942 | 7.4 | 18.4 |
| 5 1 | 12 48.50 | + 4 36.4 | 2.043 | 2.942 | 10.6 | 18.6 |
| 5 11 | 12 44.30 | + 4 39.9 | 2.121 | 2.943 | 13.5 | 18.8 |

**306627** 2000 $QA_{89}$ 4 7.1 220°.85 1°.7/ 8.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.65 | −14 31.4 | 1.779 | 2.579 | 15.7 | 21.0 |
| 3 12 | 13 25.27 | −14 6.7 | 1.686 | 2.572 | 12.4 | 20.7 |
| 3 22 | 13 18.46 | −13 22.8 | 1.614 | 2.565 | 8.4 | 20.5 |
| 4 1 | 13 9.88 | −12 21.8 | 1.567 | 2.557 | 4.1 | 20.2 |
| 4 11 | 13 0.52 | −11 8.8 | 1.548 | 2.548 | 2.1 | 20.0 |
| 4 21 | 12 51.49 | − 9 51.3 | 1.557 | 2.539 | 6.2 | 20.3 |
| 5 1 | 12 43.86 | − 8 37.5 | 1.592 | 2.529 | 10.6 | 20.5 |
| 5 11 | 12 38.41 | − 7 34.9 | 1.651 | 2.519 | 14.6 | 20.7 |

**22532** 1998 $FG_{45}$ 4 7.1 142°.84 1°.9/ 5.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.08 | − 5 22.5 | 1.390 | 2.229 | 17.3 | 19.4 |
| 3 12 | 13 27.45 | − 4 43.6 | 1.320 | 2.234 | 13.1 | 19.1 |
| 3 22 | 13 19.96 | − 3 51.4 | 1.272 | 2.238 | 8.3 | 18.8 |
| 4 1 | 13 10.45 | − 2 51.7 | 1.247 | 2.242 | 3.2 | 18.6 |
| 4 11 | 13 0.19 | − 1 52.8 | 1.249 | 2.246 | 3.5 | 18.6 |
| 4 21 | 12 50.55 | − 1 3.1 | 1.276 | 2.249 | 8.6 | 18.9 |
| 5 1 | 12 42.75 | − 0 29.2 | 1.328 | 2.252 | 13.3 | 19.2 |
| 5 11 | 12 37.59 | − 0 14.8 | 1.400 | 2.255 | 17.4 | 19.4 |

**110772** 2001 $UY_{27}$ 4 7.1 106°.21 1°.7/ 5.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.89 | − 4 6.9 | 1.774 | 2.605 | 14.4 | 20.2 |
| 3 12 | 13 25.20 | − 3 38.9 | 1.700 | 2.610 | 10.9 | 20.0 |
| 3 22 | 13 18.25 | − 3 1.9 | 1.650 | 2.615 | 6.9 | 19.8 |
| 4 1 | 13 9.74 | − 2 20.6 | 1.625 | 2.619 | 2.8 | 19.5 |
| 4 11 | 13 0.67 | − 1 40.8 | 1.628 | 2.624 | 3.0 | 19.6 |
| 4 21 | 12 52.08 | − 1 8.3 | 1.659 | 2.629 | 7.2 | 19.8 |
| 5 1 | 12 44.91 | − 0 47.7 | 1.715 | 2.634 | 11.2 | 20.1 |
| 5 11 | 12 39.84 | − 0 41.7 | 1.793 | 2.638 | 14.6 | 20.3 |

**211497** 2003 $OW_{19}$ 4 7.1 241°.20 1°.7/ 5.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.77 | − 5 36.8 | 1.915 | 2.739 | 13.8 | 21.1 |
| 3 12 | 13 25.20 | − 4 45.7 | 1.817 | 2.723 | 10.5 | 20.8 |
| 3 22 | 13 18.37 | − 3 41.9 | 1.742 | 2.706 | 6.7 | 20.6 |
| 4 1 | 13 9.85 | − 2 30.2 | 1.694 | 2.688 | 2.7 | 20.3 |
| 4 11 | 13 0.56 | − 1 17.5 | 1.674 | 2.669 | 3.1 | 20.3 |
| 4 21 | 12 51.50 | − 0 11.1 | 1.683 | 2.650 | 7.4 | 20.5 |
| 5 1 | 12 43.67 | + 0 42.4 | 1.717 | 2.630 | 11.5 | 20.7 |
| 5 11 | 12 37.83 | + 1 18.7 | 1.775 | 2.610 | 15.2 | 20.9 |

**311267** 2005 $ED_{143}$ 4 7.1 5°.39 1°.3/ 6.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.26 | − 5 37.5 | 1.122 | 1.982 | 19.0 | 19.9 |
| 3 12 | 13 23.58 | − 5 26.5 | 1.058 | 1.982 | 14.5 | 19.6 |
| 3 22 | 13 17.77 | − 5 1.6 | 1.012 | 1.983 | 9.2 | 19.3 |
| 4 1 | 13 9.68 | − 4 28.0 | 0.989 | 1.985 | 3.5 | 19.0 |
| 4 11 | 13 0.71 | − 3 53.5 | 0.989 | 1.988 | 3.2 | 19.0 |
| 4 21 | 12 52.40 | − 3 26.1 | 1.012 | 1.993 | 8.9 | 19.3 |
| 5 1 | 12 46.10 | − 3 12.5 | 1.057 | 1.999 | 14.1 | 19.6 |
| 5 11 | 12 42.69 | − 3 16.7 | 1.120 | 2.006 | 18.6 | 19.9 |

**435919** 2009 $BU_{98}$ 4 7.1 26°.32 1°.8/ 5.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.79 | − 4 21.3 | 1.624 | 2.466 | 15.0 | 20.4 |
| 3 12 | 13 22.17 | − 3 50.8 | 1.562 | 2.478 | 11.3 | 20.2 |
| 3 22 | 13 16.33 | − 3 10.8 | 1.523 | 2.491 | 7.0 | 20.0 |
| 4 1 | 13 9.00 | − 2 26.5 | 1.509 | 2.504 | 2.8 | 19.8 |
| 4 11 | 13 1.19 | − 1 44.4 | 1.522 | 2.518 | 3.1 | 19.8 |
| 4 21 | 12 53.94 | − 1 10.4 | 1.561 | 2.533 | 7.3 | 20.1 |
| 5 1 | 12 48.16 | − 0 49.3 | 1.624 | 2.549 | 11.3 | 20.4 |
| 5 11 | 12 44.46 | − 0 43.6 | 1.709 | 2.565 | 14.7 | 20.6 |

**490661** 2010 $GN_{132}$ 4 7.1 215°.93 5°.5/ 2.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.83 | + 5 13.4 | 1.803 | 2.640 | 14.0 | 21.6 |
| 3 12 | 13 27.51 | + 6 13.3 | 1.723 | 2.633 | 10.8 | 21.4 |
| 3 22 | 13 19.80 | + 7 15.6 | 1.667 | 2.625 | 7.5 | 21.1 |
| 4 1 | 13 10.38 | + 8 13.0 | 1.638 | 2.617 | 5.5 | 21.0 |
| 4 11 | 13 0.26 | + 8 57.6 | 1.636 | 2.608 | 6.8 | 21.1 |
| 4 21 | 12 50.55 | + 9 23.8 | 1.661 | 2.598 | 10.0 | 21.2 |
| 5 1 | 12 42.27 | + 9 28.2 | 1.710 | 2.587 | 13.5 | 21.4 |
| 5 11 | 12 36.17 | + 9 10.7 | 1.780 | 2.576 | 16.7 | 21.6 |

**292718** 2006 $UP_{136}$ 4 7.1 202°.89 3°.2/11.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.14 | −20 25.6 | 2.580 | 3.339 | 12.5 | 20.8 |
| 3 12 | 13 21.12 | −20 11.7 | 2.482 | 3.336 | 10.1 | 20.6 |
| 3 22 | 13 15.47 | −19 41.4 | 2.408 | 3.334 | 7.4 | 20.5 |
| 4 1 | 13 8.66 | −18 55.5 | 2.359 | 3.332 | 4.7 | 20.3 |
| 4 11 | 13 1.39 | −17 56.8 | 2.339 | 3.329 | 3.2 | 20.2 |
| 4 21 | 12 54.38 | −16 49.9 | 2.347 | 3.326 | 4.7 | 20.3 |
| 5 1 | 12 48.32 | −15 40.3 | 2.384 | 3.323 | 7.5 | 20.4 |
| 5 11 | 12 43.76 | −14 33.8 | 2.447 | 3.320 | 10.2 | 20.6 |

**373384** 2013 $GB_{90}$ 4 7.1 269°.47 0°.7/ 6.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.06 | − 9 6.5 | 1.611 | 2.440 | 15.7 | 20.8 |
| 3 12 | 13 23.51 | − 8 15.9 | 1.519 | 2.427 | 12.1 | 20.6 |
| 3 22 | 13 17.46 | − 7 7.4 | 1.449 | 2.413 | 7.7 | 20.3 |
| 4 1 | 13 9.54 | − 5 45.4 | 1.404 | 2.399 | 2.9 | 19.9 |
| 4 11 | 13 0.79 | − 4 18.0 | 1.387 | 2.386 | 2.5 | 19.9 |
| 4 21 | 12 52.34 | − 2 54.4 | 1.396 | 2.372 | 7.6 | 20.1 |
| 5 1 | 12 45.33 | − 1 43.2 | 1.430 | 2.358 | 12.3 | 20.4 |
| 5 11 | 12 40.57 | − 0 50.9 | 1.485 | 2.344 | 16.4 | 20.6 |

**433882** 2015 $BY_{353}$ 4 7.1 27°.57 0°.7/ 7.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.02 | −11 20.1 | 1.455 | 2.287 | 17.0 | 20.5 |
| 3 12 | 13 21.90 | −10 54.7 | 1.392 | 2.299 | 13.0 | 20.3 |
| 3 22 | 13 16.30 | −10 11.4 | 1.350 | 2.311 | 8.5 | 20.1 |
| 4 1 | 13 9.02 | − 9 14.5 | 1.331 | 2.325 | 3.5 | 19.8 |
| 4 11 | 13 1.19 | − 8 10.9 | 1.339 | 2.339 | 1.9 | 19.7 |
| 4 21 | 12 53.96 | − 7 8.7 | 1.371 | 2.354 | 6.7 | 20.1 |
| 5 1 | 12 48.35 | − 6 15.8 | 1.429 | 2.370 | 11.2 | 20.3 |
| 5 11 | 12 45.02 | − 5 37.5 | 1.507 | 2.386 | 15.1 | 20.6 |

**455590** 2004 $RG_{342}$ 4 7.1 156°.24 3°.0/ 9.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.35 | −18 11.5 | 1.843 | 2.623 | 16.0 | 21.7 |
| 3 12 | 13 26.38 | −17 55.2 | 1.760 | 2.631 | 12.8 | 21.5 |
| 3 22 | 13 19.06 | −17 18.2 | 1.699 | 2.638 | 9.0 | 21.3 |
| 4 1 | 13 10.09 | −16 21.9 | 1.662 | 2.644 | 5.1 | 21.0 |
| 4 11 | 13 0.50 | −15 10.8 | 1.654 | 2.650 | 3.1 | 20.9 |
| 4 21 | 12 51.38 | −13 51.8 | 1.673 | 2.654 | 5.9 | 21.1 |
| 5 1 | 12 43.73 | −12 33.4 | 1.720 | 2.659 | 9.8 | 21.3 |
| 5 11 | 12 38.26 | −11 23.2 | 1.790 | 2.662 | 13.4 | 21.6 |

**371148** 2005 $XA_{27}$ 4 7.1 113°.40 0°.8/ 7.9 15

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.58 | −11 31.9 | 2.086 | 2.887 | 13.6 | 22.4 |
| 3 12 | 13 24.61 | −11 11.2 | 2.013 | 2.903 | 10.5 | 22.2 |
| 3 22 | 13 17.71 | −10 37.4 | 1.964 | 2.918 | 6.9 | 22.0 |
| 4 1 | 13 9.51 | − 9 53.3 | 1.941 | 2.933 | 2.9 | 21.8 |
| 4 11 | 13 0.89 | − 9 3.5 | 1.947 | 2.947 | 1.5 | 21.7 |
| 4 21 | 12 52.73 | − 8 13.3 | 1.982 | 2.961 | 5.3 | 22.0 |
| 5 1 | 12 45.84 | − 7 28.1 | 2.044 | 2.975 | 9.0 | 22.2 |
| 5 11 | 12 40.77 | − 6 52.5 | 2.130 | 2.988 | 12.1 | 22.4 |

**114931** 2003 $QG_{45}$ 4 7.1 127°.07 0°.2/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.62 | − 9 20.0 | 1.921 | 2.727 | 14.5 | 20.7 |
| 3 12 | 13 27.80 | − 9 4.4 | 1.850 | 2.744 | 11.1 | 20.5 |
| 3 22 | 13 19.79 | − 8 36.8 | 1.803 | 2.760 | 7.1 | 20.3 |
| 4 1 | 13 10.32 | − 8 0.1 | 1.782 | 2.775 | 2.8 | 20.1 |
| 4 11 | 13 0.38 | − 7 19.1 | 1.790 | 2.790 | 1.7 | 20.0 |
| 4 21 | 12 50.98 | − 6 39.2 | 1.827 | 2.804 | 5.9 | 20.3 |
| 5 1 | 12 43.03 | − 6 5.8 | 1.890 | 2.817 | 9.8 | 20.6 |
| 5 11 | 12 37.16 | − 5 42.7 | 1.978 | 2.829 | 13.2 | 20.8 |

**140383** 2001 $TP_{48}$ 4 7.1 155°.60 1°.1/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.76 | − 3 50.2 | 2.682 | 3.494 | 10.6 | 20.3 |
| 3 12 | 13 23.61 | − 3 33.8 | 2.600 | 3.500 | 8.0 | 20.2 |
| 3 22 | 13 16.92 | − 3 12.0 | 2.544 | 3.505 | 5.0 | 20.0 |
| 4 1 | 13 9.20 | − 2 47.5 | 2.516 | 3.510 | 2.0 | 19.8 |
| 4 11 | 13 1.10 | − 2 23.8 | 2.518 | 3.515 | 2.1 | 19.8 |
| 4 21 | 12 53.31 | − 2 4.2 | 2.551 | 3.519 | 5.1 | 20.0 |
| 5 1 | 12 46.46 | − 1 51.6 | 2.611 | 3.523 | 8.1 | 20.2 |
| 5 11 | 12 41.03 | − 1 48.1 | 2.696 | 3.526 | 10.7 | 20.4 |

**110339** 2001 $SY_{291}$ 4 7.1 138°.14 3°.6/ 3.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.20 | − 1 24.1 | 1.914 | 2.753 | 13.2 | 19.5 |
| 3 12 | 13 22.22 | + 0 7.2 | 1.844 | 2.759 | 9.9 | 19.3 |
| 3 22 | 13 16.28 | + 1 47.4 | 1.799 | 2.764 | 6.3 | 19.1 |
| 4 1 | 13 8.99 | + 3 28.8 | 1.781 | 2.770 | 3.8 | 18.9 |
| 4 11 | 13 1.24 | + 5 2.9 | 1.792 | 2.775 | 5.0 | 19.0 |
| 4 21 | 12 53.93 | + 6 22.0 | 1.831 | 2.780 | 8.4 | 19.2 |
| 5 1 | 12 47.87 | + 7 20.9 | 1.895 | 2.784 | 11.8 | 19.4 |
| 5 11 | 12 43.64 | + 7 57.4 | 1.980 | 2.789 | 14.8 | 19.6 |

**489634** 2007 $TR_{386}$ 4 7.1 140°.67 0°.0/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.95 | − 8 43.3 | 2.623 | 3.427 | 11.1 | 22.7 |
| 3 12 | 13 22.29 | − 8 16.8 | 2.543 | 3.436 | 8.4 | 22.5 |
| 3 22 | 13 16.09 | − 7 41.2 | 2.487 | 3.445 | 5.4 | 22.3 |
| 4 1 | 13 8.88 | − 6 59.3 | 2.460 | 3.454 | 2.0 | 22.1 |
| 4 11 | 13 1.32 | − 6 14.8 | 2.463 | 3.462 | 1.4 | 22.0 |
| 4 21 | 12 54.07 | − 5 32.0 | 2.495 | 3.470 | 4.7 | 22.3 |
| 5 1 | 12 47.77 | − 4 54.7 | 2.556 | 3.478 | 7.8 | 22.5 |
| 5 11 | 12 42.90 | − 4 26.3 | 2.641 | 3.485 | 10.5 | 22.7 |

**64151** 2001 $TJ_{41}$ 4 7.1 213°.00 4°.7/ 2.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.99 | + 7 2.0 | 2.336 | 3.161 | 11.6 | 19.6 |
| 3 12 | 13 27.10 | + 7 41.5 | 2.251 | 3.153 | 9.0 | 19.4 |
| 3 22 | 13 19.30 | + 8 20.6 | 2.191 | 3.144 | 6.3 | 19.2 |
| 4 1 | 13 10.16 | + 8 53.9 | 2.160 | 3.135 | 4.8 | 19.1 |
| 4 11 | 13 0.48 | + 9 16.2 | 2.158 | 3.125 | 5.7 | 19.1 |
| 4 21 | 12 51.13 | + 9 23.9 | 2.184 | 3.115 | 8.3 | 19.2 |
| 5 1 | 12 42.91 | + 9 15.1 | 2.237 | 3.104 | 11.2 | 19.4 |
| 5 11 | 12 36.43 | + 8 49.7 | 2.312 | 3.092 | 13.8 | 19.6 |

**96874** 1999 $TF_{8}$ 4 7.1 222°.55 3°.4/10.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.17 | −19 47.0 | 2.520 | 3.276 | 12.8 | 20.4 |
| 3 12 | 13 24.31 | −19 50.5 | 2.414 | 3.266 | 10.4 | 20.2 |
| 3 22 | 13 17.60 | −19 38.6 | 2.329 | 3.255 | 7.7 | 20.0 |
| 4 1 | 13 9.54 | −19 11.1 | 2.271 | 3.243 | 4.9 | 19.9 |
| 4 11 | 13 0.86 | −18 30.1 | 2.242 | 3.231 | 3.4 | 19.7 |
| 4 21 | 12 52.37 | −17 39.4 | 2.242 | 3.219 | 5.1 | 19.8 |
| 5 1 | 12 44.87 | −16 44.3 | 2.270 | 3.205 | 8.0 | 20.0 |
| 5 11 | 12 38.98 | −15 50.4 | 2.324 | 3.192 | 10.9 | 20.1 |

**267447** 2002 $DP_{1}$ 4 7.1 337°.68 4°.5/ 2.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 20.01 | − 1 47.9 | 1.312 | 2.180 | 16.2 | 19.6 |
| 3 12 | 13 18.54 | − 0 24.5 | 1.232 | 2.162 | 12.3 | 19.3 |
| 3 22 | 13 14.47 | + 1 13.9 | 1.173 | 2.145 | 7.9 | 19.0 |
| 4 1 | 13 8.45 | + 2 57.9 | 1.137 | 2.129 | 4.7 | 18.7 |
| 4 11 | 13 1.56 | + 4 35.5 | 1.127 | 2.114 | 6.4 | 18.8 |
| 4 21 | 12 55.04 | + 5 55.1 | 1.139 | 2.100 | 10.9 | 19.0 |
| 5 1 | 12 50.07 | + 6 48.2 | 1.174 | 2.088 | 15.5 | 19.2 |
| 5 11 | 12 47.49 | + 7 11.3 | 1.226 | 2.078 | 19.6 | 19.4 |

**24571** 2179 $T\text{-}_{1}$ 4 7.1 117°.23 2°.7/ 4.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.66 | − 3 42.7 | 1.671 | 2.508 | 14.9 | 19.5 |
| 3 12 | 13 24.35 | − 2 38.1 | 1.603 | 2.517 | 11.2 | 19.3 |
| 3 22 | 13 17.74 | − 1 22.7 | 1.559 | 2.525 | 7.0 | 19.1 |
| 4 1 | 13 9.58 | − 0 3.4 | 1.541 | 2.534 | 3.2 | 18.9 |
| 4 11 | 13 0.90 | + 1 11.6 | 1.550 | 2.542 | 4.1 | 18.9 |
| 4 21 | 12 52.75 | + 2 14.5 | 1.586 | 2.550 | 8.1 | 19.2 |
| 5 1 | 12 46.09 | + 2 59.7 | 1.647 | 2.557 | 12.1 | 19.5 |
| 5 11 | 12 41.57 | + 3 24.5 | 1.730 | 2.564 | 15.5 | 19.7 |

**10781** Ritter 4 7.1 226°.99 0°.6/ 6.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.06 | − 8 21.1 | 2.083 | 2.900 | 13.1 | 18.8 |
| 3 12 | 13 22.89 | − 7 37.5 | 1.992 | 2.893 | 10.0 | 18.6 |
| 3 22 | 13 16.75 | − 6 41.1 | 1.924 | 2.885 | 6.4 | 18.3 |
| 4 1 | 13 9.22 | − 5 35.8 | 1.883 | 2.877 | 2.4 | 18.0 |
| 4 11 | 13 1.10 | − 4 27.4 | 1.871 | 2.869 | 2.0 | 18.0 |
| 4 21 | 12 53.27 | − 3 22.3 | 1.887 | 2.861 | 6.1 | 18.2 |
| 5 1 | 12 46.58 | − 2 26.3 | 1.930 | 2.852 | 9.9 | 18.4 |
| 5 11 | 12 41.66 | − 1 44.1 | 1.996 | 2.843 | 13.3 | 18.6 |

**490557** 2009 $WC_{19}$ 4 7.1 202°.23 0°.7/ 6.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.87 | − 7 45.1 | 2.101 | 2.918 | 13.0 | 22.5 |
| 3 12 | 13 23.45 | − 7 7.0 | 2.014 | 2.915 | 9.9 | 22.3 |
| 3 22 | 13 17.08 | − 6 17.3 | 1.950 | 2.912 | 6.3 | 22.1 |
| 4 1 | 13 9.33 | − 5 19.7 | 1.913 | 2.908 | 2.3 | 21.8 |
| 4 11 | 13 1.04 | − 4 19.8 | 1.906 | 2.904 | 2.0 | 21.8 |
| 4 21 | 12 53.07 | − 3 23.5 | 1.926 | 2.900 | 6.0 | 22.0 |
| 5 1 | 12 46.25 | − 2 36.1 | 1.974 | 2.895 | 9.8 | 22.2 |
| 5 11 | 12 41.20 | − 2 1.8 | 2.045 | 2.890 | 13.1 | 22.4 |

**303353** 2004 $TQ_{325}$ 4 7.1 189°.15 0°.3/ 6.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.00 | − 7 19.3 | 1.789 | 2.604 | 15.0 | 21.1 |
| 3 12 | 13 28.46 | − 7 8.5 | 1.705 | 2.604 | 11.5 | 20.8 |
| 3 22 | 13 20.46 | − 6 46.6 | 1.643 | 2.603 | 7.4 | 20.6 |
| 4 1 | 13 10.68 | − 6 16.6 | 1.607 | 2.601 | 2.8 | 20.3 |
| 4 11 | 13 0.17 | − 5 43.4 | 1.599 | 2.599 | 2.0 | 20.2 |
| 4 21 | 12 50.07 | − 5 12.3 | 1.620 | 2.596 | 6.7 | 20.5 |
| 5 1 | 12 41.45 | − 4 48.8 | 1.667 | 2.592 | 11.0 | 20.8 |
| 5 11 | 12 35.07 | − 4 36.7 | 1.737 | 2.588 | 14.7 | 21.0 |

**202465** 2006 $AR_{18}$ 4 7.1 64°.53 1°.2/ 8.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.47 | −12 34.2 | 1.322 | 2.150 | 18.6 | 21.0 |
| 3 12 | 13 25.58 | −12 11.7 | 1.257 | 2.160 | 14.4 | 20.8 |
| 3 22 | 13 18.83 | −11 28.3 | 1.211 | 2.171 | 9.5 | 20.5 |
| 4 1 | 13 10.06 | −10 27.6 | 1.189 | 2.182 | 4.2 | 20.2 |
| 4 11 | 13 0.60 | − 9 17.3 | 1.192 | 2.193 | 2.1 | 20.1 |
| 4 21 | 12 51.83 | − 8 6.6 | 1.221 | 2.204 | 7.3 | 20.5 |
| 5 1 | 12 44.96 | − 7 4.9 | 1.273 | 2.215 | 12.2 | 20.8 |
| 5 11 | 12 40.75 | − 6 19.0 | 1.347 | 2.226 | 16.5 | 21.1 |

**470098** 2006 $TL_{30}$ 4 7.1 206°.73 0°.2/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.86 | − 8 28.8 | 2.854 | 3.656 | 10.3 | 22.7 |
| 3 12 | 13 21.44 | − 7 59.9 | 2.758 | 3.651 | 7.9 | 22.5 |
| 3 22 | 13 15.58 | − 7 22.3 | 2.687 | 3.645 | 5.0 | 22.3 |
| 4 1 | 13 8.72 | − 6 38.4 | 2.645 | 3.639 | 1.9 | 22.0 |
| 4 11 | 13 1.45 | − 5 51.9 | 2.633 | 3.632 | 1.4 | 22.0 |
| 4 21 | 12 54.40 | − 5 6.7 | 2.651 | 3.625 | 4.5 | 22.2 |
| 5 1 | 12 48.16 | − 4 26.7 | 2.697 | 3.618 | 7.5 | 22.4 |
| 5 11 | 12 43.21 | − 3 55.1 | 2.769 | 3.610 | 10.1 | 22.6 |

**296155** 2009 $BF_{113}$ 4 7.1 170°.17 1°.7/ 5.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.16 | − 5 24.8 | 2.234 | 3.060 | 12.0 | 21.1 |
| 3 12 | 13 20.48 | − 4 24.9 | 2.152 | 3.060 | 9.0 | 20.9 |
| 3 22 | 13 15.10 | − 3 14.9 | 2.096 | 3.061 | 5.6 | 20.7 |
| 4 1 | 13 8.55 | − 1 59.8 | 2.067 | 3.061 | 2.3 | 20.5 |
| 4 11 | 13 1.57 | − 0 45.7 | 2.066 | 3.061 | 2.8 | 20.5 |
| 4 21 | 12 54.90 | + 0 21.4 | 2.095 | 3.061 | 6.3 | 20.7 |
| 5 1 | 12 49.26 | + 1 16.3 | 2.150 | 3.061 | 9.6 | 20.9 |
| 5 11 | 12 45.19 | + 1 55.8 | 2.228 | 3.061 | 12.6 | 21.1 |

**249661** 1999 $VJ_{18}$ 4 7.1 199°.30 0°.7/ 7.8 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.60 | −11 32.2 | 2.095 | 2.894 | 13.7 | 22.1 |
| 3 12 | 13 25.59 | −11 8.0 | 2.002 | 2.891 | 10.6 | 21.9 |
| 3 22 | 13 18.49 | −10 29.8 | 1.932 | 2.887 | 7.0 | 21.6 |
| 4 1 | 13 9.90 | − 9 40.2 | 1.890 | 2.882 | 3.0 | 21.4 |
| 4 11 | 13 0.69 | − 8 43.6 | 1.876 | 2.876 | 1.6 | 21.3 |
| 4 21 | 12 51.79 | − 7 45.8 | 1.891 | 2.869 | 5.6 | 21.5 |
| 5 1 | 12 44.09 | − 6 53.0 | 1.933 | 2.862 | 9.5 | 21.7 |
| 5 11 | 12 38.27 | − 6 10.2 | 2.000 | 2.854 | 13.0 | 21.9 |

**337856** 2001 $VA_{122}$ 4 7.1 92°.70 2°.8/ 3.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.79 | + 0 14.1 | 2.510 | 3.338 | 10.8 | 21.4 |
| 3 12 | 13 22.09 | + 1 8.5 | 2.454 | 3.362 | 8.1 | 21.2 |
| 3 22 | 13 15.91 | + 2 6.4 | 2.424 | 3.386 | 5.1 | 21.1 |
| 4 1 | 13 8.80 | + 3 3.1 | 2.422 | 3.410 | 2.9 | 21.0 |
| 4 11 | 13 1.46 | + 3 53.7 | 2.449 | 3.434 | 3.7 | 21.1 |
| 4 21 | 12 54.53 | + 4 34.1 | 2.506 | 3.457 | 6.4 | 21.3 |
| 5 1 | 12 48.63 | + 5 1.6 | 2.589 | 3.479 | 9.0 | 21.5 |
| 5 11 | 12 44.18 | + 5 14.8 | 2.696 | 3.501 | 11.4 | 21.7 |

**140834** 2001 $UF_{179}$ 4 7.1 49°.50 2°.1/ 9.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.50 | −16 36.2 | 2.040 | 2.832 | 14.2 | 20.0 |
| 3 12 | 13 20.90 | −16 7.7 | 1.965 | 2.845 | 11.2 | 19.8 |
| 3 22 | 13 15.42 | −15 21.4 | 1.912 | 2.858 | 7.7 | 19.6 |
| 4 1 | 13 8.69 | −14 19.9 | 1.885 | 2.871 | 4.1 | 19.4 |
| 4 11 | 13 1.52 | −13 8.2 | 1.886 | 2.884 | 2.2 | 19.3 |
| 4 21 | 12 54.79 | −11 52.6 | 1.915 | 2.898 | 5.1 | 19.5 |
| 5 1 | 12 49.26 | −10 40.0 | 1.971 | 2.912 | 8.7 | 19.8 |
| 5 11 | 12 45.48 | − 9 36.5 | 2.051 | 2.925 | 11.9 | 20.0 |

**268060** 2004 $RH_{45}$ 4 7.1 327°.39 6°.3/11.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.50 | −21 19.0 | 1.737 | 2.505 | 17.3 | 20.1 |
| 3 12 | 13 27.77 | −22 19.7 | 1.647 | 2.500 | 14.4 | 19.9 |
| 3 22 | 13 20.30 | −23 2.4 | 1.576 | 2.496 | 11.1 | 19.7 |
| 4 1 | 13 10.73 | −23 23.8 | 1.529 | 2.491 | 7.9 | 19.5 |
| 4 11 | 13 0.14 | −23 23.6 | 1.507 | 2.487 | 6.3 | 19.4 |
| 4 21 | 12 49.81 | −23 4.6 | 1.512 | 2.483 | 7.7 | 19.4 |
| 5 1 | 12 40.99 | −22 32.9 | 1.542 | 2.479 | 10.9 | 19.6 |
| 5 11 | 12 34.62 | −21 56.6 | 1.595 | 2.476 | 14.3 | 19.8 |

**134222** 2005 $WN_{188}$ 4 7.1 309°.91 3°.7/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.22 | −16 46.9 | 1.825 | 2.616 | 15.7 | 19.4 |
| 3 12 | 13 25.03 | −17 13.4 | 1.730 | 2.606 | 12.7 | 19.1 |
| 3 22 | 13 18.42 | −17 23.6 | 1.656 | 2.595 | 9.2 | 18.9 |
| 4 1 | 13 9.97 | −17 16.9 | 1.606 | 2.586 | 5.5 | 18.6 |
| 4 11 | 13 0.66 | −16 55.4 | 1.582 | 2.576 | 3.7 | 18.5 |
| 4 21 | 12 51.59 | −16 23.0 | 1.586 | 2.566 | 6.3 | 18.6 |
| 5 1 | 12 43.85 | −15 46.0 | 1.615 | 2.557 | 10.1 | 18.8 |
| 5 11 | 12 38.27 | −15 11.1 | 1.668 | 2.548 | 13.8 | 19.0 |

**426935** 2013 $XH_{15}$ 4 7.1 232°.58 5°.2/ 1.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.92 | + 7 37.0 | 2.309 | 3.141 | 11.5 | 21.5 |
| 3 12 | 13 24.86 | + 8 32.6 | 2.224 | 3.129 | 8.9 | 21.3 |
| 3 22 | 13 17.93 | + 9 28.3 | 2.163 | 3.116 | 6.5 | 21.1 |
| 4 1 | 13 9.68 | +10 18.1 | 2.131 | 3.102 | 5.2 | 21.0 |
| 4 11 | 13 0.88 | +10 56.0 | 2.127 | 3.088 | 6.3 | 21.1 |
| 4 21 | 12 52.36 | +11 17.9 | 2.150 | 3.074 | 8.8 | 21.2 |
| 5 1 | 12 44.92 | +11 21.2 | 2.199 | 3.059 | 11.6 | 21.3 |
| 5 11 | 12 39.14 | +11 5.7 | 2.270 | 3.044 | 14.2 | 21.5 |

**387355** 2012 $XN_{21}$ 4 7.1 255°.23 1°.4/ 5.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.32 | − 4 26.7 | 2.266 | 3.090 | 12.0 | 21.1 |
| 3 12 | 13 22.15 | − 3 54.3 | 2.179 | 3.085 | 9.0 | 20.9 |
| 3 22 | 13 16.20 | − 3 13.9 | 2.116 | 3.080 | 5.7 | 20.7 |
| 4 1 | 13 9.01 | − 2 29.4 | 2.081 | 3.075 | 2.3 | 20.5 |
| 4 11 | 13 1.32 | − 1 45.6 | 2.074 | 3.070 | 2.6 | 20.5 |
| 4 21 | 12 53.93 | − 1 7.3 | 2.096 | 3.065 | 6.0 | 20.7 |
| 5 1 | 12 47.56 | − 0 38.5 | 2.145 | 3.060 | 9.4 | 20.9 |
| 5 11 | 12 42.80 | − 0 22.3 | 2.217 | 3.055 | 12.4 | 21.1 |

**17575** 1994 $PQ_{14}$ 4 7.1 311°.72 0°.1/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.32 | − 9 13.5 | 2.125 | 2.943 | 12.9 | 18.5 |
| 3 12 | 13 20.81 | − 8 40.5 | 2.033 | 2.934 | 9.8 | 18.3 |
| 3 22 | 13 15.43 | − 7 55.1 | 1.964 | 2.925 | 6.3 | 18.1 |
| 4 1 | 13 8.74 | − 7 0.4 | 1.922 | 2.916 | 2.4 | 17.8 |
| 4 11 | 13 1.49 | − 6 1.7 | 1.908 | 2.908 | 1.7 | 17.7 |
| 4 21 | 12 54.51 | − 5 4.6 | 1.922 | 2.899 | 5.7 | 18.0 |
| 5 1 | 12 48.58 | − 4 14.7 | 1.963 | 2.891 | 9.4 | 18.2 |
| 5 11 | 12 44.34 | − 3 36.6 | 2.027 | 2.884 | 12.7 | 18.4 |

**238121** 2003 $OO_{23}$ 4 7.1 219°.45 1°.8/ 8.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.64 | −14 35.8 | 2.157 | 2.948 | 13.6 | 20.8 |
| 3 12 | 13 23.33 | −14 22.5 | 2.063 | 2.944 | 10.7 | 20.6 |
| 3 22 | 13 17.05 | −13 54.0 | 1.992 | 2.939 | 7.3 | 20.4 |
| 4 1 | 13 9.37 | −13 12.0 | 1.947 | 2.934 | 3.7 | 20.1 |
| 4 11 | 13 1.09 | −12 20.3 | 1.931 | 2.929 | 2.0 | 20.0 |
| 4 21 | 12 53.10 | −11 24.0 | 1.943 | 2.924 | 5.2 | 20.2 |
| 5 1 | 12 46.23 | −10 29.1 | 1.982 | 2.918 | 8.9 | 20.4 |
| 5 11 | 12 41.14 | − 9 41.3 | 2.045 | 2.912 | 12.2 | 20.6 |

**419946** 2011 $BX_{82}$ 4 7.1 174°.65 6°.9/30.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.22 | +11 31.8 | 2.169 | 3.005 | 12.0 | 21.3 |
| 3 12 | 13 24.33 | +12 57.4 | 2.106 | 3.008 | 9.5 | 21.1 |
| 3 22 | 13 17.55 | +14 20.0 | 2.068 | 3.010 | 7.5 | 21.0 |
| 4 1 | 13 9.51 | +15 32.0 | 2.058 | 3.011 | 6.9 | 21.0 |
| 4 11 | 13 1.03 | +16 26.4 | 2.075 | 3.012 | 8.1 | 21.0 |
| 4 21 | 12 52.97 | +16 59.0 | 2.118 | 3.013 | 10.4 | 21.2 |
| 5 1 | 12 46.10 | +17 8.0 | 2.185 | 3.012 | 12.9 | 21.3 |
| 5 11 | 12 40.99 | +16 54.5 | 2.271 | 3.012 | 15.1 | 21.5 |

**401100** 2011 $UQ_{190}$ 4 7.1 12°.50 3°.3/ 9.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.90 | −15 56.0 | 1.332 | 2.149 | 19.1 | 20.5 |
| 3 12 | 13 25.38 | −16 2.6 | 1.257 | 2.150 | 15.2 | 20.2 |
| 3 22 | 13 18.88 | −15 46.7 | 1.200 | 2.151 | 10.7 | 19.9 |
| 4 1 | 13 10.18 | −15 8.7 | 1.166 | 2.152 | 5.8 | 19.7 |
| 4 11 | 13 0.57 | −14 13.7 | 1.156 | 2.154 | 3.4 | 19.5 |
| 4 21 | 12 51.49 | −13 9.5 | 1.172 | 2.156 | 7.3 | 19.7 |
| 5 1 | 12 44.27 | −12 6.1 | 1.211 | 2.159 | 12.1 | 20.0 |
| 5 11 | 12 39.80 | −11 12.6 | 1.270 | 2.161 | 16.5 | 20.3 |

**333449** 2003 $UR_{371}$ 4 7.1 176°.80 6°.0/13.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.44 | −27 28.8 | 2.363 | 3.079 | 14.6 | 21.4 |
| 3 12 | 13 24.71 | −27 50.9 | 2.268 | 3.081 | 12.4 | 21.3 |
| 3 22 | 13 17.95 | −27 53.0 | 2.193 | 3.082 | 9.9 | 21.1 |
| 4 1 | 13 9.72 | −27 33.5 | 2.142 | 3.082 | 7.6 | 20.9 |
| 4 11 | 13 0.87 | −26 53.4 | 2.118 | 3.083 | 6.1 | 20.9 |
| 4 21 | 12 52.32 | −25 56.3 | 2.122 | 3.083 | 6.6 | 20.9 |
| 5 1 | 12 44.94 | −24 48.1 | 2.152 | 3.082 | 8.6 | 21.0 |
| 5 11 | 12 39.38 | −23 36.3 | 2.208 | 3.082 | 11.1 | 21.2 |

**78327** 2002 $PZ_{82}$ 4 7.1 177°.45 0°.3/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.55 | − 9 52.5 | 2.556 | 3.356 | 11.5 | 20.6 |
| 3 12 | 13 22.86 | − 9 30.1 | 2.467 | 3.357 | 8.8 | 20.4 |
| 3 22 | 13 16.55 | − 8 57.6 | 2.403 | 3.359 | 5.7 | 20.2 |
| 4 1 | 13 9.13 | − 8 17.3 | 2.366 | 3.359 | 2.3 | 20.0 |
| 4 11 | 13 1.27 | − 7 33.0 | 2.360 | 3.360 | 1.3 | 19.9 |
| 4 21 | 12 53.70 | − 6 49.1 | 2.382 | 3.360 | 4.8 | 20.1 |
| 5 1 | 12 47.08 | − 6 9.8 | 2.434 | 3.359 | 8.0 | 20.3 |
| 5 11 | 12 41.94 | − 5 38.7 | 2.510 | 3.358 | 10.8 | 20.5 |

**94432** 2001 $TC_{43}$ 4 7.1 202°.61 1°.3/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.62 | −11 51.4 | 1.901 | 2.699 | 14.9 | 19.9 |
| 3 12 | 13 28.15 | −11 46.9 | 1.808 | 2.695 | 11.7 | 19.7 |
| 3 22 | 13 20.29 | −11 28.2 | 1.738 | 2.690 | 7.8 | 19.4 |
| 4 1 | 13 10.67 | −10 57.0 | 1.694 | 2.684 | 3.5 | 19.1 |
| 4 11 | 13 0.27 | −10 17.2 | 1.678 | 2.678 | 1.9 | 19.0 |
| 4 21 | 12 50.19 | − 9 34.2 | 1.691 | 2.671 | 6.0 | 19.2 |
| 5 1 | 12 41.49 | − 8 54.0 | 1.731 | 2.663 | 10.3 | 19.5 |
| 5 11 | 12 34.93 | − 8 22.2 | 1.794 | 2.654 | 14.0 | 19.7 |

**309267** 2007 $RV_{102}$ 4 7.1 102°.94 0°.6/ 6.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.03 | − 8 14.4 | 1.657 | 2.478 | 15.8 | 22.0 |
| 3 12 | 13 26.85 | − 7 37.9 | 1.595 | 2.498 | 11.9 | 21.8 |
| 3 22 | 13 19.31 | − 6 48.0 | 1.555 | 2.517 | 7.5 | 21.6 |
| 4 1 | 13 10.20 | − 5 49.3 | 1.541 | 2.535 | 2.8 | 21.4 |
| 4 11 | 13 0.64 | − 4 48.9 | 1.555 | 2.554 | 2.2 | 21.3 |
| 4 21 | 12 51.73 | − 3 53.6 | 1.596 | 2.571 | 6.8 | 21.7 |
| 5 1 | 12 44.44 | − 3 9.6 | 1.663 | 2.589 | 11.0 | 22.0 |
| 5 11 | 12 39.41 | − 2 40.9 | 1.753 | 2.605 | 14.6 | 22.2 |

**65143** 2002 $CY_{112}$ 4 7.1 301°.28 0°.9/ 6.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.39 | − 6 7.6 | 2.229 | 3.052 | 12.2 | 19.9 |
| 3 12 | 13 21.54 | − 5 41.4 | 2.135 | 3.039 | 9.3 | 19.7 |
| 3 22 | 13 15.88 | − 5 6.0 | 2.064 | 3.027 | 5.9 | 19.4 |
| 4 1 | 13 8.92 | − 4 24.7 | 2.020 | 3.015 | 2.2 | 19.2 |
| 4 11 | 13 1.40 | − 3 42.0 | 2.005 | 3.003 | 2.1 | 19.1 |
| 4 21 | 12 54.11 | − 3 2.9 | 2.018 | 2.991 | 5.8 | 19.4 |
| 5 1 | 12 47.83 | − 2 31.9 | 2.057 | 2.979 | 9.4 | 19.6 |
| 5 11 | 12 43.17 | − 2 12.4 | 2.120 | 2.967 | 12.6 | 19.7 |

**440495** 2005 $TZ_{112}$ 4 7.1 257°.48 0°.6/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 23.96 | −12 15.4 | 2.472 | 3.272 | 11.8 | 21.9 |
| 3 12 | 13 20.28 | −11 39.2 | 2.376 | 3.266 | 9.1 | 21.7 |
| 3 22 | 13 14.98 | −10 49.9 | 2.305 | 3.259 | 6.0 | 21.5 |
| 4 1 | 13 8.55 | − 9 50.2 | 2.261 | 3.252 | 2.6 | 21.2 |
| 4 11 | 13 1.66 | − 8 44.5 | 2.245 | 3.246 | 1.3 | 21.1 |
| 4 21 | 12 55.01 | − 7 37.9 | 2.259 | 3.239 | 4.8 | 21.3 |
| 5 1 | 12 49.28 | − 6 35.9 | 2.301 | 3.232 | 8.1 | 21.5 |
| 5 11 | 12 45.01 | − 5 43.1 | 2.368 | 3.225 | 11.1 | 21.7 |

**316707** 1997 $CP_{11}$ 4 7.1 135°.09 2°.6/ 9.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.79 | −16 34.5 | 2.049 | 2.826 | 14.7 | 22.2 |
| 3 12 | 13 27.18 | −16 29.2 | 1.971 | 2.841 | 11.6 | 22.1 |
| 3 22 | 13 19.45 | −16 7.2 | 1.916 | 2.856 | 8.1 | 21.9 |
| 4 1 | 13 10.27 | −15 29.8 | 1.887 | 2.870 | 4.5 | 21.7 |
| 4 11 | 13 0.58 | −14 40.6 | 1.887 | 2.883 | 2.7 | 21.6 |
| 4 21 | 12 51.37 | −13 45.1 | 1.915 | 2.895 | 5.4 | 21.8 |
| 5 1 | 12 43.54 | −12 49.7 | 1.971 | 2.907 | 9.0 | 22.0 |
| 5 11 | 12 37.70 | −12 0.4 | 2.052 | 2.917 | 12.2 | 22.2 |

**456739** 2007 $TR_{21}$ 4 7.1 238°.64 1°.8/ 5.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.22 | − 4 20.1 | 1.792 | 2.618 | 14.6 | 22.0 |
| 3 12 | 13 27.24 | − 3 49.1 | 1.698 | 2.604 | 11.1 | 21.7 |
| 3 22 | 13 19.79 | − 3 7.8 | 1.627 | 2.591 | 7.1 | 21.4 |
| 4 1 | 13 10.51 | − 2 20.7 | 1.582 | 2.576 | 2.9 | 21.1 |
| 4 11 | 13 0.37 | − 1 33.9 | 1.565 | 2.561 | 3.2 | 21.1 |
| 4 21 | 12 50.51 | − 0 53.7 | 1.575 | 2.545 | 7.6 | 21.4 |
| 5 1 | 12 42.02 | − 0 25.8 | 1.612 | 2.528 | 11.9 | 21.6 |
| 5 11 | 12 35.70 | − 0 13.6 | 1.671 | 2.511 | 15.7 | 21.8 |

**66680** 1999 $TG_{29}$ 4 7.1 134°.83 0°.2/ 6.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.33 | −10 16.8 | 2.197 | 3.006 | 12.8 | 19.5 |
| 3 12 | 13 22.13 | − 9 22.4 | 2.119 | 3.015 | 9.7 | 19.3 |
| 3 22 | 13 16.16 | − 8 14.5 | 2.064 | 3.023 | 6.2 | 19.1 |
| 4 1 | 13 8.99 | − 6 57.4 | 2.037 | 3.031 | 2.3 | 18.8 |
| 4 11 | 13 1.42 | − 5 36.9 | 2.040 | 3.039 | 1.7 | 18.8 |
| 4 21 | 12 54.23 | − 4 19.7 | 2.071 | 3.047 | 5.5 | 19.0 |
| 5 1 | 12 48.15 | − 3 11.5 | 2.130 | 3.054 | 9.1 | 19.3 |
| 5 11 | 12 43.73 | − 2 16.9 | 2.214 | 3.060 | 12.1 | 19.5 |

**390271** 2012 $XX_{145}$ 4 7.1 215°.39 4°.1/ 1.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.95 | + 5 4.3 | 2.658 | 3.490 | 10.1 | 21.5 |
| 3 12 | 13 21.60 | + 6 7.0 | 2.575 | 3.483 | 7.7 | 21.3 |
| 3 22 | 13 15.74 | + 7 11.6 | 2.519 | 3.476 | 5.4 | 21.2 |
| 4 1 | 13 8.83 | + 8 12.8 | 2.491 | 3.468 | 4.1 | 21.1 |
| 4 11 | 13 1.51 | + 9 5.4 | 2.492 | 3.460 | 5.1 | 21.1 |
| 4 21 | 12 54.44 | + 9 45.2 | 2.522 | 3.451 | 7.4 | 21.2 |
| 5 1 | 12 48.25 | +10 9.4 | 2.578 | 3.442 | 10.0 | 21.4 |
| 5 11 | 12 43.43 | +10 17.1 | 2.656 | 3.433 | 12.3 | 21.5 |

**2941** Alden 4 7.1 111°.53 0°.3/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.73 | − 9 28.4 | 1.382 | 2.208 | 18.0 | 16.9 |
| 3 12 | 13 28.76 | − 9 16.5 | 1.314 | 2.218 | 13.9 | 16.6 |
| 3 22 | 13 20.87 | − 8 48.5 | 1.266 | 2.227 | 9.0 | 16.4 |
| 4 1 | 13 10.91 | − 8 7.9 | 1.243 | 2.237 | 3.6 | 16.1 |
| 4 11 | 13 0.21 | − 7 21.1 | 1.245 | 2.246 | 2.1 | 16.0 |
| 4 21 | 12 50.18 | − 6 35.8 | 1.274 | 2.254 | 7.5 | 16.3 |
| 5 1 | 12 42.07 | − 5 59.3 | 1.327 | 2.263 | 12.4 | 16.6 |
| 5 11 | 12 36.70 | − 5 36.9 | 1.401 | 2.271 | 16.6 | 16.9 |

**434943** 2006 $UD_{11}$ 4 7.1 209°.22 2°.0/ 4.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.31 | − 1 15.9 | 2.437 | 3.260 | 11.2 | 21.4 |
| 3 12 | 13 23.50 | − 0 53.9 | 2.352 | 3.258 | 8.5 | 21.2 |
| 3 22 | 13 16.99 | − 0 27.4 | 2.293 | 3.256 | 5.4 | 21.0 |
| 4 1 | 13 9.33 | + 0 0.2 | 2.261 | 3.253 | 2.5 | 20.8 |
| 4 11 | 13 1.21 | + 0 24.7 | 2.259 | 3.251 | 3.0 | 20.8 |
| 4 21 | 12 53.38 | + 0 42.4 | 2.285 | 3.248 | 6.1 | 21.0 |
| 5 1 | 12 46.56 | + 0 50.4 | 2.339 | 3.245 | 9.2 | 21.2 |
| 5 11 | 12 41.27 | + 0 47.0 | 2.416 | 3.242 | 11.9 | 21.4 |

**186073** 2001 $SA_{216}$ 4 7.1 205°.37 2°.5/ 4.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.52 | − 3 40.4 | 1.915 | 2.747 | 13.5 | 21.0 |
| 3 12 | 13 23.35 | − 2 39.7 | 1.834 | 2.745 | 10.2 | 20.8 |
| 3 22 | 13 17.12 | − 1 28.8 | 1.776 | 2.742 | 6.4 | 20.5 |
| 4 1 | 13 9.42 | − 0 13.4 | 1.746 | 2.739 | 2.9 | 20.3 |
| 4 11 | 13 1.15 | + 0 59.3 | 1.743 | 2.735 | 3.7 | 20.3 |
| 4 21 | 12 53.25 | + 2 2.2 | 1.769 | 2.731 | 7.5 | 20.6 |
| 5 1 | 12 46.59 | + 2 49.8 | 1.820 | 2.727 | 11.3 | 20.8 |
| 5 11 | 12 41.83 | + 3 19.0 | 1.893 | 2.723 | 14.6 | 21.0 |

**435870** 2008 $YM_{55}$ 4 7.1 88°.82 5°.8/31.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.82 | + 8 31.9 | 2.129 | 2.971 | 11.9 | 21.4 |
| 3 12 | 13 22.50 | + 9 42.7 | 2.070 | 2.980 | 9.3 | 21.3 |
| 3 22 | 13 16.38 | +10 52.0 | 2.036 | 2.988 | 6.9 | 21.1 |
| 4 1 | 13 9.08 | +11 53.0 | 2.029 | 2.997 | 5.8 | 21.1 |
| 4 11 | 13 1.40 | +12 39.3 | 2.050 | 3.005 | 7.0 | 21.2 |
| 4 21 | 12 54.17 | +13 7.0 | 2.096 | 3.013 | 9.4 | 21.3 |
| 5 1 | 12 48.11 | +13 13.9 | 2.167 | 3.022 | 12.0 | 21.5 |
| 5 11 | 12 43.74 | +13 0.8 | 2.259 | 3.030 | 14.3 | 21.7 |

**381197** 2007 $RS_{31}$ 4 7.1 275°.35 3°.0/10.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.17 | −18 27.0 | 2.116 | 2.895 | 14.2 | 20.5 |
| 3 12 | 13 22.43 | −18 12.8 | 2.008 | 2.877 | 11.5 | 20.3 |
| 3 22 | 13 16.62 | −17 39.9 | 1.922 | 2.859 | 8.3 | 20.1 |
| 4 1 | 13 9.28 | −16 48.8 | 1.860 | 2.840 | 4.9 | 19.8 |
| 4 11 | 13 1.21 | −15 42.7 | 1.827 | 2.822 | 3.0 | 19.7 |
| 4 21 | 12 53.33 | −14 27.4 | 1.821 | 2.803 | 5.5 | 19.8 |
| 5 1 | 12 46.54 | −13 9.8 | 1.843 | 2.784 | 9.1 | 20.0 |
| 5 11 | 12 41.56 | −11 57.5 | 1.889 | 2.764 | 12.6 | 20.1 |

**162073** 1997 $UK_{18}$ 4 7.1 242°.94 2°.7/ 4.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.51 | − 2 15.7 | 1.787 | 2.616 | 14.4 | 20.0 |
| 3 12 | 13 27.49 | − 1 37.6 | 1.692 | 2.600 | 11.0 | 19.7 |
| 3 22 | 13 19.98 | − 0 50.5 | 1.620 | 2.584 | 7.1 | 19.4 |
| 4 1 | 13 10.61 | + 0 0.4 | 1.574 | 2.567 | 3.3 | 19.2 |
| 4 11 | 13 0.36 | + 0 48.4 | 1.557 | 2.549 | 4.0 | 19.2 |
| 4 21 | 12 50.37 | + 1 27.1 | 1.567 | 2.531 | 8.2 | 19.4 |
| 5 1 | 12 41.75 | + 1 51.0 | 1.603 | 2.512 | 12.4 | 19.6 |
| 5 11 | 12 35.31 | + 1 57.3 | 1.660 | 2.493 | 16.2 | 19.8 |

**458975** 2011 $WO_{57}$ 4 7.1 86°.90 1°.6/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.32 | − 5 52.2 | 1.516 | 2.350 | 16.3 | 22.3 |
| 3 12 | 13 26.52 | − 5 12.1 | 1.456 | 2.367 | 12.3 | 22.1 |
| 3 22 | 13 19.20 | − 4 19.9 | 1.418 | 2.383 | 7.7 | 21.9 |
| 4 1 | 13 10.21 | − 3 21.2 | 1.405 | 2.400 | 3.0 | 21.6 |
| 4 11 | 13 0.71 | − 2 23.7 | 1.419 | 2.417 | 3.1 | 21.7 |
| 4 21 | 12 51.91 | − 1 34.8 | 1.460 | 2.433 | 7.7 | 22.0 |
| 5 1 | 12 44.82 | − 1 0.1 | 1.526 | 2.449 | 12.0 | 22.3 |
| 5 11 | 12 40.11 | − 0 42.8 | 1.613 | 2.465 | 15.6 | 22.6 |

**171687** 2000 $SO_{18}$ 4 7.1 287°.58 5°.3/12.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.92 | −23 52.3 | 2.309 | 3.051 | 14.2 | 19.7 |
| 3 12 | 13 23.66 | −24 22.0 | 2.207 | 3.042 | 11.9 | 19.6 |
| 3 22 | 13 17.37 | −24 34.2 | 2.125 | 3.032 | 9.3 | 19.4 |
| 4 1 | 13 9.56 | −24 27.5 | 2.068 | 3.023 | 6.8 | 19.2 |
| 4 11 | 13 1.05 | −24 2.7 | 2.038 | 3.013 | 5.4 | 19.1 |
| 4 21 | 12 52.73 | −23 22.8 | 2.035 | 3.004 | 6.2 | 19.1 |
| 5 1 | 12 45.48 | −22 33.1 | 2.059 | 2.994 | 8.7 | 19.2 |
| 5 11 | 12 40.02 | −21 40.1 | 2.108 | 2.985 | 11.4 | 19.4 |

**306621** 2000 $QH_{56}$ 4 7.1 151°.62 0°.6/ 7.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.23 | −11 21.5 | 1.966 | 2.766 | 14.4 | 21.5 |
| 3 12 | 13 26.83 | −10 55.7 | 1.887 | 2.776 | 11.1 | 21.3 |
| 3 22 | 13 19.28 | −10 15.6 | 1.831 | 2.786 | 7.3 | 21.1 |
| 4 1 | 13 10.24 | − 9 24.1 | 1.802 | 2.794 | 3.0 | 20.8 |
| 4 11 | 13 0.67 | − 8 26.5 | 1.802 | 2.802 | 1.6 | 20.7 |
| 4 21 | 12 51.57 | − 7 28.8 | 1.831 | 2.809 | 5.8 | 21.0 |
| 5 1 | 12 43.83 | − 6 37.2 | 1.887 | 2.816 | 9.7 | 21.3 |
| 5 11 | 12 38.11 | − 5 56.6 | 1.967 | 2.821 | 13.1 | 21.5 |

**401035** 2011 $SL_{185}$ 4 7.1 133°.09 1°.7/ 5.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.56 | − 6 18.3 | 1.726 | 2.552 | 15.0 | 21.9 |
| 3 12 | 13 25.74 | − 5 21.2 | 1.657 | 2.563 | 11.3 | 21.6 |
| 3 22 | 13 18.64 | − 4 11.5 | 1.610 | 2.575 | 7.1 | 21.4 |
| 4 1 | 13 10.00 | − 2 55.0 | 1.591 | 2.585 | 2.8 | 21.2 |
| 4 11 | 13 0.84 | − 1 39.4 | 1.599 | 2.596 | 3.1 | 21.2 |
| 4 21 | 12 52.24 | − 0 32.5 | 1.636 | 2.605 | 7.4 | 21.5 |
| 5 1 | 12 45.13 | + 0 19.7 | 1.698 | 2.614 | 11.4 | 21.7 |
| 5 11 | 12 40.16 | + 0 53.4 | 1.782 | 2.622 | 14.9 | 22.0 |

**437122** 2012 $UN_{137}$ 4 7.1 151°.71 0°.7/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.21 | −11 53.1 | 2.694 | 3.487 | 11.1 | 22.5 |
| 3 12 | 13 21.77 | −11 25.2 | 2.609 | 3.494 | 8.6 | 22.3 |
| 3 22 | 13 15.83 | −10 46.3 | 2.549 | 3.501 | 5.6 | 22.1 |
| 4 1 | 13 8.88 | − 9 58.8 | 2.516 | 3.507 | 2.4 | 21.9 |
| 4 11 | 13 1.56 | − 9 6.3 | 2.513 | 3.513 | 1.2 | 21.8 |
| 4 21 | 12 54.54 | − 8 13.3 | 2.540 | 3.519 | 4.4 | 22.0 |
| 5 1 | 12 48.43 | − 7 24.1 | 2.595 | 3.524 | 7.4 | 22.2 |
| 5 11 | 12 43.70 | − 6 42.6 | 2.676 | 3.529 | 10.1 | 22.4 |

**68094** 2000 $YU_{110}$ 4 7.1 185°.73 1°.6/ 5.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.85 | − 4 42.4 | 2.132 | 2.948 | 12.9 | 20.2 |
| 3 12 | 13 26.43 | − 4 4.2 | 2.047 | 2.948 | 9.8 | 20.0 |
| 3 22 | 13 19.00 | − 3 16.9 | 1.985 | 2.947 | 6.2 | 19.8 |
| 4 1 | 13 10.15 | − 2 24.8 | 1.952 | 2.946 | 2.5 | 19.6 |
| 4 11 | 13 0.75 | − 1 33.5 | 1.948 | 2.944 | 2.7 | 19.6 |
| 4 21 | 12 51.70 | − 0 48.3 | 1.974 | 2.941 | 6.5 | 19.8 |
| 5 1 | 12 43.86 | − 0 13.9 | 2.026 | 2.937 | 10.1 | 20.0 |
| 5 11 | 12 37.87 | + 0 6.7 | 2.102 | 2.932 | 13.3 | 20.2 |

**313662** 2003 $SZ_{189}$ 4 7.1 123°.90 0°.3/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.51 | − 9 40.9 | 1.911 | 2.716 | 14.6 | 21.7 |
| 3 12 | 13 27.76 | − 9 24.0 | 1.841 | 2.733 | 11.2 | 21.5 |
| 3 22 | 13 19.83 | − 8 54.8 | 1.794 | 2.750 | 7.2 | 21.3 |
| 4 1 | 13 10.45 | − 8 16.1 | 1.773 | 2.766 | 2.9 | 21.1 |
| 4 11 | 13 0.59 | − 7 32.8 | 1.782 | 2.782 | 1.6 | 21.0 |
| 4 21 | 12 51.28 | − 6 50.6 | 1.819 | 2.797 | 5.9 | 21.3 |
| 5 1 | 12 43.42 | − 6 14.7 | 1.883 | 2.811 | 9.8 | 21.6 |
| 5 11 | 12 37.65 | − 5 49.3 | 1.972 | 2.824 | 13.2 | 21.8 |

**39402** 9074 $P–L$ 4 7.1 124°.37 0°.3/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.92 | −10 13.3 | 2.110 | 2.917 | 13.3 | 19.8 |
| 3 12 | 13 24.16 | − 9 46.3 | 2.035 | 2.928 | 10.2 | 19.6 |
| 3 22 | 13 17.50 | − 9 6.9 | 1.983 | 2.940 | 6.6 | 19.4 |
| 4 1 | 13 9.56 | − 8 18.3 | 1.957 | 2.951 | 2.6 | 19.2 |
| 4 11 | 13 1.17 | − 7 25.4 | 1.961 | 2.961 | 1.5 | 19.1 |
| 4 21 | 12 53.21 | − 6 33.6 | 1.993 | 2.971 | 5.5 | 19.4 |
| 5 1 | 12 46.45 | − 5 48.2 | 2.053 | 2.981 | 9.1 | 19.6 |
| 5 11 | 12 41.49 | − 5 13.4 | 2.136 | 2.990 | 12.2 | 19.9 |

**98072** 2000 $RC_{56}$ 4 7.1 78°.84 4°.5/10.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.96 | −18 15.8 | 1.497 | 2.291 | 18.4 | 19.4 |
| 3 12 | 13 27.46 | −18 40.4 | 1.422 | 2.298 | 14.9 | 19.2 |
| 3 22 | 13 20.11 | −18 43.7 | 1.366 | 2.304 | 10.8 | 19.0 |
| 4 1 | 13 10.69 | −18 24.8 | 1.333 | 2.311 | 6.7 | 18.7 |
| 4 11 | 13 0.43 | −17 46.8 | 1.325 | 2.318 | 4.5 | 18.6 |
| 4 21 | 12 50.71 | −16 55.8 | 1.344 | 2.325 | 7.1 | 18.8 |
| 5 1 | 12 42.78 | −16 0.5 | 1.387 | 2.331 | 11.2 | 19.0 |
| 5 11 | 12 37.47 | −15 9.6 | 1.452 | 2.338 | 15.1 | 19.3 |

**173902** 2001 $UN_{163}$ 4 7.1 237°.15 2°.8/ 4.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.43 | + 0 46.4 | 2.419 | 3.247 | 11.1 | 20.4 |
| 3 12 | 13 22.89 | + 1 21.4 | 2.333 | 3.241 | 8.4 | 20.2 |
| 3 22 | 13 16.66 | + 2 0.4 | 2.272 | 3.235 | 5.4 | 20.0 |
| 4 1 | 13 9.25 | + 2 38.9 | 2.239 | 3.228 | 3.0 | 19.8 |
| 4 11 | 13 1.38 | + 3 12.3 | 2.235 | 3.221 | 3.8 | 19.8 |
| 4 21 | 12 53.78 | + 3 36.6 | 2.259 | 3.214 | 6.7 | 20.0 |
| 5 1 | 12 47.16 | + 3 48.8 | 2.311 | 3.207 | 9.7 | 20.2 |
| 5 11 | 12 42.06 | + 3 47.3 | 2.385 | 3.200 | 12.4 | 20.4 |

**171876** 2001 $QE_{228}$ 4 7.1 136°.87 4°.0/11.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.30 | −22 1.7 | 2.448 | 3.197 | 13.3 | 20.6 |
| 3 12 | 13 22.89 | −22 4.9 | 2.358 | 3.203 | 10.9 | 20.5 |
| 3 22 | 13 16.71 | −21 50.9 | 2.291 | 3.209 | 8.2 | 20.3 |
| 4 1 | 13 9.28 | −21 19.9 | 2.249 | 3.214 | 5.5 | 20.1 |
| 4 11 | 13 1.38 | −20 34.2 | 2.235 | 3.220 | 4.0 | 20.1 |
| 4 21 | 12 53.78 | −19 38.0 | 2.249 | 3.225 | 5.2 | 20.1 |
| 5 1 | 12 47.25 | −18 36.9 | 2.292 | 3.229 | 7.8 | 20.3 |
| 5 11 | 12 42.34 | −17 36.9 | 2.359 | 3.234 | 10.5 | 20.5 |

**467243** 2016 $EQ_{170}$ 4 7.1 222°.05 0°.1/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.06 | − 7 31.4 | 2.146 | 2.951 | 13.2 | 21.1 |
| 3 12 | 13 27.50 | − 7 23.7 | 2.047 | 2.941 | 10.1 | 20.9 |
| 3 22 | 13 19.81 | − 7 6.4 | 1.973 | 2.930 | 6.5 | 20.6 |
| 4 1 | 13 10.54 | − 6 41.9 | 1.925 | 2.919 | 2.5 | 20.3 |
| 4 11 | 13 0.56 | − 6 14.1 | 1.907 | 2.907 | 1.7 | 20.2 |
| 4 21 | 12 50.82 | − 5 47.2 | 1.919 | 2.894 | 5.9 | 20.5 |
| 5 1 | 12 42.25 | − 5 25.9 | 1.958 | 2.881 | 9.8 | 20.7 |
| 5 11 | 12 35.55 | − 5 13.8 | 2.021 | 2.867 | 13.2 | 20.9 |

**101728** 1999 $EW_{7}$ 4 7.1 225°.48 2°.5/ 9.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.32 | −15 1.7 | 2.082 | 2.867 | 14.2 | 20.5 |
| 3 12 | 13 26.32 | −15 11.1 | 1.984 | 2.859 | 11.3 | 20.3 |
| 3 22 | 13 19.11 | −15 6.2 | 1.908 | 2.851 | 7.9 | 20.0 |
| 4 1 | 13 10.29 | −14 47.2 | 1.858 | 2.843 | 4.3 | 19.8 |
| 4 11 | 13 0.72 | −14 16.9 | 1.837 | 2.834 | 2.6 | 19.7 |
| 4 21 | 12 51.39 | −13 39.5 | 1.844 | 2.824 | 5.6 | 19.8 |
| 5 1 | 12 43.27 | −13 0.6 | 1.878 | 2.814 | 9.3 | 20.0 |
| 5 11 | 12 37.08 | −12 25.9 | 1.937 | 2.804 | 12.7 | 20.2 |

**176503** 2001 $YZ_{17}$ 4 7.1 123°.81 0°.5/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.34 | − 7 28.3 | 2.942 | 3.746 | 10.0 | 21.9 |
| 3 12 | 13 21.66 | − 6 54.3 | 2.869 | 3.763 | 7.6 | 21.7 |
| 3 22 | 13 15.67 | − 6 12.8 | 2.822 | 3.781 | 4.8 | 21.5 |
| 4 1 | 13 8.82 | − 5 26.6 | 2.803 | 3.797 | 1.8 | 21.4 |
| 4 11 | 13 1.71 | − 4 39.6 | 2.815 | 3.813 | 1.5 | 21.3 |
| 4 21 | 12 54.90 | − 3 55.3 | 2.857 | 3.829 | 4.4 | 21.6 |
| 5 1 | 12 48.95 | − 3 17.3 | 2.927 | 3.844 | 7.1 | 21.8 |
| 5 11 | 12 44.27 | − 2 48.1 | 3.023 | 3.859 | 9.5 | 22.0 |

**121089** Vyšší Brod 4 7.1 87°.64 3°.7/ 9.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.41 | −16 2.2 | 1.498 | 2.293 | 18.4 | 19.4 |
| 3 12 | 13 30.61 | −16 28.9 | 1.435 | 2.314 | 14.6 | 19.2 |
| 3 22 | 13 21.96 | −16 36.2 | 1.392 | 2.335 | 10.3 | 19.0 |
| 4 1 | 13 11.35 | −16 24.2 | 1.373 | 2.356 | 5.8 | 18.8 |
| 4 11 | 13 0.11 | −15 56.3 | 1.381 | 2.376 | 3.7 | 18.7 |
| 4 21 | 12 49.61 | −15 18.4 | 1.415 | 2.396 | 6.8 | 19.0 |
| 5 1 | 12 41.05 | −14 38.2 | 1.475 | 2.415 | 11.0 | 19.2 |
| 5 11 | 12 35.19 | −14 3.2 | 1.557 | 2.434 | 14.8 | 19.5 |

**327887** 2007 $BM_{35}$ 4 7.1 290°.62 8°.4/29.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.23 | +11 13.2 | 1.676 | 2.528 | 14.1 | 20.8 |
| 3 12 | 13 23.55 | +12 51.8 | 1.602 | 2.513 | 11.3 | 20.6 |
| 3 22 | 13 17.48 | +14 29.4 | 1.552 | 2.498 | 9.1 | 20.5 |
| 4 1 | 13 9.67 | +15 55.4 | 1.526 | 2.483 | 8.5 | 20.4 |
| 4 11 | 13 1.12 | +17 0.1 | 1.526 | 2.468 | 10.1 | 20.4 |
| 4 21 | 12 52.95 | +17 36.6 | 1.550 | 2.453 | 13.0 | 20.6 |
| 5 1 | 12 46.18 | +17 42.2 | 1.595 | 2.438 | 16.1 | 20.7 |
| 5 11 | 12 41.58 | +17 18.3 | 1.658 | 2.424 | 18.9 | 20.9 |

**422051** 2014 $QZ_{360}$ 4 7.1 132°.03 1°.3/ 5.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.28 | − 5 50.4 | 1.884 | 2.705 | 14.1 | 22.9 |
| 3 12 | 13 26.12 | − 5 10.8 | 1.814 | 2.718 | 10.7 | 22.7 |
| 3 22 | 13 18.83 | − 4 20.7 | 1.767 | 2.730 | 6.7 | 22.5 |
| 4 1 | 13 10.10 | − 3 24.9 | 1.747 | 2.741 | 2.6 | 22.3 |
| 4 11 | 13 0.90 | − 2 29.5 | 1.756 | 2.752 | 2.7 | 22.3 |
| 4 21 | 12 52.21 | − 1 40.8 | 1.792 | 2.763 | 6.7 | 22.6 |
| 5 1 | 12 44.91 | − 1 3.7 | 1.856 | 2.773 | 10.5 | 22.8 |
| 5 11 | 12 39.62 | − 0 41.4 | 1.942 | 2.782 | 13.8 | 23.1 |

**192879** 1999 $XX_{52}$ 4 7.1 144°.15 2°.4/ 9.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.53 | −16 45.2 | 2.170 | 2.952 | 13.8 | 20.5 |
| 3 12 | 13 23.22 | −16 31.9 | 2.084 | 2.957 | 11.0 | 20.3 |
| 3 22 | 13 16.99 | −16 2.2 | 2.020 | 2.961 | 7.7 | 20.1 |
| 4 1 | 13 9.41 | −15 17.5 | 1.982 | 2.965 | 4.2 | 19.9 |
| 4 11 | 13 1.33 | −14 21.6 | 1.973 | 2.969 | 2.5 | 19.8 |
| 4 21 | 12 53.59 | −13 19.8 | 1.991 | 2.973 | 5.1 | 20.0 |
| 5 1 | 12 47.02 | −12 18.4 | 2.038 | 2.976 | 8.5 | 20.2 |
| 5 11 | 12 42.20 | −11 23.2 | 2.109 | 2.980 | 11.7 | 20.4 |

**140351** 2001 $TD_{18}$ 4 7.1 206°.80 2°.2/ 4.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.39 | − 0 40.6 | 2.573 | 3.395 | 10.8 | 20.4 |
| 3 12 | 13 23.50 | − 0 15.0 | 2.487 | 3.391 | 8.1 | 20.2 |
| 3 22 | 13 17.01 | + 0 14.8 | 2.425 | 3.388 | 5.2 | 20.0 |
| 4 1 | 13 9.39 | + 0 45.1 | 2.392 | 3.383 | 2.5 | 19.8 |
| 4 11 | 13 1.34 | + 1 12.0 | 2.389 | 3.379 | 3.1 | 19.8 |
| 4 21 | 12 53.56 | + 1 31.9 | 2.414 | 3.374 | 6.0 | 20.0 |
| 5 1 | 12 46.72 | + 1 42.0 | 2.467 | 3.369 | 8.9 | 20.2 |
| 5 11 | 12 41.34 | + 1 40.5 | 2.544 | 3.364 | 11.6 | 20.4 |

**221976** 1995 $VL_{11}$ 4 7.1 176°.34 2°.6/ 4.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.86 | − 1 4.1 | 2.234 | 3.060 | 12.0 | 21.4 |
| 3 12 | 13 24.06 | − 0 21.9 | 2.154 | 3.062 | 9.0 | 21.2 |
| 3 22 | 13 17.44 | + 0 26.0 | 2.100 | 3.063 | 5.8 | 21.0 |
| 4 1 | 13 9.57 | + 1 15.0 | 2.073 | 3.064 | 2.9 | 20.8 |
| 4 11 | 13 1.24 | + 1 59.6 | 2.075 | 3.064 | 3.6 | 20.9 |
| 4 21 | 12 53.26 | + 2 35.2 | 2.106 | 3.064 | 6.8 | 21.1 |
| 5 1 | 12 46.38 | + 2 58.0 | 2.163 | 3.064 | 10.1 | 21.3 |
| 5 11 | 12 41.18 | + 3 6.2 | 2.244 | 3.063 | 12.9 | 21.4 |

**57738** 2001 $UZ_{160}$ 4 7.1 288°.17 2°.9/ 4.6 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.89 | − 2 21.4 | 1.720 | 2.559 | 14.4 | 19.1 |
| 3 12 | 13 24.08 | − 1 35.7 | 1.625 | 2.540 | 11.0 | 18.9 |
| 3 22 | 13 17.88 | − 0 39.8 | 1.554 | 2.520 | 7.0 | 18.6 |
| 4 1 | 13 9.87 | + 0 20.5 | 1.508 | 2.500 | 3.4 | 18.3 |
| 4 11 | 13 1.01 | + 1 17.9 | 1.489 | 2.481 | 4.2 | 18.3 |
| 4 21 | 12 52.39 | + 2 5.1 | 1.496 | 2.461 | 8.4 | 18.5 |
| 5 1 | 12 45.07 | + 2 36.4 | 1.529 | 2.441 | 12.7 | 18.7 |
| 5 11 | 12 39.89 | + 2 48.2 | 1.582 | 2.422 | 16.5 | 18.9 |

**456716** 2007 $RY_{293}$ 4 7.1 50°.62 1°.7/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.47 | − 5 6.4 | 1.338 | 2.182 | 17.5 | 21.4 |
| 3 12 | 13 26.28 | − 4 38.2 | 1.276 | 2.192 | 13.2 | 21.2 |
| 3 22 | 13 19.29 | − 3 57.8 | 1.235 | 2.202 | 8.3 | 21.0 |
| 4 1 | 13 10.36 | − 3 10.9 | 1.218 | 2.213 | 3.2 | 20.7 |
| 4 11 | 13 0.78 | − 2 25.3 | 1.226 | 2.224 | 3.3 | 20.7 |
| 4 21 | 12 51.89 | − 1 48.4 | 1.260 | 2.235 | 8.3 | 21.0 |
| 5 1 | 12 44.86 | − 1 26.1 | 1.317 | 2.246 | 13.0 | 21.3 |
| 5 11 | 12 40.45 | − 1 21.4 | 1.395 | 2.258 | 17.0 | 21.6 |

**349126** 2007 $HE_{50}$ 4 7.1 4°.24 4°.7/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.49 | − 0 31.2 | 1.114 | 1.981 | 18.6 | 20.8 |
| 3 12 | 13 24.57 | + 0 26.0 | 1.052 | 1.980 | 14.1 | 20.5 |
| 3 22 | 13 18.49 | + 1 33.7 | 1.010 | 1.980 | 9.1 | 20.2 |
| 4 1 | 13 10.13 | + 2 42.4 | 0.990 | 1.981 | 5.1 | 20.0 |
| 4 11 | 13 0.90 | + 3 40.6 | 0.993 | 1.983 | 6.4 | 20.1 |
| 4 21 | 12 52.36 | + 4 19.0 | 1.019 | 1.985 | 11.2 | 20.3 |
| 5 1 | 12 45.85 | + 4 31.9 | 1.066 | 1.988 | 16.1 | 20.6 |
| 5 11 | 12 42.26 | + 4 18.2 | 1.131 | 1.992 | 20.3 | 20.9 |

**450415** 2005 $TR_{142}$ 4 7.1 88°.89 1°.9/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.39 | − 6 12.5 | 1.359 | 2.198 | 17.5 | 21.7 |
| 3 12 | 13 26.87 | − 5 21.6 | 1.300 | 2.214 | 13.2 | 21.5 |
| 3 22 | 13 19.59 | − 4 16.3 | 1.262 | 2.229 | 8.3 | 21.2 |
| 4 1 | 13 10.45 | − 3 3.4 | 1.249 | 2.244 | 3.2 | 21.0 |
| 4 11 | 13 0.74 | − 1 52.2 | 1.262 | 2.259 | 3.5 | 21.0 |
| 4 21 | 12 51.78 | − 0 51.6 | 1.301 | 2.274 | 8.4 | 21.3 |
| 5 1 | 12 44.70 | − 0 8.2 | 1.363 | 2.288 | 13.0 | 21.6 |
| 5 11 | 12 40.20 | + 0 14.4 | 1.446 | 2.302 | 16.9 | 21.9 |

**58509** 1996 $XB_{1}$ 4 7.1 175°.46 2°.8/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.08 | + 1 20.3 | 2.525 | 3.351 | 10.8 | 19.7 |
| 3 12 | 13 23.27 | + 1 53.2 | 2.445 | 3.352 | 8.1 | 19.5 |
| 3 22 | 13 16.84 | + 2 29.1 | 2.391 | 3.353 | 5.3 | 19.4 |
| 4 1 | 13 9.33 | + 3 3.9 | 2.366 | 3.354 | 3.0 | 19.2 |
| 4 11 | 13 1.42 | + 3 33.3 | 2.369 | 3.354 | 3.7 | 19.3 |
| 4 21 | 12 53.82 | + 3 53.6 | 2.402 | 3.355 | 6.4 | 19.4 |
| 5 1 | 12 47.19 | + 4 2.3 | 2.461 | 3.355 | 9.3 | 19.6 |
| 5 11 | 12 42.04 | + 3 58.1 | 2.544 | 3.354 | 11.8 | 19.8 |

**284369** 2006 $SZ_{183}$ 4 7.1 148°.21 0°.6/ 6.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.03 | − 6 55.6 | 3.012 | 3.817 | 9.8 | 22.2 |
| 3 12 | 13 21.45 | − 6 22.6 | 2.932 | 3.827 | 7.4 | 22.1 |
| 3 22 | 13 15.57 | − 5 42.3 | 2.877 | 3.836 | 4.6 | 21.9 |
| 4 1 | 13 8.82 | − 4 57.6 | 2.851 | 3.845 | 1.7 | 21.7 |
| 4 11 | 13 1.77 | − 4 12.2 | 2.856 | 3.854 | 1.5 | 21.7 |
| 4 21 | 12 54.99 | − 3 29.5 | 2.890 | 3.862 | 4.4 | 21.9 |
| 5 1 | 12 49.02 | − 2 53.0 | 2.954 | 3.869 | 7.1 | 22.1 |
| 5 11 | 12 44.28 | − 2 25.3 | 3.043 | 3.876 | 9.5 | 22.3 |

**192290** 1989 $QT$ 4 7.1 187°.80 2°.2/ 5.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.93 | − 0 10.8 | 2.378 | 3.195 | 11.7 | 20.4 |
| 3 12 | 13 27.05 | + 0 2.4 | 2.292 | 3.194 | 8.9 | 20.2 |
| 3 22 | 13 19.32 | + 0 19.0 | 2.232 | 3.193 | 5.7 | 20.0 |
| 4 1 | 13 10.32 | + 0 35.5 | 2.200 | 3.192 | 2.7 | 19.8 |
| 4 11 | 13 0.82 | + 0 48.2 | 2.199 | 3.190 | 3.2 | 19.8 |
| 4 21 | 12 51.64 | + 0 53.8 | 2.226 | 3.188 | 6.3 | 20.0 |
| 5 1 | 12 43.57 | + 0 49.7 | 2.282 | 3.185 | 9.5 | 20.2 |
| 5 11 | 12 37.19 | + 0 34.6 | 2.362 | 3.182 | 12.3 | 20.4 |

**518861** 2010 $DW_{65}$ 4 7.1 197°.35 3°.9/10.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.55 | −20 12.6 | 2.383 | 3.135 | 13.6 | 21.9 |
| 3 12 | 13 26.27 | −20 29.7 | 2.284 | 3.132 | 11.1 | 21.8 |
| 3 22 | 13 18.98 | −20 31.2 | 2.207 | 3.129 | 8.2 | 21.6 |
| 4 1 | 13 10.23 | −20 16.4 | 2.156 | 3.125 | 5.4 | 21.4 |
| 4 11 | 13 0.84 | −19 47.0 | 2.134 | 3.120 | 3.9 | 21.3 |
| 4 21 | 12 51.69 | −19 6.5 | 2.140 | 3.115 | 5.4 | 21.4 |
| 5 1 | 12 43.64 | −18 20.1 | 2.175 | 3.109 | 8.3 | 21.5 |
| 5 11 | 12 37.35 | −17 33.8 | 2.234 | 3.103 | 11.2 | 21.7 |

**337759** 2001 $UG_{125}$ 4 7.1 124°.08 4°.9/31.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.86 | + 8 20.7 | 2.621 | 3.454 | 10.3 | 21.3 |
| 3 12 | 13 22.21 | + 9 23.3 | 2.562 | 3.467 | 7.9 | 21.2 |
| 3 22 | 13 16.09 | +10 24.4 | 2.529 | 3.479 | 5.8 | 21.1 |
| 4 1 | 13 9.02 | +11 18.7 | 2.524 | 3.491 | 4.9 | 21.0 |
| 4 11 | 13 1.66 | +12 1.3 | 2.548 | 3.503 | 5.8 | 21.1 |
| 4 21 | 12 54.68 | +12 28.9 | 2.600 | 3.515 | 7.9 | 21.3 |
| 5 1 | 12 48.65 | +12 39.7 | 2.677 | 3.526 | 10.1 | 21.4 |
| 5 11 | 12 44.04 | +12 33.9 | 2.776 | 3.537 | 12.2 | 21.6 |

**502647** 2015 $CX_{42}$ 4 7.1 70°.04 2°.4/ 4.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.81 | − 4 12.1 | 1.859 | 2.694 | 13.7 | 20.7 |
| 3 12 | 13 22.02 | − 3 5.4 | 1.792 | 2.705 | 10.2 | 20.5 |
| 3 22 | 13 16.24 | − 1 48.5 | 1.749 | 2.715 | 6.4 | 20.3 |
| 4 1 | 13 9.14 | − 0 27.7 | 1.733 | 2.726 | 2.9 | 20.1 |
| 4 11 | 13 1.59 | + 0 49.3 | 1.744 | 2.737 | 3.7 | 20.1 |
| 4 21 | 12 54.51 | + 1 55.5 | 1.784 | 2.747 | 7.4 | 20.4 |
| 5 1 | 12 48.72 | + 2 45.7 | 1.848 | 2.758 | 11.0 | 20.6 |
| 5 11 | 12 44.78 | + 3 17.1 | 1.935 | 2.769 | 14.1 | 20.8 |

**138536** 2000 $OZ_{59}$ 4 7.1 230°.64 0°.8/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.98 | −12 6.8 | 2.634 | 3.428 | 11.3 | 20.5 |
| 3 12 | 13 21.77 | −11 43.8 | 2.534 | 3.419 | 8.8 | 20.3 |
| 3 22 | 13 15.97 | −11 9.3 | 2.458 | 3.409 | 5.8 | 20.1 |
| 4 1 | 13 9.04 | −10 25.2 | 2.409 | 3.400 | 2.6 | 19.8 |
| 4 11 | 13 1.63 | − 9 35.1 | 2.390 | 3.390 | 1.3 | 19.7 |
| 4 21 | 12 54.43 | − 8 43.3 | 2.400 | 3.379 | 4.5 | 19.9 |
| 5 1 | 12 48.09 | − 7 54.5 | 2.438 | 3.369 | 7.7 | 20.1 |
| 5 11 | 12 43.17 | − 7 12.8 | 2.502 | 3.358 | 10.6 | 20.3 |

**375910** 2009 $WP_9$ 4 7.1 191°.73 4°.4/ 2.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.06 | + 4 22.1 | 2.194 | 3.026 | 12.0 | 21.2 |
| 3 12 | 13 25.02 | + 5 13.9 | 2.117 | 3.025 | 9.1 | 21.0 |
| 3 22 | 13 18.09 | + 6 7.7 | 2.064 | 3.023 | 6.2 | 20.9 |
| 4 1 | 13 9.86 | + 6 57.7 | 2.040 | 3.021 | 4.4 | 20.7 |
| 4 11 | 13 1.14 | + 7 38.0 | 2.044 | 3.018 | 5.4 | 20.8 |
| 4 21 | 12 52.78 | + 8 4.3 | 2.076 | 3.015 | 8.2 | 21.0 |
| 5 1 | 12 45.57 | + 8 13.7 | 2.133 | 3.011 | 11.2 | 21.1 |
| 5 11 | 12 40.10 | + 8 5.5 | 2.213 | 3.007 | 13.9 | 21.3 |

**431930** 2008 $TA_{131}$ 4 7.1 247°.44 2°.3/ 9.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.01 | −17 37.8 | 2.156 | 2.938 | 13.9 | 21.6 |
| 3 12 | 13 22.21 | −17 3.6 | 2.054 | 2.927 | 11.1 | 21.4 |
| 3 22 | 13 16.45 | −16 10.2 | 1.974 | 2.916 | 7.8 | 21.2 |
| 4 1 | 13 9.27 | −14 59.2 | 1.921 | 2.905 | 4.2 | 20.9 |
| 4 11 | 13 1.48 | −13 35.1 | 1.896 | 2.893 | 2.3 | 20.8 |
| 4 21 | 12 53.95 | −12 4.5 | 1.899 | 2.881 | 5.2 | 20.9 |
| 5 1 | 12 47.52 | −10 35.0 | 1.930 | 2.869 | 8.9 | 21.1 |
| 5 11 | 12 42.83 | − 9 13.8 | 1.987 | 2.857 | 12.4 | 21.3 |

**56038** 1998 $XC_3$ 4 7.1 92°.11 1°.7/ 5.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.94 | − 4 31.9 | 1.769 | 2.595 | 14.7 | 19.4 |
| 3 12 | 13 26.65 | − 3 58.3 | 1.709 | 2.616 | 11.0 | 19.2 |
| 3 22 | 13 19.17 | − 3 15.7 | 1.673 | 2.636 | 6.9 | 19.0 |
| 4 1 | 13 10.25 | − 2 29.1 | 1.662 | 2.657 | 2.7 | 18.8 |
| 4 11 | 13 0.94 | − 1 44.6 | 1.680 | 2.677 | 3.0 | 18.9 |
| 4 21 | 12 52.24 | − 1 7.9 | 1.726 | 2.696 | 7.0 | 19.2 |
| 5 1 | 12 45.07 | − 0 43.4 | 1.798 | 2.715 | 10.8 | 19.4 |
| 5 11 | 12 40.00 | − 0 33.5 | 1.892 | 2.734 | 14.1 | 19.7 |

**373588** 2002 $CE_{12}$ 4 7.1 343°.83 9°.6/ 8.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 47.89 | −13 24.5 | 0.888 | 1.715 | 25.5 | 20.1 |
| 3 12 | 13 42.34 | −16 23.5 | 0.815 | 1.709 | 21.1 | 19.8 |
| 3 22 | 13 31.43 | −19 19.7 | 0.759 | 1.704 | 16.0 | 19.4 |
| 4 1 | 13 15.72 | −22 0.4 | 0.724 | 1.700 | 11.2 | 19.1 |
| 4 11 | 12 57.19 | −24 11.4 | 0.712 | 1.696 | 9.8 | 19.0 |
| 4 21 | 12 38.81 | −25 44.1 | 0.722 | 1.694 | 13.3 | 19.2 |
| 5 1 | 12 23.61 | −26 41.7 | 0.753 | 1.692 | 18.6 | 19.5 |
| 5 11 | 12 13.58 | −27 16.6 | 0.800 | 1.691 | 23.6 | 19.8 |

**412109** 2013 $GH_{10}$ 4 7.1 284°.57 2°.2/ 5.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.98 | − 3 15.3 | 1.465 | 2.304 | 16.5 | 21.3 |
| 3 12 | 13 27.59 | − 2 57.3 | 1.378 | 2.292 | 12.6 | 21.0 |
| 3 22 | 13 20.33 | − 2 29.7 | 1.313 | 2.279 | 8.1 | 20.7 |
| 4 1 | 13 10.89 | − 1 57.4 | 1.273 | 2.267 | 3.4 | 20.4 |
| 4 11 | 13 0.44 | − 1 26.8 | 1.258 | 2.254 | 3.6 | 20.4 |
| 4 21 | 12 50.34 | − 1 4.5 | 1.269 | 2.242 | 8.6 | 20.7 |
| 5 1 | 12 41.89 | − 0 56.1 | 1.305 | 2.230 | 13.4 | 20.9 |
| 5 11 | 12 36.03 | − 1 4.6 | 1.360 | 2.217 | 17.7 | 21.1 |

**278975** 2008 $UZ_{162}$ 4 7.1 243°.71 1°.6/ 8.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.63 | −13 52.9 | 2.161 | 2.955 | 13.5 | 21.1 |
| 3 12 | 13 23.41 | −13 36.9 | 2.062 | 2.945 | 10.6 | 20.9 |
| 3 22 | 13 17.22 | −13 5.9 | 1.986 | 2.935 | 7.2 | 20.7 |
| 4 1 | 13 9.58 | −12 21.8 | 1.937 | 2.925 | 3.5 | 20.4 |
| 4 11 | 13 1.31 | −11 28.4 | 1.915 | 2.915 | 1.8 | 20.3 |
| 4 21 | 12 53.27 | −10 30.9 | 1.923 | 2.904 | 5.3 | 20.5 |
| 5 1 | 12 46.34 | − 9 35.4 | 1.957 | 2.893 | 9.0 | 20.7 |
| 5 11 | 12 41.16 | − 8 47.6 | 2.016 | 2.881 | 12.4 | 20.9 |

**460071** 2014 $OH_{242}$ 4 7.1 90°.12 1°.7/ 8.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.54 | −13 43.3 | 1.439 | 2.255 | 18.0 | 21.9 |
| 3 12 | 13 26.29 | −13 23.0 | 1.370 | 2.266 | 14.0 | 21.7 |
| 3 22 | 13 19.30 | −12 42.0 | 1.322 | 2.277 | 9.4 | 21.4 |
| 4 1 | 13 10.41 | −11 43.4 | 1.297 | 2.288 | 4.4 | 21.1 |
| 4 11 | 13 0.83 | −10 33.9 | 1.299 | 2.299 | 2.2 | 21.0 |
| 4 21 | 12 51.90 | − 9 22.1 | 1.326 | 2.309 | 6.8 | 21.3 |
| 5 1 | 12 44.74 | − 8 17.1 | 1.379 | 2.320 | 11.6 | 21.6 |
| 5 11 | 12 40.13 | − 7 25.9 | 1.453 | 2.330 | 15.6 | 21.9 |

**279864** 2001 $HP_{17}$ 4 7.1 167°.29 0°.9/ 8.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.44 | −13 6.0 | 2.436 | 3.229 | 12.2 | 21.1 |
| 3 12 | 13 22.16 | −12 29.8 | 2.348 | 3.233 | 9.4 | 20.9 |
| 3 22 | 13 16.22 | −11 39.9 | 2.284 | 3.236 | 6.2 | 20.7 |
| 4 1 | 13 9.14 | −10 39.2 | 2.248 | 3.238 | 2.8 | 20.5 |
| 4 11 | 13 1.62 | − 9 32.1 | 2.240 | 3.241 | 1.4 | 20.4 |
| 4 21 | 12 54.42 | − 8 23.8 | 2.263 | 3.242 | 4.7 | 20.6 |
| 5 1 | 12 48.22 | − 7 20.1 | 2.313 | 3.244 | 8.1 | 20.8 |
| 5 11 | 12 43.54 | − 6 25.5 | 2.389 | 3.245 | 11.0 | 21.0 |

**209926** 2005 $XE$ 4 7.1 122°.51 13°.6/19.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.45 | −39 4.2 | 1.306 | 2.001 | 25.3 | 19.9 |
| 3 12 | 13 29.75 | −40 0.0 | 1.233 | 2.009 | 22.7 | 19.8 |
| 3 22 | 13 22.19 | −40 14.9 | 1.173 | 2.018 | 19.8 | 19.6 |
| 4 1 | 13 11.70 | −39 40.3 | 1.129 | 2.026 | 16.8 | 19.4 |
| 4 11 | 13 0.00 | −38 13.3 | 1.104 | 2.033 | 14.4 | 19.3 |
| 4 21 | 12 49.10 | −35 59.8 | 1.100 | 2.041 | 13.6 | 19.2 |
| 5 1 | 12 40.76 | −33 14.4 | 1.119 | 2.047 | 14.8 | 19.3 |
| 5 11 | 12 36.04 | −30 17.4 | 1.158 | 2.054 | 17.4 | 19.5 |

**300945** 2008 $CM_{177}$ 4 7.1 120°.10 3°.1/10.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.16 | −18 39.2 | 2.663 | 3.421 | 12.1 | 21.3 |
| 3 12 | 13 24.12 | −18 54.1 | 2.577 | 3.432 | 9.8 | 21.2 |
| 3 22 | 13 17.43 | −18 55.6 | 2.516 | 3.442 | 7.1 | 21.0 |
| 4 1 | 13 9.60 | −18 44.0 | 2.480 | 3.453 | 4.5 | 20.9 |
| 4 11 | 13 1.34 | −18 21.3 | 2.474 | 3.463 | 3.1 | 20.8 |
| 4 21 | 12 53.38 | −17 50.5 | 2.497 | 3.473 | 4.6 | 20.9 |
| 5 1 | 12 46.41 | −17 15.9 | 2.548 | 3.483 | 7.2 | 21.1 |
| 5 11 | 12 40.94 | −16 42.2 | 2.625 | 3.493 | 9.8 | 21.3 |

**52845** 1998 $RH_{67}$ 4 7.1 74°.46 2°.1/ 8.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.08 | −14 37.7 | 1.341 | 2.160 | 18.9 | 18.4 |
| 3 12 | 13 26.13 | −14 20.3 | 1.274 | 2.170 | 14.8 | 18.1 |
| 3 22 | 13 19.30 | −13 40.1 | 1.226 | 2.181 | 10.0 | 17.9 |
| 4 1 | 13 10.43 | −12 40.0 | 1.202 | 2.192 | 4.9 | 17.6 |
| 4 11 | 13 0.84 | −11 26.9 | 1.203 | 2.202 | 2.5 | 17.5 |
| 4 21 | 12 51.92 | −10 10.2 | 1.229 | 2.213 | 7.1 | 17.8 |
| 5 1 | 12 44.89 | − 8 59.9 | 1.279 | 2.224 | 12.0 | 18.1 |
| 5 11 | 12 40.54 | − 8 4.0 | 1.351 | 2.234 | 16.2 | 18.4 |

**231915** 2001 $AJ$ 4 7.1 86°.57 2°.6/ 9.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.07 | −15 31.5 | 1.952 | 2.744 | 14.8 | 21.1 |
| 3 12 | 13 24.64 | −15 36.3 | 1.869 | 2.747 | 11.8 | 20.9 |
| 3 22 | 13 18.03 | −15 25.2 | 1.807 | 2.751 | 8.2 | 20.7 |
| 4 1 | 13 9.90 | −14 59.1 | 1.770 | 2.755 | 4.5 | 20.4 |
| 4 11 | 13 1.15 | −14 21.4 | 1.761 | 2.758 | 2.7 | 20.3 |
| 4 21 | 12 52.78 | −13 37.0 | 1.780 | 2.762 | 5.6 | 20.5 |
| 5 1 | 12 45.70 | −12 52.2 | 1.826 | 2.765 | 9.3 | 20.7 |
| 5 11 | 12 40.59 | −12 12.7 | 1.895 | 2.769 | 12.7 | 20.9 |

**298939** 2004 $TU_{235}$ 4 7.1 77°.19 1°.9/ 5.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.68 | − 4 9.2 | 1.408 | 2.246 | 17.1 | 20.8 |
| 3 12 | 13 28.50 | − 3 43.4 | 1.352 | 2.264 | 12.9 | 20.6 |
| 3 22 | 13 20.59 | − 3 7.5 | 1.316 | 2.282 | 8.1 | 20.4 |
| 4 1 | 13 10.86 | − 2 26.9 | 1.306 | 2.300 | 3.2 | 20.1 |
| 4 11 | 13 0.61 | − 1 49.0 | 1.322 | 2.318 | 3.4 | 20.2 |
| 4 21 | 12 51.15 | − 1 20.0 | 1.363 | 2.336 | 8.1 | 20.5 |
| 5 1 | 12 43.57 | − 1 5.0 | 1.430 | 2.354 | 12.6 | 20.8 |
| 5 11 | 12 38.58 | − 1 6.4 | 1.517 | 2.371 | 16.3 | 21.1 |

**430395** 2014 $YP_3$ 4 7.1 195°.49 2°.0/ 9.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.32 | −14 59.9 | 2.098 | 2.886 | 14.0 | 21.8 |
| 3 12 | 13 24.71 | −14 49.9 | 2.006 | 2.885 | 11.1 | 21.6 |
| 3 22 | 13 18.04 | −14 24.3 | 1.937 | 2.883 | 7.6 | 21.4 |
| 4 1 | 13 9.91 | −13 44.6 | 1.894 | 2.880 | 4.0 | 21.1 |
| 4 11 | 13 1.15 | −12 54.4 | 1.879 | 2.877 | 2.2 | 21.0 |
| 4 21 | 12 52.71 | −11 59.0 | 1.893 | 2.874 | 5.3 | 21.2 |
| 5 1 | 12 45.47 | −11 4.5 | 1.934 | 2.871 | 9.0 | 21.4 |
| 5 11 | 12 40.07 | −10 16.9 | 1.999 | 2.867 | 12.4 | 21.6 |

**501258** 2013 $WA_2$ 4 7.1 221°.37 5°.7/31.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.49 | + 9 59.5 | 2.451 | 3.279 | 11.0 | 22.1 |
| 3 12 | 13 25.25 | +11 2.7 | 2.368 | 3.268 | 8.7 | 21.9 |
| 3 22 | 13 18.22 | +12 4.7 | 2.310 | 3.256 | 6.6 | 21.8 |
| 4 1 | 13 9.94 | +12 59.0 | 2.281 | 3.243 | 5.7 | 21.7 |
| 4 11 | 13 1.15 | +13 40.1 | 2.280 | 3.230 | 6.8 | 21.7 |
| 4 21 | 12 52.63 | +14 3.7 | 2.307 | 3.215 | 9.1 | 21.9 |
| 5 1 | 12 45.13 | +14 7.9 | 2.360 | 3.201 | 11.6 | 22.0 |
| 5 11 | 12 39.24 | +13 52.8 | 2.433 | 3.185 | 13.9 | 22.1 |

**239538** 2008 $SW_{38}$ 4 7.1 125°.86 1°.1/ 6.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.20 | − 7 16.5 | 1.992 | 2.815 | 13.4 | 20.8 |
| 3 12 | 13 22.30 | − 6 27.3 | 1.912 | 2.817 | 10.1 | 20.6 |
| 3 22 | 13 16.46 | − 5 26.0 | 1.856 | 2.820 | 6.4 | 20.4 |
| 4 1 | 13 9.27 | − 4 17.4 | 1.827 | 2.822 | 2.4 | 20.1 |
| 4 11 | 13 1.58 | − 3 7.6 | 1.827 | 2.824 | 2.4 | 20.1 |
| 4 21 | 12 54.26 | − 2 3.3 | 1.854 | 2.826 | 6.3 | 20.4 |
| 5 1 | 12 48.14 | − 1 10.2 | 1.908 | 2.828 | 10.1 | 20.6 |
| 5 11 | 12 43.80 | − 0 32.3 | 1.984 | 2.830 | 13.4 | 20.8 |

**374182** 2004 $XX_{132}$ 4 7.1 133°.90 3°.3/10.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.09 | −19 38.5 | 2.476 | 3.231 | 13.0 | 21.6 |
| 3 12 | 13 24.91 | −19 38.9 | 2.393 | 3.245 | 10.5 | 21.4 |
| 3 22 | 13 17.97 | −19 23.8 | 2.333 | 3.259 | 7.6 | 21.3 |
| 4 1 | 13 9.82 | −18 53.5 | 2.299 | 3.272 | 4.8 | 21.1 |
| 4 11 | 13 1.24 | −18 10.8 | 2.294 | 3.284 | 3.3 | 21.0 |
| 4 21 | 12 53.03 | −17 19.9 | 2.319 | 3.296 | 4.9 | 21.1 |
| 5 1 | 12 45.91 | −16 26.0 | 2.371 | 3.307 | 7.7 | 21.3 |
| 5 11 | 12 40.44 | −15 34.6 | 2.450 | 3.318 | 10.4 | 21.5 |

**203396** 2001 $XO_{148}$ 4 7.1 183°.99 2°.4/ 4.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.22 | − 3 11.2 | 1.965 | 2.788 | 13.6 | 21.7 |
| 3 12 | 13 26.90 | − 2 20.2 | 1.884 | 2.789 | 10.3 | 21.5 |
| 3 22 | 13 19.42 | − 1 20.2 | 1.826 | 2.789 | 6.5 | 21.2 |
| 4 1 | 13 10.43 | − 0 16.5 | 1.796 | 2.788 | 2.9 | 21.0 |
| 4 11 | 13 0.86 | + 0 44.3 | 1.794 | 2.787 | 3.6 | 21.0 |
| 4 21 | 12 51.68 | + 1 35.9 | 1.822 | 2.784 | 7.4 | 21.3 |
| 5 1 | 12 43.80 | + 2 13.4 | 1.876 | 2.781 | 11.1 | 21.5 |
| 5 11 | 12 37.91 | + 2 33.8 | 1.952 | 2.776 | 14.4 | 21.7 |

**118049** 4066 $T_{-2}$ 4 7.1 234°.64 1°.1/ 6.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.93 | − 7 6.0 | 1.601 | 2.427 | 16.0 | 20.8 |
| 3 12 | 13 27.35 | − 6 30.8 | 1.510 | 2.416 | 12.3 | 20.5 |
| 3 22 | 13 20.08 | − 5 41.0 | 1.441 | 2.405 | 7.8 | 20.3 |
| 4 1 | 13 10.80 | − 4 41.1 | 1.398 | 2.393 | 3.0 | 19.9 |
| 4 11 | 13 0.59 | − 3 38.0 | 1.382 | 2.380 | 2.7 | 19.9 |
| 4 21 | 12 50.70 | − 2 39.7 | 1.392 | 2.367 | 7.8 | 20.1 |
| 5 1 | 12 42.34 | − 1 53.5 | 1.428 | 2.353 | 12.5 | 20.4 |
| 5 11 | 12 36.38 | − 1 24.5 | 1.486 | 2.339 | 16.7 | 20.6 |

**82031** 2000 $SP_{98}$ 4 7.1 275°.54 1°.2/ 8.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.57 | −12 56.0 | 2.451 | 3.244 | 12.1 | 19.9 |
| 3 12 | 13 22.48 | −12 38.3 | 2.336 | 3.220 | 9.5 | 19.7 |
| 3 22 | 13 16.60 | −12 7.6 | 2.245 | 3.195 | 6.4 | 19.5 |
| 4 1 | 13 9.37 | −11 25.4 | 2.181 | 3.170 | 3.0 | 19.2 |
| 4 11 | 13 1.49 | −10 35.1 | 2.145 | 3.145 | 1.5 | 19.0 |
| 4 21 | 12 53.73 | − 9 41.3 | 2.139 | 3.119 | 4.9 | 19.2 |
| 5 1 | 12 46.85 | − 8 49.2 | 2.161 | 3.094 | 8.4 | 19.4 |
| 5 11 | 12 41.50 | − 8 3.8 | 2.207 | 3.067 | 11.7 | 19.6 |

**256167** 2006 $VK_{55}$ 4 7.1 68°.74 4°.4/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.56 | + 2 32.3 | 1.566 | 2.410 | 15.4 | 20.9 |
| 3 12 | 13 27.38 | + 3 10.9 | 1.512 | 2.426 | 11.6 | 20.7 |
| 3 22 | 13 19.76 | + 3 52.2 | 1.479 | 2.443 | 7.6 | 20.5 |
| 4 1 | 13 10.53 | + 4 29.6 | 1.472 | 2.459 | 4.6 | 20.4 |
| 4 11 | 13 0.86 | + 4 56.2 | 1.492 | 2.476 | 5.6 | 20.5 |
| 4 21 | 12 51.90 | + 5 7.3 | 1.537 | 2.493 | 9.2 | 20.7 |
| 5 1 | 12 44.63 | + 5 0.3 | 1.607 | 2.509 | 12.8 | 21.0 |
| 5 11 | 12 39.69 | + 4 35.3 | 1.698 | 2.526 | 16.1 | 21.2 |

**223466** 2003 $UE_{133}$ 4 7.1 233°.53 1°.6/ 9.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.26 | −13 49.0 | 2.918 | 3.698 | 10.7 | 20.8 |
| 3 12 | 13 21.85 | −13 50.6 | 2.819 | 3.693 | 8.4 | 20.7 |
| 3 22 | 13 15.97 | −13 42.1 | 2.744 | 3.688 | 5.7 | 20.5 |
| 4 1 | 13 9.06 | −13 24.5 | 2.697 | 3.683 | 3.0 | 20.3 |
| 4 11 | 13 1.72 | −13 0.2 | 2.680 | 3.678 | 1.7 | 20.2 |
| 4 21 | 12 54.57 | −12 32.0 | 2.692 | 3.672 | 4.1 | 20.3 |
| 5 1 | 12 48.21 | −12 3.6 | 2.733 | 3.667 | 6.9 | 20.5 |
| 5 11 | 12 43.15 | −11 38.4 | 2.799 | 3.661 | 9.4 | 20.7 |

**432785** 2011 $FW_{66}$ 4 7.1 213°.03 3°.9/ 3.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.13 | + 1 38.2 | 1.963 | 2.801 | 12.9 | 20.9 |
| 3 12 | 13 23.79 | + 2 33.7 | 1.886 | 2.799 | 9.8 | 20.7 |
| 3 22 | 13 17.44 | + 3 34.1 | 1.834 | 2.797 | 6.5 | 20.4 |
| 4 1 | 13 9.67 | + 4 33.1 | 1.808 | 2.795 | 4.1 | 20.3 |
| 4 11 | 13 1.36 | + 5 24.0 | 1.810 | 2.792 | 5.1 | 20.3 |
| 4 21 | 12 53.43 | + 6 1.3 | 1.840 | 2.790 | 8.3 | 20.5 |
| 5 1 | 12 46.73 | + 6 21.3 | 1.894 | 2.787 | 11.7 | 20.7 |
| 5 11 | 12 41.89 | + 6 22.6 | 1.971 | 2.784 | 14.7 | 20.9 |

**123708** 2000 $YE_{117}$ 4 7.1 42°.16 6°.2/12.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.23 | −22 32.2 | 1.745 | 2.509 | 17.3 | 19.0 |
| 3 12 | 13 26.66 | −23 21.2 | 1.669 | 2.519 | 14.4 | 18.8 |
| 3 22 | 13 19.52 | −23 49.6 | 1.613 | 2.529 | 11.1 | 18.6 |
| 4 1 | 13 10.54 | −23 55.2 | 1.579 | 2.539 | 7.9 | 18.5 |
| 4 11 | 13 0.80 | −23 38.9 | 1.572 | 2.550 | 6.2 | 18.4 |
| 4 21 | 12 51.51 | −23 4.8 | 1.590 | 2.561 | 7.3 | 18.5 |
| 5 1 | 12 43.79 | −22 19.8 | 1.633 | 2.573 | 10.2 | 18.7 |
| 5 11 | 12 38.42 | −21 32.1 | 1.700 | 2.584 | 13.4 | 18.9 |

**512390** 2016 $OC_{2}$ 4 7.1 198°.40 7°.6/19.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.78 | −40 56.4 | 3.493 | 4.075 | 12.2 | 22.4 |
| 3 12 | 13 25.45 | −41 36.0 | 3.385 | 4.071 | 11.1 | 22.3 |
| 3 22 | 13 18.38 | −41 57.5 | 3.295 | 4.066 | 9.9 | 22.2 |
| 4 1 | 13 10.03 | −41 58.4 | 3.226 | 4.061 | 8.7 | 22.1 |
| 4 11 | 13 1.11 | −41 38.0 | 3.182 | 4.055 | 7.9 | 22.0 |
| 4 21 | 12 52.35 | −40 57.3 | 3.164 | 4.049 | 7.6 | 22.0 |
| 5 1 | 12 44.49 | −39 59.8 | 3.171 | 4.042 | 8.1 | 22.0 |
| 5 11 | 12 38.15 | −38 50.7 | 3.204 | 4.035 | 9.1 | 22.1 |

**459381** 2012 $JX_{61}$ 4 7.2 195°.33 6°.6/31.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.57 | +10 14.1 | 2.038 | 2.877 | 12.5 | 21.3 |
| 3 12 | 13 24.80 | +11 27.0 | 1.971 | 2.876 | 9.9 | 21.1 |
| 3 22 | 13 18.03 | +12 37.7 | 1.927 | 2.874 | 7.6 | 21.0 |
| 4 1 | 13 9.88 | +13 38.8 | 1.910 | 2.872 | 6.6 | 20.9 |
| 4 11 | 13 1.24 | +14 23.1 | 1.921 | 2.870 | 7.9 | 21.0 |
| 4 21 | 12 53.01 | +14 46.4 | 1.957 | 2.867 | 10.3 | 21.1 |
| 5 1 | 12 46.03 | +14 46.7 | 2.017 | 2.864 | 13.1 | 21.3 |
| 5 11 | 12 40.91 | +14 24.9 | 2.098 | 2.861 | 15.5 | 21.4 |

**60429** 2000 $CJ_{52}$ 4 7.2 303°.94 0°.0/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.77 | −10 0.8 | 1.273 | 2.115 | 18.3 | 18.5 |
| 3 12 | 13 24.09 | − 9 32.2 | 1.184 | 2.097 | 14.3 | 18.2 |
| 3 22 | 13 18.37 | − 8 42.6 | 1.114 | 2.079 | 9.4 | 17.8 |
| 4 1 | 13 10.24 | − 7 35.5 | 1.066 | 2.061 | 3.7 | 17.5 |
| 4 11 | 13 0.93 | − 6 18.8 | 1.043 | 2.043 | 2.4 | 17.3 |
| 4 21 | 12 51.89 | − 5 2.8 | 1.044 | 2.026 | 8.4 | 17.6 |
| 5 1 | 12 44.58 | − 3 58.3 | 1.068 | 2.010 | 14.1 | 17.9 |
| 5 11 | 12 40.06 | − 3 13.2 | 1.111 | 1.994 | 19.0 | 18.1 |

**87718** 2000 $SY_{42}$ 4 7.2 295°.07 2°.5/ 9.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.54 | −15 6.6 | 1.743 | 2.546 | 15.8 | 19.6 |
| 3 12 | 13 24.00 | −15 3.7 | 1.637 | 2.523 | 12.7 | 19.3 |
| 3 22 | 13 17.99 | −14 42.5 | 1.552 | 2.500 | 8.9 | 19.0 |
| 4 1 | 13 10.03 | −14 3.5 | 1.491 | 2.477 | 4.7 | 18.7 |
| 4 11 | 13 1.08 | −13 10.2 | 1.456 | 2.454 | 2.7 | 18.5 |
| 4 21 | 12 52.26 | −12 8.6 | 1.448 | 2.431 | 6.4 | 18.7 |
| 5 1 | 12 44.72 | −11 6.7 | 1.466 | 2.408 | 10.9 | 18.9 |
| 5 11 | 12 39.38 | −10 12.2 | 1.506 | 2.386 | 15.0 | 19.1 |

**238064** 2003 $EA_{16}$ 4 7.2 88°.76 4°.2/ 4.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.59 | + 0 5.1 | 1.374 | 2.222 | 16.9 | 20.1 |
| 3 12 | 13 27.82 | + 0 55.0 | 1.315 | 2.233 | 12.8 | 19.9 |
| 3 22 | 13 20.26 | + 1 51.9 | 1.277 | 2.243 | 8.2 | 19.7 |
| 4 1 | 13 10.79 | + 2 48.0 | 1.264 | 2.254 | 4.5 | 19.5 |
| 4 11 | 13 0.71 | + 3 34.5 | 1.276 | 2.264 | 5.6 | 19.6 |
| 4 21 | 12 51.36 | + 4 4.4 | 1.314 | 2.275 | 9.8 | 19.8 |
| 5 1 | 12 43.89 | + 4 13.8 | 1.375 | 2.285 | 14.0 | 20.1 |
| 5 11 | 12 39.02 | + 4 1.8 | 1.456 | 2.295 | 17.7 | 20.3 |

**129109** 2004 $XF_{32}$ 4 7.2 134°.90 1°.6/ 5.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.34 | − 4 29.9 | 2.098 | 2.922 | 12.8 | 20.4 |
| 3 12 | 13 23.79 | − 3 52.8 | 2.022 | 2.928 | 9.6 | 20.2 |
| 3 22 | 13 17.35 | − 3 7.3 | 1.970 | 2.934 | 6.0 | 20.0 |
| 4 1 | 13 9.62 | − 2 17.8 | 1.946 | 2.940 | 2.4 | 19.8 |
| 4 11 | 13 1.43 | − 1 29.5 | 1.949 | 2.945 | 2.7 | 19.8 |
| 4 21 | 12 53.62 | − 0 47.8 | 1.982 | 2.950 | 6.4 | 20.0 |
| 5 1 | 12 47.00 | − 0 16.9 | 2.040 | 2.955 | 9.9 | 20.2 |
| 5 11 | 12 42.12 | + 0 0.3 | 2.122 | 2.960 | 12.9 | 20.4 |

**87090** 2000 $LX_{2}$ 4 7.2 253°.31 7°.2/15.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.72 | −31 48.8 | 2.064 | 2.767 | 16.8 | 19.2 |
| 3 12 | 13 23.91 | −31 41.8 | 1.954 | 2.754 | 14.6 | 19.0 |
| 3 22 | 13 17.77 | −31 6.5 | 1.863 | 2.740 | 12.0 | 18.8 |
| 4 1 | 13 9.88 | −30 0.4 | 1.795 | 2.727 | 9.3 | 18.6 |
| 4 11 | 13 1.23 | −28 24.6 | 1.752 | 2.713 | 7.4 | 18.4 |
| 4 21 | 12 52.88 | −26 24.6 | 1.735 | 2.699 | 7.6 | 18.4 |
| 5 1 | 12 45.86 | −24 9.7 | 1.747 | 2.684 | 9.8 | 18.5 |
| 5 11 | 12 40.95 | −21 51.6 | 1.783 | 2.670 | 12.8 | 18.6 |

**347899** 2002 $UR_{74}$ 4 7.2 135°.60 2°.4/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.64 | − 3 57.1 | 1.587 | 2.418 | 15.9 | 21.8 |
| 3 12 | 13 28.32 | − 3 11.0 | 1.520 | 2.430 | 12.0 | 21.6 |
| 3 22 | 13 20.46 | − 2 14.4 | 1.476 | 2.441 | 7.5 | 21.3 |
| 4 1 | 13 10.86 | − 1 13.4 | 1.458 | 2.451 | 3.2 | 21.1 |
| 4 11 | 13 0.69 | − 0 15.7 | 1.467 | 2.461 | 3.7 | 21.1 |
| 4 21 | 12 51.14 | + 0 31.7 | 1.503 | 2.470 | 8.1 | 21.4 |
| 5 1 | 12 43.26 | + 1 3.2 | 1.564 | 2.479 | 12.3 | 21.7 |
| 5 11 | 12 37.78 | + 1 16.3 | 1.647 | 2.487 | 15.9 | 21.9 |

**243681** 1999 $XK_{80}$ 4 7.2 174°.25 3°.4/ 3.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.52 | + 1 17.2 | 2.160 | 2.993 | 12.1 | 20.5 |
| 3 12 | 13 23.89 | + 2 3.0 | 2.084 | 2.994 | 9.2 | 20.3 |
| 3 22 | 13 17.41 | + 2 52.9 | 2.032 | 2.995 | 6.0 | 20.1 |
| 4 1 | 13 9.65 | + 3 41.6 | 2.008 | 2.996 | 3.6 | 19.9 |
| 4 11 | 13 1.43 | + 4 23.6 | 2.012 | 2.996 | 4.4 | 20.0 |
| 4 21 | 12 53.56 | + 4 54.1 | 2.045 | 2.996 | 7.5 | 20.2 |
| 5 1 | 12 46.84 | + 5 10.0 | 2.103 | 2.997 | 10.6 | 20.4 |
| 5 11 | 12 41.82 | + 5 9.7 | 2.183 | 2.996 | 13.5 | 20.6 |

**265338** 2004 $PM_{58}$ 4 7.2 303°.64 5°.7/ 1.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.52 | + 2 46.9 | 1.677 | 2.531 | 14.0 | 19.8 |
| 3 12 | 13 21.45 | + 4 32.5 | 1.601 | 2.522 | 10.7 | 19.6 |
| 3 22 | 13 16.14 | + 6 26.0 | 1.549 | 2.512 | 7.4 | 19.4 |
| 4 1 | 13 9.24 | + 8 17.7 | 1.524 | 2.503 | 5.7 | 19.3 |
| 4 11 | 13 1.67 | + 9 56.8 | 1.525 | 2.495 | 7.4 | 19.3 |
| 4 21 | 12 54.47 | +11 14.5 | 1.552 | 2.486 | 10.8 | 19.5 |
| 5 1 | 12 48.59 | +12 5.3 | 1.602 | 2.478 | 14.4 | 19.7 |
| 5 11 | 12 44.75 | +12 27.9 | 1.671 | 2.469 | 17.5 | 19.9 |

**64481** 2001 $VK_{47}$ 4 7.2 131°.98 3°.8/ 4.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.88 | + 0 12.8 | 1.548 | 2.389 | 15.7 | 18.7 |
| 3 12 | 13 27.84 | + 0 56.0 | 1.481 | 2.395 | 11.9 | 18.5 |
| 3 22 | 13 20.21 | + 1 45.5 | 1.436 | 2.401 | 7.7 | 18.2 |
| 4 1 | 13 10.79 | + 2 34.4 | 1.416 | 2.406 | 4.2 | 18.0 |
| 4 11 | 13 0.73 | + 3 15.3 | 1.423 | 2.411 | 5.1 | 18.1 |
| 4 21 | 12 51.27 | + 3 41.9 | 1.456 | 2.416 | 9.1 | 18.3 |
| 5 1 | 12 43.48 | + 3 50.2 | 1.514 | 2.421 | 13.2 | 18.6 |
| 5 11 | 12 38.11 | + 3 39.1 | 1.592 | 2.425 | 16.7 | 18.8 |

**200811** 2001 $XO_{174}$ 4 7.2 49°.74 3°.9/10.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.94 | −18 4.4 | 1.357 | 2.164 | 19.3 | 19.6 |
| 3 12 | 13 25.38 | −18 4.5 | 1.286 | 2.171 | 15.5 | 19.4 |
| 3 22 | 13 18.91 | −17 39.6 | 1.234 | 2.179 | 11.1 | 19.1 |
| 4 1 | 13 10.35 | −16 50.4 | 1.204 | 2.187 | 6.4 | 18.9 |
| 4 11 | 13 1.00 | −15 42.2 | 1.199 | 2.195 | 3.9 | 18.8 |
| 4 21 | 12 52.25 | −14 23.9 | 1.219 | 2.203 | 7.1 | 19.0 |
| 5 1 | 12 45.37 | −13 5.9 | 1.263 | 2.212 | 11.6 | 19.2 |
| 5 11 | 12 41.16 | −11 58.1 | 1.329 | 2.221 | 15.8 | 19.5 |

**400304** 2007 $TB_{150}$ 4 7.2 114°.30 2°.3/ 9.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.99 | −15 42.1 | 1.846 | 2.634 | 15.7 | 21.6 |
| 3 12 | 13 27.54 | −15 28.2 | 1.777 | 2.654 | 12.3 | 21.4 |
| 3 22 | 13 19.82 | −14 56.5 | 1.729 | 2.674 | 8.5 | 21.2 |
| 4 1 | 13 10.59 | −14 9.0 | 1.707 | 2.693 | 4.4 | 21.0 |
| 4 11 | 13 0.88 | −13 10.3 | 1.714 | 2.712 | 2.4 | 20.9 |
| 4 21 | 12 51.76 | −12 7.2 | 1.748 | 2.729 | 5.7 | 21.1 |
| 5 1 | 12 44.15 | −11 6.5 | 1.810 | 2.747 | 9.6 | 21.4 |
| 5 11 | 12 38.69 | −10 14.7 | 1.896 | 2.763 | 13.0 | 21.7 |

**374340** 2005 $US_{11}$ 4 7.2 197°.33 0°.1/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.97 | −10 57.0 | 2.285 | 3.086 | 12.6 | 22.4 |
| 3 12 | 13 23.49 | −10 12.6 | 2.192 | 3.083 | 9.7 | 22.2 |
| 3 22 | 13 17.18 | − 9 14.6 | 2.123 | 3.080 | 6.3 | 22.0 |
| 4 1 | 13 9.58 | − 8 6.2 | 2.082 | 3.075 | 2.5 | 21.7 |
| 4 11 | 13 1.47 | − 6 52.6 | 2.071 | 3.071 | 1.5 | 21.6 |
| 4 21 | 12 53.66 | − 5 39.9 | 2.089 | 3.065 | 5.4 | 21.9 |
| 5 1 | 12 46.90 | − 4 34.0 | 2.134 | 3.059 | 9.0 | 22.1 |
| 5 11 | 12 41.79 | − 3 39.8 | 2.205 | 3.053 | 12.1 | 22.3 |

**496943** 2001 $WY_{75}$ 4 7.2 218°.95 2°.1/ 4.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.31 | − 2 12.6 | 2.461 | 3.277 | 11.3 | 23.2 |
| 3 12 | 13 25.15 | − 1 31.2 | 2.364 | 3.266 | 8.6 | 23.0 |
| 3 22 | 13 18.21 | − 0 43.2 | 2.292 | 3.254 | 5.5 | 22.8 |
| 4 1 | 13 9.99 | + 0 7.5 | 2.249 | 3.241 | 2.6 | 22.6 |
| 4 11 | 13 1.22 | + 0 55.7 | 2.236 | 3.227 | 3.2 | 22.6 |
| 4 21 | 12 52.67 | + 1 36.9 | 2.253 | 3.213 | 6.3 | 22.8 |
| 5 1 | 12 45.09 | + 2 7.0 | 2.297 | 3.197 | 9.6 | 23.0 |
| 5 11 | 12 39.08 | + 2 23.7 | 2.365 | 3.181 | 12.5 | 23.1 |

**157511** 2005 $SD_{85}$ 4 7.2 143°.03 0°.1/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.94 | − 9 57.1 | 1.461 | 2.285 | 17.3 | 21.1 |
| 3 12 | 13 27.40 | − 9 32.7 | 1.387 | 2.290 | 13.3 | 20.9 |
| 3 22 | 13 20.09 | − 8 51.4 | 1.334 | 2.295 | 8.7 | 20.6 |
| 4 1 | 13 10.79 | − 7 56.9 | 1.305 | 2.299 | 3.4 | 20.3 |
| 4 11 | 13 0.74 | − 6 56.2 | 1.302 | 2.303 | 2.0 | 20.2 |
| 4 21 | 12 51.23 | − 5 57.3 | 1.326 | 2.306 | 7.3 | 20.6 |
| 5 1 | 12 43.48 | − 5 8.1 | 1.375 | 2.309 | 12.1 | 20.8 |
| 5 11 | 12 38.29 | − 4 34.4 | 1.445 | 2.312 | 16.3 | 21.1 |

**471383** 2011 $SX_{121}$ 4 7.2 199°.59 0°.1/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.53 | − 7 43.8 | 2.860 | 3.662 | 10.3 | 22.3 |
| 3 12 | 13 22.78 | − 7 29.1 | 2.766 | 3.658 | 7.9 | 22.1 |
| 3 22 | 13 16.56 | − 7 6.9 | 2.698 | 3.655 | 5.0 | 21.9 |
| 4 1 | 13 9.31 | − 6 39.2 | 2.657 | 3.651 | 1.9 | 21.7 |
| 4 11 | 13 1.66 | − 6 9.4 | 2.647 | 3.647 | 1.3 | 21.6 |
| 4 21 | 12 54.22 | − 5 40.6 | 2.667 | 3.642 | 4.5 | 21.8 |
| 5 1 | 12 47.61 | − 5 16.2 | 2.715 | 3.637 | 7.4 | 22.0 |
| 5 11 | 12 42.31 | − 4 59.0 | 2.789 | 3.631 | 10.0 | 22.2 |

**298830** 2004 $RF_{156}$ 4 7.2 175°.34 1°.2/ 8.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.76 | −13 17.8 | 1.961 | 2.756 | 14.6 | 22.0 |
| 3 12 | 13 26.64 | −12 49.0 | 1.875 | 2.759 | 11.4 | 21.8 |
| 3 22 | 13 19.32 | −12 3.8 | 1.811 | 2.762 | 7.6 | 21.5 |
| 4 1 | 13 10.44 | −11 4.7 | 1.773 | 2.764 | 3.5 | 21.3 |
| 4 11 | 13 0.95 | − 9 56.9 | 1.765 | 2.765 | 1.7 | 21.2 |
| 4 21 | 12 51.86 | − 8 47.0 | 1.785 | 2.765 | 5.8 | 21.4 |
| 5 1 | 12 44.10 | − 7 42.1 | 1.833 | 2.764 | 9.8 | 21.7 |
| 5 11 | 12 38.36 | − 6 48.1 | 1.904 | 2.763 | 13.3 | 21.9 |

**173328** 1999 $VJ_{167}$ 4 7.2 240°.83 0°.2/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.76 | − 9 49.4 | 1.930 | 2.739 | 14.3 | 20.8 |
| 3 12 | 13 26.09 | − 9 26.6 | 1.830 | 2.725 | 11.1 | 20.6 |
| 3 22 | 13 19.12 | − 8 50.1 | 1.753 | 2.710 | 7.2 | 20.3 |
| 4 1 | 13 10.43 | − 8 2.3 | 1.702 | 2.695 | 2.9 | 20.0 |
| 4 11 | 13 0.93 | − 7 8.3 | 1.679 | 2.679 | 1.7 | 19.9 |
| 4 21 | 12 51.66 | − 6 14.1 | 1.684 | 2.662 | 6.3 | 20.1 |
| 5 1 | 12 43.62 | − 5 26.3 | 1.717 | 2.645 | 10.5 | 20.4 |
| 5 11 | 12 37.59 | − 4 50.0 | 1.772 | 2.628 | 14.3 | 20.5 |

**165721** 2001 $QZ_{63}$ 4 7.2 92°.31 3°.5/ 2.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.08 | + 0 52.9 | 2.532 | 3.361 | 10.7 | 20.0 |
| 3 12 | 13 21.63 | + 2 25.6 | 2.480 | 3.389 | 7.9 | 19.9 |
| 3 22 | 13 15.74 | + 4 2.1 | 2.454 | 3.416 | 5.2 | 19.7 |
| 4 1 | 13 8.95 | + 5 36.0 | 2.459 | 3.442 | 3.5 | 19.7 |
| 4 11 | 13 1.93 | + 7 1.2 | 2.493 | 3.468 | 4.5 | 19.8 |
| 4 21 | 12 55.33 | + 8 12.6 | 2.557 | 3.494 | 7.0 | 20.0 |
| 5 1 | 12 49.72 | + 9 7.0 | 2.648 | 3.519 | 9.5 | 20.2 |
| 5 11 | 12 45.52 | + 9 43.1 | 2.762 | 3.543 | 11.7 | 20.4 |

**168921** 2000 $YT_{53}$ 4 7.2 89°.70 3°.4/ 4.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.47 | − 1 8.1 | 1.542 | 2.383 | 15.7 | 19.9 |
| 3 12 | 13 26.67 | − 0 18.2 | 1.482 | 2.397 | 11.8 | 19.7 |
| 3 22 | 13 19.39 | + 0 39.2 | 1.445 | 2.411 | 7.5 | 19.5 |
| 4 1 | 13 10.45 | + 1 37.1 | 1.433 | 2.424 | 3.8 | 19.3 |
| 4 11 | 13 1.00 | + 2 27.7 | 1.448 | 2.438 | 4.8 | 19.3 |
| 4 21 | 12 52.21 | + 3 4.5 | 1.489 | 2.451 | 8.7 | 19.6 |
| 5 1 | 12 45.09 | + 3 23.1 | 1.555 | 2.464 | 12.7 | 19.9 |
| 5 11 | 12 40.31 | + 3 22.2 | 1.641 | 2.477 | 16.2 | 20.1 |

**387567** 2001 $SJ_{252}$ 4 7.2 103°.47 2°.2/ 5.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.92 | + 0 52.9 | 2.527 | 3.338 | 11.2 | 20.9 |
| 3 12 | 13 28.30 | + 0 54.5 | 2.458 | 3.356 | 8.5 | 20.8 |
| 3 22 | 13 20.00 | + 0 57.9 | 2.415 | 3.374 | 5.4 | 20.6 |
| 4 1 | 13 10.61 | + 1 0.2 | 2.401 | 3.391 | 2.6 | 20.4 |
| 4 11 | 13 0.90 | + 0 58.4 | 2.418 | 3.408 | 3.0 | 20.5 |
| 4 21 | 12 51.65 | + 0 50.2 | 2.465 | 3.425 | 5.9 | 20.7 |
| 5 1 | 12 43.54 | + 0 33.8 | 2.541 | 3.442 | 8.8 | 20.9 |
| 5 11 | 12 37.08 | + 0 8.6 | 2.642 | 3.458 | 11.3 | 21.1 |

**61845** 2000 $QW_{200}$ 4 7.2 191°.91 0°.3/ 7.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.30 | − 9 26.6 | 2.704 | 3.503 | 10.9 | 20.4 |
| 3 12 | 13 22.69 | − 9 11.4 | 2.612 | 3.502 | 8.4 | 20.2 |
| 3 22 | 13 16.55 | − 8 47.1 | 2.545 | 3.500 | 5.4 | 20.0 |
| 4 1 | 13 9.33 | − 8 16.0 | 2.505 | 3.498 | 2.2 | 19.8 |
| 4 11 | 13 1.68 | − 7 41.2 | 2.496 | 3.496 | 1.2 | 19.7 |
| 4 21 | 12 54.27 | − 7 6.5 | 2.516 | 3.493 | 4.5 | 19.9 |
| 5 1 | 12 47.75 | − 6 35.6 | 2.564 | 3.490 | 7.6 | 20.1 |
| 5 11 | 12 42.61 | − 6 11.8 | 2.638 | 3.487 | 10.3 | 20.3 |

**213373** 2001 $TN_{230}$ 4 7.2 118°.94 0°.1/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.80 | − 9 37.8 | 2.539 | 3.342 | 11.5 | 21.6 |
| 3 12 | 13 22.32 | − 9 9.8 | 2.462 | 3.354 | 8.7 | 21.5 |
| 3 22 | 13 16.27 | − 8 31.9 | 2.410 | 3.367 | 5.6 | 21.3 |
| 4 1 | 13 9.20 | − 7 46.8 | 2.385 | 3.379 | 2.2 | 21.1 |
| 4 11 | 13 1.78 | − 6 58.6 | 2.390 | 3.390 | 1.3 | 21.0 |
| 4 21 | 12 54.69 | − 6 11.6 | 2.425 | 3.402 | 4.7 | 21.3 |
| 5 1 | 12 48.58 | − 5 30.3 | 2.487 | 3.413 | 7.8 | 21.5 |
| 5 11 | 12 43.92 | − 4 57.8 | 2.575 | 3.424 | 10.6 | 21.7 |

**41875** 2000 $WZ_{100}$ 4 7.2 290°.49 6°.7/ 2.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.97 | + 6 17.5 | 1.486 | 2.338 | 15.6 | 18.2 |
| 3 12 | 13 26.76 | + 7 17.1 | 1.406 | 2.323 | 12.2 | 17.9 |
| 3 22 | 13 19.78 | + 8 18.7 | 1.349 | 2.309 | 8.7 | 17.7 |
| 4 1 | 13 10.74 | + 9 13.5 | 1.315 | 2.294 | 6.7 | 17.5 |
| 4 11 | 13 0.78 | + 9 52.1 | 1.308 | 2.280 | 8.1 | 17.5 |
| 4 21 | 12 51.22 | +10 7.8 | 1.324 | 2.265 | 11.7 | 17.7 |
| 5 1 | 12 43.28 | + 9 57.3 | 1.363 | 2.251 | 15.6 | 17.9 |
| 5 11 | 12 37.85 | + 9 21.0 | 1.421 | 2.237 | 19.2 | 18.1 |

**522768** 2016 $NO_{76}$ 4 7.2 232°.42 4°.6/12.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.45 | −23 46.0 | 2.522 | 3.260 | 13.3 | 22.1 |
| 3 12 | 13 23.15 | −23 56.3 | 2.419 | 3.252 | 11.1 | 22.0 |
| 3 22 | 13 17.02 | −23 49.2 | 2.337 | 3.245 | 8.5 | 21.8 |
| 4 1 | 13 9.57 | −23 24.1 | 2.280 | 3.237 | 6.1 | 21.6 |
| 4 11 | 13 1.52 | −22 42.7 | 2.250 | 3.229 | 4.6 | 21.5 |
| 4 21 | 12 53.69 | −21 48.3 | 2.249 | 3.220 | 5.5 | 21.5 |
| 5 1 | 12 46.84 | −20 46.5 | 2.276 | 3.212 | 7.9 | 21.7 |
| 5 11 | 12 41.60 | −19 43.4 | 2.328 | 3.203 | 10.6 | 21.8 |

**206572** 2003 $UK_{309}$ 4 7.2 190°.62 1°.2/ 5.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.27 | − 5 51.4 | 2.279 | 3.098 | 12.1 | 21.7 |
| 3 12 | 13 22.92 | − 5 13.1 | 2.194 | 3.097 | 9.1 | 21.5 |
| 3 22 | 13 16.80 | − 4 25.5 | 2.133 | 3.096 | 5.8 | 21.3 |
| 4 1 | 13 9.45 | − 3 32.5 | 2.100 | 3.094 | 2.2 | 21.0 |
| 4 11 | 13 1.62 | − 2 39.3 | 2.096 | 3.093 | 2.3 | 21.0 |
| 4 21 | 12 54.10 | − 1 50.9 | 2.121 | 3.091 | 5.8 | 21.2 |
| 5 1 | 12 47.62 | − 1 11.8 | 2.172 | 3.089 | 9.3 | 21.5 |
| 5 11 | 12 42.75 | − 0 45.4 | 2.248 | 3.086 | 12.3 | 21.6 |

**428316** 2007 $GV_{33}$ 4 7.2 220°.29 2°.6/ 4.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.27 | + 0 15.8 | 2.443 | 3.262 | 11.3 | 21.8 |
| 3 12 | 13 25.88 | + 0 43.8 | 2.349 | 3.253 | 8.6 | 21.6 |
| 3 22 | 13 18.67 | + 1 15.7 | 2.281 | 3.243 | 5.5 | 21.4 |
| 4 1 | 13 10.19 | + 1 47.7 | 2.242 | 3.232 | 2.9 | 21.2 |
| 4 11 | 13 1.16 | + 2 15.4 | 2.232 | 3.220 | 3.5 | 21.2 |
| 4 21 | 12 52.38 | + 2 34.8 | 2.252 | 3.208 | 6.6 | 21.4 |
| 5 1 | 12 44.61 | + 2 43.0 | 2.299 | 3.196 | 9.7 | 21.6 |
| 5 11 | 12 38.43 | + 2 38.3 | 2.369 | 3.183 | 12.5 | 21.7 |

**419322** 2009 $WO_{101}$ 4 7.2 50°.85 4°.1/11.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.57 | −21 59.2 | 1.706 | 2.485 | 17.1 | 20.5 |
| 3 12 | 13 22.25 | −21 31.4 | 1.631 | 2.496 | 13.9 | 20.3 |
| 3 22 | 13 16.62 | −20 37.9 | 1.576 | 2.508 | 10.2 | 20.1 |
| 4 1 | 13 9.42 | −19 20.1 | 1.545 | 2.520 | 6.4 | 19.9 |
| 4 11 | 13 1.67 | −17 43.8 | 1.540 | 2.532 | 4.1 | 19.8 |
| 4 21 | 12 54.45 | −15 57.5 | 1.561 | 2.544 | 6.0 | 20.0 |
| 5 1 | 12 48.71 | −14 11.5 | 1.610 | 2.557 | 9.7 | 20.2 |
| 5 11 | 12 45.09 | −12 35.0 | 1.682 | 2.570 | 13.3 | 20.5 |

**170191** 2003 $OY_{4}$ 4 7.2 198°.08 1°.0/ 6.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.05 | − 6 58.6 | 2.063 | 2.877 | 13.4 | 21.0 |
| 3 12 | 13 26.01 | − 6 17.1 | 1.974 | 2.873 | 10.2 | 20.8 |
| 3 22 | 13 18.90 | − 5 24.0 | 1.908 | 2.869 | 6.5 | 20.6 |
| 4 1 | 13 10.31 | − 4 23.3 | 1.870 | 2.864 | 2.4 | 20.3 |
| 4 11 | 13 1.10 | − 3 21.0 | 1.861 | 2.858 | 2.3 | 20.3 |
| 4 21 | 12 52.21 | − 2 23.1 | 1.880 | 2.852 | 6.4 | 20.5 |
| 5 1 | 12 44.54 | − 1 35.2 | 1.927 | 2.844 | 10.2 | 20.8 |
| 5 11 | 12 38.74 | − 1 1.5 | 1.998 | 2.836 | 13.6 | 20.9 |

**503673** 2016 $HX_2$ 4 7.2 349°.41 4°.7/10.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.14 | −16 14.9 | 1.413 | 2.222 | 18.6 | 20.5 |
| 3 12 | 13 26.45 | −17 5.9 | 1.331 | 2.216 | 15.1 | 20.3 |
| 3 22 | 13 19.78 | −17 39.3 | 1.267 | 2.211 | 11.0 | 20.0 |
| 4 1 | 13 10.81 | −17 53.2 | 1.227 | 2.207 | 6.8 | 19.8 |
| 4 11 | 13 0.76 | −17 48.7 | 1.210 | 2.203 | 4.7 | 19.6 |
| 4 21 | 12 51.06 | −17 29.9 | 1.219 | 2.201 | 7.5 | 19.8 |
| 5 1 | 12 43.10 | −17 3.9 | 1.251 | 2.199 | 11.8 | 20.0 |
| 5 11 | 12 37.86 | −16 38.7 | 1.304 | 2.198 | 16.0 | 20.3 |

**299296** 2005 $QF_6$ 4 7.2 258°.13 6°.3/13.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.11 | −26 51.5 | 2.488 | 3.202 | 14.0 | 20.6 |
| 3 12 | 13 26.10 | −27 41.7 | 2.386 | 3.195 | 12.0 | 20.4 |
| 3 22 | 13 19.03 | −28 15.2 | 2.304 | 3.188 | 9.7 | 20.3 |
| 4 1 | 13 10.41 | −28 29.6 | 2.247 | 3.181 | 7.6 | 20.1 |
| 4 11 | 13 1.02 | −28 24.4 | 2.216 | 3.174 | 6.4 | 20.0 |
| 4 21 | 12 51.79 | −28 1.6 | 2.213 | 3.167 | 6.8 | 20.0 |
| 5 1 | 12 43.60 | −27 25.6 | 2.237 | 3.160 | 8.7 | 20.1 |
| 5 11 | 12 37.18 | −26 42.4 | 2.286 | 3.153 | 11.1 | 20.3 |

**508250** 2015 $HN_{65}$ 4 7.2 334°.55 0°.4/ 6.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.34 | − 7 43.3 | 1.977 | 2.800 | 13.5 | 21.5 |
| 3 12 | 13 22.53 | − 7 19.7 | 1.892 | 2.795 | 10.3 | 21.3 |
| 3 22 | 13 16.71 | − 6 45.0 | 1.829 | 2.791 | 6.6 | 21.0 |
| 4 1 | 13 9.47 | − 6 2.4 | 1.793 | 2.788 | 2.5 | 20.8 |
| 4 11 | 13 1.64 | − 5 17.1 | 1.785 | 2.784 | 1.9 | 20.7 |
| 4 21 | 12 54.14 | − 4 34.4 | 1.804 | 2.781 | 6.0 | 21.0 |
| 5 1 | 12 47.80 | − 3 59.7 | 1.849 | 2.778 | 9.9 | 21.2 |
| 5 11 | 12 43.29 | − 3 36.8 | 1.918 | 2.775 | 13.3 | 21.4 |

**13418** 1999 $VO_9$ 4 7.2 205°.12 0°.0/ 7.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.61 | − 9 46.8 | 2.045 | 2.851 | 13.7 | 18.8 |
| 3 12 | 13 25.75 | − 9 17.3 | 1.953 | 2.847 | 10.6 | 18.6 |
| 3 22 | 13 18.77 | − 8 34.6 | 1.884 | 2.841 | 6.8 | 18.4 |
| 4 1 | 13 10.28 | − 7 41.7 | 1.842 | 2.835 | 2.7 | 18.1 |
| 4 11 | 13 1.14 | − 6 43.7 | 1.828 | 2.828 | 1.6 | 18.0 |
| 4 21 | 12 52.30 | − 5 46.5 | 1.844 | 2.821 | 5.9 | 18.2 |
| 5 1 | 12 44.68 | − 4 56.2 | 1.886 | 2.813 | 9.9 | 18.5 |
| 5 11 | 12 38.95 | − 4 17.6 | 1.953 | 2.804 | 13.3 | 18.7 |

**352648** 2008 $OA_{18}$ 4 7.2 291°.21 6°.4/10.9 13 C

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.98 | −19 47.7 | 1.339 | 2.134 | 20.2 | 21.3 |
| 3 12 | 13 28.98 | −20 41.0 | 1.252 | 2.126 | 16.7 | 21.0 |
| 3 22 | 13 21.64 | −21 12.6 | 1.184 | 2.117 | 12.6 | 20.7 |
| 4 1 | 13 11.62 | −21 18.7 | 1.136 | 2.108 | 8.5 | 20.5 |
| 4 11 | 13 0.24 | −20 59.4 | 1.112 | 2.100 | 6.4 | 20.3 |
| 4 21 | 12 49.14 | −20 19.1 | 1.113 | 2.092 | 8.6 | 20.4 |
| 5 1 | 12 39.95 | −19 27.0 | 1.137 | 2.083 | 12.9 | 20.6 |
| 5 11 | 12 33.82 | −18 34.1 | 1.181 | 2.075 | 17.2 | 20.9 |

**239513** 2007 $VY_{286}$ 4 7.2 22°.28 4°.1/ 3.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.42 | + 3 26.9 | 2.036 | 2.874 | 12.6 | 19.9 |
| 3 12 | 13 23.93 | + 4 5.6 | 1.964 | 2.876 | 9.5 | 19.7 |
| 3 22 | 13 17.50 | + 4 46.4 | 1.916 | 2.877 | 6.4 | 19.5 |
| 4 1 | 13 9.74 | + 5 23.7 | 1.894 | 2.879 | 4.2 | 19.4 |
| 4 11 | 13 1.51 | + 5 52.2 | 1.901 | 2.881 | 5.1 | 19.4 |
| 4 21 | 12 53.67 | + 6 7.4 | 1.934 | 2.883 | 8.1 | 19.6 |
| 5 1 | 12 47.05 | + 6 6.8 | 1.993 | 2.885 | 11.2 | 19.8 |
| 5 11 | 12 42.22 | + 5 49.9 | 2.074 | 2.888 | 14.0 | 20.0 |

**105982** 2000 $SV_{268}$ 4 7.2 139°.81 1°.8/ 5.0 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.63 | − 2 25.7 | 2.644 | 3.465 | 10.5 | 20.2 |
| 3 12 | 13 22.14 | − 1 51.9 | 2.567 | 3.472 | 7.9 | 20.0 |
| 3 22 | 13 16.16 | − 1 12.8 | 2.515 | 3.478 | 5.0 | 19.8 |
| 4 1 | 13 9.19 | − 0 32.1 | 2.492 | 3.484 | 2.2 | 19.6 |
| 4 11 | 13 1.86 | + 0 6.1 | 2.498 | 3.490 | 2.7 | 19.7 |
| 4 21 | 12 54.84 | + 0 38.1 | 2.533 | 3.496 | 5.5 | 19.9 |
| 5 1 | 12 48.72 | + 1 0.6 | 2.595 | 3.501 | 8.4 | 20.1 |
| 5 11 | 12 43.99 | + 1 11.8 | 2.682 | 3.506 | 10.9 | 20.3 |

**494168** 2016 $GE_{126}$ 4 7.2 73°.52 0°.5/ 7.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.05 | −11 24.4 | 1.671 | 2.489 | 15.8 | 21.0 |
| 3 12 | 13 24.09 | −10 53.0 | 1.598 | 2.497 | 12.2 | 20.7 |
| 3 22 | 13 17.80 | −10 4.8 | 1.546 | 2.505 | 7.9 | 20.5 |
| 4 1 | 13 9.90 | − 9 3.8 | 1.520 | 2.513 | 3.3 | 20.2 |
| 4 11 | 13 1.42 | − 7 56.2 | 1.520 | 2.521 | 1.7 | 20.1 |
| 4 21 | 12 53.44 | − 6 49.6 | 1.548 | 2.529 | 6.4 | 20.5 |
| 5 1 | 12 46.93 | − 5 51.3 | 1.602 | 2.537 | 10.7 | 20.7 |
| 5 11 | 12 42.56 | − 5 7.0 | 1.677 | 2.545 | 14.4 | 21.0 |

**467766** 2009 $VV_{14}$ 4 7.2 201°.86 0°.9/ 6.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.14 | − 5 32.1 | 2.313 | 3.124 | 12.2 | 22.1 |
| 3 12 | 13 25.87 | − 5 10.7 | 2.222 | 3.120 | 9.3 | 21.9 |
| 3 22 | 13 18.72 | − 4 41.2 | 2.155 | 3.115 | 5.9 | 21.7 |
| 4 1 | 13 10.24 | − 4 6.6 | 2.115 | 3.110 | 2.3 | 21.4 |
| 4 11 | 13 1.20 | − 3 31.4 | 2.106 | 3.104 | 2.1 | 21.4 |
| 4 21 | 12 52.43 | − 2 59.7 | 2.126 | 3.097 | 5.8 | 21.7 |
| 5 1 | 12 44.74 | − 2 35.8 | 2.173 | 3.090 | 9.3 | 21.9 |
| 5 11 | 12 38.74 | − 2 22.6 | 2.245 | 3.082 | 12.3 | 22.0 |

**80110** 1999 $RQ_{40}$ 4 7.2 141°.85 0°.6/ 6.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.68 | − 8 52.2 | 1.435 | 2.264 | 17.3 | 20.4 |
| 3 12 | 13 27.22 | − 8 12.4 | 1.364 | 2.270 | 13.3 | 20.1 |
| 3 22 | 13 20.00 | − 7 15.5 | 1.313 | 2.276 | 8.5 | 19.9 |
| 4 1 | 13 10.80 | − 6 6.7 | 1.286 | 2.281 | 3.2 | 19.6 |
| 4 11 | 13 0.87 | − 4 53.9 | 1.286 | 2.286 | 2.4 | 19.5 |
| 4 21 | 12 51.52 | − 3 46.2 | 1.313 | 2.290 | 7.7 | 19.8 |
| 5 1 | 12 43.94 | − 2 51.7 | 1.364 | 2.294 | 12.5 | 20.1 |
| 5 11 | 12 38.93 | − 2 15.6 | 1.436 | 2.298 | 16.7 | 20.4 |

**138649** 2000 $RZ_{39}$ 4 7.2 317°.51 1°.7/ 9.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.56 | −15 40.0 | 2.286 | 3.076 | 13.0 | 19.7 |
| 3 12 | 13 20.95 | −15 8.1 | 2.196 | 3.075 | 10.2 | 19.5 |
| 3 22 | 13 15.59 | −14 20.2 | 2.128 | 3.075 | 7.0 | 19.3 |
| 4 1 | 13 9.02 | −13 18.5 | 2.087 | 3.074 | 3.6 | 19.1 |
| 4 11 | 13 1.97 | −12 7.3 | 2.075 | 3.074 | 1.8 | 18.9 |
| 4 21 | 12 55.22 | −10 52.6 | 2.091 | 3.073 | 4.8 | 19.2 |
| 5 1 | 12 49.50 | − 9 40.5 | 2.135 | 3.072 | 8.3 | 19.4 |
| 5 11 | 12 45.36 | − 8 36.7 | 2.203 | 3.072 | 11.4 | 19.6 |

**403001** 2007 $VE_{266}$ 4 7.2 164°.52 1°.6/ 5.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.78 | − 4 48.9 | 2.061 | 2.878 | 13.2 | 21.8 |
| 3 12 | 13 26.47 | − 4 6.7 | 1.982 | 2.884 | 10.0 | 21.6 |
| 3 22 | 13 19.12 | − 3 15.2 | 1.928 | 2.890 | 6.3 | 21.4 |
| 4 1 | 13 10.39 | − 2 19.0 | 1.901 | 2.895 | 2.5 | 21.2 |
| 4 11 | 13 1.14 | − 1 24.0 | 1.904 | 2.899 | 2.8 | 21.2 |
| 4 21 | 12 52.31 | − 0 35.7 | 1.935 | 2.902 | 6.6 | 21.4 |
| 5 1 | 12 44.74 | + 0 1.0 | 1.993 | 2.905 | 10.2 | 21.7 |
| 5 11 | 12 39.05 | + 0 23.1 | 2.075 | 2.907 | 13.4 | 21.9 |

**435936** 2009 $BD_{177}$ 4 7.2 348°.42 3°.7/ 2.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.69 | + 0 46.0 | 2.094 | 2.935 | 12.2 | 21.4 |
| 3 12 | 13 21.10 | + 1 55.6 | 2.019 | 2.934 | 9.1 | 21.2 |
| 3 22 | 13 15.70 | + 3 10.9 | 1.969 | 2.933 | 6.0 | 21.0 |
| 4 1 | 13 9.06 | + 4 25.9 | 1.946 | 2.932 | 3.8 | 20.8 |
| 4 11 | 13 1.96 | + 5 33.4 | 1.951 | 2.932 | 4.9 | 20.9 |
| 4 21 | 12 55.19 | + 6 27.7 | 1.983 | 2.931 | 7.9 | 21.1 |
| 5 1 | 12 49.52 | + 7 4.7 | 2.041 | 2.931 | 11.1 | 21.3 |
| 5 11 | 12 45.49 | + 7 22.6 | 2.120 | 2.930 | 13.9 | 21.5 |

**299736** 2006 $RV_{63}$ 4 7.2 158°.24 0°.8/ 7.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.95 | −10 21.8 | 2.424 | 3.223 | 12.1 | 20.4 |
| 3 12 | 13 24.13 | −10 21.5 | 2.337 | 3.224 | 9.3 | 20.2 |
| 3 22 | 13 17.57 | −10 11.5 | 2.273 | 3.226 | 6.1 | 20.0 |
| 4 1 | 13 9.79 | − 9 53.3 | 2.236 | 3.228 | 2.7 | 19.8 |
| 4 11 | 13 1.52 | − 9 30.1 | 2.229 | 3.229 | 1.4 | 19.7 |
| 4 21 | 12 53.54 | − 9 5.4 | 2.251 | 3.231 | 4.8 | 19.9 |
| 5 1 | 12 46.57 | − 8 43.1 | 2.301 | 3.232 | 8.1 | 20.1 |
| 5 11 | 12 41.18 | − 8 26.8 | 2.376 | 3.233 | 11.1 | 20.3 |

**330132** 2005 $YM_{108}$ 4 7.2 196°.74 1°.8/ 5.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.82 | − 3 43.7 | 2.434 | 3.251 | 11.4 | 22.2 |
| 3 12 | 13 24.01 | − 2 57.9 | 2.345 | 3.248 | 8.6 | 22.0 |
| 3 22 | 13 17.48 | − 2 4.5 | 2.282 | 3.244 | 5.4 | 21.8 |
| 4 1 | 13 9.76 | − 1 7.6 | 2.247 | 3.240 | 2.4 | 21.6 |
| 4 11 | 13 1.57 | − 0 12.1 | 2.241 | 3.235 | 2.8 | 21.6 |
| 4 21 | 12 53.64 | + 0 36.8 | 2.265 | 3.229 | 6.1 | 21.8 |
| 5 1 | 12 46.71 | + 1 15.0 | 2.317 | 3.222 | 9.3 | 22.0 |
| 5 11 | 12 41.33 | + 1 39.8 | 2.392 | 3.215 | 12.1 | 22.2 |

**95812** 2003 $FA_{59}$ 4 7.2 278°.09 1°.2/ 6.4 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.81 | − 5 20.6 | 1.446 | 2.281 | 16.9 | 20.4 |
| 3 12 | 13 28.37 | − 5 11.5 | 1.358 | 2.269 | 13.0 | 20.1 |
| 3 22 | 13 20.97 | − 4 51.3 | 1.291 | 2.256 | 8.4 | 19.8 |
| 4 1 | 13 11.30 | − 4 23.5 | 1.249 | 2.244 | 3.2 | 19.5 |
| 4 11 | 13 0.56 | − 3 54.2 | 1.232 | 2.231 | 2.8 | 19.4 |
| 4 21 | 12 50.14 | − 3 29.9 | 1.241 | 2.218 | 8.2 | 19.7 |
| 5 1 | 12 41.40 | − 3 16.5 | 1.275 | 2.205 | 13.2 | 19.9 |
| 5 11 | 12 35.31 | − 3 18.2 | 1.329 | 2.193 | 17.6 | 20.1 |

**281061** 2006 $KR_{27}$ 4 7.2 182°.15 2°.3/ 9.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.87 | −17 38.4 | 2.462 | 3.234 | 12.6 | 21.1 |
| 3 12 | 13 22.60 | −17 15.5 | 2.368 | 3.234 | 10.1 | 20.9 |
| 3 22 | 13 16.61 | −16 36.9 | 2.297 | 3.234 | 7.1 | 20.7 |
| 4 1 | 13 9.43 | −15 43.8 | 2.253 | 3.234 | 4.0 | 20.5 |
| 4 11 | 13 1.78 | −14 40.0 | 2.238 | 3.234 | 2.3 | 20.4 |
| 4 21 | 12 54.41 | −13 30.4 | 2.252 | 3.233 | 4.6 | 20.5 |
| 5 1 | 12 48.04 | −12 20.9 | 2.294 | 3.231 | 7.8 | 20.7 |
| 5 11 | 12 43.22 | −11 17.1 | 2.362 | 3.229 | 10.7 | 20.9 |

**474867** 2005 $SO_{138}$ 4 7.2 272°.10 0°.2/ 7.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.34 | − 7 37.6 | 2.399 | 3.203 | 12.0 | 21.6 |
| 3 12 | 13 25.25 | − 7 45.4 | 2.305 | 3.198 | 9.2 | 21.4 |
| 3 22 | 13 18.34 | − 7 45.7 | 2.236 | 3.193 | 6.0 | 21.1 |
| 4 1 | 13 10.12 | − 7 40.1 | 2.194 | 3.187 | 2.4 | 20.9 |
| 4 11 | 13 1.34 | − 7 31.4 | 2.182 | 3.182 | 1.4 | 20.8 |
| 4 21 | 12 52.81 | − 7 22.6 | 2.199 | 3.177 | 5.0 | 21.0 |
| 5 1 | 12 45.29 | − 7 17.1 | 2.244 | 3.171 | 8.5 | 21.2 |
| 5 11 | 12 39.39 | − 7 17.8 | 2.314 | 3.166 | 11.5 | 21.4 |

**509557** 2008 $BK_{53}$ 4 7.2 100°.44 8°.4/26.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 25.53 | +18 42.8 | 2.344 | 3.176 | 11.3 | 21.1 |
| 3 12 | 13 21.56 | +20 28.0 | 2.297 | 3.182 | 9.6 | 21.0 |
| 3 22 | 13 15.91 | +22 4.8 | 2.276 | 3.188 | 8.6 | 20.9 |
| 4 1 | 13 9.13 | +23 25.4 | 2.281 | 3.194 | 8.6 | 20.9 |
| 4 11 | 13 1.99 | +24 23.6 | 2.312 | 3.200 | 9.8 | 21.0 |
| 4 21 | 12 55.23 | +24 56.4 | 2.367 | 3.205 | 11.5 | 21.1 |
| 5 1 | 12 49.55 | +25 3.1 | 2.443 | 3.211 | 13.4 | 21.2 |
| 5 11 | 12 45.45 | +24 45.7 | 2.537 | 3.217 | 15.0 | 21.4 |

**136621** 1994 $JD_{7}$ 4 7.2 248°.48 0°.2/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.44 | − 8 31.3 | 2.621 | 3.426 | 11.1 | 21.2 |
| 3 12 | 13 22.21 | − 8 1.3 | 2.516 | 3.411 | 8.5 | 21.0 |
| 3 22 | 13 16.36 | − 7 21.5 | 2.436 | 3.395 | 5.4 | 20.7 |
| 4 1 | 13 9.35 | − 6 34.4 | 2.384 | 3.378 | 2.1 | 20.5 |
| 4 11 | 13 1.82 | − 5 43.9 | 2.362 | 3.361 | 1.5 | 20.4 |
| 4 21 | 12 54.46 | − 4 54.7 | 2.369 | 3.344 | 4.9 | 20.6 |
| 5 1 | 12 47.95 | − 4 11.1 | 2.404 | 3.327 | 8.2 | 20.8 |
| 5 11 | 12 42.84 | − 3 36.7 | 2.465 | 3.309 | 11.1 | 20.9 |

**127285** 2002 $JG_{70}$ 4 7.2 279°.00 4°.5/ 2.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.91 | + 2 35.7 | 1.996 | 2.837 | 12.7 | 19.9 |
| 3 12 | 13 23.06 | + 3 44.7 | 1.903 | 2.816 | 9.7 | 19.7 |
| 3 22 | 13 17.15 | + 4 59.7 | 1.834 | 2.796 | 6.6 | 19.4 |
| 4 1 | 13 9.72 | + 6 14.1 | 1.791 | 2.775 | 4.6 | 19.3 |
| 4 11 | 13 1.59 | + 7 20.2 | 1.777 | 2.754 | 5.8 | 19.3 |
| 4 21 | 12 53.68 | + 8 11.4 | 1.790 | 2.732 | 9.0 | 19.5 |
| 5 1 | 12 46.88 | + 8 43.1 | 1.827 | 2.711 | 12.5 | 19.6 |
| 5 11 | 12 41.89 | + 8 53.3 | 1.886 | 2.689 | 15.6 | 19.8 |

**110924** 2001 $UV_{144}$ 4 7.2 84°.72 0°.6/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.15 | − 7 22.0 | 2.253 | 3.070 | 12.2 | 20.3 |
| 3 12 | 13 22.09 | − 6 50.3 | 2.173 | 3.074 | 9.3 | 20.1 |
| 3 22 | 13 16.29 | − 6 8.8 | 2.118 | 3.079 | 5.9 | 19.9 |
| 4 1 | 13 9.31 | − 5 21.0 | 2.089 | 3.084 | 2.2 | 19.7 |
| 4 11 | 13 1.89 | − 4 31.6 | 2.089 | 3.088 | 1.8 | 19.7 |
| 4 21 | 12 54.80 | − 3 45.6 | 2.118 | 3.093 | 5.5 | 19.9 |
| 5 1 | 12 48.77 | − 3 7.6 | 2.174 | 3.098 | 8.9 | 20.1 |
| 5 11 | 12 44.33 | − 2 41.0 | 2.254 | 3.102 | 11.9 | 20.3 |

**417274** 2006 $AL_{44}$ 4 7.2 204°.71 2°.0/11.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 20.95 | −19 1.3 | 4.598 | 5.344 | 7.5 | 21.3 |
| 3 12 | 13 17.41 | −19 2.3 | 4.497 | 5.343 | 6.1 | 21.2 |
| 3 22 | 13 12.99 | −18 55.0 | 4.420 | 5.342 | 4.5 | 21.1 |
| 4 1 | 13 7.97 | −18 40.1 | 4.371 | 5.341 | 2.9 | 20.9 |
| 4 11 | 13 2.71 | −18 18.8 | 4.351 | 5.339 | 2.0 | 20.9 |
| 4 21 | 12 57.58 | −17 52.9 | 4.362 | 5.338 | 2.8 | 20.9 |
| 5 1 | 12 52.92 | −17 24.7 | 4.402 | 5.337 | 4.4 | 21.0 |
| 5 11 | 12 49.03 | −16 56.6 | 4.469 | 5.335 | 6.1 | 21.2 |

**24118** Babazadeh 4 7.2 116°.50 0°.8/ 6.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.06 | − 6 29.9 | 2.055 | 2.873 | 13.2 | 19.3 |
| 3 12 | 13 24.44 | − 6 5.9 | 1.978 | 2.880 | 10.0 | 19.1 |
| 3 22 | 13 17.85 | − 5 32.4 | 1.924 | 2.886 | 6.3 | 18.9 |
| 4 1 | 13 9.93 | − 4 52.9 | 1.898 | 2.892 | 2.4 | 18.7 |
| 4 11 | 13 1.52 | − 4 12.2 | 1.900 | 2.899 | 2.0 | 18.6 |
| 4 21 | 12 53.50 | − 3 35.5 | 1.930 | 2.905 | 6.0 | 18.9 |
| 5 1 | 12 46.69 | − 3 7.2 | 1.987 | 2.910 | 9.6 | 19.1 |
| 5 11 | 12 41.69 | − 2 50.6 | 2.068 | 2.916 | 12.8 | 19.4 |

**271735** 2004 $RD_{292}$ 4 7.2 197°.06 2°.8/ 9.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.27 | −14 3.4 | 2.078 | 2.859 | 14.4 | 20.5 |
| 3 12 | 13 29.38 | −14 39.6 | 1.985 | 2.858 | 11.4 | 20.3 |
| 3 22 | 13 21.18 | −15 3.9 | 1.915 | 2.857 | 8.0 | 20.1 |
| 4 1 | 13 11.29 | −15 15.9 | 1.872 | 2.855 | 4.5 | 19.8 |
| 4 11 | 13 0.64 | −15 16.9 | 1.858 | 2.853 | 2.9 | 19.7 |
| 4 21 | 12 50.26 | −15 9.8 | 1.872 | 2.851 | 5.7 | 19.9 |
| 5 1 | 12 41.15 | −14 58.9 | 1.915 | 2.849 | 9.3 | 20.1 |
| 5 11 | 12 34.09 | −14 49.2 | 1.982 | 2.846 | 12.6 | 20.3 |

**46046** 2001 $DM_{70}$ 4 7.2 300°.29 3°.5/ 4.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.80 | − 2 42.9 | 1.503 | 2.352 | 15.7 | 19.2 |
| 3 12 | 13 23.51 | − 1 36.1 | 1.423 | 2.342 | 11.9 | 18.9 |
| 3 22 | 13 17.67 | − 0 16.9 | 1.365 | 2.333 | 7.6 | 18.7 |
| 4 1 | 13 9.97 | + 1 7.5 | 1.332 | 2.324 | 3.8 | 18.4 |
| 4 11 | 13 1.47 | + 2 27.3 | 1.325 | 2.315 | 5.0 | 18.5 |
| 4 21 | 12 53.35 | + 3 33.4 | 1.343 | 2.307 | 9.3 | 18.7 |
| 5 1 | 12 46.75 | + 4 18.9 | 1.385 | 2.298 | 13.7 | 18.9 |
| 5 11 | 12 42.46 | + 4 40.4 | 1.447 | 2.290 | 17.6 | 19.1 |

**4975** Dohmoto 4 7.2 131°.88 1°.6/ 4.9 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.39 | − 4 40.4 | 2.771 | 3.587 | 10.2 | 17.9 |
| 3 12 | 13 21.12 | − 3 38.3 | 2.697 | 3.600 | 7.6 | 17.8 |
| 3 22 | 13 15.49 | − 2 28.9 | 2.650 | 3.613 | 4.8 | 17.6 |
| 4 1 | 13 8.96 | − 1 16.5 | 2.632 | 3.625 | 2.0 | 17.4 |
| 4 11 | 13 2.13 | − 0 6.1 | 2.645 | 3.637 | 2.5 | 17.5 |
| 4 21 | 12 55.62 | + 0 57.7 | 2.687 | 3.649 | 5.3 | 17.7 |
| 5 1 | 12 49.97 | + 1 50.9 | 2.757 | 3.660 | 8.1 | 17.9 |
| 5 11 | 12 45.62 | + 2 31.1 | 2.853 | 3.671 | 10.5 | 18.1 |

**506337** 2017 $OJ_{33}$ 4 7.2 300°.01 4°.1/10.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.22 | −19 24.7 | 1.597 | 2.389 | 17.5 | 20.8 |
| 3 12 | 13 23.94 | −19 24.6 | 1.504 | 2.379 | 14.3 | 20.6 |
| 3 22 | 13 18.04 | −19 1.0 | 1.431 | 2.369 | 10.5 | 20.3 |
| 4 1 | 13 10.15 | −18 13.7 | 1.381 | 2.360 | 6.4 | 20.1 |
| 4 11 | 13 1.34 | −17 6.2 | 1.356 | 2.350 | 4.1 | 19.9 |
| 4 21 | 12 52.84 | −15 45.7 | 1.358 | 2.341 | 6.7 | 20.0 |
| 5 1 | 12 45.84 | −14 21.8 | 1.384 | 2.332 | 10.9 | 20.2 |
| 5 11 | 12 41.22 | −13 4.3 | 1.433 | 2.323 | 15.0 | 20.4 |

**494744** 2005 $VG_{60}$ 4 7.2 335°.89 6°.5/ 2.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.16 | + 2 23.8 | 1.149 | 2.018 | 18.0 | 20.9 |
| 3 12 | 13 24.41 | + 3 41.7 | 1.082 | 2.011 | 13.8 | 20.6 |
| 3 22 | 13 18.54 | + 5 8.2 | 1.036 | 2.004 | 9.4 | 20.3 |
| 4 1 | 13 10.36 | + 6 32.0 | 1.012 | 1.998 | 6.5 | 20.1 |
| 4 11 | 13 1.24 | + 7 40.3 | 1.012 | 1.993 | 8.2 | 20.2 |
| 4 21 | 12 52.69 | + 8 23.2 | 1.034 | 1.988 | 12.6 | 20.4 |
| 5 1 | 12 46.09 | + 8 35.4 | 1.076 | 1.984 | 17.2 | 20.7 |
| 5 11 | 12 42.34 | + 8 16.5 | 1.135 | 1.980 | 21.3 | 20.9 |

**4497** Taguchi 4 7.2 141°.03 4°.8/ 2.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.52 | + 4 59.1 | 2.117 | 2.946 | 12.5 | 17.2 |
| 3 12 | 13 26.86 | + 6 2.8 | 2.055 | 2.961 | 9.5 | 17.0 |
| 3 22 | 13 19.29 | + 7 7.8 | 2.018 | 2.975 | 6.6 | 16.9 |
| 4 1 | 13 10.46 | + 8 7.4 | 2.010 | 2.987 | 4.8 | 16.8 |
| 4 11 | 13 1.24 | + 8 55.4 | 2.030 | 3.000 | 5.9 | 16.9 |
| 4 21 | 12 52.53 | + 9 27.3 | 2.078 | 3.011 | 8.6 | 17.1 |
| 5 1 | 12 45.11 | + 9 40.5 | 2.151 | 3.021 | 11.4 | 17.3 |
| 5 11 | 12 39.52 | + 9 35.2 | 2.247 | 3.031 | 14.0 | 17.5 |

**296792** 2009 $VF_{24}$ 4 7.2 268°.94 1°.0/ 6.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.27 | − 5 48.9 | 1.955 | 2.776 | 13.7 | 21.0 |
| 3 12 | 13 25.74 | − 5 27.4 | 1.853 | 2.756 | 10.5 | 20.7 |
| 3 22 | 13 18.96 | − 4 55.8 | 1.774 | 2.736 | 6.7 | 20.4 |
| 4 1 | 13 10.48 | − 4 17.3 | 1.721 | 2.716 | 2.6 | 20.1 |
| 4 11 | 13 1.16 | − 3 37.0 | 1.697 | 2.695 | 2.4 | 20.1 |
| 4 21 | 12 52.03 | − 3 0.5 | 1.700 | 2.674 | 6.7 | 20.3 |
| 5 1 | 12 44.06 | − 2 32.9 | 1.730 | 2.652 | 10.9 | 20.5 |
| 5 11 | 12 38.04 | − 2 18.3 | 1.783 | 2.631 | 14.6 | 20.7 |

**111312** 2001 $XT_{68}$ 4 7.2 345°.81 8°.4/14.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.06 | −27 44.7 | 1.542 | 2.297 | 19.7 | 18.3 |
| 3 12 | 13 24.10 | −28 28.9 | 1.456 | 2.292 | 16.9 | 18.1 |
| 3 22 | 13 18.29 | −28 45.8 | 1.387 | 2.287 | 13.7 | 17.9 |
| 4 1 | 13 10.29 | −28 31.1 | 1.338 | 2.283 | 10.6 | 17.7 |
| 4 11 | 13 1.28 | −27 45.1 | 1.312 | 2.280 | 8.6 | 17.6 |
| 4 21 | 12 52.62 | −26 32.6 | 1.310 | 2.277 | 9.1 | 17.6 |
| 5 1 | 12 45.64 | −25 3.1 | 1.332 | 2.275 | 11.7 | 17.7 |
| 5 11 | 12 41.28 | −23 28.6 | 1.375 | 2.274 | 15.0 | 17.9 |

**333698** 2008 $VM_{19}$ 4 7.2 200°.71 3°.7/11.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.63 | −21 57.6 | 2.467 | 3.216 | 13.2 | 21.8 |
| 3 12 | 13 23.28 | −21 45.5 | 2.367 | 3.213 | 10.9 | 21.6 |
| 3 22 | 13 17.11 | −21 15.2 | 2.289 | 3.209 | 8.1 | 21.4 |
| 4 1 | 13 9.67 | −20 27.3 | 2.237 | 3.205 | 5.3 | 21.2 |
| 4 11 | 13 1.70 | −19 24.3 | 2.212 | 3.200 | 3.7 | 21.1 |
| 4 21 | 12 53.99 | −18 11.0 | 2.217 | 3.195 | 5.0 | 21.2 |
| 5 1 | 12 47.31 | −16 53.7 | 2.251 | 3.189 | 7.8 | 21.3 |
| 5 11 | 12 42.23 | −15 38.7 | 2.310 | 3.183 | 10.7 | 21.5 |

**291229** 2006 $BH_{20}$ 4 7.2 76°.39 2°.8/ 5.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.97 | − 3 45.1 | 1.350 | 2.196 | 17.3 | 20.8 |
| 3 12 | 13 26.70 | − 2 55.3 | 1.290 | 2.207 | 13.0 | 20.5 |
| 3 22 | 13 19.65 | − 1 53.7 | 1.251 | 2.218 | 8.2 | 20.3 |
| 4 1 | 13 10.70 | − 0 47.5 | 1.235 | 2.229 | 3.6 | 20.0 |
| 4 11 | 13 1.12 | + 0 13.9 | 1.246 | 2.240 | 4.3 | 20.1 |
| 4 21 | 12 52.24 | + 1 2.6 | 1.282 | 2.252 | 8.9 | 20.4 |
| 5 1 | 12 45.21 | + 1 32.5 | 1.342 | 2.263 | 13.5 | 20.7 |
| 5 11 | 12 40.75 | + 1 41.2 | 1.421 | 2.274 | 17.3 | 21.0 |

**381325** 2007 $VT_{270}$ 4 7.2 63°.59 4°.1/11.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.63 | −20 57.5 | 2.143 | 2.907 | 14.5 | 20.6 |
| 3 12 | 13 23.46 | −21 7.2 | 2.061 | 2.915 | 11.9 | 20.4 |
| 3 22 | 13 17.30 | −20 58.7 | 2.000 | 2.924 | 8.9 | 20.2 |
| 4 1 | 13 9.76 | −20 32.2 | 1.963 | 2.932 | 5.8 | 20.1 |
| 4 11 | 13 1.69 | −19 50.1 | 1.954 | 2.941 | 4.1 | 20.0 |
| 4 21 | 12 53.97 | −18 57.1 | 1.972 | 2.950 | 5.5 | 20.1 |
| 5 1 | 12 47.46 | −17 59.4 | 2.017 | 2.958 | 8.5 | 20.3 |
| 5 11 | 12 42.76 | −17 3.4 | 2.087 | 2.967 | 11.4 | 20.5 |

**139105** 2001 $FX_{46}$ 4 7.2 313°.31 1°.8/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.47 | −12 28.5 | 1.415 | 2.242 | 17.7 | 19.7 |
| 3 12 | 13 24.45 | −12 28.7 | 1.322 | 2.224 | 14.0 | 19.4 |
| 3 22 | 13 18.57 | −12 10.3 | 1.249 | 2.206 | 9.5 | 19.1 |
| 4 1 | 13 10.45 | −11 34.5 | 1.198 | 2.189 | 4.5 | 18.8 |
| 4 11 | 13 1.20 | −10 45.9 | 1.173 | 2.173 | 2.3 | 18.6 |
| 4 21 | 12 52.18 | − 9 51.9 | 1.172 | 2.157 | 7.3 | 18.8 |
| 5 1 | 12 44.75 | − 9 1.2 | 1.195 | 2.141 | 12.4 | 19.1 |
| 5 11 | 12 39.90 | − 8 21.8 | 1.239 | 2.126 | 17.1 | 19.3 |

**413940** 2006 $YA_{13}$ 4 7.2 43°.88 3°.9/ 4.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.49 | − 0 25.5 | 1.315 | 2.168 | 17.2 | 20.2 |
| 3 12 | 13 26.14 | + 0 19.9 | 1.272 | 2.192 | 12.9 | 20.0 |
| 3 22 | 13 19.13 | + 1 11.7 | 1.249 | 2.217 | 8.2 | 19.8 |
| 4 1 | 13 10.44 | + 2 2.1 | 1.251 | 2.243 | 4.3 | 19.6 |
| 4 11 | 13 1.36 | + 2 42.7 | 1.279 | 2.269 | 5.2 | 19.7 |
| 4 21 | 12 53.15 | + 3 7.6 | 1.331 | 2.296 | 9.3 | 20.0 |
| 5 1 | 12 46.83 | + 3 13.2 | 1.407 | 2.322 | 13.3 | 20.3 |
| 5 11 | 12 43.02 | + 2 59.2 | 1.502 | 2.350 | 16.8 | 20.6 |

**198968** 2005 $UF_{506}$ 4 7.2 173°.60 3°.2/ 3.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.60 | − 0 8.2 | 2.105 | 2.938 | 12.4 | 20.4 |
| 3 12 | 13 23.31 | + 0 49.1 | 2.029 | 2.939 | 9.3 | 20.2 |
| 3 22 | 13 17.14 | + 1 52.3 | 1.977 | 2.941 | 6.0 | 20.0 |
| 4 1 | 13 9.69 | + 2 55.9 | 1.952 | 2.941 | 3.4 | 19.8 |
| 4 11 | 13 1.75 | + 3 53.3 | 1.957 | 2.942 | 4.4 | 19.9 |
| 4 21 | 12 54.18 | + 4 39.2 | 1.989 | 2.942 | 7.5 | 20.1 |
| 5 1 | 12 47.75 | + 5 9.6 | 2.046 | 2.942 | 10.8 | 20.3 |
| 5 11 | 12 43.03 | + 5 22.6 | 2.127 | 2.942 | 13.7 | 20.5 |

**307443** 2002 $UJ_{37}$ 4 7.2 205°.04 1°.4/ 6.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.39 | − 4 25.8 | 1.913 | 2.734 | 13.9 | 20.9 |
| 3 12 | 13 27.23 | − 4 6.3 | 1.828 | 2.731 | 10.6 | 20.7 |
| 3 22 | 13 19.81 | − 3 38.3 | 1.765 | 2.728 | 6.7 | 20.4 |
| 4 1 | 13 10.78 | − 3 5.5 | 1.729 | 2.724 | 2.7 | 20.1 |
| 4 11 | 13 1.08 | − 2 33.1 | 1.722 | 2.719 | 2.7 | 20.1 |
| 4 21 | 12 51.73 | − 2 6.2 | 1.743 | 2.715 | 6.8 | 20.4 |
| 5 1 | 12 43.70 | − 1 49.2 | 1.790 | 2.709 | 10.8 | 20.6 |
| 5 11 | 12 37.70 | − 1 45.1 | 1.861 | 2.704 | 14.2 | 20.8 |

**179483** 2002 $CO_{17}$ 4 7.2 83°.58 0°.8/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.80 | −11 3.1 | 2.382 | 3.181 | 12.2 | 20.5 |
| 3 12 | 13 23.22 | −10 51.7 | 2.309 | 3.197 | 9.4 | 20.4 |
| 3 22 | 13 16.96 | −10 29.5 | 2.258 | 3.212 | 6.2 | 20.2 |
| 4 1 | 13 9.59 | − 9 58.8 | 2.236 | 3.227 | 2.7 | 20.0 |
| 4 11 | 13 1.85 | − 9 23.1 | 2.242 | 3.242 | 1.3 | 19.9 |
| 4 21 | 12 54.48 | − 8 46.7 | 2.277 | 3.257 | 4.7 | 20.2 |
| 5 1 | 12 48.16 | − 8 13.7 | 2.340 | 3.272 | 7.9 | 20.4 |
| 5 11 | 12 43.41 | − 7 47.9 | 2.427 | 3.286 | 10.8 | 20.6 |

**443123** 2014 $AG_{46}$ 4 7.2 228°.58 15°.4/16.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 40.24 | −35 53.9 | 1.367 | 2.066 | 24.1 | 20.9 |
| 3 12 | 13 35.58 | −38 8.0 | 1.283 | 2.061 | 21.9 | 20.7 |
| 3 22 | 13 26.62 | −39 54.6 | 1.214 | 2.056 | 19.5 | 20.5 |
| 4 1 | 13 13.90 | −41 1.7 | 1.163 | 2.050 | 17.1 | 20.3 |
| 4 11 | 12 59.00 | −41 20.7 | 1.131 | 2.044 | 15.6 | 20.2 |
| 4 21 | 12 44.15 | −40 49.9 | 1.119 | 2.037 | 15.6 | 20.1 |
| 5 1 | 12 31.67 | −39 37.2 | 1.128 | 2.030 | 17.0 | 20.2 |
| 5 11 | 12 23.24 | −37 58.3 | 1.156 | 2.023 | 19.5 | 20.3 |

**497156** 2004 $RG_{194}$ 4 7.2 195°.94 2°.2/ 9.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.34 | −16 17.1 | 2.681 | 3.447 | 11.9 | 22.9 |
| 3 12 | 13 25.14 | −16 12.9 | 2.580 | 3.444 | 9.5 | 22.8 |
| 3 22 | 13 18.24 | −15 55.7 | 2.503 | 3.440 | 6.6 | 22.6 |
| 4 1 | 13 10.13 | −15 26.5 | 2.454 | 3.435 | 3.7 | 22.4 |
| 4 11 | 13 1.50 | −14 47.6 | 2.434 | 3.430 | 2.3 | 22.3 |
| 4 21 | 12 53.09 | −14 2.9 | 2.444 | 3.423 | 4.5 | 22.4 |
| 5 1 | 12 45.62 | −13 16.8 | 2.483 | 3.416 | 7.5 | 22.6 |
| 5 11 | 12 39.64 | −12 34.2 | 2.549 | 3.409 | 10.3 | 22.8 |

**245986** 2006 $SU_{214}$ 4 7.2 225°.21 2°.3/ 4.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.04 | − 1 58.1 | 2.428 | 3.254 | 11.2 | 20.7 |
| 3 12 | 13 21.95 | − 1 10.7 | 2.342 | 3.249 | 8.4 | 20.5 |
| 3 22 | 13 16.21 | − 0 16.8 | 2.280 | 3.244 | 5.3 | 20.3 |
| 4 1 | 13 9.33 | + 0 39.1 | 2.247 | 3.239 | 2.6 | 20.1 |
| 4 11 | 13 2.00 | + 1 31.8 | 2.243 | 3.233 | 3.3 | 20.1 |
| 4 21 | 12 54.93 | + 2 16.7 | 2.268 | 3.227 | 6.3 | 20.3 |
| 5 1 | 12 48.80 | + 2 49.8 | 2.319 | 3.221 | 9.4 | 20.5 |
| 5 11 | 12 44.15 | + 3 8.8 | 2.394 | 3.215 | 12.2 | 20.7 |

**329813** 2004 $RF_{93}$ 4 7.2 211°.51 1°.7/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.49 | − 6 33.6 | 2.133 | 2.954 | 12.7 | 21.1 |
| 3 12 | 13 22.52 | − 5 22.2 | 2.045 | 2.950 | 9.6 | 20.9 |
| 3 22 | 13 16.69 | − 3 58.2 | 1.981 | 2.945 | 6.0 | 20.7 |
| 4 1 | 13 9.55 | − 2 26.9 | 1.945 | 2.939 | 2.4 | 20.5 |
| 4 11 | 13 1.87 | − 0 55.3 | 1.939 | 2.933 | 2.9 | 20.5 |
| 4 21 | 12 54.50 | + 0 29.3 | 1.961 | 2.927 | 6.6 | 20.7 |
| 5 1 | 12 48.21 | + 1 40.6 | 2.010 | 2.921 | 10.2 | 20.9 |
| 5 11 | 12 43.61 | + 2 34.5 | 2.083 | 2.914 | 13.4 | 21.1 |

**354889** 2006 $BZ_{178}$ 4 7.2 45°.75 4°.4/10.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.44 | −16 31.6 | 1.202 | 2.019 | 20.8 | 20.7 |
| 3 12 | 13 28.36 | −17 4.5 | 1.141 | 2.032 | 16.6 | 20.5 |
| 3 22 | 13 21.01 | −17 14.2 | 1.099 | 2.046 | 11.8 | 20.3 |
| 4 1 | 13 11.33 | −17 0.3 | 1.078 | 2.061 | 6.9 | 20.0 |
| 4 11 | 13 0.81 | −16 26.7 | 1.081 | 2.076 | 4.4 | 19.9 |
| 4 21 | 12 51.07 | −15 40.7 | 1.108 | 2.092 | 7.7 | 20.2 |
| 5 1 | 12 43.50 | −14 52.1 | 1.158 | 2.108 | 12.3 | 20.5 |
| 5 11 | 12 38.95 | −14 10.1 | 1.229 | 2.125 | 16.6 | 20.8 |

**9096** Tamotsu 4 7.2 169°.91 2°.5/ 4.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.94 | − 0 25.0 | 2.406 | 3.234 | 11.2 | 17.2 |
| 3 12 | 13 22.59 | + 0 10.5 | 2.326 | 3.234 | 8.4 | 17.1 |
| 3 22 | 13 16.60 | + 0 50.5 | 2.271 | 3.235 | 5.4 | 16.9 |
| 4 1 | 13 9.48 | + 1 30.8 | 2.244 | 3.235 | 2.8 | 16.7 |
| 4 11 | 13 1.93 | + 2 6.8 | 2.246 | 3.235 | 3.5 | 16.7 |
| 4 21 | 12 54.70 | + 2 34.5 | 2.277 | 3.235 | 6.4 | 16.9 |
| 5 1 | 12 48.44 | + 2 50.6 | 2.334 | 3.236 | 9.4 | 17.1 |
| 5 11 | 12 43.70 | + 2 53.5 | 2.414 | 3.236 | 12.1 | 17.3 |

**21040** 1990 $OZ$ 4 7.2 295°.06 2°.0/ 5.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.41 | − 6 41.1 | 1.777 | 2.611 | 14.3 | 18.1 |
| 3 12 | 13 21.41 | − 5 25.1 | 1.682 | 2.594 | 10.8 | 17.9 |
| 3 22 | 13 16.24 | − 3 52.7 | 1.611 | 2.578 | 6.8 | 17.6 |
| 4 1 | 13 9.44 | − 2 9.9 | 1.566 | 2.561 | 2.8 | 17.3 |
| 4 11 | 13 1.92 | − 0 25.5 | 1.549 | 2.544 | 3.5 | 17.3 |
| 4 21 | 12 54.65 | + 1 11.2 | 1.560 | 2.527 | 7.8 | 17.5 |
| 5 1 | 12 48.60 | + 2 31.7 | 1.595 | 2.511 | 12.1 | 17.7 |
| 5 11 | 12 44.50 | + 3 30.7 | 1.653 | 2.495 | 15.8 | 17.9 |

**131148** 2001 $BM_{79}$ 4 7.2 84°.19 0°.5/ 7.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.79 | −10 50.3 | 1.960 | 2.767 | 14.2 | 21.1 |
| 3 12 | 13 25.00 | −10 27.2 | 1.895 | 2.788 | 10.9 | 20.9 |
| 3 22 | 13 18.20 | − 9 51.0 | 1.853 | 2.809 | 7.1 | 20.7 |
| 4 1 | 13 10.09 | − 9 4.9 | 1.837 | 2.829 | 2.9 | 20.5 |
| 4 11 | 13 1.59 | − 8 13.9 | 1.849 | 2.850 | 1.5 | 20.4 |
| 4 21 | 12 53.61 | − 7 23.8 | 1.890 | 2.870 | 5.5 | 20.7 |
| 5 1 | 12 46.96 | − 6 40.1 | 1.958 | 2.890 | 9.3 | 21.0 |
| 5 11 | 12 42.21 | − 6 6.9 | 2.049 | 2.909 | 12.5 | 21.2 |

**508308** 2015 $KC_{94}$ 4 7.2 260°.97 5°.3/31.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.50 | + 8 20.8 | 2.406 | 3.243 | 10.9 | 21.4 |
| 3 12 | 13 22.32 | + 9 21.3 | 2.328 | 3.235 | 8.5 | 21.3 |
| 3 22 | 13 16.46 | +10 21.2 | 2.275 | 3.226 | 6.3 | 21.1 |
| 4 1 | 13 9.44 | +11 14.8 | 2.249 | 3.218 | 5.3 | 21.0 |
| 4 11 | 13 1.96 | +11 56.4 | 2.252 | 3.209 | 6.3 | 21.1 |
| 4 21 | 12 54.76 | +12 21.9 | 2.281 | 3.200 | 8.6 | 21.2 |
| 5 1 | 12 48.54 | +12 29.0 | 2.336 | 3.191 | 11.2 | 21.4 |
| 5 11 | 12 43.84 | +12 17.7 | 2.411 | 3.183 | 13.5 | 21.5 |

**192874** 1999 $XN_{30}$ 4 7.2 189°.55 0°.7/ 8.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.15 | −12 31.9 | 2.489 | 3.282 | 12.0 | 20.9 |
| 3 12 | 13 22.78 | −11 54.8 | 2.396 | 3.281 | 9.3 | 20.7 |
| 3 22 | 13 16.74 | −11 4.6 | 2.327 | 3.279 | 6.1 | 20.5 |
| 4 1 | 13 9.55 | −10 3.9 | 2.286 | 3.277 | 2.7 | 20.3 |
| 4 11 | 13 1.90 | − 8 57.1 | 2.274 | 3.275 | 1.3 | 20.1 |
| 4 21 | 12 54.52 | − 7 49.3 | 2.292 | 3.272 | 4.7 | 20.4 |
| 5 1 | 12 48.10 | − 6 46.2 | 2.339 | 3.268 | 8.1 | 20.6 |
| 5 11 | 12 43.19 | − 5 52.2 | 2.411 | 3.264 | 11.1 | 20.8 |

**149676** 2004 $GG_{13}$ 4 7.2 359°.16 3°.3/ 4.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.33 | + 0 12.5 | 1.841 | 2.684 | 13.5 | 19.4 |
| 3 12 | 13 22.63 | + 0 51.4 | 1.767 | 2.682 | 10.2 | 19.2 |
| 3 22 | 13 16.85 | + 1 35.7 | 1.716 | 2.681 | 6.6 | 19.0 |
| 4 1 | 13 9.63 | + 2 19.8 | 1.690 | 2.681 | 3.6 | 18.8 |
| 4 11 | 13 1.87 | + 2 57.6 | 1.692 | 2.681 | 4.5 | 18.9 |
| 4 21 | 12 54.49 | + 3 23.7 | 1.721 | 2.681 | 7.9 | 19.1 |
| 5 1 | 12 48.38 | + 3 34.4 | 1.774 | 2.682 | 11.5 | 19.3 |
| 5 11 | 12 44.16 | + 3 28.1 | 1.849 | 2.684 | 14.7 | 19.5 |

**26119** Duden 4 7.2 254°.49 0°.5/ 7.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.11 | −10 29.0 | 1.903 | 2.710 | 14.5 | 19.8 |
| 3 12 | 13 26.52 | −10 11.8 | 1.798 | 2.691 | 11.3 | 19.5 |
| 3 22 | 13 19.56 | − 9 40.4 | 1.716 | 2.672 | 7.5 | 19.2 |
| 4 1 | 13 10.78 | − 8 56.8 | 1.659 | 2.652 | 3.1 | 18.9 |
| 4 11 | 13 1.11 | − 8 5.7 | 1.631 | 2.632 | 1.7 | 18.8 |
| 4 21 | 12 51.60 | − 7 13.1 | 1.631 | 2.611 | 6.3 | 19.0 |
| 5 1 | 12 43.32 | − 6 25.5 | 1.658 | 2.589 | 10.7 | 19.2 |
| 5 11 | 12 37.09 | − 5 48.7 | 1.707 | 2.567 | 14.6 | 19.4 |

**44184** 1998 $KZ_{45}$ 4 7.2 322°.80 1°.1/ 6.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.29 | − 7 45.0 | 1.367 | 2.211 | 17.2 | 18.8 |
| 3 12 | 13 23.45 | − 7 7.9 | 1.285 | 2.200 | 13.2 | 18.5 |
| 3 22 | 13 17.85 | − 6 13.5 | 1.223 | 2.189 | 8.5 | 18.2 |
| 4 1 | 13 10.15 | − 5 6.9 | 1.184 | 2.179 | 3.2 | 17.9 |
| 4 11 | 13 1.52 | − 3 56.2 | 1.170 | 2.169 | 2.8 | 17.8 |
| 4 21 | 12 53.26 | − 2 50.9 | 1.182 | 2.160 | 8.2 | 18.1 |
| 5 1 | 12 46.64 | − 1 59.6 | 1.216 | 2.152 | 13.3 | 18.4 |
| 5 11 | 12 42.54 | − 1 28.2 | 1.271 | 2.144 | 17.7 | 18.6 |

**250473** 2004 $CM_{93}$ 4 7.2 64°.62 0°.4/ 7.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.54 | −11 52.0 | 1.561 | 2.383 | 16.5 | 20.5 |
| 3 12 | 13 23.90 | −11 10.3 | 1.489 | 2.391 | 12.7 | 20.3 |
| 3 22 | 13 17.82 | −10 9.7 | 1.438 | 2.398 | 8.3 | 20.1 |
| 4 1 | 13 10.04 | − 8 54.5 | 1.412 | 2.405 | 3.4 | 19.8 |
| 4 11 | 13 1.64 | − 7 32.4 | 1.413 | 2.413 | 1.8 | 19.7 |
| 4 21 | 12 53.76 | − 6 12.2 | 1.440 | 2.421 | 6.7 | 20.0 |
| 5 1 | 12 47.44 | − 5 2.2 | 1.492 | 2.429 | 11.2 | 20.3 |
| 5 11 | 12 43.36 | − 4 8.6 | 1.566 | 2.436 | 15.1 | 20.5 |

**107047** 2000 $YL_{138}$ 4 7.2 200°.38 1°.5/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.81 | − 5 14.9 | 2.059 | 2.876 | 13.3 | 20.6 |
| 3 12 | 13 26.65 | − 4 37.4 | 1.970 | 2.872 | 10.1 | 20.4 |
| 3 22 | 13 19.40 | − 3 50.1 | 1.905 | 2.867 | 6.4 | 20.2 |
| 4 1 | 13 10.64 | − 2 57.0 | 1.868 | 2.862 | 2.5 | 19.9 |
| 4 11 | 13 1.26 | − 2 3.8 | 1.859 | 2.855 | 2.7 | 19.9 |
| 4 21 | 12 52.19 | − 1 16.3 | 1.879 | 2.848 | 6.6 | 20.1 |
| 5 1 | 12 44.34 | − 0 39.6 | 1.926 | 2.841 | 10.4 | 20.4 |
| 5 11 | 12 38.38 | − 0 17.0 | 1.997 | 2.832 | 13.7 | 20.6 |

**373565** 2001 $XM_{32}$ 4 7.2 17°.19 4°.0/10.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.43 | −20 7.3 | 1.646 | 2.434 | 17.3 | 20.3 |
| 3 12 | 13 23.15 | −19 59.2 | 1.564 | 2.436 | 14.0 | 20.1 |
| 3 22 | 13 17.41 | −19 27.3 | 1.501 | 2.438 | 10.2 | 19.9 |
| 4 1 | 13 9.91 | −18 32.2 | 1.463 | 2.440 | 6.3 | 19.6 |
| 4 11 | 13 1.71 | −17 18.3 | 1.449 | 2.443 | 4.0 | 19.5 |
| 4 21 | 12 53.93 | −15 53.1 | 1.462 | 2.445 | 6.3 | 19.7 |
| 5 1 | 12 47.65 | −14 26.2 | 1.501 | 2.449 | 10.2 | 19.9 |
| 5 11 | 12 43.60 | −13 6.7 | 1.563 | 2.452 | 14.0 | 20.1 |

**290066** 2005 $QB_{69}$ 4 7.2 222°.60 5°.7/12.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.79 | −25 40.6 | 2.754 | 3.460 | 12.9 | 21.0 |
| 3 12 | 13 28.77 | −26 37.5 | 2.647 | 3.453 | 11.0 | 20.8 |
| 3 22 | 13 20.75 | −27 20.1 | 2.562 | 3.446 | 8.9 | 20.6 |
| 4 1 | 13 11.20 | −27 46.1 | 2.504 | 3.439 | 6.9 | 20.5 |
| 4 11 | 13 0.89 | −27 54.6 | 2.473 | 3.432 | 5.7 | 20.4 |
| 4 21 | 12 50.66 | −27 47.1 | 2.472 | 3.424 | 6.3 | 20.4 |
| 5 1 | 12 41.40 | −27 26.9 | 2.499 | 3.417 | 8.2 | 20.5 |
| 5 11 | 12 33.79 | −26 59.4 | 2.552 | 3.408 | 10.4 | 20.7 |

**30969** 1995 $BP_{2}$ 4 7.2 45°.17 3°.1/ 4.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.62 | −12 0.2 | 1.036 | 1.890 | 20.8 | 17.2 |
| 3 12 | 13 22.19 | − 8 58.2 | 0.997 | 1.919 | 15.3 | 17.0 |
| 3 22 | 13 16.81 | − 5 27.7 | 0.979 | 1.950 | 9.3 | 16.7 |
| 4 1 | 13 9.59 | − 1 47.4 | 0.986 | 1.981 | 3.7 | 16.5 |
| 4 11 | 13 2.01 | + 1 39.8 | 1.020 | 2.013 | 5.4 | 16.7 |
| 4 21 | 12 55.46 | + 4 34.9 | 1.080 | 2.045 | 10.7 | 17.1 |
| 5 1 | 12 50.97 | + 6 47.0 | 1.162 | 2.078 | 15.5 | 17.5 |
| 5 11 | 12 49.09 | + 8 14.4 | 1.264 | 2.111 | 19.4 | 17.8 |

**11063** Poynting 4 7.2 274°.19 4°.8/ 2.4 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.00 | + 3 48.5 | 2.011 | 2.849 | 12.7 | 17.5 |
| 3 12 | 13 24.72 | + 4 50.4 | 1.914 | 2.825 | 9.8 | 17.3 |
| 3 22 | 13 18.29 | + 5 57.1 | 1.841 | 2.801 | 6.7 | 17.1 |
| 4 1 | 13 10.26 | + 7 2.0 | 1.794 | 2.776 | 4.8 | 16.9 |
| 4 11 | 13 1.47 | + 7 57.7 | 1.776 | 2.750 | 6.1 | 16.9 |
| 4 21 | 12 52.86 | + 8 38.0 | 1.785 | 2.725 | 9.2 | 17.0 |
| 5 1 | 12 45.36 | + 8 58.7 | 1.818 | 2.699 | 12.7 | 17.2 |
| 5 11 | 12 39.71 | + 8 58.1 | 1.873 | 2.673 | 15.8 | 17.4 |

**31824** Elatus 4 7.2 193°.94 0°.3/ 5.1 09 C

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 11.19 | − 1 52.1 | 15.421 | 16.235 | 2.0 | 22.3 |
| 3 12 | 13 9.65 | − 1 40.9 | 15.331 | 16.233 | 1.5 | 22.3 |
| 3 22 | 13 7.91 | − 1 29.0 | 15.268 | 16.230 | 0.9 | 22.2 |
| 4 1 | 13 6.03 | − 1 16.8 | 15.235 | 16.228 | 0.4 | 22.2 |
| 4 11 | 13 4.11 | − 1 5.1 | 15.233 | 16.225 | 0.5 | 22.2 |
| 4 21 | 13 2.22 | − 0 54.2 | 15.260 | 16.223 | 1.1 | 22.2 |
| 5 1 | 13 0.43 | − 0 44.6 | 15.317 | 16.220 | 1.6 | 22.3 |
| 5 11 | 12 58.83 | − 0 36.7 | 15.400 | 16.218 | 2.1 | 22.3 |

**55299** 2001 $SX_{44}$ 4 7.2 32°.39 0°.2/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.21 | − 5 20.9 | 1.487 | 2.316 | 16.8 | 18.5 |
| 3 12 | 13 29.88 | − 5 44.8 | 1.416 | 2.322 | 12.9 | 18.2 |
| 3 22 | 13 21.74 | − 6 0.5 | 1.367 | 2.330 | 8.3 | 18.0 |
| 4 1 | 13 11.61 | − 6 10.1 | 1.343 | 2.337 | 3.2 | 17.7 |
| 4 11 | 13 0.72 | − 6 17.3 | 1.346 | 2.346 | 2.1 | 17.6 |
| 4 21 | 12 50.42 | − 6 25.9 | 1.375 | 2.354 | 7.2 | 18.0 |
| 5 1 | 12 41.92 | − 6 39.7 | 1.429 | 2.363 | 11.8 | 18.3 |
| 5 11 | 12 36.01 | − 7 1.8 | 1.505 | 2.373 | 15.7 | 18.5 |

**262453** 2006 $UE_{113}$ 4 7.2 334°.78 1°.0/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.27 | −11 26.1 | 1.359 | 2.194 | 17.8 | 20.7 |
| 3 12 | 13 23.49 | −11 12.7 | 1.277 | 2.184 | 13.9 | 20.4 |
| 3 22 | 13 17.91 | −10 40.1 | 1.214 | 2.175 | 9.3 | 20.1 |
| 4 1 | 13 10.20 | − 9 51.0 | 1.174 | 2.167 | 4.0 | 19.8 |
| 4 11 | 13 1.53 | − 8 51.7 | 1.159 | 2.160 | 2.0 | 19.6 |
| 4 21 | 12 53.25 | − 7 50.5 | 1.169 | 2.153 | 7.3 | 19.9 |
| 5 1 | 12 46.62 | − 6 56.6 | 1.202 | 2.147 | 12.5 | 20.2 |
| 5 11 | 12 42.57 | − 6 17.3 | 1.255 | 2.141 | 17.0 | 20.4 |

**384733** 2011 $KS_{26}$ 4 7.2 325°.13 8°.1/14.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.96 | −28 44.2 | 1.737 | 2.477 | 18.3 | 20.1 |
| 3 12 | 13 23.07 | −29 20.9 | 1.639 | 2.464 | 15.8 | 19.9 |
| 3 22 | 13 17.58 | −29 31.8 | 1.559 | 2.452 | 13.0 | 19.7 |
| 4 1 | 13 10.08 | −29 13.1 | 1.500 | 2.440 | 10.2 | 19.5 |
| 4 11 | 13 1.59 | −28 24.7 | 1.464 | 2.428 | 8.3 | 19.3 |
| 4 21 | 12 53.35 | −27 10.6 | 1.453 | 2.417 | 8.6 | 19.3 |
| 5 1 | 12 46.55 | −25 39.2 | 1.466 | 2.407 | 11.0 | 19.4 |
| 5 11 | 12 42.11 | −24 1.6 | 1.502 | 2.397 | 14.2 | 19.6 |

**498921** 2009 $BN_{15}$ 4 7.2 117°.73 5°.0/12.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.75 | −24 1.1 | 2.366 | 3.103 | 14.1 | 21.7 |
| 3 12 | 13 24.97 | −24 23.0 | 2.280 | 3.112 | 11.7 | 21.6 |
| 3 22 | 13 18.26 | −24 27.0 | 2.215 | 3.121 | 9.1 | 21.4 |
| 4 1 | 13 10.19 | −24 12.3 | 2.175 | 3.130 | 6.5 | 21.3 |
| 4 11 | 13 1.58 | −23 40.4 | 2.162 | 3.138 | 5.0 | 21.2 |
| 4 21 | 12 53.30 | −22 54.9 | 2.177 | 3.147 | 5.8 | 21.2 |
| 5 1 | 12 46.16 | −22 1.4 | 2.220 | 3.155 | 8.1 | 21.4 |
| 5 11 | 12 40.77 | −21 6.2 | 2.287 | 3.163 | 10.8 | 21.6 |

**511344** 2014 $EJ_{39}$ 4 7.2 0°.55 3°.4/ 3.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.88 | + 1 2.1 | 2.093 | 2.932 | 12.2 | 20.9 |
| 3 12 | 13 22.05 | + 1 45.9 | 2.018 | 2.931 | 9.2 | 20.7 |
| 3 22 | 13 16.38 | + 2 34.0 | 1.967 | 2.931 | 6.0 | 20.5 |
| 4 1 | 13 9.45 | + 3 21.2 | 1.942 | 2.931 | 3.5 | 20.3 |
| 4 11 | 13 2.05 | + 4 1.8 | 1.946 | 2.931 | 4.4 | 20.4 |
| 4 21 | 12 54.99 | + 4 31.0 | 1.977 | 2.932 | 7.5 | 20.6 |
| 5 1 | 12 49.04 | + 4 45.5 | 2.033 | 2.932 | 10.7 | 20.8 |
| 5 11 | 12 44.77 | + 4 43.9 | 2.111 | 2.934 | 13.5 | 20.9 |

**484228** 2007 $EG_{39}$ 4 7.2 208°.43 6°.2/ 9.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 48.73 | −15 5.7 | 1.278 | 2.067 | 21.3 | 20.9 |
| 3 12 | 13 41.58 | −16 45.9 | 1.191 | 2.064 | 17.4 | 20.7 |
| 3 22 | 13 30.18 | −18 14.3 | 1.122 | 2.060 | 12.8 | 20.4 |
| 4 1 | 13 15.24 | −19 24.5 | 1.078 | 2.055 | 8.1 | 20.1 |
| 4 11 | 12 58.39 | −20 12.1 | 1.060 | 2.049 | 6.3 | 20.0 |
| 4 21 | 12 41.75 | −20 37.0 | 1.068 | 2.043 | 9.6 | 20.1 |
| 5 1 | 12 27.48 | −20 45.0 | 1.102 | 2.036 | 14.5 | 20.4 |
| 5 11 | 12 17.03 | −20 45.6 | 1.157 | 2.028 | 19.2 | 20.6 |

**481960** 2009 $DL_{123}$ 4 7.2 78°.15 3°.9/ 8.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 51.21 | − 9 0.8 | 1.070 | 1.887 | 22.8 | 20.1 |
| 3 12 | 13 43.39 | −10 47.5 | 1.006 | 1.900 | 18.0 | 19.8 |
| 3 22 | 13 31.12 | −12 25.6 | 0.960 | 1.913 | 12.4 | 19.6 |
| 4 1 | 13 15.46 | −13 50.0 | 0.938 | 1.926 | 6.4 | 19.3 |
| 4 11 | 12 58.42 | −14 57.3 | 0.942 | 1.939 | 4.3 | 19.2 |
| 4 21 | 12 42.36 | −15 47.5 | 0.973 | 1.953 | 9.3 | 19.5 |
| 5 1 | 12 29.33 | −16 25.3 | 1.027 | 1.966 | 14.8 | 19.9 |
| 5 11 | 12 20.50 | −16 58.0 | 1.101 | 1.979 | 19.5 | 20.2 |

**456969** 2008 $AV_{101}$ 4 7.2 6°.80 0°.7/ 7.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.57 | −10 45.4 | 1.220 | 2.064 | 18.8 | 20.7 |
| 3 12 | 13 23.08 | −10 30.6 | 1.151 | 2.065 | 14.6 | 20.4 |
| 3 22 | 13 17.66 | − 9 56.0 | 1.102 | 2.066 | 9.6 | 20.1 |
| 4 1 | 13 10.09 | − 9 5.4 | 1.074 | 2.068 | 4.0 | 19.8 |
| 4 11 | 13 1.68 | − 8 6.1 | 1.071 | 2.072 | 2.0 | 19.7 |
| 4 21 | 12 53.83 | − 7 7.5 | 1.091 | 2.076 | 7.7 | 20.0 |
| 5 1 | 12 47.82 | − 6 18.5 | 1.135 | 2.082 | 12.9 | 20.3 |
| 5 11 | 12 44.51 | − 5 45.9 | 1.198 | 2.088 | 17.3 | 20.6 |

**422091** 2014 $QS_{396}$ 4 7.2 77°.84 0°.3/ 7.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.10 | −10 13.5 | 1.570 | 2.390 | 16.5 | 21.6 |
| 3 12 | 13 26.48 | − 9 49.6 | 1.507 | 2.408 | 12.6 | 21.3 |
| 3 22 | 13 19.40 | − 9 10.3 | 1.466 | 2.425 | 8.2 | 21.1 |
| 4 1 | 13 10.65 | − 8 19.4 | 1.449 | 2.443 | 3.3 | 20.9 |
| 4 11 | 13 1.38 | − 7 23.3 | 1.460 | 2.460 | 1.8 | 20.8 |
| 4 21 | 12 52.75 | − 6 29.4 | 1.497 | 2.478 | 6.6 | 21.1 |
| 5 1 | 12 45.77 | − 5 44.4 | 1.560 | 2.495 | 11.0 | 21.4 |
| 5 11 | 12 41.10 | − 5 13.0 | 1.645 | 2.512 | 14.7 | 21.7 |

**426959** 2013 $YB_{45}$ 4 7.2 206°.94 5°.1/ 1.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.93 | + 6 0.5 | 2.132 | 2.972 | 12.0 | 20.2 |
| 3 12 | 13 22.81 | + 7 7.5 | 2.061 | 2.972 | 9.2 | 20.0 |
| 3 22 | 13 16.85 | + 8 15.8 | 2.014 | 2.971 | 6.5 | 19.9 |
| 4 1 | 13 9.64 | + 9 18.6 | 1.995 | 2.970 | 5.1 | 19.8 |
| 4 11 | 13 1.97 | +10 9.6 | 2.004 | 2.969 | 6.3 | 19.9 |
| 4 21 | 12 54.65 | +10 43.8 | 2.039 | 2.969 | 8.9 | 20.0 |
| 5 1 | 12 48.46 | +10 58.5 | 2.099 | 2.968 | 11.7 | 20.2 |
| 5 11 | 12 43.94 | +10 53.4 | 2.180 | 2.967 | 14.3 | 20.4 |

**364165** 2006 $HO_{127}$ 4 7.2 231°.53 1°.0/ 8.1 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.12 | −12 40.5 | 1.813 | 2.618 | 15.2 | 22.0 |
| 3 12 | 13 25.79 | −12 13.2 | 1.717 | 2.608 | 11.9 | 21.8 |
| 3 22 | 13 19.09 | −11 28.4 | 1.644 | 2.598 | 8.0 | 21.5 |
| 4 1 | 13 10.61 | −10 28.5 | 1.596 | 2.587 | 3.6 | 21.2 |
| 4 11 | 13 1.34 | − 9 19.0 | 1.576 | 2.576 | 1.7 | 21.1 |
| 4 21 | 12 52.35 | − 8 7.0 | 1.583 | 2.564 | 6.2 | 21.3 |
| 5 1 | 12 44.69 | − 7 0.3 | 1.617 | 2.552 | 10.6 | 21.6 |
| 5 11 | 12 39.14 | − 6 5.5 | 1.675 | 2.539 | 14.5 | 21.8 |

**308071** 2004 $TM_{208}$ 4 7.2 221°.72 0°.7/ 7.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.86 | −12 38.2 | 1.738 | 2.546 | 15.7 | 21.4 |
| 3 12 | 13 25.65 | −11 59.7 | 1.646 | 2.539 | 12.2 | 21.1 |
| 3 22 | 13 19.02 | −11 2.2 | 1.576 | 2.532 | 8.1 | 20.9 |
| 4 1 | 13 10.59 | − 9 48.8 | 1.531 | 2.523 | 3.5 | 20.6 |
| 4 11 | 13 1.38 | − 8 26.0 | 1.514 | 2.515 | 1.7 | 20.4 |
| 4 21 | 12 52.49 | − 7 1.9 | 1.525 | 2.505 | 6.5 | 20.7 |
| 5 1 | 12 45.00 | − 5 45.1 | 1.562 | 2.495 | 11.0 | 20.9 |
| 5 11 | 12 39.69 | − 4 42.6 | 1.622 | 2.485 | 15.0 | 21.2 |

**33288** 1998 $KL_4$ 4 7.2 8°.59 5°.0/13.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 23.93 | −26 54.1 | 2.165 | 2.902 | 15.2 | 18.2 |
| 3 12 | 13 20.76 | −26 27.4 | 2.071 | 2.902 | 12.8 | 18.0 |
| 3 22 | 13 15.66 | −25 36.1 | 1.998 | 2.903 | 9.9 | 17.9 |
| 4 1 | 13 9.21 | −24 20.3 | 1.949 | 2.904 | 7.0 | 17.7 |
| 4 11 | 13 2.25 | −22 43.5 | 1.926 | 2.906 | 5.1 | 17.6 |
| 4 21 | 12 55.65 | −20 52.5 | 1.932 | 2.908 | 5.8 | 17.6 |
| 5 1 | 12 50.22 | −18 55.6 | 1.965 | 2.910 | 8.4 | 17.8 |
| 5 11 | 12 46.55 | −17 2.1 | 2.024 | 2.912 | 11.4 | 18.0 |

**322404** 2011 $RD_{14}$ 4 7.2 142°.61 0°.6/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.43 | −12 5.5 | 2.816 | 3.607 | 10.7 | 21.4 |
| 3 12 | 13 21.26 | −11 33.5 | 2.731 | 3.615 | 8.3 | 21.2 |
| 3 22 | 13 15.68 | −10 50.6 | 2.671 | 3.623 | 5.4 | 21.1 |
| 4 1 | 13 9.16 | − 9 59.3 | 2.639 | 3.630 | 2.4 | 20.9 |
| 4 11 | 13 2.29 | − 9 3.4 | 2.637 | 3.637 | 1.1 | 20.8 |
| 4 21 | 12 55.70 | − 8 7.0 | 2.665 | 3.644 | 4.2 | 21.0 |
| 5 1 | 12 49.96 | − 7 14.6 | 2.721 | 3.650 | 7.1 | 21.2 |
| 5 11 | 12 45.52 | − 6 29.7 | 2.803 | 3.656 | 9.7 | 21.4 |

**67471** 2000 $RL_4$ 4 7.2 126°.46 3°.8/ 4.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.95 | − 0 11.4 | 1.682 | 2.519 | 14.8 | 18.7 |
| 3 12 | 13 26.98 | + 0 45.9 | 1.618 | 2.530 | 11.2 | 18.5 |
| 3 22 | 13 19.67 | + 1 49.9 | 1.576 | 2.541 | 7.2 | 18.2 |
| 4 1 | 13 10.76 | + 2 53.6 | 1.561 | 2.551 | 4.0 | 18.1 |
| 4 11 | 13 1.34 | + 3 49.3 | 1.574 | 2.560 | 5.0 | 18.1 |
| 4 21 | 12 52.49 | + 4 30.5 | 1.613 | 2.570 | 8.7 | 18.4 |
| 5 1 | 12 45.17 | + 4 53.2 | 1.677 | 2.578 | 12.4 | 18.6 |
| 5 11 | 12 40.05 | + 4 55.9 | 1.763 | 2.587 | 15.7 | 18.9 |

**111590** 2002 $AX_{56}$ 4 7.2 190°.93 0°.8/ 6.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.07 | − 6 11.4 | 2.877 | 3.685 | 10.1 | 21.3 |
| 3 12 | 13 21.73 | − 5 37.8 | 2.786 | 3.684 | 7.6 | 21.1 |
| 3 22 | 13 15.99 | − 4 56.7 | 2.722 | 3.682 | 4.8 | 20.9 |
| 4 1 | 13 9.29 | − 4 11.1 | 2.686 | 3.680 | 1.8 | 20.7 |
| 4 11 | 13 2.21 | − 3 24.9 | 2.680 | 3.677 | 1.7 | 20.7 |
| 4 21 | 12 55.35 | − 2 41.9 | 2.704 | 3.674 | 4.7 | 20.9 |
| 5 1 | 12 49.30 | − 2 5.7 | 2.756 | 3.671 | 7.6 | 21.1 |
| 5 11 | 12 44.52 | − 1 39.0 | 2.833 | 3.667 | 10.1 | 21.2 |

**349885** 2009 $DT_{118}$ 4 7.2 4°.91 0°.3/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.62 | − 8 28.7 | 1.937 | 2.760 | 13.7 | 21.1 |
| 3 12 | 13 22.06 | − 8 1.6 | 1.857 | 2.760 | 10.5 | 20.9 |
| 3 22 | 13 16.50 | − 7 22.4 | 1.799 | 2.761 | 6.7 | 20.7 |
| 4 1 | 13 9.55 | − 6 34.7 | 1.767 | 2.762 | 2.6 | 20.4 |
| 4 11 | 13 2.05 | − 5 43.7 | 1.763 | 2.763 | 1.8 | 20.4 |
| 4 21 | 12 54.90 | − 4 55.3 | 1.786 | 2.764 | 5.9 | 20.6 |
| 5 1 | 12 48.94 | − 4 15.0 | 1.836 | 2.766 | 9.8 | 20.9 |
| 5 11 | 12 44.80 | − 3 47.0 | 1.908 | 2.769 | 13.2 | 21.1 |

**332119** 2005 $UE_{513}$ 4 7.2 154°.99 7°.6/17.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.66 | −36 31.7 | 2.318 | 2.972 | 16.3 | 22.1 |
| 3 12 | 13 25.86 | −36 14.3 | 2.221 | 2.979 | 14.4 | 21.9 |
| 3 22 | 13 18.90 | −35 28.5 | 2.142 | 2.985 | 12.1 | 21.8 |
| 4 1 | 13 10.46 | −34 12.1 | 2.086 | 2.991 | 9.7 | 21.6 |
| 4 11 | 13 1.52 | −32 26.8 | 2.055 | 2.996 | 8.0 | 21.5 |
| 4 21 | 12 53.08 | −30 18.2 | 2.052 | 3.001 | 7.7 | 21.5 |
| 5 1 | 12 46.03 | −27 55.4 | 2.078 | 3.005 | 9.1 | 21.6 |
| 5 11 | 12 41.01 | −25 29.1 | 2.131 | 3.009 | 11.3 | 21.7 |

**386506** 2009 $BX_{77}$ 4 7.2 39°.47 4°.1/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.48 | + 1 38.7 | 1.646 | 2.492 | 14.6 | 20.2 |
| 3 12 | 13 24.23 | + 2 24.0 | 1.598 | 2.515 | 11.0 | 20.0 |
| 3 22 | 13 17.80 | + 3 12.6 | 1.573 | 2.538 | 7.1 | 19.8 |
| 4 1 | 13 9.99 | + 3 58.0 | 1.573 | 2.561 | 4.3 | 19.7 |
| 4 11 | 13 1.84 | + 4 33.4 | 1.601 | 2.586 | 5.2 | 19.8 |
| 4 21 | 12 54.34 | + 4 54.0 | 1.654 | 2.610 | 8.5 | 20.1 |
| 5 1 | 12 48.35 | + 4 57.3 | 1.732 | 2.635 | 12.0 | 20.3 |
| 5 11 | 12 44.43 | + 4 42.8 | 1.830 | 2.661 | 15.0 | 20.6 |

**382618** 2002 $OL_{34}$ 4 7.2 166°.72 0°.3/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.07 | −10 5.1 | 2.313 | 3.117 | 12.4 | 21.8 |
| 3 12 | 13 23.59 | − 9 43.2 | 2.228 | 3.119 | 9.5 | 21.6 |
| 3 22 | 13 17.34 | − 9 10.1 | 2.165 | 3.121 | 6.2 | 21.4 |
| 4 1 | 13 9.85 | − 8 28.4 | 2.131 | 3.123 | 2.5 | 21.2 |
| 4 11 | 13 1.88 | − 7 42.2 | 2.125 | 3.125 | 1.3 | 21.1 |
| 4 21 | 12 54.21 | − 6 56.3 | 2.148 | 3.126 | 5.1 | 21.4 |
| 5 1 | 12 47.60 | − 6 15.5 | 2.199 | 3.128 | 8.5 | 21.6 |
| 5 11 | 12 42.60 | − 5 43.8 | 2.274 | 3.128 | 11.6 | 21.8 |

**430020** 2013 $RP_{25}$ 4 7.2 150°.22 1°.3/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.40 | −12 33.0 | 2.220 | 3.013 | 13.2 | 22.5 |
| 3 12 | 13 25.43 | −12 23.3 | 2.136 | 3.019 | 10.3 | 22.3 |
| 3 22 | 13 18.54 | −12 0.8 | 2.076 | 3.026 | 6.9 | 22.1 |
| 4 1 | 13 10.32 | −11 27.3 | 2.043 | 3.032 | 3.2 | 21.9 |
| 4 11 | 13 1.60 | −10 46.7 | 2.038 | 3.038 | 1.6 | 21.8 |
| 4 21 | 12 53.23 | −10 3.5 | 2.063 | 3.043 | 5.0 | 22.0 |
| 5 1 | 12 46.02 | − 9 22.9 | 2.115 | 3.048 | 8.6 | 22.2 |
| 5 11 | 12 40.55 | − 8 49.5 | 2.192 | 3.052 | 11.7 | 22.4 |

**303240** 2004 $PP_{68}$ 4 7.2 185°.59 1°.0/ 6.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.57 | − 7 10.3 | 1.946 | 2.759 | 14.0 | 22.5 |
| 3 12 | 13 27.34 | − 6 30.8 | 1.861 | 2.760 | 10.7 | 22.2 |
| 3 22 | 13 19.90 | − 5 39.3 | 1.799 | 2.760 | 6.8 | 22.0 |
| 4 1 | 13 10.89 | − 4 40.0 | 1.764 | 2.758 | 2.6 | 21.7 |
| 4 11 | 13 1.26 | − 3 38.7 | 1.758 | 2.756 | 2.3 | 21.7 |
| 4 21 | 12 51.99 | − 2 42.0 | 1.781 | 2.753 | 6.6 | 22.0 |
| 5 1 | 12 44.04 | − 1 55.7 | 1.830 | 2.749 | 10.6 | 22.2 |
| 5 11 | 12 38.10 | − 1 23.8 | 1.903 | 2.745 | 14.0 | 22.4 |

**1403** Idelsonia 4 7.2 223°.05 2°.6/ 3.9 18 A

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.63 | − 1 13.9 | 2.598 | 3.420 | 10.7 | 17.0 |
| 3 12 | 13 23.12 | − 0 12.7 | 2.503 | 3.408 | 8.0 | 16.8 |
| 3 22 | 13 16.99 | + 0 55.2 | 2.433 | 3.395 | 5.2 | 16.6 |
| 4 1 | 13 9.72 | + 2 5.1 | 2.392 | 3.382 | 2.8 | 16.4 |
| 4 11 | 13 1.96 | + 3 11.5 | 2.382 | 3.368 | 3.6 | 16.5 |
| 4 21 | 12 54.40 | + 4 9.4 | 2.400 | 3.353 | 6.5 | 16.6 |
| 5 1 | 12 47.72 | + 4 54.6 | 2.447 | 3.338 | 9.5 | 16.8 |
| 5 11 | 12 42.45 | + 5 24.6 | 2.517 | 3.321 | 12.1 | 16.9 |

**423251** 2004 $TS_{183}$ 4 7.2 171°.85 1°.4/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.41 | −12 16.3 | 2.037 | 2.836 | 14.0 | 21.5 |
| 3 12 | 13 25.66 | −12 15.0 | 1.951 | 2.837 | 11.0 | 21.3 |
| 3 22 | 13 18.81 | −12 0.5 | 1.887 | 2.838 | 7.4 | 21.1 |
| 4 1 | 13 10.47 | −11 34.5 | 1.849 | 2.839 | 3.5 | 20.8 |
| 4 11 | 13 1.51 | −11 0.6 | 1.840 | 2.840 | 1.8 | 20.7 |
| 4 21 | 12 52.88 | −10 23.4 | 1.859 | 2.840 | 5.4 | 21.0 |
| 5 1 | 12 45.48 | − 9 48.3 | 1.905 | 2.840 | 9.2 | 21.2 |
| 5 11 | 12 39.99 | − 9 20.2 | 1.975 | 2.840 | 12.6 | 21.4 |

**241625** 1999 $VE_{63}$ 4 7.2 202°.45 1°.3/ 5.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.29 | − 5 3.5 | 2.177 | 2.990 | 12.8 | 21.4 |
| 3 12 | 13 26.94 | − 4 31.4 | 2.086 | 2.985 | 9.7 | 21.2 |
| 3 22 | 13 19.57 | − 3 50.4 | 2.018 | 2.979 | 6.2 | 21.0 |
| 4 1 | 13 10.76 | − 3 4.3 | 1.979 | 2.973 | 2.4 | 20.7 |
| 4 11 | 13 1.33 | − 2 18.0 | 1.969 | 2.965 | 2.5 | 20.7 |
| 4 21 | 12 52.19 | − 1 36.8 | 1.988 | 2.957 | 6.3 | 20.9 |
| 5 1 | 12 44.21 | − 1 5.2 | 2.035 | 2.948 | 10.0 | 21.1 |
| 5 11 | 12 38.02 | − 0 46.5 | 2.105 | 2.938 | 13.2 | 21.3 |

**105139** 2000 $NA_7$ 4 7.2 150°.47 0°.4/ 7.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.33 | −11 8.2 | 2.291 | 3.089 | 12.7 | 20.1 |
| 3 12 | 13 24.51 | −10 35.8 | 2.210 | 3.098 | 9.8 | 19.9 |
| 3 22 | 13 17.90 | − 9 50.9 | 2.152 | 3.107 | 6.4 | 19.7 |
| 4 1 | 13 10.06 | − 8 56.4 | 2.122 | 3.115 | 2.6 | 19.5 |
| 4 11 | 13 1.79 | − 7 57.0 | 2.122 | 3.122 | 1.3 | 19.4 |
| 4 21 | 12 53.87 | − 6 58.0 | 2.150 | 3.129 | 5.1 | 19.7 |
| 5 1 | 12 47.07 | − 6 4.8 | 2.207 | 3.135 | 8.6 | 19.9 |
| 5 11 | 12 41.92 | − 5 21.7 | 2.289 | 3.140 | 11.6 | 20.1 |

**140354** 2001 $TM_{19}$ 4 7.2 125°.32 3°.1/10.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.52 | −17 55.5 | 2.440 | 3.206 | 12.9 | 19.8 |
| 3 12 | 13 24.69 | −18 11.1 | 2.352 | 3.212 | 10.4 | 19.7 |
| 3 22 | 13 18.05 | −18 12.8 | 2.287 | 3.217 | 7.5 | 19.5 |
| 4 1 | 13 10.14 | −18 0.7 | 2.248 | 3.223 | 4.6 | 19.3 |
| 4 11 | 13 1.72 | −17 37.0 | 2.237 | 3.228 | 3.1 | 19.2 |
| 4 21 | 12 53.59 | −17 5.1 | 2.255 | 3.234 | 4.9 | 19.3 |
| 5 1 | 12 46.50 | −16 29.5 | 2.302 | 3.239 | 7.8 | 19.5 |
| 5 11 | 12 41.04 | −15 55.2 | 2.373 | 3.244 | 10.6 | 19.7 |

**105725** 2000 $SS_{81}$ 4 7.2 88°.47 1°.3/ 5.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.43 | − 5 43.4 | 2.405 | 3.225 | 11.5 | 19.8 |
| 3 12 | 13 21.41 | − 4 51.9 | 2.336 | 3.240 | 8.6 | 19.6 |
| 3 22 | 13 15.83 | − 3 52.0 | 2.292 | 3.255 | 5.4 | 19.4 |
| 4 1 | 13 9.23 | − 2 47.9 | 2.275 | 3.270 | 2.1 | 19.2 |
| 4 11 | 13 2.31 | − 1 45.0 | 2.288 | 3.284 | 2.3 | 19.2 |
| 4 21 | 12 55.75 | − 0 48.2 | 2.330 | 3.299 | 5.6 | 19.5 |
| 5 1 | 12 50.18 | − 0 1.8 | 2.400 | 3.313 | 8.6 | 19.7 |
| 5 11 | 12 46.07 | + 0 31.4 | 2.493 | 3.327 | 11.3 | 19.9 |

**95346** 2002 $CY_{134}$ 4 7.2 120°.66 1°.8/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.05 | − 6 49.6 | 1.557 | 2.388 | 16.1 | 19.6 |
| 3 12 | 13 25.77 | − 5 47.6 | 1.488 | 2.398 | 12.1 | 19.4 |
| 3 22 | 13 19.02 | − 4 30.7 | 1.442 | 2.407 | 7.6 | 19.1 |
| 4 1 | 13 10.56 | − 3 5.7 | 1.421 | 2.416 | 3.0 | 18.9 |
| 4 11 | 13 1.51 | − 1 41.3 | 1.428 | 2.425 | 3.2 | 18.9 |
| 4 21 | 12 53.03 | − 0 26.4 | 1.462 | 2.433 | 7.8 | 19.2 |
| 5 1 | 12 46.15 | + 0 31.9 | 1.520 | 2.441 | 12.2 | 19.5 |
| 5 11 | 12 41.57 | + 1 9.4 | 1.600 | 2.448 | 15.9 | 19.7 |

**380456** 2003 $UZ_{21}$ 4 7.2 131°.68 4°.6/13.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.90 | −25 28.4 | 2.771 | 3.485 | 12.7 | 22.0 |
| 3 12 | 13 25.53 | −25 40.6 | 2.686 | 3.502 | 10.6 | 21.8 |
| 3 22 | 13 18.48 | −25 36.1 | 2.623 | 3.518 | 8.3 | 21.7 |
| 4 1 | 13 10.28 | −25 14.4 | 2.586 | 3.534 | 6.0 | 21.6 |
| 4 11 | 13 1.67 | −24 37.0 | 2.577 | 3.549 | 4.7 | 21.5 |
| 4 21 | 12 53.40 | −23 47.4 | 2.598 | 3.563 | 5.3 | 21.6 |
| 5 1 | 12 46.15 | −22 50.4 | 2.646 | 3.577 | 7.2 | 21.7 |
| 5 11 | 12 40.46 | −21 51.8 | 2.721 | 3.589 | 9.5 | 21.9 |

**473278** 2015 $ND_{11}$ 4 7.2 11°.59 6°.0/30.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 24.52 | + 7 53.1 | 2.151 | 2.996 | 11.7 | 20.9 |
| 3 12 | 13 20.99 | + 9 26.0 | 2.085 | 2.997 | 9.1 | 20.7 |
| 3 22 | 13 15.71 | +10 59.3 | 2.045 | 2.997 | 6.8 | 20.5 |
| 4 1 | 13 9.23 | +12 25.3 | 2.032 | 2.998 | 6.0 | 20.5 |
| 4 11 | 13 2.31 | +13 36.6 | 2.047 | 2.999 | 7.3 | 20.6 |
| 4 21 | 12 55.74 | +14 28.1 | 2.088 | 2.999 | 9.7 | 20.7 |
| 5 1 | 12 50.24 | +14 56.9 | 2.153 | 3.000 | 12.3 | 20.9 |
| 5 11 | 12 46.35 | +15 3.0 | 2.238 | 3.001 | 14.7 | 21.1 |

**31477** Meenakshi 4 7.2 358°.00 0°.3/ 7.0 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.80 | − 7 9.8 | 1.239 | 2.083 | 18.6 | 17.9 |
| 3 12 | 13 27.13 | − 7 9.2 | 1.167 | 2.081 | 14.3 | 17.6 |
| 3 22 | 13 20.33 | − 6 54.6 | 1.114 | 2.080 | 9.3 | 17.3 |
| 4 1 | 13 11.20 | − 6 29.7 | 1.084 | 2.079 | 3.6 | 17.0 |
| 4 11 | 13 1.10 | − 6 0.5 | 1.078 | 2.079 | 2.4 | 16.9 |
| 4 21 | 12 51.54 | − 5 34.2 | 1.097 | 2.079 | 8.2 | 17.3 |
| 5 1 | 12 43.92 | − 5 17.7 | 1.139 | 2.080 | 13.4 | 17.6 |
| 5 11 | 12 39.16 | − 5 15.8 | 1.201 | 2.082 | 17.9 | 17.8 |

**56875** 2000 $QE_{111}$ 4 7.2 251°.49 0°.5/ 7.8 17 R

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.92 | −10 36.0 | 2.438 | 3.239 | 11.9 | 20.3 |
| 3 12 | 13 22.73 | −10 18.6 | 2.340 | 3.230 | 9.2 | 20.1 |
| 3 22 | 13 16.83 | − 9 50.2 | 2.265 | 3.220 | 6.1 | 19.9 |
| 4 1 | 13 9.69 | − 9 12.8 | 2.218 | 3.210 | 2.6 | 19.6 |
| 4 11 | 13 2.01 | − 8 30.2 | 2.200 | 3.200 | 1.3 | 19.5 |
| 4 21 | 12 54.54 | − 7 46.7 | 2.211 | 3.190 | 4.9 | 19.8 |
| 5 1 | 12 48.02 | − 7 7.0 | 2.249 | 3.180 | 8.3 | 19.9 |
| 5 11 | 12 43.00 | − 6 35.2 | 2.312 | 3.169 | 11.3 | 20.1 |

**245171** 2004 $TM_{116}$ 4 7.2 207°.25 3°.8/10.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.07 | −19 11.7 | 1.817 | 2.593 | 16.4 | 20.9 |
| 3 12 | 13 27.37 | −19 12.4 | 1.723 | 2.588 | 13.3 | 20.7 |
| 3 22 | 13 20.16 | −18 52.4 | 1.649 | 2.583 | 9.7 | 20.5 |
| 4 1 | 13 11.08 | −18 11.6 | 1.600 | 2.577 | 5.9 | 20.2 |
| 4 11 | 13 1.16 | −17 13.0 | 1.578 | 2.571 | 3.8 | 20.1 |
| 4 21 | 12 51.55 | −16 2.7 | 1.583 | 2.564 | 6.3 | 20.2 |
| 5 1 | 12 43.37 | −14 49.0 | 1.615 | 2.556 | 10.2 | 20.4 |
| 5 11 | 12 37.43 | −13 40.2 | 1.671 | 2.548 | 13.9 | 20.6 |

**411500** 2011 $AJ_{73}$ 4 7.2 111°.45 2°.6/ 4.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.83 | − 1 41.6 | 2.127 | 2.949 | 12.7 | 22.3 |
| 3 12 | 13 26.32 | − 0 51.4 | 2.068 | 2.973 | 9.5 | 22.2 |
| 3 22 | 13 18.97 | + 0 4.7 | 2.034 | 2.996 | 6.0 | 22.0 |
| 4 1 | 13 10.46 | + 1 1.4 | 2.027 | 3.018 | 3.0 | 21.8 |
| 4 11 | 13 1.62 | + 1 52.8 | 2.050 | 3.040 | 3.6 | 21.9 |
| 4 21 | 12 53.31 | + 2 34.1 | 2.102 | 3.061 | 6.8 | 22.2 |
| 5 1 | 12 46.27 | + 3 1.8 | 2.181 | 3.081 | 10.0 | 22.4 |
| 5 11 | 12 41.03 | + 3 14.2 | 2.283 | 3.101 | 12.8 | 22.6 |

**314062** 2005 $AA_{75}$ 4 7.2 207°.28 1°.2/ 8.3 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.24 | −12 31.5 | 1.994 | 2.790 | 14.4 | 21.9 |
| 3 12 | 13 27.18 | −12 14.9 | 1.899 | 2.784 | 11.3 | 21.7 |
| 3 22 | 13 19.88 | −11 43.3 | 1.826 | 2.778 | 7.6 | 21.5 |
| 4 1 | 13 10.94 | −10 58.6 | 1.780 | 2.770 | 3.5 | 21.2 |
| 4 11 | 13 1.27 | −10 5.2 | 1.762 | 2.762 | 1.7 | 21.1 |
| 4 21 | 12 51.88 | − 9 8.9 | 1.773 | 2.754 | 5.7 | 21.3 |
| 5 1 | 12 43.75 | − 8 16.1 | 1.812 | 2.744 | 9.8 | 21.5 |
| 5 11 | 12 37.61 | − 7 32.6 | 1.874 | 2.734 | 13.4 | 21.7 |

**285775** 2000 $UC_{88}$ 4 7.2 184°.45 2°.5/ 4.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.95 | + 0 32.5 | 2.654 | 3.477 | 10.4 | 21.0 |
| 3 12 | 13 23.24 | + 1 3.0 | 2.572 | 3.477 | 7.9 | 20.8 |
| 3 22 | 13 17.00 | + 1 36.8 | 2.516 | 3.477 | 5.1 | 20.6 |
| 4 1 | 13 9.72 | + 2 10.2 | 2.487 | 3.477 | 2.8 | 20.5 |
| 4 11 | 13 2.04 | + 2 39.2 | 2.489 | 3.476 | 3.4 | 20.5 |
| 4 21 | 12 54.64 | + 3 0.2 | 2.519 | 3.475 | 6.0 | 20.7 |
| 5 1 | 12 48.14 | + 3 10.6 | 2.577 | 3.474 | 8.8 | 20.9 |
| 5 11 | 12 43.03 | + 3 9.1 | 2.658 | 3.472 | 11.3 | 21.0 |

**200762** 2001 $XX$ 4 7.2 47°.38 8°.9/29.5 18 R

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.30 | + 1 28.5 | 1.043 | 1.920 | 18.8 | 19.0 |
| 3 12 | 13 22.69 | + 5 11.7 | 1.016 | 1.949 | 14.0 | 18.8 |
| 3 22 | 13 17.16 | + 8 59.5 | 1.013 | 1.979 | 10.0 | 18.7 |
| 4 1 | 13 9.79 | +12 29.0 | 1.036 | 2.009 | 9.0 | 18.7 |
| 4 11 | 13 2.08 | +15 20.0 | 1.083 | 2.040 | 11.5 | 18.9 |
| 4 21 | 12 55.37 | +17 22.0 | 1.154 | 2.071 | 15.2 | 19.2 |
| 5 1 | 12 50.70 | +18 33.5 | 1.243 | 2.103 | 18.7 | 19.5 |
| 5 11 | 12 48.63 | +18 59.8 | 1.349 | 2.134 | 21.6 | 19.8 |

**136343** 2004 $CO_{31}$ 4 7.2 244°.32 0°.0/ 7.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.89 | − 9 30.4 | 2.261 | 3.070 | 12.5 | 20.7 |
| 3 12 | 13 22.82 | − 9 3.6 | 2.168 | 3.063 | 9.6 | 20.5 |
| 3 22 | 13 16.93 | − 8 25.2 | 2.099 | 3.057 | 6.2 | 20.3 |
| 4 1 | 13 9.75 | − 7 38.1 | 2.056 | 3.050 | 2.5 | 20.1 |
| 4 11 | 13 2.02 | − 6 46.7 | 2.043 | 3.043 | 1.4 | 20.0 |
| 4 21 | 12 54.55 | − 5 56.2 | 2.058 | 3.036 | 5.3 | 20.2 |
| 5 1 | 12 48.10 | − 5 11.6 | 2.101 | 3.029 | 8.9 | 20.4 |
| 5 11 | 12 43.27 | − 4 37.1 | 2.167 | 3.022 | 12.1 | 20.6 |

**224318** 2005 $UQ_{34}$ 4 7.3 139°.90 2°.5/ 9.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.02 | −17 54.0 | 2.020 | 2.801 | 14.7 | 20.4 |
| 3 12 | 13 23.86 | −17 25.5 | 1.936 | 2.808 | 11.7 | 20.2 |
| 3 22 | 13 17.65 | −16 37.7 | 1.874 | 2.814 | 8.2 | 20.0 |
| 4 1 | 13 10.03 | −15 32.4 | 1.837 | 2.820 | 4.6 | 19.8 |
| 4 11 | 13 1.88 | −14 14.5 | 1.828 | 2.825 | 2.6 | 19.6 |
| 4 21 | 12 54.12 | −12 50.6 | 1.848 | 2.830 | 5.3 | 19.8 |
| 5 1 | 12 47.62 | −11 28.5 | 1.895 | 2.835 | 9.0 | 20.1 |
| 5 11 | 12 42.98 | −10 15.0 | 1.967 | 2.840 | 12.3 | 20.3 |

**58156** 1989 $GL$ 4 7.3 14°.39 0°.2/ 7.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 47.59 | − 0 35.0 | 1.005 | 1.848 | 22.1 | 17.0 |
| 3 12 | 13 40.75 | − 2 24.5 | 0.940 | 1.852 | 17.2 | 16.7 |
| 3 22 | 13 29.51 | − 4 18.4 | 0.894 | 1.858 | 11.2 | 16.4 |
| 4 1 | 13 14.91 | − 6 14.4 | 0.871 | 1.865 | 4.5 | 16.0 |
| 4 11 | 12 58.94 | − 8 8.8 | 0.873 | 1.874 | 2.6 | 16.0 |
| 4 21 | 12 43.91 | − 9 57.2 | 0.902 | 1.884 | 9.4 | 16.4 |
| 5 1 | 12 31.84 | −11 38.2 | 0.954 | 1.896 | 15.3 | 16.7 |
| 5 11 | 12 23.90 | −13 13.0 | 1.026 | 1.909 | 20.2 | 17.1 |

**174536** 2003 $EB_{41}$ 4 7.3 240°.57 7°.6/27.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.11 | +16 1.1 | 2.431 | 3.266 | 10.9 | 19.9 |
| 3 12 | 13 21.33 | +17 44.4 | 2.369 | 3.261 | 9.0 | 19.7 |
| 3 22 | 13 15.90 | +19 22.5 | 2.333 | 3.256 | 7.8 | 19.7 |
| 4 1 | 13 9.33 | +20 47.9 | 2.324 | 3.251 | 7.8 | 19.6 |
| 4 11 | 13 2.33 | +21 53.9 | 2.342 | 3.246 | 9.0 | 19.7 |
| 4 21 | 12 55.63 | +22 36.6 | 2.385 | 3.241 | 10.9 | 19.8 |
| 5 1 | 12 49.90 | +22 54.6 | 2.450 | 3.235 | 12.9 | 20.0 |
| 5 11 | 12 45.67 | +22 48.7 | 2.533 | 3.230 | 14.7 | 20.1 |

**7892** Musamurahigashi 4 7.3 189°.64 0°.2/ 6.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.84 | − 8 11.5 | 2.979 | 3.781 | 10.0 | 19.3 |
| 3 12 | 13 21.55 | − 7 42.2 | 2.887 | 3.780 | 7.6 | 19.1 |
| 3 22 | 13 15.89 | − 7 4.7 | 2.820 | 3.778 | 4.8 | 18.9 |
| 4 1 | 13 9.31 | − 6 21.5 | 2.782 | 3.776 | 1.9 | 18.7 |
| 4 11 | 13 2.35 | − 5 36.2 | 2.774 | 3.774 | 1.3 | 18.7 |
| 4 21 | 12 55.61 | − 4 52.6 | 2.796 | 3.771 | 4.3 | 18.9 |
| 5 1 | 12 49.64 | − 4 14.0 | 2.847 | 3.768 | 7.2 | 19.1 |
| 5 11 | 12 44.90 | − 3 43.7 | 2.923 | 3.765 | 9.7 | 19.2 |

**421742** 2014 $PC_{46}$ 4 7.3 213°.59 3°.1/ 9.8 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.92 | −16 37.0 | 1.765 | 2.552 | 16.3 | 22.2 |
| 3 12 | 13 28.09 | −16 42.1 | 1.671 | 2.546 | 13.1 | 22.0 |
| 3 22 | 13 20.68 | −16 28.6 | 1.599 | 2.540 | 9.3 | 21.8 |
| 4 1 | 13 11.34 | −15 56.7 | 1.551 | 2.533 | 5.3 | 21.5 |
| 4 11 | 13 1.10 | −15 9.6 | 1.530 | 2.526 | 3.2 | 21.4 |
| 4 21 | 12 51.17 | −14 12.9 | 1.537 | 2.518 | 6.3 | 21.5 |
| 5 1 | 12 42.69 | −13 14.5 | 1.570 | 2.510 | 10.5 | 21.7 |
| 5 11 | 12 36.51 | −12 21.8 | 1.626 | 2.501 | 14.4 | 22.0 |

**134515** 1999 $JL_{124}$ 4 7.3 324°.85 0°.0/ 7.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.00 | − 7 56.6 | 1.883 | 2.706 | 14.0 | 19.4 |
| 3 12 | 13 23.33 | − 7 47.1 | 1.789 | 2.693 | 10.8 | 19.2 |
| 3 22 | 13 17.49 | − 7 26.4 | 1.719 | 2.680 | 7.0 | 18.9 |
| 4 1 | 13 10.05 | − 6 57.3 | 1.674 | 2.668 | 2.8 | 18.6 |
| 4 11 | 13 1.89 | − 6 24.3 | 1.656 | 2.656 | 1.7 | 18.5 |
| 4 21 | 12 53.97 | − 5 52.6 | 1.666 | 2.645 | 6.2 | 18.8 |
| 5 1 | 12 47.25 | − 5 27.2 | 1.701 | 2.634 | 10.3 | 19.0 |
| 5 11 | 12 42.45 | − 5 12.6 | 1.759 | 2.624 | 13.9 | 19.2 |

**396241** 2014 $BJ_{37}$ 4 7.3 153°.22 2°.9/ 3.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.58 | + 0 7.6 | 2.592 | 3.420 | 10.5 | 21.1 |
| 3 12 | 13 21.48 | + 1 12.4 | 2.518 | 3.426 | 7.9 | 20.9 |
| 3 22 | 13 15.89 | + 2 22.1 | 2.469 | 3.431 | 5.1 | 20.8 |
| 4 1 | 13 9.31 | + 3 31.6 | 2.449 | 3.436 | 3.0 | 20.6 |
| 4 11 | 13 2.38 | + 4 35.5 | 2.458 | 3.440 | 3.9 | 20.7 |
| 4 21 | 12 55.74 | + 5 29.2 | 2.496 | 3.445 | 6.5 | 20.9 |
| 5 1 | 12 50.00 | + 6 9.3 | 2.562 | 3.449 | 9.2 | 21.0 |
| 5 11 | 12 45.63 | + 6 33.8 | 2.650 | 3.452 | 11.7 | 21.2 |

**169001** 2001 $DN_{31}$ 4 7.3 51°.87 2°.4/ 5.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.58 | − 3 57.2 | 1.339 | 2.185 | 17.3 | 19.4 |
| 3 12 | 13 26.43 | − 3 19.2 | 1.283 | 2.200 | 13.1 | 19.2 |
| 3 22 | 13 19.55 | − 2 30.2 | 1.248 | 2.215 | 8.2 | 19.0 |
| 4 1 | 13 10.81 | − 1 36.8 | 1.236 | 2.231 | 3.5 | 18.7 |
| 4 11 | 13 1.51 | − 0 47.2 | 1.251 | 2.247 | 3.8 | 18.8 |
| 4 21 | 12 52.94 | − 0 8.9 | 1.290 | 2.263 | 8.5 | 19.1 |
| 5 1 | 12 46.22 | + 0 12.7 | 1.354 | 2.279 | 13.0 | 19.4 |
| 5 11 | 12 42.04 | + 0 15.4 | 1.437 | 2.296 | 16.8 | 19.7 |

**303266** 2004 $RX_{125}$ 4 7.3 104°.45 0°.5/ 6.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.78 | − 9 24.6 | 1.579 | 2.400 | 16.4 | 21.5 |
| 3 12 | 13 27.00 | − 8 37.3 | 1.516 | 2.418 | 12.5 | 21.3 |
| 3 22 | 13 19.76 | − 7 34.2 | 1.474 | 2.436 | 7.9 | 21.0 |
| 4 1 | 13 10.87 | − 6 20.4 | 1.458 | 2.453 | 3.0 | 20.8 |
| 4 11 | 13 1.48 | − 5 3.9 | 1.470 | 2.469 | 2.2 | 20.7 |
| 4 21 | 12 52.73 | − 3 52.9 | 1.508 | 2.485 | 7.0 | 21.1 |
| 5 1 | 12 45.63 | − 2 54.8 | 1.573 | 2.501 | 11.3 | 21.4 |
| 5 11 | 12 40.84 | − 2 14.0 | 1.659 | 2.516 | 15.0 | 21.6 |

**500522** 2012 $TZ_{306}$ 4 7.3 181°.69 3°.9/11.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.05 | −20 27.2 | 2.632 | 3.376 | 12.6 | 21.8 |
| 3 12 | 13 26.60 | −20 54.6 | 2.535 | 3.377 | 10.4 | 21.6 |
| 3 22 | 13 19.32 | −21 8.2 | 2.460 | 3.377 | 7.8 | 21.5 |
| 4 1 | 13 10.71 | −21 7.3 | 2.412 | 3.377 | 5.2 | 21.3 |
| 4 11 | 13 1.52 | −20 53.0 | 2.393 | 3.376 | 3.9 | 21.2 |
| 4 21 | 12 52.55 | −20 27.9 | 2.403 | 3.375 | 5.1 | 21.3 |
| 5 1 | 12 44.56 | −19 56.2 | 2.441 | 3.374 | 7.6 | 21.4 |
| 5 11 | 12 38.17 | −19 23.0 | 2.506 | 3.372 | 10.3 | 21.6 |

**459546** 2013 $GH_{26}$ 4 7.3 323°.42 0°.2/ 7.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.47 | −10 51.9 | 1.177 | 2.028 | 18.9 | 21.1 |
| 3 12 | 13 21.08 | −10 7.2 | 1.089 | 2.007 | 14.7 | 20.7 |
| 3 22 | 13 16.69 | − 8 56.8 | 1.020 | 1.987 | 9.7 | 20.4 |
| 4 1 | 13 9.91 | − 7 24.9 | 0.973 | 1.968 | 3.8 | 20.0 |
| 4 11 | 13 1.95 | − 5 41.2 | 0.949 | 1.950 | 2.5 | 19.8 |
| 4 21 | 12 54.27 | − 3 58.7 | 0.949 | 1.932 | 8.8 | 20.1 |
| 5 1 | 12 48.32 | − 2 30.6 | 0.971 | 1.916 | 14.7 | 20.4 |
| 5 11 | 12 45.18 | − 1 26.7 | 1.011 | 1.901 | 19.8 | 20.6 |

**228066** 2008 $OM_{2}$ 4 7.3 291°.19 3°.4/ 4.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.15 | − 1 26.7 | 1.749 | 2.591 | 14.1 | 20.5 |
| 3 12 | 13 23.52 | − 0 28.5 | 1.665 | 2.580 | 10.7 | 20.2 |
| 3 22 | 13 17.64 | + 0 38.9 | 1.603 | 2.569 | 6.9 | 20.0 |
| 4 1 | 13 10.12 | + 1 49.2 | 1.568 | 2.559 | 3.7 | 19.8 |
| 4 11 | 13 1.89 | + 2 54.5 | 1.559 | 2.548 | 4.7 | 19.8 |
| 4 21 | 12 53.97 | + 3 47.5 | 1.578 | 2.538 | 8.5 | 20.0 |
| 5 1 | 12 47.36 | + 4 22.8 | 1.620 | 2.527 | 12.4 | 20.2 |
| 5 11 | 12 42.77 | + 4 37.6 | 1.684 | 2.517 | 15.9 | 20.4 |

**138056** 2000 $DN_{38}$ 4 7.3 136°.21 0°.9/ 6.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.62 | − 7 23.6 | 2.028 | 2.842 | 13.5 | 21.0 |
| 3 12 | 13 25.67 | − 6 38.5 | 1.955 | 2.855 | 10.3 | 20.8 |
| 3 22 | 13 18.73 | − 5 42.1 | 1.906 | 2.867 | 6.5 | 20.6 |
| 4 1 | 13 10.46 | − 4 38.7 | 1.884 | 2.879 | 2.4 | 20.3 |
| 4 11 | 13 1.73 | − 3 34.4 | 1.891 | 2.890 | 2.2 | 20.3 |
| 4 21 | 12 53.46 | − 2 35.4 | 1.927 | 2.900 | 6.1 | 20.6 |
| 5 1 | 12 46.46 | − 1 47.0 | 1.991 | 2.910 | 9.8 | 20.9 |
| 5 11 | 12 41.32 | − 1 12.8 | 2.077 | 2.919 | 13.0 | 21.1 |

**173714** 2001 $QR_{139}$ 4 7.3 107°.02 2°.8/10.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.75 | −18 8.8 | 2.912 | 3.660 | 11.4 | 20.1 |
| 3 12 | 13 26.73 | −18 27.0 | 2.836 | 3.685 | 9.2 | 20.0 |
| 3 22 | 13 19.17 | −18 33.1 | 2.784 | 3.709 | 6.6 | 19.9 |
| 4 1 | 13 10.60 | −18 27.4 | 2.761 | 3.733 | 4.1 | 19.7 |
| 4 11 | 13 1.68 | −18 11.6 | 2.767 | 3.756 | 2.8 | 19.7 |
| 4 21 | 12 53.10 | −17 48.6 | 2.803 | 3.779 | 4.3 | 19.8 |
| 5 1 | 12 45.51 | −17 21.9 | 2.869 | 3.801 | 6.7 | 20.0 |
| 5 11 | 12 39.37 | −16 55.6 | 2.962 | 3.822 | 9.0 | 20.2 |

**79068** 3258 $T\text{-}_{3}$ 4 7.3 253°.93 1°.1/ 6.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.52 | − 5 41.5 | 1.745 | 2.568 | 15.0 | 20.3 |
| 3 12 | 13 27.76 | − 5 23.9 | 1.650 | 2.554 | 11.5 | 20.0 |
| 3 22 | 13 20.48 | − 4 55.8 | 1.578 | 2.540 | 7.4 | 19.8 |
| 4 1 | 13 11.30 | − 4 20.5 | 1.532 | 2.526 | 2.9 | 19.4 |
| 4 11 | 13 1.21 | − 3 43.6 | 1.513 | 2.511 | 2.5 | 19.4 |
| 4 21 | 12 51.37 | − 3 10.9 | 1.521 | 2.496 | 7.2 | 19.6 |
| 5 1 | 12 42.90 | − 2 48.0 | 1.556 | 2.481 | 11.7 | 19.8 |
| 5 11 | 12 36.66 | − 2 39.0 | 1.612 | 2.465 | 15.6 | 20.1 |

**296650** 2009 $SC_{129}$ 4 7.3 337°.65 1°.0/ 6.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.30 | − 8 33.9 | 1.588 | 2.423 | 15.7 | 20.3 |
| 3 12 | 13 22.31 | − 7 38.6 | 1.508 | 2.418 | 12.0 | 20.0 |
| 3 22 | 13 16.94 | − 6 26.3 | 1.449 | 2.414 | 7.6 | 19.8 |
| 4 1 | 13 9.87 | − 5 2.4 | 1.415 | 2.410 | 2.9 | 19.5 |
| 4 11 | 13 2.09 | − 3 35.3 | 1.408 | 2.407 | 2.6 | 19.4 |
| 4 21 | 12 54.71 | − 2 14.0 | 1.427 | 2.403 | 7.4 | 19.7 |
| 5 1 | 12 48.75 | − 1 6.8 | 1.471 | 2.401 | 11.9 | 20.0 |
| 5 11 | 12 44.93 | − 0 19.0 | 1.537 | 2.398 | 15.8 | 20.2 |

**285894** 2001 $QV_{25}$ 4 7.3 214°.93 0°.2/ 7.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.32 | − 9 2.7 | 1.906 | 2.709 | 14.7 | 20.9 |
| 3 12 | 13 29.70 | − 8 53.4 | 1.809 | 2.701 | 11.4 | 20.6 |
| 3 22 | 13 21.62 | − 8 32.0 | 1.736 | 2.692 | 7.4 | 20.4 |
| 4 1 | 13 11.72 | − 8 0.7 | 1.688 | 2.681 | 3.0 | 20.1 |
| 4 11 | 13 0.97 | − 7 23.8 | 1.670 | 2.670 | 1.7 | 20.0 |
| 4 21 | 12 50.48 | − 6 46.7 | 1.681 | 2.658 | 6.3 | 20.2 |
| 5 1 | 12 41.33 | − 6 15.0 | 1.718 | 2.645 | 10.6 | 20.5 |
| 5 11 | 12 34.33 | − 5 53.4 | 1.779 | 2.632 | 14.4 | 20.7 |

**423613** 2005 $WB_{88}$ 4 7.3 130°.62 3°.9/ 2.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.91 | + 3 40.2 | 2.425 | 3.250 | 11.2 | 22.3 |
| 3 12 | 13 25.48 | + 4 36.5 | 2.364 | 3.268 | 8.5 | 22.1 |
| 3 22 | 13 18.42 | + 5 34.5 | 2.328 | 3.286 | 5.7 | 22.0 |
| 4 1 | 13 10.31 | + 6 28.8 | 2.321 | 3.302 | 3.9 | 21.9 |
| 4 11 | 13 1.88 | + 7 14.2 | 2.343 | 3.318 | 4.8 | 22.0 |
| 4 21 | 12 53.88 | + 7 46.7 | 2.395 | 3.333 | 7.3 | 22.1 |
| 5 1 | 12 46.98 | + 8 3.9 | 2.473 | 3.347 | 10.0 | 22.3 |
| 5 11 | 12 41.67 | + 8 5.3 | 2.573 | 3.361 | 12.3 | 22.5 |

**422568** 2014 $TT_{47}$ 4 7.3 273°.63 0°.9/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.85 | −11 10.1 | 1.582 | 2.400 | 16.5 | 21.5 |
| 3 12 | 13 26.87 | −10 58.3 | 1.483 | 2.381 | 13.0 | 21.2 |
| 3 22 | 13 20.14 | −10 29.5 | 1.404 | 2.361 | 8.7 | 20.9 |
| 4 1 | 13 11.23 | − 9 45.7 | 1.349 | 2.341 | 3.8 | 20.6 |
| 4 11 | 13 1.23 | − 8 51.8 | 1.321 | 2.321 | 1.9 | 20.4 |
| 4 21 | 12 51.39 | − 7 55.0 | 1.319 | 2.301 | 7.1 | 20.6 |
| 5 1 | 12 43.00 | − 7 3.3 | 1.342 | 2.280 | 12.1 | 20.9 |
| 5 11 | 12 37.04 | − 6 24.0 | 1.387 | 2.259 | 16.5 | 21.1 |

**32641** 2595 $P\text{–}L$ 4 7.3 234°.12 0°.2/ 7.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.64 | − 8 22.7 | 2.146 | 2.954 | 13.1 | 20.6 |
| 3 12 | 13 25.86 | − 8 0.4 | 2.047 | 2.942 | 10.1 | 20.3 |
| 3 22 | 13 19.02 | − 7 26.8 | 1.971 | 2.929 | 6.5 | 20.1 |
| 4 1 | 13 10.66 | − 6 44.7 | 1.922 | 2.915 | 2.5 | 19.8 |
| 4 11 | 13 1.62 | − 5 58.6 | 1.901 | 2.901 | 1.7 | 19.7 |
| 4 21 | 12 52.78 | − 5 13.7 | 1.910 | 2.887 | 5.8 | 20.0 |
| 5 1 | 12 45.05 | − 4 35.3 | 1.946 | 2.871 | 9.7 | 20.2 |
| 5 11 | 12 39.11 | − 4 7.6 | 2.006 | 2.856 | 13.1 | 20.4 |

**264505** 2001 $QC_{155}$ 4 7.3 207°.48 3°.7/11.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.29 | −20 31.5 | 2.361 | 3.113 | 13.7 | 22.0 |
| 3 12 | 13 26.26 | −20 35.2 | 2.258 | 3.106 | 11.2 | 21.8 |
| 3 22 | 13 19.23 | −20 21.9 | 2.177 | 3.099 | 8.3 | 21.6 |
| 4 1 | 13 10.74 | −19 51.5 | 2.122 | 3.092 | 5.4 | 21.4 |
| 4 11 | 13 1.58 | −19 6.0 | 2.095 | 3.083 | 3.7 | 21.3 |
| 4 21 | 12 52.64 | −18 9.6 | 2.097 | 3.074 | 5.3 | 21.4 |
| 5 1 | 12 44.78 | −17 8.2 | 2.128 | 3.064 | 8.3 | 21.5 |
| 5 11 | 12 38.68 | −16 8.2 | 2.184 | 3.054 | 11.4 | 21.7 |

**333687** 2008 $UU_{93}$ 4 7.3 212°.36 5°.5/31.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.26 | +10 39.8 | 2.615 | 3.441 | 10.5 | 21.4 |
| 3 12 | 13 25.09 | +11 38.7 | 2.536 | 3.433 | 8.3 | 21.3 |
| 3 22 | 13 18.27 | +12 35.5 | 2.482 | 3.424 | 6.3 | 21.1 |
| 4 1 | 13 10.30 | +13 24.5 | 2.456 | 3.415 | 5.5 | 21.1 |
| 4 11 | 13 1.88 | +14 0.7 | 2.459 | 3.405 | 6.5 | 21.1 |
| 4 21 | 12 53.73 | +14 20.3 | 2.489 | 3.395 | 8.6 | 21.2 |
| 5 1 | 12 46.53 | +14 21.8 | 2.545 | 3.383 | 10.9 | 21.4 |
| 5 11 | 12 40.83 | +14 5.2 | 2.623 | 3.372 | 13.1 | 21.5 |

**61887** 2000 $QF_{220}$ 4 7.3 94°.03 1°.6/ 8.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.23 | −13 35.8 | 1.875 | 2.674 | 15.0 | 19.5 |
| 3 12 | 13 25.60 | −13 23.2 | 1.802 | 2.688 | 11.7 | 19.3 |
| 3 22 | 13 18.81 | −12 54.9 | 1.752 | 2.702 | 7.9 | 19.1 |
| 4 1 | 13 10.54 | −12 13.0 | 1.727 | 2.716 | 3.8 | 18.9 |
| 4 11 | 13 1.75 | −11 22.3 | 1.730 | 2.729 | 1.9 | 18.8 |
| 4 21 | 12 53.45 | −10 28.8 | 1.761 | 2.743 | 5.6 | 19.1 |
| 5 1 | 12 46.52 | − 9 38.7 | 1.818 | 2.756 | 9.4 | 19.3 |
| 5 11 | 12 41.61 | − 8 57.6 | 1.899 | 2.769 | 12.9 | 19.6 |

**29573** 1998 $FU_{38}$ 4 7.3 74°.59 0°.5/ 6.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.26 | − 8 19.6 | 2.173 | 2.989 | 12.7 | 18.6 |
| 3 12 | 13 22.25 | − 7 37.1 | 2.103 | 3.003 | 9.6 | 18.4 |
| 3 22 | 13 16.50 | − 6 43.6 | 2.057 | 3.018 | 6.1 | 18.2 |
| 4 1 | 13 9.60 | − 5 43.2 | 2.039 | 3.033 | 2.3 | 18.0 |
| 4 11 | 13 2.32 | − 4 41.4 | 2.049 | 3.048 | 1.8 | 18.0 |
| 4 21 | 12 55.44 | − 3 43.6 | 2.088 | 3.063 | 5.5 | 18.3 |
| 5 1 | 12 49.68 | − 2 54.9 | 2.154 | 3.078 | 8.9 | 18.5 |
| 5 11 | 12 45.54 | − 2 18.8 | 2.243 | 3.093 | 11.9 | 18.7 |

**184803** 2005 $TB_{110}$ 4 7.3 350°.36 1°.3/ 8.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.59 | −12 56.9 | 2.360 | 3.155 | 12.5 | 20.8 |
| 3 12 | 13 22.54 | −12 47.8 | 2.271 | 3.155 | 9.7 | 20.6 |
| 3 22 | 13 16.74 | −12 26.3 | 2.205 | 3.154 | 6.6 | 20.4 |
| 4 1 | 13 9.73 | −11 54.3 | 2.165 | 3.154 | 3.2 | 20.2 |
| 4 11 | 13 2.22 | −11 15.0 | 2.154 | 3.154 | 1.6 | 20.1 |
| 4 21 | 12 54.97 | −10 32.9 | 2.172 | 3.153 | 4.7 | 20.3 |
| 5 1 | 12 48.73 | − 9 52.7 | 2.217 | 3.153 | 8.1 | 20.5 |
| 5 11 | 12 44.04 | − 9 18.7 | 2.287 | 3.153 | 11.1 | 20.7 |

**312137** 2007 $TS_{289}$ 4 7.3 130°.59 1°.9/ 5.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.75 | − 4 32.7 | 1.847 | 2.669 | 14.3 | 21.9 |
| 3 12 | 13 27.44 | − 3 48.5 | 1.779 | 2.684 | 10.8 | 21.7 |
| 3 22 | 13 19.95 | − 2 54.8 | 1.735 | 2.698 | 6.8 | 21.5 |
| 4 1 | 13 10.98 | − 1 56.7 | 1.717 | 2.711 | 2.8 | 21.2 |
| 4 11 | 13 1.54 | − 1 0.9 | 1.728 | 2.724 | 3.1 | 21.3 |
| 4 21 | 12 52.63 | − 0 13.3 | 1.768 | 2.735 | 7.0 | 21.5 |
| 5 1 | 12 45.15 | + 0 21.1 | 1.833 | 2.747 | 10.9 | 21.8 |
| 5 11 | 12 39.73 | + 0 39.5 | 1.921 | 2.757 | 14.1 | 22.0 |

**91386** 1999 $JL_{127}$ 4 7.3 329°.64 2°.5/ 5.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.16 | − 4 53.0 | 1.441 | 2.292 | 16.1 | 19.0 |
| 3 12 | 13 21.75 | − 3 58.9 | 1.356 | 2.277 | 12.2 | 18.7 |
| 3 22 | 13 16.78 | − 2 49.8 | 1.293 | 2.262 | 7.8 | 18.4 |
| 4 1 | 13 9.89 | − 1 32.2 | 1.254 | 2.249 | 3.3 | 18.1 |
| 4 11 | 13 2.12 | − 0 15.3 | 1.241 | 2.236 | 4.0 | 18.1 |
| 4 21 | 12 54.69 | + 0 51.6 | 1.252 | 2.224 | 8.8 | 18.3 |
| 5 1 | 12 48.73 | + 1 40.6 | 1.287 | 2.213 | 13.5 | 18.6 |
| 5 11 | 12 45.10 | + 2 6.9 | 1.341 | 2.202 | 17.6 | 18.8 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **465148** 2007 $CJ_{29}$ | | | 4 7.3 188°.94 | | 7°.0/30.3 17 | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.62 | + 9 50.5 | 1.999 | 2.840 | 12.6 | 21.1 |
| 3 12 | 13 24.28 | +11 28.4 | 1.934 | 2.840 | 10.0 | 20.9 |
| 3 22 | 13 17.94 | +13 5.5 | 1.893 | 2.839 | 7.7 | 20.8 |
| 4 1 | 13 10.21 | +14 32.9 | 1.879 | 2.838 | 7.0 | 20.8 |
| 4 11 | 13 1.97 | +15 42.5 | 1.893 | 2.836 | 8.4 | 20.8 |
| 4 21 | 12 54.12 | +16 28.9 | 1.932 | 2.834 | 10.9 | 21.0 |
| 5 1 | 12 47.51 | +16 49.6 | 1.995 | 2.832 | 13.6 | 21.1 |
| 5 11 | 12 42.73 | +16 45.4 | 2.077 | 2.829 | 16.0 | 21.3 |
| **271163** 2003 $SK_{231}$ | | | 4 7.3 169°.62 | | 1°.9/ 5.4 17 | |
| 3 2 | 13 29.21 | − 3 4.9 | 2.194 | 3.017 | 12.3 | 20.9 |
| 3 12 | 13 24.55 | − 2 31.6 | 2.114 | 3.019 | 9.3 | 20.7 |
| 3 22 | 13 18.04 | − 1 51.3 | 2.057 | 3.020 | 5.9 | 20.5 |
| 4 1 | 13 10.24 | − 1 8.2 | 2.029 | 3.022 | 2.6 | 20.3 |
| 4 11 | 13 1.96 | − 0 27.3 | 2.029 | 3.023 | 2.9 | 20.3 |
| 4 21 | 12 54.01 | + 0 6.6 | 2.058 | 3.024 | 6.4 | 20.6 |
| 5 1 | 12 47.17 | + 0 29.7 | 2.113 | 3.025 | 9.7 | 20.8 |
| 5 11 | 12 42.03 | + 0 39.6 | 2.192 | 3.025 | 12.7 | 21.0 |
| **432024** 2008 $VU_{72}$ | | | 4 7.3 227°.41 | | 3°.0/ 4.3 17 | |
| 3 2 | 13 28.86 | − 0 2.3 | 2.172 | 3.001 | 12.2 | 21.9 |
| 3 12 | 13 24.35 | + 0 39.6 | 2.087 | 2.996 | 9.2 | 21.7 |
| 3 22 | 13 17.96 | + 1 26.8 | 2.027 | 2.990 | 6.0 | 21.5 |
| 4 1 | 13 10.23 | + 2 14.5 | 1.994 | 2.984 | 3.3 | 21.3 |
| 4 11 | 13 1.96 | + 2 57.0 | 1.990 | 2.978 | 4.0 | 21.3 |
| 4 21 | 12 53.99 | + 3 29.5 | 2.014 | 2.971 | 7.2 | 21.5 |
| 5 1 | 12 47.11 | + 3 48.4 | 2.064 | 2.964 | 10.5 | 21.7 |
| 5 11 | 12 41.92 | + 3 51.8 | 2.137 | 2.957 | 13.5 | 21.9 |
| **216383** 2008 $BC_{48}$ | | | 4 7.3 336°.77 | | 0°.9/ 6.3 17 | |
| 3 2 | 13 25.37 | − 6 31.2 | 2.101 | 2.925 | 12.7 | 20.6 |
| 3 12 | 13 21.79 | − 5 58.9 | 2.015 | 2.920 | 9.7 | 20.4 |
| 3 22 | 13 16.36 | − 5 16.5 | 1.953 | 2.916 | 6.1 | 20.2 |
| 4 1 | 13 9.61 | − 4 27.6 | 1.917 | 2.911 | 2.3 | 19.9 |
| 4 11 | 13 2.33 | − 3 37.6 | 1.909 | 2.907 | 2.1 | 19.9 |
| 4 21 | 12 55.33 | − 2 51.7 | 1.929 | 2.904 | 6.0 | 20.1 |
| 5 1 | 12 49.41 | − 2 14.9 | 1.976 | 2.900 | 9.6 | 20.3 |
| 5 11 | 12 45.16 | − 1 50.7 | 2.045 | 2.897 | 12.8 | 20.5 |
| **245691** 2006 $BV_{148}$ | | | 4 7.3 101°.75 | | 2°.1/ 9.2 17 | |
| 3 2 | 13 29.86 | −14 38.8 | 1.962 | 2.755 | 14.7 | 20.9 |
| 3 12 | 13 25.31 | −14 34.7 | 1.883 | 2.764 | 11.6 | 20.7 |
| 3 22 | 13 18.65 | −14 15.0 | 1.826 | 2.773 | 7.9 | 20.5 |
| 4 1 | 13 10.51 | −13 41.2 | 1.795 | 2.781 | 4.1 | 20.3 |
| 4 11 | 13 1.81 | −12 57.3 | 1.791 | 2.790 | 2.2 | 20.1 |
| 4 21 | 12 53.52 | −12 8.5 | 1.816 | 2.798 | 5.4 | 20.4 |
| 5 1 | 12 46.53 | −11 21.1 | 1.867 | 2.806 | 9.2 | 20.6 |
| 5 11 | 12 41.48 | −10 40.5 | 1.942 | 2.814 | 12.5 | 20.8 |
| **302162** 2001 $SL_{333}$ | | | 4 7.3 265°.14 | | 2°.3/ 5.6 17 | |
| 3 2 | 13 33.35 | − 3 50.6 | 1.624 | 2.454 | 15.6 | 21.4 |
| 3 12 | 13 28.73 | − 3 16.4 | 1.522 | 2.430 | 12.0 | 21.1 |
| 3 22 | 13 21.34 | − 2 30.6 | 1.442 | 2.406 | 7.7 | 20.8 |
| 4 1 | 13 11.74 | − 1 37.9 | 1.387 | 2.381 | 3.3 | 20.4 |
| 4 11 | 13 1.00 | − 0 45.5 | 1.360 | 2.355 | 3.7 | 20.4 |
| 4 21 | 12 50.37 | − 0 0.8 | 1.359 | 2.329 | 8.5 | 20.6 |
| 5 1 | 12 41.15 | + 0 29.4 | 1.383 | 2.302 | 13.4 | 20.8 |
| 5 11 | 12 34.34 | + 0 41.0 | 1.429 | 2.274 | 17.6 | 21.0 |
| **64979** 2002 $AZ_{22}$ | | | 4 7.3 239°.76 | | 1°.0/ 6.4 17 | |
| 3 2 | 13 29.65 | − 8 32.0 | 1.693 | 2.516 | 15.4 | 19.2 |
| 3 12 | 13 25.61 | − 7 40.0 | 1.600 | 2.504 | 11.8 | 18.9 |
| 3 22 | 13 19.11 | − 6 31.2 | 1.530 | 2.493 | 7.6 | 18.7 |
| 4 1 | 13 10.78 | − 5 10.5 | 1.486 | 2.480 | 2.9 | 18.3 |
| 4 11 | 13 1.61 | − 3 45.3 | 1.469 | 2.468 | 2.5 | 18.3 |
| 4 21 | 12 52.74 | − 2 24.4 | 1.480 | 2.455 | 7.4 | 18.5 |
| 5 1 | 12 45.26 | − 1 16.1 | 1.516 | 2.441 | 11.9 | 18.8 |
| 5 11 | 12 39.96 | − 0 26.1 | 1.574 | 2.427 | 15.9 | 19.0 |
| **500583** 2012 $UB_{89}$ | | | 4 7.3 134°.71 | | 0°.6/ 6.5 17 | |
| 3 2 | 13 27.58 | − 6 38.1 | 2.691 | 3.498 | 10.8 | 22.5 |
| 3 12 | 13 22.95 | − 6 9.8 | 2.613 | 3.509 | 8.1 | 22.4 |
| 3 22 | 13 16.83 | − 5 34.0 | 2.560 | 3.519 | 5.1 | 22.2 |
| 4 1 | 13 9.73 | − 4 53.5 | 2.535 | 3.529 | 1.9 | 22.0 |
| 4 11 | 13 2.29 | − 4 12.2 | 2.540 | 3.539 | 1.6 | 22.0 |
| 4 21 | 12 55.15 | − 3 34.0 | 2.575 | 3.548 | 4.8 | 22.2 |
| 5 1 | 12 48.92 | − 3 2.5 | 2.638 | 3.557 | 7.8 | 22.4 |
| 5 11 | 12 44.06 | − 2 40.3 | 2.727 | 3.565 | 10.3 | 22.6 |
| **279629** 2011 $EG_{51}$ | | | 4 7.3 51°.55 | | 7°.6/31.3 16 | |
| 3 2 | 13 30.24 | +11 45.2 | 1.806 | 2.649 | 13.7 | 20.3 |
| 3 12 | 13 25.63 | +12 52.5 | 1.748 | 2.653 | 10.9 | 20.1 |
| 3 22 | 13 18.83 | +13 55.2 | 1.713 | 2.658 | 8.5 | 20.0 |
| 4 1 | 13 10.56 | +14 45.2 | 1.703 | 2.662 | 7.6 | 19.9 |
| 4 11 | 13 1.81 | +15 15.3 | 1.720 | 2.667 | 8.8 | 20.0 |
| 4 21 | 12 53.59 | +15 21.7 | 1.761 | 2.672 | 11.3 | 20.2 |
| 5 1 | 12 46.79 | +15 3.4 | 1.826 | 2.677 | 14.0 | 20.3 |
| 5 11 | 12 42.04 | +14 22.4 | 1.909 | 2.682 | 16.5 | 20.5 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **198993** Epoigny | | | 4 7.3 57°.20 | | 2°.9/ 9.5 18 | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.34 | −16 31.0 | 1.295 | 2.111 | 19.6 | 20.9 |
| 3 12 | 13 25.90 | −16 16.6 | 1.226 | 2.119 | 15.6 | 20.6 |
| 3 22 | 13 19.48 | −15 36.8 | 1.177 | 2.128 | 10.8 | 20.4 |
| 4 1 | 13 10.93 | −14 33.7 | 1.149 | 2.136 | 5.7 | 20.1 |
| 4 11 | 13 1.58 | −13 14.0 | 1.146 | 2.145 | 3.0 | 20.0 |
| 4 21 | 12 52.86 | −11 47.8 | 1.168 | 2.154 | 7.1 | 20.2 |
| 5 1 | 12 46.06 | −10 26.2 | 1.215 | 2.163 | 12.0 | 20.5 |
| 5 11 | 12 41.99 | − 9 18.5 | 1.282 | 2.172 | 16.4 | 20.8 |
| **497858** 2006 $UG_{122}$ | | | 4 7.3 131°.96 | | 1°.0/ 6.1 17 | |
| 3 2 | 13 27.52 | − 5 15.3 | 2.627 | 3.439 | 10.8 | 22.6 |
| 3 12 | 13 22.95 | − 4 47.7 | 2.549 | 3.448 | 8.2 | 22.4 |
| 3 22 | 13 16.86 | − 4 13.2 | 2.496 | 3.457 | 5.1 | 22.2 |
| 4 1 | 13 9.76 | − 3 35.0 | 2.471 | 3.465 | 2.0 | 22.0 |
| 4 11 | 13 2.30 | − 2 57.0 | 2.476 | 3.473 | 1.9 | 22.0 |
| 4 21 | 12 55.14 | − 2 23.1 | 2.511 | 3.481 | 5.0 | 22.2 |
| 5 1 | 12 48.91 | − 1 56.6 | 2.573 | 3.489 | 8.0 | 22.4 |
| 5 11 | 12 44.08 | − 1 40.0 | 2.660 | 3.496 | 10.7 | 22.6 |
| **183260** 2002 $TB_{208}$ | | | 4 7.3 40°.85 | | 0°.7/ 6.9 18 | |
| 3 2 | 13 37.63 | − 4 6.4 | 1.267 | 2.105 | 18.7 | 18.9 |
| 3 12 | 13 31.91 | − 4 35.5 | 1.215 | 2.126 | 14.2 | 18.7 |
| 3 22 | 13 23.12 | − 4 56.5 | 1.184 | 2.148 | 9.0 | 18.4 |
| 4 1 | 13 12.27 | − 5 12.1 | 1.176 | 2.171 | 3.5 | 18.2 |
| 4 11 | 13 0.86 | − 5 26.1 | 1.194 | 2.194 | 2.4 | 18.2 |
| 4 21 | 12 50.38 | − 5 42.2 | 1.238 | 2.218 | 7.7 | 18.5 |
| 5 1 | 12 42.07 | − 6 4.2 | 1.306 | 2.242 | 12.5 | 18.9 |
| 5 11 | 12 36.67 | − 6 34.4 | 1.395 | 2.267 | 16.5 | 19.2 |
| **471801** 2012 $VU_{90}$ | | | 4 7.3 279°.33 | | 7°.4/30.5 18 | |
| 3 2 | 13 30.56 | +15 22.1 | 2.227 | 3.056 | 11.9 | 20.7 |
| 3 12 | 13 25.57 | +16 16.8 | 2.158 | 3.051 | 9.8 | 20.5 |
| 3 22 | 13 18.69 | +17 4.9 | 2.114 | 3.045 | 8.0 | 20.4 |
| 4 1 | 13 10.51 | +17 39.8 | 2.096 | 3.040 | 7.5 | 20.4 |
| 4 11 | 13 1.86 | +17 56.0 | 2.105 | 3.034 | 8.5 | 20.4 |
| 4 21 | 12 53.60 | +17 50.5 | 2.139 | 3.029 | 10.5 | 20.5 |
| 5 1 | 12 46.52 | +17 22.8 | 2.197 | 3.023 | 12.8 | 20.7 |
| 5 11 | 12 41.19 | +16 34.5 | 2.275 | 3.018 | 15.0 | 20.8 |
| **267383** 2001 $XB_{232}$ | | | 4 7.3 233°.98 | | 1°.6/ 8.9 18 | |
| 3 2 | 13 30.47 | −14 11.3 | 2.381 | 3.163 | 12.7 | 21.8 |
| 3 12 | 13 25.63 | −13 54.8 | 2.271 | 3.147 | 10.1 | 21.6 |
| 3 22 | 13 18.85 | −13 24.2 | 2.185 | 3.130 | 6.9 | 21.4 |
| 4 1 | 13 10.64 | −12 40.8 | 2.125 | 3.113 | 3.4 | 21.1 |
| 4 11 | 13 1.74 | −11 48.0 | 2.095 | 3.095 | 1.8 | 21.0 |
| 4 21 | 12 53.00 | −10 50.6 | 2.095 | 3.076 | 5.0 | 21.2 |
| 5 1 | 12 45.25 | − 9 54.1 | 2.123 | 3.056 | 8.6 | 21.3 |
| 5 11 | 12 39.14 | − 9 4.1 | 2.176 | 3.035 | 11.9 | 21.5 |
| **354512** 2004 $QR_{8}$ | | | 4 7.3 262°.56 | | 0°.2/ 7.0 16 | |
| 3 2 | 13 31.33 | − 6 3.9 | 2.577 | 3.381 | 11.3 | 20.5 |
| 3 12 | 13 26.05 | − 6 9.7 | 2.475 | 3.368 | 8.7 | 20.3 |
| 3 22 | 13 18.99 | − 6 9.4 | 2.397 | 3.355 | 5.6 | 20.1 |
| 4 1 | 13 10.66 | − 6 4.7 | 2.348 | 3.342 | 2.2 | 19.8 |
| 4 11 | 13 1.74 | − 5 58.3 | 2.329 | 3.328 | 1.4 | 19.7 |
| 4 21 | 12 52.99 | − 5 53.0 | 2.339 | 3.315 | 5.0 | 20.0 |
| 5 1 | 12 45.16 | − 5 51.8 | 2.378 | 3.301 | 8.3 | 20.2 |
| 5 11 | 12 38.83 | − 5 57.1 | 2.443 | 3.287 | 11.2 | 20.3 |
| **48288** 2002 $HC_{6}$ | | | 4 7.3 311°.93 | | 1°.9/ 5.8 18 | |
| 3 2 | 13 29.54 | − 5 1.9 | 1.432 | 2.274 | 16.7 | 19.0 |
| 3 12 | 13 25.85 | − 4 28.1 | 1.353 | 2.267 | 12.7 | 18.7 |
| 3 22 | 13 19.41 | − 3 41.4 | 1.294 | 2.261 | 8.1 | 18.4 |
| 4 1 | 13 10.94 | − 2 47.3 | 1.261 | 2.255 | 3.3 | 18.1 |
| 4 11 | 13 1.60 | − 1 53.5 | 1.252 | 2.249 | 3.4 | 18.1 |
| 4 21 | 12 52.67 | − 1 7.9 | 1.270 | 2.244 | 8.4 | 18.4 |
| 5 1 | 12 45.38 | − 0 37.3 | 1.311 | 2.239 | 13.1 | 18.6 |
| 5 11 | 12 40.59 | − 0 25.6 | 1.372 | 2.234 | 17.3 | 18.8 |
| **166866** 2002 $XO_{37}$ | | | 4 7.3 183°.37 | | 1°.5/ 5.7 18 | |
| 3 2 | 13 29.44 | − 3 15.1 | 2.471 | 3.287 | 11.3 | 20.7 |
| 3 12 | 13 24.55 | − 2 53.2 | 2.386 | 3.287 | 8.6 | 20.6 |
| 3 22 | 13 17.97 | − 2 25.3 | 2.326 | 3.287 | 5.4 | 20.4 |
| 4 1 | 13 10.23 | − 1 54.9 | 2.294 | 3.287 | 2.3 | 20.1 |
| 4 11 | 13 2.04 | − 1 25.9 | 2.291 | 3.286 | 2.4 | 20.2 |
| 4 21 | 12 54.13 | − 1 2.1 | 2.318 | 3.285 | 5.6 | 20.4 |
| 5 1 | 12 47.21 | − 0 46.8 | 2.372 | 3.284 | 8.8 | 20.6 |
| 5 11 | 12 41.80 | − 0 42.2 | 2.450 | 3.282 | 11.6 | 20.7 |
| **11344** 1996 $XH_{31}$ | | | 4 7.3 122°.39 | | 0°.9/ 8.1 18 | |
| 3 2 | 13 32.28 | −12 6.1 | 1.840 | 2.642 | 15.2 | 19.0 |
| 3 12 | 13 27.18 | −11 42.4 | 1.768 | 2.657 | 11.7 | 18.8 |
| 3 22 | 13 19.85 | −11 3.2 | 1.718 | 2.671 | 7.7 | 18.6 |
| 4 1 | 13 10.99 | −10 11.6 | 1.694 | 2.686 | 3.4 | 18.3 |
| 4 11 | 13 1.62 | − 9 13.1 | 1.699 | 2.699 | 1.6 | 18.2 |
| 4 21 | 12 52.77 | − 8 14.0 | 1.732 | 2.712 | 5.8 | 18.5 |
| 5 1 | 12 45.36 | − 7 21.1 | 1.791 | 2.724 | 9.9 | 18.8 |
| 5 11 | 12 40.04 | − 6 39.3 | 1.874 | 2.736 | 13.4 | 19.0 |

**150783** 2001 $QC_{328}$ 4 7.3 158.°92 7.°0/14.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.07 | −29 22.8 | 2.201 | 2.906 | 15.8 | 20.4 |
| 3 12 | 13 27.12 | −29 52.2 | 2.110 | 2.912 | 13.6 | 20.2 |
| 3 22 | 13 19.92 | −29 59.6 | 2.039 | 2.917 | 11.1 | 20.1 |
| 4 1 | 13 11.08 | −29 42.5 | 1.990 | 2.921 | 8.7 | 19.9 |
| 4 11 | 13 1.54 | −29 1.5 | 1.968 | 2.925 | 7.1 | 19.8 |
| 4 21 | 12 52.34 | −28 0.4 | 1.972 | 2.928 | 7.4 | 19.8 |
| 5 1 | 12 44.45 | −26 45.7 | 2.003 | 2.932 | 9.3 | 20.0 |
| 5 11 | 12 38.59 | −25 25.9 | 2.059 | 2.934 | 11.8 | 20.1 |

**331536** 2000 $SC_{284}$ 4 7.3 228.°92 2.°6/10.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.85 | −18 47.8 | 2.212 | 2.983 | 13.9 | 21.6 |
| 3 12 | 13 23.76 | −18 18.1 | 2.108 | 2.973 | 11.2 | 21.4 |
| 3 22 | 13 17.69 | −17 29.1 | 2.027 | 2.963 | 8.0 | 21.2 |
| 4 1 | 13 10.19 | −16 22.0 | 1.972 | 2.953 | 4.6 | 20.9 |
| 4 11 | 13 2.06 | −15 0.8 | 1.945 | 2.941 | 2.7 | 20.8 |
| 4 21 | 12 54.18 | −13 31.8 | 1.948 | 2.930 | 5.1 | 20.9 |
| 5 1 | 12 47.38 | −12 2.3 | 1.978 | 2.918 | 8.7 | 21.1 |
| 5 11 | 12 42.33 | −10 39.8 | 2.034 | 2.905 | 12.1 | 21.3 |

**351559** 2005 $TA_{193}$ 4 7.3 130.°76 2.°1/ 5.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.99 | − 5 33.9 | 1.383 | 2.224 | 17.2 | 21.2 |
| 3 12 | 13 26.92 | − 4 44.3 | 1.313 | 2.227 | 13.1 | 21.0 |
| 3 22 | 13 20.05 | − 3 40.1 | 1.263 | 2.230 | 8.3 | 20.7 |
| 4 1 | 13 11.17 | − 2 28.0 | 1.238 | 2.233 | 3.4 | 20.4 |
| 4 11 | 13 1.51 | − 1 17.0 | 1.239 | 2.235 | 3.7 | 20.5 |
| 4 21 | 12 52.43 | − 0 16.2 | 1.265 | 2.238 | 8.6 | 20.8 |
| 5 1 | 12 45.10 | + 0 27.2 | 1.316 | 2.240 | 13.4 | 21.0 |
| 5 11 | 12 40.35 | + 0 49.1 | 1.386 | 2.243 | 17.5 | 21.3 |

**488903** 2005 $TN_{81}$ 4 7.3 101.°44 1.°5/ 8.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.00 | −13 35.4 | 1.865 | 2.665 | 15.1 | 21.5 |
| 3 12 | 13 25.48 | −13 19.3 | 1.790 | 2.677 | 11.8 | 21.3 |
| 3 22 | 13 18.79 | −12 47.2 | 1.737 | 2.688 | 7.9 | 21.1 |
| 4 1 | 13 10.59 | −12 1.4 | 1.710 | 2.699 | 3.8 | 20.9 |
| 4 11 | 13 1.86 | −11 6.7 | 1.711 | 2.710 | 1.8 | 20.8 |
| 4 21 | 12 53.59 | −10 9.3 | 1.739 | 2.721 | 5.6 | 21.0 |
| 5 1 | 12 46.70 | − 9 15.8 | 1.794 | 2.732 | 9.5 | 21.3 |
| 5 11 | 12 41.81 | − 8 31.8 | 1.873 | 2.742 | 13.0 | 21.5 |

**151071** 2001 $VY_{49}$ 4 7.3 183.°48 2.°6/ 9.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.28 | −16 5.0 | 2.250 | 3.024 | 13.6 | 20.9 |
| 3 12 | 13 27.02 | −16 11.2 | 2.157 | 3.025 | 10.9 | 20.8 |
| 3 22 | 13 19.73 | −16 3.0 | 2.087 | 3.025 | 7.7 | 20.5 |
| 4 1 | 13 10.98 | −15 40.9 | 2.043 | 3.024 | 4.3 | 20.3 |
| 4 11 | 13 1.61 | −15 7.6 | 2.028 | 3.023 | 2.6 | 20.2 |
| 4 21 | 12 52.53 | −14 27.3 | 2.041 | 3.022 | 5.1 | 20.4 |
| 5 1 | 12 44.58 | −13 45.1 | 2.083 | 3.019 | 8.5 | 20.6 |
| 5 11 | 12 38.45 | −13 6.6 | 2.150 | 3.016 | 11.7 | 20.8 |

**478254** 2011 $UM_{373}$ 4 7.3 255.°92 2.°9/ 3.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.55 | + 1 24.7 | 2.571 | 3.396 | 10.7 | 22.1 |
| 3 12 | 13 23.93 | + 2 0.2 | 2.473 | 3.379 | 8.1 | 21.9 |
| 3 22 | 13 17.63 | + 2 39.3 | 2.401 | 3.361 | 5.3 | 21.7 |
| 4 1 | 13 10.14 | + 3 17.9 | 2.356 | 3.344 | 3.1 | 21.5 |
| 4 11 | 13 2.11 | + 3 51.5 | 2.341 | 3.325 | 3.8 | 21.5 |
| 4 21 | 12 54.26 | + 4 16.0 | 2.355 | 3.307 | 6.6 | 21.7 |
| 5 1 | 12 47.29 | + 4 28.6 | 2.395 | 3.288 | 9.5 | 21.8 |
| 5 11 | 12 41.77 | + 4 27.5 | 2.460 | 3.269 | 12.2 | 22.0 |

**432787** 2011 $FU_{89}$ 4 7.3 269.°07 5.°1/ 1.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.47 | + 3 19.5 | 1.886 | 2.731 | 13.1 | 21.1 |
| 3 12 | 13 22.83 | + 4 44.6 | 1.809 | 2.725 | 10.0 | 20.9 |
| 3 22 | 13 17.13 | + 6 15.1 | 1.757 | 2.718 | 6.9 | 20.7 |
| 4 1 | 13 9.97 | + 7 43.0 | 1.731 | 2.711 | 5.1 | 20.6 |
| 4 11 | 13 2.22 | + 8 59.8 | 1.733 | 2.705 | 6.5 | 20.6 |
| 4 21 | 12 54.81 | + 9 58.6 | 1.761 | 2.698 | 9.6 | 20.8 |
| 5 1 | 12 48.61 | +10 35.0 | 1.814 | 2.691 | 12.9 | 21.0 |
| 5 11 | 12 44.27 | +10 47.8 | 1.886 | 2.684 | 15.8 | 21.2 |

**319570** 2006 $SW_{86}$ 4 7.3 271.°11 0.°1/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.12 | − 7 49.4 | 1.647 | 2.467 | 15.9 | 20.7 |
| 3 12 | 13 28.33 | − 7 53.3 | 1.560 | 2.461 | 12.3 | 20.5 |
| 3 22 | 13 20.92 | − 7 45.9 | 1.495 | 2.455 | 8.0 | 20.2 |
| 4 1 | 13 11.54 | − 7 29.6 | 1.455 | 2.449 | 3.2 | 19.9 |
| 4 11 | 13 1.28 | − 7 8.6 | 1.442 | 2.442 | 1.8 | 19.8 |
| 4 21 | 12 51.36 | − 6 48.1 | 1.456 | 2.436 | 6.8 | 20.1 |
| 5 1 | 12 42.94 | − 6 33.4 | 1.496 | 2.430 | 11.4 | 20.3 |
| 5 11 | 12 36.88 | − 6 28.9 | 1.558 | 2.424 | 15.4 | 20.5 |

**148593** 2001 $RO_{21}$ 4 7.3 131.°74 4.°6/10.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.82 | −19 8.0 | 1.896 | 2.663 | 16.0 | 20.0 |
| 3 12 | 13 29.37 | −19 47.4 | 1.812 | 2.669 | 13.1 | 19.8 |
| 3 22 | 13 21.45 | −20 9.8 | 1.749 | 2.675 | 9.7 | 19.6 |
| 4 1 | 13 11.71 | −20 13.9 | 1.710 | 2.681 | 6.4 | 19.4 |
| 4 11 | 13 1.19 | −20 0.8 | 1.699 | 2.686 | 4.6 | 19.3 |
| 4 21 | 12 51.04 | −19 34.1 | 1.715 | 2.691 | 6.4 | 19.4 |
| 5 1 | 12 42.33 | −18 59.9 | 1.759 | 2.696 | 9.7 | 19.6 |
| 5 11 | 12 35.86 | −18 25.1 | 1.826 | 2.701 | 13.0 | 19.8 |

**57099** 2001 $OL_{69}$ 4 7.3 179.°51 3.°8/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.29 | − 0 24.1 | 1.776 | 2.609 | 14.3 | 20.1 |
| 3 12 | 13 27.32 | + 0 42.6 | 1.701 | 2.611 | 10.8 | 19.9 |
| 3 22 | 13 20.03 | + 1 57.2 | 1.649 | 2.612 | 7.0 | 19.7 |
| 4 1 | 13 11.11 | + 3 12.7 | 1.624 | 2.613 | 4.0 | 19.5 |
| 4 11 | 13 1.57 | + 4 20.9 | 1.627 | 2.613 | 5.1 | 19.6 |
| 4 21 | 12 52.47 | + 5 14.7 | 1.658 | 2.612 | 8.7 | 19.8 |
| 5 1 | 12 44.79 | + 5 49.4 | 1.714 | 2.610 | 12.5 | 20.0 |
| 5 11 | 12 39.24 | + 6 2.9 | 1.791 | 2.607 | 15.8 | 20.2 |

**317786** 2003 $SG_{162}$ 4 7.3 220.°89 1.°6/ 5.8 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.38 | − 5 30.1 | 2.015 | 2.832 | 13.5 | 21.9 |
| 3 12 | 13 26.53 | − 4 46.5 | 1.920 | 2.822 | 10.3 | 21.6 |
| 3 22 | 13 19.52 | − 3 51.8 | 1.850 | 2.812 | 6.5 | 21.4 |
| 4 1 | 13 10.94 | − 2 50.5 | 1.806 | 2.800 | 2.6 | 21.1 |
| 4 11 | 13 1.65 | − 1 48.6 | 1.791 | 2.788 | 2.8 | 21.1 |
| 4 21 | 12 52.62 | − 0 52.5 | 1.806 | 2.775 | 6.8 | 21.3 |
| 5 1 | 12 44.78 | − 0 7.9 | 1.846 | 2.761 | 10.8 | 21.5 |
| 5 11 | 12 38.85 | + 0 21.4 | 1.910 | 2.746 | 14.2 | 21.7 |

**206994** 2004 $TD_{200}$ 4 7.3 191.°29 0.°8/ 6.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.55 | − 7 53.9 | 1.742 | 2.562 | 15.2 | 21.6 |
| 3 12 | 13 26.90 | − 7 15.0 | 1.659 | 2.561 | 11.6 | 21.4 |
| 3 22 | 13 19.84 | − 6 22.2 | 1.598 | 2.560 | 7.4 | 21.1 |
| 4 1 | 13 11.07 | − 5 19.7 | 1.564 | 2.558 | 2.8 | 20.8 |
| 4 11 | 13 1.59 | − 4 14.3 | 1.557 | 2.555 | 2.3 | 20.8 |
| 4 21 | 12 52.50 | − 3 13.4 | 1.577 | 2.552 | 6.9 | 21.0 |
| 5 1 | 12 44.84 | − 2 23.5 | 1.624 | 2.549 | 11.3 | 21.3 |
| 5 11 | 12 39.35 | − 1 49.3 | 1.693 | 2.545 | 15.0 | 21.5 |

**159789** 2003 $PG_{1}$ 4 7.3 313.°30 7.°6/13.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.57 | −25 59.2 | 1.735 | 2.486 | 17.9 | 19.5 |
| 3 12 | 13 25.17 | −26 46.4 | 1.634 | 2.471 | 15.3 | 19.3 |
| 3 22 | 13 19.10 | −27 11.0 | 1.553 | 2.456 | 12.4 | 19.0 |
| 4 1 | 13 10.91 | −27 9.2 | 1.493 | 2.441 | 9.4 | 18.8 |
| 4 11 | 13 1.62 | −26 40.6 | 1.457 | 2.427 | 7.7 | 18.7 |
| 4 21 | 12 52.49 | −25 48.4 | 1.446 | 2.414 | 8.4 | 18.7 |
| 5 1 | 12 44.78 | −24 39.9 | 1.460 | 2.400 | 11.1 | 18.8 |
| 5 11 | 12 39.46 | −23 25.2 | 1.496 | 2.387 | 14.4 | 19.0 |

**19429** Grubaugh 4 7.3 83.°21 0.°8/ 7.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.22 | −11 6.9 | 1.528 | 2.343 | 17.1 | 18.7 |
| 3 12 | 13 28.23 | −10 51.3 | 1.467 | 2.364 | 13.2 | 18.5 |
| 3 22 | 13 20.65 | −10 19.3 | 1.427 | 2.384 | 8.6 | 18.2 |
| 4 1 | 13 11.34 | − 9 34.5 | 1.411 | 2.404 | 3.7 | 18.0 |
| 4 11 | 13 1.49 | − 8 43.0 | 1.423 | 2.423 | 1.8 | 17.9 |
| 4 21 | 12 52.33 | − 7 51.8 | 1.461 | 2.443 | 6.6 | 18.3 |
| 5 1 | 12 44.93 | − 7 8.1 | 1.525 | 2.462 | 11.0 | 18.6 |
| 5 11 | 12 39.95 | − 6 36.9 | 1.612 | 2.481 | 14.8 | 18.8 |

**6766** Kharms 4 7.3 189.°70 1.°4/ 8.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.66 | −13 30.8 | 2.373 | 3.160 | 12.6 | 19.5 |
| 3 12 | 13 24.89 | −13 16.5 | 2.280 | 3.159 | 9.9 | 19.3 |
| 3 22 | 13 18.30 | −12 49.0 | 2.210 | 3.157 | 6.7 | 19.1 |
| 4 1 | 13 10.41 | −12 10.2 | 2.167 | 3.155 | 3.3 | 18.9 |
| 4 11 | 13 1.99 | −11 23.5 | 2.153 | 3.153 | 1.6 | 18.8 |
| 4 21 | 12 53.83 | −10 33.6 | 2.169 | 3.150 | 4.8 | 19.0 |
| 5 1 | 12 46.71 | − 9 45.5 | 2.213 | 3.146 | 8.2 | 19.2 |
| 5 11 | 12 41.23 | − 9 4.1 | 2.281 | 3.142 | 11.3 | 19.4 |

**475139** 2005 $UC_{345}$ 4 7.3 285.°08 2.°4/ 4.8 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.69 | − 1 4.6 | 2.375 | 3.201 | 11.4 | 21.4 |
| 3 12 | 13 23.48 | − 0 32.0 | 2.271 | 3.178 | 8.7 | 21.2 |
| 3 22 | 13 17.46 | + 0 6.4 | 2.192 | 3.155 | 5.6 | 20.9 |
| 4 1 | 13 10.11 | + 0 46.6 | 2.140 | 3.132 | 2.8 | 20.7 |
| 4 11 | 13 2.14 | + 1 23.9 | 2.117 | 3.108 | 3.4 | 20.7 |
| 4 21 | 12 54.31 | + 1 53.6 | 2.123 | 3.084 | 6.6 | 20.9 |
| 5 1 | 12 47.40 | + 2 12.1 | 2.155 | 3.061 | 9.9 | 21.0 |
| 5 11 | 12 42.01 | + 2 16.9 | 2.211 | 3.037 | 12.9 | 21.2 |

**302001** 2000 $QB_{166}$ 4 7.3 240.°12 3.°8/11.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.21 | −21 16.3 | 2.660 | 3.406 | 12.4 | 21.4 |
| 3 12 | 13 23.78 | −21 25.7 | 2.552 | 3.395 | 10.2 | 21.2 |
| 3 22 | 13 17.61 | −21 20.1 | 2.466 | 3.384 | 7.7 | 21.1 |
| 4 1 | 13 10.16 | −20 59.0 | 2.407 | 3.372 | 5.2 | 20.9 |
| 4 11 | 13 2.12 | −20 24.2 | 2.375 | 3.360 | 3.8 | 20.8 |
| 4 21 | 12 54.24 | −19 38.9 | 2.372 | 3.347 | 5.0 | 20.8 |
| 5 1 | 12 47.26 | −18 47.7 | 2.398 | 3.335 | 7.5 | 21.0 |
| 5 11 | 12 41.77 | −17 56.2 | 2.449 | 3.322 | 10.2 | 21.1 |

**162709** 2000 $UE_{71}$ 4 7.3 338.°40 0.°4/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.30 | − 6 27.0 | 1.405 | 2.239 | 17.4 | 19.0 |
| 3 12 | 13 28.82 | − 6 31.8 | 1.327 | 2.236 | 13.4 | 18.7 |
| 3 22 | 13 21.38 | − 6 25.4 | 1.270 | 2.233 | 8.7 | 18.5 |
| 4 1 | 13 11.76 | − 6 10.6 | 1.236 | 2.231 | 3.4 | 18.1 |
| 4 11 | 13 1.19 | − 5 52.6 | 1.229 | 2.229 | 2.2 | 18.0 |
| 4 21 | 12 51.07 | − 5 37.2 | 1.247 | 2.227 | 7.6 | 18.4 |
| 5 1 | 12 42.73 | − 5 29.8 | 1.289 | 2.225 | 12.6 | 18.6 |
| 5 11 | 12 37.07 | − 5 34.7 | 1.352 | 2.224 | 16.9 | 18.9 |

**127840** 2003 $FL_{108}$ 4 7.3 343°.70 1°.8/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.81 | − 4 9.1 | 1.716 | 2.548 | 14.8 | 19.4 |
| 3 12 | 13 25.57 | − 3 43.6 | 1.637 | 2.547 | 11.2 | 19.2 |
| 3 22 | 13 18.99 | − 3 8.8 | 1.581 | 2.546 | 7.1 | 18.9 |
| 4 1 | 13 10.74 | − 2 29.3 | 1.550 | 2.544 | 2.9 | 18.7 |
| 4 11 | 13 1.82 | − 1 50.9 | 1.547 | 2.543 | 3.0 | 18.7 |
| 4 21 | 12 53.30 | − 1 19.6 | 1.570 | 2.543 | 7.3 | 18.9 |
| 5 1 | 12 46.18 | − 1 0.3 | 1.619 | 2.542 | 11.4 | 19.2 |
| 5 11 | 12 41.19 | − 0 56.0 | 1.689 | 2.541 | 15.0 | 19.4 |

**266693** 2009 $PT_{11}$ 4 7.3 72°.31 4°.4/10.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.80 | −19 21.4 | 1.714 | 2.495 | 17.0 | 20.1 |
| 3 12 | 13 26.49 | −19 39.7 | 1.634 | 2.501 | 13.8 | 19.8 |
| 3 22 | 13 19.67 | −19 37.8 | 1.574 | 2.507 | 10.1 | 19.6 |
| 4 1 | 13 11.03 | −19 15.1 | 1.538 | 2.513 | 6.4 | 19.4 |
| 4 11 | 13 1.65 | −18 34.4 | 1.528 | 2.519 | 4.4 | 19.3 |
| 4 21 | 12 52.70 | −17 41.4 | 1.544 | 2.524 | 6.4 | 19.4 |
| 5 1 | 12 45.26 | −16 43.6 | 1.586 | 2.530 | 10.1 | 19.7 |
| 5 11 | 12 40.12 | −15 49.1 | 1.651 | 2.536 | 13.7 | 19.9 |

**311145** 2004 $RX_{235}$ 4 7.3 226°.65 3°.0/ 9.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.81 | −16 54.7 | 1.855 | 2.638 | 15.8 | 22.2 |
| 3 12 | 13 28.00 | −16 52.0 | 1.754 | 2.627 | 12.7 | 22.0 |
| 3 22 | 13 20.69 | −16 30.5 | 1.675 | 2.615 | 9.0 | 21.7 |
| 4 1 | 13 11.48 | −15 50.5 | 1.620 | 2.603 | 5.1 | 21.5 |
| 4 11 | 13 1.35 | −14 55.2 | 1.593 | 2.590 | 3.0 | 21.3 |
| 4 21 | 12 51.45 | −13 50.4 | 1.594 | 2.576 | 6.1 | 21.4 |
| 5 1 | 12 42.90 | −12 43.9 | 1.622 | 2.561 | 10.3 | 21.6 |
| 5 11 | 12 36.54 | −11 43.6 | 1.673 | 2.546 | 14.2 | 21.9 |

**504765** 2009 $WB_{142}$ 4 7.3 169°.85 2°.0/ 9.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.48 | −17 1.0 | 2.376 | 3.150 | 13.0 | 22.0 |
| 3 12 | 13 23.98 | −16 29.3 | 2.285 | 3.154 | 10.3 | 21.8 |
| 3 22 | 13 17.69 | −15 41.2 | 2.218 | 3.157 | 7.2 | 21.7 |
| 4 1 | 13 10.17 | −14 38.6 | 2.177 | 3.160 | 3.8 | 21.4 |
| 4 11 | 13 2.18 | −13 25.6 | 2.165 | 3.163 | 2.1 | 21.3 |
| 4 21 | 12 54.50 | −12 7.9 | 2.183 | 3.164 | 4.7 | 21.5 |
| 5 1 | 12 47.88 | −10 51.9 | 2.229 | 3.165 | 8.0 | 21.7 |
| 5 11 | 12 42.88 | − 9 43.3 | 2.301 | 3.166 | 11.1 | 21.9 |

**338560** 2003 $SD_{62}$ 4 7.3 178°.23 2°.3/10.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.41 | −17 19.6 | 2.534 | 3.303 | 12.4 | 21.9 |
| 3 12 | 13 23.85 | −17 3.2 | 2.440 | 3.304 | 9.9 | 21.7 |
| 3 22 | 13 17.59 | −16 32.0 | 2.369 | 3.305 | 7.0 | 21.5 |
| 4 1 | 13 10.13 | −15 47.1 | 2.325 | 3.306 | 4.0 | 21.3 |
| 4 11 | 13 2.20 | −14 51.9 | 2.310 | 3.306 | 2.3 | 21.2 |
| 4 21 | 12 54.54 | −13 50.9 | 2.325 | 3.306 | 4.5 | 21.3 |
| 5 1 | 12 47.86 | −12 49.5 | 2.368 | 3.305 | 7.6 | 21.5 |
| 5 11 | 12 42.71 | −11 52.9 | 2.437 | 3.304 | 10.5 | 21.7 |

**53814** 2000 $EH_{137}$ 4 7.3 127°.58 0°.3/ 7.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.34 | − 8 12.1 | 1.548 | 2.369 | 16.7 | 20.0 |
| 3 12 | 13 29.17 | − 7 51.1 | 1.478 | 2.380 | 12.8 | 19.8 |
| 3 22 | 13 21.36 | − 7 16.2 | 1.429 | 2.390 | 8.2 | 19.5 |
| 4 1 | 13 11.68 | − 6 31.4 | 1.405 | 2.399 | 3.2 | 19.3 |
| 4 11 | 13 1.33 | − 5 43.1 | 1.409 | 2.409 | 2.1 | 19.2 |
| 4 21 | 12 51.56 | − 4 58.2 | 1.439 | 2.417 | 7.1 | 19.5 |
| 5 1 | 12 43.51 | − 4 23.1 | 1.495 | 2.425 | 11.7 | 19.8 |
| 5 11 | 12 37.92 | − 4 2.2 | 1.573 | 2.433 | 15.5 | 20.1 |

**479604** 2014 $DG_{13}$ 4 7.3 310°.81 2°.7/ 9.2 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.94 | −13 16.2 | 2.045 | 2.837 | 14.2 | 20.4 |
| 3 12 | 13 27.20 | −13 53.2 | 1.937 | 2.816 | 11.4 | 20.2 |
| 3 22 | 13 20.15 | −14 19.5 | 1.851 | 2.796 | 8.0 | 19.9 |
| 4 1 | 13 11.28 | −14 34.6 | 1.791 | 2.776 | 4.4 | 19.7 |
| 4 11 | 13 1.48 | −14 39.6 | 1.759 | 2.756 | 2.8 | 19.5 |
| 4 21 | 12 51.74 | −14 37.1 | 1.755 | 2.736 | 5.7 | 19.7 |
| 5 1 | 12 43.10 | −14 31.2 | 1.778 | 2.716 | 9.6 | 19.9 |
| 5 11 | 12 36.42 | −14 26.6 | 1.825 | 2.697 | 13.2 | 20.0 |

**64891** 2001 $YL_{76}$ 4 7.3 332°.37 0°.8/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.54 | − 6 53.5 | 1.642 | 2.473 | 15.4 | 19.3 |
| 3 12 | 13 24.78 | − 6 32.5 | 1.560 | 2.468 | 11.8 | 19.0 |
| 3 22 | 13 18.59 | − 5 59.3 | 1.499 | 2.463 | 7.6 | 18.8 |
| 4 1 | 13 10.63 | − 5 17.6 | 1.464 | 2.459 | 2.9 | 18.5 |
| 4 11 | 13 1.92 | − 4 33.5 | 1.455 | 2.454 | 2.3 | 18.4 |
| 4 21 | 12 53.58 | − 3 53.4 | 1.473 | 2.450 | 7.0 | 18.7 |
| 5 1 | 12 46.66 | − 3 23.4 | 1.515 | 2.447 | 11.4 | 18.9 |
| 5 11 | 12 41.93 | − 3 7.6 | 1.579 | 2.444 | 15.3 | 19.2 |

**361632** 2007 $TE_{181}$ 4 7.3 158°.58 3°.5/ 4.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.69 | − 1 25.7 | 1.756 | 2.590 | 14.4 | 21.2 |
| 3 12 | 13 26.10 | − 0 19.2 | 1.684 | 2.595 | 10.9 | 21.0 |
| 3 22 | 13 19.25 | + 0 56.1 | 1.636 | 2.600 | 7.0 | 20.8 |
| 4 1 | 13 10.83 | + 2 13.0 | 1.614 | 2.604 | 3.8 | 20.6 |
| 4 11 | 13 1.83 | + 3 23.4 | 1.620 | 2.608 | 4.7 | 20.6 |
| 4 21 | 12 53.30 | + 4 20.3 | 1.654 | 2.611 | 8.4 | 20.9 |
| 5 1 | 12 46.19 | + 4 58.5 | 1.712 | 2.613 | 12.2 | 21.1 |
| 5 11 | 12 41.16 | + 5 16.0 | 1.792 | 2.616 | 15.5 | 21.3 |

**319939** 2007 $AR_2$ 4 7.3 234°.63 1°.6/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.68 | − 5 2.4 | 2.065 | 2.884 | 13.1 | 21.1 |
| 3 12 | 13 25.99 | − 4 23.6 | 1.968 | 2.871 | 10.0 | 20.9 |
| 3 22 | 13 19.19 | − 3 34.6 | 1.895 | 2.857 | 6.4 | 20.7 |
| 4 1 | 13 10.85 | − 2 39.7 | 1.849 | 2.843 | 2.6 | 20.4 |
| 4 11 | 13 1.80 | − 1 44.4 | 1.832 | 2.828 | 2.8 | 20.4 |
| 4 21 | 12 52.97 | − 0 54.7 | 1.843 | 2.812 | 6.7 | 20.6 |
| 5 1 | 12 45.29 | − 0 16.0 | 1.881 | 2.796 | 10.6 | 20.8 |
| 5 11 | 12 39.44 | + 0 8.2 | 1.943 | 2.780 | 14.0 | 21.0 |

**286805** 2002 $JH_{149}$ 4 7.3 294°.15 7°.3/ 1.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.67 | + 7 23.4 | 1.486 | 2.337 | 15.7 | 20.5 |
| 3 12 | 13 27.62 | + 8 26.9 | 1.398 | 2.313 | 12.4 | 20.2 |
| 3 22 | 13 20.71 | + 9 32.5 | 1.332 | 2.289 | 9.1 | 19.9 |
| 4 1 | 13 11.58 | +10 30.7 | 1.290 | 2.265 | 7.3 | 19.8 |
| 4 11 | 13 1.35 | +11 11.6 | 1.273 | 2.241 | 8.8 | 19.8 |
| 4 21 | 12 51.36 | +11 27.7 | 1.280 | 2.217 | 12.4 | 19.9 |
| 5 1 | 12 42.93 | +11 15.3 | 1.309 | 2.193 | 16.4 | 20.1 |
| 5 11 | 12 37.03 | +10 34.8 | 1.357 | 2.169 | 20.1 | 20.2 |

**16792** 1997 $AK_{13}$ 4 7.3 35°.98 7°.2/31.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.99 | +11 52.8 | 1.917 | 2.761 | 13.0 | 16.9 |
| 3 12 | 13 23.78 | +12 58.6 | 1.866 | 2.772 | 10.3 | 16.7 |
| 3 22 | 13 17.61 | +13 59.4 | 1.838 | 2.783 | 8.1 | 16.6 |
| 4 1 | 13 10.14 | +14 47.7 | 1.836 | 2.794 | 7.2 | 16.6 |
| 4 11 | 13 2.29 | +15 17.2 | 1.860 | 2.806 | 8.3 | 16.7 |
| 4 21 | 12 54.95 | +15 24.7 | 1.909 | 2.818 | 10.6 | 16.8 |
| 5 1 | 12 48.93 | +15 9.1 | 1.981 | 2.830 | 13.2 | 17.0 |
| 5 11 | 12 44.77 | +14 32.4 | 2.073 | 2.843 | 15.5 | 17.2 |

**408800** 2000 $SZ_{79}$ 4 7.3 234°.74 0°.1/ 7.2 15

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.02 | − 8 48.3 | 1.934 | 2.742 | 14.3 | 22.9 |
| 3 12 | 13 28.00 | − 8 25.5 | 1.833 | 2.728 | 11.1 | 22.7 |
| 3 22 | 13 20.62 | − 7 49.8 | 1.754 | 2.712 | 7.2 | 22.4 |
| 4 1 | 13 11.46 | − 7 3.8 | 1.702 | 2.696 | 2.9 | 22.1 |
| 4 11 | 13 1.44 | − 6 12.6 | 1.679 | 2.678 | 1.8 | 22.0 |
| 4 21 | 12 51.62 | − 5 22.2 | 1.684 | 2.661 | 6.4 | 22.2 |
| 5 1 | 12 43.03 | − 4 38.8 | 1.716 | 2.642 | 10.7 | 22.5 |
| 5 11 | 12 36.49 | − 4 7.4 | 1.771 | 2.622 | 14.5 | 22.6 |

**369312** 2009 $SA_{81}$ 4 7.3 226°.24 0°.4/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.11 | − 8 51.8 | 1.959 | 2.774 | 13.9 | 22.1 |
| 3 12 | 13 24.86 | − 8 16.5 | 1.868 | 2.767 | 10.7 | 21.8 |
| 3 22 | 13 18.49 | − 7 27.9 | 1.801 | 2.760 | 6.9 | 21.6 |
| 4 1 | 13 10.58 | − 6 29.5 | 1.759 | 2.753 | 2.7 | 21.3 |
| 4 11 | 13 2.00 | − 5 26.9 | 1.746 | 2.746 | 1.8 | 21.2 |
| 4 21 | 12 53.72 | − 4 26.7 | 1.761 | 2.738 | 6.2 | 21.5 |
| 5 1 | 12 46.64 | − 3 35.1 | 1.802 | 2.729 | 10.2 | 21.7 |
| 5 11 | 12 41.46 | − 2 56.7 | 1.867 | 2.721 | 13.8 | 21.9 |

**465070** 2006 $SV_{229}$ 4 7.3 149°.63 1°.1/ 8.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.99 | −13 24.2 | 1.928 | 2.727 | 14.7 | 22.5 |
| 3 12 | 13 25.48 | −12 52.4 | 1.847 | 2.733 | 11.5 | 22.3 |
| 3 22 | 13 18.83 | −12 3.9 | 1.788 | 2.740 | 7.6 | 22.1 |
| 4 1 | 13 10.68 | −11 1.7 | 1.755 | 2.746 | 3.5 | 21.9 |
| 4 11 | 13 1.97 | − 9 51.2 | 1.751 | 2.751 | 1.6 | 21.7 |
| 4 21 | 12 53.68 | − 8 39.1 | 1.775 | 2.756 | 5.6 | 22.0 |
| 5 1 | 12 46.70 | − 7 32.7 | 1.826 | 2.761 | 9.6 | 22.2 |
| 5 11 | 12 41.67 | − 6 37.6 | 1.901 | 2.765 | 13.1 | 22.5 |

**145476** 2005 $TW_{65}$ 4 7.3 200°.39 3°.7/11.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.31 | −21 22.8 | 2.504 | 3.257 | 12.9 | 20.3 |
| 3 12 | 13 22.37 | −21 22.2 | 2.409 | 3.257 | 10.6 | 20.1 |
| 3 22 | 13 16.71 | −21 5.1 | 2.336 | 3.256 | 7.9 | 20.0 |
| 4 1 | 13 9.83 | −20 31.7 | 2.289 | 3.256 | 5.3 | 19.8 |
| 4 11 | 13 2.46 | −19 44.3 | 2.269 | 3.256 | 3.7 | 19.7 |
| 4 21 | 12 55.33 | −18 47.2 | 2.278 | 3.255 | 4.9 | 19.8 |
| 5 1 | 12 49.17 | −17 45.5 | 2.314 | 3.255 | 7.6 | 19.9 |
| 5 11 | 12 44.56 | −16 45.3 | 2.376 | 3.254 | 10.3 | 20.1 |

**74718** 1999 $RX_{165}$ 4 7.3 218°.73 1°.4/ 8.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.75 | −11 55.4 | 1.814 | 2.617 | 15.3 | 20.0 |
| 3 12 | 13 27.89 | −11 53.2 | 1.723 | 2.611 | 12.0 | 19.8 |
| 3 22 | 13 20.58 | −11 36.5 | 1.653 | 2.605 | 8.1 | 19.5 |
| 4 1 | 13 11.45 | −11 6.8 | 1.609 | 2.599 | 3.8 | 19.3 |
| 4 11 | 13 1.51 | −10 28.1 | 1.592 | 2.592 | 1.8 | 19.1 |
| 4 21 | 12 51.86 | − 9 45.9 | 1.603 | 2.585 | 6.1 | 19.4 |
| 5 1 | 12 43.58 | − 9 6.5 | 1.641 | 2.577 | 10.4 | 19.6 |
| 5 11 | 12 37.49 | − 8 35.6 | 1.702 | 2.569 | 14.2 | 19.8 |

**415681** 2014 $RP_{23}$ 4 7.3 141°.38 3°.4/10.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.12 | −16 58.0 | 1.689 | 2.477 | 16.9 | 21.0 |
| 3 12 | 13 28.27 | −17 6.5 | 1.608 | 2.483 | 13.5 | 20.8 |
| 3 22 | 13 20.84 | −16 55.9 | 1.548 | 2.489 | 9.6 | 20.6 |
| 4 1 | 13 11.54 | −16 26.3 | 1.513 | 2.495 | 5.5 | 20.3 |
| 4 11 | 13 1.48 | −15 41.4 | 1.504 | 2.500 | 3.4 | 20.2 |
| 4 21 | 12 51.87 | −14 47.2 | 1.523 | 2.505 | 6.3 | 20.4 |
| 5 1 | 12 43.84 | −13 51.3 | 1.567 | 2.509 | 10.3 | 20.6 |
| 5 11 | 12 38.16 | −13 1.4 | 1.635 | 2.513 | 14.1 | 20.9 |

**476393** 2008 $CD_{163}$ 4 7.3 257°.70 3°.0/ 3.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 25.06 | − 0 10.3 | 2.425 | 3.257 | 11.0 | 21.4 |
| 3 12 | 13 21.34 | + 0 49.4 | 2.340 | 3.250 | 8.3 | 21.2 |
| 3 22 | 13 16.01 | + 1 54.8 | 2.281 | 3.244 | 5.4 | 21.0 |
| 4 1 | 13 9.55 | + 3 0.9 | 2.249 | 3.238 | 3.1 | 20.8 |
| 4 11 | 13 2.65 | + 4 2.1 | 2.247 | 3.231 | 4.0 | 20.9 |
| 4 21 | 12 55.99 | + 4 53.3 | 2.273 | 3.225 | 6.8 | 21.0 |
| 5 1 | 12 50.25 | + 5 30.6 | 2.325 | 3.218 | 9.8 | 21.2 |
| 5 11 | 12 45.95 | + 5 51.9 | 2.400 | 3.211 | 12.4 | 21.4 |

**77738** 2001 $OG_{83}$ 4 7.3 252°.51 2°.6/ 9.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.85 | −14 56.0 | 2.222 | 3.004 | 13.5 | 19.6 |
| 3 12 | 13 26.03 | −15 14.9 | 2.128 | 3.000 | 10.8 | 19.4 |
| 3 22 | 13 19.18 | −15 21.0 | 2.056 | 2.997 | 7.6 | 19.2 |
| 4 1 | 13 10.86 | −15 14.7 | 2.010 | 2.993 | 4.3 | 19.0 |
| 4 11 | 13 1.87 | −14 57.9 | 1.993 | 2.988 | 2.6 | 18.9 |
| 4 21 | 12 53.13 | −14 34.1 | 2.004 | 2.984 | 5.2 | 19.0 |
| 5 1 | 12 45.48 | −14 8.0 | 2.042 | 2.980 | 8.6 | 19.2 |
| 5 11 | 12 39.62 | −13 44.5 | 2.106 | 2.976 | 11.8 | 19.4 |

**438423** 2006 $VZ_{94}$ 4 7.3 187°.83 3°.2/11.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.14 | −20 54.9 | 2.683 | 3.435 | 12.2 | 21.4 |
| 3 12 | 13 22.11 | −20 41.0 | 2.586 | 3.435 | 9.9 | 21.2 |
| 3 22 | 13 16.48 | −20 11.1 | 2.511 | 3.434 | 7.3 | 21.0 |
| 4 1 | 13 9.74 | −19 25.9 | 2.463 | 3.433 | 4.7 | 20.8 |
| 4 11 | 13 2.55 | −18 28.2 | 2.442 | 3.432 | 3.2 | 20.7 |
| 4 21 | 12 55.60 | −17 22.1 | 2.452 | 3.430 | 4.5 | 20.8 |
| 5 1 | 12 49.56 | −16 13.0 | 2.489 | 3.429 | 7.1 | 21.0 |
| 5 11 | 12 44.95 | −15 6.5 | 2.553 | 3.427 | 9.8 | 21.1 |

**467515** 2007 $EE_{159}$ 4 7.3 285°.37 0°.4/ 7.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.43 | −10 52.9 | 1.838 | 2.653 | 14.7 | 21.7 |
| 3 12 | 13 23.86 | −10 24.0 | 1.737 | 2.635 | 11.4 | 21.4 |
| 3 22 | 13 18.02 | − 9 39.0 | 1.659 | 2.617 | 7.5 | 21.1 |
| 4 1 | 13 10.47 | − 8 40.9 | 1.607 | 2.600 | 3.1 | 20.8 |
| 4 11 | 13 2.10 | − 7 35.0 | 1.581 | 2.582 | 1.6 | 20.7 |
| 4 21 | 12 53.93 | − 6 28.3 | 1.583 | 2.564 | 6.3 | 20.9 |
| 5 1 | 12 46.96 | − 5 28.1 | 1.611 | 2.546 | 10.7 | 21.1 |
| 5 11 | 12 41.99 | − 4 40.6 | 1.662 | 2.528 | 14.6 | 21.3 |

**289460** 2005 $EY_{63}$ 4 7.3 170°.41 0°.7/ 6.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.60 | − 7 29.0 | 2.275 | 3.088 | 12.3 | 21.7 |
| 3 12 | 13 23.35 | − 6 52.5 | 2.191 | 3.090 | 9.3 | 21.5 |
| 3 22 | 13 17.33 | − 6 5.8 | 2.131 | 3.091 | 5.9 | 21.3 |
| 4 1 | 13 10.09 | − 5 12.4 | 2.098 | 3.092 | 2.3 | 21.0 |
| 4 11 | 13 2.37 | − 4 17.3 | 2.095 | 3.094 | 1.8 | 21.0 |
| 4 21 | 12 54.96 | − 3 25.7 | 2.120 | 3.094 | 5.5 | 21.2 |
| 5 1 | 12 48.60 | − 2 42.4 | 2.173 | 3.095 | 9.0 | 21.4 |
| 5 11 | 12 43.83 | − 2 10.9 | 2.249 | 3.095 | 12.0 | 21.6 |

**390277** 2012 $XX_{153}$ 4 7.3 201°.82 2°.5/10.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.94 | −18 17.5 | 2.651 | 3.416 | 12.0 | 21.9 |
| 3 12 | 13 22.73 | −18 2.5 | 2.552 | 3.413 | 9.7 | 21.7 |
| 3 22 | 13 16.90 | −17 32.8 | 2.476 | 3.409 | 6.9 | 21.5 |
| 4 1 | 13 9.92 | −16 49.3 | 2.427 | 3.405 | 4.1 | 21.4 |
| 4 11 | 13 2.47 | −15 54.9 | 2.407 | 3.401 | 2.5 | 21.2 |
| 4 21 | 12 55.24 | −14 54.0 | 2.416 | 3.396 | 4.4 | 21.4 |
| 5 1 | 12 48.91 | −13 51.6 | 2.453 | 3.391 | 7.3 | 21.5 |
| 5 11 | 12 44.03 | −12 53.1 | 2.517 | 3.386 | 10.1 | 21.7 |

**141278** 2001 $YW_{52}$ 4 7.3 164°.90 0°.2/ 7.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.17 | − 9 49.2 | 2.721 | 3.519 | 10.9 | 21.0 |
| 3 12 | 13 22.74 | − 9 26.9 | 2.634 | 3.522 | 8.4 | 20.8 |
| 3 22 | 13 16.81 | − 8 55.1 | 2.571 | 3.526 | 5.4 | 20.6 |
| 4 1 | 13 9.86 | − 8 16.2 | 2.536 | 3.529 | 2.2 | 20.4 |
| 4 11 | 13 2.51 | − 7 33.7 | 2.531 | 3.531 | 1.2 | 20.3 |
| 4 21 | 12 55.42 | − 6 51.6 | 2.555 | 3.533 | 4.4 | 20.6 |
| 5 1 | 12 49.20 | − 6 13.8 | 2.608 | 3.535 | 7.5 | 20.8 |
| 5 11 | 12 44.33 | − 5 43.6 | 2.686 | 3.537 | 10.1 | 20.9 |

**511608** 2015 $BK_{21}$ 4 7.3 124°.37 2°.3/ 9.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.07 | −15 58.4 | 2.017 | 2.804 | 14.5 | 21.5 |
| 3 12 | 13 24.75 | −15 48.4 | 1.934 | 2.810 | 11.5 | 21.3 |
| 3 22 | 13 18.37 | −15 21.7 | 1.872 | 2.816 | 8.0 | 21.1 |
| 4 1 | 13 10.53 | −14 39.7 | 1.837 | 2.821 | 4.3 | 20.9 |
| 4 11 | 13 2.12 | −13 46.6 | 1.829 | 2.826 | 2.4 | 20.7 |
| 4 21 | 12 54.08 | −12 47.8 | 1.849 | 2.831 | 5.3 | 20.9 |
| 5 1 | 12 47.29 | −11 49.8 | 1.896 | 2.836 | 9.0 | 21.2 |
| 5 11 | 12 42.38 | −10 58.7 | 1.968 | 2.841 | 12.3 | 21.4 |

**387050** 2012 $TO_{19}$ 4 7.3 267°.98 1°.8/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.77 | − 2 35.2 | 2.122 | 2.943 | 12.8 | 21.1 |
| 3 12 | 13 26.80 | − 2 22.1 | 2.024 | 2.927 | 9.8 | 20.9 |
| 3 22 | 13 19.73 | − 2 2.9 | 1.949 | 2.911 | 6.3 | 20.7 |
| 4 1 | 13 11.11 | − 1 41.1 | 1.901 | 2.894 | 2.7 | 20.4 |
| 4 11 | 13 1.76 | − 1 21.0 | 1.882 | 2.877 | 2.8 | 20.4 |
| 4 21 | 12 52.60 | − 1 6.8 | 1.891 | 2.860 | 6.6 | 20.6 |
| 5 1 | 12 44.55 | − 1 2.2 | 1.928 | 2.843 | 10.3 | 20.8 |
| 5 11 | 12 38.32 | − 1 9.5 | 1.988 | 2.826 | 13.6 | 20.9 |

**500041** 2011 $SV_{191}$ 4 7.3 134°.02 0°.9/ 6.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 25.19 | − 6 58.6 | 2.698 | 3.509 | 10.6 | 22.3 |
| 3 12 | 13 21.21 | − 6 5.9 | 2.619 | 3.518 | 8.0 | 22.1 |
| 3 22 | 13 15.81 | − 5 4.4 | 2.565 | 3.526 | 5.0 | 21.9 |
| 4 1 | 13 9.45 | − 3 57.8 | 2.540 | 3.534 | 1.9 | 21.7 |
| 4 11 | 13 2.76 | − 2 51.0 | 2.545 | 3.542 | 1.9 | 21.7 |
| 4 21 | 12 56.36 | − 1 48.7 | 2.580 | 3.550 | 5.0 | 21.9 |
| 5 1 | 12 50.82 | − 0 55.0 | 2.642 | 3.557 | 7.9 | 22.1 |
| 5 11 | 12 46.59 | − 0 13.2 | 2.730 | 3.564 | 10.5 | 22.3 |

**326286** 1997 $SO_{30}$ 4 7.3 304°.11 0°.1/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.57 | − 7 46.4 | 1.659 | 2.483 | 15.6 | 20.8 |
| 3 12 | 13 26.39 | − 7 38.7 | 1.572 | 2.476 | 12.0 | 20.6 |
| 3 22 | 13 19.69 | − 7 19.0 | 1.507 | 2.469 | 7.8 | 20.3 |
| 4 1 | 13 11.13 | − 6 50.1 | 1.468 | 2.462 | 3.1 | 20.0 |
| 4 11 | 13 1.75 | − 6 17.1 | 1.455 | 2.455 | 1.9 | 19.9 |
| 4 21 | 12 52.70 | − 5 45.7 | 1.469 | 2.448 | 6.8 | 20.2 |
| 5 1 | 12 45.08 | − 5 21.7 | 1.508 | 2.442 | 11.3 | 20.4 |
| 5 11 | 12 39.71 | − 5 9.7 | 1.569 | 2.436 | 15.2 | 20.7 |

**377916** 2006 $EH_{14}$ 4 7.3 83°.77 0°.9/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.61 | − 7 27.9 | 1.922 | 2.744 | 13.8 | 21.1 |
| 3 12 | 13 23.64 | − 6 47.5 | 1.846 | 2.750 | 10.5 | 20.9 |
| 3 22 | 13 17.64 | − 5 55.1 | 1.792 | 2.755 | 6.7 | 20.7 |
| 4 1 | 13 10.24 | − 4 55.2 | 1.765 | 2.760 | 2.5 | 20.4 |
| 4 11 | 13 2.31 | − 3 53.8 | 1.766 | 2.765 | 2.2 | 20.4 |
| 4 21 | 12 54.79 | − 2 57.2 | 1.795 | 2.770 | 6.3 | 20.7 |
| 5 1 | 12 48.50 | − 2 11.1 | 1.850 | 2.775 | 10.1 | 20.9 |
| 5 11 | 12 44.06 | − 1 39.3 | 1.928 | 2.780 | 13.4 | 21.1 |

**100239** 1994 $PE_{32}$ 4 7.3 151°.37 1°.5/ 9.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.06 | −14 36.5 | 2.785 | 3.563 | 11.2 | 20.7 |
| 3 12 | 13 22.65 | −14 22.4 | 2.696 | 3.569 | 8.8 | 20.5 |
| 3 22 | 13 16.76 | −13 56.7 | 2.632 | 3.575 | 6.0 | 20.3 |
| 4 1 | 13 9.85 | −13 20.7 | 2.595 | 3.580 | 3.1 | 20.2 |
| 4 11 | 13 2.54 | −12 37.7 | 2.587 | 3.586 | 1.6 | 20.0 |
| 4 21 | 12 55.50 | −11 51.3 | 2.609 | 3.590 | 4.1 | 20.2 |
| 5 1 | 12 49.32 | −11 5.8 | 2.660 | 3.595 | 7.0 | 20.4 |
| 5 11 | 12 44.50 | −10 25.2 | 2.737 | 3.599 | 9.6 | 20.6 |

**106371** 2000 $VA_{11}$ 4 7.3 201°.52 0°.8/ 8.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.20 | −12 28.2 | 2.877 | 3.665 | 10.6 | 20.7 |
| 3 12 | 13 22.00 | −12 3.9 | 2.780 | 3.661 | 8.3 | 20.5 |
| 3 22 | 13 16.35 | −11 28.8 | 2.708 | 3.657 | 5.5 | 20.3 |
| 4 1 | 13 9.69 | −10 44.8 | 2.663 | 3.653 | 2.5 | 20.1 |
| 4 11 | 13 2.63 | − 9 55.4 | 2.648 | 3.648 | 1.2 | 20.0 |
| 4 21 | 12 55.77 | − 9 4.3 | 2.663 | 3.643 | 4.1 | 20.2 |
| 5 1 | 12 49.70 | − 8 15.8 | 2.707 | 3.638 | 7.0 | 20.4 |
| 5 11 | 12 44.92 | − 7 33.8 | 2.776 | 3.632 | 9.7 | 20.6 |

**226886** 2004 $TM_{130}$ 4 7.3 199°.73 3°.3/ 4.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.28 | + 0 57.7 | 2.125 | 2.955 | 12.4 | 20.5 |
| 3 12 | 13 25.50 | + 1 40.2 | 2.045 | 2.953 | 9.4 | 20.3 |
| 3 22 | 13 18.77 | + 2 27.2 | 1.988 | 2.950 | 6.2 | 20.1 |
| 4 1 | 13 10.69 | + 3 13.6 | 1.959 | 2.947 | 3.6 | 19.9 |
| 4 11 | 13 2.07 | + 3 53.7 | 1.959 | 2.944 | 4.4 | 20.0 |
| 4 21 | 12 53.78 | + 4 22.6 | 1.986 | 2.941 | 7.5 | 20.2 |
| 5 1 | 12 46.64 | + 4 37.0 | 2.040 | 2.937 | 10.8 | 20.4 |
| 5 11 | 12 41.27 | + 4 35.4 | 2.116 | 2.933 | 13.7 | 20.6 |

**468286** 2015 $DX_{108}$ 4 7.3 144°.89 6°.0/ 1.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.15 | + 8 30.3 | 1.987 | 2.824 | 12.9 | 21.3 |
| 3 12 | 13 26.21 | + 9 26.3 | 1.921 | 2.827 | 10.0 | 21.1 |
| 3 22 | 13 19.23 | +10 20.8 | 1.879 | 2.831 | 7.4 | 21.0 |
| 4 1 | 13 10.86 | +11 6.8 | 1.864 | 2.834 | 6.0 | 20.9 |
| 4 11 | 13 2.01 | +11 38.0 | 1.876 | 2.837 | 7.1 | 21.0 |
| 4 21 | 12 53.61 | +11 50.3 | 1.914 | 2.839 | 9.6 | 21.1 |
| 5 1 | 12 46.50 | +11 42.0 | 1.977 | 2.842 | 12.5 | 21.3 |
| 5 11 | 12 41.30 | +11 14.0 | 2.061 | 2.844 | 15.1 | 21.5 |

**306750** 2000 $YB_{3}$ 4 7.3 84°.17 2°.0/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.37 | − 4 30.3 | 1.522 | 2.354 | 16.3 | 20.8 |
| 3 12 | 13 28.29 | − 3 52.4 | 1.465 | 2.375 | 12.3 | 20.5 |
| 3 22 | 13 20.70 | − 3 4.1 | 1.431 | 2.395 | 7.7 | 20.3 |
| 4 1 | 13 11.44 | − 2 11.4 | 1.421 | 2.415 | 3.2 | 20.1 |
| 4 11 | 13 1.70 | − 1 21.5 | 1.439 | 2.435 | 3.3 | 20.1 |
| 4 21 | 12 52.68 | − 0 41.1 | 1.483 | 2.455 | 7.7 | 20.5 |
| 5 1 | 12 45.39 | − 0 15.3 | 1.553 | 2.474 | 11.9 | 20.7 |
| 5 11 | 12 40.47 | − 0 6.7 | 1.644 | 2.493 | 15.5 | 21.0 |

**67323** 2000 $HX_{65}$ 4 7.3 357°.64 5°.0/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.41 | + 0 57.9 | 1.227 | 2.086 | 17.8 | 19.5 |
| 3 12 | 13 26.84 | + 1 48.3 | 1.161 | 2.084 | 13.6 | 19.2 |
| 3 22 | 13 20.23 | + 2 46.3 | 1.115 | 2.083 | 8.9 | 18.9 |
| 4 1 | 13 11.39 | + 3 43.0 | 1.093 | 2.082 | 5.3 | 18.7 |
| 4 11 | 13 1.69 | + 4 28.5 | 1.095 | 2.082 | 6.4 | 18.8 |
| 4 21 | 12 52.59 | + 4 54.9 | 1.120 | 2.083 | 10.9 | 19.0 |
| 5 1 | 12 45.41 | + 4 57.4 | 1.167 | 2.083 | 15.5 | 19.3 |
| 5 11 | 12 41.02 | + 4 35.5 | 1.233 | 2.085 | 19.5 | 19.5 |

**250110** 2002 $JE_{137}$ 4 7.3 345°.38 0°.1/ 7.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.52 | − 9 44.7 | 1.230 | 2.075 | 18.6 | 20.2 |
| 3 12 | 13 24.02 | − 9 27.7 | 1.154 | 2.068 | 14.5 | 19.9 |
| 3 22 | 13 18.53 | − 8 51.6 | 1.097 | 2.062 | 9.5 | 19.6 |
| 4 1 | 13 10.78 | − 8 0.2 | 1.062 | 2.056 | 3.8 | 19.3 |
| 4 11 | 13 2.02 | − 7 1.0 | 1.051 | 2.052 | 2.1 | 19.1 |
| 4 21 | 12 53.71 | − 6 3.2 | 1.064 | 2.048 | 8.0 | 19.5 |
| 5 1 | 12 47.21 | − 5 16.0 | 1.100 | 2.045 | 13.3 | 19.7 |
| 5 11 | 12 43.44 | − 4 46.1 | 1.155 | 2.044 | 18.0 | 20.0 |

**191834** 2004 $VT_{9}$ 4 7.3 213°.93 4°.9/ 1.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.60 | + 7 38.5 | 2.553 | 3.379 | 10.7 | 21.1 |
| 3 12 | 13 25.47 | + 8 35.6 | 2.469 | 3.371 | 8.3 | 20.9 |
| 3 22 | 13 18.64 | + 9 32.7 | 2.411 | 3.361 | 6.0 | 20.7 |
| 4 1 | 13 10.63 | +10 24.3 | 2.381 | 3.351 | 4.9 | 20.6 |
| 4 11 | 13 2.14 | +11 5.1 | 2.380 | 3.340 | 5.8 | 20.7 |
| 4 21 | 12 53.89 | +11 31.2 | 2.407 | 3.328 | 8.1 | 20.8 |
| 5 1 | 12 46.61 | +11 40.1 | 2.461 | 3.316 | 10.7 | 20.9 |
| 5 11 | 12 40.84 | +11 31.5 | 2.536 | 3.303 | 13.0 | 21.1 |

**97886** 2000 $QK_{54}$ 4 7.3 189°.26 1°.6/ 8.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.24 | −13 39.7 | 2.277 | 3.057 | 13.3 | 21.6 |
| 3 12 | 13 28.51 | −13 29.7 | 2.181 | 3.056 | 10.5 | 21.4 |
| 3 22 | 13 20.74 | −13 6.2 | 2.109 | 3.054 | 7.1 | 21.2 |
| 4 1 | 13 11.50 | −12 30.3 | 2.064 | 3.051 | 3.5 | 20.9 |
| 4 11 | 13 1.63 | −11 45.6 | 2.048 | 3.047 | 1.8 | 20.8 |
| 4 21 | 12 52.04 | −10 56.9 | 2.062 | 3.042 | 5.1 | 21.0 |
| 5 1 | 12 43.59 | −10 9.4 | 2.105 | 3.036 | 8.7 | 21.2 |
| 5 11 | 12 36.96 | − 9 28.5 | 2.173 | 3.029 | 12.0 | 21.4 |

**246817** 2009 $KH_{1}$ 4 7.3 253°.68 1°.9/11.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 19.88 | −20 18.8 | 4.466 | 5.208 | 7.8 | 20.2 |
| 3 12 | 13 16.78 | −19 50.2 | 4.363 | 5.207 | 6.3 | 20.1 |
| 3 22 | 13 12.82 | −19 11.6 | 4.284 | 5.205 | 4.6 | 19.9 |
| 4 1 | 13 8.28 | −18 24.2 | 4.233 | 5.204 | 2.9 | 19.8 |
| 4 11 | 13 3.52 | −17 29.8 | 4.213 | 5.203 | 1.9 | 19.7 |
| 4 21 | 12 58.90 | −16 31.1 | 4.223 | 5.202 | 2.8 | 19.8 |
| 5 1 | 12 54.77 | −15 31.1 | 4.263 | 5.200 | 4.5 | 19.9 |
| 5 11 | 12 51.43 | −14 32.7 | 4.330 | 5.199 | 6.2 | 20.0 |

**106113** 2000 $TF_{25}$ 4 7.3 19°.18 3°.2/ 5.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.36 | + 3 42.9 | 2.057 | 2.877 | 13.1 | 18.6 |
| 3 12 | 13 30.87 | + 3 30.5 | 1.978 | 2.880 | 10.0 | 18.4 |
| 3 22 | 13 22.21 | + 3 17.4 | 1.925 | 2.883 | 6.6 | 18.2 |
| 4 1 | 13 12.05 | + 3 0.1 | 1.899 | 2.887 | 3.7 | 18.0 |
| 4 11 | 13 1.35 | + 2 35.4 | 1.902 | 2.891 | 4.0 | 18.1 |
| 4 21 | 12 51.09 | + 2 1.5 | 1.935 | 2.895 | 7.2 | 18.3 |
| 5 1 | 12 42.20 | + 1 17.5 | 1.996 | 2.900 | 10.6 | 18.5 |
| 5 11 | 12 35.33 | + 0 23.6 | 2.080 | 2.904 | 13.6 | 18.7 |

**378857** 2008 $TE_{64}$ 4 7.3 116°.67 0°.3/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.00 | −10 36.5 | 2.095 | 2.903 | 13.4 | 21.9 |
| 3 12 | 13 23.79 | −10 5.9 | 2.016 | 2.910 | 10.3 | 21.7 |
| 3 22 | 13 17.69 | − 9 22.2 | 1.960 | 2.917 | 6.7 | 21.5 |
| 4 1 | 13 10.27 | − 8 28.8 | 1.930 | 2.923 | 2.7 | 21.2 |
| 4 11 | 13 2.37 | − 7 30.5 | 1.929 | 2.930 | 1.4 | 21.2 |
| 4 21 | 12 54.83 | − 6 33.2 | 1.957 | 2.936 | 5.4 | 21.4 |
| 5 1 | 12 48.46 | − 5 42.5 | 2.012 | 2.943 | 9.1 | 21.7 |
| 5 11 | 12 43.82 | − 5 2.7 | 2.090 | 2.949 | 12.3 | 21.9 |

**455563** 2004 $PA_{96}$ 4 7.3 156°.34 8°.2/29.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.46 | + 9 59.3 | 1.766 | 2.610 | 13.9 | 21.5 |
| 3 12 | 13 25.94 | +12 17.8 | 1.711 | 2.618 | 11.0 | 21.3 |
| 3 22 | 13 19.18 | +14 35.4 | 1.681 | 2.624 | 8.8 | 21.2 |
| 4 1 | 13 10.87 | +16 40.4 | 1.679 | 2.630 | 8.3 | 21.2 |
| 4 11 | 13 2.03 | +18 22.1 | 1.703 | 2.636 | 9.9 | 21.3 |
| 4 21 | 12 53.69 | +19 33.8 | 1.753 | 2.641 | 12.6 | 21.5 |
| 5 1 | 12 46.79 | +20 13.0 | 1.825 | 2.645 | 15.3 | 21.7 |
| 5 11 | 12 41.97 | +20 21.4 | 1.915 | 2.648 | 17.8 | 21.9 |

**152656** 1997 $WC_{29}$ 4 7.3 179°.50 1°.4/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.42 | − 5 6.9 | 2.352 | 3.164 | 11.9 | 21.5 |
| 3 12 | 13 25.43 | − 4 27.1 | 2.267 | 3.166 | 9.0 | 21.3 |
| 3 22 | 13 18.65 | − 3 38.8 | 2.206 | 3.167 | 5.7 | 21.1 |
| 4 1 | 13 10.65 | − 2 45.9 | 2.174 | 3.168 | 2.3 | 20.8 |
| 4 11 | 13 2.15 | − 1 53.4 | 2.171 | 3.167 | 2.4 | 20.9 |
| 4 21 | 12 53.97 | − 1 6.3 | 2.198 | 3.166 | 5.8 | 21.1 |
| 5 1 | 12 46.84 | − 0 28.9 | 2.253 | 3.165 | 9.2 | 21.3 |
| 5 11 | 12 41.32 | − 0 4.1 | 2.331 | 3.163 | 12.1 | 21.5 |

**96085** 2256 $T\text{-}_{1}$ 4 7.3 86°.90 0°.0/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 38.28 | − 7 32.1 | 1.483 | 2.301 | 17.4 | 19.2 |
| 3 12 | 13 32.14 | − 7 35.5 | 1.424 | 2.324 | 13.3 | 19.0 |
| 3 22 | 13 23.23 | − 7 27.0 | 1.387 | 2.347 | 8.6 | 18.7 |
| 4 1 | 13 12.47 | − 7 9.5 | 1.375 | 2.369 | 3.4 | 18.5 |
| 4 11 | 13 1.16 | − 6 48.2 | 1.391 | 2.391 | 1.9 | 18.4 |
| 4 21 | 12 50.65 | − 6 28.5 | 1.433 | 2.412 | 7.0 | 18.8 |
| 5 1 | 12 42.06 | − 6 15.7 | 1.501 | 2.433 | 11.5 | 19.1 |
| 5 11 | 12 36.11 | − 6 13.5 | 1.591 | 2.454 | 15.3 | 19.4 |

**501173** 2013 $TM_{93}$ 4 7.3 212°.85 0°.7/ 8.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.54 | −12 58.6 | 2.142 | 2.940 | 13.4 | 22.0 |
| 3 12 | 13 23.53 | −12 14.1 | 2.048 | 2.935 | 10.5 | 21.8 |
| 3 22 | 13 17.59 | −11 13.6 | 1.977 | 2.930 | 6.9 | 21.5 |
| 4 1 | 13 10.27 | − 9 59.9 | 1.933 | 2.925 | 3.0 | 21.3 |
| 4 11 | 13 2.38 | − 8 38.6 | 1.918 | 2.919 | 1.4 | 21.1 |
| 4 21 | 12 54.78 | − 7 16.4 | 1.933 | 2.913 | 5.4 | 21.4 |
| 5 1 | 12 48.27 | − 6 0.2 | 1.974 | 2.906 | 9.2 | 21.6 |
| 5 11 | 12 43.49 | − 4 55.7 | 2.040 | 2.899 | 12.5 | 21.8 |

**121675** 1999 $XS_{52}$ 4 7.3 242°.14 0°.8/ 6.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.75 | − 5 54.9 | 3.127 | 3.931 | 9.5 | 21.2 |
| 3 12 | 13 22.35 | − 5 26.8 | 3.019 | 3.914 | 7.2 | 21.0 |
| 3 22 | 13 16.57 | − 4 51.8 | 2.937 | 3.896 | 4.6 | 20.8 |
| 4 1 | 13 9.83 | − 4 12.4 | 2.884 | 3.878 | 1.8 | 20.6 |
| 4 11 | 13 2.64 | − 3 32.1 | 2.861 | 3.859 | 1.6 | 20.5 |
| 4 21 | 12 55.58 | − 2 54.2 | 2.868 | 3.839 | 4.5 | 20.7 |
| 5 1 | 12 49.20 | − 2 22.0 | 2.905 | 3.819 | 7.3 | 20.9 |
| 5 11 | 12 43.99 | − 1 58.2 | 2.966 | 3.799 | 9.8 | 21.0 |

**201564** 2003 $SW_{16}$ 4 7.3 271°.55 2°.0/ 9.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.08 | −14 49.0 | 2.002 | 2.797 | 14.4 | 20.3 |
| 3 12 | 13 24.17 | −14 39.1 | 1.906 | 2.787 | 11.4 | 20.0 |
| 3 22 | 13 18.13 | −14 13.0 | 1.831 | 2.778 | 7.9 | 19.8 |
| 4 1 | 13 10.53 | −13 32.0 | 1.782 | 2.769 | 4.1 | 19.5 |
| 4 11 | 13 2.22 | −12 40.0 | 1.761 | 2.759 | 2.2 | 19.4 |
| 4 21 | 12 54.16 | −11 42.5 | 1.767 | 2.750 | 5.5 | 19.6 |
| 5 1 | 12 47.26 | −10 46.0 | 1.800 | 2.740 | 9.4 | 19.8 |
| 5 11 | 12 42.24 | − 9 56.7 | 1.857 | 2.731 | 12.9 | 20.0 |

**206738** 2004 $BD_{120}$ 4 7.3 71°.58 4°.6/ 3.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.97 | + 4 58.2 | 2.036 | 2.873 | 12.6 | 20.1 |
| 3 12 | 13 25.20 | + 5 41.7 | 1.975 | 2.884 | 9.6 | 19.9 |
| 3 22 | 13 18.52 | + 6 25.8 | 1.938 | 2.896 | 6.6 | 19.7 |
| 4 1 | 13 10.58 | + 7 4.7 | 1.927 | 2.908 | 4.6 | 19.6 |
| 4 11 | 13 2.25 | + 7 32.8 | 1.945 | 2.920 | 5.6 | 19.7 |
| 4 21 | 12 54.38 | + 7 46.3 | 1.989 | 2.932 | 8.3 | 19.9 |
| 5 1 | 12 47.77 | + 7 43.0 | 2.059 | 2.944 | 11.2 | 20.1 |
| 5 11 | 12 42.95 | + 7 23.0 | 2.151 | 2.955 | 13.9 | 20.3 |

**312754** 2010 $TG_{98}$ 4 7.3 352°.70 0°.0/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.97 | − 8 7.5 | 1.297 | 2.139 | 18.1 | 20.5 |
| 3 12 | 13 25.74 | − 8 2.6 | 1.222 | 2.135 | 14.0 | 20.2 |
| 3 22 | 13 19.56 | − 7 42.6 | 1.167 | 2.131 | 9.1 | 19.9 |
| 4 1 | 13 11.18 | − 7 11.1 | 1.134 | 2.129 | 3.6 | 19.6 |
| 4 11 | 13 1.86 | − 6 34.3 | 1.126 | 2.127 | 2.1 | 19.4 |
| 4 21 | 12 53.00 | − 5 59.5 | 1.143 | 2.126 | 7.7 | 19.8 |
| 5 1 | 12 45.92 | − 5 33.9 | 1.183 | 2.126 | 12.9 | 20.1 |
| 5 11 | 12 41.54 | − 5 22.8 | 1.243 | 2.126 | 17.3 | 20.3 |

**160354** 2003 $UO_{198}$ 4 7.3 243°.65 1°.5/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.38 | − 5 27.8 | 2.145 | 2.967 | 12.6 | 20.2 |
| 3 12 | 13 23.38 | − 4 42.8 | 2.055 | 2.959 | 9.6 | 19.9 |
| 3 22 | 13 17.48 | − 3 47.8 | 1.988 | 2.951 | 6.1 | 19.7 |
| 4 1 | 13 10.24 | − 2 46.8 | 1.949 | 2.943 | 2.4 | 19.5 |
| 4 11 | 13 2.42 | − 1 45.8 | 1.938 | 2.934 | 2.6 | 19.5 |
| 4 21 | 12 54.86 | − 0 50.4 | 1.956 | 2.926 | 6.3 | 19.7 |
| 5 1 | 12 48.36 | − 0 5.9 | 2.000 | 2.917 | 9.9 | 19.9 |
| 5 11 | 12 43.55 | + 0 24.1 | 2.068 | 2.908 | 13.1 | 20.1 |

**473048** 2015 $HH_{82}$ 4 7.3 245°.67 1°.0/ 6.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.80 | − 5 38.0 | 2.514 | 3.327 | 11.3 | 21.8 |
| 3 12 | 13 23.45 | − 5 11.6 | 2.416 | 3.315 | 8.6 | 21.6 |
| 3 22 | 13 17.42 | − 4 37.3 | 2.343 | 3.304 | 5.4 | 21.4 |
| 4 1 | 13 10.20 | − 3 58.1 | 2.298 | 3.292 | 2.1 | 21.1 |
| 4 11 | 13 2.45 | − 3 18.1 | 2.282 | 3.280 | 2.0 | 21.1 |
| 4 21 | 12 54.89 | − 2 41.5 | 2.295 | 3.267 | 5.3 | 21.3 |
| 5 1 | 12 48.24 | − 2 12.3 | 2.336 | 3.254 | 8.6 | 21.5 |
| 5 11 | 12 43.04 | − 1 53.5 | 2.401 | 3.241 | 11.5 | 21.7 |

**192053** 2006 $AV_{96}$ 4 7.3 23°.35 0°.1/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.77 | − 8 39.8 | 1.782 | 2.603 | 14.8 | 20.4 |
| 3 12 | 13 24.75 | − 8 19.4 | 1.703 | 2.605 | 11.4 | 20.1 |
| 3 22 | 13 18.50 | − 7 46.3 | 1.646 | 2.606 | 7.3 | 19.9 |
| 4 1 | 13 10.66 | − 7 3.8 | 1.614 | 2.608 | 2.9 | 19.6 |
| 4 11 | 13 2.19 | − 6 17.3 | 1.610 | 2.610 | 1.7 | 19.5 |
| 4 21 | 12 54.11 | − 5 32.9 | 1.633 | 2.613 | 6.3 | 19.8 |
| 5 1 | 12 47.38 | − 4 56.4 | 1.682 | 2.615 | 10.4 | 20.1 |
| 5 11 | 12 42.67 | − 4 32.2 | 1.753 | 2.617 | 14.0 | 20.3 |

**456907** 2007 $VZ_{277}$ 4 7.3 68°.69 0°.0/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.53 | − 9 49.8 | 1.441 | 2.267 | 17.4 | 21.9 |
| 3 12 | 13 27.07 | − 9 16.6 | 1.384 | 2.289 | 13.3 | 21.7 |
| 3 22 | 13 20.01 | − 8 27.0 | 1.349 | 2.310 | 8.5 | 21.5 |
| 4 1 | 13 11.22 | − 7 25.9 | 1.338 | 2.332 | 3.3 | 21.2 |
| 4 11 | 13 1.93 | − 6 21.0 | 1.353 | 2.353 | 2.0 | 21.1 |
| 4 21 | 12 53.36 | − 5 20.3 | 1.395 | 2.375 | 7.0 | 21.5 |
| 5 1 | 12 46.58 | − 4 31.3 | 1.461 | 2.396 | 11.5 | 21.8 |
| 5 11 | 12 42.22 | − 3 58.4 | 1.550 | 2.418 | 15.3 | 22.1 |

**212908** 2007 $XD_8$ 4 7.3 41°.54 0°.3/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.63 | −10 13.1 | 2.112 | 2.923 | 13.2 | 20.9 |
| 3 12 | 13 22.78 | − 9 47.8 | 2.030 | 2.926 | 10.1 | 20.7 |
| 3 22 | 13 17.07 | − 9 10.1 | 1.972 | 2.930 | 6.6 | 20.5 |
| 4 1 | 13 10.06 | − 8 23.1 | 1.941 | 2.934 | 2.7 | 20.3 |
| 4 11 | 13 2.55 | − 7 31.4 | 1.937 | 2.937 | 1.4 | 20.2 |
| 4 21 | 12 55.38 | − 6 40.5 | 1.962 | 2.942 | 5.3 | 20.4 |
| 5 1 | 12 49.32 | − 5 55.6 | 2.013 | 2.946 | 9.0 | 20.7 |
| 5 11 | 12 44.95 | − 5 21.1 | 2.088 | 2.950 | 12.2 | 20.9 |

**123366** 2000 $WE_{32}$ 4 7.3 216°.55 6°.4/31.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.63 | +11 22.2 | 2.319 | 3.149 | 11.5 | 20.0 |
| 3 12 | 13 25.67 | +12 31.5 | 2.243 | 3.141 | 9.2 | 19.9 |
| 3 22 | 13 18.86 | +13 38.4 | 2.192 | 3.133 | 7.2 | 19.7 |
| 4 1 | 13 10.76 | +14 36.1 | 2.168 | 3.124 | 6.4 | 19.6 |
| 4 11 | 13 2.15 | +15 18.4 | 2.172 | 3.115 | 7.5 | 19.7 |
| 4 21 | 12 53.84 | +15 41.2 | 2.203 | 3.105 | 9.7 | 19.8 |
| 5 1 | 12 46.61 | +15 42.6 | 2.259 | 3.094 | 12.2 | 20.0 |
| 5 11 | 12 41.05 | +15 23.2 | 2.335 | 3.083 | 14.5 | 20.1 |

**299885** 2006 $SE_{333}$ 4 7.3 10°.77 1°.6/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.80 | − 5 53.4 | 2.190 | 3.015 | 12.3 | 20.7 |
| 3 12 | 13 21.32 | − 4 52.6 | 2.109 | 3.016 | 9.2 | 20.5 |
| 3 22 | 13 16.09 | − 3 41.2 | 2.052 | 3.016 | 5.8 | 20.3 |
| 4 1 | 13 9.67 | − 2 24.1 | 2.022 | 3.016 | 2.4 | 20.1 |
| 4 11 | 13 2.78 | − 1 7.6 | 2.021 | 3.017 | 2.7 | 20.1 |
| 4 21 | 12 56.20 | + 0 2.1 | 2.049 | 3.017 | 6.2 | 20.3 |
| 5 1 | 12 50.65 | + 0 59.7 | 2.103 | 3.018 | 9.6 | 20.5 |
| 5 11 | 12 46.67 | + 1 41.5 | 2.181 | 3.018 | 12.6 | 20.7 |

**87277** 2000 $PR_{11}$ 4 7.4 214°.46 6°.7/30.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.22 | +11 27.9 | 2.248 | 3.080 | 11.7 | 20.3 |
| 3 12 | 13 25.42 | +12 45.4 | 2.174 | 3.073 | 9.4 | 20.1 |
| 3 22 | 13 18.73 | +14 0.5 | 2.125 | 3.066 | 7.4 | 20.0 |
| 4 1 | 13 10.71 | +15 6.0 | 2.103 | 3.058 | 6.7 | 19.9 |
| 4 11 | 13 2.18 | +15 55.2 | 2.109 | 3.049 | 7.9 | 20.0 |
| 4 21 | 12 53.96 | +16 23.9 | 2.141 | 3.040 | 10.1 | 20.1 |
| 5 1 | 12 46.85 | +16 29.9 | 2.198 | 3.030 | 12.6 | 20.3 |
| 5 11 | 12 41.45 | +16 13.9 | 2.274 | 3.020 | 14.9 | 20.4 |

**421965** 2014 $QB_{282}$ 4 7.4 256°.47 3°.3/ 9.6 14 C

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.21 | −15 33.1 | 1.619 | 2.413 | 17.2 | 21.8 |
| 3 12 | 13 29.59 | −15 52.4 | 1.518 | 2.398 | 13.9 | 21.5 |
| 3 22 | 13 22.07 | −15 54.1 | 1.437 | 2.381 | 9.9 | 21.2 |
| 4 1 | 13 12.25 | −15 37.5 | 1.381 | 2.364 | 5.6 | 20.9 |
| 4 11 | 13 1.22 | −15 4.7 | 1.350 | 2.347 | 3.4 | 20.7 |
| 4 21 | 12 50.33 | −14 21.0 | 1.347 | 2.329 | 6.9 | 20.9 |
| 5 1 | 12 40.93 | −13 33.8 | 1.368 | 2.310 | 11.5 | 21.1 |
| 5 11 | 12 34.06 | −12 51.5 | 1.413 | 2.292 | 15.9 | 21.3 |

**464857** 2005 $GA_{47}$ 4 7.4 333°.31 0°.3/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.70 | − 9 33.7 | 1.443 | 2.273 | 17.2 | 21.3 |
| 3 12 | 13 26.07 | − 9 23.2 | 1.362 | 2.268 | 13.3 | 21.0 |
| 3 22 | 13 19.68 | − 8 57.0 | 1.302 | 2.264 | 8.7 | 20.7 |
| 4 1 | 13 11.23 | − 8 17.9 | 1.266 | 2.260 | 3.6 | 20.4 |
| 4 11 | 13 1.88 | − 7 32.0 | 1.255 | 2.256 | 1.9 | 20.3 |
| 4 21 | 12 52.93 | − 6 46.4 | 1.270 | 2.252 | 7.2 | 20.6 |
| 5 1 | 12 45.62 | − 6 8.7 | 1.309 | 2.249 | 12.1 | 20.9 |
| 5 11 | 12 40.82 | − 5 44.6 | 1.369 | 2.247 | 16.4 | 21.1 |

**325177** 2008 $FG_{66}$ 4 7.4 315°.78 0°.4/ 7.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.34 | − 8 54.9 | 1.480 | 2.316 | 16.5 | 21.1 |
| 3 12 | 13 23.56 | − 8 26.1 | 1.387 | 2.298 | 12.8 | 20.8 |
| 3 22 | 13 18.12 | − 7 40.2 | 1.316 | 2.280 | 8.3 | 20.5 |
| 4 1 | 13 10.65 | − 6 41.0 | 1.268 | 2.263 | 3.3 | 20.1 |
| 4 11 | 13 2.19 | − 5 35.3 | 1.246 | 2.246 | 2.2 | 20.0 |
| 4 21 | 12 53.97 | − 4 31.6 | 1.250 | 2.230 | 7.5 | 20.3 |
| 5 1 | 12 47.22 | − 3 38.4 | 1.277 | 2.215 | 12.6 | 20.5 |
| 5 11 | 12 42.84 | − 3 2.2 | 1.325 | 2.200 | 17.0 | 20.7 |

**295203** 2008 $FB_{117}$ 4 7.4 153°.86 1°.3/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.32 | − 4 52.7 | 2.177 | 2.990 | 12.8 | 21.1 |
| 3 12 | 13 26.97 | − 4 25.3 | 2.099 | 2.999 | 9.7 | 20.9 |
| 3 22 | 13 19.69 | − 3 49.9 | 2.046 | 3.006 | 6.1 | 20.7 |
| 4 1 | 13 11.09 | − 3 10.1 | 2.019 | 3.013 | 2.4 | 20.5 |
| 4 11 | 13 2.01 | − 2 30.9 | 2.022 | 3.019 | 2.4 | 20.5 |
| 4 21 | 12 53.31 | − 1 56.8 | 2.055 | 3.025 | 6.0 | 20.7 |
| 5 1 | 12 45.80 | − 1 32.1 | 2.114 | 3.030 | 9.5 | 21.0 |
| 5 11 | 12 40.07 | − 1 19.2 | 2.198 | 3.035 | 12.6 | 21.2 |

**161439** 2003 $WM_{171}$ 4 7.4 244°.70 4°.1/ 2.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.67 | + 3 41.1 | 2.392 | 3.222 | 11.2 | 21.3 |
| 3 12 | 13 24.20 | + 4 40.1 | 2.299 | 3.206 | 8.6 | 21.1 |
| 3 22 | 13 17.96 | + 5 42.5 | 2.231 | 3.190 | 5.9 | 20.9 |
| 4 1 | 13 10.44 | + 6 42.9 | 2.192 | 3.173 | 4.1 | 20.8 |
| 4 11 | 13 2.36 | + 7 35.4 | 2.182 | 3.156 | 5.1 | 20.8 |
| 4 21 | 12 54.48 | + 8 15.1 | 2.199 | 3.138 | 7.8 | 21.0 |
| 5 1 | 12 47.55 | + 8 38.5 | 2.243 | 3.120 | 10.8 | 21.1 |
| 5 11 | 12 42.16 | + 8 44.2 | 2.309 | 3.101 | 13.5 | 21.3 |

**100853** 1998 $HH_{34}$ 4 7.4 57°.29 0°.5/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.53 | −10 24.8 | 1.532 | 2.355 | 16.7 | 19.3 |
| 3 12 | 13 25.96 | − 9 22.1 | 1.489 | 2.392 | 12.6 | 19.1 |
| 3 22 | 13 19.09 | − 8 3.3 | 1.467 | 2.428 | 8.0 | 18.9 |
| 4 1 | 13 10.80 | − 6 34.9 | 1.471 | 2.465 | 3.0 | 18.7 |
| 4 11 | 13 2.24 | − 5 6.0 | 1.502 | 2.502 | 2.1 | 18.7 |
| 4 21 | 12 54.49 | − 3 45.1 | 1.560 | 2.538 | 6.7 | 19.1 |
| 5 1 | 12 48.41 | − 2 39.3 | 1.644 | 2.574 | 10.8 | 19.4 |
| 5 11 | 12 44.55 | − 1 52.3 | 1.751 | 2.610 | 14.3 | 19.7 |

**211796** 2004 $CC_{100}$ 4 7.4 28°.60 6°.1/31.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.05 | + 6 35.6 | 1.897 | 2.747 | 12.8 | 19.5 |
| 3 12 | 13 21.70 | + 8 8.6 | 1.837 | 2.752 | 9.9 | 19.4 |
| 3 22 | 13 16.41 | + 9 42.7 | 1.801 | 2.757 | 7.2 | 19.2 |
| 4 1 | 13 9.81 | +11 9.5 | 1.792 | 2.763 | 6.1 | 19.2 |
| 4 11 | 13 2.75 | +12 20.9 | 1.810 | 2.769 | 7.5 | 19.2 |
| 4 21 | 12 56.11 | +13 11.1 | 1.853 | 2.775 | 10.1 | 19.4 |
| 5 1 | 12 50.68 | +13 37.1 | 1.920 | 2.781 | 13.0 | 19.6 |
| 5 11 | 12 47.03 | +13 39.1 | 2.006 | 2.788 | 15.5 | 19.8 |

**267387** 2001 $XN_{245}$ 4 7.4 159°.29 1°.9/ 9.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.46 | −14 33.0 | 2.079 | 2.867 | 14.1 | 21.5 |
| 3 12 | 13 25.78 | −14 21.6 | 1.993 | 2.872 | 11.1 | 21.3 |
| 3 22 | 13 19.05 | −13 54.9 | 1.930 | 2.876 | 7.6 | 21.1 |
| 4 1 | 13 10.88 | −13 14.6 | 1.893 | 2.880 | 3.9 | 20.8 |
| 4 11 | 13 2.12 | −12 24.5 | 1.884 | 2.883 | 2.0 | 20.7 |
| 4 21 | 12 53.72 | −11 30.1 | 1.904 | 2.886 | 5.2 | 20.9 |
| 5 1 | 12 46.53 | −10 37.4 | 1.951 | 2.888 | 8.9 | 21.2 |
| 5 11 | 12 41.20 | − 9 51.9 | 2.023 | 2.890 | 12.3 | 21.4 |

**126043** 2001 $YE_{71}$ 4 7.4 213°.31 1°.0/ 8.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.33 | −12 39.5 | 2.399 | 3.187 | 12.5 | 20.6 |
| 3 12 | 13 25.50 | −12 20.0 | 2.298 | 3.179 | 9.8 | 20.4 |
| 3 22 | 13 18.81 | −11 47.4 | 2.221 | 3.170 | 6.6 | 20.1 |
| 4 1 | 13 10.79 | −11 3.9 | 2.171 | 3.161 | 3.0 | 19.9 |
| 4 11 | 13 2.17 | −10 12.9 | 2.150 | 3.150 | 1.4 | 19.7 |
| 4 21 | 12 53.76 | − 9 19.3 | 2.159 | 3.140 | 4.9 | 20.0 |
| 5 1 | 12 46.35 | − 8 28.4 | 2.197 | 3.128 | 8.4 | 20.2 |
| 5 11 | 12 40.56 | − 7 45.0 | 2.259 | 3.116 | 11.6 | 20.3 |

**368255** 2001 $XK_{138}$ 4 7.4 165°.68 1°.0/ 6.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.05 | − 6 26.7 | 2.357 | 3.166 | 12.0 | 22.5 |
| 3 12 | 13 25.14 | − 5 46.0 | 2.274 | 3.172 | 9.1 | 22.3 |
| 3 22 | 13 18.48 | − 4 55.9 | 2.217 | 3.177 | 5.8 | 22.1 |
| 4 1 | 13 10.62 | − 4 0.3 | 2.187 | 3.181 | 2.2 | 21.9 |
| 4 11 | 13 2.30 | − 3 4.1 | 2.187 | 3.185 | 2.1 | 21.9 |
| 4 21 | 12 54.32 | − 2 12.5 | 2.217 | 3.188 | 5.6 | 22.1 |
| 5 1 | 12 47.38 | − 1 29.9 | 2.274 | 3.190 | 8.9 | 22.3 |
| 5 11 | 12 42.05 | − 0 59.5 | 2.356 | 3.192 | 11.9 | 22.5 |

**96330** 1997 $GW_9$ 4 7.4 52°.42 0°.0/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.88 | − 9 20.4 | 1.877 | 2.695 | 14.3 | 20.0 |
| 3 12 | 13 23.97 | − 8 50.8 | 1.798 | 2.698 | 11.0 | 19.8 |
| 3 22 | 13 17.95 | − 8 7.9 | 1.741 | 2.701 | 7.1 | 19.6 |
| 4 1 | 13 10.46 | − 7 15.2 | 1.710 | 2.704 | 2.8 | 19.3 |
| 4 11 | 13 2.39 | − 6 18.3 | 1.707 | 2.707 | 1.7 | 19.2 |
| 4 21 | 12 54.70 | − 5 23.7 | 1.731 | 2.710 | 6.0 | 19.5 |
| 5 1 | 12 48.28 | − 4 37.2 | 1.782 | 2.713 | 10.0 | 19.8 |
| 5 11 | 12 43.77 | − 4 3.4 | 1.855 | 2.717 | 13.5 | 20.0 |

**343949** 2011 $KT_{27}$ 4 7.4 281°.45 5°.3/ 1.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.40 | + 5 25.2 | 2.032 | 2.872 | 12.5 | 20.6 |
| 3 12 | 13 24.36 | + 6 28.8 | 1.941 | 2.851 | 9.7 | 20.3 |
| 3 22 | 13 18.24 | + 7 35.4 | 1.873 | 2.831 | 6.9 | 20.1 |
| 4 1 | 13 10.61 | + 8 38.3 | 1.833 | 2.810 | 5.3 | 20.0 |
| 4 11 | 13 2.28 | + 9 30.3 | 1.820 | 2.789 | 6.5 | 20.0 |
| 4 21 | 12 54.16 | +10 5.5 | 1.833 | 2.768 | 9.4 | 20.1 |
| 5 1 | 12 47.14 | +10 20.4 | 1.871 | 2.747 | 12.6 | 20.3 |
| 5 11 | 12 41.92 | +10 13.8 | 1.930 | 2.725 | 15.6 | 20.5 |

**438953** 2010 $KH_{118}$ 4 7.4 272°.41 17°.0/19.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.68 | +20 19.4 | 1.032 | 1.902 | 19.5 | 20.0 |
| 3 12 | 13 25.54 | +24 21.6 | 0.993 | 1.894 | 17.5 | 19.9 |
| 3 22 | 13 19.82 | +28 10.3 | 0.974 | 1.886 | 17.1 | 19.8 |
| 4 1 | 13 11.39 | +31 20.3 | 0.977 | 1.877 | 18.5 | 19.9 |
| 4 11 | 13 1.85 | +33 32.8 | 0.999 | 1.868 | 21.1 | 20.0 |
| 4 21 | 12 52.97 | +34 40.5 | 1.037 | 1.860 | 24.0 | 20.2 |
| 5 1 | 12 46.37 | +34 46.0 | 1.088 | 1.851 | 26.8 | 20.3 |
| 5 11 | 12 43.03 | +33 58.6 | 1.148 | 1.842 | 29.2 | 20.5 |

**258138** 2001 $RY_{84}$ 4 7.4 139°.05 1°.6/ 9.0 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.34 | −14 22.0 | 2.202 | 2.986 | 13.6 | 21.5 |
| 3 12 | 13 26.26 | −14 5.6 | 2.122 | 2.998 | 10.6 | 21.3 |
| 3 22 | 13 19.26 | −13 34.8 | 2.065 | 3.010 | 7.2 | 21.1 |
| 4 1 | 13 10.94 | −12 51.3 | 2.034 | 3.021 | 3.6 | 20.9 |
| 4 11 | 13 2.14 | −11 59.3 | 2.033 | 3.032 | 1.8 | 20.8 |
| 4 21 | 12 53.74 | −11 3.9 | 2.060 | 3.042 | 5.0 | 21.0 |
| 5 1 | 12 46.52 | −10 10.8 | 2.116 | 3.051 | 8.5 | 21.2 |
| 5 11 | 12 41.09 | − 9 25.2 | 2.197 | 3.060 | 11.6 | 21.4 |

**33734** Stephenlitt 4 7.4 74.°45 2.°6/ 4.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.61 | − 1 21.0 | 2.252 | 3.082 | 11.8 | 18.7 |
| 3 12 | 13 22.56 | − 0 33.2 | 2.183 | 3.092 | 8.9 | 18.5 |
| 3 22 | 13 16.82 | + 0 20.2 | 2.138 | 3.102 | 5.6 | 18.4 |
| 4 1 | 13 9.96 | + 1 14.5 | 2.120 | 3.111 | 2.9 | 18.2 |
| 4 11 | 13 2.71 | + 2 4.2 | 2.132 | 3.121 | 3.5 | 18.3 |
| 4 21 | 12 55.83 | + 2 44.5 | 2.171 | 3.131 | 6.6 | 18.5 |
| 5 1 | 12 49.99 | + 3 12.0 | 2.237 | 3.140 | 9.6 | 18.7 |
| 5 11 | 12 45.72 | + 3 24.7 | 2.325 | 3.150 | 12.4 | 18.9 |

**106520** 2000 $WA_{51}$ 4 7.4 62.°27 18.°0/24.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 41.58 | +36 12.1 | 1.382 | 2.171 | 19.9 | 18.3 |
| 3 12 | 13 34.68 | +38 11.6 | 1.389 | 2.205 | 18.6 | 18.3 |
| 3 22 | 13 24.65 | +39 34.5 | 1.413 | 2.239 | 18.0 | 18.3 |
| 4 1 | 13 12.90 | +40 10.8 | 1.456 | 2.273 | 18.2 | 18.4 |
| 4 11 | 13 1.20 | +39 57.5 | 1.517 | 2.307 | 19.0 | 18.6 |
| 4 21 | 12 51.05 | +38 58.5 | 1.594 | 2.340 | 20.1 | 18.8 |
| 5 1 | 12 43.51 | +37 21.7 | 1.685 | 2.373 | 21.2 | 18.9 |
| 5 11 | 12 39.00 | +35 16.9 | 1.790 | 2.406 | 22.2 | 19.1 |

**377473** 2005 $AQ$ 4 7.4 137.°61 2.°1/ 4.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.30 | − 2 57.9 | 2.489 | 3.308 | 11.2 | 22.1 |
| 3 12 | 13 23.66 | − 2 1.4 | 2.417 | 3.321 | 8.4 | 21.9 |
| 3 22 | 13 17.44 | − 0 58.2 | 2.371 | 3.333 | 5.3 | 21.7 |
| 4 1 | 13 10.19 | + 0 7.0 | 2.353 | 3.345 | 2.5 | 21.6 |
| 4 11 | 13 2.59 | + 1 8.9 | 2.365 | 3.356 | 3.1 | 21.6 |
| 4 21 | 12 55.34 | + 2 2.7 | 2.407 | 3.367 | 6.0 | 21.8 |
| 5 1 | 12 49.07 | + 2 44.6 | 2.476 | 3.377 | 8.9 | 22.0 |
| 5 11 | 12 44.28 | + 3 12.3 | 2.569 | 3.386 | 11.5 | 22.2 |

**213798** 2003 $FK_{100}$ 4 7.4 48.°81 3.°2/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.24 | + 0 4.6 | 2.127 | 2.963 | 12.2 | 20.0 |
| 3 12 | 13 22.39 | + 0 57.2 | 2.059 | 2.971 | 9.2 | 19.8 |
| 3 22 | 13 16.77 | + 1 54.9 | 2.015 | 2.978 | 5.9 | 19.7 |
| 4 1 | 13 9.95 | + 2 52.2 | 1.998 | 2.986 | 3.4 | 19.5 |
| 4 11 | 13 2.73 | + 3 43.2 | 2.009 | 2.994 | 4.2 | 19.6 |
| 4 21 | 12 55.87 | + 4 22.9 | 2.047 | 3.003 | 7.2 | 19.8 |
| 5 1 | 12 50.12 | + 4 47.8 | 2.111 | 3.011 | 10.3 | 20.0 |
| 5 11 | 12 46.00 | + 4 56.3 | 2.198 | 3.019 | 13.1 | 20.2 |

**424191** 2007 $JF_{40}$ 4 7.4 321.°78 6.°9/ 2.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.17 | + 8 47.0 | 1.523 | 2.370 | 15.6 | 20.2 |
| 3 12 | 13 28.67 | + 9 17.9 | 1.439 | 2.351 | 12.3 | 20.0 |
| 3 22 | 13 21.36 | + 9 46.1 | 1.378 | 2.333 | 9.0 | 19.7 |
| 4 1 | 13 11.94 | +10 3.7 | 1.340 | 2.316 | 7.0 | 19.6 |
| 4 11 | 13 1.54 | +10 3.0 | 1.328 | 2.299 | 8.1 | 19.6 |
| 4 21 | 12 51.50 | + 9 39.5 | 1.340 | 2.283 | 11.4 | 19.7 |
| 5 1 | 12 43.06 | + 8 51.9 | 1.376 | 2.267 | 15.3 | 19.9 |
| 5 11 | 12 37.13 | + 7 41.9 | 1.431 | 2.253 | 18.8 | 20.1 |

**399142** 2014 $EF_{31}$ 4 7.4 82.°48 3.°0/ 3.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.52 | + 0 0.5 | 2.392 | 3.223 | 11.1 | 20.7 |
| 3 12 | 13 21.68 | + 0 55.6 | 2.317 | 3.227 | 8.4 | 20.5 |
| 3 22 | 13 16.26 | + 1 55.7 | 2.268 | 3.231 | 5.4 | 20.4 |
| 4 1 | 13 9.75 | + 2 55.7 | 2.246 | 3.234 | 3.1 | 20.2 |
| 4 11 | 13 2.85 | + 3 50.2 | 2.253 | 3.238 | 3.9 | 20.3 |
| 4 21 | 12 56.25 | + 4 34.6 | 2.289 | 3.242 | 6.7 | 20.5 |
| 5 1 | 12 50.61 | + 5 5.3 | 2.350 | 3.246 | 9.6 | 20.6 |
| 5 11 | 12 46.43 | + 5 20.7 | 2.435 | 3.249 | 12.2 | 20.8 |

**388790** 2008 $AD_{87}$ 4 7.4 42.°09 5.°0/12.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.96 | −23 19.7 | 2.179 | 2.928 | 14.8 | 20.7 |
| 3 12 | 13 23.95 | −23 38.3 | 2.092 | 2.933 | 12.3 | 20.6 |
| 3 22 | 13 17.92 | −23 38.1 | 2.027 | 2.939 | 9.4 | 20.4 |
| 4 1 | 13 10.47 | −23 18.2 | 1.986 | 2.945 | 6.7 | 20.2 |
| 4 11 | 13 2.43 | −22 40.6 | 1.971 | 2.951 | 5.0 | 20.1 |
| 4 21 | 12 54.70 | −21 49.4 | 1.983 | 2.957 | 5.9 | 20.2 |
| 5 1 | 12 48.14 | −20 50.6 | 2.023 | 2.963 | 8.5 | 20.4 |
| 5 11 | 12 43.40 | −19 51.1 | 2.087 | 2.970 | 11.3 | 20.6 |

**118974** 2000 $WU_{173}$ 4 7.4 119.°00 5.°9/31.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.87 | +11 32.7 | 2.494 | 3.326 | 10.7 | 19.4 |
| 3 12 | 13 23.37 | +12 33.3 | 2.433 | 3.332 | 8.5 | 19.2 |
| 3 22 | 13 17.27 | +13 30.4 | 2.397 | 3.338 | 6.6 | 19.1 |
| 4 1 | 13 10.13 | +14 18.3 | 2.388 | 3.344 | 5.9 | 19.1 |
| 4 11 | 13 2.65 | +14 51.8 | 2.407 | 3.350 | 6.9 | 19.1 |
| 4 21 | 12 55.52 | +15 7.9 | 2.453 | 3.356 | 8.8 | 19.3 |
| 5 1 | 12 49.39 | +15 5.3 | 2.524 | 3.362 | 11.0 | 19.4 |
| 5 11 | 12 44.74 | +14 44.7 | 2.616 | 3.367 | 13.0 | 19.6 |

**426264** 2012 $QA_{39}$ 4 7.4 266.°22 2.°5/ 4.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.06 | − 4 40.0 | 2.097 | 2.925 | 12.6 | 21.1 |
| 3 12 | 13 22.51 | − 3 18.0 | 1.998 | 2.907 | 9.6 | 20.9 |
| 3 22 | 13 17.04 | − 1 43.0 | 1.924 | 2.889 | 6.1 | 20.6 |
| 4 1 | 13 10.14 | − 0 0.9 | 1.878 | 2.870 | 2.9 | 20.4 |
| 4 11 | 13 2.60 | + 1 40.6 | 1.861 | 2.851 | 3.8 | 20.4 |
| 4 21 | 12 55.25 | + 3 13.4 | 1.872 | 2.832 | 7.4 | 20.6 |
| 5 1 | 12 48.93 | + 4 30.6 | 1.910 | 2.813 | 11.1 | 20.7 |
| 5 11 | 12 44.29 | + 5 28.0 | 1.971 | 2.793 | 14.4 | 20.9 |

**181528** 2006 $UD_{133}$ 4 7.4 123.°77 0.°7/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.47 | − 6 38.1 | 2.714 | 3.521 | 10.7 | 21.7 |
| 3 12 | 13 22.94 | − 6 8.8 | 2.638 | 3.534 | 8.1 | 21.5 |
| 3 22 | 13 16.95 | − 5 31.9 | 2.587 | 3.546 | 5.1 | 21.3 |
| 4 1 | 13 10.01 | − 4 50.5 | 2.564 | 3.558 | 1.9 | 21.1 |
| 4 11 | 13 2.73 | − 4 8.4 | 2.571 | 3.570 | 1.6 | 21.1 |
| 4 21 | 12 55.76 | − 3 29.5 | 2.608 | 3.581 | 4.7 | 21.4 |
| 5 1 | 12 49.68 | − 2 57.3 | 2.673 | 3.592 | 7.6 | 21.6 |
| 5 11 | 12 44.95 | − 2 34.5 | 2.763 | 3.603 | 10.2 | 21.7 |

**243969** 2001 $QX_{294}$ 4 7.4 242.°90 2.°8/ 9.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.42 | −15 45.3 | 1.752 | 2.542 | 16.3 | 21.0 |
| 3 12 | 13 28.75 | −15 45.8 | 1.649 | 2.526 | 13.1 | 20.8 |
| 3 22 | 13 21.41 | −15 27.8 | 1.566 | 2.510 | 9.2 | 20.5 |
| 4 1 | 13 11.99 | −14 51.4 | 1.509 | 2.493 | 5.0 | 20.2 |
| 4 11 | 13 1.52 | −14 0.0 | 1.478 | 2.476 | 2.9 | 20.0 |
| 4 21 | 12 51.21 | −12 59.3 | 1.475 | 2.457 | 6.4 | 20.2 |
| 5 1 | 12 42.27 | −11 57.3 | 1.498 | 2.438 | 10.9 | 20.4 |
| 5 11 | 12 35.66 | −11 2.1 | 1.545 | 2.419 | 15.0 | 20.6 |

**372518** 2009 $SB_{316}$ 4 7.4 199.°53 0.°0/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.97 | − 9 27.3 | 2.299 | 3.101 | 12.5 | 22.7 |
| 3 12 | 13 25.25 | − 8 55.9 | 2.206 | 3.097 | 9.6 | 22.5 |
| 3 22 | 13 18.66 | − 8 12.8 | 2.137 | 3.093 | 6.2 | 22.3 |
| 4 1 | 13 10.75 | − 7 20.9 | 2.095 | 3.088 | 2.5 | 22.0 |
| 4 11 | 13 2.29 | − 6 25.0 | 2.083 | 3.083 | 1.5 | 21.9 |
| 4 21 | 12 54.09 | − 5 30.1 | 2.100 | 3.077 | 5.3 | 22.2 |
| 5 1 | 12 46.94 | − 4 41.6 | 2.145 | 3.070 | 8.9 | 22.4 |
| 5 11 | 12 41.44 | − 4 3.7 | 2.215 | 3.063 | 12.1 | 22.6 |

**32597** 2001 $QC_{157}$ 4 7.4 184.°16 0.°1/ 7.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.81 | − 9 12.8 | 2.781 | 3.581 | 10.7 | 21.2 |
| 3 12 | 13 22.50 | − 8 35.8 | 2.690 | 3.581 | 8.1 | 21.0 |
| 3 22 | 13 16.73 | − 7 49.0 | 2.624 | 3.580 | 5.2 | 20.8 |
| 4 1 | 13 9.95 | − 6 55.4 | 2.586 | 3.580 | 2.0 | 20.6 |
| 4 11 | 13 2.77 | − 5 59.0 | 2.579 | 3.578 | 1.3 | 20.5 |
| 4 21 | 12 55.82 | − 5 4.0 | 2.601 | 3.577 | 4.5 | 20.7 |
| 5 1 | 12 49.72 | − 4 14.8 | 2.652 | 3.575 | 7.5 | 20.9 |
| 5 11 | 12 44.92 | − 3 34.7 | 2.728 | 3.572 | 10.2 | 21.1 |

**258623** 2002 $DP_{12}$ 4 7.4 20.°91 7.°2/ 2.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.23 | + 5 15.7 | 1.236 | 2.100 | 17.3 | 19.9 |
| 3 12 | 13 25.84 | + 6 33.5 | 1.180 | 2.103 | 13.3 | 19.6 |
| 3 22 | 13 19.53 | + 7 54.0 | 1.144 | 2.107 | 9.4 | 19.4 |
| 4 1 | 13 11.17 | + 9 6.1 | 1.132 | 2.112 | 7.2 | 19.3 |
| 4 11 | 13 2.09 | + 9 58.8 | 1.144 | 2.117 | 8.7 | 19.4 |
| 4 21 | 12 53.70 | +10 24.6 | 1.178 | 2.123 | 12.4 | 19.6 |
| 5 1 | 12 47.20 | +10 20.8 | 1.234 | 2.129 | 16.4 | 19.9 |
| 5 11 | 12 43.37 | + 9 48.9 | 1.307 | 2.136 | 19.9 | 20.1 |

**410191** 2007 $RP_{117}$ 4 7.4 257.°56 0.°2/ 7.1 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.83 | −10 24.6 | 1.575 | 2.399 | 16.3 | 21.7 |
| 3 12 | 13 25.26 | − 9 38.4 | 1.486 | 2.389 | 12.6 | 21.4 |
| 3 22 | 13 19.11 | − 8 33.2 | 1.418 | 2.379 | 8.2 | 21.1 |
| 4 1 | 13 11.05 | − 7 13.1 | 1.375 | 2.369 | 3.2 | 20.8 |
| 4 11 | 13 2.11 | − 5 45.8 | 1.359 | 2.359 | 2.1 | 20.7 |
| 4 21 | 12 53.49 | − 4 20.7 | 1.369 | 2.348 | 7.2 | 21.0 |
| 5 1 | 12 46.34 | − 3 6.7 | 1.405 | 2.338 | 12.1 | 21.2 |
| 5 11 | 12 41.50 | − 2 10.8 | 1.462 | 2.327 | 16.3 | 21.4 |

**150696** 2001 $OE_{102}$ 4 7.4 131.°51 0.°4/ 7.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.04 | −11 29.7 | 2.367 | 3.159 | 12.5 | 21.1 |
| 3 12 | 13 25.82 | −10 54.1 | 2.293 | 3.177 | 9.6 | 20.9 |
| 3 22 | 13 18.88 | −10 6.3 | 2.242 | 3.194 | 6.3 | 20.8 |
| 4 1 | 13 10.78 | − 9 9.2 | 2.219 | 3.211 | 2.6 | 20.5 |
| 4 11 | 13 2.32 | − 8 7.5 | 2.227 | 3.227 | 1.3 | 20.5 |
| 4 21 | 12 54.26 | − 7 6.6 | 2.264 | 3.242 | 4.9 | 20.7 |
| 5 1 | 12 47.32 | − 6 11.5 | 2.330 | 3.256 | 8.2 | 21.0 |
| 5 11 | 12 42.02 | − 5 26.4 | 2.420 | 3.270 | 11.1 | 21.2 |

**211116** 2002 $GR_{2}$ 4 7.4 323.°58 22.°4/10.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 42.34 | +42 42.6 | 1.253 | 2.024 | 22.5 | 19.1 |
| 3 12 | 13 37.21 | +44 36.9 | 1.206 | 1.996 | 22.4 | 19.0 |
| 3 22 | 13 27.53 | +45 54.8 | 1.173 | 1.969 | 22.8 | 18.9 |
| 4 1 | 13 14.48 | +46 19.3 | 1.155 | 1.942 | 23.7 | 18.9 |
| 4 11 | 13 0.22 | +45 39.3 | 1.149 | 1.917 | 25.1 | 18.9 |
| 4 21 | 12 47.10 | +43 52.9 | 1.156 | 1.893 | 26.7 | 18.9 |
| 5 1 | 12 37.05 | +41 6.4 | 1.175 | 1.870 | 28.5 | 19.0 |
| 5 11 | 12 31.07 | +37 31.9 | 1.204 | 1.848 | 30.2 | 19.0 |

**216574** 2002 $CX_{258}$ 4 7.4 130.°66 7.°5/15.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.18 | −29 45.3 | 2.000 | 2.715 | 16.9 | 20.0 |
| 3 12 | 13 26.02 | −30 15.9 | 1.911 | 2.718 | 14.6 | 19.8 |
| 3 22 | 13 19.46 | −30 22.2 | 1.840 | 2.720 | 12.0 | 19.6 |
| 4 1 | 13 11.15 | −30 1.8 | 1.791 | 2.723 | 9.4 | 19.5 |
| 4 11 | 13 2.07 | −29 15.0 | 1.767 | 2.725 | 7.7 | 19.4 |
| 4 21 | 12 53.34 | −28 6.1 | 1.769 | 2.727 | 7.9 | 19.4 |
| 5 1 | 12 45.99 | −26 42.5 | 1.796 | 2.729 | 9.8 | 19.5 |
| 5 11 | 12 40.79 | −25 13.6 | 1.848 | 2.731 | 12.5 | 19.7 |

**123632** 2000 $YO_{47}$ 4 7.4 78°.43 5°.2/ 2.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.55 | + 4 25.0 | 1.858 | 2.699 | 13.4 | 19.7 |
| 3 12 | 13 24.99 | + 5 40.6 | 1.809 | 2.721 | 10.2 | 19.5 |
| 3 22 | 13 18.45 | + 6 57.6 | 1.783 | 2.742 | 7.0 | 19.4 |
| 4 1 | 13 10.62 | + 8 8.4 | 1.785 | 2.763 | 5.2 | 19.3 |
| 4 11 | 13 2.45 | + 9 5.7 | 1.813 | 2.784 | 6.3 | 19.4 |
| 4 21 | 12 54.85 | + 9 44.5 | 1.869 | 2.805 | 9.2 | 19.6 |
| 5 1 | 12 48.61 | +10 2.2 | 1.949 | 2.826 | 12.1 | 19.8 |
| 5 11 | 12 44.27 | + 9 59.1 | 2.049 | 2.846 | 14.8 | 20.1 |

**157645** 2005 $YA_{1}$ 4 7.4 62°.78 4°.6/ 4.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 39.01 | + 5 55.2 | 1.770 | 2.597 | 14.6 | 19.5 |
| 3 12 | 13 32.43 | + 5 57.3 | 1.701 | 2.604 | 11.3 | 19.3 |
| 3 22 | 13 23.37 | + 5 57.4 | 1.654 | 2.611 | 7.7 | 19.1 |
| 4 1 | 13 12.62 | + 5 50.5 | 1.635 | 2.618 | 4.9 | 19.0 |
| 4 11 | 13 1.30 | + 5 32.1 | 1.644 | 2.626 | 5.5 | 19.0 |
| 4 21 | 12 50.59 | + 5 0.0 | 1.680 | 2.633 | 8.7 | 19.2 |
| 5 1 | 12 41.50 | + 4 13.7 | 1.743 | 2.641 | 12.3 | 19.4 |
| 5 11 | 12 34.74 | + 3 14.1 | 1.829 | 2.648 | 15.4 | 19.7 |

**88762** 2001 $SF_{66}$ 4 7.4 179°.99 1°.7/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.56 | − 6 25.4 | 1.709 | 2.534 | 15.2 | 20.3 |
| 3 12 | 13 26.99 | − 5 32.0 | 1.630 | 2.535 | 11.6 | 20.1 |
| 3 22 | 13 20.03 | − 4 25.1 | 1.573 | 2.536 | 7.3 | 19.8 |
| 4 1 | 13 11.35 | − 3 10.0 | 1.542 | 2.537 | 2.9 | 19.6 |
| 4 11 | 13 2.00 | − 1 54.7 | 1.540 | 2.536 | 3.0 | 19.6 |
| 4 21 | 12 53.07 | − 0 46.8 | 1.564 | 2.535 | 7.4 | 19.8 |
| 5 1 | 12 45.60 | + 0 6.6 | 1.615 | 2.534 | 11.7 | 20.1 |
| 5 11 | 12 40.29 | + 0 41.7 | 1.687 | 2.532 | 15.4 | 20.3 |

**365423** 2010 $JZ_{131}$ 4 7.4 312°.39 8°.6/14.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.76 | −27 40.9 | 1.504 | 2.257 | 20.1 | 20.3 |
| 3 12 | 13 26.52 | −28 26.1 | 1.415 | 2.250 | 17.4 | 20.0 |
| 3 22 | 13 20.24 | −28 43.6 | 1.343 | 2.244 | 14.1 | 19.8 |
| 4 1 | 13 11.60 | −28 28.7 | 1.291 | 2.237 | 10.9 | 19.6 |
| 4 11 | 13 1.80 | −27 41.2 | 1.262 | 2.231 | 8.7 | 19.4 |
| 4 21 | 12 52.31 | −26 25.6 | 1.258 | 2.226 | 9.3 | 19.5 |
| 5 1 | 12 44.56 | −24 52.0 | 1.276 | 2.220 | 12.0 | 19.6 |
| 5 11 | 12 39.56 | −23 13.2 | 1.317 | 2.215 | 15.6 | 19.8 |

**498086** 2007 $RA_{225}$ 4 7.4 92°.49 1°.3/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.96 | − 6 20.1 | 2.395 | 3.208 | 11.7 | 21.8 |
| 3 12 | 13 23.39 | − 5 23.7 | 2.334 | 3.234 | 8.8 | 21.7 |
| 3 22 | 13 17.26 | − 4 18.6 | 2.298 | 3.259 | 5.5 | 21.5 |
| 4 1 | 13 10.14 | − 3 9.4 | 2.290 | 3.284 | 2.2 | 21.3 |
| 4 11 | 13 2.74 | − 2 1.6 | 2.312 | 3.309 | 2.2 | 21.4 |
| 4 21 | 12 55.76 | − 1 0.2 | 2.364 | 3.333 | 5.5 | 21.6 |
| 5 1 | 12 49.84 | − 0 9.7 | 2.444 | 3.357 | 8.5 | 21.9 |
| 5 11 | 12 45.43 | + 0 27.4 | 2.547 | 3.380 | 11.2 | 22.1 |

**256596** 2007 $UR_{53}$ 4 7.4 316°.82 3°.4/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.78 | −16 58.2 | 1.321 | 2.139 | 19.1 | 20.1 |
| 3 12 | 13 23.57 | −16 53.0 | 1.229 | 2.122 | 15.5 | 19.8 |
| 3 22 | 13 18.40 | −16 22.0 | 1.156 | 2.106 | 11.0 | 19.5 |
| 4 1 | 13 10.89 | −15 25.3 | 1.104 | 2.090 | 6.2 | 19.2 |
| 4 11 | 13 2.21 | −14 7.7 | 1.077 | 2.075 | 3.4 | 19.0 |
| 4 21 | 12 53.78 | −12 38.3 | 1.074 | 2.060 | 7.3 | 19.2 |
| 5 1 | 12 47.02 | −11 8.9 | 1.094 | 2.046 | 12.6 | 19.4 |
| 5 11 | 12 42.96 | − 9 50.8 | 1.134 | 2.033 | 17.4 | 19.6 |

**464726** 2002 $TQ_{224}$ 4 7.4 199°.02 0°.2/ 7.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.66 | −11 31.3 | 2.213 | 3.011 | 13.1 | 22.1 |
| 3 12 | 13 25.10 | −10 44.6 | 2.119 | 3.007 | 10.1 | 21.9 |
| 3 22 | 13 18.62 | − 9 43.2 | 2.048 | 3.003 | 6.6 | 21.6 |
| 4 1 | 13 10.77 | − 8 30.4 | 2.005 | 2.998 | 2.7 | 21.4 |
| 4 11 | 13 2.35 | − 7 11.5 | 1.992 | 2.992 | 1.4 | 21.3 |
| 4 21 | 12 54.20 | − 5 53.1 | 2.008 | 2.985 | 5.4 | 21.5 |
| 5 1 | 12 47.16 | − 4 41.7 | 2.052 | 2.978 | 9.2 | 21.7 |
| 5 11 | 12 41.82 | − 3 42.4 | 2.120 | 2.970 | 12.5 | 21.9 |

**224584** 2005 $XE_{61}$ 4 7.4 120°.93 2°.3/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.83 | − 2 34.3 | 1.964 | 2.790 | 13.4 | 20.9 |
| 3 12 | 13 26.03 | − 1 57.7 | 1.892 | 2.799 | 10.1 | 20.7 |
| 3 22 | 13 19.20 | − 1 14.1 | 1.845 | 2.808 | 6.4 | 20.5 |
| 4 1 | 13 10.97 | − 0 28.1 | 1.824 | 2.816 | 2.9 | 20.3 |
| 4 11 | 13 2.26 | + 0 14.4 | 1.831 | 2.824 | 3.3 | 20.3 |
| 4 21 | 12 53.98 | + 0 48.2 | 1.866 | 2.832 | 6.9 | 20.5 |
| 5 1 | 12 46.98 | + 1 9.5 | 1.928 | 2.840 | 10.5 | 20.8 |
| 5 11 | 12 41.86 | + 1 15.9 | 2.012 | 2.847 | 13.6 | 21.0 |

**89531** 2001 $XD_{76}$ 4 7.4 258°.46 4°.3/ 2.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.30 | + 5 19.7 | 2.263 | 3.096 | 11.6 | 19.7 |
| 3 12 | 13 24.67 | + 5 59.3 | 2.187 | 3.094 | 8.9 | 19.6 |
| 3 22 | 13 18.25 | + 6 39.5 | 2.136 | 3.093 | 6.2 | 19.4 |
| 4 1 | 13 10.59 | + 7 15.0 | 2.112 | 3.091 | 4.4 | 19.3 |
| 4 11 | 13 2.46 | + 7 41.0 | 2.116 | 3.090 | 5.3 | 19.3 |
| 4 21 | 12 54.67 | + 7 53.5 | 2.148 | 3.088 | 7.9 | 19.5 |
| 5 1 | 12 47.96 | + 7 50.3 | 2.205 | 3.087 | 10.7 | 19.6 |
| 5 11 | 12 42.88 | + 7 31.2 | 2.285 | 3.085 | 13.3 | 19.8 |

**370717** 2004 $RQ_{11}$ 4 7.4 122°.18 2°.8/ 4.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.28 | − 2 31.2 | 2.205 | 3.030 | 12.2 | 21.8 |
| 3 12 | 13 23.83 | − 1 14.2 | 2.139 | 3.046 | 9.1 | 21.6 |
| 3 22 | 13 17.65 | + 0 10.4 | 2.098 | 3.061 | 5.8 | 21.4 |
| 4 1 | 13 10.32 | + 1 36.5 | 2.085 | 3.076 | 3.0 | 21.2 |
| 4 11 | 13 2.63 | + 2 57.3 | 2.102 | 3.090 | 3.9 | 21.3 |
| 4 21 | 12 55.35 | + 4 6.8 | 2.148 | 3.103 | 6.9 | 21.5 |
| 5 1 | 12 49.19 | + 5 0.5 | 2.221 | 3.116 | 10.1 | 21.8 |
| 5 11 | 12 44.66 | + 5 36.0 | 2.316 | 3.129 | 12.8 | 22.0 |

**165249** 2000 $SD_{154}$ 4 7.4 178°.22 0°.0/ 7.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.40 | −10 33.9 | 1.784 | 2.596 | 15.2 | 20.7 |
| 3 12 | 13 26.05 | − 9 47.7 | 1.701 | 2.598 | 11.7 | 20.4 |
| 3 22 | 13 19.40 | − 8 44.9 | 1.640 | 2.599 | 7.6 | 20.2 |
| 4 1 | 13 11.11 | − 7 29.7 | 1.606 | 2.599 | 3.0 | 19.9 |
| 4 11 | 13 2.16 | − 6 9.0 | 1.599 | 2.599 | 1.8 | 19.8 |
| 4 21 | 12 53.62 | − 4 50.7 | 1.621 | 2.599 | 6.4 | 20.1 |
| 5 1 | 12 46.45 | − 3 42.4 | 1.669 | 2.598 | 10.7 | 20.4 |
| 5 11 | 12 41.36 | − 2 49.7 | 1.740 | 2.596 | 14.4 | 20.6 |

**36597** 2000 $QB_{136}$ 4 7.4 88°.16 1°.7/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.95 | − 4 33.3 | 1.877 | 2.701 | 14.0 | 19.6 |
| 3 12 | 13 26.12 | − 3 55.8 | 1.814 | 2.720 | 10.6 | 19.4 |
| 3 22 | 13 19.22 | − 3 9.5 | 1.775 | 2.739 | 6.6 | 19.2 |
| 4 1 | 13 10.96 | − 2 19.3 | 1.763 | 2.757 | 2.7 | 19.0 |
| 4 11 | 13 2.29 | − 1 31.3 | 1.779 | 2.775 | 2.9 | 19.1 |
| 4 21 | 12 54.15 | − 0 50.8 | 1.823 | 2.793 | 6.7 | 19.3 |
| 5 1 | 12 47.37 | − 0 22.4 | 1.893 | 2.811 | 10.3 | 19.6 |
| 5 11 | 12 42.54 | − 0 8.6 | 1.986 | 2.828 | 13.5 | 19.8 |

**289103** 2004 $TG_{308}$ 4 7.4 108°.37 1°.6/ 8.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.16 | −14 18.3 | 1.511 | 2.322 | 17.5 | 20.4 |
| 3 12 | 13 26.24 | −13 49.3 | 1.436 | 2.328 | 13.7 | 20.2 |
| 3 22 | 13 19.69 | −12 59.1 | 1.381 | 2.334 | 9.2 | 20.0 |
| 4 1 | 13 11.26 | −11 50.7 | 1.350 | 2.341 | 4.4 | 19.7 |
| 4 11 | 13 2.10 | −10 30.8 | 1.346 | 2.346 | 2.0 | 19.5 |
| 4 21 | 12 53.46 | − 9 8.4 | 1.369 | 2.352 | 6.6 | 19.8 |
| 5 1 | 12 46.46 | − 7 52.9 | 1.416 | 2.358 | 11.3 | 20.1 |
| 5 11 | 12 41.88 | − 6 51.7 | 1.486 | 2.363 | 15.3 | 20.4 |

**287504** 2003 $BD_{48}$ 4 7.4 118°.59 6°.6/15.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.64 | −29 48.6 | 2.519 | 3.214 | 14.3 | 20.6 |
| 3 12 | 13 25.86 | −30 25.1 | 2.430 | 3.222 | 12.3 | 20.5 |
| 3 22 | 13 19.13 | −30 42.5 | 2.361 | 3.229 | 10.1 | 20.4 |
| 4 1 | 13 10.98 | −30 38.5 | 2.315 | 3.237 | 8.1 | 20.2 |
| 4 11 | 13 2.24 | −30 13.7 | 2.295 | 3.244 | 6.7 | 20.2 |
| 4 21 | 12 53.77 | −29 30.8 | 2.302 | 3.252 | 6.9 | 20.2 |
| 5 1 | 12 46.42 | −28 34.9 | 2.336 | 3.259 | 8.4 | 20.3 |
| 5 11 | 12 40.81 | −27 32.6 | 2.395 | 3.266 | 10.5 | 20.4 |

**114966** 2003 $QY_{61}$ 4 7.4 172°.55 1°.3/ 6.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.96 | − 5 35.8 | 2.038 | 2.852 | 13.5 | 20.7 |
| 3 12 | 13 27.67 | − 5 2.4 | 1.956 | 2.855 | 10.3 | 20.5 |
| 3 22 | 13 20.29 | − 4 19.3 | 1.898 | 2.859 | 6.5 | 20.3 |
| 4 1 | 13 11.44 | − 3 30.5 | 1.867 | 2.861 | 2.6 | 20.0 |
| 4 11 | 13 2.02 | − 2 41.6 | 1.865 | 2.863 | 2.4 | 20.0 |
| 4 21 | 12 52.97 | − 1 58.0 | 1.892 | 2.864 | 6.4 | 20.3 |
| 5 1 | 12 45.18 | − 1 24.7 | 1.947 | 2.864 | 10.1 | 20.5 |
| 5 11 | 12 39.30 | − 1 4.7 | 2.024 | 2.863 | 13.4 | 20.7 |

**459007** 2011 $XB_{2}$ 4 7.4 113°.83 3°.0/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.81 | −17 32.5 | 1.814 | 2.594 | 16.2 | 22.3 |
| 3 12 | 13 28.53 | −17 23.9 | 1.743 | 2.613 | 12.9 | 22.2 |
| 3 22 | 13 20.90 | −16 55.9 | 1.694 | 2.632 | 9.1 | 22.0 |
| 4 1 | 13 11.68 | −16 9.8 | 1.669 | 2.650 | 5.1 | 21.8 |
| 4 11 | 13 1.92 | −15 10.2 | 1.672 | 2.668 | 3.0 | 21.7 |
| 4 21 | 12 52.72 | −14 3.6 | 1.703 | 2.685 | 5.7 | 21.9 |
| 5 1 | 12 45.06 | −12 57.6 | 1.761 | 2.701 | 9.5 | 22.1 |
| 5 11 | 12 39.59 | −11 59.3 | 1.844 | 2.717 | 13.0 | 22.4 |

**109584** 2001 $QZ_{275}$ 4 7.4 246°.32 0°.4/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.50 | − 6 23.0 | 2.254 | 3.065 | 12.4 | 19.5 |
| 3 12 | 13 25.71 | − 6 16.6 | 2.162 | 3.059 | 9.5 | 19.3 |
| 3 22 | 13 19.01 | − 6 2.3 | 2.095 | 3.054 | 6.1 | 19.1 |
| 4 1 | 13 10.95 | − 5 42.4 | 2.055 | 3.049 | 2.4 | 18.8 |
| 4 11 | 13 2.30 | − 5 20.8 | 2.044 | 3.043 | 1.7 | 18.8 |
| 4 21 | 12 53.90 | − 5 1.1 | 2.061 | 3.038 | 5.5 | 19.0 |
| 5 1 | 12 46.57 | − 4 47.3 | 2.107 | 3.032 | 9.0 | 19.2 |
| 5 11 | 12 40.92 | − 4 42.4 | 2.176 | 3.026 | 12.2 | 19.4 |

**428061** 2006 $EJ_{20}$ 4 7.4 37°.21 1°.8/ 5.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.66 | − 5 50.2 | 1.731 | 2.565 | 14.6 | 20.8 |
| 3 12 | 13 23.18 | − 4 54.6 | 1.659 | 2.570 | 11.0 | 20.5 |
| 3 22 | 13 17.52 | − 3 46.7 | 1.609 | 2.575 | 6.9 | 20.3 |
| 4 1 | 13 10.36 | − 2 32.2 | 1.585 | 2.580 | 2.8 | 20.1 |
| 4 11 | 13 2.65 | − 1 18.8 | 1.589 | 2.585 | 3.1 | 20.1 |
| 4 21 | 12 55.36 | − 0 13.9 | 1.620 | 2.591 | 7.2 | 20.3 |
| 5 1 | 12 49.41 | + 0 36.2 | 1.675 | 2.596 | 11.2 | 20.6 |
| 5 11 | 12 45.44 | + 1 8.0 | 1.753 | 2.602 | 14.7 | 20.8 |

**5239** Reiki 4 7.4 102°.90 4°.1/ 3.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.56 | + 2 57.6 | 2.046 | 2.879 | 12.7 | 17.3 |
| 3 12 | 13 25.69 | + 3 46.8 | 1.984 | 2.893 | 9.6 | 17.1 |
| 3 22 | 13 18.90 | + 4 38.5 | 1.945 | 2.906 | 6.4 | 17.0 |
| 4 1 | 13 10.85 | + 5 26.7 | 1.935 | 2.919 | 4.2 | 16.8 |
| 4 11 | 13 2.40 | + 6 5.7 | 1.952 | 2.931 | 5.1 | 16.9 |
| 4 21 | 12 54.42 | + 6 31.1 | 1.997 | 2.944 | 7.9 | 17.1 |
| 5 1 | 12 47.68 | + 6 40.0 | 2.067 | 2.956 | 11.0 | 17.3 |
| 5 11 | 12 42.75 | + 6 32.1 | 2.159 | 2.968 | 13.7 | 17.5 |

**72677** 2001 $FA_{60}$ 4 7.4 97°.70 0°.8/ 6.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.09 | − 7 17.5 | 1.661 | 2.482 | 15.7 | 20.3 |
| 3 12 | 13 28.04 | − 6 48.8 | 1.597 | 2.499 | 11.9 | 20.1 |
| 3 22 | 13 20.61 | − 6 7.9 | 1.555 | 2.517 | 7.6 | 19.9 |
| 4 1 | 13 11.56 | − 5 19.2 | 1.539 | 2.533 | 2.9 | 19.7 |
| 4 11 | 13 2.01 | − 4 29.2 | 1.551 | 2.550 | 2.2 | 19.6 |
| 4 21 | 12 53.05 | − 3 44.3 | 1.590 | 2.566 | 6.8 | 20.0 |
| 5 1 | 12 45.68 | − 3 10.0 | 1.655 | 2.582 | 10.9 | 20.2 |
| 5 11 | 12 40.54 | − 2 50.2 | 1.742 | 2.597 | 14.5 | 20.5 |

**244102** 2001 $UN_{150}$ 4 7.4 91°.61 3°.0/11.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.58 | −20 41.6 | 2.427 | 3.186 | 13.2 | 20.5 |
| 3 12 | 13 22.55 | −20 14.6 | 2.348 | 3.202 | 10.6 | 20.4 |
| 3 22 | 13 16.85 | −19 29.8 | 2.290 | 3.218 | 7.7 | 20.2 |
| 4 1 | 13 10.04 | −18 28.9 | 2.259 | 3.233 | 4.7 | 20.0 |
| 4 11 | 13 2.86 | −17 15.7 | 2.256 | 3.248 | 3.0 | 19.9 |
| 4 21 | 12 56.04 | −15 55.7 | 2.283 | 3.264 | 4.6 | 20.1 |
| 5 1 | 12 50.27 | −14 35.2 | 2.337 | 3.279 | 7.4 | 20.3 |
| 5 11 | 12 46.05 | −13 20.1 | 2.418 | 3.294 | 10.2 | 20.5 |

**494266** 2016 $QY_{55}$ 4 7.4 241°.64 3°.5/11.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.73 | −21 4.9 | 2.469 | 3.224 | 13.1 | 21.4 |
| 3 12 | 13 22.83 | −20 58.8 | 2.368 | 3.218 | 10.7 | 21.2 |
| 3 22 | 13 17.16 | −20 35.6 | 2.289 | 3.212 | 8.0 | 21.0 |
| 4 1 | 13 10.22 | −19 55.7 | 2.236 | 3.206 | 5.2 | 20.8 |
| 4 11 | 13 2.73 | −19 1.6 | 2.211 | 3.199 | 3.5 | 20.7 |
| 4 21 | 12 55.46 | −17 57.6 | 2.214 | 3.193 | 4.9 | 20.8 |
| 5 1 | 12 49.16 | −16 49.5 | 2.245 | 3.186 | 7.7 | 20.9 |
| 5 11 | 12 44.41 | −15 43.4 | 2.302 | 3.179 | 10.6 | 21.1 |

**198073** 2004 $RM_{345}$ 4 7.4 143°.37 0°.1/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.18 | −10 0.3 | 2.066 | 2.874 | 13.5 | 21.5 |
| 3 12 | 13 24.80 | − 9 32.7 | 1.985 | 2.879 | 10.4 | 21.3 |
| 3 22 | 13 18.44 | − 8 52.5 | 1.927 | 2.884 | 6.8 | 21.1 |
| 4 1 | 13 10.72 | − 8 2.8 | 1.895 | 2.888 | 2.7 | 20.9 |
| 4 11 | 13 2.47 | − 7 8.6 | 1.892 | 2.893 | 1.4 | 20.8 |
| 4 21 | 12 54.57 | − 6 15.4 | 1.918 | 2.897 | 5.5 | 21.1 |
| 5 1 | 12 47.86 | − 5 28.9 | 1.970 | 2.900 | 9.3 | 21.3 |
| 5 11 | 12 42.93 | − 4 53.4 | 2.046 | 2.904 | 12.6 | 21.5 |

**105492** 2000 $QO_{227}$ 4 7.4 326°.55 8°.6/13.1 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 38.54 | −27 45.8 | 2.113 | 2.820 | 16.4 | 19.6 |
| 3 12 | 13 32.67 | −29 26.9 | 2.013 | 2.812 | 14.2 | 19.4 |
| 3 22 | 13 24.03 | −30 51.9 | 1.933 | 2.805 | 11.9 | 19.2 |
| 4 1 | 13 13.14 | −31 55.5 | 1.877 | 2.797 | 9.8 | 19.0 |
| 4 11 | 13 1.00 | −32 34.1 | 1.848 | 2.790 | 8.6 | 19.0 |
| 4 21 | 12 48.83 | −32 47.7 | 1.845 | 2.784 | 9.1 | 19.0 |
| 5 1 | 12 37.92 | −32 39.8 | 1.869 | 2.777 | 11.0 | 19.1 |
| 5 11 | 12 29.32 | −32 17.8 | 1.915 | 2.771 | 13.3 | 19.2 |

**397677** 2008 $AP_{106}$ 4 7.4 87°.96 4°.3/ 2.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.73 | + 4 42.4 | 2.272 | 3.107 | 11.5 | 20.7 |
| 3 12 | 13 23.45 | + 5 34.0 | 2.203 | 3.112 | 8.8 | 20.5 |
| 3 22 | 13 17.45 | + 6 26.8 | 2.158 | 3.116 | 6.1 | 20.3 |
| 4 1 | 13 10.29 | + 7 15.4 | 2.141 | 3.121 | 4.4 | 20.2 |
| 4 11 | 13 2.73 | + 7 54.4 | 2.152 | 3.125 | 5.3 | 20.3 |
| 4 21 | 12 55.51 | + 8 19.7 | 2.190 | 3.129 | 7.8 | 20.4 |
| 5 1 | 12 49.35 | + 8 28.7 | 2.254 | 3.134 | 10.6 | 20.6 |
| 5 11 | 12 44.77 | + 8 21.0 | 2.340 | 3.138 | 13.1 | 20.8 |

**271915** 2004 $XV_{37}$ 4 7.4 200°.42 2°.1/ 4.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.83 | − 3 33.8 | 2.569 | 3.386 | 10.9 | 21.5 |
| 3 12 | 13 23.42 | − 2 26.5 | 2.479 | 3.382 | 8.2 | 21.3 |
| 3 22 | 13 17.41 | − 1 10.9 | 2.415 | 3.377 | 5.2 | 21.1 |
| 4 1 | 13 10.29 | + 0 8.3 | 2.379 | 3.371 | 2.5 | 20.9 |
| 4 11 | 13 2.72 | + 1 25.4 | 2.374 | 3.364 | 3.1 | 20.9 |
| 4 21 | 12 55.38 | + 2 35.0 | 2.399 | 3.357 | 6.1 | 21.1 |
| 5 1 | 12 48.94 | + 3 32.3 | 2.451 | 3.349 | 9.1 | 21.3 |
| 5 11 | 12 43.92 | + 4 14.5 | 2.528 | 3.341 | 11.8 | 21.5 |

**403932** 2012 $BY_{15}$ 4 7.4 101°.51 2°.0/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.41 | − 4 56.7 | 1.699 | 2.526 | 15.2 | 21.2 |
| 3 12 | 13 27.43 | − 4 8.5 | 1.639 | 2.545 | 11.4 | 21.0 |
| 3 22 | 13 20.17 | − 3 9.8 | 1.600 | 2.564 | 7.2 | 20.8 |
| 4 1 | 13 11.38 | − 2 6.4 | 1.588 | 2.582 | 3.0 | 20.6 |
| 4 11 | 13 2.14 | − 1 5.6 | 1.604 | 2.600 | 3.2 | 20.6 |
| 4 21 | 12 53.51 | − 0 14.1 | 1.648 | 2.617 | 7.3 | 20.9 |
| 5 1 | 12 46.40 | + 0 22.9 | 1.717 | 2.634 | 11.2 | 21.2 |
| 5 11 | 12 41.45 | + 0 42.7 | 1.808 | 2.651 | 14.6 | 21.4 |

**214852** 2006 $WU_{102}$ 4 7.4 304°.12 2°.6/ 4.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.36 | − 0 53.8 | 2.168 | 3.000 | 12.1 | 20.6 |
| 3 12 | 13 23.40 | − 0 19.7 | 2.079 | 2.988 | 9.2 | 20.4 |
| 3 22 | 13 17.57 | + 0 20.1 | 2.014 | 2.977 | 5.9 | 20.2 |
| 4 1 | 13 10.40 | + 1 1.3 | 1.975 | 2.966 | 3.0 | 19.9 |
| 4 11 | 13 2.66 | + 1 38.5 | 1.965 | 2.955 | 3.6 | 20.0 |
| 4 21 | 12 55.15 | + 2 7.1 | 1.982 | 2.945 | 6.9 | 20.1 |
| 5 1 | 12 48.69 | + 2 23.3 | 2.026 | 2.934 | 10.3 | 20.3 |
| 5 11 | 12 43.87 | + 2 25.0 | 2.092 | 2.924 | 13.3 | 20.5 |

**173834** 2001 $TE_{87}$ 4 7.4 202°.03 1°.6/ 9.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.07 | −14 39.7 | 2.386 | 3.172 | 12.6 | 20.3 |
| 3 12 | 13 23.04 | −14 22.0 | 2.293 | 3.171 | 9.9 | 20.2 |
| 3 22 | 13 17.26 | −13 50.3 | 2.224 | 3.169 | 6.8 | 19.9 |
| 4 1 | 13 10.26 | −13 6.5 | 2.181 | 3.168 | 3.5 | 19.7 |
| 4 11 | 13 2.75 | −12 14.1 | 2.167 | 3.166 | 1.8 | 19.6 |
| 4 21 | 12 55.50 | −11 17.9 | 2.182 | 3.164 | 4.6 | 19.8 |
| 5 1 | 12 49.23 | −10 23.2 | 2.224 | 3.162 | 8.0 | 20.0 |
| 5 11 | 12 44.52 | − 9 35.1 | 2.292 | 3.160 | 11.0 | 20.2 |

**480399** 2015 $KA_{60}$ 4 7.4 317°.00 4°.0/ 2.5 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.81 | − 1 1.9 | 1.961 | 2.806 | 12.7 | 21.1 |
| 3 12 | 13 20.16 | + 0 37.6 | 1.872 | 2.789 | 9.6 | 20.8 |
| 3 22 | 13 15.60 | + 2 28.3 | 1.807 | 2.773 | 6.3 | 20.6 |
| 4 1 | 13 9.65 | + 4 22.5 | 1.770 | 2.757 | 4.1 | 20.4 |
| 4 11 | 13 3.09 | + 6 11.0 | 1.761 | 2.741 | 5.4 | 20.5 |
| 4 21 | 12 56.75 | + 7 45.1 | 1.780 | 2.726 | 8.8 | 20.6 |
| 5 1 | 12 51.47 | + 8 58.4 | 1.823 | 2.711 | 12.3 | 20.8 |
| 5 11 | 12 47.88 | + 9 47.5 | 1.888 | 2.697 | 15.4 | 21.0 |

**316932** 2001 $AA_{13}$ 4 7.4 62°.41 3°.8/10.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.91 | −17 36.3 | 1.424 | 2.224 | 18.9 | 20.5 |
| 3 12 | 13 27.69 | −17 44.4 | 1.360 | 2.241 | 15.1 | 20.3 |
| 3 22 | 13 20.67 | −17 29.7 | 1.315 | 2.257 | 10.7 | 20.0 |
| 4 1 | 13 11.67 | −16 53.0 | 1.293 | 2.274 | 6.2 | 19.8 |
| 4 11 | 13 2.00 | −15 59.1 | 1.296 | 2.291 | 3.8 | 19.7 |
| 4 21 | 12 52.99 | −14 55.7 | 1.324 | 2.308 | 6.7 | 19.9 |
| 5 1 | 12 45.81 | −13 52.1 | 1.378 | 2.326 | 11.0 | 20.2 |
| 5 11 | 12 41.24 | −12 56.5 | 1.454 | 2.343 | 14.9 | 20.5 |

**225747** 2001 $SF_{75}$ 4 7.4 141°.39 2°.1/ 9.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.53 | −16 5.5 | 2.364 | 3.137 | 13.1 | 21.6 |
| 3 12 | 13 26.33 | −15 50.9 | 2.282 | 3.150 | 10.4 | 21.4 |
| 3 22 | 13 19.31 | −15 21.6 | 2.224 | 3.163 | 7.2 | 21.3 |
| 4 1 | 13 11.05 | −14 39.2 | 2.192 | 3.175 | 3.9 | 21.1 |
| 4 11 | 13 2.35 | −13 47.1 | 2.189 | 3.186 | 2.1 | 21.0 |
| 4 21 | 12 54.01 | −12 50.3 | 2.216 | 3.197 | 4.7 | 21.2 |
| 5 1 | 12 46.79 | −11 54.3 | 2.272 | 3.207 | 8.0 | 21.4 |
| 5 11 | 12 41.26 | −11 4.2 | 2.353 | 3.216 | 10.9 | 21.6 |

**497102** 2004 $BO_{153}$ 4 7.4 54°.46 1°.8/ 9.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.87 | −13 50.9 | 1.923 | 2.722 | 14.7 | 21.3 |
| 3 12 | 13 24.68 | −13 46.2 | 1.850 | 2.735 | 11.5 | 21.1 |
| 3 22 | 13 18.41 | −13 26.3 | 1.800 | 2.749 | 7.8 | 20.9 |
| 4 1 | 13 10.73 | −12 53.2 | 1.775 | 2.763 | 3.9 | 20.7 |
| 4 11 | 13 2.53 | −12 11.0 | 1.778 | 2.777 | 2.0 | 20.6 |
| 4 21 | 12 54.77 | −11 25.2 | 1.808 | 2.791 | 5.3 | 20.9 |
| 5 1 | 12 48.31 | −10 41.5 | 1.864 | 2.805 | 9.1 | 21.1 |
| 5 11 | 12 43.76 | −10 5.3 | 1.945 | 2.819 | 12.4 | 21.3 |

**429215** 2009 $WW_{256}$ 4 7.4 140°.64 3°.2/11.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.51 | −20 6.7 | 2.310 | 3.069 | 13.7 | 22.0 |
| 3 12 | 13 24.91 | −19 49.6 | 2.225 | 3.080 | 11.1 | 21.9 |
| 3 22 | 13 18.46 | −19 14.6 | 2.162 | 3.089 | 8.1 | 21.7 |
| 4 1 | 13 10.73 | −18 22.7 | 2.124 | 3.099 | 4.9 | 21.5 |
| 4 11 | 13 2.53 | −17 17.5 | 2.115 | 3.108 | 3.2 | 21.4 |
| 4 21 | 12 54.69 | −16 4.3 | 2.136 | 3.116 | 4.9 | 21.5 |
| 5 1 | 12 47.98 | −14 49.6 | 2.184 | 3.124 | 8.0 | 21.7 |
| 5 11 | 12 42.97 | −13 39.8 | 2.258 | 3.131 | 11.0 | 21.9 |

**192506** 1998 $MS_{15}$ 4 7.4 256°.28 1°.4/ 8.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.29 | −13 22.8 | 2.026 | 2.825 | 14.1 | 20.7 |
| 3 12 | 13 24.34 | −13 4.0 | 1.930 | 2.816 | 11.1 | 20.5 |
| 3 22 | 13 18.30 | −12 29.6 | 1.857 | 2.807 | 7.5 | 20.2 |
| 4 1 | 13 10.74 | −11 41.7 | 1.809 | 2.798 | 3.6 | 20.0 |
| 4 11 | 13 2.50 | −10 44.5 | 1.789 | 2.789 | 1.7 | 19.8 |
| 4 21 | 12 54.50 | − 9 43.9 | 1.798 | 2.780 | 5.4 | 20.0 |
| 5 1 | 12 47.65 | − 8 46.3 | 1.833 | 2.771 | 9.4 | 20.3 |
| 5 11 | 12 42.64 | − 7 57.6 | 1.892 | 2.761 | 12.9 | 20.4 |

**231320** 2006 $CM_{55}$ 4 7.4 40°.09 0°.4/ 7.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.04 | − 8 36.3 | 1.816 | 2.638 | 14.5 | 20.8 |
| 3 12 | 13 24.20 | − 8 4.3 | 1.738 | 2.640 | 11.1 | 20.6 |
| 3 22 | 13 18.20 | − 7 19.2 | 1.682 | 2.643 | 7.1 | 20.4 |
| 4 1 | 13 10.68 | − 6 24.8 | 1.652 | 2.646 | 2.8 | 20.1 |
| 4 11 | 13 2.56 | − 5 27.0 | 1.649 | 2.649 | 1.9 | 20.0 |
| 4 21 | 12 54.83 | − 4 32.5 | 1.674 | 2.652 | 6.3 | 20.3 |
| 5 1 | 12 48.40 | − 3 47.2 | 1.724 | 2.655 | 10.3 | 20.6 |
| 5 11 | 12 43.94 | − 3 15.6 | 1.798 | 2.659 | 13.9 | 20.8 |

**150879** 2001 $SQ_{233}$ 4 7.4 106°.69 1°.6/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.03 | − 4 37.5 | 1.968 | 2.788 | 13.7 | 20.7 |
| 3 12 | 13 26.88 | − 4 1.3 | 1.903 | 2.806 | 10.3 | 20.5 |
| 3 22 | 13 19.71 | − 3 16.5 | 1.863 | 2.825 | 6.5 | 20.3 |
| 4 1 | 13 11.21 | − 2 27.8 | 1.849 | 2.842 | 2.6 | 20.1 |
| 4 11 | 13 2.29 | − 1 40.9 | 1.864 | 2.860 | 2.7 | 20.1 |
| 4 21 | 12 53.89 | − 1 1.1 | 1.907 | 2.877 | 6.5 | 20.4 |
| 5 1 | 12 46.82 | − 0 32.7 | 1.977 | 2.893 | 10.1 | 20.6 |
| 5 11 | 12 41.65 | − 0 18.2 | 2.070 | 2.909 | 13.2 | 20.9 |

**189158** 2002 $JZ_{131}$ 4 7.4 45°.28 1°.0/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.31 | −10 48.8 | 1.320 | 2.150 | 18.5 | 19.8 |
| 3 12 | 13 27.39 | −10 43.6 | 1.256 | 2.160 | 14.4 | 19.6 |
| 3 22 | 13 20.56 | −10 20.8 | 1.210 | 2.170 | 9.5 | 19.3 |
| 4 1 | 13 11.67 | − 9 43.4 | 1.188 | 2.181 | 4.1 | 19.0 |
| 4 11 | 13 2.02 | − 8 57.8 | 1.191 | 2.192 | 1.9 | 18.9 |
| 4 21 | 12 53.01 | − 8 11.5 | 1.219 | 2.203 | 7.2 | 19.3 |
| 5 1 | 12 45.87 | − 7 32.5 | 1.272 | 2.215 | 12.1 | 19.6 |
| 5 11 | 12 41.40 | − 7 6.7 | 1.344 | 2.227 | 16.3 | 19.9 |

**120684** 1997 $CA_9$ 4 7.4 122°.47 2°.2/ 9.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.92 | −15 42.5 | 2.311 | 3.085 | 13.3 | 21.4 |
| 3 12 | 13 26.65 | −15 39.4 | 2.233 | 3.102 | 10.5 | 21.3 |
| 3 22 | 13 19.53 | −15 22.2 | 2.178 | 3.118 | 7.3 | 21.1 |
| 4 1 | 13 11.14 | −14 52.1 | 2.151 | 3.134 | 4.0 | 20.9 |
| 4 11 | 13 2.32 | −14 12.4 | 2.152 | 3.149 | 2.3 | 20.8 |
| 4 21 | 12 53.88 | −13 27.5 | 2.182 | 3.163 | 4.8 | 21.0 |
| 5 1 | 12 46.61 | −12 42.6 | 2.241 | 3.177 | 8.0 | 21.2 |
| 5 11 | 12 41.05 | −12 2.6 | 2.325 | 3.190 | 11.0 | 21.4 |

**402981** 2007 $VF_{12}$ 4 7.4 180°.18 1°.0/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.08 | − 6 35.9 | 2.064 | 2.874 | 13.5 | 22.3 |
| 3 12 | 13 27.78 | − 6 3.0 | 1.979 | 2.876 | 10.3 | 22.1 |
| 3 22 | 13 20.40 | − 5 19.6 | 1.917 | 2.877 | 6.5 | 21.9 |
| 4 1 | 13 11.54 | − 4 29.5 | 1.883 | 2.877 | 2.5 | 21.6 |
| 4 11 | 13 2.08 | − 3 38.0 | 1.879 | 2.877 | 2.2 | 21.6 |
| 4 21 | 12 52.97 | − 2 50.9 | 1.903 | 2.876 | 6.2 | 21.9 |
| 5 1 | 12 45.10 | − 2 13.1 | 1.955 | 2.874 | 10.0 | 22.1 |
| 5 11 | 12 39.12 | − 1 48.3 | 2.030 | 2.871 | 13.3 | 22.3 |

**412703** 2014 $OD_{286}$ 4 7.4 336°.06 2°.1/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.40 | − 2 57.1 | 1.322 | 2.164 | 17.8 | 20.8 |
| 3 12 | 13 29.91 | − 2 50.7 | 1.247 | 2.161 | 13.6 | 20.5 |
| 3 22 | 13 22.33 | − 2 35.5 | 1.192 | 2.158 | 8.8 | 20.2 |
| 4 1 | 13 12.44 | − 2 16.4 | 1.161 | 2.155 | 3.7 | 19.9 |
| 4 11 | 13 1.57 | − 1 59.7 | 1.156 | 2.153 | 3.5 | 19.9 |
| 4 21 | 12 51.19 | − 1 51.3 | 1.175 | 2.151 | 8.7 | 20.2 |
| 5 1 | 12 42.69 | − 1 56.0 | 1.218 | 2.149 | 13.7 | 20.5 |
| 5 11 | 12 37.01 | − 2 16.6 | 1.282 | 2.148 | 18.0 | 20.7 |

**463783** 2014 $SS_{228}$ 4 7.4 125°.97 0°.6/ 7.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.83 | −11 1.9 | 1.930 | 2.731 | 14.6 | 22.4 |
| 3 12 | 13 27.64 | −10 40.8 | 1.856 | 2.746 | 11.3 | 22.2 |
| 3 22 | 13 20.29 | −10 6.1 | 1.806 | 2.760 | 7.4 | 22.0 |
| 4 1 | 13 11.48 | − 9 20.5 | 1.782 | 2.773 | 3.1 | 21.8 |
| 4 11 | 13 2.16 | − 8 29.1 | 1.786 | 2.786 | 1.5 | 21.7 |
| 4 21 | 12 53.31 | − 7 37.9 | 1.819 | 2.799 | 5.7 | 22.0 |
| 5 1 | 12 45.84 | − 6 52.5 | 1.879 | 2.811 | 9.6 | 22.2 |
| 5 11 | 12 40.36 | − 6 17.8 | 1.963 | 2.822 | 13.0 | 22.5 |

**205794** 2002 $CA_{127}$ 4 7.4 74°.42 1°.2/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.77 | − 7 40.0 | 1.383 | 2.215 | 17.7 | 21.0 |
| 3 12 | 13 28.12 | − 6 53.6 | 1.330 | 2.239 | 13.4 | 20.7 |
| 3 22 | 13 20.78 | − 5 52.3 | 1.298 | 2.262 | 8.4 | 20.5 |
| 4 1 | 13 11.68 | − 4 42.3 | 1.291 | 2.286 | 3.2 | 20.3 |
| 4 11 | 13 2.10 | − 3 32.5 | 1.311 | 2.309 | 2.7 | 20.3 |
| 4 21 | 12 53.32 | − 2 31.2 | 1.356 | 2.332 | 7.7 | 20.6 |
| 5 1 | 12 46.39 | − 1 45.4 | 1.426 | 2.355 | 12.2 | 21.0 |
| 5 11 | 12 41.98 | − 1 18.6 | 1.517 | 2.378 | 16.0 | 21.3 |

**295576** 2008 $SB_{107}$ 4 7.4 159°.98 0°.7/ 6.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.86 | − 6 32.8 | 2.249 | 3.061 | 12.4 | 21.3 |
| 3 12 | 13 25.16 | − 6 8.1 | 2.167 | 3.065 | 9.5 | 21.1 |
| 3 22 | 13 18.63 | − 5 34.4 | 2.109 | 3.069 | 6.0 | 20.9 |
| 4 1 | 13 10.83 | − 4 55.0 | 2.078 | 3.072 | 2.3 | 20.7 |
| 4 11 | 13 2.54 | − 4 14.4 | 2.076 | 3.075 | 1.9 | 20.7 |
| 4 21 | 12 54.57 | − 3 37.2 | 2.103 | 3.077 | 5.6 | 20.9 |
| 5 1 | 12 47.68 | − 3 7.6 | 2.157 | 3.079 | 9.0 | 21.1 |
| 5 11 | 12 42.45 | − 2 49.0 | 2.236 | 3.081 | 12.1 | 21.3 |

**503677** 2016 $HZ_6$ 4 7.4 234°.32 2°.9/ 4.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.35 | − 1 36.1 | 1.913 | 2.745 | 13.5 | 21.7 |
| 3 12 | 13 25.13 | − 0 48.4 | 1.831 | 2.741 | 10.2 | 21.5 |
| 3 22 | 13 18.79 | + 0 7.1 | 1.772 | 2.736 | 6.6 | 21.2 |
| 4 1 | 13 10.94 | + 1 4.8 | 1.740 | 2.731 | 3.3 | 21.0 |
| 4 11 | 13 2.47 | + 1 58.0 | 1.736 | 2.726 | 4.0 | 21.0 |
| 4 21 | 12 54.33 | + 2 40.9 | 1.759 | 2.721 | 7.6 | 21.2 |
| 5 1 | 12 47.42 | + 3 8.8 | 1.808 | 2.716 | 11.3 | 21.5 |
| 5 11 | 12 42.41 | + 3 19.2 | 1.879 | 2.710 | 14.6 | 21.7 |

**280430** 2003 $YO_{93}$ 4 7.4 132°.13 1°.0/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.05 | − 6 28.9 | 1.977 | 2.790 | 13.9 | 21.7 |
| 3 12 | 13 27.72 | − 5 56.1 | 1.905 | 2.804 | 10.5 | 21.5 |
| 3 22 | 13 20.31 | − 5 13.2 | 1.857 | 2.818 | 6.7 | 21.3 |
| 4 1 | 13 11.49 | − 4 24.1 | 1.837 | 2.831 | 2.6 | 21.1 |
| 4 11 | 13 2.20 | − 3 34.6 | 1.845 | 2.843 | 2.2 | 21.1 |
| 4 21 | 12 53.38 | − 2 50.1 | 1.882 | 2.855 | 6.2 | 21.3 |
| 5 1 | 12 45.89 | − 2 15.4 | 1.945 | 2.866 | 10.0 | 21.6 |
| 5 11 | 12 40.34 | − 1 54.0 | 2.033 | 2.876 | 13.2 | 21.8 |

**424744** 2008 $SR_{300}$ 4 7.4 278°.59 6°.1/13.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.86 | −26 41.3 | 2.076 | 2.808 | 15.9 | 21.1 |
| 3 12 | 13 25.14 | −26 47.5 | 1.956 | 2.782 | 13.6 | 20.9 |
| 3 22 | 13 19.07 | −26 30.3 | 1.855 | 2.756 | 10.8 | 20.6 |
| 4 1 | 13 11.16 | −25 47.3 | 1.778 | 2.729 | 8.0 | 20.4 |
| 4 11 | 13 2.29 | −24 39.1 | 1.726 | 2.701 | 6.2 | 20.2 |
| 4 21 | 12 53.50 | −23 10.1 | 1.702 | 2.673 | 6.9 | 20.2 |
| 5 1 | 12 45.84 | −21 28.0 | 1.704 | 2.645 | 9.7 | 20.3 |
| 5 11 | 12 40.19 | −19 42.9 | 1.731 | 2.617 | 13.1 | 20.4 |

**51248** 2000 $JF_{46}$ 4 7.4 132°.35 2°.5/10.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.16 | −17 41.1 | 2.312 | 3.087 | 13.3 | 19.1 |
| 3 12 | 13 23.17 | −17 22.2 | 2.224 | 3.091 | 10.6 | 19.0 |
| 3 22 | 13 17.38 | −16 46.9 | 2.158 | 3.096 | 7.5 | 18.8 |
| 4 1 | 13 10.35 | −15 56.7 | 2.119 | 3.100 | 4.3 | 18.6 |
| 4 11 | 13 2.84 | −14 55.4 | 2.108 | 3.104 | 2.5 | 18.4 |
| 4 21 | 12 55.63 | −13 48.0 | 2.126 | 3.108 | 4.7 | 18.6 |
| 5 1 | 12 49.47 | −12 40.8 | 2.171 | 3.112 | 8.0 | 18.8 |
| 5 11 | 12 44.93 | −11 39.4 | 2.242 | 3.115 | 11.0 | 19.0 |

**267182** 2000 $QX_{57}$ 4 7.4 238°.76 5°.5/ 1.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.53 | + 5 40.5 | 2.111 | 2.949 | 12.2 | 20.5 |
| 3 12 | 13 24.38 | + 7 8.3 | 2.027 | 2.936 | 9.4 | 20.3 |
| 3 22 | 13 18.26 | + 8 39.6 | 1.968 | 2.923 | 6.8 | 20.1 |
| 4 1 | 13 10.74 | +10 7.0 | 1.937 | 2.910 | 5.5 | 20.0 |
| 4 11 | 13 2.61 | +11 22.5 | 1.934 | 2.896 | 6.8 | 20.1 |
| 4 21 | 12 54.72 | +12 19.7 | 1.958 | 2.881 | 9.6 | 20.2 |
| 5 1 | 12 47.92 | +12 54.9 | 2.007 | 2.866 | 12.6 | 20.3 |
| 5 11 | 12 42.86 | +13 7.0 | 2.076 | 2.851 | 15.3 | 20.5 |

**6719** Gallaj 4 7.4 161°.50 1°.4/ 5.9 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.53 | − 4 58.3 | 2.145 | 2.964 | 12.7 | 17.8 |
| 3 12 | 13 25.00 | − 4 24.7 | 2.065 | 2.967 | 9.6 | 17.6 |
| 3 22 | 13 18.57 | − 3 42.5 | 2.008 | 2.970 | 6.1 | 17.4 |
| 4 1 | 13 10.83 | − 2 55.6 | 1.979 | 2.972 | 2.5 | 17.1 |
| 4 11 | 13 2.58 | − 2 9.2 | 1.978 | 2.975 | 2.5 | 17.1 |
| 4 21 | 12 54.67 | − 1 28.5 | 2.006 | 2.977 | 6.1 | 17.4 |
| 5 1 | 12 47.88 | − 0 57.8 | 2.061 | 2.978 | 9.6 | 17.6 |
| 5 11 | 12 42.81 | − 0 40.0 | 2.139 | 2.980 | 12.7 | 17.8 |

**464291** 2016 $AZ_{75}$ 4 7.4 118°.80 1°.1/ 8.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.11 | −13 59.8 | 1.603 | 2.411 | 16.8 | 22.0 |
| 3 12 | 13 26.06 | −13 19.0 | 1.528 | 2.420 | 13.1 | 21.8 |
| 3 22 | 13 19.53 | −12 17.7 | 1.474 | 2.428 | 8.7 | 21.6 |
| 4 1 | 13 11.26 | −10 59.3 | 1.446 | 2.436 | 4.0 | 21.3 |
| 4 11 | 13 2.34 | − 9 31.2 | 1.444 | 2.444 | 1.7 | 21.2 |
| 4 21 | 12 53.94 | − 8 2.3 | 1.469 | 2.452 | 6.4 | 21.5 |
| 5 1 | 12 47.09 | − 6 41.8 | 1.520 | 2.459 | 10.9 | 21.7 |
| 5 11 | 12 42.52 | − 5 36.6 | 1.594 | 2.466 | 14.8 | 22.0 |

**311247** 2005 $EU_{15}$ 4 7.4 129°.15 0°.5/ 6.9 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.27 | − 8 29.3 | 1.931 | 2.740 | 14.3 | 22.3 |
| 3 12 | 13 27.93 | − 7 53.1 | 1.861 | 2.756 | 10.9 | 22.1 |
| 3 22 | 13 20.46 | − 7 4.7 | 1.814 | 2.772 | 7.0 | 21.9 |
| 4 1 | 13 11.57 | − 6 8.1 | 1.794 | 2.787 | 2.7 | 21.7 |
| 4 11 | 13 2.20 | − 5 9.1 | 1.802 | 2.802 | 1.8 | 21.6 |
| 4 21 | 12 53.34 | − 4 14.0 | 1.840 | 2.816 | 6.1 | 21.9 |
| 5 1 | 12 45.85 | − 3 28.3 | 1.904 | 2.828 | 9.9 | 22.2 |
| 5 11 | 12 40.35 | − 2 56.0 | 1.992 | 2.841 | 13.2 | 22.4 |

**377335** 2004 $PF_{39}$ 4 7.4 227°.91 3°.4/ 3.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.96 | − 0 35.2 | 2.206 | 3.036 | 12.0 | 21.2 |
| 3 12 | 13 23.85 | + 0 40.0 | 2.117 | 3.026 | 9.1 | 20.9 |
| 3 22 | 13 17.88 | + 2 3.0 | 2.053 | 3.015 | 5.9 | 20.7 |
| 4 1 | 13 10.59 | + 3 28.0 | 2.017 | 3.005 | 3.5 | 20.6 |
| 4 11 | 13 2.72 | + 4 47.7 | 2.010 | 2.993 | 4.5 | 20.6 |
| 4 21 | 12 55.11 | + 5 55.7 | 2.032 | 2.981 | 7.7 | 20.8 |
| 5 1 | 12 48.51 | + 6 47.0 | 2.080 | 2.969 | 10.9 | 20.9 |
| 5 11 | 12 43.55 | + 7 19.2 | 2.150 | 2.956 | 13.9 | 21.1 |

**120893** 1998 $SN_8$ 4 7.4 311°.64 0°.6/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.15 | − 9 40.2 | 1.252 | 2.095 | 18.5 | 19.7 |
| 3 12 | 13 24.63 | − 8 58.0 | 1.169 | 2.083 | 14.3 | 19.4 |
| 3 22 | 13 19.10 | − 7 54.0 | 1.106 | 2.072 | 9.3 | 19.1 |
| 4 1 | 13 11.25 | − 6 33.2 | 1.066 | 2.061 | 3.6 | 18.8 |
| 4 11 | 13 2.32 | − 5 4.6 | 1.050 | 2.050 | 2.5 | 18.6 |
| 4 21 | 12 53.76 | − 3 39.7 | 1.059 | 2.040 | 8.5 | 19.0 |
| 5 1 | 12 46.95 | − 2 29.4 | 1.090 | 2.031 | 14.0 | 19.2 |
| 5 11 | 12 42.87 | − 1 41.2 | 1.141 | 2.021 | 18.8 | 19.5 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **68846** 2002 $GV_{144}$ | | | 4 7.4 249°.55 | 2°.1/ 5.6 17 | | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.14 | − 4 47.6 | 1.758 | 2.585 | 14.7 | 20.3 |
| 3 12 | 13 26.85 | − 4 2.5 | 1.664 | 2.571 | 11.3 | 20.1 |
| 3 22 | 13 20.12 | − 3 5.3 | 1.592 | 2.556 | 7.2 | 19.8 |
| 4 1 | 13 11.57 | − 2 1.0 | 1.546 | 2.540 | 3.0 | 19.5 |
| 4 11 | 13 2.15 | − 0 56.6 | 1.529 | 2.524 | 3.3 | 19.5 |
| 4 21 | 12 52.97 | + 0 0.4 | 1.538 | 2.508 | 7.7 | 19.7 |
| 5 1 | 12 45.10 | + 0 43.5 | 1.573 | 2.491 | 12.1 | 19.9 |
| 5 11 | 12 39.37 | + 1 8.6 | 1.630 | 2.473 | 15.9 | 20.1 |
| **503032** 2015 $FK_{143}$ | | | 4 7.4 100°.97 | 0°.7/ 6.7 17 | | |
| 3 2 | 13 26.41 | − 9 0.8 | 2.146 | 2.960 | 12.9 | 21.5 |
| 3 12 | 13 22.61 | − 8 4.7 | 2.069 | 2.968 | 9.8 | 21.3 |
| 3 22 | 13 17.02 | − 6 55.9 | 2.016 | 2.976 | 6.2 | 21.1 |
| 4 1 | 13 10.21 | − 5 38.9 | 1.990 | 2.985 | 2.4 | 20.8 |
| 4 11 | 13 2.97 | − 4 19.8 | 1.994 | 2.993 | 1.9 | 20.8 |
| 4 21 | 12 56.10 | − 3 5.2 | 2.026 | 3.001 | 5.7 | 21.1 |
| 5 1 | 12 50.31 | − 2 0.9 | 2.085 | 3.009 | 9.2 | 21.3 |
| 5 11 | 12 46.17 | − 1 10.9 | 2.168 | 3.016 | 12.3 | 21.5 |
| **321819** 2010 $RZ_{43}$ | | | 4 7.4 236°.83 | 1°.7/ 5.9 17 | | |
| 3 2 | 13 31.30 | − 5 29.9 | 1.916 | 2.737 | 13.9 | 21.8 |
| 3 12 | 13 26.76 | − 4 46.0 | 1.820 | 2.724 | 10.7 | 21.5 |
| 3 22 | 13 19.97 | − 3 50.4 | 1.747 | 2.710 | 6.8 | 21.3 |
| 4 1 | 13 11.49 | − 2 47.6 | 1.701 | 2.695 | 2.8 | 21.0 |
| 4 11 | 13 2.23 | − 1 44.0 | 1.684 | 2.680 | 2.9 | 21.0 |
| 4 21 | 12 53.19 | − 0 46.3 | 1.694 | 2.664 | 7.1 | 21.2 |
| 5 1 | 12 45.38 | − 0 0.7 | 1.731 | 2.648 | 11.2 | 21.4 |
| 5 11 | 12 39.53 | + 0 28.6 | 1.790 | 2.631 | 14.8 | 21.6 |
| **288060** 2003 $UD_{319}$ | | | 4 7.4 193°.48 | 2°.3/ 4.9 17 | | |
| 3 2 | 13 27.73 | − 3 11.4 | 2.143 | 2.970 | 12.4 | 20.8 |
| 3 12 | 13 23.65 | − 2 19.6 | 2.062 | 2.969 | 9.4 | 20.6 |
| 3 22 | 13 17.73 | − 1 19.5 | 2.005 | 2.968 | 6.0 | 20.3 |
| 4 1 | 13 10.52 | − 0 16.1 | 1.975 | 2.967 | 2.8 | 20.1 |
| 4 11 | 13 2.80 | + 0 44.6 | 1.974 | 2.966 | 3.3 | 20.2 |
| 4 21 | 12 55.39 | + 1 36.9 | 2.001 | 2.964 | 6.7 | 20.4 |
| 5 1 | 12 49.06 | + 2 16.1 | 2.054 | 2.963 | 10.1 | 20.6 |
| 5 11 | 12 44.40 | + 2 39.6 | 2.130 | 2.961 | 13.1 | 20.8 |
| **345896** 2007 $RE_{96}$ | | | 4 7.4 126°.16 | 0°.9/ 6.5 17 | | |
| 3 2 | 13 30.77 | − 5 9.9 | 2.250 | 3.064 | 12.4 | 21.6 |
| 3 12 | 13 25.84 | − 4 56.8 | 2.170 | 3.069 | 9.4 | 21.4 |
| 3 22 | 13 19.08 | − 4 36.4 | 2.115 | 3.075 | 6.0 | 21.2 |
| 4 1 | 13 11.04 | − 4 11.8 | 2.086 | 3.080 | 2.3 | 21.0 |
| 4 11 | 13 2.52 | − 3 46.8 | 2.087 | 3.085 | 2.0 | 21.0 |
| 4 21 | 12 54.34 | − 3 25.6 | 2.116 | 3.090 | 5.6 | 21.2 |
| 5 1 | 12 47.26 | − 3 11.5 | 2.173 | 3.095 | 9.0 | 21.4 |
| 5 11 | 12 41.86 | − 3 7.3 | 2.254 | 3.100 | 12.0 | 21.6 |
| **406437** 2007 $TB_{283}$ | | | 4 7.4 122°.59 | 0°.2/ 7.2 18 | | |
| 3 2 | 13 31.08 | − 9 57.8 | 1.694 | 2.511 | 15.7 | 21.5 |
| 3 12 | 13 26.61 | − 9 13.7 | 1.622 | 2.522 | 12.0 | 21.3 |
| 3 22 | 13 19.80 | − 8 13.8 | 1.573 | 2.532 | 7.7 | 21.1 |
| 4 1 | 13 11.37 | − 7 2.6 | 1.549 | 2.542 | 3.0 | 20.8 |
| 4 11 | 13 2.36 | − 5 47.4 | 1.552 | 2.552 | 1.9 | 20.7 |
| 4 21 | 12 53.86 | − 4 35.9 | 1.584 | 2.562 | 6.6 | 21.0 |
| 5 1 | 12 46.85 | − 3 35.4 | 1.641 | 2.571 | 10.8 | 21.3 |
| 5 11 | 12 42.00 | − 2 50.8 | 1.721 | 2.580 | 14.5 | 21.6 |
| **361555** 2007 $QP_{16}$ | | | 4 7.4 204°.16 | 3°.5/10.2 16 | | |
| 3 2 | 13 34.85 | −17 7.2 | 1.860 | 2.637 | 16.0 | 21.8 |
| 3 12 | 13 29.66 | −17 22.4 | 1.766 | 2.633 | 12.9 | 21.6 |
| 3 22 | 13 21.93 | −17 20.4 | 1.692 | 2.629 | 9.3 | 21.4 |
| 4 1 | 13 12.30 | −17 0.6 | 1.644 | 2.624 | 5.5 | 21.1 |
| 4 11 | 13 1.79 | −16 25.6 | 1.624 | 2.618 | 3.5 | 21.0 |
| 4 21 | 12 51.54 | −15 40.1 | 1.631 | 2.611 | 6.1 | 21.1 |
| 5 1 | 12 42.69 | −14 51.0 | 1.665 | 2.604 | 10.0 | 21.3 |
| 5 11 | 12 36.07 | −14 5.3 | 1.723 | 2.597 | 13.7 | 21.5 |
| **294767** 2008 $CC_{32}$ | | | 4 7.4 41°.41 | 1°.3/ 6.1 17 | | |
| 3 2 | 13 26.82 | − 5 21.0 | 2.065 | 2.891 | 12.9 | 20.6 |
| 3 12 | 13 22.96 | − 4 48.3 | 1.995 | 2.901 | 9.7 | 20.4 |
| 3 22 | 13 17.26 | − 4 6.7 | 1.948 | 2.911 | 6.1 | 20.2 |
| 4 1 | 13 10.32 | − 3 20.6 | 1.927 | 2.921 | 2.4 | 20.0 |
| 4 11 | 13 2.94 | − 2 35.0 | 1.935 | 2.932 | 2.4 | 20.0 |
| 4 21 | 12 55.95 | − 1 55.2 | 1.970 | 2.943 | 6.0 | 20.3 |
| 5 1 | 12 50.09 | − 1 25.4 | 2.032 | 2.954 | 9.5 | 20.5 |
| 5 11 | 12 45.93 | − 1 8.5 | 2.117 | 2.965 | 12.5 | 20.7 |
| **169783** 2002 $PB_{133}$ | | | 4 7.4 237°.71 | 0°.4/ 7.8 17 | | |
| 3 2 | 13 31.33 | −10 26.6 | 1.867 | 2.675 | 14.7 | 20.8 |
| 3 12 | 13 26.88 | −10 6.2 | 1.771 | 2.665 | 11.5 | 20.6 |
| 3 22 | 13 20.09 | − 9 31.2 | 1.697 | 2.654 | 7.6 | 20.3 |
| 4 1 | 13 11.56 | − 8 44.5 | 1.650 | 2.642 | 3.2 | 20.0 |
| 4 11 | 13 2.22 | − 7 50.8 | 1.630 | 2.630 | 1.6 | 19.9 |
| 4 21 | 12 53.12 | − 6 56.3 | 1.638 | 2.618 | 6.1 | 20.1 |
| 5 1 | 12 45.29 | − 6 7.8 | 1.673 | 2.605 | 10.5 | 20.4 |
| 5 11 | 12 39.51 | − 5 30.7 | 1.730 | 2.592 | 14.3 | 20.6 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **507546** 2012 $XZ_{100}$ | | | 4 7.4 330°.50 | 5°.0/12.4 17 | | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.58 | −22 42.1 | 2.085 | 2.842 | 15.1 | 20.6 |
| 3 12 | 13 23.91 | −23 3.2 | 1.989 | 2.836 | 12.6 | 20.4 |
| 3 22 | 13 18.12 | −23 5.4 | 1.914 | 2.830 | 9.7 | 20.2 |
| 4 1 | 13 10.76 | −22 47.5 | 1.862 | 2.824 | 6.8 | 20.0 |
| 4 11 | 13 2.67 | −22 11.0 | 1.837 | 2.818 | 5.1 | 19.9 |
| 4 21 | 12 54.81 | −21 20.1 | 1.838 | 2.813 | 6.1 | 19.9 |
| 5 1 | 12 48.12 | −20 20.9 | 1.866 | 2.809 | 8.9 | 20.1 |
| 5 11 | 12 43.29 | −19 20.7 | 1.918 | 2.804 | 12.0 | 20.3 |
| **466167** 2012 $JC_{20}$ | | | 4 7.4 308°.16 | 0°.6/ 6.8 17 | | |
| 3 2 | 13 24.70 | −10 34.8 | 1.579 | 2.410 | 16.0 | 21.0 |
| 3 12 | 13 22.19 | − 9 31.4 | 1.485 | 2.393 | 12.3 | 20.7 |
| 3 22 | 13 17.25 | − 8 6.8 | 1.413 | 2.376 | 8.0 | 20.4 |
| 4 1 | 13 10.47 | − 6 25.7 | 1.365 | 2.359 | 3.1 | 20.1 |
| 4 11 | 13 2.83 | − 4 36.8 | 1.344 | 2.343 | 2.3 | 20.0 |
| 4 21 | 12 55.45 | − 2 50.8 | 1.349 | 2.327 | 7.4 | 20.2 |
| 5 1 | 12 49.41 | − 1 17.9 | 1.379 | 2.312 | 12.3 | 20.5 |
| 5 11 | 12 45.55 | − 0 5.8 | 1.431 | 2.297 | 16.5 | 20.7 |
| **512313** 2016 $JU_{14}$ | | | 4 7.4 212°.80 | 5°.1/ 1.7 17 | | |
| 3 2 | 13 26.74 | + 2 47.8 | 1.927 | 2.770 | 12.9 | 21.3 |
| 3 12 | 13 23.10 | + 4 24.5 | 1.854 | 2.769 | 9.8 | 21.1 |
| 3 22 | 13 17.48 | + 6 7.0 | 1.806 | 2.767 | 6.8 | 20.9 |
| 4 1 | 13 10.46 | + 7 47.1 | 1.786 | 2.765 | 5.1 | 20.8 |
| 4 11 | 13 2.89 | + 9 16.0 | 1.793 | 2.763 | 6.4 | 20.9 |
| 4 21 | 12 55.68 | +10 26.5 | 1.827 | 2.761 | 9.5 | 21.0 |
| 5 1 | 12 49.65 | +11 14.1 | 1.885 | 2.759 | 12.6 | 21.2 |
| 5 11 | 12 45.42 | +11 37.4 | 1.964 | 2.757 | 15.5 | 21.4 |
| **179133** 2001 $SF_{293}$ | | | 4 7.4 193°.13 | 1°.2/ 9.7 18 | | |
| 3 2 | 13 21.78 | −14 30.4 | 4.575 | 5.343 | 7.3 | 20.4 |
| 3 12 | 13 18.27 | −14 26.2 | 4.476 | 5.342 | 5.7 | 20.3 |
| 3 22 | 13 13.90 | −14 15.1 | 4.403 | 5.342 | 4.0 | 20.1 |
| 4 1 | 13 8.94 | −13 58.1 | 4.358 | 5.341 | 2.1 | 20.0 |
| 4 11 | 13 3.75 | −13 36.8 | 4.343 | 5.340 | 1.2 | 19.9 |
| 4 21 | 12 58.67 | −13 12.9 | 4.359 | 5.340 | 2.6 | 20.0 |
| 5 1 | 12 54.05 | −12 48.6 | 4.404 | 5.339 | 4.4 | 20.1 |
| 5 11 | 12 50.19 | −12 26.0 | 4.476 | 5.338 | 6.2 | 20.3 |
| **501180** 2013 $TU_{99}$ | | | 4 7.4 144°.66 | 0°.3/ 7.8 17 | | |
| 3 2 | 13 33.75 | − 8 43.9 | 2.396 | 3.191 | 12.3 | 21.7 |
| 3 12 | 13 28.00 | − 8 44.3 | 2.314 | 3.200 | 9.5 | 21.5 |
| 3 22 | 13 20.43 | − 8 35.9 | 2.256 | 3.210 | 6.2 | 21.3 |
| 4 1 | 13 11.60 | − 8 20.6 | 2.226 | 3.218 | 2.6 | 21.1 |
| 4 11 | 13 2.28 | − 8 1.5 | 2.226 | 3.227 | 1.3 | 21.0 |
| 4 21 | 12 53.31 | − 7 42.1 | 2.256 | 3.234 | 4.9 | 21.2 |
| 5 1 | 12 45.44 | − 7 26.0 | 2.315 | 3.242 | 8.3 | 21.5 |
| 5 11 | 12 39.24 | − 7 16.5 | 2.398 | 3.248 | 11.2 | 21.7 |
| **62599** 2000 $SA_{318}$ | | | 4 7.4 178°.78 | 2°.4/ 9.7 18 | | |
| 3 2 | 13 32.23 | −16 31.2 | 1.928 | 2.710 | 15.3 | 19.9 |
| 3 12 | 13 27.44 | −16 15.6 | 1.839 | 2.712 | 12.2 | 19.7 |
| 3 22 | 13 20.37 | −15 41.4 | 1.772 | 2.714 | 8.5 | 19.5 |
| 4 1 | 13 11.65 | −14 50.1 | 1.730 | 2.714 | 4.6 | 19.3 |
| 4 11 | 13 2.24 | −13 45.9 | 1.716 | 2.714 | 2.5 | 19.1 |
| 4 21 | 12 53.19 | −12 35.2 | 1.731 | 2.713 | 5.6 | 19.3 |
| 5 1 | 12 45.48 | −11 25.4 | 1.773 | 2.712 | 9.6 | 19.5 |
| 5 11 | 12 39.81 | −10 23.7 | 1.839 | 2.710 | 13.2 | 19.8 |
| **16795** 1997 $CA_{3}$ | | | 4 7.4 122°.64 | 1°.4/ 5.7 18 | | |
| 3 2 | 13 27.64 | − 4 8.4 | 2.673 | 3.487 | 10.6 | 19.3 |
| 3 12 | 13 23.15 | − 3 31.9 | 2.600 | 3.500 | 8.0 | 19.2 |
| 3 22 | 13 17.20 | − 2 49.2 | 2.551 | 3.512 | 5.0 | 19.0 |
| 4 1 | 13 10.29 | − 2 3.8 | 2.531 | 3.525 | 2.1 | 18.8 |
| 4 11 | 13 3.04 | − 1 19.8 | 2.541 | 3.536 | 2.3 | 18.8 |
| 4 21 | 12 56.09 | − 0 41.1 | 2.580 | 3.548 | 5.2 | 19.0 |
| 5 1 | 12 50.06 | − 0 11.2 | 2.648 | 3.559 | 8.0 | 19.2 |
| 5 11 | 12 45.38 | + 0 7.8 | 2.739 | 3.570 | 10.6 | 19.4 |
| **284711** 2008 $TL_{120}$ | | | 4 7.4 192°.44 | 1°.6/ 6.0 17 | | |
| 3 2 | 13 34.67 | − 5 17.3 | 1.916 | 2.731 | 14.2 | 22.2 |
| 3 12 | 13 29.23 | − 4 38.8 | 1.829 | 2.729 | 10.8 | 22.0 |
| 3 22 | 13 21.49 | − 3 49.6 | 1.766 | 2.727 | 6.9 | 21.7 |
| 4 1 | 13 12.10 | − 2 54.3 | 1.730 | 2.723 | 2.8 | 21.5 |
| 4 11 | 13 2.00 | − 1 59.0 | 1.722 | 2.719 | 2.8 | 21.4 |
| 4 21 | 12 52.26 | − 1 9.9 | 1.744 | 2.713 | 6.9 | 21.7 |
| 5 1 | 12 43.84 | − 0 32.4 | 1.792 | 2.707 | 11.0 | 21.9 |
| 5 11 | 12 37.48 | − 0 10.3 | 1.863 | 2.700 | 14.5 | 22.1 |
| **176228** 2001 $QF_{140}$ | | | 4 7.4 124°.54 | 4°.2/12.4 18 | | |
| 3 2 | 13 33.54 | −23 10.4 | 2.982 | 3.700 | 11.8 | 20.6 |
| 3 12 | 13 27.63 | −23 40.0 | 2.897 | 3.718 | 9.8 | 20.5 |
| 3 22 | 13 20.11 | −23 55.8 | 2.835 | 3.735 | 7.5 | 20.4 |
| 4 1 | 13 11.46 | −23 57.0 | 2.800 | 3.751 | 5.4 | 20.2 |
| 4 11 | 13 2.38 | −23 44.6 | 2.793 | 3.767 | 4.2 | 20.2 |
| 4 21 | 12 53.57 | −23 21.1 | 2.817 | 3.783 | 4.9 | 20.3 |
| 5 1 | 12 45.70 | −22 50.1 | 2.870 | 3.798 | 6.8 | 20.4 |
| 5 11 | 12 39.30 | −22 16.3 | 2.949 | 3.812 | 9.0 | 20.6 |

**21092** 1992 $EJ_6$ 4 7.4 156°.49 3°.2/ 4.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.49 | − 0 32.8 | 2.005 | 2.839 | 12.9 | 19.2 |
| 3 12 | 13 24.34 | + 0 20.7 | 1.930 | 2.840 | 9.7 | 19.0 |
| 3 22 | 13 18.23 | + 1 20.7 | 1.878 | 2.841 | 6.3 | 18.8 |
| 4 1 | 13 10.76 | + 2 21.4 | 1.853 | 2.843 | 3.5 | 18.6 |
| 4 11 | 13 2.77 | + 3 16.3 | 1.856 | 2.844 | 4.3 | 18.7 |
| 4 21 | 12 55.13 | + 3 59.8 | 1.887 | 2.845 | 7.6 | 18.9 |
| 5 1 | 12 48.68 | + 4 27.7 | 1.944 | 2.846 | 11.0 | 19.1 |
| 5 11 | 12 44.00 | + 4 38.2 | 2.022 | 2.846 | 14.0 | 19.3 |

**43440** 2000 $YT_{60}$ 4 7.4 261°.58 2°.6/ 5.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.21 | − 3 48.4 | 1.616 | 2.452 | 15.4 | 19.4 |
| 3 12 | 13 26.27 | − 3 0.9 | 1.531 | 2.443 | 11.7 | 19.2 |
| 3 22 | 13 19.81 | − 2 1.8 | 1.468 | 2.433 | 7.5 | 18.9 |
| 4 1 | 13 11.49 | − 0 56.8 | 1.431 | 2.424 | 3.4 | 18.6 |
| 4 11 | 13 2.33 | + 0 6.2 | 1.420 | 2.414 | 3.9 | 18.6 |
| 4 21 | 12 53.51 | + 0 59.5 | 1.436 | 2.405 | 8.3 | 18.9 |
| 5 1 | 12 46.12 | + 1 36.7 | 1.476 | 2.395 | 12.7 | 19.1 |
| 5 11 | 12 40.98 | + 1 54.2 | 1.538 | 2.385 | 16.5 | 19.3 |

**317627** 2003 $BX_{78}$ 4 7.4 71°.71 3°.7/10.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.61 | −17 13.0 | 1.682 | 2.471 | 16.9 | 20.5 |
| 3 12 | 13 27.95 | −17 31.7 | 1.610 | 2.483 | 13.6 | 20.3 |
| 3 22 | 13 20.78 | −17 31.7 | 1.558 | 2.496 | 9.7 | 20.1 |
| 4 1 | 13 11.82 | −17 13.0 | 1.529 | 2.509 | 5.8 | 19.9 |
| 4 11 | 13 2.19 | −16 39.0 | 1.528 | 2.522 | 3.7 | 19.8 |
| 4 21 | 12 53.06 | −15 55.1 | 1.553 | 2.535 | 6.2 | 20.0 |
| 5 1 | 12 45.50 | −15 8.4 | 1.604 | 2.548 | 10.0 | 20.2 |
| 5 11 | 12 40.25 | −14 26.1 | 1.678 | 2.561 | 13.6 | 20.4 |

**336919** 2011 $HX_{35}$ 4 7.4 292°.28 0°.7/ 8.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.20 | −11 58.6 | 1.883 | 2.694 | 14.6 | 21.4 |
| 3 12 | 13 23.67 | −11 29.6 | 1.791 | 2.686 | 11.3 | 21.2 |
| 3 22 | 13 17.99 | −10 44.5 | 1.722 | 2.678 | 7.5 | 21.0 |
| 4 1 | 13 10.73 | − 9 46.1 | 1.678 | 2.670 | 3.3 | 20.7 |
| 4 11 | 13 2.78 | − 8 39.7 | 1.661 | 2.662 | 1.5 | 20.5 |
| 4 21 | 12 55.10 | − 7 32.2 | 1.672 | 2.654 | 5.8 | 20.8 |
| 5 1 | 12 48.63 | − 6 30.5 | 1.709 | 2.646 | 10.0 | 21.0 |
| 5 11 | 12 44.08 | − 5 40.6 | 1.770 | 2.639 | 13.7 | 21.2 |

**26600** 2000 $EX_{182}$ 4 7.4 234°.15 1°.3/ 8.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.84 | −12 23.3 | 1.708 | 2.511 | 16.1 | 19.5 |
| 3 12 | 13 29.12 | −12 11.3 | 1.610 | 2.499 | 12.7 | 19.3 |
| 3 22 | 13 21.74 | −11 42.4 | 1.533 | 2.485 | 8.6 | 19.0 |
| 4 1 | 13 12.31 | −10 58.3 | 1.481 | 2.472 | 4.0 | 18.7 |
| 4 11 | 13 1.88 | −10 3.4 | 1.457 | 2.457 | 1.8 | 18.5 |
| 4 21 | 12 51.67 | − 9 4.6 | 1.460 | 2.442 | 6.5 | 18.8 |
| 5 1 | 12 42.87 | − 8 9.5 | 1.490 | 2.426 | 11.2 | 19.0 |
| 5 11 | 12 36.40 | − 7 25.1 | 1.542 | 2.409 | 15.4 | 19.2 |

**48286** 2002 $GZ_{96}$ 4 7.4 148°.09 0°.6/ 8.1 18 R

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.31 | −12 9.0 | 2.129 | 2.930 | 13.4 | 20.1 |
| 3 12 | 13 24.15 | −11 32.9 | 2.046 | 2.935 | 10.4 | 19.9 |
| 3 22 | 13 18.09 | −10 42.3 | 1.986 | 2.939 | 6.9 | 19.6 |
| 4 1 | 13 10.71 | − 9 40.3 | 1.952 | 2.944 | 3.0 | 19.4 |
| 4 11 | 13 2.82 | − 8 32.1 | 1.947 | 2.948 | 1.3 | 19.3 |
| 4 21 | 12 55.28 | − 7 23.7 | 1.971 | 2.952 | 5.2 | 19.6 |
| 5 1 | 12 48.87 | − 6 21.4 | 2.023 | 2.956 | 8.9 | 19.8 |
| 5 11 | 12 44.19 | − 5 30.2 | 2.098 | 2.959 | 12.2 | 20.0 |

**384252** 2009 $ES_3$ 4 7.4 63°.13 5°.0/12.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.45 | −22 1.9 | 2.052 | 2.802 | 15.5 | 20.4 |
| 3 12 | 13 28.14 | −22 37.6 | 1.986 | 2.828 | 12.8 | 20.2 |
| 3 22 | 13 20.67 | −22 54.8 | 1.940 | 2.854 | 9.7 | 20.1 |
| 4 1 | 13 11.73 | −22 52.6 | 1.919 | 2.880 | 6.7 | 19.9 |
| 4 11 | 13 2.28 | −22 32.7 | 1.925 | 2.905 | 5.0 | 19.9 |
| 4 21 | 12 53.34 | −21 59.1 | 1.959 | 2.931 | 6.1 | 20.0 |
| 5 1 | 12 45.78 | −21 17.7 | 2.020 | 2.957 | 8.7 | 20.2 |
| 5 11 | 12 40.24 | −20 35.2 | 2.105 | 2.982 | 11.5 | 20.4 |

**419581** 2010 $RD_{80}$ 4 7.4 182°.34 0°.3/ 7.8 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.77 | −10 52.9 | 2.142 | 2.939 | 13.5 | 22.7 |
| 3 12 | 13 26.81 | −10 22.3 | 2.053 | 2.941 | 10.4 | 22.5 |
| 3 22 | 13 19.83 | − 9 38.3 | 1.987 | 2.941 | 6.8 | 22.2 |
| 4 1 | 13 11.42 | − 8 43.8 | 1.949 | 2.941 | 2.8 | 22.0 |
| 4 11 | 13 2.43 | − 7 43.6 | 1.939 | 2.940 | 1.4 | 21.9 |
| 4 21 | 12 53.76 | − 6 43.5 | 1.959 | 2.938 | 5.5 | 22.1 |
| 5 1 | 12 46.25 | − 5 49.5 | 2.007 | 2.935 | 9.2 | 22.4 |
| 5 11 | 12 40.55 | − 5 6.2 | 2.079 | 2.932 | 12.6 | 22.6 |

**8619** 1981 $EH_1$ 4 7.4 35°.38 2°.7/ 4.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.69 | − 2 46.4 | 1.871 | 2.710 | 13.5 | 17.1 |
| 3 12 | 13 22.27 | − 1 48.7 | 1.807 | 2.721 | 10.1 | 16.9 |
| 3 22 | 13 16.90 | − 0 42.8 | 1.766 | 2.732 | 6.4 | 16.7 |
| 4 1 | 13 10.23 | + 0 25.3 | 1.752 | 2.744 | 3.1 | 16.5 |
| 4 11 | 13 3.12 | + 1 28.7 | 1.765 | 2.756 | 3.8 | 16.6 |
| 4 21 | 12 56.44 | + 2 21.1 | 1.805 | 2.769 | 7.3 | 16.8 |
| 5 1 | 12 50.98 | + 2 57.9 | 1.871 | 2.782 | 10.8 | 17.1 |
| 5 11 | 12 47.32 | + 3 17.0 | 1.958 | 2.796 | 13.8 | 17.3 |

**141934** 2002 $PL_{94}$ 4 7.4 247°.35 0°.6/ 8.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.36 | −12 0.2 | 1.941 | 2.743 | 14.5 | 21.2 |
| 3 12 | 13 26.13 | −11 28.1 | 1.837 | 2.727 | 11.3 | 21.0 |
| 3 22 | 13 19.64 | −10 39.5 | 1.756 | 2.710 | 7.5 | 20.7 |
| 4 1 | 13 11.43 | − 9 36.7 | 1.701 | 2.693 | 3.3 | 20.4 |
| 4 11 | 13 2.39 | − 8 25.2 | 1.674 | 2.675 | 1.5 | 20.3 |
| 4 21 | 12 53.54 | − 7 11.6 | 1.675 | 2.656 | 6.0 | 20.5 |
| 5 1 | 12 45.86 | − 6 3.6 | 1.704 | 2.637 | 10.3 | 20.7 |
| 5 11 | 12 40.15 | − 5 7.4 | 1.756 | 2.617 | 14.1 | 20.9 |

**62771** 2000 $UN_{18}$ 4 7.4 11°.54 1°.4/ 8.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.74 | −11 42.5 | 2.290 | 3.085 | 12.8 | 19.2 |
| 3 12 | 13 25.17 | −11 51.3 | 2.202 | 3.086 | 10.0 | 19.0 |
| 3 22 | 13 18.74 | −11 49.4 | 2.137 | 3.086 | 6.7 | 18.8 |
| 4 1 | 13 10.99 | −11 38.0 | 2.098 | 3.087 | 3.2 | 18.6 |
| 4 11 | 13 2.68 | −11 19.7 | 2.088 | 3.088 | 1.6 | 18.5 |
| 4 21 | 12 54.63 | −10 58.3 | 2.107 | 3.089 | 4.8 | 18.7 |
| 5 1 | 12 47.63 | −10 37.8 | 2.153 | 3.090 | 8.3 | 18.9 |
| 5 11 | 12 42.29 | −10 22.2 | 2.224 | 3.091 | 11.4 | 19.1 |

**153044** 2000 $QG_{47}$ 4 7.4 264°.14 0°.8/ 8.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.15 | −11 2.4 | 2.052 | 2.853 | 13.9 | 20.8 |
| 3 12 | 13 26.67 | −10 50.7 | 1.943 | 2.831 | 10.9 | 20.6 |
| 3 22 | 13 19.98 | −10 25.8 | 1.856 | 2.810 | 7.3 | 20.3 |
| 4 1 | 13 11.58 | − 9 49.2 | 1.796 | 2.787 | 3.2 | 20.0 |
| 4 11 | 13 2.32 | − 9 5.0 | 1.764 | 2.764 | 1.5 | 19.8 |
| 4 21 | 12 53.16 | − 8 18.2 | 1.761 | 2.741 | 5.7 | 20.1 |
| 5 1 | 12 45.08 | − 7 34.8 | 1.784 | 2.717 | 9.9 | 20.3 |
| 5 11 | 12 38.89 | − 7 0.2 | 1.831 | 2.693 | 13.6 | 20.4 |

**423934** 2006 $TA_{75}$ 4 7.4 175°.40 0°.7/ 8.3 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.38 | −13 14.7 | 2.292 | 3.080 | 13.0 | 22.7 |
| 3 12 | 13 25.61 | −12 31.1 | 2.202 | 3.084 | 10.1 | 22.5 |
| 3 22 | 13 18.99 | −11 32.6 | 2.136 | 3.086 | 6.7 | 22.3 |
| 4 1 | 13 11.07 | −10 21.8 | 2.098 | 3.088 | 3.0 | 22.1 |
| 4 11 | 13 2.65 | − 9 4.1 | 2.089 | 3.089 | 1.3 | 21.9 |
| 4 21 | 12 54.55 | − 7 45.4 | 2.110 | 3.089 | 5.0 | 22.2 |
| 5 1 | 12 47.54 | − 6 32.2 | 2.159 | 3.089 | 8.6 | 22.4 |
| 5 11 | 12 42.20 | − 5 29.8 | 2.234 | 3.088 | 11.8 | 22.6 |

**31718** 1999 $JO_{58}$ 4 7.4 40°.55 5°.2/12.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.62 | −24 0.5 | 1.581 | 2.354 | 18.5 | 17.4 |
| 3 12 | 13 23.62 | −23 46.9 | 1.507 | 2.364 | 15.3 | 17.2 |
| 3 22 | 13 18.09 | −23 5.0 | 1.451 | 2.375 | 11.6 | 17.0 |
| 4 1 | 13 10.79 | −21 55.1 | 1.418 | 2.386 | 7.7 | 16.8 |
| 4 11 | 13 2.83 | −20 22.0 | 1.409 | 2.397 | 5.3 | 16.7 |
| 4 21 | 12 55.40 | −18 34.7 | 1.427 | 2.409 | 6.6 | 16.8 |
| 5 1 | 12 49.56 | −16 44.1 | 1.470 | 2.421 | 10.1 | 17.0 |
| 5 11 | 12 46.01 | −15 1.1 | 1.537 | 2.434 | 13.8 | 17.3 |

**132254** 2002 $EZ_{100}$ 4 7.4 351°.91 4°.9/ 4.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.07 | + 1 51.6 | 1.370 | 2.221 | 16.7 | 19.7 |
| 3 12 | 13 27.98 | + 2 36.1 | 1.301 | 2.219 | 12.8 | 19.5 |
| 3 22 | 13 21.02 | + 3 26.0 | 1.253 | 2.218 | 8.5 | 19.2 |
| 4 1 | 13 12.00 | + 4 13.6 | 1.229 | 2.217 | 5.2 | 19.0 |
| 4 11 | 13 2.15 | + 4 50.1 | 1.230 | 2.216 | 6.2 | 19.1 |
| 4 21 | 12 52.85 | + 5 8.9 | 1.256 | 2.216 | 10.2 | 19.3 |
| 5 1 | 12 45.32 | + 5 6.0 | 1.305 | 2.216 | 14.6 | 19.5 |
| 5 11 | 12 40.38 | + 4 40.9 | 1.373 | 2.216 | 18.4 | 19.8 |

**207019** 2004 $VY_{12}$ 4 7.4 251°.86 0°.4/ 7.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.06 | − 9 37.6 | 1.722 | 2.538 | 15.5 | 20.8 |
| 3 12 | 13 26.95 | − 8 56.8 | 1.622 | 2.521 | 12.0 | 20.5 |
| 3 22 | 13 20.32 | − 7 58.9 | 1.544 | 2.503 | 7.8 | 20.2 |
| 4 1 | 13 11.76 | − 6 47.6 | 1.491 | 2.485 | 3.1 | 19.9 |
| 4 11 | 13 2.24 | − 5 29.5 | 1.466 | 2.466 | 2.0 | 19.7 |
| 4 21 | 12 52.92 | − 4 12.7 | 1.469 | 2.446 | 7.0 | 20.0 |
| 5 1 | 12 44.92 | − 3 5.6 | 1.497 | 2.426 | 11.7 | 20.2 |
| 5 11 | 12 39.12 | − 2 14.6 | 1.548 | 2.406 | 15.9 | 20.4 |

**303749** 2005 $QT_{103}$ 4 7.5 172°.83 1°.5/ 5.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.53 | − 4 54.2 | 2.694 | 3.510 | 10.5 | 21.2 |
| 3 12 | 13 21.65 | − 4 0.5 | 2.610 | 3.512 | 7.9 | 21.1 |
| 3 22 | 13 16.31 | − 2 58.9 | 2.551 | 3.513 | 5.0 | 20.9 |
| 4 1 | 13 9.99 | − 1 53.5 | 2.521 | 3.515 | 2.1 | 20.7 |
| 4 11 | 13 3.29 | − 0 49.1 | 2.521 | 3.515 | 2.4 | 20.7 |
| 4 21 | 12 56.84 | + 0 9.6 | 2.550 | 3.516 | 5.3 | 20.9 |
| 5 1 | 12 51.22 | + 0 58.6 | 2.607 | 3.516 | 8.2 | 21.1 |
| 5 11 | 12 46.91 | + 1 35.0 | 2.689 | 3.517 | 10.8 | 21.3 |

**89245** 2001 $UQ_{167}$ 4 7.5 280°.92 1°.1/ 8.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.31 | − 9 8.2 | 1.783 | 2.591 | 15.4 | 19.0 |
| 3 12 | 13 30.11 | − 9 32.7 | 1.689 | 2.581 | 12.0 | 18.7 |
| 3 22 | 13 22.31 | − 9 47.3 | 1.616 | 2.571 | 8.0 | 18.5 |
| 4 1 | 13 12.55 | − 9 52.8 | 1.570 | 2.561 | 3.6 | 18.2 |
| 4 11 | 13 1.83 | − 9 51.8 | 1.551 | 2.551 | 1.7 | 18.0 |
| 4 21 | 12 51.34 | − 9 47.9 | 1.560 | 2.541 | 6.2 | 18.3 |
| 5 1 | 12 42.23 | − 9 45.5 | 1.596 | 2.532 | 10.7 | 18.5 |
| 5 11 | 12 35.38 | − 9 48.9 | 1.654 | 2.522 | 14.5 | 18.7 |

**402851** 2007 $RE_{11}$ 4 7.5 167°.52 0°.4/ 7.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.39 | −10 18.0 | 2.072 | 2.869 | 13.9 | 22.8 |
| 3 12 | 13 28.84 | −10 0.3 | 1.987 | 2.874 | 10.7 | 22.6 |
| 3 22 | 13 21.16 | − 9 30.3 | 1.926 | 2.880 | 7.0 | 22.3 |
| 4 1 | 13 11.98 | − 8 50.2 | 1.892 | 2.884 | 3.0 | 22.1 |
| 4 11 | 13 2.21 | − 8 4.8 | 1.887 | 2.887 | 1.4 | 22.0 |
| 4 21 | 12 52.81 | − 7 19.1 | 1.911 | 2.890 | 5.6 | 22.3 |
| 5 1 | 12 44.67 | − 6 38.6 | 1.963 | 2.891 | 9.4 | 22.5 |
| 5 11 | 12 38.46 | − 6 7.8 | 2.039 | 2.892 | 12.8 | 22.7 |

**129456** 1992 $DR_{7}$ 4 7.5 23°.39 1°.7/ 6.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.99 | − 5 29.8 | 1.146 | 2.000 | 19.1 | 19.6 |
| 3 12 | 13 26.77 | − 5 8.0 | 1.085 | 2.006 | 14.6 | 19.3 |
| 3 22 | 13 20.41 | − 4 32.3 | 1.044 | 2.012 | 9.3 | 19.0 |
| 4 1 | 13 11.79 | − 3 48.4 | 1.025 | 2.020 | 3.7 | 18.7 |
| 4 11 | 13 2.33 | − 3 4.8 | 1.029 | 2.028 | 3.3 | 18.7 |
| 4 21 | 12 53.57 | − 2 29.8 | 1.058 | 2.037 | 8.8 | 19.1 |
| 5 1 | 12 46.82 | − 2 10.2 | 1.108 | 2.047 | 13.9 | 19.4 |
| 5 11 | 12 42.95 | − 2 9.6 | 1.178 | 2.058 | 18.3 | 19.7 |

**240267** 2002 $XU_{5}$ 4 7.5 79°.66 3°.6/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.93 | + 2 38.7 | 2.178 | 3.007 | 12.2 | 20.6 |
| 3 12 | 13 25.84 | + 3 19.6 | 2.123 | 3.030 | 9.2 | 20.5 |
| 3 22 | 13 19.00 | + 4 2.4 | 2.093 | 3.053 | 6.1 | 20.3 |
| 4 1 | 13 11.04 | + 4 42.0 | 2.090 | 3.075 | 3.8 | 20.2 |
| 4 11 | 13 2.77 | + 5 13.4 | 2.116 | 3.098 | 4.5 | 20.3 |
| 4 21 | 12 55.00 | + 5 32.7 | 2.170 | 3.120 | 7.2 | 20.5 |
| 5 1 | 12 48.43 | + 5 37.8 | 2.250 | 3.142 | 10.1 | 20.7 |
| 5 11 | 12 43.55 | + 5 28.2 | 2.353 | 3.163 | 12.7 | 20.9 |

**18315** 1981 $ED_{37}$ 4 7.5 257°.90 0°.5/ 7.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.25 | − 7 35.2 | 1.758 | 2.574 | 15.2 | 18.8 |
| 3 12 | 13 28.62 | − 7 16.1 | 1.656 | 2.555 | 11.8 | 18.5 |
| 3 22 | 13 21.43 | − 6 44.2 | 1.576 | 2.536 | 7.7 | 18.3 |
| 4 1 | 13 12.23 | − 6 2.6 | 1.521 | 2.515 | 3.0 | 17.9 |
| 4 11 | 13 2.02 | − 5 16.5 | 1.495 | 2.494 | 2.1 | 17.8 |
| 4 21 | 12 51.95 | − 4 32.2 | 1.496 | 2.473 | 7.0 | 18.1 |
| 5 1 | 12 43.19 | − 3 56.4 | 1.523 | 2.451 | 11.6 | 18.3 |
| 5 11 | 12 36.64 | − 3 33.9 | 1.572 | 2.429 | 15.7 | 18.5 |

**173830** 2001 $TO_{60}$ 4 7.5 61°.80 0°.3/ 7.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.16 | −12 24.6 | 2.073 | 2.877 | 13.7 | 19.9 |
| 3 12 | 13 23.12 | −11 28.5 | 2.014 | 2.905 | 10.4 | 19.7 |
| 3 22 | 13 17.31 | −10 17.8 | 1.979 | 2.934 | 6.8 | 19.5 |
| 4 1 | 13 10.38 | − 8 57.1 | 1.970 | 2.963 | 2.8 | 19.3 |
| 4 11 | 13 3.14 | − 7 32.8 | 1.991 | 2.991 | 1.3 | 19.3 |
| 4 21 | 12 56.40 | − 6 11.5 | 2.040 | 3.020 | 5.2 | 19.6 |
| 5 1 | 12 50.86 | − 4 59.4 | 2.117 | 3.048 | 8.7 | 19.8 |
| 5 11 | 12 47.01 | − 4 1.0 | 2.218 | 3.077 | 11.7 | 20.1 |

**184804** 2005 $TF_{112}$ 4 7.5 349°.87 1°.1/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.69 | −11 36.2 | 2.184 | 2.986 | 13.1 | 20.4 |
| 3 12 | 13 23.73 | −11 32.1 | 2.095 | 2.984 | 10.2 | 20.2 |
| 3 22 | 13 17.88 | −11 16.1 | 2.030 | 2.982 | 6.8 | 20.0 |
| 4 1 | 13 10.69 | −10 50.0 | 1.990 | 2.981 | 3.2 | 19.8 |
| 4 11 | 13 2.93 | −10 17.2 | 1.979 | 2.979 | 1.5 | 19.6 |
| 4 21 | 12 55.44 | − 9 42.1 | 1.996 | 2.978 | 5.0 | 19.9 |
| 5 1 | 12 49.01 | − 9 9.6 | 2.040 | 2.977 | 8.6 | 20.1 |
| 5 11 | 12 44.25 | − 8 43.9 | 2.108 | 2.977 | 11.8 | 20.3 |

**344381** 2001 $XQ_{216}$ 4 7.5 140°.01 7°.3/27.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.46 | +21 20.9 | 2.995 | 3.802 | 9.8 | 21.3 |
| 3 12 | 13 25.15 | +22 26.0 | 2.949 | 3.814 | 8.4 | 21.2 |
| 3 22 | 13 18.42 | +23 22.1 | 2.929 | 3.826 | 7.4 | 21.2 |
| 4 1 | 13 10.80 | +24 4.0 | 2.936 | 3.837 | 7.4 | 21.2 |
| 4 11 | 13 2.92 | +24 27.9 | 2.969 | 3.848 | 8.2 | 21.3 |
| 4 21 | 12 55.40 | +24 32.0 | 3.028 | 3.859 | 9.5 | 21.4 |
| 5 1 | 12 48.83 | +24 16.2 | 3.110 | 3.869 | 11.0 | 21.5 |
| 5 11 | 12 43.63 | +23 42.4 | 3.212 | 3.878 | 12.3 | 21.6 |

**141525** 2002 $FV_{5}$ 4 7.5 247°.43 23°.3/26.7 14 C

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 14 39.48 | +26 23.4 | 1.064 | 1.805 | 27.5 | 20.5 |
| 3 12 | 14 26.64 | +29 53.8 | 0.959 | 1.772 | 25.3 | 20.2 |
| 3 22 | 14 4.36 | +33 31.6 | 0.872 | 1.733 | 23.6 | 19.9 |
| 4 1 | 13 31.58 | +36 34.8 | 0.810 | 1.686 | 23.7 | 19.7 |
| 4 11 | 12 50.53 | +38 8.5 | 0.775 | 1.632 | 26.6 | 19.6 |
| 4 21 | 12 7.57 | +37 36.7 | 0.767 | 1.571 | 31.9 | 19.7 |
| 5 1 | 11 30.11 | +35 7.4 | 0.781 | 1.502 | 37.9 | 19.8 |
| 5 11 | 11 1.95 | +31 22.0 | 0.810 | 1.424 | 43.9 | 19.9 |

**253050** 2002 $TG_{2}$ 4 7.5 258°.50 0°.8/ 8.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.95 | −11 27.4 | 1.853 | 2.660 | 14.9 | 21.0 |
| 3 12 | 13 26.73 | −11 8.5 | 1.751 | 2.643 | 11.7 | 20.7 |
| 3 22 | 13 20.12 | −10 33.9 | 1.670 | 2.625 | 7.8 | 20.5 |
| 4 1 | 13 11.69 | − 9 46.0 | 1.615 | 2.607 | 3.4 | 20.2 |
| 4 11 | 13 2.35 | − 8 49.3 | 1.588 | 2.588 | 1.6 | 20.0 |
| 4 21 | 12 53.18 | − 7 50.2 | 1.588 | 2.569 | 6.2 | 20.2 |
| 5 1 | 12 45.24 | − 6 55.8 | 1.615 | 2.550 | 10.6 | 20.4 |
| 5 11 | 12 39.37 | − 6 12.4 | 1.665 | 2.530 | 14.6 | 20.6 |

**346154** 2007 $VH_{265}$ 4 7.5 153°.90 1°.1/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.67 | − 4 50.9 | 2.896 | 3.703 | 10.1 | 22.1 |
| 3 12 | 13 23.88 | − 4 20.3 | 2.815 | 3.711 | 7.6 | 21.9 |
| 3 22 | 13 17.68 | − 3 43.6 | 2.760 | 3.719 | 4.8 | 21.8 |
| 4 1 | 13 10.54 | − 3 3.7 | 2.733 | 3.727 | 1.9 | 21.6 |
| 4 11 | 13 3.06 | − 2 24.2 | 2.737 | 3.734 | 1.9 | 21.6 |
| 4 21 | 12 55.85 | − 1 48.8 | 2.771 | 3.740 | 4.7 | 21.8 |
| 5 1 | 12 49.47 | − 1 20.5 | 2.834 | 3.746 | 7.5 | 22.0 |
| 5 11 | 12 44.37 | − 1 1.8 | 2.921 | 3.752 | 10.0 | 22.1 |

**406492** 2007 $VV_{29}$ 4 7.5 212°.52 1°.9/ 5.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.82 | − 4 29.3 | 2.043 | 2.860 | 13.3 | 22.3 |
| 3 12 | 13 27.77 | − 3 46.6 | 1.951 | 2.852 | 10.2 | 22.1 |
| 3 22 | 13 20.57 | − 2 54.1 | 1.882 | 2.843 | 6.5 | 21.8 |
| 4 1 | 13 11.80 | − 1 56.2 | 1.840 | 2.834 | 2.8 | 21.6 |
| 4 11 | 13 2.34 | − 0 59.0 | 1.828 | 2.823 | 3.0 | 21.6 |
| 4 21 | 12 53.15 | − 0 8.3 | 1.844 | 2.812 | 6.8 | 21.8 |
| 5 1 | 12 45.14 | + 0 30.4 | 1.888 | 2.800 | 10.7 | 22.0 |
| 5 11 | 12 39.01 | + 0 53.9 | 1.954 | 2.787 | 14.1 | 22.2 |

**497540** 2006 $CU_{17}$ 4 7.5 31°.81 2°.5/ 9.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.90 | −13 47.5 | 1.642 | 2.449 | 16.5 | 20.3 |
| 3 12 | 13 26.73 | −14 4.2 | 1.568 | 2.456 | 13.1 | 20.1 |
| 3 22 | 13 20.07 | −14 4.9 | 1.514 | 2.463 | 9.0 | 19.9 |
| 4 1 | 13 11.62 | −13 50.4 | 1.485 | 2.471 | 4.7 | 19.6 |
| 4 11 | 13 2.46 | −13 24.3 | 1.481 | 2.480 | 2.6 | 19.5 |
| 4 21 | 12 53.75 | −12 51.8 | 1.505 | 2.489 | 6.1 | 19.7 |
| 5 1 | 12 46.56 | −12 19.3 | 1.553 | 2.498 | 10.2 | 20.0 |
| 5 11 | 12 41.64 | −11 52.8 | 1.625 | 2.508 | 14.0 | 20.2 |

**270319** 2001 $XJ_{32}$ 4 7.5 145°.94 1°.1/ 8.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.81 | −13 8.5 | 2.233 | 3.022 | 13.3 | 22.2 |
| 3 12 | 13 25.96 | −12 44.3 | 2.151 | 3.032 | 10.3 | 22.0 |
| 3 22 | 13 19.23 | −12 6.1 | 2.092 | 3.041 | 6.9 | 21.8 |
| 4 1 | 13 11.21 | −11 16.5 | 2.061 | 3.050 | 3.2 | 21.6 |
| 4 11 | 13 2.71 | −10 19.7 | 2.058 | 3.058 | 1.5 | 21.5 |
| 4 21 | 12 54.56 | − 9 21.1 | 2.085 | 3.066 | 4.9 | 21.7 |
| 5 1 | 12 47.56 | − 8 26.4 | 2.140 | 3.073 | 8.5 | 22.0 |
| 5 11 | 12 42.28 | − 7 40.3 | 2.219 | 3.080 | 11.6 | 22.2 |

**373470** 2000 $SF_{51}$ 4 7.5 207°.39 0°.9/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.46 | −13 48.9 | 2.269 | 3.059 | 13.0 | 21.6 |
| 3 12 | 13 24.27 | −13 5.2 | 2.172 | 3.054 | 10.2 | 21.4 |
| 3 22 | 13 18.21 | −12 5.5 | 2.099 | 3.049 | 6.8 | 21.1 |
| 4 1 | 13 10.83 | −10 52.6 | 2.053 | 3.043 | 3.1 | 20.9 |
| 4 11 | 13 2.89 | − 9 31.5 | 2.036 | 3.036 | 1.3 | 20.7 |
| 4 21 | 12 55.21 | − 8 8.5 | 2.048 | 3.029 | 5.0 | 21.0 |
| 5 1 | 12 48.57 | − 6 50.4 | 2.089 | 3.021 | 8.7 | 21.2 |
| 5 11 | 12 43.57 | − 5 42.9 | 2.155 | 3.013 | 12.0 | 21.4 |

**243196** 2007 $TW_{403}$ 4 7.5 58°.72 2°.9/10.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.66 | −18 53.1 | 2.064 | 2.841 | 14.6 | 20.2 |
| 3 12 | 13 23.01 | −18 32.6 | 1.984 | 2.852 | 11.7 | 20.0 |
| 3 22 | 13 17.42 | −17 53.1 | 1.927 | 2.863 | 8.4 | 19.8 |
| 4 1 | 13 10.50 | −16 56.4 | 1.895 | 2.874 | 4.9 | 19.6 |
| 4 11 | 13 3.09 | −15 46.7 | 1.890 | 2.885 | 2.9 | 19.5 |
| 4 21 | 12 56.07 | −14 30.3 | 1.913 | 2.896 | 5.1 | 19.6 |
| 5 1 | 12 50.23 | −13 14.1 | 1.963 | 2.907 | 8.5 | 19.9 |
| 5 11 | 12 46.17 | −12 4.9 | 2.038 | 2.919 | 11.6 | 20.1 |

**57237** 2001 $QL_{80}$ 4 7.5 53°.44 0°.3/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.28 | − 7 25.4 | 1.581 | 2.407 | 16.2 | 18.0 |
| 3 12 | 13 27.69 | − 7 18.8 | 1.516 | 2.420 | 12.4 | 17.8 |
| 3 22 | 13 20.60 | − 7 0.6 | 1.472 | 2.434 | 7.9 | 17.5 |
| 4 1 | 13 11.80 | − 6 34.1 | 1.454 | 2.448 | 3.1 | 17.3 |
| 4 11 | 13 2.41 | − 6 4.7 | 1.462 | 2.462 | 1.9 | 17.2 |
| 4 21 | 12 53.58 | − 5 37.9 | 1.497 | 2.477 | 6.6 | 17.5 |
| 5 1 | 12 46.37 | − 5 19.1 | 1.557 | 2.491 | 11.0 | 17.8 |
| 5 11 | 12 41.45 | − 5 11.9 | 1.639 | 2.506 | 14.7 | 18.1 |

**41148** 1999 $VU_{143}$ 4 7.5 301°.07 1°.7/ 9.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.94 | −14 19.2 | 1.916 | 2.716 | 14.8 | 18.9 |
| 3 12 | 13 24.22 | −14 3.3 | 1.827 | 2.712 | 11.6 | 18.7 |
| 3 22 | 13 18.36 | −13 30.6 | 1.759 | 2.708 | 8.0 | 18.5 |
| 4 1 | 13 10.94 | −12 43.2 | 1.716 | 2.704 | 4.0 | 18.2 |
| 4 11 | 13 2.84 | −11 45.3 | 1.701 | 2.700 | 1.9 | 18.0 |
| 4 21 | 12 55.04 | −10 43.1 | 1.713 | 2.697 | 5.5 | 18.3 |
| 5 1 | 12 48.46 | − 9 43.5 | 1.752 | 2.693 | 9.5 | 18.5 |
| 5 11 | 12 43.80 | − 8 52.7 | 1.814 | 2.689 | 13.1 | 18.7 |

**1100** Arnica 4 7.5 235°.06 0°.5/ 7.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.38 | −10 39.6 | 2.234 | 3.037 | 12.8 | 15.8 |
| 3 12 | 13 24.22 | −10 19.8 | 2.141 | 3.032 | 9.9 | 15.6 |
| 3 22 | 13 18.20 | − 9 47.9 | 2.072 | 3.027 | 6.5 | 15.4 |
| 4 1 | 13 10.84 | − 9 6.3 | 2.030 | 3.021 | 2.8 | 15.1 |
| 4 11 | 13 2.91 | − 8 19.2 | 2.016 | 3.016 | 1.3 | 15.0 |
| 4 21 | 12 55.22 | − 7 31.5 | 2.030 | 3.011 | 5.1 | 15.3 |
| 5 1 | 12 48.57 | − 6 48.4 | 2.072 | 3.005 | 8.8 | 15.5 |
| 5 11 | 12 43.57 | − 6 14.3 | 2.139 | 2.999 | 12.0 | 15.7 |

**34858** 2001 $TW_{44}$ 4 7.5 254°.18 1°.4/ 6.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 35.05 | − 4 58.3 | 1.722 | 2.543 | 15.2 | 18.1 |
| 3 12 | 13 30.06 | − 4 39.7 | 1.622 | 2.525 | 11.8 | 17.9 |
| 3 22 | 13 22.40 | − 4 10.7 | 1.544 | 2.505 | 7.6 | 17.6 |
| 4 1 | 13 12.66 | − 3 35.0 | 1.491 | 2.485 | 3.1 | 17.3 |
| 4 11 | 13 1.86 | − 2 58.2 | 1.467 | 2.465 | 2.8 | 17.2 |
| 4 21 | 12 51.21 | − 2 26.4 | 1.470 | 2.444 | 7.5 | 17.4 |
| 5 1 | 12 41.93 | − 2 5.2 | 1.499 | 2.422 | 12.2 | 17.6 |
| 5 11 | 12 34.94 | − 1 58.7 | 1.549 | 2.399 | 16.3 | 17.8 |

**209097** 2003 $SF_{51}$ 4 7.5 166°.84 2°.1/ 5.5 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.21 | − 3 26.7 | 1.985 | 2.804 | 13.6 | 20.8 |
| 3 12 | 13 27.98 | − 2 46.1 | 1.906 | 2.809 | 10.3 | 20.6 |
| 3 22 | 13 20.63 | − 1 57.1 | 1.852 | 2.814 | 6.5 | 20.4 |
| 4 1 | 13 11.80 | − 1 4.5 | 1.825 | 2.817 | 2.9 | 20.2 |
| 4 11 | 13 2.41 | − 0 14.4 | 1.826 | 2.820 | 3.2 | 20.2 |
| 4 21 | 12 53.41 | + 0 27.7 | 1.857 | 2.823 | 6.9 | 20.4 |
| 5 1 | 12 45.70 | + 0 57.1 | 1.913 | 2.825 | 10.6 | 20.6 |
| 5 11 | 12 39.93 | + 1 11.3 | 1.993 | 2.825 | 13.8 | 20.8 |

**419557** 2010 $PC_{77}$ 4 7.5 250°.90 0°.2/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.19 | − 8 42.8 | 1.806 | 2.620 | 14.9 | 22.2 |
| 3 12 | 13 27.72 | − 8 19.1 | 1.706 | 2.603 | 11.6 | 21.9 |
| 3 22 | 13 20.79 | − 7 41.6 | 1.628 | 2.587 | 7.6 | 21.7 |
| 4 1 | 13 11.98 | − 6 53.3 | 1.576 | 2.570 | 3.0 | 21.3 |
| 4 11 | 13 2.25 | − 5 59.5 | 1.552 | 2.552 | 1.8 | 21.2 |
| 4 21 | 12 52.71 | − 5 6.8 | 1.556 | 2.534 | 6.6 | 21.5 |
| 5 1 | 12 44.44 | − 4 21.9 | 1.585 | 2.515 | 11.2 | 21.7 |
| 5 11 | 12 38.31 | − 3 50.1 | 1.638 | 2.496 | 15.1 | 21.9 |

**28018** 1998 $AG$ 4 7.5 204°.75 4°.0/ 2.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.73 | + 2 58.6 | 2.402 | 3.235 | 11.0 | 18.1 |
| 3 12 | 13 22.75 | + 4 6.1 | 2.324 | 3.233 | 8.4 | 18.0 |
| 3 22 | 13 17.14 | + 5 17.2 | 2.271 | 3.230 | 5.7 | 17.8 |
| 4 1 | 13 10.39 | + 6 26.3 | 2.246 | 3.227 | 4.0 | 17.7 |
| 4 11 | 13 3.19 | + 7 27.2 | 2.250 | 3.224 | 5.0 | 17.7 |
| 4 21 | 12 56.27 | + 8 15.2 | 2.282 | 3.221 | 7.6 | 17.9 |
| 5 1 | 12 50.29 | + 8 46.8 | 2.340 | 3.218 | 10.3 | 18.0 |
| 5 11 | 12 45.79 | + 9 0.7 | 2.420 | 3.214 | 12.8 | 18.2 |

**850** Altona 4 7.5 307°.34 7°.7/29.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.50 | +12 27.2 | 1.995 | 2.840 | 12.5 | 14.2 |
| 3 12 | 13 23.00 | +13 59.0 | 1.924 | 2.828 | 10.1 | 14.0 |
| 3 22 | 13 17.50 | +15 28.2 | 1.876 | 2.816 | 8.3 | 13.9 |
| 4 1 | 13 10.58 | +16 46.1 | 1.855 | 2.805 | 7.8 | 13.8 |
| 4 11 | 13 3.08 | +17 44.9 | 1.860 | 2.793 | 9.2 | 13.9 |
| 4 21 | 12 55.88 | +18 19.4 | 1.889 | 2.782 | 11.5 | 14.0 |
| 5 1 | 12 49.83 | +18 27.2 | 1.941 | 2.772 | 14.1 | 14.2 |
| 5 11 | 12 45.56 | +18 9.3 | 2.011 | 2.761 | 16.5 | 14.3 |

**303988** 2006 $BT_{120}$ 4 7.5 43°.59 2°.4/ 5.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.25 | − 5 42.0 | 1.385 | 2.228 | 17.1 | 21.0 |
| 3 12 | 13 25.80 | − 4 40.6 | 1.314 | 2.229 | 13.0 | 20.7 |
| 3 22 | 13 19.63 | − 3 23.8 | 1.264 | 2.231 | 8.2 | 20.4 |
| 4 1 | 13 11.49 | − 1 58.6 | 1.239 | 2.233 | 3.5 | 20.1 |
| 4 11 | 13 2.59 | − 0 35.0 | 1.239 | 2.235 | 3.9 | 20.2 |
| 4 21 | 12 54.21 | + 0 37.3 | 1.265 | 2.237 | 8.7 | 20.5 |
| 5 1 | 12 47.50 | + 1 30.4 | 1.315 | 2.240 | 13.4 | 20.7 |
| 5 11 | 12 43.27 | + 2 0.2 | 1.385 | 2.242 | 17.4 | 21.0 |

**305350** 2008 $BC_{9}$ 4 7.5 201°.59 7°.4/27.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.03 | +18 40.9 | 2.733 | 3.553 | 10.2 | 20.7 |
| 3 12 | 13 23.58 | +19 58.8 | 2.672 | 3.550 | 8.6 | 20.6 |
| 3 22 | 13 17.58 | +21 9.6 | 2.636 | 3.547 | 7.6 | 20.5 |
| 4 1 | 13 10.55 | +22 7.2 | 2.627 | 3.543 | 7.5 | 20.5 |
| 4 11 | 13 3.13 | +22 46.6 | 2.645 | 3.539 | 8.5 | 20.5 |
| 4 21 | 12 56.00 | +23 5.1 | 2.688 | 3.535 | 10.0 | 20.6 |
| 5 1 | 12 49.78 | +23 1.8 | 2.754 | 3.531 | 11.8 | 20.8 |
| 5 11 | 12 44.98 | +22 38.0 | 2.839 | 3.526 | 13.4 | 20.9 |

**270547** 2002 $GD_{154}$ 4 7.5 346°.98 7°.7/ 1.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.91 | + 8 12.0 | 1.435 | 2.296 | 15.5 | 19.6 |
| 3 12 | 13 23.96 | + 9 23.8 | 1.368 | 2.287 | 12.2 | 19.4 |
| 3 22 | 13 18.43 | +10 35.4 | 1.322 | 2.280 | 9.1 | 19.2 |
| 4 1 | 13 11.02 | +11 36.9 | 1.301 | 2.273 | 7.7 | 19.1 |
| 4 11 | 13 2.86 | +12 18.7 | 1.303 | 2.267 | 9.1 | 19.2 |
| 4 21 | 12 55.16 | +12 34.5 | 1.329 | 2.263 | 12.3 | 19.3 |
| 5 1 | 12 49.03 | +12 21.6 | 1.376 | 2.259 | 15.8 | 19.5 |
| 5 11 | 12 45.23 | +11 41.7 | 1.442 | 2.257 | 19.0 | 19.7 |

**426462** 2013 $QU_{73}$ 4 7.5 15°.09 7°.2/30.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.71 | + 6 32.0 | 1.623 | 2.477 | 14.4 | 20.5 |
| 3 12 | 13 23.45 | + 8 24.8 | 1.561 | 2.478 | 11.2 | 20.3 |
| 3 22 | 13 17.91 | +10 20.3 | 1.523 | 2.479 | 8.3 | 20.2 |
| 4 1 | 13 10.76 | +12 7.8 | 1.511 | 2.480 | 7.2 | 20.1 |
| 4 11 | 13 3.01 | +13 36.5 | 1.525 | 2.482 | 8.8 | 20.2 |
| 4 21 | 12 55.72 | +14 39.1 | 1.564 | 2.483 | 11.8 | 20.4 |
| 5 1 | 12 49.84 | +15 11.7 | 1.624 | 2.485 | 15.0 | 20.6 |
| 5 11 | 12 46.03 | +15 15.1 | 1.704 | 2.487 | 17.8 | 20.8 |

**260740** 2005 $LY_{44}$ 4 7.5 281°.60 2°.0/ 9.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.22 | −14 35.0 | 1.664 | 2.469 | 16.4 | 20.8 |
| 3 12 | 13 25.69 | −14 22.7 | 1.566 | 2.454 | 13.0 | 20.6 |
| 3 22 | 13 19.60 | −13 51.0 | 1.489 | 2.439 | 9.0 | 20.3 |
| 4 1 | 13 11.54 | −13 1.2 | 1.436 | 2.424 | 4.6 | 20.0 |
| 4 11 | 13 2.53 | −11 57.8 | 1.409 | 2.409 | 2.2 | 19.8 |
| 4 21 | 12 53.72 | −10 47.9 | 1.409 | 2.393 | 6.3 | 20.0 |
| 5 1 | 12 46.28 | − 9 40.0 | 1.435 | 2.378 | 11.0 | 20.3 |
| 5 11 | 12 41.10 | − 8 42.1 | 1.482 | 2.363 | 15.2 | 20.5 |

**369992** 1999 $EF_{6}$ 4 7.5 67°.35 3°.6/ 8.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 51.43 | − 7 54.3 | 1.023 | 1.846 | 23.2 | 20.2 |
| 3 12 | 13 44.26 | − 9 43.2 | 0.955 | 1.853 | 18.4 | 19.9 |
| 3 22 | 13 32.42 | −11 26.3 | 0.905 | 1.859 | 12.6 | 19.6 |
| 4 1 | 13 16.88 | −12 58.8 | 0.877 | 1.866 | 6.4 | 19.3 |
| 4 11 | 12 59.62 | −14 16.4 | 0.875 | 1.873 | 4.0 | 19.1 |
| 4 21 | 12 43.12 | −15 18.0 | 0.898 | 1.880 | 9.5 | 19.5 |
| 5 1 | 12 29.62 | −16 6.9 | 0.945 | 1.887 | 15.4 | 19.8 |
| 5 11 | 12 20.47 | −16 50.1 | 1.012 | 1.894 | 20.4 | 20.1 |

**361084** 2006 $BE_{118}$ 4 7.5 43°.05 0°.2/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.82 | − 9 30.6 | 1.216 | 2.057 | 19.1 | 21.2 |
| 3 12 | 13 26.48 | − 8 59.9 | 1.155 | 2.067 | 14.6 | 20.9 |
| 3 22 | 13 20.15 | − 8 10.3 | 1.114 | 2.078 | 9.4 | 20.6 |
| 4 1 | 13 11.70 | − 7 7.0 | 1.095 | 2.090 | 3.7 | 20.3 |
| 4 11 | 13 2.52 | − 5 58.9 | 1.101 | 2.102 | 2.2 | 20.3 |
| 4 21 | 12 54.02 | − 4 55.6 | 1.132 | 2.114 | 7.9 | 20.7 |
| 5 1 | 12 47.47 | − 4 5.8 | 1.186 | 2.127 | 13.0 | 21.0 |
| 5 11 | 12 43.65 | − 3 35.0 | 1.259 | 2.140 | 17.3 | 21.3 |

**240565** 2004 $SD_{5}$ 4 7.5 122°.68 12°.3/25.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 39.85 | +28 12.9 | 1.952 | 2.746 | 14.7 | 20.8 |
| 3 12 | 13 32.92 | +29 55.6 | 1.928 | 2.768 | 13.2 | 20.7 |
| 3 22 | 13 23.65 | +31 18.7 | 1.927 | 2.789 | 12.4 | 20.7 |
| 4 1 | 13 12.93 | +32 13.1 | 1.949 | 2.809 | 12.5 | 20.7 |
| 4 11 | 13 1.93 | +32 33.1 | 1.995 | 2.828 | 13.5 | 20.8 |
| 4 21 | 12 51.78 | +32 18.5 | 2.062 | 2.847 | 14.9 | 21.0 |
| 5 1 | 12 43.40 | +31 32.1 | 2.149 | 2.864 | 16.4 | 21.1 |
| 5 11 | 12 37.36 | +30 19.6 | 2.251 | 2.881 | 17.8 | 21.3 |

**391795** Univofutah 4 7.5 167°.97 5°.1/12.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.65 | −24 21.8 | 2.332 | 3.064 | 14.4 | 21.5 |
| 3 12 | 13 26.81 | −24 42.8 | 2.239 | 3.067 | 12.0 | 21.3 |
| 3 22 | 13 19.92 | −24 45.5 | 2.167 | 3.070 | 9.4 | 21.1 |
| 4 1 | 13 11.57 | −24 28.8 | 2.119 | 3.072 | 6.7 | 21.0 |
| 4 11 | 13 2.58 | −23 53.9 | 2.099 | 3.074 | 5.2 | 20.9 |
| 4 21 | 12 53.85 | −23 4.4 | 2.106 | 3.076 | 6.0 | 20.9 |
| 5 1 | 12 46.26 | −22 6.1 | 2.141 | 3.077 | 8.4 | 21.1 |
| 5 11 | 12 40.48 | −21 5.8 | 2.201 | 3.078 | 11.1 | 21.2 |

**376746** 1999 $TS_{270}$ 4 7.5 163°.60 2°.1/ 9.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.03 | −13 53.9 | 2.199 | 2.981 | 13.6 | 20.5 |
| 3 12 | 13 27.81 | −14 7.7 | 2.110 | 2.984 | 10.8 | 20.3 |
| 3 22 | 13 20.55 | −14 8.9 | 2.044 | 2.987 | 7.5 | 20.1 |
| 4 1 | 13 11.81 | −13 58.2 | 2.005 | 2.989 | 4.0 | 19.9 |
| 4 11 | 13 2.45 | −13 38.1 | 1.994 | 2.992 | 2.2 | 19.7 |
| 4 21 | 12 53.38 | −13 12.4 | 2.012 | 2.993 | 5.1 | 19.9 |
| 5 1 | 12 45.47 | −12 45.6 | 2.058 | 2.995 | 8.6 | 20.1 |
| 5 11 | 12 39.38 | −12 22.5 | 2.129 | 2.996 | 11.8 | 20.3 |

**240572** 2004 $TG_{31}$ 4 7.5 301°.77 2°.4/ 9.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.98 | −16 6.6 | 1.359 | 2.177 | 18.7 | 20.0 |
| 3 12 | 13 24.49 | −15 42.5 | 1.268 | 2.162 | 15.0 | 19.7 |
| 3 22 | 13 19.08 | −14 52.2 | 1.195 | 2.148 | 10.5 | 19.4 |
| 4 1 | 13 11.41 | −13 36.8 | 1.145 | 2.133 | 5.4 | 19.1 |
| 4 11 | 13 2.62 | −12 2.7 | 1.120 | 2.119 | 2.6 | 18.9 |
| 4 21 | 12 54.11 | −10 20.1 | 1.119 | 2.106 | 7.2 | 19.1 |
| 5 1 | 12 47.23 | − 8 41.5 | 1.143 | 2.092 | 12.5 | 19.3 |
| 5 11 | 12 42.98 | − 7 17.7 | 1.187 | 2.079 | 17.3 | 19.6 |

**504991** 2011 $HY_{62}$ 4 7.5 270°.22 7°.4/30.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.95 | +13 49.9 | 2.199 | 3.028 | 12.1 | 21.5 |
| 3 12 | 13 27.07 | +14 56.5 | 2.111 | 3.005 | 9.9 | 21.4 |
| 3 22 | 13 20.13 | +15 59.4 | 2.047 | 2.981 | 8.0 | 21.2 |
| 4 1 | 13 11.67 | +16 51.2 | 2.010 | 2.958 | 7.5 | 21.1 |
| 4 11 | 13 2.52 | +17 25.0 | 2.000 | 2.933 | 8.6 | 21.1 |
| 4 21 | 12 53.58 | +17 36.4 | 2.015 | 2.909 | 10.9 | 21.2 |
| 5 1 | 12 45.74 | +17 23.6 | 2.055 | 2.884 | 13.5 | 21.3 |
| 5 11 | 12 39.68 | +16 47.6 | 2.114 | 2.858 | 16.0 | 21.5 |

**245478** 2005 $NO_{66}$ 4 7.5 275°.87 0°.5/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.75 | − 7 30.3 | 2.297 | 3.109 | 12.2 | 21.4 |
| 3 12 | 13 23.75 | − 7 5.9 | 2.197 | 3.095 | 9.4 | 21.2 |
| 3 22 | 13 17.93 | − 6 31.6 | 2.121 | 3.080 | 6.0 | 20.9 |
| 4 1 | 13 10.77 | − 5 50.2 | 2.072 | 3.066 | 2.4 | 20.7 |
| 4 11 | 13 3.01 | − 5 6.0 | 2.052 | 3.052 | 1.7 | 20.6 |
| 4 21 | 12 55.42 | − 4 23.9 | 2.061 | 3.037 | 5.4 | 20.8 |
| 5 1 | 12 48.80 | − 3 48.4 | 2.096 | 3.022 | 9.0 | 21.0 |
| 5 11 | 12 43.75 | − 3 23.5 | 2.156 | 3.008 | 12.2 | 21.2 |

**360700** 2004 $TX_{20}$ 4 7.5 193°.00 0°.0/ 7.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.48 | − 9 12.8 | 1.841 | 2.648 | 15.0 | 22.5 |
| 3 12 | 13 29.28 | − 8 56.5 | 1.753 | 2.646 | 11.6 | 22.2 |
| 3 22 | 13 21.67 | − 8 27.3 | 1.688 | 2.644 | 7.6 | 22.0 |
| 4 1 | 13 12.31 | − 7 47.9 | 1.649 | 2.641 | 3.1 | 21.7 |
| 4 11 | 13 2.19 | − 7 3.3 | 1.638 | 2.638 | 1.6 | 21.6 |
| 4 21 | 12 52.41 | − 6 19.3 | 1.655 | 2.634 | 6.3 | 21.9 |
| 5 1 | 12 44.00 | − 5 41.8 | 1.699 | 2.629 | 10.5 | 22.1 |
| 5 11 | 12 37.74 | − 5 15.8 | 1.767 | 2.624 | 14.3 | 22.3 |

**332951** 2011 $DU_{43}$ 4 7.5 256°.15 4°.5/ 2.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.77 | + 0 52.2 | 1.916 | 2.757 | 13.1 | 20.7 |
| 3 12 | 13 23.26 | + 2 24.6 | 1.835 | 2.749 | 9.9 | 20.5 |
| 3 22 | 13 17.71 | + 4 5.4 | 1.778 | 2.741 | 6.7 | 20.2 |
| 4 1 | 13 10.70 | + 5 46.6 | 1.749 | 2.733 | 4.6 | 20.1 |
| 4 11 | 13 3.07 | + 7 19.3 | 1.747 | 2.724 | 5.9 | 20.2 |
| 4 21 | 12 55.74 | + 8 35.7 | 1.773 | 2.716 | 9.1 | 20.3 |
| 5 1 | 12 49.58 | + 9 30.6 | 1.824 | 2.707 | 12.5 | 20.5 |
| 5 11 | 12 45.22 | +10 1.5 | 1.895 | 2.698 | 15.6 | 20.7 |

**7329** Bettadotto 4 7.5 28°.86 0°.7/ 8.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.09 | −14 10.1 | 1.586 | 2.403 | 16.5 | 16.9 |
| 3 12 | 13 22.33 | −13 10.3 | 1.511 | 2.409 | 12.8 | 16.7 |
| 3 22 | 13 17.23 | −11 48.2 | 1.458 | 2.415 | 8.5 | 16.4 |
| 4 1 | 13 10.52 | −10 8.6 | 1.430 | 2.422 | 3.7 | 16.1 |
| 4 11 | 13 3.20 | − 8 20.1 | 1.428 | 2.429 | 1.6 | 16.0 |
| 4 21 | 12 56.34 | − 6 32.8 | 1.454 | 2.437 | 6.4 | 16.3 |
| 5 1 | 12 50.92 | − 4 56.7 | 1.505 | 2.445 | 10.8 | 16.6 |
| 5 11 | 12 47.61 | − 3 38.9 | 1.579 | 2.454 | 14.7 | 16.9 |

**519997** 2013 $TV_{169}$ 4 7.5 231°.18 2°.5/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.42 | −16 59.1 | 2.154 | 2.933 | 14.0 | 22.1 |
| 3 12 | 13 25.22 | −16 44.0 | 2.053 | 2.923 | 11.2 | 21.9 |
| 3 22 | 13 18.97 | −16 11.8 | 1.975 | 2.914 | 7.9 | 21.7 |
| 4 1 | 13 11.23 | −15 23.3 | 1.922 | 2.904 | 4.4 | 21.4 |
| 4 11 | 13 2.79 | −14 22.3 | 1.897 | 2.894 | 2.5 | 21.3 |
| 4 21 | 12 54.58 | −13 14.1 | 1.901 | 2.883 | 5.2 | 21.4 |
| 5 1 | 12 47.46 | −12 5.4 | 1.932 | 2.872 | 8.8 | 21.6 |
| 5 11 | 12 42.13 | −11 2.9 | 1.988 | 2.861 | 12.2 | 21.8 |

**414446** 2009 $FJ_{29}$ 4 7.5 108°.66 6°.0/ 2.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.55 | + 4 48.6 | 1.543 | 2.389 | 15.5 | 20.8 |
| 3 12 | 13 27.97 | + 5 54.1 | 1.480 | 2.394 | 11.9 | 20.6 |
| 3 22 | 13 20.85 | + 7 2.0 | 1.440 | 2.399 | 8.3 | 20.4 |
| 4 1 | 13 11.96 | + 8 3.6 | 1.425 | 2.405 | 6.0 | 20.2 |
| 4 11 | 13 2.44 | + 8 50.3 | 1.436 | 2.410 | 7.2 | 20.3 |
| 4 21 | 12 53.49 | + 9 16.0 | 1.472 | 2.415 | 10.6 | 20.5 |
| 5 1 | 12 46.17 | + 9 17.8 | 1.532 | 2.420 | 14.2 | 20.7 |
| 5 11 | 12 41.20 | + 8 56.3 | 1.611 | 2.425 | 17.4 | 21.0 |

**402922** 2007 $TG_{150}$ 4 7.5 207°.56 2°.5/ 9.7 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.89 | −15 39.4 | 2.056 | 2.832 | 14.7 | 22.9 |
| 3 12 | 13 29.51 | −15 42.6 | 1.957 | 2.826 | 11.7 | 22.7 |
| 3 22 | 13 21.81 | −15 30.2 | 1.879 | 2.819 | 8.3 | 22.5 |
| 4 1 | 13 12.39 | −15 2.7 | 1.828 | 2.811 | 4.5 | 22.3 |
| 4 11 | 13 2.16 | −14 22.8 | 1.805 | 2.802 | 2.6 | 22.1 |
| 4 21 | 12 52.15 | −13 35.3 | 1.812 | 2.793 | 5.6 | 22.3 |
| 5 1 | 12 43.38 | −12 46.3 | 1.846 | 2.782 | 9.4 | 22.5 |
| 5 11 | 12 36.61 | −12 2.2 | 1.904 | 2.771 | 13.0 | 22.7 |

**505996** 2015 $GN_{42}$ 4 7.5 281°.17 4°.9/ 1.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.44 | + 4 23.4 | 2.127 | 2.968 | 12.0 | 21.2 |
| 3 12 | 13 22.79 | + 5 38.4 | 2.049 | 2.961 | 9.2 | 21.0 |
| 3 22 | 13 17.31 | + 6 56.9 | 1.995 | 2.954 | 6.4 | 20.8 |
| 4 1 | 13 10.52 | + 8 12.0 | 1.968 | 2.946 | 4.9 | 20.7 |
| 4 11 | 13 3.21 | + 9 16.7 | 1.970 | 2.939 | 6.0 | 20.8 |
| 4 21 | 12 56.17 | +10 5.3 | 1.998 | 2.932 | 8.8 | 20.9 |
| 5 1 | 12 50.19 | +10 34.2 | 2.051 | 2.925 | 11.7 | 21.1 |
| 5 11 | 12 45.85 | +10 42.3 | 2.125 | 2.917 | 14.4 | 21.3 |

**214165** 2005 $CQ_{23}$ 4 7.5 108°.97 1°.7/ 8.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.36 | −14 51.3 | 1.609 | 2.414 | 16.9 | 20.5 |
| 3 12 | 13 26.34 | −14 20.1 | 1.534 | 2.422 | 13.3 | 20.3 |
| 3 22 | 13 19.83 | −13 28.2 | 1.480 | 2.431 | 9.0 | 20.1 |
| 4 1 | 13 11.57 | −12 18.5 | 1.450 | 2.439 | 4.3 | 19.8 |
| 4 11 | 13 2.65 | −10 57.6 | 1.447 | 2.447 | 1.9 | 19.7 |
| 4 21 | 12 54.23 | − 9 34.0 | 1.471 | 2.455 | 6.2 | 20.0 |
| 5 1 | 12 47.35 | − 8 16.6 | 1.521 | 2.463 | 10.6 | 20.2 |
| 5 11 | 12 42.75 | − 7 12.6 | 1.594 | 2.470 | 14.6 | 20.5 |

**372751** 2010 $BZ_{2}$ 4 7.5 54°.21 5°.1/11.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.35 | −18 29.0 | 1.718 | 2.491 | 17.2 | 20.3 |
| 3 12 | 13 31.62 | −19 30.1 | 1.649 | 2.510 | 14.0 | 20.1 |
| 3 22 | 13 23.22 | −20 14.1 | 1.601 | 2.528 | 10.4 | 19.9 |
| 4 1 | 13 12.93 | −20 38.9 | 1.578 | 2.548 | 6.9 | 19.7 |
| 4 11 | 13 1.91 | −20 45.0 | 1.581 | 2.567 | 5.1 | 19.7 |
| 4 21 | 12 51.42 | −20 35.8 | 1.611 | 2.587 | 6.8 | 19.8 |
| 5 1 | 12 42.59 | −20 17.2 | 1.668 | 2.606 | 10.1 | 20.0 |
| 5 11 | 12 36.22 | −19 56.1 | 1.747 | 2.626 | 13.3 | 20.3 |

**74057** 1998 $KW_{12}$ 4 7.5 316°.35 0°.7/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.30 | − 7 13.9 | 1.422 | 2.258 | 17.1 | 19.5 |
| 3 12 | 13 26.77 | − 6 58.2 | 1.339 | 2.249 | 13.2 | 19.3 |
| 3 22 | 13 20.41 | − 6 28.5 | 1.276 | 2.240 | 8.6 | 19.0 |
| 4 1 | 13 11.91 | − 5 48.5 | 1.237 | 2.231 | 3.4 | 18.6 |
| 4 11 | 13 2.43 | − 5 4.8 | 1.223 | 2.223 | 2.3 | 18.5 |
| 4 21 | 12 53.28 | − 4 24.6 | 1.235 | 2.215 | 7.7 | 18.8 |
| 5 1 | 12 45.76 | − 3 55.0 | 1.270 | 2.207 | 12.7 | 19.1 |
| 5 11 | 12 40.76 | − 3 41.1 | 1.326 | 2.200 | 17.0 | 19.3 |

**507449** 2012 $TU_{39}$ 4 7.5 290°.92 2°.1/ 9.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.79 | −17 21.9 | 1.947 | 2.737 | 14.9 | 21.6 |
| 3 12 | 13 22.72 | −16 40.4 | 1.839 | 2.717 | 11.9 | 21.3 |
| 3 22 | 13 17.51 | −15 36.9 | 1.753 | 2.697 | 8.4 | 21.1 |
| 4 1 | 13 10.69 | −14 13.0 | 1.692 | 2.677 | 4.4 | 20.8 |
| 4 11 | 13 3.10 | −12 33.8 | 1.658 | 2.657 | 2.2 | 20.6 |
| 4 21 | 12 55.68 | −10 47.3 | 1.653 | 2.637 | 5.6 | 20.7 |
| 5 1 | 12 49.39 | − 9 2.6 | 1.675 | 2.617 | 9.8 | 20.9 |
| 5 11 | 12 44.98 | − 7 28.4 | 1.721 | 2.597 | 13.6 | 21.1 |

**419173** 2009 $TY_{29}$ 4 7.5 103°.51 3°.3/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.72 | − 1 11.9 | 2.106 | 2.934 | 12.6 | 21.6 |
| 3 12 | 13 25.05 | + 0 8.3 | 2.049 | 2.957 | 9.4 | 21.4 |
| 3 22 | 13 18.59 | + 1 34.8 | 2.017 | 2.980 | 6.0 | 21.3 |
| 4 1 | 13 10.97 | + 3 1.0 | 2.013 | 3.002 | 3.5 | 21.1 |
| 4 11 | 13 3.02 | + 4 19.7 | 2.039 | 3.023 | 4.3 | 21.2 |
| 4 21 | 12 55.55 | + 5 25.0 | 2.093 | 3.044 | 7.4 | 21.5 |
| 5 1 | 12 49.29 | + 6 12.9 | 2.173 | 3.064 | 10.4 | 21.7 |
| 5 11 | 12 44.72 | + 6 41.9 | 2.276 | 3.084 | 13.1 | 21.9 |

**42929** Francini 4 7.5 213°.25 0°.8/ 8.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.56 | −11 32.3 | 2.070 | 2.866 | 13.9 | 20.3 |
| 3 12 | 13 27.64 | −11 13.0 | 1.973 | 2.858 | 10.9 | 20.0 |
| 3 22 | 13 20.56 | −10 39.9 | 1.898 | 2.850 | 7.2 | 19.8 |
| 4 1 | 13 11.88 | − 9 55.0 | 1.850 | 2.841 | 3.2 | 19.5 |
| 4 11 | 13 2.47 | − 9 2.7 | 1.831 | 2.832 | 1.4 | 19.4 |
| 4 21 | 12 53.31 | − 8 8.6 | 1.841 | 2.822 | 5.6 | 19.6 |
| 5 1 | 12 45.32 | − 7 18.6 | 1.879 | 2.811 | 9.6 | 19.8 |
| 5 11 | 12 39.21 | − 6 38.2 | 1.940 | 2.799 | 13.1 | 20.0 |

**129946** 1999 $TQ_{191}$ 4 7.5 187°.64 1°.5/ 9.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.60 | −12 59.8 | 2.513 | 3.292 | 12.2 | 20.7 |
| 3 12 | 13 27.26 | −13 3.7 | 2.418 | 3.292 | 9.6 | 20.5 |
| 3 22 | 13 20.09 | −12 56.6 | 2.346 | 3.291 | 6.6 | 20.3 |
| 4 1 | 13 11.64 | −12 39.4 | 2.302 | 3.289 | 3.3 | 20.1 |
| 4 11 | 13 2.62 | −12 14.7 | 2.288 | 3.287 | 1.7 | 20.0 |
| 4 21 | 12 53.83 | −11 46.1 | 2.304 | 3.284 | 4.6 | 20.2 |
| 5 1 | 12 46.04 | −11 17.6 | 2.348 | 3.281 | 7.9 | 20.4 |
| 5 11 | 12 39.83 | −10 53.3 | 2.418 | 3.277 | 10.8 | 20.6 |

**194293** 2001 $UE_{60}$ 4 7.5 153°.68 3°.3/10.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.50 | −18 40.5 | 1.704 | 2.486 | 17.0 | 20.9 |
| 3 12 | 13 27.97 | −18 24.8 | 1.622 | 2.492 | 13.7 | 20.7 |
| 3 22 | 13 20.90 | −17 46.8 | 1.561 | 2.498 | 9.8 | 20.5 |
| 4 1 | 13 12.03 | −16 47.4 | 1.523 | 2.504 | 5.7 | 20.3 |
| 4 11 | 13 2.43 | −15 31.4 | 1.513 | 2.509 | 3.3 | 20.1 |
| 4 21 | 12 53.28 | −14 6.4 | 1.530 | 2.513 | 6.1 | 20.3 |
| 5 1 | 12 45.66 | −12 41.8 | 1.573 | 2.517 | 10.2 | 20.5 |
| 5 11 | 12 40.35 | −11 26.1 | 1.640 | 2.520 | 14.0 | 20.8 |

**240310** 2003 $FF_{116}$ 4 7.5 277°.04 0°.6/ 8.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.40 | − 9 39.0 | 2.375 | 3.176 | 12.2 | 19.9 |
| 3 12 | 13 24.91 | − 9 37.8 | 2.283 | 3.172 | 9.5 | 19.7 |
| 3 22 | 13 18.63 | − 9 27.1 | 2.214 | 3.168 | 6.2 | 19.5 |
| 4 1 | 13 11.07 | − 9 8.6 | 2.172 | 3.164 | 2.7 | 19.3 |
| 4 11 | 13 2.95 | − 8 45.4 | 2.159 | 3.159 | 1.2 | 19.1 |
| 4 21 | 12 55.06 | − 8 21.2 | 2.175 | 3.155 | 4.8 | 19.4 |
| 5 1 | 12 48.15 | − 8 0.1 | 2.219 | 3.151 | 8.3 | 19.6 |
| 5 11 | 12 42.82 | − 7 45.5 | 2.287 | 3.147 | 11.3 | 19.8 |

**114910** 2003 $QA_{29}$ 4 7.5 171°.78 2°.1/ 5.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.88 | − 1 24.7 | 2.609 | 3.423 | 10.8 | 20.7 |
| 3 12 | 13 25.74 | − 0 51.9 | 2.526 | 3.427 | 8.2 | 20.6 |
| 3 22 | 13 19.01 | − 0 14.2 | 2.470 | 3.430 | 5.2 | 20.4 |
| 4 1 | 13 11.17 | + 0 24.5 | 2.441 | 3.432 | 2.5 | 20.2 |
| 4 11 | 13 2.92 | + 1 0.0 | 2.443 | 3.434 | 2.9 | 20.2 |
| 4 21 | 12 54.95 | + 1 28.6 | 2.475 | 3.436 | 5.8 | 20.4 |
| 5 1 | 12 47.92 | + 1 47.3 | 2.534 | 3.437 | 8.7 | 20.6 |
| 5 11 | 12 42.35 | + 1 54.1 | 2.618 | 3.437 | 11.3 | 20.8 |

**269678** 1995 $UF_{80}$ 4 7.5 344°.62 1°.3/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.84 | − 2 55.8 | 1.472 | 2.309 | 16.6 | 19.5 |
| 3 12 | 13 29.38 | − 3 15.7 | 1.390 | 2.301 | 12.8 | 19.3 |
| 3 22 | 13 22.06 | − 3 30.0 | 1.329 | 2.293 | 8.3 | 19.0 |
| 4 1 | 13 12.58 | − 3 41.6 | 1.292 | 2.286 | 3.3 | 18.7 |
| 4 11 | 13 2.11 | − 3 54.3 | 1.281 | 2.280 | 2.6 | 18.6 |
| 4 21 | 12 52.01 | − 4 12.0 | 1.297 | 2.275 | 7.6 | 18.9 |
| 5 1 | 12 43.55 | − 4 37.8 | 1.337 | 2.271 | 12.4 | 19.2 |
| 5 11 | 12 37.66 | − 5 14.0 | 1.398 | 2.268 | 16.6 | 19.4 |

**301640** 2010 $EO_{77}$ 4 7.5 313°.20 4°.5/10.1 15

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.28 | −16 4.8 | 1.314 | 2.124 | 19.7 | 20.4 |
| 3 12 | 13 29.52 | −16 45.3 | 1.229 | 2.116 | 16.0 | 20.1 |
| 3 22 | 13 22.49 | −17 6.5 | 1.163 | 2.108 | 11.6 | 19.9 |
| 4 1 | 13 12.86 | −17 6.3 | 1.118 | 2.100 | 6.9 | 19.6 |
| 4 11 | 13 1.93 | −16 46.6 | 1.098 | 2.093 | 4.5 | 19.4 |
| 4 21 | 12 51.29 | −16 12.4 | 1.102 | 2.086 | 7.7 | 19.6 |
| 5 1 | 12 42.49 | −15 32.2 | 1.130 | 2.079 | 12.6 | 19.8 |
| 5 11 | 12 36.66 | −14 55.5 | 1.178 | 2.073 | 17.2 | 20.0 |

**169990** 2002 $TZ_{240}$ 4 7.5 189°.37 0°.4/ 7.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.42 | −11 12.0 | 2.348 | 3.148 | 12.4 | 20.9 |
| 3 12 | 13 23.40 | −10 38.7 | 2.258 | 3.147 | 9.5 | 20.7 |
| 3 22 | 13 17.64 | − 9 52.7 | 2.192 | 3.146 | 6.3 | 20.5 |
| 4 1 | 13 10.66 | − 8 56.9 | 2.153 | 3.145 | 2.6 | 20.2 |
| 4 11 | 13 3.19 | − 7 56.0 | 2.144 | 3.144 | 1.2 | 20.1 |
| 4 21 | 12 55.99 | − 6 55.1 | 2.163 | 3.143 | 4.9 | 20.4 |
| 5 1 | 12 49.77 | − 5 59.6 | 2.210 | 3.141 | 8.4 | 20.6 |
| 5 11 | 12 45.10 | − 5 14.0 | 2.282 | 3.139 | 11.4 | 20.8 |

**326972** 2004 $LV_{4}$ 4 7.5 280°.23 0°.1/ 7.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.90 | −11 34.1 | 1.805 | 2.620 | 14.9 | 20.7 |
| 3 12 | 13 23.69 | −10 35.7 | 1.702 | 2.600 | 11.6 | 20.4 |
| 3 22 | 13 18.21 | − 9 17.5 | 1.621 | 2.580 | 7.6 | 20.2 |
| 4 1 | 13 11.01 | − 7 43.1 | 1.566 | 2.560 | 3.1 | 19.8 |
| 4 11 | 13 2.97 | − 5 59.9 | 1.539 | 2.540 | 1.8 | 19.7 |
| 4 21 | 12 55.11 | − 4 17.0 | 1.540 | 2.519 | 6.6 | 19.9 |
| 5 1 | 12 48.45 | − 2 43.7 | 1.567 | 2.498 | 11.2 | 20.2 |
| 5 11 | 12 43.78 | − 1 27.4 | 1.617 | 2.478 | 15.2 | 20.4 |

**103069** 1999 $XN_{145}$ 4 7.5 329°.66 1°.9/ 9.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.74 | −14 47.3 | 1.479 | 2.294 | 17.6 | 19.9 |
| 3 12 | 13 24.72 | −14 26.0 | 1.395 | 2.289 | 13.9 | 19.6 |
| 3 22 | 13 19.03 | −13 42.6 | 1.331 | 2.284 | 9.6 | 19.3 |
| 4 1 | 13 11.35 | −12 39.2 | 1.291 | 2.280 | 4.7 | 19.1 |
| 4 11 | 13 2.80 | −11 22.1 | 1.276 | 2.276 | 2.2 | 18.9 |
| 4 21 | 12 54.62 | −10 0.1 | 1.287 | 2.272 | 6.6 | 19.1 |
| 5 1 | 12 48.00 | − 8 42.9 | 1.322 | 2.269 | 11.5 | 19.4 |
| 5 11 | 12 43.79 | − 7 39.0 | 1.379 | 2.266 | 15.8 | 19.6 |

**285146** 1995 $UL_{17}$ 4 7.5 189°.35 1°.3/ 6.2 15

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.82 | − 6 0.3 | 2.170 | 2.982 | 12.8 | 22.6 |
| 3 12 | 13 26.86 | − 5 17.7 | 2.083 | 2.981 | 9.8 | 22.4 |
| 3 22 | 13 19.92 | − 4 24.8 | 2.019 | 2.979 | 6.2 | 22.2 |
| 4 1 | 13 11.60 | − 3 25.9 | 1.983 | 2.977 | 2.5 | 21.9 |
| 4 11 | 13 2.70 | − 2 26.4 | 1.977 | 2.974 | 2.4 | 21.9 |
| 4 21 | 12 54.11 | − 1 32.2 | 2.000 | 2.970 | 6.1 | 22.1 |
| 5 1 | 12 46.64 | − 0 48.2 | 2.050 | 2.965 | 9.8 | 22.4 |
| 5 11 | 12 40.93 | − 0 18.0 | 2.124 | 2.960 | 13.0 | 22.6 |

**209568** 2004 $XV_{27}$ 4 7.5 129°.51 0°.3/ 7.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.73 | − 8 38.0 | 1.857 | 2.665 | 14.8 | 21.3 |
| 3 12 | 13 29.23 | − 8 11.0 | 1.786 | 2.680 | 11.4 | 21.1 |
| 3 22 | 13 21.48 | − 7 31.7 | 1.738 | 2.696 | 7.3 | 20.9 |
| 4 1 | 13 12.21 | − 6 43.7 | 1.717 | 2.710 | 2.9 | 20.6 |
| 4 11 | 13 2.41 | − 5 52.5 | 1.724 | 2.724 | 1.7 | 20.6 |
| 4 21 | 12 53.13 | − 5 4.3 | 1.760 | 2.737 | 6.1 | 20.9 |
| 5 1 | 12 45.29 | − 4 24.7 | 1.823 | 2.749 | 10.1 | 21.2 |
| 5 11 | 12 39.55 | − 3 57.5 | 1.909 | 2.761 | 13.6 | 21.4 |

**253926** 2004 $CQ_{72}$ 4 7.5 99°.48 0°.1/ 7.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.18 | − 7 54.9 | 1.704 | 2.520 | 15.6 | 20.6 |
| 3 12 | 13 29.04 | − 7 46.0 | 1.634 | 2.533 | 12.0 | 20.4 |
| 3 22 | 13 21.48 | − 7 25.6 | 1.586 | 2.545 | 7.7 | 20.2 |
| 4 1 | 13 12.23 | − 6 56.7 | 1.564 | 2.557 | 3.1 | 19.9 |
| 4 11 | 13 2.39 | − 6 24.3 | 1.569 | 2.569 | 1.7 | 19.8 |
| 4 21 | 12 53.07 | − 5 53.9 | 1.602 | 2.581 | 6.4 | 20.2 |
| 5 1 | 12 45.29 | − 5 30.9 | 1.661 | 2.592 | 10.6 | 20.4 |
| 5 11 | 12 39.73 | − 5 19.0 | 1.742 | 2.604 | 14.2 | 20.7 |

**82522** 2001 $OD_{54}$ 4 7.5 198°.71 4°.5/ 2.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.72 | + 5 51.2 | 2.309 | 3.141 | 11.5 | 19.0 |
| 3 12 | 13 25.09 | + 6 37.2 | 2.234 | 3.140 | 8.8 | 18.8 |
| 3 22 | 13 18.70 | + 7 23.7 | 2.183 | 3.139 | 6.2 | 18.7 |
| 4 1 | 13 11.09 | + 8 5.4 | 2.160 | 3.137 | 4.6 | 18.6 |
| 4 11 | 13 3.02 | + 8 36.9 | 2.165 | 3.136 | 5.5 | 18.6 |
| 4 21 | 12 55.27 | + 8 54.4 | 2.198 | 3.134 | 8.0 | 18.8 |
| 5 1 | 12 48.56 | + 8 55.6 | 2.256 | 3.132 | 10.7 | 18.9 |
| 5 11 | 12 43.46 | + 8 40.2 | 2.336 | 3.130 | 13.3 | 19.1 |

**251544** 2009 $BA_{70}$ 4 7.5 325°.98 21°.1/19.0 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 39.60 | −40 26.2 | 1.134 | 1.830 | 28.4 | 20.0 |
| 3 12 | 13 36.75 | −43 41.8 | 1.063 | 1.824 | 26.5 | 19.8 |
| 3 22 | 13 28.82 | −46 28.0 | 1.004 | 1.818 | 24.6 | 19.6 |
| 4 1 | 13 16.03 | −48 28.3 | 0.959 | 1.812 | 22.7 | 19.5 |
| 4 11 | 13 0.04 | −49 28.8 | 0.930 | 1.808 | 21.5 | 19.4 |
| 4 21 | 12 43.72 | −49 23.7 | 0.916 | 1.803 | 21.2 | 19.3 |
| 5 1 | 12 30.32 | −48 18.9 | 0.918 | 1.799 | 21.9 | 19.3 |
| 5 11 | 12 22.14 | −46 32.5 | 0.935 | 1.796 | 23.5 | 19.4 |

**38156** 1999 $JQ_{71}$ 4 7.5 237°.17 3°.6/ 4.3 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.66 | − 0 22.6 | 1.834 | 2.665 | 14.1 | 19.2 |
| 3 12 | 13 27.97 | + 0 31.0 | 1.743 | 2.652 | 10.7 | 19.0 |
| 3 22 | 13 20.91 | + 1 32.6 | 1.675 | 2.638 | 7.0 | 18.7 |
| 4 1 | 13 12.09 | + 2 36.1 | 1.634 | 2.624 | 3.9 | 18.5 |
| 4 11 | 13 2.46 | + 3 34.1 | 1.621 | 2.608 | 4.8 | 18.5 |
| 4 21 | 12 53.08 | + 4 19.7 | 1.635 | 2.593 | 8.5 | 18.7 |
| 5 1 | 12 44.99 | + 4 48.0 | 1.675 | 2.576 | 12.4 | 18.9 |
| 5 11 | 12 38.97 | + 4 56.3 | 1.736 | 2.559 | 16.0 | 19.1 |

**191140** 2002 $GM_{86}$ 4 7.5 121°.78 2°.4/ 5.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.91 | − 3 5.6 | 2.022 | 2.850 | 13.0 | 20.1 |
| 3 12 | 13 24.68 | − 2 13.0 | 1.949 | 2.857 | 9.8 | 19.9 |
| 3 22 | 13 18.52 | − 1 12.1 | 1.900 | 2.864 | 6.2 | 19.7 |
| 4 1 | 13 11.04 | − 0 8.3 | 1.878 | 2.871 | 2.9 | 19.5 |
| 4 11 | 13 3.07 | + 0 52.0 | 1.885 | 2.877 | 3.5 | 19.5 |
| 4 21 | 12 55.50 | + 1 42.9 | 1.919 | 2.884 | 6.9 | 19.7 |
| 5 1 | 12 49.10 | + 2 20.0 | 1.980 | 2.890 | 10.4 | 20.0 |
| 5 11 | 12 44.47 | + 2 40.7 | 2.063 | 2.896 | 13.4 | 20.2 |

**305805** 2009 $DO_{95}$ 4 7.5 76°.77 3°.3/ 4.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.34 | − 2 17.9 | 1.412 | 2.254 | 16.9 | 21.0 |
| 3 12 | 13 28.62 | − 1 23.3 | 1.360 | 2.274 | 12.7 | 20.8 |
| 3 22 | 13 21.25 | − 0 19.6 | 1.329 | 2.295 | 8.1 | 20.6 |
| 4 1 | 13 12.14 | + 0 45.6 | 1.323 | 2.315 | 3.9 | 20.4 |
| 4 11 | 13 2.53 | + 1 43.5 | 1.344 | 2.336 | 4.6 | 20.5 |
| 4 21 | 12 53.68 | + 2 26.9 | 1.390 | 2.356 | 8.8 | 20.8 |
| 5 1 | 12 46.64 | + 2 51.1 | 1.460 | 2.376 | 13.0 | 21.1 |
| 5 11 | 12 42.06 | + 2 54.6 | 1.551 | 2.395 | 16.5 | 21.3 |

**194384** 2001 $VK_{3}$ 4 7.5 77°.84 0°.6/ 8.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.03 | −11 8.0 | 3.094 | 3.885 | 9.9 | 20.8 |
| 3 12 | 13 21.11 | −10 49.5 | 3.016 | 3.900 | 7.6 | 20.7 |
| 3 22 | 13 15.95 | −10 22.4 | 2.963 | 3.914 | 5.0 | 20.5 |
| 4 1 | 13 9.96 | − 9 48.5 | 2.938 | 3.928 | 2.2 | 20.4 |
| 4 11 | 13 3.69 | − 9 11.0 | 2.942 | 3.943 | 1.0 | 20.3 |
| 4 21 | 12 57.65 | − 8 33.1 | 2.976 | 3.957 | 3.7 | 20.5 |
| 5 1 | 12 52.36 | − 7 58.1 | 3.039 | 3.971 | 6.3 | 20.7 |
| 5 11 | 12 48.23 | − 7 28.9 | 3.128 | 3.985 | 8.7 | 20.9 |

**407707** 2011 $UN_{164}$ 4 7.5 216°.67 3°.9/ 4.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.29 | + 0 6.8 | 1.782 | 2.614 | 14.3 | 22.1 |
| 3 12 | 13 28.45 | + 1 5.5 | 1.697 | 2.606 | 11.0 | 21.8 |
| 3 22 | 13 21.21 | + 2 11.9 | 1.636 | 2.598 | 7.2 | 21.6 |
| 4 1 | 13 12.21 | + 3 19.3 | 1.601 | 2.589 | 4.2 | 21.4 |
| 4 11 | 13 2.45 | + 4 19.9 | 1.594 | 2.580 | 5.1 | 21.4 |
| 4 21 | 12 53.01 | + 5 6.7 | 1.614 | 2.569 | 8.8 | 21.6 |
| 5 1 | 12 44.93 | + 5 34.8 | 1.660 | 2.558 | 12.7 | 21.8 |
| 5 11 | 12 38.99 | + 5 42.1 | 1.727 | 2.547 | 16.2 | 22.0 |

**404238** 2013 $EK_{7}$ 4 7.5 304°.90 2°.7/ 5.3 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.90 | − 5 43.1 | 1.303 | 2.153 | 17.5 | 20.9 |
| 3 12 | 13 24.46 | − 4 40.3 | 1.216 | 2.135 | 13.4 | 20.5 |
| 3 22 | 13 19.12 | − 3 18.7 | 1.149 | 2.118 | 8.6 | 20.2 |
| 4 1 | 13 11.51 | − 1 45.0 | 1.106 | 2.100 | 3.7 | 19.9 |
| 4 11 | 13 2.79 | − 0 10.0 | 1.088 | 2.083 | 4.3 | 19.9 |
| 4 21 | 12 54.34 | + 1 14.4 | 1.094 | 2.067 | 9.6 | 20.1 |
| 5 1 | 12 47.52 | + 2 18.3 | 1.123 | 2.051 | 14.9 | 20.3 |
| 5 11 | 12 43.31 | + 2 55.7 | 1.170 | 2.035 | 19.5 | 20.6 |

**168272** 2007 $PY_{7}$ 4 7.5 237°.05 1°.2/ 6.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.94 | − 5 41.5 | 2.469 | 3.281 | 11.5 | 21.5 |
| 3 12 | 13 24.55 | − 5 3.1 | 2.369 | 3.267 | 8.8 | 21.3 |
| 3 22 | 13 18.42 | − 4 15.6 | 2.292 | 3.253 | 5.6 | 21.1 |
| 4 1 | 13 11.04 | − 3 22.7 | 2.244 | 3.238 | 2.2 | 20.9 |
| 4 11 | 13 3.09 | − 2 28.9 | 2.226 | 3.222 | 2.2 | 20.8 |
| 4 21 | 12 55.31 | − 1 39.1 | 2.236 | 3.207 | 5.6 | 21.0 |
| 5 1 | 12 48.43 | − 0 57.9 | 2.275 | 3.190 | 9.0 | 21.2 |
| 5 11 | 12 43.04 | − 0 28.6 | 2.337 | 3.173 | 11.9 | 21.4 |

**471392** 2011 $SQ_{134}$ 4 7.5 194°.32 2°.1/10.1 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.07 | −16 22.2 | 3.113 | 3.874 | 10.5 | 22.6 |
| 3 12 | 13 24.30 | −16 22.4 | 3.012 | 3.871 | 8.4 | 22.4 |
| 3 22 | 13 18.09 | −16 11.7 | 2.935 | 3.868 | 5.9 | 22.2 |
| 4 1 | 13 10.87 | −15 50.8 | 2.885 | 3.864 | 3.4 | 22.1 |
| 4 11 | 13 3.22 | −15 21.8 | 2.866 | 3.860 | 2.1 | 22.0 |
| 4 21 | 12 55.73 | −14 47.4 | 2.876 | 3.856 | 3.8 | 22.1 |
| 5 1 | 12 49.00 | −14 11.3 | 2.916 | 3.851 | 6.4 | 22.2 |
| 5 11 | 12 43.51 | −13 37.3 | 2.982 | 3.846 | 8.9 | 22.4 |

**380558** 2004 $PC_{81}$ 4 7.5 259°.11 1°.0/ 8.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.32 | −11 52.4 | 2.152 | 2.947 | 13.5 | 21.7 |
| 3 12 | 13 26.78 | −11 40.2 | 2.041 | 2.926 | 10.6 | 21.5 |
| 3 22 | 13 20.11 | −11 14.6 | 1.953 | 2.904 | 7.2 | 21.2 |
| 4 1 | 13 11.81 | −10 37.2 | 1.891 | 2.882 | 3.3 | 20.9 |
| 4 11 | 13 2.67 | − 9 51.5 | 1.858 | 2.859 | 1.5 | 20.7 |
| 4 21 | 12 53.63 | − 9 2.6 | 1.854 | 2.835 | 5.4 | 20.9 |
| 5 1 | 12 45.62 | − 8 16.1 | 1.877 | 2.811 | 9.4 | 21.1 |
| 5 11 | 12 39.41 | − 7 37.6 | 1.925 | 2.787 | 13.1 | 21.3 |

**437113** 2012 $UN_{126}$ 4 7.5 74°.79 3°.3/11.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 26.92 | −20 21.5 | 2.275 | 3.039 | 13.8 | 21.0 |
| 3 12 | 13 23.13 | −20 7.6 | 2.191 | 3.048 | 11.2 | 20.8 |
| 3 22 | 13 17.53 | −19 35.6 | 2.129 | 3.056 | 8.2 | 20.6 |
| 4 1 | 13 10.67 | −18 46.6 | 2.091 | 3.065 | 5.1 | 20.5 |
| 4 11 | 13 3.34 | −17 44.1 | 2.082 | 3.074 | 3.3 | 20.4 |
| 4 21 | 12 56.34 | −16 33.3 | 2.101 | 3.082 | 4.9 | 20.5 |
| 5 1 | 12 50.42 | −15 20.6 | 2.148 | 3.091 | 7.9 | 20.7 |
| 5 11 | 12 46.14 | −14 12.3 | 2.220 | 3.100 | 10.8 | 20.9 |

**155741** 2000 $SK_{56}$ 4 7.5 124°.94 0°.2/ 7.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.83 | −10 11.3 | 2.157 | 2.959 | 13.3 | 21.0 |
| 3 12 | 13 26.03 | − 9 43.1 | 2.082 | 2.972 | 10.2 | 20.8 |
| 3 22 | 13 19.35 | − 9 2.8 | 2.030 | 2.985 | 6.6 | 20.6 |
| 4 1 | 13 11.39 | − 8 13.5 | 2.005 | 2.998 | 2.7 | 20.4 |
| 4 11 | 13 2.97 | − 7 20.1 | 2.009 | 3.010 | 1.3 | 20.3 |
| 4 21 | 12 54.95 | − 6 27.9 | 2.043 | 3.022 | 5.2 | 20.6 |
| 5 1 | 12 48.10 | − 5 42.1 | 2.103 | 3.033 | 8.8 | 20.8 |
| 5 11 | 12 43.00 | − 5 6.8 | 2.188 | 3.044 | 12.0 | 21.0 |

**470286** 2007 $EQ_{87}$ 4 7.5 297°.75 0°.4/ 7.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.02 | −12 57.9 | 1.799 | 2.611 | 15.1 | 21.4 |
| 3 12 | 13 23.15 | −12 6.6 | 1.687 | 2.583 | 11.9 | 21.1 |
| 3 22 | 13 17.97 | −10 54.0 | 1.598 | 2.554 | 7.9 | 20.8 |
| 4 1 | 13 11.00 | − 9 22.9 | 1.533 | 2.526 | 3.4 | 20.5 |
| 4 11 | 13 3.10 | − 7 39.9 | 1.497 | 2.497 | 1.6 | 20.3 |
| 4 21 | 12 55.31 | − 5 53.9 | 1.487 | 2.469 | 6.5 | 20.5 |
| 5 1 | 12 48.65 | − 4 14.6 | 1.504 | 2.440 | 11.2 | 20.7 |
| 5 11 | 12 44.00 | − 2 50.7 | 1.544 | 2.412 | 15.4 | 20.9 |

**250479** 2004 $DW_{24}$ 4 7.5 258°.64 15°.7/13.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 45.78 | −31 7.3 | 1.227 | 1.957 | 25.0 | 20.2 |
| 3 12 | 13 40.81 | −33 56.8 | 1.143 | 1.949 | 22.4 | 19.9 |
| 3 22 | 13 31.05 | −36 25.7 | 1.075 | 1.941 | 19.6 | 19.7 |
| 4 1 | 13 16.85 | −38 19.9 | 1.025 | 1.932 | 17.1 | 19.5 |
| 4 11 | 12 59.77 | −39 26.6 | 0.996 | 1.923 | 15.8 | 19.4 |
| 4 21 | 12 42.30 | −39 41.0 | 0.988 | 1.915 | 16.3 | 19.4 |
| 5 1 | 12 27.26 | −39 9.1 | 1.000 | 1.906 | 18.4 | 19.4 |
| 5 11 | 12 16.70 | −38 7.1 | 1.030 | 1.897 | 21.4 | 19.6 |

**380196** 2000 $XH_{20}$ 4 7.5 191°.21 4°.5/12.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.21 | −25 3.8 | 2.809 | 3.523 | 12.6 | 21.0 |
| 3 12 | 13 26.96 | −25 15.1 | 2.705 | 3.521 | 10.5 | 20.9 |
| 3 22 | 13 19.95 | −25 10.0 | 2.622 | 3.518 | 8.2 | 20.7 |
| 4 1 | 13 11.66 | −24 47.7 | 2.566 | 3.515 | 6.0 | 20.5 |
| 4 11 | 13 2.81 | −24 9.5 | 2.537 | 3.510 | 4.6 | 20.4 |
| 4 21 | 12 54.16 | −23 18.3 | 2.538 | 3.505 | 5.2 | 20.5 |
| 5 1 | 12 46.44 | −22 19.1 | 2.568 | 3.500 | 7.3 | 20.6 |
| 5 11 | 12 40.24 | −21 17.5 | 2.624 | 3.493 | 9.8 | 20.7 |

**399342** 2000 $QY_{220}$ 4 7.5 209°.70 2°.6/ 5.0 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.51 | − 3 11.1 | 2.002 | 2.823 | 13.4 | 22.4 |
| 3 12 | 13 27.62 | − 2 14.7 | 1.912 | 2.816 | 10.2 | 22.2 |
| 3 22 | 13 20.57 | − 1 8.5 | 1.847 | 2.809 | 6.5 | 22.0 |
| 4 1 | 13 11.96 | + 0 2.1 | 1.808 | 2.800 | 3.1 | 21.7 |
| 4 11 | 13 2.66 | + 1 10.3 | 1.799 | 2.790 | 3.7 | 21.8 |
| 4 21 | 12 53.64 | + 2 9.3 | 1.818 | 2.780 | 7.4 | 22.0 |
| 5 1 | 12 45.82 | + 2 53.7 | 1.863 | 2.769 | 11.2 | 22.2 |
| 5 11 | 12 39.90 | + 3 20.3 | 1.931 | 2.757 | 14.5 | 22.3 |

**31007** 1996 $AE_{14}$ 4 7.5 264°.54 5°.0/ 3.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.82 | + 1 50.2 | 1.597 | 2.438 | 15.3 | 18.3 |
| 3 12 | 13 28.53 | + 2 51.8 | 1.505 | 2.418 | 11.8 | 18.0 |
| 3 22 | 13 21.54 | + 4 1.1 | 1.436 | 2.398 | 8.0 | 17.7 |
| 4 1 | 13 12.46 | + 5 10.7 | 1.391 | 2.377 | 5.1 | 17.5 |
| 4 11 | 13 2.35 | + 6 11.3 | 1.374 | 2.356 | 6.3 | 17.5 |
| 4 21 | 12 52.45 | + 6 54.8 | 1.382 | 2.334 | 10.3 | 17.7 |
| 5 1 | 12 43.97 | + 7 15.6 | 1.414 | 2.312 | 14.5 | 17.9 |
| 5 11 | 12 37.86 | + 7 11.9 | 1.466 | 2.289 | 18.4 | 18.1 |

**29853** 1999 $FZ_{26}$ 4 7.5 342°.23 3°.2/ 4.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.58 | − 0 39.3 | 2.052 | 2.888 | 12.6 | 17.9 |
| 3 12 | 13 22.97 | + 0 17.7 | 1.974 | 2.886 | 9.5 | 17.7 |
| 3 22 | 13 17.48 | + 1 21.3 | 1.920 | 2.884 | 6.1 | 17.5 |
| 4 1 | 13 10.68 | + 2 25.9 | 1.893 | 2.883 | 3.4 | 17.3 |
| 4 11 | 13 3.36 | + 3 25.0 | 1.894 | 2.881 | 4.3 | 17.4 |
| 4 21 | 12 56.35 | + 4 12.9 | 1.923 | 2.880 | 7.5 | 17.6 |
| 5 1 | 12 50.44 | + 4 45.2 | 1.976 | 2.879 | 10.8 | 17.8 |
| 5 11 | 12 46.21 | + 4 59.8 | 2.052 | 2.878 | 13.8 | 17.9 |

**470060** 2006 $SL_{223}$ 4 7.5 280°.37 0°.1/ 7.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.48 | − 7 19.8 | 2.238 | 3.047 | 12.6 | 21.4 |
| 3 12 | 13 25.88 | − 7 16.8 | 2.144 | 3.040 | 9.7 | 21.2 |
| 3 22 | 13 19.37 | − 7 5.4 | 2.075 | 3.033 | 6.3 | 21.0 |
| 4 1 | 13 11.46 | − 6 47.6 | 2.032 | 3.026 | 2.5 | 20.7 |
| 4 11 | 13 2.94 | − 6 27.1 | 2.018 | 3.019 | 1.4 | 20.6 |
| 4 21 | 12 54.64 | − 6 7.5 | 2.033 | 3.012 | 5.3 | 20.9 |
| 5 1 | 12 47.39 | − 5 52.9 | 2.075 | 3.005 | 8.9 | 21.1 |
| 5 11 | 12 41.81 | − 5 46.4 | 2.142 | 2.998 | 12.1 | 21.3 |

**118422** 1999 $TU_{71}$ 4 7.5 279°.66 0°.2/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.23 | − 8 23.1 | 2.431 | 3.239 | 11.7 | 20.4 |
| 3 12 | 13 23.31 | − 8 1.0 | 2.329 | 3.224 | 9.0 | 20.2 |
| 3 22 | 13 17.67 | − 7 29.1 | 2.251 | 3.209 | 5.9 | 20.0 |
| 4 1 | 13 10.78 | − 6 49.8 | 2.201 | 3.194 | 2.3 | 19.7 |
| 4 11 | 13 3.30 | − 6 7.0 | 2.179 | 3.179 | 1.4 | 19.6 |
| 4 21 | 12 55.99 | − 5 25.3 | 2.186 | 3.164 | 5.1 | 19.8 |
| 5 1 | 12 49.58 | − 4 49.1 | 2.221 | 3.149 | 8.5 | 20.0 |
| 5 11 | 12 44.64 | − 4 22.2 | 2.280 | 3.134 | 11.6 | 20.2 |

**403285** 2009 $BC_{51}$ 4 7.5 29°.73 4°.2/10.3 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.90 | −16 37.5 | 1.299 | 2.111 | 19.8 | 21.3 |
| 3 12 | 13 28.26 | −17 5.5 | 1.228 | 2.116 | 15.9 | 21.0 |
| 3 22 | 13 21.50 | −17 11.7 | 1.176 | 2.122 | 11.4 | 20.8 |
| 4 1 | 13 12.44 | −16 55.4 | 1.146 | 2.128 | 6.7 | 20.5 |
| 4 11 | 13 2.42 | −16 20.0 | 1.140 | 2.135 | 4.2 | 20.4 |
| 4 21 | 12 52.94 | −15 32.5 | 1.158 | 2.143 | 7.3 | 20.6 |
| 5 1 | 12 45.37 | −14 41.9 | 1.200 | 2.151 | 11.9 | 20.9 |
| 5 11 | 12 40.64 | −13 57.4 | 1.262 | 2.159 | 16.2 | 21.2 |

**350160** 2011 $SP_{206}$ 4 7.5 189°.02 0°.7/ 6.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.19 | − 7 8.1 | 2.588 | 3.397 | 11.1 | 21.6 |
| 3 12 | 13 23.06 | − 6 31.4 | 2.500 | 3.396 | 8.4 | 21.4 |
| 3 22 | 13 17.38 | − 5 45.7 | 2.436 | 3.395 | 5.4 | 21.2 |
| 4 1 | 13 10.62 | − 4 54.4 | 2.400 | 3.394 | 2.1 | 21.0 |
| 4 11 | 13 3.42 | − 4 1.6 | 2.394 | 3.392 | 1.7 | 21.0 |
| 4 21 | 12 56.46 | − 3 12.0 | 2.417 | 3.391 | 5.0 | 21.2 |
| 5 1 | 12 50.38 | − 2 29.8 | 2.468 | 3.389 | 8.1 | 21.4 |
| 5 11 | 12 45.69 | − 1 58.1 | 2.544 | 3.386 | 10.9 | 21.6 |

**420856** 2013 $JC_{63}$ 4 7.5 297°.96 1°.1/ 6.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.43 | − 5 41.5 | 1.441 | 2.276 | 17.0 | 21.2 |
| 3 12 | 13 28.58 | − 5 34.2 | 1.347 | 2.257 | 13.2 | 20.9 |
| 3 22 | 13 21.78 | − 5 15.3 | 1.274 | 2.238 | 8.6 | 20.6 |
| 4 1 | 13 12.63 | − 4 48.2 | 1.225 | 2.219 | 3.4 | 20.2 |
| 4 11 | 13 2.28 | − 4 18.7 | 1.201 | 2.201 | 2.6 | 20.1 |
| 4 21 | 12 52.10 | − 3 53.4 | 1.203 | 2.183 | 8.0 | 20.4 |
| 5 1 | 12 43.48 | − 3 38.7 | 1.229 | 2.165 | 13.2 | 20.6 |
| 5 11 | 12 37.47 | − 3 39.1 | 1.276 | 2.147 | 17.8 | 20.8 |

**518576** 2007 $JR_{46}$ 4 7.5 296°.10 3°.8/ 3.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.01 | + 0 39.1 | 1.868 | 2.706 | 13.5 | 21.0 |
| 3 12 | 13 25.01 | + 1 33.2 | 1.792 | 2.704 | 10.3 | 20.8 |
| 3 22 | 13 18.89 | + 2 33.1 | 1.739 | 2.702 | 6.7 | 20.6 |
| 4 1 | 13 11.28 | + 3 32.8 | 1.713 | 2.701 | 4.0 | 20.4 |
| 4 11 | 13 3.07 | + 4 25.1 | 1.714 | 2.699 | 4.9 | 20.4 |
| 4 21 | 12 55.23 | + 5 4.2 | 1.742 | 2.697 | 8.2 | 20.6 |
| 5 1 | 12 48.63 | + 5 26.0 | 1.794 | 2.695 | 11.8 | 20.8 |
| 5 11 | 12 43.94 | + 5 28.8 | 1.869 | 2.693 | 14.9 | 21.0 |

**273953** 2007 $JR_{41}$ 4 7.5 81°.66 0°.5/ 8.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.75 | −12 10.3 | 1.862 | 2.671 | 14.7 | 21.2 |
| 3 12 | 13 24.06 | −11 27.7 | 1.783 | 2.677 | 11.4 | 21.0 |
| 3 22 | 13 18.27 | −10 28.5 | 1.728 | 2.683 | 7.5 | 20.8 |
| 4 1 | 13 11.02 | − 9 16.5 | 1.698 | 2.690 | 3.2 | 20.5 |
| 4 11 | 13 3.22 | − 7 57.9 | 1.695 | 2.696 | 1.4 | 20.4 |
| 4 21 | 12 55.81 | − 6 40.1 | 1.721 | 2.702 | 5.8 | 20.7 |
| 5 1 | 12 49.67 | − 5 30.5 | 1.773 | 2.708 | 9.8 | 20.9 |
| 5 11 | 12 45.43 | − 4 34.6 | 1.849 | 2.715 | 13.3 | 21.2 |

**30459** 2000 $OK_{6}$ 4 7.5 355°.49 0°.4/ 7.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.69 | −12 7.2 | 1.189 | 2.031 | 19.4 | 17.2 |
| 3 12 | 13 23.63 | −11 26.9 | 1.116 | 2.028 | 15.1 | 16.9 |
| 3 22 | 13 18.58 | −10 21.9 | 1.062 | 2.025 | 10.0 | 16.6 |
| 4 1 | 13 11.29 | − 8 56.8 | 1.030 | 2.024 | 4.2 | 16.3 |
| 4 11 | 13 3.05 | − 7 21.4 | 1.022 | 2.023 | 2.0 | 16.1 |
| 4 21 | 12 55.31 | − 5 47.4 | 1.038 | 2.023 | 7.9 | 16.5 |
| 5 1 | 12 49.39 | − 4 26.9 | 1.077 | 2.024 | 13.4 | 16.8 |
| 5 11 | 12 46.19 | − 3 28.0 | 1.135 | 2.025 | 18.1 | 17.0 |

**500925** 2013 $PW_{36}$ 4 7.5 149°.94 3°.9/11.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.70 | −19 55.0 | 2.121 | 2.881 | 14.8 | 22.2 |
| 3 12 | 13 27.73 | −20 8.3 | 2.034 | 2.887 | 12.1 | 22.0 |
| 3 22 | 13 20.63 | −20 4.1 | 1.968 | 2.893 | 8.9 | 21.8 |
| 4 1 | 13 11.98 | −19 42.2 | 1.928 | 2.899 | 5.7 | 21.6 |
| 4 11 | 13 2.70 | −19 4.9 | 1.915 | 2.904 | 3.9 | 21.5 |
| 4 21 | 12 53.74 | −18 16.7 | 1.931 | 2.909 | 5.6 | 21.6 |
| 5 1 | 12 46.02 | −17 23.5 | 1.974 | 2.914 | 8.7 | 21.8 |
| 5 11 | 12 40.23 | −16 32.0 | 2.042 | 2.918 | 11.8 | 22.0 |

**235158** 2003 $SL_{1}$ 4 7.5 128°.70 1°.9/ 9.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.21 | −13 43.2 | 2.102 | 2.892 | 13.9 | 21.3 |
| 3 12 | 13 26.53 | −13 45.6 | 2.017 | 2.897 | 11.0 | 21.1 |
| 3 22 | 13 19.81 | −13 34.4 | 1.955 | 2.901 | 7.5 | 20.9 |
| 4 1 | 13 11.64 | −13 10.9 | 1.919 | 2.906 | 3.9 | 20.7 |
| 4 11 | 13 2.88 | −12 38.3 | 1.912 | 2.910 | 2.0 | 20.6 |
| 4 21 | 12 54.44 | −12 1.1 | 1.932 | 2.915 | 5.1 | 20.8 |
| 5 1 | 12 47.19 | −11 24.5 | 1.980 | 2.919 | 8.7 | 21.0 |
| 5 11 | 12 41.77 | −10 53.6 | 2.053 | 2.923 | 12.0 | 21.2 |

**140180** 2001 $ST_{200}$ 4 7.5 48°.19 1°.4/ 8.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.34 | −11 46.1 | 1.995 | 2.796 | 14.2 | 19.4 |
| 3 12 | 13 25.90 | −11 50.7 | 1.918 | 2.806 | 11.0 | 19.2 |
| 3 22 | 13 19.40 | −11 42.9 | 1.864 | 2.816 | 7.4 | 19.0 |
| 4 1 | 13 11.47 | −11 24.3 | 1.836 | 2.826 | 3.5 | 18.8 |
| 4 11 | 13 2.99 | −10 58.4 | 1.836 | 2.836 | 1.7 | 18.7 |
| 4 21 | 12 54.89 | −10 29.5 | 1.864 | 2.846 | 5.2 | 19.0 |
| 5 1 | 12 48.03 | −10 2.7 | 1.918 | 2.857 | 9.0 | 19.2 |
| 5 11 | 12 43.04 | − 9 42.5 | 1.996 | 2.868 | 12.3 | 19.4 |

**238848** 2005 $UO_{456}$ 4 7.5 51°.11 0°.2/ 7.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.00 | − 8 59.7 | 1.148 | 1.988 | 20.1 | 20.8 |
| 3 12 | 13 29.82 | − 8 55.5 | 1.094 | 2.004 | 15.4 | 20.6 |
| 3 22 | 13 22.40 | − 8 34.2 | 1.058 | 2.021 | 10.0 | 20.3 |
| 4 1 | 13 12.74 | − 8 0.0 | 1.045 | 2.039 | 4.1 | 20.0 |
| 4 11 | 13 2.35 | − 7 19.9 | 1.057 | 2.058 | 2.0 | 19.9 |
| 4 21 | 12 52.82 | − 6 42.1 | 1.092 | 2.076 | 7.8 | 20.3 |
| 5 1 | 12 45.46 | − 6 14.0 | 1.151 | 2.095 | 13.0 | 20.7 |
| 5 11 | 12 41.07 | − 6 0.9 | 1.230 | 2.114 | 17.4 | 21.0 |

**173741** 2001 $QL_{295}$ 4 7.5 160°.69 0°.1/ 7.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.09 | − 8 18.7 | 2.685 | 3.480 | 11.1 | 20.5 |
| 3 12 | 13 25.94 | − 8 14.0 | 2.597 | 3.485 | 8.5 | 20.4 |
| 3 22 | 13 19.20 | − 8 1.3 | 2.535 | 3.489 | 5.5 | 20.2 |
| 4 1 | 13 11.35 | − 7 42.8 | 2.500 | 3.493 | 2.3 | 20.0 |
| 4 11 | 13 3.06 | − 7 21.3 | 2.496 | 3.496 | 1.1 | 19.9 |
| 4 21 | 12 55.02 | − 7 0.1 | 2.522 | 3.500 | 4.5 | 20.1 |
| 5 1 | 12 47.90 | − 6 42.5 | 2.576 | 3.502 | 7.6 | 20.3 |
| 5 11 | 12 42.21 | − 6 31.2 | 2.656 | 3.505 | 10.3 | 20.5 |

**81839** 2000 $KO_{52}$ 4 7.5 254°.12 2°.7/ 4.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.35 | − 1 51.2 | 2.147 | 2.969 | 12.6 | 20.2 |
| 3 12 | 13 26.73 | − 1 4.6 | 2.043 | 2.948 | 9.6 | 19.9 |
| 3 22 | 13 20.04 | − 0 9.8 | 1.964 | 2.926 | 6.2 | 19.7 |
| 4 1 | 13 11.79 | + 0 48.4 | 1.912 | 2.903 | 3.1 | 19.4 |
| 4 11 | 13 2.78 | + 1 44.0 | 1.889 | 2.879 | 3.7 | 19.4 |
| 4 21 | 12 53.90 | + 2 31.0 | 1.894 | 2.855 | 7.3 | 19.6 |
| 5 1 | 12 46.06 | + 3 4.7 | 1.927 | 2.831 | 10.9 | 19.8 |
| 5 11 | 12 39.97 | + 3 22.0 | 1.982 | 2.805 | 14.2 | 19.9 |

**499843** 2011 $ER_{23}$ 4 7.5 50°.50 0°.8/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.14 | −10 30.2 | 1.674 | 2.489 | 15.9 | 21.1 |
| 3 12 | 13 26.87 | −10 26.0 | 1.601 | 2.497 | 12.3 | 20.8 |
| 3 22 | 13 20.19 | −10 7.8 | 1.549 | 2.506 | 8.1 | 20.6 |
| 4 1 | 13 11.82 | − 9 38.0 | 1.523 | 2.515 | 3.5 | 20.4 |
| 4 11 | 13 2.81 | − 9 1.6 | 1.523 | 2.524 | 1.6 | 20.2 |
| 4 21 | 12 54.26 | − 8 24.2 | 1.551 | 2.533 | 6.1 | 20.5 |
| 5 1 | 12 47.18 | − 7 51.9 | 1.604 | 2.543 | 10.4 | 20.8 |
| 5 11 | 12 42.30 | − 7 29.7 | 1.679 | 2.553 | 14.1 | 21.1 |

**246988** 1999 $TA_{307}$ 4 7.5 219°.53 2°.7/ 3.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.11 | + 0 14.7 | 2.919 | 3.741 | 9.6 | 21.5 |
| 3 12 | 13 22.09 | + 1 13.2 | 2.828 | 3.733 | 7.2 | 21.3 |
| 3 22 | 13 16.70 | + 2 16.4 | 2.763 | 3.724 | 4.7 | 21.2 |
| 4 1 | 13 10.35 | + 3 20.1 | 2.728 | 3.715 | 2.8 | 21.0 |
| 4 11 | 13 3.60 | + 4 19.5 | 2.722 | 3.705 | 3.5 | 21.1 |
| 4 21 | 12 57.03 | + 5 10.5 | 2.746 | 3.695 | 6.0 | 21.2 |
| 5 1 | 12 51.20 | + 5 49.7 | 2.798 | 3.685 | 8.5 | 21.4 |
| 5 11 | 12 46.58 | + 6 15.1 | 2.873 | 3.674 | 10.9 | 21.5 |

**129054** 2004 $VM_{13}$ 4 7.5 289°.90 7°.8/29.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.54 | +10 12.1 | 1.810 | 2.658 | 13.4 | 19.3 |
| 3 12 | 13 24.10 | +11 53.6 | 1.734 | 2.643 | 10.7 | 19.1 |
| 3 22 | 13 18.44 | +13 35.4 | 1.681 | 2.628 | 8.5 | 18.9 |
| 4 1 | 13 11.16 | +15 7.9 | 1.654 | 2.612 | 7.9 | 18.8 |
| 4 11 | 13 3.16 | +16 21.5 | 1.654 | 2.597 | 9.4 | 18.9 |
| 4 21 | 12 55.45 | +17 9.4 | 1.677 | 2.581 | 12.1 | 19.0 |
| 5 1 | 12 48.98 | +17 28.3 | 1.723 | 2.566 | 15.1 | 19.2 |
| 5 11 | 12 44.47 | +17 18.8 | 1.787 | 2.551 | 17.8 | 19.3 |

**451497** 2011 $UN_{234}$ 4 7.5 15°.66 3°.1/ 9.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.74 | −15 49.8 | 1.311 | 2.128 | 19.3 | 21.0 |
| 3 12 | 13 26.58 | −15 53.2 | 1.237 | 2.129 | 15.5 | 20.8 |
| 3 22 | 13 20.42 | −15 33.7 | 1.181 | 2.131 | 10.8 | 20.5 |
| 4 1 | 13 12.03 | −14 52.1 | 1.148 | 2.134 | 5.9 | 20.2 |
| 4 11 | 13 2.70 | −13 53.6 | 1.139 | 2.137 | 3.2 | 20.0 |
| 4 21 | 12 53.87 | −12 46.5 | 1.154 | 2.140 | 7.0 | 20.3 |
| 5 1 | 12 46.85 | −11 40.9 | 1.194 | 2.144 | 12.0 | 20.6 |
| 5 11 | 12 42.55 | −10 46.0 | 1.254 | 2.149 | 16.4 | 20.8 |

**90935** 1997 $TW_{17}$ 4 7.5 182°.69 0°.5/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.62 | − 8 58.7 | 1.894 | 2.703 | 14.5 | 20.5 |
| 3 12 | 13 27.79 | − 8 17.6 | 1.808 | 2.704 | 11.2 | 20.2 |
| 3 22 | 13 20.72 | − 7 22.4 | 1.746 | 2.705 | 7.2 | 20.0 |
| 4 1 | 13 12.05 | − 6 17.3 | 1.711 | 2.704 | 2.8 | 19.7 |
| 4 11 | 13 2.71 | − 5 8.2 | 1.704 | 2.703 | 1.9 | 19.6 |
| 4 21 | 12 53.73 | − 4 2.4 | 1.725 | 2.701 | 6.3 | 19.9 |
| 5 1 | 12 46.07 | − 3 6.2 | 1.773 | 2.699 | 10.4 | 20.2 |
| 5 11 | 12 40.42 | − 2 24.5 | 1.845 | 2.696 | 14.0 | 20.4 |

**244128** 2001 $VQ_{57}$ 4 7.5 88°.19 1°.9/ 6.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 36.12 | − 4 2.1 | 1.444 | 2.276 | 17.1 | 20.3 |
| 3 12 | 13 30.83 | − 3 40.6 | 1.384 | 2.292 | 13.0 | 20.1 |
| 3 22 | 13 22.79 | − 3 9.3 | 1.345 | 2.308 | 8.3 | 19.8 |
| 4 1 | 13 12.86 | − 2 33.5 | 1.331 | 2.324 | 3.4 | 19.6 |
| 4 11 | 13 2.33 | − 1 59.9 | 1.343 | 2.340 | 3.2 | 19.6 |
| 4 21 | 12 52.49 | − 1 34.6 | 1.382 | 2.356 | 7.9 | 19.9 |
| 5 1 | 12 44.50 | − 1 22.5 | 1.445 | 2.371 | 12.3 | 20.2 |
| 5 11 | 12 39.07 | − 1 25.9 | 1.530 | 2.386 | 16.1 | 20.5 |

**162508** 2000 $QA_{65}$ 4 7.5 119°.77 4°.6/ 3.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.63 | + 2 23.6 | 1.712 | 2.547 | 14.7 | 20.0 |
| 3 12 | 13 29.27 | + 3 22.5 | 1.653 | 2.562 | 11.2 | 19.8 |
| 3 22 | 13 21.58 | + 4 25.1 | 1.617 | 2.577 | 7.5 | 19.6 |
| 4 1 | 13 12.34 | + 5 24.2 | 1.607 | 2.592 | 4.8 | 19.5 |
| 4 11 | 13 2.61 | + 6 12.2 | 1.625 | 2.606 | 5.7 | 19.6 |
| 4 21 | 12 53.47 | + 6 43.6 | 1.669 | 2.619 | 9.0 | 19.8 |
| 5 1 | 12 45.89 | + 6 55.3 | 1.739 | 2.632 | 12.5 | 20.0 |
| 5 11 | 12 40.49 | + 6 46.9 | 1.830 | 2.644 | 15.6 | 20.3 |

**30489** 2000 $QL_{32}$ 4 7.5 129°.78 3°.4/ 3.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.21 | + 2 8.8 | 2.339 | 3.168 | 11.5 | 18.2 |
| 3 12 | 13 24.70 | + 2 46.7 | 2.264 | 3.171 | 8.7 | 18.0 |
| 3 22 | 13 18.48 | + 3 27.4 | 2.214 | 3.174 | 5.8 | 17.8 |
| 4 1 | 13 11.08 | + 4 6.3 | 2.191 | 3.177 | 3.5 | 17.7 |
| 4 11 | 13 3.25 | + 4 38.4 | 2.196 | 3.179 | 4.2 | 17.7 |
| 4 21 | 12 55.74 | + 4 59.8 | 2.230 | 3.182 | 6.9 | 17.9 |
| 5 1 | 12 49.25 | + 5 7.9 | 2.291 | 3.185 | 9.9 | 18.1 |
| 5 11 | 12 44.32 | + 5 1.6 | 2.374 | 3.187 | 12.5 | 18.2 |

**435963** 2009 $DH_{54}$ 4 7.5 112°.89 3°.6/ 3.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.31 | + 1 33.9 | 2.311 | 3.143 | 11.5 | 21.4 |
| 3 12 | 13 23.25 | + 2 39.6 | 2.243 | 3.152 | 8.7 | 21.2 |
| 3 22 | 13 17.53 | + 3 49.3 | 2.200 | 3.161 | 5.7 | 21.1 |
| 4 1 | 13 10.70 | + 4 57.4 | 2.185 | 3.169 | 3.7 | 21.0 |
| 4 11 | 13 3.48 | + 5 57.8 | 2.198 | 3.178 | 4.6 | 21.0 |
| 4 21 | 12 56.61 | + 6 45.7 | 2.240 | 3.186 | 7.3 | 21.2 |
| 5 1 | 12 50.75 | + 7 17.7 | 2.308 | 3.194 | 10.1 | 21.4 |
| 5 11 | 12 46.41 | + 7 32.5 | 2.399 | 3.202 | 12.7 | 21.6 |

**1328** Devota 4 7.5 155°.57 0°.8/ 8.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.45 | −12 38.5 | 3.144 | 3.927 | 9.9 | 16.4 |
| 3 12 | 13 21.50 | −12 13.2 | 3.054 | 3.932 | 7.7 | 16.3 |
| 3 22 | 13 16.27 | −11 38.2 | 2.989 | 3.937 | 5.1 | 16.1 |
| 4 1 | 13 10.18 | −10 55.2 | 2.952 | 3.941 | 2.4 | 15.9 |
| 4 11 | 13 3.76 | −10 7.4 | 2.944 | 3.945 | 1.0 | 15.8 |
| 4 21 | 12 57.54 | − 9 18.4 | 2.967 | 3.948 | 3.7 | 16.0 |
| 5 1 | 12 52.05 | − 8 31.8 | 3.019 | 3.952 | 6.3 | 16.2 |
| 5 11 | 12 47.69 | − 7 51.1 | 3.098 | 3.955 | 8.7 | 16.3 |

**154** Bertha 4 7.5 355°.33 4°.3/ 4.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.33 | + 6 8.2 | 2.128 | 2.954 | 12.5 | 12.3 |
| 3 12 | 13 28.78 | + 6 18.8 | 2.050 | 2.953 | 9.7 | 12.1 |
| 3 22 | 13 21.20 | + 6 27.9 | 1.996 | 2.952 | 6.7 | 11.9 |
| 4 1 | 13 12.21 | + 6 31.2 | 1.970 | 2.951 | 4.5 | 11.8 |
| 4 11 | 13 2.69 | + 6 24.3 | 1.972 | 2.950 | 5.1 | 11.8 |
| 4 21 | 12 53.55 | + 6 4.6 | 2.002 | 2.950 | 7.9 | 12.0 |
| 5 1 | 12 45.63 | + 5 31.1 | 2.059 | 2.950 | 10.9 | 12.2 |
| 5 11 | 12 39.56 | + 4 44.0 | 2.138 | 2.950 | 13.7 | 12.4 |

**229490** 2005 $UD_{452}$ 4 7.5 28°.67 7°.2/14.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.01 | −26 34.2 | 1.585 | 2.342 | 19.1 | 19.5 |
| 3 12 | 13 24.92 | −27 0.9 | 1.511 | 2.351 | 16.2 | 19.3 |
| 3 22 | 13 19.17 | −27 0.2 | 1.454 | 2.360 | 12.8 | 19.1 |
| 4 1 | 13 11.50 | −26 30.0 | 1.418 | 2.370 | 9.5 | 19.0 |
| 4 11 | 13 3.06 | −25 32.4 | 1.406 | 2.380 | 7.3 | 18.9 |
| 4 21 | 12 55.08 | −24 13.6 | 1.419 | 2.391 | 7.9 | 18.9 |
| 5 1 | 12 48.74 | −22 43.4 | 1.456 | 2.403 | 10.6 | 19.1 |
| 5 11 | 12 44.80 | −21 12.7 | 1.516 | 2.415 | 13.8 | 19.3 |

**177068** 2003 $FC_{17}$ 4 7.5 76°.35 1°.0/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.66 | − 6 3.9 | 2.241 | 3.056 | 12.3 | 21.0 |
| 3 12 | 13 24.30 | − 5 34.5 | 2.172 | 3.072 | 9.3 | 20.8 |
| 3 22 | 13 18.22 | − 4 56.6 | 2.127 | 3.088 | 5.9 | 20.7 |
| 4 1 | 13 10.98 | − 4 13.9 | 2.109 | 3.103 | 2.3 | 20.4 |
| 4 11 | 13 3.36 | − 3 31.2 | 2.121 | 3.119 | 2.0 | 20.4 |
| 4 21 | 12 56.12 | − 2 53.1 | 2.161 | 3.134 | 5.5 | 20.7 |
| 5 1 | 12 49.97 | − 2 23.4 | 2.228 | 3.150 | 8.8 | 20.9 |
| 5 11 | 12 45.42 | − 2 5.1 | 2.318 | 3.165 | 11.7 | 21.1 |

**497838** 2006 $UH_{50}$ 4 7.5 123°.42 0°.7/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.13 | − 9 55.2 | 2.512 | 3.306 | 11.8 | 21.5 |
| 3 12 | 13 26.09 | − 9 57.1 | 2.429 | 3.314 | 9.1 | 21.3 |
| 3 22 | 13 19.36 | − 9 50.0 | 2.369 | 3.321 | 6.0 | 21.2 |
| 4 1 | 13 11.46 | − 9 35.5 | 2.338 | 3.329 | 2.7 | 20.9 |
| 4 11 | 13 3.09 | − 9 16.4 | 2.335 | 3.336 | 1.2 | 20.8 |
| 4 21 | 12 55.02 | − 8 56.1 | 2.363 | 3.343 | 4.5 | 21.1 |
| 5 1 | 12 47.93 | − 8 38.2 | 2.418 | 3.350 | 7.7 | 21.3 |
| 5 11 | 12 42.38 | − 8 25.9 | 2.499 | 3.356 | 10.6 | 21.5 |

**26029** 5565 *P–L* 4 7.5 159°.51 1°.3/ 6.5 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 36.86 | − 5 37.6 | 1.721 | 2.537 | 15.5 | 18.8 |
| 3 12 | 13 31.17 | − 5 12.8 | 1.645 | 2.545 | 11.8 | 18.5 |
| 3 22 | 13 22.96 | − 4 37.3 | 1.591 | 2.551 | 7.6 | 18.3 |
| 4 1 | 13 12.97 | − 3 55.5 | 1.563 | 2.557 | 3.0 | 18.0 |
| 4 11 | 13 2.29 | − 3 13.2 | 1.564 | 2.562 | 2.5 | 18.0 |
| 4 21 | 12 52.09 | − 2 36.5 | 1.593 | 2.566 | 7.1 | 18.3 |
| 5 1 | 12 43.45 | − 2 10.7 | 1.648 | 2.570 | 11.3 | 18.5 |
| 5 11 | 12 37.10 | − 1 59.2 | 1.725 | 2.572 | 15.0 | 18.8 |

**34712** 2001 $ON_{103}$ 4 7.5 137°.79 4°.8/12.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.53 | −24 24.1 | 2.635 | 3.358 | 13.1 | 18.7 |
| 3 12 | 13 26.53 | −24 51.1 | 2.545 | 3.366 | 11.0 | 18.5 |
| 3 22 | 13 19.72 | −25 2.2 | 2.476 | 3.374 | 8.6 | 18.4 |
| 4 1 | 13 11.63 | −24 56.1 | 2.432 | 3.381 | 6.2 | 18.3 |
| 4 11 | 13 2.99 | −24 34.1 | 2.416 | 3.389 | 4.9 | 18.2 |
| 4 21 | 12 54.61 | −23 59.0 | 2.429 | 3.395 | 5.5 | 18.2 |
| 5 1 | 12 47.22 | −23 15.2 | 2.470 | 3.402 | 7.6 | 18.4 |
| 5 11 | 12 41.44 | −22 28.5 | 2.536 | 3.408 | 9.9 | 18.5 |

**522858** 2016 $NC_{87}$ 4 7.5 274°.24 0°.9/ 8.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.96 | −11 31.8 | 2.364 | 3.159 | 12.4 | 22.2 |
| 3 12 | 13 24.80 | −11 19.1 | 2.252 | 3.137 | 9.7 | 22.0 |
| 3 22 | 13 18.76 | −10 54.4 | 2.164 | 3.115 | 6.5 | 21.7 |
| 4 1 | 13 11.30 | −10 19.4 | 2.102 | 3.093 | 3.0 | 21.5 |
| 4 11 | 13 3.14 | − 9 37.4 | 2.070 | 3.070 | 1.3 | 21.3 |
| 4 21 | 12 55.08 | − 8 52.9 | 2.066 | 3.047 | 5.0 | 21.5 |
| 5 1 | 12 47.93 | − 8 10.8 | 2.090 | 3.024 | 8.6 | 21.7 |
| 5 11 | 12 42.35 | − 7 35.8 | 2.139 | 3.001 | 11.9 | 21.9 |

**293160** 2006 $YU_{17}$ 4 7.5 1°.06 8°.3/29.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.15 | +18 6.9 | 2.209 | 3.034 | 12.2 | 20.1 |
| 3 12 | 13 26.30 | +19 3.8 | 2.149 | 3.033 | 10.2 | 19.9 |
| 3 22 | 13 19.55 | +19 51.9 | 2.113 | 3.033 | 8.7 | 19.8 |
| 4 1 | 13 11.53 | +20 24.3 | 2.103 | 3.033 | 8.3 | 19.8 |
| 4 11 | 13 3.08 | +20 35.8 | 2.119 | 3.033 | 9.3 | 19.9 |
| 4 21 | 12 55.06 | +20 23.8 | 2.159 | 3.034 | 11.1 | 20.0 |
| 5 1 | 12 48.25 | +19 48.5 | 2.223 | 3.035 | 13.2 | 20.1 |
| 5 11 | 12 43.20 | +18 52.3 | 2.306 | 3.035 | 15.2 | 20.3 |

**70055** 1999 $JN_{6}$ 4 7.5 199°.48 3°.8/12.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.07 | −23 57.0 | 2.302 | 3.036 | 14.5 | 19.8 |
| 3 12 | 13 27.18 | −23 17.5 | 2.196 | 3.032 | 12.0 | 19.6 |
| 3 22 | 13 20.25 | −22 14.9 | 2.112 | 3.026 | 9.0 | 19.4 |
| 4 1 | 13 11.87 | −20 49.8 | 2.053 | 3.020 | 5.8 | 19.2 |
| 4 11 | 13 2.88 | −19 5.9 | 2.024 | 3.013 | 3.8 | 19.1 |
| 4 21 | 12 54.17 | −17 10.0 | 2.025 | 3.005 | 5.2 | 19.2 |
| 5 1 | 12 46.63 | −15 10.7 | 2.056 | 2.995 | 8.4 | 19.3 |
| 5 11 | 12 40.90 | −13 17.0 | 2.114 | 2.985 | 11.7 | 19.5 |

**437670** 2014 $CE_{15}$ 4 7.5 336°.00 4°.3/ 2.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.96 | + 2 49.0 | 2.138 | 2.978 | 12.0 | 20.6 |
| 3 12 | 13 22.45 | + 3 57.3 | 2.062 | 2.975 | 9.1 | 20.4 |
| 3 22 | 13 17.15 | + 5 9.8 | 2.011 | 2.972 | 6.2 | 20.3 |
| 4 1 | 13 10.60 | + 6 20.0 | 1.987 | 2.969 | 4.3 | 20.1 |
| 4 11 | 13 3.57 | + 7 21.3 | 1.991 | 2.967 | 5.4 | 20.2 |
| 4 21 | 12 56.82 | + 8 8.3 | 2.022 | 2.965 | 8.2 | 20.4 |
| 5 1 | 12 51.12 | + 8 37.2 | 2.078 | 2.963 | 11.2 | 20.5 |
| 5 11 | 12 47.03 | + 8 46.9 | 2.156 | 2.961 | 13.9 | 20.7 |

**131822** 2002 $AM_{96}$ 4 7.5 69°.93 0°.6/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.40 | − 7 52.8 | 1.361 | 2.193 | 17.9 | 20.7 |
| 3 12 | 13 28.94 | − 7 28.1 | 1.302 | 2.209 | 13.7 | 20.5 |
| 3 22 | 13 21.67 | − 6 48.5 | 1.263 | 2.225 | 8.8 | 20.2 |
| 4 1 | 13 12.47 | − 5 59.0 | 1.248 | 2.242 | 3.4 | 20.0 |
| 4 11 | 13 2.63 | − 5 7.1 | 1.258 | 2.258 | 2.3 | 19.9 |
| 4 21 | 12 53.49 | − 4 20.5 | 1.295 | 2.275 | 7.5 | 20.3 |
| 5 1 | 12 46.21 | − 3 45.8 | 1.356 | 2.291 | 12.2 | 20.6 |
| 5 11 | 12 41.53 | − 3 27.5 | 1.438 | 2.307 | 16.2 | 20.9 |

**457325** 2008 $SB_{142}$ 4 7.5 243°.96 2°.0/ 6.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.14 | − 3 55.6 | 1.517 | 2.348 | 16.5 | 21.4 |
| 3 12 | 13 30.40 | − 3 34.5 | 1.431 | 2.339 | 12.7 | 21.2 |
| 3 22 | 13 22.80 | − 3 3.1 | 1.366 | 2.329 | 8.2 | 20.9 |
| 4 1 | 13 13.04 | − 2 26.1 | 1.326 | 2.320 | 3.4 | 20.6 |
| 4 11 | 13 2.26 | − 1 50.0 | 1.313 | 2.310 | 3.3 | 20.5 |
| 4 21 | 12 51.81 | − 1 21.4 | 1.326 | 2.299 | 8.2 | 20.8 |
| 5 1 | 12 42.96 | − 1 6.2 | 1.364 | 2.289 | 13.0 | 21.0 |
| 5 11 | 12 36.65 | − 1 7.6 | 1.422 | 2.278 | 17.2 | 21.3 |

**498709** 2008 $TE_{80}$ 4 7.5 225°.31 0°.7/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.16 | − 6 31.8 | 2.010 | 2.826 | 13.6 | 21.9 |
| 3 12 | 13 26.59 | − 6 17.2 | 1.925 | 2.824 | 10.4 | 21.6 |
| 3 22 | 13 19.92 | − 5 53.1 | 1.862 | 2.822 | 6.7 | 21.4 |
| 4 1 | 13 11.76 | − 5 22.7 | 1.825 | 2.819 | 2.6 | 21.1 |
| 4 11 | 13 2.97 | − 4 50.3 | 1.817 | 2.817 | 1.9 | 21.1 |
| 4 21 | 12 54.47 | − 4 21.0 | 1.838 | 2.814 | 6.0 | 21.3 |
| 5 1 | 12 47.17 | − 3 59.1 | 1.884 | 2.812 | 9.8 | 21.6 |
| 5 11 | 12 41.72 | − 3 48.1 | 1.955 | 2.809 | 13.2 | 21.8 |

**253192** 2002 $XQ_{45}$ 4 7.5 133°.44 7°.9/ 4.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 50.63 | +10 29.1 | 1.233 | 2.062 | 19.6 | 20.0 |
| 3 12 | 13 42.53 | +10 39.0 | 1.170 | 2.071 | 15.5 | 19.8 |
| 3 22 | 13 30.66 | +10 40.7 | 1.128 | 2.078 | 11.2 | 19.5 |
| 4 1 | 13 16.13 | +10 25.5 | 1.110 | 2.086 | 8.1 | 19.4 |
| 4 11 | 13 0.72 | + 9 46.7 | 1.118 | 2.092 | 8.8 | 19.4 |
| 4 21 | 12 46.35 | + 8 42.9 | 1.153 | 2.099 | 12.5 | 19.7 |
| 5 1 | 12 34.61 | + 7 16.8 | 1.211 | 2.105 | 16.7 | 19.9 |
| 5 11 | 12 26.42 | + 5 33.9 | 1.289 | 2.110 | 20.5 | 20.2 |

**11096** 1994 $RU_{1}$ 4 7.5 195°.44 2°.3/ 4.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.87 | − 1 14.5 | 3.089 | 3.907 | 9.2 | 19.2 |
| 3 12 | 13 21.83 | − 0 10.8 | 3.001 | 3.904 | 6.9 | 19.1 |
| 3 22 | 13 16.51 | + 0 58.4 | 2.940 | 3.901 | 4.5 | 18.9 |
| 4 1 | 13 10.31 | + 2 8.7 | 2.908 | 3.897 | 2.5 | 18.7 |
| 4 11 | 13 3.75 | + 3 15.8 | 2.907 | 3.893 | 3.1 | 18.8 |
| 4 21 | 12 57.39 | + 4 15.3 | 2.936 | 3.888 | 5.5 | 18.9 |
| 5 1 | 12 51.73 | + 5 3.8 | 2.993 | 3.883 | 8.0 | 19.1 |
| 5 11 | 12 47.22 | + 5 39.3 | 3.075 | 3.877 | 10.2 | 19.2 |

**301404** 2009 $DK_{35}$ 4 7.5 290°.61 0°.9/ 8.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.14 | −10 26.8 | 2.252 | 3.051 | 12.8 | 20.8 |
| 3 12 | 13 25.67 | −10 29.9 | 2.158 | 3.046 | 10.0 | 20.6 |
| 3 22 | 13 19.28 | −10 22.6 | 2.088 | 3.041 | 6.7 | 20.4 |
| 4 1 | 13 11.50 | −10 6.5 | 2.045 | 3.035 | 3.0 | 20.2 |
| 4 11 | 13 3.11 | − 9 44.7 | 2.030 | 3.030 | 1.4 | 20.0 |
| 4 21 | 12 54.94 | − 9 20.8 | 2.043 | 3.025 | 5.0 | 20.3 |
| 5 1 | 12 47.80 | − 8 59.3 | 2.084 | 3.019 | 8.6 | 20.5 |
| 5 11 | 12 42.34 | − 8 43.9 | 2.150 | 3.014 | 11.8 | 20.7 |

**346081** 2007 $UL_{130}$ 4 7.5 36°.15 0°.9/ 8.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.21 | −10 22.7 | 1.887 | 2.697 | 14.5 | 20.6 |
| 3 12 | 13 25.92 | −10 26.0 | 1.813 | 2.707 | 11.3 | 20.4 |
| 3 22 | 13 19.49 | −10 17.3 | 1.762 | 2.716 | 7.5 | 20.1 |
| 4 1 | 13 11.58 | − 9 58.6 | 1.735 | 2.727 | 3.3 | 19.9 |
| 4 11 | 13 3.10 | − 9 33.8 | 1.737 | 2.737 | 1.5 | 19.8 |
| 4 21 | 12 55.02 | − 9 7.4 | 1.765 | 2.748 | 5.5 | 20.1 |
| 5 1 | 12 48.24 | − 8 44.4 | 1.821 | 2.759 | 9.4 | 20.3 |
| 5 11 | 12 43.40 | − 8 29.1 | 1.899 | 2.771 | 12.8 | 20.6 |

**68184** 2001 $BO_{50}$ 4 7.5 192°.38 1°.3/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.11 | − 7 17.4 | 2.099 | 2.910 | 13.2 | 20.0 |
| 3 12 | 13 26.45 | − 6 17.3 | 2.010 | 2.908 | 10.1 | 19.8 |
| 3 22 | 13 19.79 | − 5 4.4 | 1.946 | 2.906 | 6.4 | 19.6 |
| 4 1 | 13 11.70 | − 3 43.6 | 1.909 | 2.903 | 2.5 | 19.3 |
| 4 11 | 13 3.02 | − 2 21.3 | 1.901 | 2.899 | 2.5 | 19.3 |
| 4 21 | 12 54.64 | − 1 4.7 | 1.923 | 2.894 | 6.4 | 19.5 |
| 5 1 | 12 47.41 | + 0 0.1 | 1.973 | 2.888 | 10.1 | 19.7 |
| 5 11 | 12 41.97 | + 0 48.8 | 2.045 | 2.882 | 13.4 | 19.9 |

**387199** 2012 $TF_{305}$ 4 7.5 163°.83 1°.8/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.99 | − 4 26.8 | 2.455 | 3.273 | 11.3 | 21.1 |
| 3 12 | 13 22.99 | − 3 32.4 | 2.373 | 3.276 | 8.5 | 20.9 |
| 3 22 | 13 17.39 | − 2 29.9 | 2.317 | 3.279 | 5.4 | 20.7 |
| 4 1 | 13 10.69 | − 1 23.5 | 2.288 | 3.281 | 2.4 | 20.5 |
| 4 11 | 13 3.57 | − 0 18.7 | 2.290 | 3.283 | 2.7 | 20.6 |
| 4 21 | 12 56.73 | + 0 39.5 | 2.320 | 3.285 | 5.8 | 20.8 |
| 5 1 | 12 50.82 | + 1 26.5 | 2.377 | 3.287 | 8.9 | 21.0 |
| 5 11 | 12 46.35 | + 1 59.7 | 2.459 | 3.288 | 11.6 | 21.1 |

**245642** 2005 $YZ_{82}$ 4 7.6 24°.89 5°.7/ 3.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.45 | + 1 43.7 | 1.337 | 2.192 | 16.8 | 20.3 |
| 3 12 | 13 26.87 | + 3 1.4 | 1.273 | 2.193 | 12.8 | 20.1 |
| 3 22 | 13 20.46 | + 4 26.8 | 1.229 | 2.195 | 8.7 | 19.8 |
| 4 1 | 13 12.05 | + 5 49.9 | 1.210 | 2.196 | 5.8 | 19.7 |
| 4 11 | 13 2.86 | + 6 59.8 | 1.216 | 2.197 | 7.1 | 19.8 |
| 4 21 | 12 54.22 | + 7 47.8 | 1.246 | 2.199 | 11.1 | 20.0 |
| 5 1 | 12 47.34 | + 8 9.0 | 1.299 | 2.201 | 15.3 | 20.2 |
| 5 11 | 12 43.00 | + 8 2.9 | 1.370 | 2.203 | 18.9 | 20.5 |

**131825** 2002 $AP_{99}$ 4 7.6 172°.24 3°.9/ 4.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.91 | + 0 28.2 | 1.822 | 2.652 | 14.2 | 20.1 |
| 3 12 | 13 28.79 | + 1 24.5 | 1.748 | 2.656 | 10.8 | 19.9 |
| 3 22 | 13 21.37 | + 2 27.0 | 1.697 | 2.659 | 7.1 | 19.7 |
| 4 1 | 13 12.35 | + 3 29.3 | 1.673 | 2.661 | 4.1 | 19.5 |
| 4 11 | 13 2.71 | + 4 23.9 | 1.677 | 2.662 | 5.0 | 19.6 |
| 4 21 | 12 53.50 | + 5 4.7 | 1.709 | 2.663 | 8.5 | 19.8 |
| 5 1 | 12 45.68 | + 5 27.5 | 1.766 | 2.663 | 12.1 | 20.0 |
| 5 11 | 12 39.95 | + 5 30.9 | 1.844 | 2.663 | 15.3 | 20.2 |

**30532** 2001 *OO* 4 7.6 102°.48 1°.6/ 5.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.78 | − 5 53.5 | 2.183 | 3.004 | 12.4 | 19.2 |
| 3 12 | 13 23.00 | − 4 54.3 | 2.107 | 3.011 | 9.4 | 19.0 |
| 3 22 | 13 17.47 | − 3 45.0 | 2.056 | 3.018 | 5.9 | 18.8 |
| 4 1 | 13 10.73 | − 2 30.3 | 2.032 | 3.025 | 2.4 | 18.6 |
| 4 11 | 13 3.56 | − 1 16.6 | 2.037 | 3.032 | 2.6 | 18.6 |
| 4 21 | 12 56.73 | − 0 9.9 | 2.070 | 3.039 | 6.1 | 18.9 |
| 5 1 | 12 50.96 | + 0 44.7 | 2.131 | 3.046 | 9.5 | 19.1 |
| 5 11 | 12 46.77 | + 1 23.8 | 2.214 | 3.052 | 12.4 | 19.3 |

**168982** 2001 $CC_9$ 4 7.6 18°.78 0°.7/ 8.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.01 | − 9 51.2 | 1.241 | 2.080 | 18.9 | 19.7 |
| 3 12 | 13 26.80 | − 9 51.0 | 1.175 | 2.084 | 14.7 | 19.5 |
| 3 22 | 13 20.57 | − 9 33.8 | 1.128 | 2.090 | 9.7 | 19.2 |
| 4 1 | 13 12.14 | − 9 2.6 | 1.103 | 2.096 | 4.1 | 18.9 |
| 4 11 | 13 2.84 | − 8 23.6 | 1.102 | 2.103 | 1.9 | 18.8 |
| 4 21 | 12 54.12 | − 7 44.5 | 1.126 | 2.111 | 7.4 | 19.1 |
| 5 1 | 12 47.28 | − 7 13.1 | 1.173 | 2.120 | 12.5 | 19.4 |
| 5 11 | 12 43.18 | − 6 55.1 | 1.240 | 2.129 | 16.9 | 19.7 |

**417709** 2007 $BG_{95}$ 4 7.6 134°.24 6°.0/13.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.91 | −26 13.0 | 2.130 | 2.853 | 15.8 | 22.1 |
| 3 12 | 13 28.78 | −26 39.4 | 2.045 | 2.865 | 13.3 | 21.9 |
| 3 22 | 13 21.39 | −26 45.0 | 1.981 | 2.876 | 10.5 | 21.7 |
| 4 1 | 13 12.38 | −26 27.8 | 1.940 | 2.886 | 7.8 | 21.6 |
| 4 11 | 13 2.71 | −25 49.3 | 1.926 | 2.896 | 6.1 | 21.5 |
| 4 21 | 12 53.41 | −24 53.4 | 1.940 | 2.906 | 6.7 | 21.6 |
| 5 1 | 12 45.44 | −23 46.9 | 1.980 | 2.914 | 9.0 | 21.7 |
| 5 11 | 12 39.50 | −22 37.7 | 2.045 | 2.923 | 11.7 | 21.9 |

**513633** 2011 $OU_{58}$ 4 7.6 257°.99 7°.2/24.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.38 | −49 40.0 | 4.827 | 5.301 | 9.9 | 21.3 |
| 3 12 | 13 25.43 | −50 32.9 | 4.721 | 5.297 | 9.3 | 21.2 |
| 3 22 | 13 18.97 | −51 11.4 | 4.632 | 5.293 | 8.6 | 21.1 |
| 4 1 | 13 11.38 | −51 33.2 | 4.562 | 5.289 | 8.0 | 21.1 |
| 4 11 | 13 3.22 | −51 37.4 | 4.513 | 5.285 | 7.5 | 21.0 |
| 4 21 | 12 55.10 | −51 24.2 | 4.486 | 5.281 | 7.2 | 21.0 |
| 5 1 | 12 47.66 | −50 55.3 | 4.482 | 5.278 | 7.3 | 21.0 |
| 5 11 | 12 41.41 | −50 13.9 | 4.502 | 5.274 | 7.7 | 21.0 |

**497211** 2004 $VG_{68}$ 4 7.6 208°.59 2°.5/ 4.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.06 | − 1 9.3 | 2.290 | 3.111 | 11.9 | 22.2 |
| 3 12 | 13 26.26 | − 0 32.1 | 2.203 | 3.106 | 9.1 | 22.0 |
| 3 22 | 13 19.60 | + 0 10.8 | 2.140 | 3.101 | 5.9 | 21.8 |
| 4 1 | 13 11.64 | + 0 55.1 | 2.104 | 3.095 | 2.9 | 21.6 |
| 4 11 | 13 3.12 | + 1 35.8 | 2.098 | 3.089 | 3.4 | 21.6 |
| 4 21 | 12 54.86 | + 2 8.1 | 2.121 | 3.082 | 6.6 | 21.8 |
| 5 1 | 12 47.64 | + 2 28.4 | 2.170 | 3.075 | 9.9 | 22.0 |
| 5 11 | 12 42.05 | + 2 34.8 | 2.243 | 3.067 | 12.8 | 22.1 |

**465127** 2006 $XB_{56}$ 4 7.6 154°.32 4°.0/ 3.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.56 | + 2 13.4 | 2.083 | 2.912 | 12.6 | 21.8 |
| 3 12 | 13 26.69 | + 3 12.5 | 2.012 | 2.919 | 9.6 | 21.6 |
| 3 22 | 13 19.87 | + 4 15.4 | 1.966 | 2.926 | 6.4 | 21.4 |
| 4 1 | 13 11.72 | + 5 16.2 | 1.947 | 2.931 | 4.2 | 21.3 |
| 4 11 | 13 3.09 | + 6 8.2 | 1.957 | 2.937 | 5.1 | 21.3 |
| 4 21 | 12 54.86 | + 6 46.5 | 1.995 | 2.942 | 8.0 | 21.5 |
| 5 1 | 12 47.83 | + 7 7.6 | 2.059 | 2.946 | 11.1 | 21.7 |
| 5 11 | 12 42.58 | + 7 10.7 | 2.144 | 2.950 | 13.9 | 21.9 |

**200655** 2001 $TT_{21}$ 4 7.6 179°.35 5°.2/ 3.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.69 | + 3 2.4 | 1.667 | 2.505 | 14.9 | 20.5 |
| 3 12 | 13 28.84 | + 4 10.5 | 1.596 | 2.507 | 11.4 | 20.3 |
| 3 22 | 13 21.52 | + 5 23.4 | 1.548 | 2.508 | 7.8 | 20.1 |
| 4 1 | 13 12.45 | + 6 33.1 | 1.525 | 2.508 | 5.3 | 20.0 |
| 4 11 | 13 2.70 | + 7 30.9 | 1.530 | 2.508 | 6.4 | 20.0 |
| 4 21 | 12 53.42 | + 8 10.2 | 1.562 | 2.507 | 9.9 | 20.2 |
| 5 1 | 12 45.64 | + 8 27.1 | 1.617 | 2.506 | 13.5 | 20.4 |
| 5 11 | 12 40.10 | + 8 21.1 | 1.693 | 2.504 | 16.8 | 20.6 |

**299253** 2005 $NO_5$ 4 7.6 207°.67 0°.7/ 6.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.49 | − 6 47.1 | 2.580 | 3.389 | 11.1 | 21.7 |
| 3 12 | 13 23.36 | − 6 14.9 | 2.489 | 3.386 | 8.5 | 21.5 |
| 3 22 | 13 17.65 | − 5 34.2 | 2.423 | 3.383 | 5.4 | 21.3 |
| 4 1 | 13 10.83 | − 4 48.0 | 2.385 | 3.379 | 2.1 | 21.1 |
| 4 11 | 13 3.56 | − 4 0.5 | 2.377 | 3.375 | 1.7 | 21.0 |
| 4 21 | 12 56.51 | − 3 16.0 | 2.397 | 3.371 | 5.0 | 21.3 |
| 5 1 | 12 50.33 | − 2 38.6 | 2.446 | 3.367 | 8.2 | 21.4 |
| 5 11 | 12 45.55 | − 2 11.5 | 2.519 | 3.362 | 11.0 | 21.6 |

**430152** 2013 $TR_{53}$ 4 7.6 147°.86 1°.8/ 9.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.63 | −13 43.8 | 2.110 | 2.899 | 13.9 | 21.8 |
| 3 12 | 13 26.88 | −13 42.4 | 2.025 | 2.904 | 11.0 | 21.6 |
| 3 22 | 13 20.10 | −13 27.3 | 1.962 | 2.908 | 7.5 | 21.4 |
| 4 1 | 13 11.86 | −12 59.7 | 1.926 | 2.912 | 3.8 | 21.2 |
| 4 11 | 13 3.02 | −12 23.1 | 1.917 | 2.916 | 1.9 | 21.1 |
| 4 21 | 12 54.51 | −11 42.2 | 1.938 | 2.920 | 5.1 | 21.3 |
| 5 1 | 12 47.18 | −11 2.2 | 1.985 | 2.923 | 8.8 | 21.5 |
| 5 11 | 12 41.68 | −10 28.3 | 2.057 | 2.927 | 12.0 | 21.7 |

**201639** 2003 $SX_{318}$ 4 7.6 238°.44 1°.1/ 6.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.84 | − 5 46.3 | 2.314 | 3.127 | 12.1 | 21.6 |
| 3 12 | 13 25.40 | − 5 14.1 | 2.216 | 3.114 | 9.3 | 21.4 |
| 3 22 | 13 19.11 | − 4 32.8 | 2.142 | 3.102 | 5.9 | 21.2 |
| 4 1 | 13 11.47 | − 3 45.8 | 2.095 | 3.089 | 2.4 | 20.9 |
| 4 11 | 13 3.22 | − 2 57.8 | 2.078 | 3.075 | 2.1 | 20.9 |
| 4 21 | 12 55.15 | − 2 13.7 | 2.089 | 3.062 | 5.8 | 21.1 |
| 5 1 | 12 48.06 | − 1 38.2 | 2.128 | 3.047 | 9.3 | 21.3 |
| 5 11 | 12 42.57 | − 1 14.6 | 2.191 | 3.033 | 12.4 | 21.5 |

**315507** 2008 $AE_{30}$ 4 7.6 129°.20 4°.8/ 3.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.87 | + 2 45.9 | 1.687 | 2.526 | 14.7 | 20.5 |
| 3 12 | 13 28.12 | + 3 40.5 | 1.620 | 2.531 | 11.2 | 20.3 |
| 3 22 | 13 21.00 | + 4 39.0 | 1.576 | 2.537 | 7.5 | 20.1 |
| 4 1 | 13 12.22 | + 5 34.1 | 1.558 | 2.542 | 4.9 | 19.9 |
| 4 11 | 13 2.85 | + 6 18.3 | 1.567 | 2.547 | 5.9 | 20.0 |
| 4 21 | 12 53.98 | + 6 45.9 | 1.602 | 2.552 | 9.3 | 20.2 |
| 5 1 | 12 46.60 | + 6 53.5 | 1.662 | 2.557 | 12.9 | 20.4 |
| 5 11 | 12 41.40 | + 6 40.7 | 1.742 | 2.561 | 16.1 | 20.6 |

**55564** 2002 $AQ_{188}$ 4 7.6 356°.92 1°.8/ 5.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 21.99 | − 7 47.5 | 1.787 | 2.622 | 14.1 | 17.8 |
| 3 12 | 13 19.82 | − 6 23.1 | 1.707 | 2.619 | 10.7 | 17.5 |
| 3 22 | 13 15.66 | − 4 42.4 | 1.650 | 2.616 | 6.7 | 17.3 |
| 4 1 | 13 10.09 | − 2 52.1 | 1.620 | 2.614 | 2.7 | 17.0 |
| 4 11 | 13 3.96 | − 1 1.3 | 1.617 | 2.613 | 3.1 | 17.0 |
| 4 21 | 12 58.16 | + 0 40.7 | 1.642 | 2.613 | 7.2 | 17.3 |
| 5 1 | 12 53.52 | + 2 6.1 | 1.692 | 2.613 | 11.2 | 17.5 |
| 5 11 | 12 50.66 | + 3 9.8 | 1.765 | 2.615 | 14.6 | 17.7 |

**225567** 2000 $TD_{45}$ 4 7.6 193°.02 3°.0/ 4.6 17 R

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.17 | + 0 59.0 | 2.379 | 3.197 | 11.6 | 21.0 |
| 3 12 | 13 27.77 | + 1 31.5 | 2.294 | 3.195 | 8.9 | 20.8 |
| 3 22 | 13 20.53 | + 2 7.6 | 2.234 | 3.193 | 5.8 | 20.6 |
| 4 1 | 13 12.02 | + 2 43.1 | 2.202 | 3.190 | 3.2 | 20.5 |
| 4 11 | 13 2.99 | + 3 13.2 | 2.199 | 3.186 | 3.8 | 20.5 |
| 4 21 | 12 54.24 | + 3 33.9 | 2.226 | 3.182 | 6.7 | 20.7 |
| 5 1 | 12 46.54 | + 3 42.4 | 2.280 | 3.177 | 9.8 | 20.8 |
| 5 11 | 12 40.46 | + 3 37.2 | 2.358 | 3.171 | 12.6 | 21.0 |

**262800** 2006 $YK_{50}$ 4 7.6 132°.17 0°.6/ 7.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.71 | − 8 2.1 | 1.845 | 2.663 | 14.5 | 21.4 |
| 3 12 | 13 26.38 | − 7 31.5 | 1.767 | 2.667 | 11.1 | 21.2 |
| 3 22 | 13 19.86 | − 6 48.4 | 1.712 | 2.672 | 7.2 | 20.9 |
| 4 1 | 13 11.79 | − 5 56.8 | 1.682 | 2.676 | 2.8 | 20.7 |
| 4 11 | 13 3.12 | − 5 2.5 | 1.680 | 2.680 | 1.9 | 20.6 |
| 4 21 | 12 54.83 | − 4 11.7 | 1.707 | 2.684 | 6.2 | 20.9 |
| 5 1 | 12 47.86 | − 3 30.2 | 1.759 | 2.688 | 10.3 | 21.1 |
| 5 11 | 12 42.87 | − 3 2.2 | 1.834 | 2.691 | 13.8 | 21.4 |

**150996** 2001 $UR_{28}$ 4 7.6 131°.19 1°.3/ 6.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.29 | − 6 0.1 | 2.122 | 2.936 | 13.0 | 21.2 |
| 3 12 | 13 26.44 | − 5 16.7 | 2.050 | 2.949 | 9.9 | 21.0 |
| 3 22 | 13 19.70 | − 4 23.8 | 2.001 | 2.962 | 6.2 | 20.8 |
| 4 1 | 13 11.67 | − 3 25.5 | 1.980 | 2.974 | 2.5 | 20.6 |
| 4 11 | 13 3.20 | − 2 27.7 | 1.989 | 2.986 | 2.3 | 20.6 |
| 4 21 | 12 55.14 | − 1 35.8 | 2.026 | 2.997 | 6.0 | 20.9 |
| 5 1 | 12 48.26 | − 0 54.6 | 2.090 | 3.007 | 9.5 | 21.1 |
| 5 11 | 12 43.13 | − 0 27.2 | 2.178 | 3.018 | 12.6 | 21.3 |

**499379** 2010 $AX_{65}$ 4 7.6 135°.89 5°.1/13.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.99 | −26 20.2 | 2.686 | 3.391 | 13.2 | 22.7 |
| 3 12 | 13 28.36 | −26 42.7 | 2.600 | 3.407 | 11.2 | 22.5 |
| 3 22 | 13 20.89 | −26 48.0 | 2.535 | 3.423 | 8.8 | 22.4 |
| 4 1 | 13 12.16 | −26 35.0 | 2.496 | 3.437 | 6.6 | 22.3 |
| 4 11 | 13 2.93 | −26 4.9 | 2.485 | 3.451 | 5.2 | 22.2 |
| 4 21 | 12 54.01 | −25 20.7 | 2.502 | 3.464 | 5.7 | 22.2 |
| 5 1 | 12 46.16 | −24 27.4 | 2.548 | 3.477 | 7.5 | 22.4 |
| 5 11 | 12 39.96 | −23 30.8 | 2.620 | 3.488 | 9.8 | 22.5 |

**157886** 1999 $RG_{85}$ 4 7.6 184°.30 0°.1/ 7.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.66 | − 9 25.3 | 2.335 | 3.135 | 12.4 | 20.6 |
| 3 12 | 13 25.95 | − 9 4.3 | 2.246 | 3.135 | 9.6 | 20.4 |
| 3 22 | 13 19.41 | − 8 32.7 | 2.180 | 3.135 | 6.2 | 20.2 |
| 4 1 | 13 11.59 | − 7 52.9 | 2.142 | 3.134 | 2.6 | 19.9 |
| 4 11 | 13 3.23 | − 7 9.0 | 2.133 | 3.133 | 1.3 | 19.8 |
| 4 21 | 12 55.14 | − 6 25.8 | 2.153 | 3.132 | 5.0 | 20.1 |
| 5 1 | 12 48.07 | − 5 47.7 | 2.201 | 3.130 | 8.6 | 20.3 |
| 5 11 | 12 42.63 | − 5 18.8 | 2.274 | 3.127 | 11.6 | 20.5 |

**467775** 2009 $VW_{107}$ 4 7.6 117°.04 1°.7/ 6.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.61 | − 4 5.1 | 1.930 | 2.753 | 13.8 | 21.3 |
| 3 12 | 13 26.92 | − 3 35.9 | 1.856 | 2.760 | 10.4 | 21.1 |
| 3 22 | 13 20.12 | − 2 58.5 | 1.805 | 2.767 | 6.6 | 20.9 |
| 4 1 | 13 11.88 | − 2 17.1 | 1.780 | 2.774 | 2.8 | 20.7 |
| 4 11 | 13 3.09 | − 1 37.3 | 1.784 | 2.780 | 2.8 | 20.7 |
| 4 21 | 12 54.71 | − 1 4.3 | 1.816 | 2.787 | 6.6 | 20.9 |
| 5 1 | 12 47.61 | − 0 42.3 | 1.874 | 2.793 | 10.3 | 21.2 |
| 5 11 | 12 42.42 | − 0 34.1 | 1.955 | 2.799 | 13.6 | 21.4 |

**350335** 2012 $UG_{99}$ 4 7.6 97°.02 0°.0/ 7.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.77 | − 8 56.7 | 2.391 | 3.195 | 12.0 | 21.6 |
| 3 12 | 13 24.35 | − 8 31.3 | 2.318 | 3.210 | 9.2 | 21.5 |
| 3 22 | 13 18.27 | − 7 56.1 | 2.268 | 3.225 | 5.9 | 21.3 |
| 4 1 | 13 11.09 | − 7 14.0 | 2.246 | 3.239 | 2.4 | 21.1 |
| 4 11 | 13 3.52 | − 6 29.1 | 2.253 | 3.253 | 1.3 | 21.0 |
| 4 21 | 12 56.29 | − 5 46.1 | 2.289 | 3.267 | 4.8 | 21.3 |
| 5 1 | 12 50.09 | − 5 9.1 | 2.353 | 3.281 | 8.1 | 21.5 |
| 5 11 | 12 45.41 | − 4 41.4 | 2.441 | 3.294 | 10.9 | 21.7 |

**508681** 2017 $US_{15}$ 4 7.6 261°.13 1°.0/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.08 | − 6 25.5 | 1.898 | 2.718 | 14.1 | 22.1 |
| 3 12 | 13 26.80 | − 5 59.8 | 1.802 | 2.704 | 10.9 | 21.8 |
| 3 22 | 13 20.26 | − 5 22.9 | 1.729 | 2.690 | 7.0 | 21.6 |
| 4 1 | 13 12.02 | − 4 38.4 | 1.681 | 2.675 | 2.8 | 21.3 |
| 4 11 | 13 2.98 | − 3 51.7 | 1.662 | 2.661 | 2.2 | 21.2 |
| 4 21 | 12 54.14 | − 3 8.7 | 1.670 | 2.646 | 6.6 | 21.4 |
| 5 1 | 12 46.51 | − 2 35.1 | 1.705 | 2.631 | 10.8 | 21.6 |
| 5 11 | 12 40.83 | − 2 15.0 | 1.762 | 2.615 | 14.5 | 21.8 |

**470014** 2006 $QB_{183}$ 4 7.6 212°.96 1°.6/ 9.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.13 | −14 19.3 | 2.647 | 3.425 | 11.7 | 22.2 |
| 3 12 | 13 24.67 | −14 11.2 | 2.547 | 3.419 | 9.2 | 22.0 |
| 3 22 | 13 18.55 | −13 51.2 | 2.470 | 3.413 | 6.4 | 21.8 |
| 4 1 | 13 11.25 | −13 20.4 | 2.421 | 3.407 | 3.3 | 21.6 |
| 4 11 | 13 3.43 | −12 41.7 | 2.402 | 3.400 | 1.7 | 21.5 |
| 4 21 | 12 55.79 | −11 58.9 | 2.411 | 3.393 | 4.3 | 21.6 |
| 5 1 | 12 49.03 | −11 16.4 | 2.449 | 3.386 | 7.4 | 21.8 |
| 5 11 | 12 43.70 | −10 38.5 | 2.513 | 3.378 | 10.3 | 22.0 |

**376351** 2011 $HK_{64}$ 4 7.6 178°.22 1°.2/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.56 | − 5 10.7 | 2.021 | 2.839 | 13.4 | 21.2 |
| 3 12 | 13 26.88 | − 4 51.5 | 1.938 | 2.839 | 10.2 | 21.0 |
| 3 22 | 13 20.13 | − 4 23.7 | 1.879 | 2.840 | 6.5 | 20.7 |
| 4 1 | 13 11.91 | − 3 51.0 | 1.846 | 2.840 | 2.6 | 20.5 |
| 4 11 | 13 3.10 | − 3 18.0 | 1.842 | 2.840 | 2.2 | 20.4 |
| 4 21 | 12 54.61 | − 2 49.5 | 1.866 | 2.840 | 6.2 | 20.7 |
| 5 1 | 12 47.32 | − 2 29.9 | 1.916 | 2.840 | 9.9 | 20.9 |
| 5 11 | 12 41.87 | − 2 22.1 | 1.990 | 2.839 | 13.2 | 21.1 |

**25361** 1999 $TC_{23}$ 4 7.6 70°.96 1°.7/ 6.2 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.07 | − 5 50.6 | 1.480 | 2.314 | 16.6 | 18.6 |
| 3 12 | 13 27.74 | − 5 11.3 | 1.420 | 2.330 | 12.6 | 18.3 |
| 3 22 | 13 20.85 | − 4 19.7 | 1.381 | 2.345 | 8.0 | 18.1 |
| 4 1 | 13 12.20 | − 3 21.5 | 1.367 | 2.361 | 3.2 | 17.9 |
| 4 11 | 13 2.99 | − 2 24.4 | 1.379 | 2.377 | 3.0 | 17.9 |
| 4 21 | 12 54.40 | − 1 35.9 | 1.418 | 2.393 | 7.6 | 18.2 |
| 5 1 | 12 47.50 | − 1 1.9 | 1.481 | 2.409 | 12.0 | 18.5 |
| 5 11 | 12 42.96 | − 0 45.5 | 1.566 | 2.424 | 15.7 | 18.8 |

**439911** 2001 $DY_{8}$ 4 7.6 92°.15 16°.4/21.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.38 | +19 41.3 | 1.059 | 1.925 | 19.5 | 19.9 |
| 3 12 | 13 27.48 | +23 41.8 | 1.035 | 1.935 | 17.2 | 19.8 |
| 3 22 | 13 21.13 | +27 22.5 | 1.033 | 1.944 | 16.4 | 19.8 |
| 4 1 | 13 12.40 | +30 20.6 | 1.053 | 1.954 | 17.3 | 19.9 |
| 4 11 | 13 2.90 | +32 20.9 | 1.092 | 1.963 | 19.5 | 20.0 |
| 4 21 | 12 54.31 | +33 19.4 | 1.149 | 1.973 | 22.1 | 20.2 |
| 5 1 | 12 48.01 | +33 20.7 | 1.220 | 1.982 | 24.5 | 20.5 |
| 5 11 | 12 44.77 | +32 34.9 | 1.300 | 1.991 | 26.5 | 20.7 |

**264539** 2001 $SR_{12}$ 4 7.6 198°.92 0°.4/ 8.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.93 | −10 37.9 | 2.304 | 3.098 | 12.7 | 22.3 |
| 3 12 | 13 26.99 | −10 16.6 | 2.209 | 3.094 | 9.9 | 22.1 |
| 3 22 | 13 20.14 | − 9 43.4 | 2.138 | 3.090 | 6.5 | 21.9 |
| 4 1 | 13 11.92 | − 9 0.7 | 2.094 | 3.085 | 2.8 | 21.6 |
| 4 11 | 13 3.10 | − 8 12.4 | 2.079 | 3.080 | 1.3 | 21.5 |
| 4 21 | 12 54.52 | − 7 23.4 | 2.094 | 3.073 | 5.1 | 21.8 |
| 5 1 | 12 46.98 | − 6 39.0 | 2.137 | 3.066 | 8.7 | 22.0 |
| 5 11 | 12 41.12 | − 6 3.4 | 2.205 | 3.059 | 11.9 | 22.2 |

**336830** 2011 $EF_{74}$ 4 7.6 313°.26 3°.6/10.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.41 | −15 41.3 | 1.790 | 2.579 | 16.1 | 20.5 |
| 3 12 | 13 28.87 | −16 20.1 | 1.696 | 2.570 | 13.0 | 20.3 |
| 3 22 | 13 21.77 | −16 44.4 | 1.623 | 2.562 | 9.4 | 20.0 |
| 4 1 | 13 12.70 | −16 53.3 | 1.574 | 2.554 | 5.6 | 19.8 |
| 4 11 | 13 2.66 | −16 47.9 | 1.552 | 2.546 | 3.7 | 19.6 |
| 4 21 | 12 52.81 | −16 31.7 | 1.557 | 2.538 | 6.2 | 19.8 |
| 5 1 | 12 44.30 | −16 10.1 | 1.588 | 2.531 | 10.2 | 20.0 |
| 5 11 | 12 38.03 | −15 49.4 | 1.642 | 2.524 | 13.9 | 20.2 |

**409011** 2003 $AZ_{13}$ 4 7.6 64°.76 0°.6/ 8.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.39 | −12 0.1 | 1.564 | 2.378 | 16.8 | 20.7 |
| 3 12 | 13 27.04 | −11 26.1 | 1.508 | 2.404 | 12.9 | 20.6 |
| 3 22 | 13 20.28 | −10 34.8 | 1.473 | 2.429 | 8.5 | 20.4 |
| 4 1 | 13 11.94 | − 9 30.5 | 1.462 | 2.454 | 3.6 | 20.1 |
| 4 11 | 13 3.15 | − 8 20.3 | 1.479 | 2.480 | 1.6 | 20.0 |
| 4 21 | 12 55.02 | − 7 12.2 | 1.523 | 2.505 | 6.2 | 20.4 |
| 5 1 | 12 48.52 | − 6 13.5 | 1.592 | 2.530 | 10.5 | 20.7 |
| 5 11 | 12 44.26 | − 5 29.4 | 1.684 | 2.555 | 14.1 | 21.0 |

**200653** 2001 $TM_{14}$ 4 7.6 175°.58 2°.7/ 9.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.76 | −17 4.8 | 1.720 | 2.507 | 16.7 | 20.7 |
| 3 12 | 13 28.28 | −16 48.4 | 1.635 | 2.510 | 13.3 | 20.4 |
| 3 22 | 13 21.28 | −16 11.1 | 1.569 | 2.511 | 9.4 | 20.2 |
| 4 1 | 13 12.45 | −15 14.1 | 1.529 | 2.512 | 5.2 | 20.0 |
| 4 11 | 13 2.83 | −14 2.2 | 1.515 | 2.513 | 2.8 | 19.8 |
| 4 21 | 12 53.60 | −12 42.7 | 1.529 | 2.513 | 6.0 | 20.0 |
| 5 1 | 12 45.85 | −11 24.6 | 1.570 | 2.513 | 10.3 | 20.2 |
| 5 11 | 12 40.37 | −10 15.8 | 1.634 | 2.511 | 14.2 | 20.5 |

**302258** 2001 $XX_{108}$ 4 7.6 26°.35 8°.6/ 2.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.28 | + 8 46.4 | 1.100 | 1.966 | 18.9 | 19.2 |
| 3 12 | 13 29.39 | + 9 41.5 | 1.053 | 1.974 | 14.8 | 19.0 |
| 3 22 | 13 22.23 | +10 32.6 | 1.024 | 1.984 | 10.9 | 18.8 |
| 4 1 | 13 12.81 | +11 8.6 | 1.018 | 1.994 | 8.6 | 18.7 |
| 4 11 | 13 2.70 | +11 19.9 | 1.034 | 2.005 | 9.9 | 18.8 |
| 4 21 | 12 53.49 | +11 2.0 | 1.073 | 2.018 | 13.3 | 19.1 |
| 5 1 | 12 46.47 | +10 15.0 | 1.131 | 2.031 | 17.2 | 19.3 |
| 5 11 | 12 42.43 | + 9 3.2 | 1.208 | 2.045 | 20.7 | 19.6 |

**149418** 2003 $BD_{14}$ 4 7.6 353°.34 4°.8/11.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.21 | −20 36.5 | 1.453 | 2.249 | 18.8 | 19.2 |
| 3 12 | 13 23.78 | −20 41.4 | 1.371 | 2.245 | 15.4 | 19.0 |
| 3 22 | 13 18.64 | −20 20.3 | 1.306 | 2.242 | 11.5 | 18.7 |
| 4 1 | 13 11.45 | −19 32.9 | 1.264 | 2.240 | 7.3 | 18.5 |
| 4 11 | 13 3.35 | −18 22.9 | 1.245 | 2.238 | 4.8 | 18.3 |
| 4 21 | 12 55.63 | −16 58.3 | 1.252 | 2.237 | 6.9 | 18.4 |
| 5 1 | 12 49.49 | −15 29.5 | 1.283 | 2.236 | 11.0 | 18.7 |
| 5 11 | 12 45.80 | −14 7.2 | 1.335 | 2.237 | 15.1 | 18.9 |

**329299** 2000 $RB_{37}$ 4 7.6 172°.61 4°.9/ 1.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.02 | + 0 51.7 | 2.082 | 2.916 | 12.5 | 20.7 |
| 3 12 | 13 24.10 | + 3 9.0 | 2.007 | 2.918 | 9.4 | 20.5 |
| 3 22 | 13 18.29 | + 5 35.3 | 1.960 | 2.920 | 6.4 | 20.3 |
| 4 1 | 13 11.16 | + 8 1.0 | 1.943 | 2.921 | 4.9 | 20.2 |
| 4 11 | 13 3.53 | +10 15.7 | 1.956 | 2.922 | 6.4 | 20.3 |
| 4 21 | 12 56.22 | +12 10.6 | 1.999 | 2.923 | 9.4 | 20.5 |
| 5 1 | 12 50.02 | +13 40.0 | 2.067 | 2.923 | 12.4 | 20.6 |
| 5 11 | 12 45.51 | +14 42.2 | 2.156 | 2.923 | 15.0 | 20.8 |

**9243** 1998 $FF_{68}$ 4 7.6 355°.56 0°.0/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.08 | − 9 11.9 | 1.987 | 2.803 | 13.7 | 18.2 |
| 3 12 | 13 23.55 | − 8 51.2 | 1.902 | 2.801 | 10.5 | 18.0 |
| 3 22 | 13 18.03 | − 8 18.3 | 1.841 | 2.800 | 6.9 | 17.8 |
| 4 1 | 13 11.09 | − 7 36.4 | 1.805 | 2.799 | 2.8 | 17.5 |
| 4 11 | 13 3.57 | − 6 50.3 | 1.797 | 2.798 | 1.4 | 17.4 |
| 4 21 | 12 56.33 | − 6 5.3 | 1.817 | 2.797 | 5.6 | 17.7 |
| 5 1 | 12 50.24 | − 5 27.0 | 1.863 | 2.797 | 9.5 | 17.9 |
| 5 11 | 12 45.91 | − 4 59.5 | 1.932 | 2.798 | 12.8 | 18.1 |

**170257** 2003 $QA_{55}$ 4 7.6 245°.69 2°.1/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.07 | − 4 34.7 | 1.671 | 2.500 | 15.3 | 20.4 |
| 3 12 | 13 27.82 | − 3 55.7 | 1.583 | 2.491 | 11.7 | 20.2 |
| 3 22 | 13 21.04 | − 3 5.1 | 1.517 | 2.481 | 7.5 | 19.9 |
| 4 1 | 13 12.39 | − 2 7.9 | 1.477 | 2.470 | 3.2 | 19.6 |
| 4 11 | 13 2.87 | − 1 11.3 | 1.464 | 2.460 | 3.3 | 19.6 |
| 4 21 | 12 53.65 | − 0 22.4 | 1.477 | 2.449 | 7.8 | 19.8 |
| 5 1 | 12 45.82 | + 0 12.6 | 1.516 | 2.438 | 12.2 | 20.1 |
| 5 11 | 12 40.21 | + 0 29.8 | 1.577 | 2.426 | 16.1 | 20.3 |

**89793** 2002 $AJ_{121}$ 4 7.6 325°.39 1°.1/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.99 | − 5 50.0 | 2.114 | 2.937 | 12.7 | 18.9 |
| 3 12 | 13 23.39 | − 5 23.0 | 2.025 | 2.929 | 9.7 | 18.7 |
| 3 22 | 13 17.89 | − 4 46.7 | 1.959 | 2.921 | 6.2 | 18.5 |
| 4 1 | 13 11.04 | − 4 4.6 | 1.919 | 2.913 | 2.5 | 18.2 |
| 4 11 | 13 3.59 | − 3 21.6 | 1.907 | 2.905 | 2.1 | 18.2 |
| 4 21 | 12 56.38 | − 2 42.7 | 1.923 | 2.898 | 5.9 | 18.4 |
| 5 1 | 12 50.21 | − 2 12.8 | 1.966 | 2.891 | 9.6 | 18.6 |
| 5 11 | 12 45.70 | − 1 55.1 | 2.031 | 2.885 | 12.8 | 18.8 |

**316734** 1998 $SE_{125}$ 4 7.6 238°.58 1°.3/ 6.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.05 | − 6 32.3 | 2.055 | 2.870 | 13.4 | 21.8 |
| 3 12 | 13 26.63 | − 5 46.7 | 1.955 | 2.855 | 10.2 | 21.6 |
| 3 22 | 13 20.09 | − 4 49.0 | 1.879 | 2.839 | 6.6 | 21.3 |
| 4 1 | 13 11.97 | − 3 43.3 | 1.830 | 2.823 | 2.6 | 21.0 |
| 4 11 | 13 3.11 | − 2 35.6 | 1.809 | 2.807 | 2.5 | 21.0 |
| 4 21 | 12 54.43 | − 1 32.4 | 1.817 | 2.789 | 6.5 | 21.2 |
| 5 1 | 12 46.86 | − 0 39.9 | 1.852 | 2.771 | 10.5 | 21.4 |
| 5 11 | 12 41.10 | − 0 2.4 | 1.911 | 2.752 | 14.0 | 21.6 |

**105570** 2000 $RP_{66}$ 4 7.6 186°.39 2°.7/ 4.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.05 | − 3 8.6 | 2.046 | 2.867 | 13.2 | 20.5 |
| 3 12 | 13 27.22 | − 2 2.6 | 1.963 | 2.867 | 10.0 | 20.3 |
| 3 22 | 13 20.34 | − 0 47.0 | 1.905 | 2.867 | 6.4 | 20.1 |
| 4 1 | 13 12.02 | + 0 32.4 | 1.874 | 2.865 | 3.1 | 19.9 |
| 4 11 | 13 3.11 | + 1 48.5 | 1.872 | 2.863 | 3.8 | 19.9 |
| 4 21 | 12 54.53 | + 2 54.6 | 1.899 | 2.860 | 7.3 | 20.1 |
| 5 1 | 12 47.14 | + 3 45.2 | 1.953 | 2.856 | 10.9 | 20.3 |
| 5 11 | 12 41.58 | + 4 17.5 | 2.030 | 2.851 | 14.0 | 20.5 |

**69714** 1998 $HR_{98}$ 4 7.6 341°.15 3°.4/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.87 | − 0 23.7 | 1.259 | 2.111 | 17.9 | 18.1 |
| 3 12 | 13 29.12 | − 0 15.1 | 1.184 | 2.103 | 13.7 | 17.8 |
| 3 22 | 13 22.23 | − 0 0.4 | 1.128 | 2.095 | 9.0 | 17.5 |
| 4 1 | 13 12.95 | + 0 14.6 | 1.096 | 2.089 | 4.3 | 17.2 |
| 4 11 | 13 2.60 | + 0 23.2 | 1.088 | 2.083 | 4.6 | 17.2 |
| 4 21 | 12 52.69 | + 0 19.4 | 1.104 | 2.078 | 9.4 | 17.4 |
| 5 1 | 12 44.64 | − 0 0.6 | 1.143 | 2.074 | 14.4 | 17.7 |
| 5 11 | 12 39.42 | − 0 38.2 | 1.201 | 2.070 | 18.8 | 17.9 |

**508942** 2004 $RU_{324}$ 4 7.6 257°.57 2°.4/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.10 | −16 6.4 | 2.315 | 3.087 | 13.3 | 22.6 |
| 3 12 | 13 27.40 | −16 4.1 | 2.196 | 3.063 | 10.7 | 22.4 |
| 3 22 | 13 20.61 | −15 47.0 | 2.100 | 3.038 | 7.6 | 22.2 |
| 4 1 | 13 12.21 | −15 15.5 | 2.031 | 3.013 | 4.3 | 21.9 |
| 4 11 | 13 2.96 | −14 31.8 | 1.990 | 2.987 | 2.5 | 21.7 |
| 4 21 | 12 53.76 | −13 40.3 | 1.978 | 2.960 | 5.1 | 21.9 |
| 5 1 | 12 45.51 | −12 46.6 | 1.995 | 2.932 | 8.8 | 22.0 |
| 5 11 | 12 38.97 | −11 56.8 | 2.036 | 2.904 | 12.2 | 22.2 |

**277745** 2006 $DK_{107}$ 4 7.6 178°.36 3°.3/ 3.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.44 | − 1 39.3 | 2.006 | 2.839 | 12.9 | 20.9 |
| 3 12 | 13 23.73 | − 0 24.6 | 1.929 | 2.839 | 9.7 | 20.7 |
| 3 22 | 13 18.09 | + 0 58.6 | 1.876 | 2.840 | 6.3 | 20.5 |
| 4 1 | 13 11.11 | + 2 24.0 | 1.851 | 2.840 | 3.5 | 20.3 |
| 4 11 | 13 3.59 | + 3 43.9 | 1.854 | 2.840 | 4.4 | 20.4 |
| 4 21 | 12 56.41 | + 4 51.4 | 1.884 | 2.840 | 7.7 | 20.6 |
| 5 1 | 12 50.36 | + 5 41.7 | 1.941 | 2.840 | 11.1 | 20.8 |
| 5 11 | 12 46.04 | + 6 12.0 | 2.019 | 2.839 | 14.1 | 21.0 |

**182844** 2002 $CE_{58}$ 4 7.6 309°.83 6°.9/29.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.81 | +10 23.9 | 2.147 | 2.992 | 11.7 | 20.2 |
| 3 12 | 13 21.73 | +12 6.1 | 2.070 | 2.977 | 9.4 | 20.0 |
| 3 22 | 13 16.83 | +13 48.3 | 2.018 | 2.962 | 7.5 | 19.8 |
| 4 1 | 13 10.62 | +15 22.2 | 1.993 | 2.947 | 7.0 | 19.8 |
| 4 11 | 13 3.84 | +16 39.8 | 1.995 | 2.933 | 8.4 | 19.8 |
| 4 21 | 12 57.29 | +17 35.4 | 2.023 | 2.919 | 10.7 | 19.9 |
| 5 1 | 12 51.74 | +18 5.8 | 2.073 | 2.905 | 13.3 | 20.1 |
| 5 11 | 12 47.79 | +18 10.9 | 2.143 | 2.891 | 15.7 | 20.2 |

**466164** 2012 $JW_{7}$ 4 7.6 227°.40 3°.6/ 4.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.15 | + 2 48.8 | 2.262 | 3.083 | 12.1 | 21.0 |
| 3 12 | 13 28.72 | + 3 21.3 | 2.170 | 3.072 | 9.3 | 20.8 |
| 3 22 | 13 21.29 | + 3 56.5 | 2.102 | 3.060 | 6.2 | 20.6 |
| 4 1 | 13 12.43 | + 4 29.6 | 2.063 | 3.048 | 3.8 | 20.4 |
| 4 11 | 13 2.92 | + 4 55.6 | 2.052 | 3.035 | 4.5 | 20.5 |
| 4 21 | 12 53.65 | + 5 10.2 | 2.071 | 3.022 | 7.5 | 20.6 |
| 5 1 | 12 45.46 | + 5 10.8 | 2.116 | 3.008 | 10.7 | 20.8 |
| 5 11 | 12 39.00 | + 4 56.1 | 2.185 | 2.993 | 13.6 | 21.0 |

**348569** 2005 $VO_{126}$ 4 7.6 332°.18 1°.5/ 8.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 40.42 | − 7 43.5 | 1.896 | 2.694 | 15.0 | 20.4 |
| 3 12 | 13 34.15 | − 8 46.0 | 1.795 | 2.681 | 11.8 | 20.1 |
| 3 22 | 13 25.19 | − 9 43.7 | 1.717 | 2.668 | 8.0 | 19.9 |
| 4 1 | 13 14.14 | −10 36.0 | 1.667 | 2.656 | 3.7 | 19.6 |
| 4 11 | 13 2.00 | −11 22.9 | 1.645 | 2.645 | 1.9 | 19.4 |
| 4 21 | 12 49.98 | −12 5.3 | 1.654 | 2.634 | 6.1 | 19.7 |
| 5 1 | 12 39.28 | −12 45.0 | 1.690 | 2.624 | 10.3 | 19.9 |
| 5 11 | 12 30.84 | −13 24.9 | 1.752 | 2.615 | 14.1 | 20.1 |

**172801** 2004 $FS_{129}$ 4 7.6 301°.67 2°.4/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.90 | −16 17.3 | 2.202 | 2.985 | 13.6 | 19.9 |
| 3 12 | 13 24.08 | −16 10.5 | 2.109 | 2.982 | 10.9 | 19.7 |
| 3 22 | 13 18.36 | −15 48.2 | 2.038 | 2.978 | 7.7 | 19.5 |
| 4 1 | 13 11.25 | −15 11.6 | 1.992 | 2.975 | 4.3 | 19.2 |
| 4 11 | 13 3.55 | −14 23.8 | 1.975 | 2.972 | 2.4 | 19.1 |
| 4 21 | 12 56.09 | −13 29.8 | 1.985 | 2.969 | 4.9 | 19.3 |
| 5 1 | 12 49.68 | −12 35.3 | 2.023 | 2.966 | 8.4 | 19.5 |
| 5 11 | 12 44.95 | −11 46.0 | 2.086 | 2.962 | 11.6 | 19.7 |

**438878** 2009 $HP_{103}$ 4 7.6 280°.59 3°.0/ 4.2 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.45 | + 0 14.3 | 2.403 | 3.231 | 11.2 | 21.5 |
| 3 12 | 13 23.55 | + 0 59.4 | 2.306 | 3.214 | 8.5 | 21.3 |
| 3 22 | 13 17.93 | + 1 49.9 | 2.235 | 3.196 | 5.6 | 21.1 |
| 4 1 | 13 11.07 | + 2 41.2 | 2.190 | 3.179 | 3.2 | 20.9 |
| 4 11 | 13 3.64 | + 3 27.9 | 2.175 | 3.161 | 3.9 | 20.9 |
| 4 21 | 12 56.38 | + 4 5.5 | 2.188 | 3.144 | 6.8 | 21.1 |
| 5 1 | 12 50.00 | + 4 30.1 | 2.227 | 3.126 | 9.9 | 21.3 |
| 5 11 | 12 45.10 | + 4 39.5 | 2.289 | 3.108 | 12.7 | 21.4 |

**169476** 2002 $CC_{115}$ 4 7.6 272°.85 3°.3/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.28 | −15 35.1 | 1.556 | 2.355 | 17.6 | 20.1 |
| 3 12 | 13 29.19 | −15 54.4 | 1.461 | 2.343 | 14.2 | 19.9 |
| 3 22 | 13 22.23 | −15 55.4 | 1.386 | 2.330 | 10.1 | 19.6 |
| 4 1 | 13 12.99 | −15 37.7 | 1.334 | 2.318 | 5.8 | 19.3 |
| 4 11 | 13 2.60 | −15 3.8 | 1.308 | 2.305 | 3.4 | 19.1 |
| 4 21 | 12 52.40 | −14 19.1 | 1.308 | 2.292 | 6.8 | 19.3 |
| 5 1 | 12 43.72 | −13 31.4 | 1.334 | 2.279 | 11.4 | 19.5 |
| 5 11 | 12 37.58 | −12 49.0 | 1.381 | 2.267 | 15.8 | 19.7 |

**116867** 2004 $FF_{105}$ 4 7.6 347°.00 1°.9/ 8.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.66 | −11 11.5 | 1.140 | 1.978 | 20.3 | 19.2 |
| 3 12 | 13 28.60 | −11 30.9 | 1.065 | 1.973 | 16.0 | 18.9 |
| 3 22 | 13 22.12 | −11 32.2 | 1.009 | 1.969 | 10.9 | 18.6 |
| 4 1 | 13 12.99 | −11 16.2 | 0.974 | 1.965 | 5.2 | 18.2 |
| 4 11 | 13 2.62 | −10 47.9 | 0.962 | 1.963 | 2.4 | 18.0 |
| 4 21 | 12 52.70 | −10 14.3 | 0.974 | 1.960 | 7.9 | 18.4 |
| 5 1 | 12 44.80 | − 9 44.2 | 1.007 | 1.959 | 13.5 | 18.7 |
| 5 11 | 12 40.01 | − 9 25.4 | 1.060 | 1.958 | 18.4 | 18.9 |

**488928** 2005 $UR_{65}$ 4 7.6 112°.47 1°.6/ 9.3 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.81 | −14 46.7 | 2.130 | 2.913 | 14.0 | 22.4 |
| 3 12 | 13 26.89 | −14 24.1 | 2.057 | 2.933 | 11.0 | 22.2 |
| 3 22 | 13 20.03 | −13 46.2 | 2.007 | 2.952 | 7.5 | 22.0 |
| 4 1 | 13 11.87 | −12 55.3 | 1.983 | 2.970 | 3.7 | 21.8 |
| 4 11 | 13 3.27 | −11 55.9 | 1.988 | 2.988 | 1.8 | 21.7 |
| 4 21 | 12 55.11 | −10 53.7 | 2.023 | 3.005 | 4.9 | 21.9 |
| 5 1 | 12 48.19 | − 9 54.7 | 2.085 | 3.022 | 8.5 | 22.2 |
| 5 11 | 12 43.06 | − 9 4.2 | 2.172 | 3.038 | 11.6 | 22.4 |

**159273** 2005 $YH_{240}$ 4 7.6 239°.70 2°.4/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.74 | − 2 30.1 | 1.941 | 2.769 | 13.5 | 20.6 |
| 3 12 | 13 26.38 | − 1 54.5 | 1.857 | 2.764 | 10.3 | 20.4 |
| 3 22 | 13 19.90 | − 1 11.1 | 1.796 | 2.759 | 6.6 | 20.2 |
| 4 1 | 13 11.89 | − 0 24.8 | 1.762 | 2.754 | 3.1 | 19.9 |
| 4 11 | 13 3.23 | + 0 18.5 | 1.756 | 2.749 | 3.4 | 20.0 |
| 4 21 | 12 54.88 | + 0 53.5 | 1.777 | 2.744 | 7.1 | 20.2 |
| 5 1 | 12 47.74 | + 1 15.5 | 1.824 | 2.738 | 10.9 | 20.4 |
| 5 11 | 12 42.48 | + 1 22.1 | 1.894 | 2.733 | 14.2 | 20.6 |

**436665** 2011 $ST_{52}$ 4 7.6 247°.86 0°.8/ 6.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.16 | − 8 0.1 | 2.427 | 3.238 | 11.7 | 21.8 |
| 3 12 | 13 22.52 | − 7 11.1 | 2.333 | 3.231 | 8.9 | 21.6 |
| 3 22 | 13 17.23 | − 6 11.0 | 2.263 | 3.223 | 5.7 | 21.4 |
| 4 1 | 13 10.77 | − 5 3.5 | 2.222 | 3.216 | 2.2 | 21.1 |
| 4 11 | 13 3.82 | − 3 53.8 | 2.209 | 3.208 | 1.8 | 21.1 |
| 4 21 | 12 57.08 | − 2 47.3 | 2.226 | 3.200 | 5.3 | 21.3 |
| 5 1 | 12 51.24 | − 1 49.3 | 2.270 | 3.192 | 8.7 | 21.5 |
| 5 11 | 12 46.84 | − 1 3.7 | 2.339 | 3.184 | 11.6 | 21.7 |

**260217** 2004 $RP_{212}$ 4 7.6 303°.37 2°.7/10.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.21 | −20 0.2 | 2.251 | 3.018 | 13.8 | 19.8 |
| 3 12 | 13 23.04 | −19 18.3 | 2.118 | 2.980 | 11.3 | 19.5 |
| 3 22 | 13 17.86 | −18 13.9 | 2.008 | 2.942 | 8.2 | 19.2 |
| 4 1 | 13 11.14 | −16 47.6 | 1.924 | 2.903 | 4.8 | 18.9 |
| 4 11 | 13 3.58 | −15 2.8 | 1.867 | 2.864 | 2.7 | 18.7 |
| 4 21 | 12 56.04 | −13 6.3 | 1.841 | 2.824 | 5.2 | 18.8 |
| 5 1 | 12 49.41 | −11 6.6 | 1.842 | 2.785 | 9.0 | 19.0 |
| 5 11 | 12 44.44 | − 9 12.9 | 1.870 | 2.745 | 12.8 | 19.1 |

**32615** 2001 $QU_{277}$ 4 7.6 228°.04 4°.0/30.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 21.82 | +13 58.7 | 4.465 | 5.287 | 6.5 | 18.4 |
| 3 12 | 13 18.46 | +14 42.9 | 4.396 | 5.285 | 5.3 | 18.3 |
| 3 22 | 13 14.25 | +15 24.1 | 4.354 | 5.283 | 4.3 | 18.2 |
| 4 1 | 13 9.48 | +15 59.3 | 4.340 | 5.282 | 4.0 | 18.2 |
| 4 11 | 13 4.50 | +16 26.0 | 4.355 | 5.280 | 4.6 | 18.2 |
| 4 21 | 12 59.66 | +16 42.4 | 4.397 | 5.278 | 5.7 | 18.3 |
| 5 1 | 12 55.30 | +16 47.5 | 4.465 | 5.276 | 7.1 | 18.4 |
| 5 11 | 12 51.70 | +16 41.2 | 4.555 | 5.274 | 8.3 | 18.5 |

**343352** 2010 $CR_{62}$ 4 7.6 303°.95 2°.1/ 9.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.11 | −13 48.3 | 2.008 | 2.801 | 14.4 | 21.3 |
| 3 12 | 13 26.72 | −13 59.1 | 1.917 | 2.797 | 11.4 | 21.1 |
| 3 22 | 13 20.17 | −13 56.3 | 1.848 | 2.794 | 7.9 | 20.8 |
| 4 1 | 13 12.02 | −13 40.6 | 1.805 | 2.791 | 4.2 | 20.6 |
| 4 11 | 13 3.16 | −13 14.9 | 1.789 | 2.788 | 2.2 | 20.4 |
| 4 21 | 12 54.56 | −12 43.3 | 1.802 | 2.785 | 5.4 | 20.6 |
| 5 1 | 12 47.14 | −12 11.3 | 1.841 | 2.782 | 9.1 | 20.9 |
| 5 11 | 12 41.63 | −11 44.2 | 1.904 | 2.779 | 12.6 | 21.1 |

**473134** 2015 $JJ_{10}$ 4 7.6 239°.62 4°.6/13.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.47 | −26 17.6 | 2.776 | 3.492 | 12.6 | 21.7 |
| 3 12 | 13 23.51 | −26 15.3 | 2.666 | 3.482 | 10.7 | 21.5 |
| 3 22 | 13 17.89 | −25 55.2 | 2.577 | 3.471 | 8.4 | 21.3 |
| 4 1 | 13 11.06 | −25 16.7 | 2.513 | 3.461 | 6.2 | 21.2 |
| 4 11 | 13 3.68 | −24 21.3 | 2.477 | 3.450 | 4.7 | 21.1 |
| 4 21 | 12 56.48 | −23 12.5 | 2.469 | 3.438 | 5.2 | 21.1 |
| 5 1 | 12 50.14 | −21 55.7 | 2.490 | 3.427 | 7.3 | 21.2 |
| 5 11 | 12 45.25 | −20 37.2 | 2.536 | 3.415 | 9.7 | 21.3 |

**177446** 2004 $CW_{107}$ 4 7.6 252°.02 1°.6/ 6.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.95 | − 6 14.0 | 1.769 | 2.595 | 14.7 | 20.5 |
| 3 12 | 13 26.05 | − 5 28.8 | 1.680 | 2.586 | 11.2 | 20.3 |
| 3 22 | 13 19.84 | − 4 30.6 | 1.614 | 2.577 | 7.2 | 20.0 |
| 4 1 | 13 11.92 | − 3 24.2 | 1.574 | 2.568 | 2.9 | 19.7 |
| 4 11 | 13 3.24 | − 2 16.7 | 1.561 | 2.559 | 2.8 | 19.7 |
| 4 21 | 12 54.83 | − 1 15.3 | 1.576 | 2.549 | 7.2 | 19.9 |
| 5 1 | 12 47.72 | − 0 26.6 | 1.616 | 2.539 | 11.4 | 20.2 |
| 5 11 | 12 42.65 | + 0 4.9 | 1.678 | 2.530 | 15.2 | 20.4 |

**175564** 2006 $SK_{393}$ 4 7.6 212°.37 1°.9/ 9.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.83 | −14 37.6 | 2.776 | 3.546 | 11.4 | 20.8 |
| 3 12 | 13 25.93 | −14 43.4 | 2.673 | 3.540 | 9.1 | 20.6 |
| 3 22 | 13 19.38 | −14 38.3 | 2.595 | 3.534 | 6.3 | 20.4 |
| 4 1 | 13 11.65 | −14 23.1 | 2.544 | 3.527 | 3.4 | 20.2 |
| 4 11 | 13 3.38 | −13 59.8 | 2.523 | 3.520 | 1.9 | 20.1 |
| 4 21 | 12 55.28 | −13 31.4 | 2.531 | 3.512 | 4.2 | 20.2 |
| 5 1 | 12 48.01 | −13 1.8 | 2.568 | 3.504 | 7.2 | 20.4 |
| 5 11 | 12 42.15 | −12 35.0 | 2.632 | 3.496 | 9.9 | 20.6 |

**491140** 2011 $SC_{166}$ 4 7.6 209°.36 0°.7/ 8.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.03 | −10 24.7 | 2.697 | 3.487 | 11.2 | 22.1 |
| 3 12 | 13 25.30 | −10 21.1 | 2.600 | 3.483 | 8.7 | 21.9 |
| 3 22 | 13 18.96 | −10 8.4 | 2.528 | 3.479 | 5.8 | 21.7 |
| 4 1 | 13 11.47 | − 9 48.2 | 2.484 | 3.474 | 2.6 | 21.5 |
| 4 11 | 13 3.48 | − 9 23.3 | 2.469 | 3.469 | 1.1 | 21.3 |
| 4 21 | 12 55.68 | − 8 57.0 | 2.484 | 3.464 | 4.3 | 21.6 |
| 5 1 | 12 48.74 | − 8 32.8 | 2.527 | 3.459 | 7.5 | 21.7 |
| 5 11 | 12 43.20 | − 8 14.3 | 2.596 | 3.453 | 10.2 | 21.9 |

**496846** 1999 $TD_{84}$ 4 7.6 276°.90 1°.4/ 8.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.71 | −12 42.2 | 1.707 | 2.513 | 16.0 | 22.4 |
| 3 12 | 13 27.82 | −12 29.7 | 1.598 | 2.488 | 12.7 | 22.1 |
| 3 22 | 13 21.28 | −11 59.5 | 1.509 | 2.462 | 8.7 | 21.8 |
| 4 1 | 13 12.63 | −11 13.0 | 1.446 | 2.436 | 4.1 | 21.5 |
| 4 11 | 13 2.82 | −10 14.4 | 1.409 | 2.409 | 1.8 | 21.3 |
| 4 21 | 12 53.04 | − 9 10.5 | 1.399 | 2.382 | 6.5 | 21.5 |
| 5 1 | 12 44.53 | − 8 9.4 | 1.414 | 2.354 | 11.4 | 21.7 |
| 5 11 | 12 38.27 | − 7 18.7 | 1.453 | 2.327 | 15.8 | 21.9 |

**276511** 2003 $QA_{99}$ 4 7.6 183°.68 0°.0/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.01 | − 9 10.2 | 2.126 | 2.933 | 13.2 | 21.4 |
| 3 12 | 13 25.66 | − 8 47.7 | 2.040 | 2.933 | 10.2 | 21.2 |
| 3 22 | 13 19.36 | − 8 13.6 | 1.977 | 2.933 | 6.6 | 21.0 |
| 4 1 | 13 11.67 | − 7 30.9 | 1.940 | 2.933 | 2.7 | 20.8 |
| 4 11 | 13 3.40 | − 6 44.2 | 1.932 | 2.933 | 1.4 | 20.7 |
| 4 21 | 12 55.43 | − 5 58.7 | 1.953 | 2.932 | 5.4 | 20.9 |
| 5 1 | 12 48.57 | − 5 19.3 | 2.001 | 2.931 | 9.2 | 21.2 |
| 5 11 | 12 43.45 | − 4 50.4 | 2.072 | 2.930 | 12.4 | 21.4 |

**111739** 2002 $CB_{84}$ 4 7.6 15°.10 0°.0/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.32 | − 8 56.4 | 2.167 | 2.979 | 12.8 | 19.6 |
| 3 12 | 13 23.56 | − 8 36.7 | 2.084 | 2.981 | 9.9 | 19.4 |
| 3 22 | 13 17.97 | − 8 6.2 | 2.025 | 2.983 | 6.4 | 19.2 |
| 4 1 | 13 11.10 | − 7 27.8 | 1.992 | 2.985 | 2.6 | 19.0 |
| 4 11 | 13 3.71 | − 6 45.8 | 1.987 | 2.988 | 1.3 | 18.9 |
| 4 21 | 12 56.61 | − 6 5.0 | 2.011 | 2.991 | 5.2 | 19.1 |
| 5 1 | 12 50.57 | − 5 30.3 | 2.061 | 2.994 | 8.8 | 19.3 |
| 5 11 | 12 46.16 | − 5 5.4 | 2.135 | 2.997 | 11.9 | 19.6 |

**386181** 2007 $VH_{60}$ 4 7.6 241°.74 3°.0/11.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.37 | −19 30.2 | 2.234 | 3.002 | 13.9 | 21.1 |
| 3 12 | 13 23.70 | −19 10.8 | 2.137 | 2.998 | 11.2 | 20.9 |
| 3 22 | 13 18.12 | −18 32.9 | 2.063 | 2.994 | 8.2 | 20.7 |
| 4 1 | 13 11.18 | −17 37.5 | 2.013 | 2.990 | 4.9 | 20.5 |
| 4 11 | 13 3.66 | −16 28.2 | 1.992 | 2.986 | 3.0 | 20.4 |
| 4 21 | 12 56.38 | −15 10.6 | 1.999 | 2.982 | 4.9 | 20.5 |
| 5 1 | 12 50.16 | −13 51.3 | 2.034 | 2.977 | 8.2 | 20.7 |
| 5 11 | 12 45.62 | −12 37.4 | 2.093 | 2.973 | 11.4 | 20.9 |

**502229** 2015 $BE_{89}$ 4 7.6 324°.79 0°.4/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.97 | −10 4.0 | 1.862 | 2.675 | 14.6 | 21.2 |
| 3 12 | 13 25.93 | − 9 48.9 | 1.778 | 2.673 | 11.3 | 21.0 |
| 3 22 | 13 19.68 | − 9 20.5 | 1.715 | 2.672 | 7.5 | 20.7 |
| 4 1 | 13 11.84 | − 8 41.5 | 1.678 | 2.670 | 3.2 | 20.5 |
| 4 11 | 13 3.32 | − 7 56.7 | 1.668 | 2.669 | 1.4 | 20.3 |
| 4 21 | 12 55.11 | − 7 11.8 | 1.686 | 2.668 | 5.8 | 20.6 |
| 5 1 | 12 48.17 | − 6 32.8 | 1.731 | 2.667 | 9.9 | 20.9 |
| 5 11 | 12 43.20 | − 6 4.3 | 1.798 | 2.666 | 13.6 | 21.1 |

**435592** 2008 $SJ_{8}$ 4 7.6 153°.98 2°.1/ 4.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.21 | − 4 34.7 | 2.371 | 3.188 | 11.7 | 21.2 |
| 3 12 | 13 24.00 | − 3 21.5 | 2.293 | 3.195 | 8.8 | 21.0 |
| 3 22 | 13 18.13 | − 1 59.1 | 2.240 | 3.202 | 5.6 | 20.8 |
| 4 1 | 13 11.13 | − 0 32.8 | 2.216 | 3.208 | 2.6 | 20.6 |
| 4 11 | 13 3.71 | + 0 51.2 | 2.222 | 3.214 | 3.1 | 20.7 |
| 4 21 | 12 56.61 | + 2 6.7 | 2.258 | 3.219 | 6.2 | 20.9 |
| 5 1 | 12 50.49 | + 3 8.8 | 2.321 | 3.224 | 9.4 | 21.1 |
| 5 11 | 12 45.89 | + 3 54.6 | 2.407 | 3.228 | 12.1 | 21.3 |

**384158** 2009 $AK_{27}$ 4 7.6 41°.87 1°.9/ 5.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.66 | − 4 0.2 | 1.900 | 2.730 | 13.7 | 21.2 |
| 3 12 | 13 24.72 | − 3 26.3 | 1.831 | 2.739 | 10.3 | 21.0 |
| 3 22 | 13 18.76 | − 2 44.1 | 1.784 | 2.747 | 6.6 | 20.7 |
| 4 1 | 13 11.42 | − 1 58.1 | 1.763 | 2.757 | 2.8 | 20.5 |
| 4 11 | 13 3.57 | − 1 14.2 | 1.770 | 2.766 | 2.9 | 20.5 |
| 4 21 | 12 56.14 | − 0 37.7 | 1.805 | 2.776 | 6.6 | 20.8 |
| 5 1 | 12 49.94 | − 0 13.0 | 1.865 | 2.786 | 10.3 | 21.0 |
| 5 11 | 12 45.58 | − 0 2.7 | 1.948 | 2.796 | 13.5 | 21.3 |

**87678** 2000 $RU_{103}$ 4 7.6 288°.48 3°.6/11.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.25 | −20 36.7 | 1.823 | 2.601 | 16.2 | 19.2 |
| 3 12 | 13 24.21 | −20 14.2 | 1.716 | 2.581 | 13.3 | 18.9 |
| 3 22 | 13 18.80 | −19 27.3 | 1.628 | 2.561 | 9.8 | 18.6 |
| 4 1 | 13 11.57 | −18 16.1 | 1.565 | 2.542 | 6.0 | 18.4 |
| 4 11 | 13 3.44 | −16 44.4 | 1.527 | 2.522 | 3.7 | 18.2 |
| 4 21 | 12 55.47 | −14 59.5 | 1.518 | 2.502 | 6.0 | 18.3 |
| 5 1 | 12 48.74 | −13 11.3 | 1.534 | 2.482 | 10.1 | 18.5 |
| 5 11 | 12 44.07 | −11 30.0 | 1.575 | 2.462 | 14.1 | 18.6 |

**368731** 2005 $UM_{110}$ 4 7.6 134°.23 1°.5/ 9.2 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.60 | −14 26.4 | 2.315 | 3.095 | 13.1 | 21.9 |
| 3 12 | 13 26.64 | −14 4.6 | 2.235 | 3.109 | 10.3 | 21.8 |
| 3 22 | 13 19.86 | −13 28.6 | 2.179 | 3.123 | 7.0 | 21.6 |
| 4 1 | 13 11.84 | −12 40.6 | 2.150 | 3.136 | 3.5 | 21.4 |
| 4 11 | 13 3.37 | −11 44.7 | 2.150 | 3.149 | 1.6 | 21.3 |
| 4 21 | 12 55.27 | −10 45.9 | 2.179 | 3.161 | 4.7 | 21.5 |
| 5 1 | 12 48.29 | − 9 49.8 | 2.237 | 3.172 | 8.1 | 21.7 |
| 5 11 | 12 42.98 | − 9 1.3 | 2.320 | 3.183 | 11.1 | 21.9 |

**346225** 2007 $YB_{66}$ 4 7.6 54°.33 0°.3/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.80 | −10 4.1 | 2.205 | 3.012 | 12.8 | 21.6 |
| 3 12 | 13 23.87 | − 9 43.0 | 2.125 | 3.018 | 9.9 | 21.4 |
| 3 22 | 13 18.14 | − 9 10.3 | 2.069 | 3.025 | 6.5 | 21.2 |
| 4 1 | 13 11.17 | − 8 29.0 | 2.039 | 3.032 | 2.7 | 20.9 |
| 4 11 | 13 3.72 | − 7 43.4 | 2.038 | 3.039 | 1.2 | 20.8 |
| 4 21 | 12 56.58 | − 6 58.3 | 2.065 | 3.046 | 5.0 | 21.1 |
| 5 1 | 12 50.51 | − 6 18.6 | 2.119 | 3.053 | 8.5 | 21.3 |
| 5 11 | 12 46.05 | − 5 48.4 | 2.197 | 3.060 | 11.6 | 21.5 |

**382116** 2011 $HV_{36}$ 4 7.6 121°.65 3°.6/ 3.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.67 | + 0 4.4 | 1.964 | 2.799 | 13.1 | 21.2 |
| 3 12 | 13 24.72 | + 1 3.8 | 1.890 | 2.801 | 9.9 | 21.0 |
| 3 22 | 13 18.77 | + 2 9.5 | 1.840 | 2.802 | 6.5 | 20.8 |
| 4 1 | 13 11.44 | + 3 15.3 | 1.816 | 2.804 | 3.8 | 20.6 |
| 4 11 | 13 3.57 | + 4 14.3 | 1.820 | 2.805 | 4.6 | 20.6 |
| 4 21 | 12 56.06 | + 5 0.7 | 1.852 | 2.807 | 7.9 | 20.8 |
| 5 1 | 12 49.73 | + 5 30.3 | 1.908 | 2.808 | 11.2 | 21.0 |
| 5 11 | 12 45.19 | + 5 41.1 | 1.987 | 2.809 | 14.3 | 21.2 |

**140212** 2001 $SJ_{232}$ 4 7.6 206°.06 0°.6/ 7.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.31 | − 6 23.4 | 2.414 | 3.222 | 11.8 | 20.2 |
| 3 12 | 13 25.67 | − 6 10.0 | 2.325 | 3.220 | 9.0 | 20.0 |
| 3 22 | 13 19.27 | − 5 48.7 | 2.260 | 3.218 | 5.8 | 19.8 |
| 4 1 | 13 11.63 | − 5 22.2 | 2.222 | 3.215 | 2.3 | 19.5 |
| 4 11 | 13 3.48 | − 4 54.3 | 2.213 | 3.213 | 1.6 | 19.5 |
| 4 21 | 12 55.56 | − 4 28.7 | 2.234 | 3.210 | 5.1 | 19.7 |
| 5 1 | 12 48.61 | − 4 9.1 | 2.282 | 3.207 | 8.5 | 19.9 |
| 5 11 | 12 43.21 | − 3 58.5 | 2.355 | 3.203 | 11.4 | 20.1 |

**498031** 2007 $GP_{60}$ 4 7.6 260°.12 1°.2/ 8.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.71 | −12 18.4 | 2.040 | 2.838 | 14.0 | 21.9 |
| 3 12 | 13 26.47 | −12 10.6 | 1.939 | 2.825 | 11.1 | 21.7 |
| 3 22 | 13 20.06 | −11 48.8 | 1.861 | 2.811 | 7.5 | 21.4 |
| 4 1 | 13 12.04 | −11 14.8 | 1.808 | 2.798 | 3.6 | 21.2 |
| 4 11 | 13 3.24 | −10 32.3 | 1.784 | 2.784 | 1.6 | 21.0 |
| 4 21 | 12 54.61 | − 9 46.2 | 1.787 | 2.770 | 5.4 | 21.2 |
| 5 1 | 12 47.10 | − 9 2.5 | 1.818 | 2.755 | 9.5 | 21.4 |
| 5 11 | 12 41.44 | − 8 26.5 | 1.872 | 2.741 | 13.1 | 21.6 |

**470234** 2006 $WF_{157}$ 4 7.6 206°.98 4°.3/13.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.04 | −25 10.4 | 2.791 | 3.513 | 12.5 | 22.0 |
| 3 12 | 13 23.90 | −25 5.9 | 2.687 | 3.508 | 10.4 | 21.8 |
| 3 22 | 13 18.12 | −24 44.2 | 2.604 | 3.504 | 8.1 | 21.7 |
| 4 1 | 13 11.17 | −24 4.9 | 2.546 | 3.499 | 5.8 | 21.5 |
| 4 11 | 13 3.72 | −23 10.0 | 2.517 | 3.493 | 4.3 | 21.4 |
| 4 21 | 12 56.46 | −22 3.0 | 2.516 | 3.488 | 5.0 | 21.4 |
| 5 1 | 12 50.09 | −20 49.3 | 2.544 | 3.482 | 7.1 | 21.6 |
| 5 11 | 12 45.15 | −19 34.9 | 2.598 | 3.475 | 9.5 | 21.7 |

**38691** 2000 $QY_{29}$ 4 7.6 152°.63 0°.3/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.83 | − 7 36.0 | 1.738 | 2.551 | 15.5 | 19.0 |
| 3 12 | 13 30.49 | − 7 25.1 | 1.660 | 2.557 | 11.9 | 18.8 |
| 3 22 | 13 22.66 | − 7 2.8 | 1.604 | 2.563 | 7.7 | 18.5 |
| 4 1 | 13 13.07 | − 6 32.1 | 1.574 | 2.568 | 3.1 | 18.2 |
| 4 11 | 13 2.76 | − 5 58.1 | 1.572 | 2.572 | 1.8 | 18.2 |
| 4 21 | 12 52.89 | − 5 26.3 | 1.598 | 2.577 | 6.5 | 18.5 |
| 5 1 | 12 44.51 | − 5 2.1 | 1.650 | 2.580 | 10.8 | 18.7 |
| 5 11 | 12 38.39 | − 4 49.4 | 1.725 | 2.584 | 14.5 | 19.0 |

**390556** 2000 $TE_{65}$ 4 7.6 157°.86 0°.7/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.72 | −12 36.5 | 2.636 | 3.426 | 11.4 | 21.8 |
| 3 12 | 13 22.79 | −12 2.6 | 2.548 | 3.430 | 8.9 | 21.6 |
| 3 22 | 13 17.34 | −11 16.8 | 2.483 | 3.433 | 5.9 | 21.4 |
| 4 1 | 13 10.83 | −10 21.3 | 2.446 | 3.436 | 2.7 | 21.2 |
| 4 11 | 13 3.91 | − 9 20.3 | 2.438 | 3.439 | 1.1 | 21.1 |
| 4 21 | 12 57.24 | − 8 18.4 | 2.460 | 3.441 | 4.3 | 21.3 |
| 5 1 | 12 51.44 | − 7 20.5 | 2.511 | 3.444 | 7.4 | 21.5 |
| 5 11 | 12 47.00 | − 6 30.8 | 2.586 | 3.446 | 10.2 | 21.7 |

**504017** 2005 $JR_{182}$ 4 7.6 235°.39 2°.3/ 5.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.97 | − 0 55.7 | 2.353 | 3.173 | 11.7 | 21.5 |
| 3 12 | 13 26.22 | − 0 31.9 | 2.264 | 3.167 | 8.9 | 21.3 |
| 3 22 | 13 19.65 | − 0 3.4 | 2.199 | 3.160 | 5.7 | 21.1 |
| 4 1 | 13 11.80 | + 0 26.0 | 2.162 | 3.153 | 2.8 | 20.9 |
| 4 11 | 13 3.40 | + 0 52.0 | 2.154 | 3.146 | 3.1 | 20.9 |
| 4 21 | 12 55.24 | + 1 10.6 | 2.175 | 3.138 | 6.3 | 21.1 |
| 5 1 | 12 48.07 | + 1 18.8 | 2.222 | 3.131 | 9.5 | 21.2 |
| 5 11 | 12 42.49 | + 1 14.7 | 2.294 | 3.123 | 12.4 | 21.4 |

**318624** 2005 $JZ_{137}$ 4 7.6 79°.63 1°.5/ 6.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.99 | − 8 6.9 | 1.568 | 2.398 | 16.1 | 20.9 |
| 3 12 | 13 25.38 | − 6 57.9 | 1.500 | 2.408 | 12.2 | 20.7 |
| 3 22 | 13 19.38 | − 5 32.6 | 1.455 | 2.419 | 7.7 | 20.5 |
| 4 1 | 13 11.73 | − 3 57.7 | 1.435 | 2.430 | 3.0 | 20.2 |
| 4 11 | 13 3.49 | − 2 22.5 | 1.443 | 2.440 | 2.9 | 20.2 |
| 4 21 | 12 55.77 | − 0 56.3 | 1.477 | 2.451 | 7.5 | 20.5 |
| 5 1 | 12 49.55 | + 0 13.1 | 1.536 | 2.462 | 11.8 | 20.8 |
| 5 11 | 12 45.51 | + 1 1.3 | 1.617 | 2.472 | 15.5 | 21.1 |

**392962** 2012 $XU_{2}$ 4 7.6 194°.31 4°.3/ 2.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.51 | + 5 59.9 | 2.582 | 3.409 | 10.6 | 21.3 |
| 3 12 | 13 24.89 | + 6 49.5 | 2.504 | 3.407 | 8.1 | 21.1 |
| 3 22 | 13 18.69 | + 7 39.7 | 2.451 | 3.405 | 5.7 | 21.0 |
| 4 1 | 13 11.39 | + 8 25.4 | 2.427 | 3.403 | 4.3 | 20.9 |
| 4 11 | 13 3.67 | + 9 1.8 | 2.432 | 3.400 | 5.2 | 20.9 |
| 4 21 | 12 56.21 | + 9 25.2 | 2.464 | 3.397 | 7.4 | 21.1 |
| 5 1 | 12 49.67 | + 9 33.4 | 2.523 | 3.394 | 10.0 | 21.2 |
| 5 11 | 12 44.56 | + 9 25.8 | 2.605 | 3.390 | 12.3 | 21.4 |

**87178** 2000 $OZ_{6}$ 4 7.6 257°.28 5°.0/11.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.69 | −20 32.9 | 2.063 | 2.817 | 15.3 | 19.3 |
| 3 12 | 13 29.74 | −21 12.7 | 1.955 | 2.803 | 12.7 | 19.0 |
| 3 22 | 13 22.36 | −21 36.6 | 1.869 | 2.788 | 9.7 | 18.8 |
| 4 1 | 13 13.06 | −21 42.4 | 1.808 | 2.773 | 6.7 | 18.6 |
| 4 11 | 13 2.75 | −21 30.4 | 1.773 | 2.757 | 5.0 | 18.5 |
| 4 21 | 12 52.51 | −21 3.3 | 1.767 | 2.741 | 6.4 | 18.5 |
| 5 1 | 12 43.43 | −20 26.5 | 1.787 | 2.725 | 9.6 | 18.7 |
| 5 11 | 12 36.40 | −19 46.9 | 1.831 | 2.708 | 12.9 | 18.8 |

**279584** 2011 $DY_{46}$ 4 7.6 15°.07 1°.5/ 8.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.71 | −11 40.5 | 1.694 | 2.504 | 15.9 | 20.6 |
| 3 12 | 13 27.51 | −11 48.3 | 1.613 | 2.505 | 12.5 | 20.4 |
| 3 22 | 13 20.85 | −11 41.9 | 1.553 | 2.506 | 8.4 | 20.1 |
| 4 1 | 13 12.38 | −11 22.8 | 1.518 | 2.508 | 4.0 | 19.9 |
| 4 11 | 13 3.15 | −10 54.8 | 1.510 | 2.510 | 1.8 | 19.7 |
| 4 21 | 12 54.29 | −10 23.2 | 1.529 | 2.513 | 6.0 | 20.0 |
| 5 1 | 12 46.85 | − 9 53.9 | 1.573 | 2.515 | 10.3 | 20.2 |
| 5 11 | 12 41.62 | − 9 32.4 | 1.640 | 2.518 | 14.1 | 20.5 |

**300147** 2006 $VE_{68}$ 4 7.6 175°.75 0°.7/ 6.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.99 | − 6 28.6 | 2.945 | 3.748 | 10.0 | 22.3 |
| 3 12 | 13 23.57 | − 5 59.4 | 2.857 | 3.750 | 7.6 | 22.1 |
| 3 22 | 13 17.77 | − 5 23.1 | 2.794 | 3.752 | 4.9 | 21.9 |
| 4 1 | 13 11.01 | − 4 42.4 | 2.759 | 3.753 | 1.9 | 21.7 |
| 4 11 | 13 3.88 | − 4 0.7 | 2.755 | 3.754 | 1.5 | 21.7 |
| 4 21 | 12 56.96 | − 3 21.9 | 2.781 | 3.754 | 4.5 | 21.9 |
| 5 1 | 12 50.82 | − 2 49.1 | 2.835 | 3.754 | 7.3 | 22.1 |
| 5 11 | 12 45.91 | − 2 25.1 | 2.915 | 3.754 | 9.8 | 22.2 |

**288261** 2003 $YC_{142}$ 4 7.6 48°.79 0°.7/ 7.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.66 | − 5 42.6 | 1.344 | 2.178 | 18.0 | 19.5 |
| 3 12 | 13 30.78 | − 5 46.9 | 1.287 | 2.195 | 13.8 | 19.2 |
| 3 22 | 13 22.99 | − 5 40.5 | 1.250 | 2.213 | 8.8 | 19.0 |
| 4 1 | 13 13.22 | − 5 27.0 | 1.237 | 2.231 | 3.5 | 18.7 |
| 4 11 | 13 2.80 | − 5 11.9 | 1.249 | 2.249 | 2.2 | 18.7 |
| 4 21 | 12 53.11 | − 5 0.6 | 1.288 | 2.268 | 7.4 | 19.1 |
| 5 1 | 12 45.36 | − 4 58.0 | 1.350 | 2.287 | 12.1 | 19.4 |
| 5 11 | 12 40.27 | − 5 7.3 | 1.434 | 2.306 | 16.1 | 19.7 |

**330449** 2007 $EH_{5}$ 4 7.6 339°.45 8°.0/31.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.57 | + 8 49.1 | 1.498 | 2.354 | 15.3 | 20.2 |
| 3 12 | 13 25.31 | +10 13.4 | 1.432 | 2.347 | 12.1 | 20.0 |
| 3 22 | 13 19.49 | +11 37.5 | 1.388 | 2.341 | 9.2 | 19.8 |
| 4 1 | 13 11.85 | +12 51.1 | 1.368 | 2.336 | 8.0 | 19.7 |
| 4 11 | 13 3.46 | +13 44.2 | 1.373 | 2.331 | 9.4 | 19.7 |
| 4 21 | 12 55.53 | +14 10.3 | 1.402 | 2.327 | 12.5 | 19.9 |
| 5 1 | 12 49.11 | +14 6.7 | 1.452 | 2.323 | 15.8 | 20.1 |
| 5 11 | 12 44.99 | +13 35.0 | 1.520 | 2.320 | 18.9 | 20.3 |

**219672** 2001 $VB_{80}$ 4 7.6 124°.97 1°.4/ 9.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.14 | −14 3.1 | 2.257 | 3.040 | 13.3 | 20.7 |
| 3 12 | 13 27.09 | −13 42.4 | 2.181 | 3.057 | 10.4 | 20.5 |
| 3 22 | 13 20.17 | −13 7.7 | 2.128 | 3.074 | 7.1 | 20.3 |
| 4 1 | 13 12.01 | −12 21.1 | 2.102 | 3.090 | 3.5 | 20.1 |
| 4 11 | 13 3.41 | −11 26.8 | 2.106 | 3.105 | 1.6 | 20.0 |
| 4 21 | 12 55.20 | −10 30.0 | 2.138 | 3.120 | 4.8 | 20.2 |
| 5 1 | 12 48.15 | − 9 36.3 | 2.199 | 3.134 | 8.2 | 20.5 |
| 5 11 | 12 42.82 | − 8 50.4 | 2.285 | 3.148 | 11.2 | 20.7 |

**274667** 2008 $TP_{175}$ 4 7.6 223°.21 1°.3/ 8.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.33 | −12 4.6 | 2.282 | 3.071 | 13.0 | 21.0 |
| 3 12 | 13 27.44 | −12 5.3 | 2.183 | 3.063 | 10.2 | 20.8 |
| 3 22 | 13 20.57 | −11 54.2 | 2.108 | 3.056 | 6.9 | 20.6 |
| 4 1 | 13 12.25 | −11 32.8 | 2.059 | 3.047 | 3.3 | 20.3 |
| 4 11 | 13 3.25 | −11 4.0 | 2.039 | 3.039 | 1.5 | 20.2 |
| 4 21 | 12 54.44 | −10 31.7 | 2.048 | 3.030 | 5.0 | 20.4 |
| 5 1 | 12 46.67 | −10 0.7 | 2.085 | 3.020 | 8.6 | 20.6 |
| 5 11 | 12 40.60 | − 9 35.3 | 2.147 | 3.010 | 11.8 | 20.8 |

**253454** 2003 $RB_{27}$ 4 7.6 246°.40 1°.6/ 6.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.03 | − 4 53.1 | 1.714 | 2.537 | 15.2 | 20.8 |
| 3 12 | 13 29.36 | − 4 30.9 | 1.622 | 2.526 | 11.7 | 20.6 |
| 3 22 | 13 22.12 | − 3 58.3 | 1.552 | 2.514 | 7.6 | 20.3 |
| 4 1 | 13 12.96 | − 3 19.4 | 1.509 | 2.502 | 3.1 | 20.0 |
| 4 11 | 13 2.88 | − 2 40.0 | 1.492 | 2.490 | 2.8 | 19.9 |
| 4 21 | 12 53.04 | − 2 6.3 | 1.503 | 2.477 | 7.3 | 20.2 |
| 5 1 | 12 44.59 | − 1 43.8 | 1.539 | 2.464 | 11.8 | 20.4 |
| 5 11 | 12 38.37 | − 1 36.3 | 1.598 | 2.451 | 15.7 | 20.6 |

**140227** 2001 $SC_{242}$ 4 7.6 122°.00 1°.1/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.69 | − 4 43.6 | 2.526 | 3.335 | 11.3 | 20.6 |
| 3 12 | 13 25.77 | − 4 23.9 | 2.450 | 3.346 | 8.6 | 20.5 |
| 3 22 | 13 19.24 | − 3 57.9 | 2.398 | 3.358 | 5.5 | 20.3 |
| 4 1 | 13 11.62 | − 3 28.4 | 2.375 | 3.369 | 2.2 | 20.1 |
| 4 11 | 13 3.61 | − 2 59.3 | 2.382 | 3.379 | 1.9 | 20.1 |
| 4 21 | 12 55.92 | − 2 34.3 | 2.418 | 3.390 | 5.1 | 20.3 |
| 5 1 | 12 49.21 | − 2 16.5 | 2.482 | 3.400 | 8.2 | 20.5 |
| 5 11 | 12 43.97 | − 2 8.2 | 2.570 | 3.410 | 10.9 | 20.7 |

**348525** 2005 $UO_{70}$ 4 7.6 275°.89 1°.1/ 8.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.01 | −10 19.0 | 2.440 | 3.230 | 12.2 | 20.3 |
| 3 12 | 13 27.80 | −10 38.7 | 2.345 | 3.226 | 9.6 | 20.1 |
| 3 22 | 13 20.72 | −10 49.7 | 2.273 | 3.222 | 6.4 | 19.9 |
| 4 1 | 13 12.29 | −10 53.1 | 2.230 | 3.219 | 3.0 | 19.7 |
| 4 11 | 13 3.25 | −10 50.8 | 2.215 | 3.215 | 1.4 | 19.6 |
| 4 21 | 12 54.41 | −10 45.6 | 2.230 | 3.211 | 4.7 | 19.8 |
| 5 1 | 12 46.55 | −10 40.8 | 2.274 | 3.208 | 8.0 | 20.0 |
| 5 11 | 12 40.30 | −10 39.6 | 2.342 | 3.204 | 11.0 | 20.2 |

**70228** 1999 $RY_{51}$ 4 7.6 144°.24 0°.4/ 7.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.08 | − 8 49.8 | 1.928 | 2.736 | 14.4 | 20.0 |
| 3 12 | 13 28.12 | − 8 14.2 | 1.852 | 2.746 | 11.0 | 19.8 |
| 3 22 | 13 21.00 | − 7 25.7 | 1.798 | 2.756 | 7.1 | 19.6 |
| 4 1 | 13 12.39 | − 6 28.4 | 1.772 | 2.765 | 2.8 | 19.3 |
| 4 11 | 13 3.23 | − 5 27.9 | 1.774 | 2.774 | 1.7 | 19.3 |
| 4 21 | 12 54.49 | − 4 30.6 | 1.804 | 2.782 | 6.0 | 19.6 |
| 5 1 | 12 47.07 | − 3 42.4 | 1.862 | 2.789 | 9.9 | 19.8 |
| 5 11 | 12 41.62 | − 3 7.5 | 1.943 | 2.795 | 13.3 | 20.0 |

**52485** 1995 $WD$ 4 7.6 152°.36 3°.9/ 4.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.53 | + 0 34.0 | 1.675 | 2.505 | 15.2 | 19.5 |
| 3 12 | 13 31.01 | + 1 19.5 | 1.606 | 2.513 | 11.6 | 19.2 |
| 3 22 | 13 22.99 | + 2 10.7 | 1.559 | 2.520 | 7.6 | 19.0 |
| 4 1 | 13 13.22 | + 3 1.2 | 1.538 | 2.527 | 4.3 | 18.8 |
| 4 11 | 13 2.81 | + 3 43.5 | 1.545 | 2.533 | 5.0 | 18.9 |
| 4 21 | 12 52.93 | + 4 11.9 | 1.580 | 2.538 | 8.7 | 19.1 |
| 5 1 | 12 44.62 | + 4 22.5 | 1.639 | 2.543 | 12.6 | 19.3 |
| 5 11 | 12 38.60 | + 4 14.3 | 1.720 | 2.547 | 15.9 | 19.6 |

**181736** 1995 $US_{21}$ 4 7.6 260°.70 0°.2/ 7.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.51 | − 9 26.0 | 2.336 | 3.140 | 12.3 | 20.8 |
| 3 12 | 13 24.43 | − 9 8.8 | 2.242 | 3.134 | 9.5 | 20.6 |
| 3 22 | 13 18.56 | − 8 41.1 | 2.173 | 3.128 | 6.2 | 20.3 |
| 4 1 | 13 11.41 | − 8 5.2 | 2.130 | 3.122 | 2.6 | 20.1 |
| 4 11 | 13 3.71 | − 7 25.1 | 2.116 | 3.117 | 1.2 | 20.0 |
| 4 21 | 12 56.22 | − 6 45.2 | 2.131 | 3.111 | 5.0 | 20.2 |
| 5 1 | 12 49.71 | − 6 10.1 | 2.173 | 3.105 | 8.5 | 20.4 |
| 5 11 | 12 44.75 | − 5 43.7 | 2.240 | 3.099 | 11.6 | 20.6 |

**384534** 2010 $DG_{73}$ 4 7.6 279°.82 6°.5/30.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.00 | +10 38.4 | 2.199 | 3.037 | 11.8 | 20.3 |
| 3 12 | 13 24.10 | +11 54.1 | 2.126 | 3.029 | 9.4 | 20.2 |
| 3 22 | 13 18.36 | +13 8.0 | 2.077 | 3.021 | 7.3 | 20.0 |
| 4 1 | 13 11.32 | +14 13.1 | 2.055 | 3.013 | 6.5 | 20.0 |
| 4 11 | 13 3.77 | +15 2.6 | 2.061 | 3.006 | 7.7 | 20.0 |
| 4 21 | 12 56.50 | +15 32.0 | 2.092 | 2.998 | 10.0 | 20.1 |
| 5 1 | 12 50.28 | +15 39.2 | 2.146 | 2.990 | 12.5 | 20.3 |
| 5 11 | 12 45.69 | +15 24.4 | 2.221 | 2.982 | 14.8 | 20.4 |

**512339** 2016 $LB_{56}$ 4 7.6 225°.91 1°.9/ 5.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.44 | − 3 49.9 | 2.505 | 3.325 | 11.1 | 22.2 |
| 3 12 | 13 22.68 | − 2 56.8 | 2.417 | 3.321 | 8.4 | 22.0 |
| 3 22 | 13 17.34 | − 1 55.9 | 2.354 | 3.316 | 5.3 | 21.8 |
| 4 1 | 13 10.89 | − 0 51.3 | 2.319 | 3.312 | 2.4 | 21.6 |
| 4 11 | 13 3.99 | + 0 11.6 | 2.314 | 3.307 | 2.8 | 21.6 |
| 4 21 | 12 57.31 | + 1 7.8 | 2.337 | 3.302 | 5.8 | 21.8 |
| 5 1 | 12 51.51 | + 1 53.1 | 2.388 | 3.297 | 8.9 | 22.0 |
| 5 11 | 12 47.10 | + 2 24.7 | 2.463 | 3.291 | 11.6 | 22.2 |

**377649** 2005 $UB_{136}$ 4 7.6 211°.80 0°.3/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.12 | − 8 46.7 | 2.326 | 3.127 | 12.4 | 23.0 |
| 3 12 | 13 26.43 | − 8 11.8 | 2.229 | 3.120 | 9.6 | 22.8 |
| 3 22 | 13 19.87 | − 7 25.4 | 2.155 | 3.111 | 6.2 | 22.6 |
| 4 1 | 13 11.96 | − 6 30.6 | 2.109 | 3.103 | 2.5 | 22.4 |
| 4 11 | 13 3.44 | − 5 32.2 | 2.093 | 3.093 | 1.5 | 22.3 |
| 4 21 | 12 55.14 | − 4 35.4 | 2.106 | 3.083 | 5.4 | 22.5 |
| 5 1 | 12 47.84 | − 3 45.6 | 2.148 | 3.072 | 9.0 | 22.7 |
| 5 11 | 12 42.16 | − 3 6.9 | 2.213 | 3.060 | 12.1 | 22.9 |

**189830** 2002 $VL_{14}$ 4 7.6 266°.30 0°.6/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.27 | − 7 53.9 | 1.510 | 2.334 | 16.9 | 20.8 |
| 3 12 | 13 30.10 | − 7 31.7 | 1.409 | 2.312 | 13.2 | 20.5 |
| 3 22 | 13 22.96 | − 6 53.9 | 1.329 | 2.290 | 8.7 | 20.2 |
| 4 1 | 13 13.44 | − 6 3.9 | 1.273 | 2.267 | 3.5 | 19.8 |
| 4 11 | 13 2.62 | − 5 7.9 | 1.243 | 2.243 | 2.3 | 19.7 |
| 4 21 | 12 51.88 | − 4 13.7 | 1.240 | 2.219 | 7.8 | 20.0 |
| 5 1 | 12 42.62 | − 3 29.6 | 1.261 | 2.194 | 13.1 | 20.2 |
| 5 11 | 12 35.91 | − 3 1.9 | 1.304 | 2.169 | 17.8 | 20.4 |

**14911** Fukamatsu 4 7.6 217°.27 2°.1/ 9.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.82 | −13 45.8 | 2.220 | 2.997 | 13.7 | 19.1 |
| 3 12 | 13 30.24 | −14 1.6 | 2.118 | 2.989 | 10.9 | 18.9 |
| 3 22 | 13 22.48 | −14 5.2 | 2.039 | 2.980 | 7.6 | 18.7 |
| 4 1 | 13 13.07 | −13 57.0 | 1.986 | 2.971 | 4.1 | 18.4 |
| 4 11 | 13 2.88 | −13 38.9 | 1.963 | 2.961 | 2.2 | 18.3 |
| 4 21 | 12 52.85 | −13 14.6 | 1.969 | 2.950 | 5.2 | 18.5 |
| 5 1 | 12 43.93 | −12 48.6 | 2.004 | 2.939 | 8.9 | 18.6 |
| 5 11 | 12 36.86 | −12 25.9 | 2.063 | 2.927 | 12.2 | 18.8 |

**500721** 2012 $XA_{34}$ 4 7.6 139°.53 1°.0/ 6.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.40 | − 5 33.3 | 2.725 | 3.533 | 10.6 | 22.1 |
| 3 12 | 13 23.96 | − 4 59.9 | 2.646 | 3.542 | 8.0 | 21.9 |
| 3 22 | 13 18.05 | − 4 19.4 | 2.592 | 3.551 | 5.1 | 21.7 |
| 4 1 | 13 11.16 | − 3 35.1 | 2.566 | 3.560 | 2.0 | 21.5 |
| 4 11 | 13 3.90 | − 2 50.9 | 2.571 | 3.568 | 1.8 | 21.5 |
| 4 21 | 12 56.92 | − 2 10.8 | 2.605 | 3.576 | 4.8 | 21.8 |
| 5 1 | 12 50.80 | − 1 38.2 | 2.667 | 3.583 | 7.8 | 22.0 |
| 5 11 | 12 46.01 | − 1 15.7 | 2.754 | 3.591 | 10.3 | 22.1 |

**433255** 2012 $WP_{28}$ 4 7.6 261°.36 3°.7/ 3.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.09 | + 2 51.7 | 2.220 | 3.050 | 11.9 | 21.1 |
| 3 12 | 13 25.64 | + 3 29.8 | 2.138 | 3.045 | 9.1 | 20.9 |
| 3 22 | 13 19.34 | + 4 10.6 | 2.081 | 3.040 | 6.1 | 20.7 |
| 4 1 | 13 11.74 | + 4 49.2 | 2.051 | 3.036 | 3.9 | 20.5 |
| 4 11 | 13 3.60 | + 5 20.2 | 2.049 | 3.031 | 4.6 | 20.6 |
| 4 21 | 12 55.74 | + 5 39.4 | 2.075 | 3.026 | 7.5 | 20.7 |
| 5 1 | 12 48.94 | + 5 44.1 | 2.127 | 3.021 | 10.5 | 20.9 |
| 5 11 | 12 43.78 | + 5 33.1 | 2.202 | 3.016 | 13.3 | 21.1 |

**437592** 2014 $AQ_{50}$ 4 7.6 81°.65 1°.3/ 6.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.15 | − 6 12.1 | 2.147 | 2.966 | 12.7 | 21.4 |
| 3 12 | 13 24.11 | − 5 25.2 | 2.078 | 2.980 | 9.6 | 21.2 |
| 3 22 | 13 18.28 | − 4 28.7 | 2.033 | 2.995 | 6.1 | 21.0 |
| 4 1 | 13 11.27 | − 3 27.0 | 2.015 | 3.009 | 2.4 | 20.8 |
| 4 11 | 13 3.85 | − 2 26.0 | 2.026 | 3.023 | 2.3 | 20.8 |
| 4 21 | 12 56.82 | − 1 31.0 | 2.065 | 3.037 | 5.8 | 21.1 |
| 5 1 | 12 50.89 | − 0 46.9 | 2.132 | 3.052 | 9.2 | 21.3 |
| 5 11 | 12 46.60 | − 0 16.6 | 2.221 | 3.066 | 12.2 | 21.5 |

**416750** 2005 $EC_{108}$ 4 7.6 307°.64 2°.6/ 9.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.34 | −12 54.9 | 1.400 | 2.219 | 18.2 | 20.9 |
| 3 12 | 13 28.15 | −13 16.8 | 1.299 | 2.195 | 14.6 | 20.6 |
| 3 22 | 13 21.88 | −13 22.0 | 1.218 | 2.172 | 10.2 | 20.3 |
| 4 1 | 13 13.06 | −13 10.4 | 1.160 | 2.148 | 5.3 | 19.9 |
| 4 11 | 13 2.82 | −12 44.4 | 1.126 | 2.125 | 2.8 | 19.7 |
| 4 21 | 12 52.59 | −12 9.8 | 1.117 | 2.103 | 7.3 | 19.9 |
| 5 1 | 12 43.89 | −11 34.1 | 1.132 | 2.081 | 12.6 | 20.1 |
| 5 11 | 12 37.90 | −11 5.7 | 1.167 | 2.059 | 17.5 | 20.3 |

**316683** 1995 $UJ_{80}$ 4 7.6 55°.76 0°.0/ 7.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.05 | − 9 1.8 | 1.445 | 2.273 | 17.3 | 21.1 |
| 3 12 | 13 27.97 | − 8 44.6 | 1.380 | 2.284 | 13.3 | 20.9 |
| 3 22 | 13 21.20 | − 8 12.3 | 1.335 | 2.296 | 8.7 | 20.6 |
| 4 1 | 13 12.54 | − 7 28.9 | 1.314 | 2.308 | 3.5 | 20.3 |
| 4 11 | 13 3.21 | − 6 40.8 | 1.319 | 2.320 | 1.8 | 20.3 |
| 4 21 | 12 54.44 | − 5 55.3 | 1.350 | 2.332 | 6.9 | 20.6 |
| 5 1 | 12 47.38 | − 5 19.2 | 1.406 | 2.345 | 11.6 | 20.9 |
| 5 11 | 12 42.76 | − 4 57.3 | 1.483 | 2.357 | 15.5 | 21.2 |

**471597** 2012 $RB_{42}$ 4 7.6 259°.41 1°.0/ 6.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.35 | − 7 40.3 | 2.199 | 3.012 | 12.6 | 22.6 |
| 3 12 | 13 24.50 | − 6 49.0 | 2.095 | 2.994 | 9.7 | 22.3 |
| 3 22 | 13 18.74 | − 5 44.8 | 2.015 | 2.975 | 6.2 | 22.1 |
| 4 1 | 13 11.54 | − 4 31.8 | 1.962 | 2.956 | 2.5 | 21.8 |
| 4 11 | 13 3.67 | − 3 15.6 | 1.939 | 2.937 | 2.1 | 21.7 |
| 4 21 | 12 55.95 | − 2 2.9 | 1.944 | 2.917 | 6.0 | 21.9 |
| 5 1 | 12 49.21 | − 0 59.8 | 1.976 | 2.897 | 9.8 | 22.1 |
| 5 11 | 12 44.11 | − 0 10.9 | 2.032 | 2.876 | 13.2 | 22.3 |

**112776** 2002 $PA_{159}$ 4 7.6 118°.17 1°.4/ 6.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.97 | − 5 37.0 | 2.092 | 2.912 | 13.0 | 20.6 |
| 3 12 | 13 24.87 | − 4 58.7 | 2.013 | 2.916 | 9.8 | 20.4 |
| 3 22 | 13 18.87 | − 4 10.9 | 1.958 | 2.920 | 6.3 | 20.2 |
| 4 1 | 13 11.54 | − 3 17.8 | 1.930 | 2.924 | 2.5 | 19.9 |
| 4 11 | 13 3.71 | − 2 24.9 | 1.930 | 2.927 | 2.4 | 19.9 |
| 4 21 | 12 56.20 | − 1 37.6 | 1.958 | 2.931 | 6.1 | 20.2 |
| 5 1 | 12 49.81 | − 1 0.7 | 2.013 | 2.934 | 9.6 | 20.4 |
| 5 11 | 12 45.13 | − 0 37.4 | 2.092 | 2.938 | 12.8 | 20.6 |

**416326** 2003 $SY_{177}$ 4 7.6 231°.58 0°.1/ 7.7 15

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.30 | −10 47.0 | 2.042 | 2.842 | 14.0 | 22.7 |
| 3 12 | 13 27.70 | −10 9.6 | 1.938 | 2.827 | 10.9 | 22.5 |
| 3 22 | 13 20.90 | − 9 17.1 | 1.857 | 2.812 | 7.2 | 22.2 |
| 4 1 | 13 12.45 | − 8 12.2 | 1.804 | 2.796 | 3.0 | 21.9 |
| 4 11 | 13 3.21 | − 7 0.3 | 1.779 | 2.779 | 1.5 | 21.8 |
| 4 21 | 12 54.13 | − 5 48.2 | 1.783 | 2.762 | 5.9 | 22.0 |
| 5 1 | 12 46.19 | − 4 42.7 | 1.814 | 2.743 | 10.0 | 22.2 |
| 5 11 | 12 40.13 | − 3 49.6 | 1.870 | 2.724 | 13.7 | 22.4 |

**281681** 2008 $WA_{8}$ 4 7.6 82°.54 1°.0/ 6.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.37 | − 6 34.6 | 1.984 | 2.804 | 13.6 | 21.7 |
| 3 12 | 13 25.30 | − 6 3.4 | 1.904 | 2.806 | 10.3 | 21.5 |
| 3 22 | 13 19.21 | − 5 21.8 | 1.848 | 2.809 | 6.6 | 21.3 |
| 4 1 | 13 11.70 | − 4 33.6 | 1.817 | 2.811 | 2.6 | 21.0 |
| 4 11 | 13 3.63 | − 3 44.4 | 1.815 | 2.814 | 2.1 | 21.0 |
| 4 21 | 12 55.89 | − 2 59.6 | 1.841 | 2.816 | 6.1 | 21.2 |
| 5 1 | 12 49.33 | − 2 24.3 | 1.893 | 2.819 | 9.9 | 21.5 |
| 5 11 | 12 44.58 | − 2 2.2 | 1.968 | 2.821 | 13.2 | 21.7 |

**213390** 2001 $UF_{144}$ 4 7.6 154°.22 0°.2/ 7.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.55 | − 9 17.3 | 2.671 | 3.470 | 11.0 | 21.4 |
| 3 12 | 13 23.39 | − 8 39.7 | 2.586 | 3.476 | 8.4 | 21.3 |
| 3 22 | 13 17.73 | − 7 52.2 | 2.525 | 3.481 | 5.4 | 21.1 |
| 4 1 | 13 11.05 | − 6 57.7 | 2.493 | 3.486 | 2.2 | 20.8 |
| 4 11 | 13 3.98 | − 6 0.5 | 2.491 | 3.491 | 1.2 | 20.8 |
| 4 21 | 12 57.15 | − 5 5.1 | 2.518 | 3.495 | 4.5 | 21.0 |
| 5 1 | 12 51.20 | − 4 15.8 | 2.574 | 3.499 | 7.6 | 21.2 |
| 5 11 | 12 46.60 | − 3 36.1 | 2.655 | 3.503 | 10.3 | 21.4 |

**261959** 2006 $PB_{16}$ 4 7.6 253°.81 2°.0/ 5.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.00 | − 4 41.5 | 1.768 | 2.594 | 14.7 | 21.4 |
| 3 12 | 13 27.75 | − 4 2.6 | 1.674 | 2.580 | 11.3 | 21.2 |
| 3 22 | 13 21.07 | − 3 12.3 | 1.603 | 2.565 | 7.3 | 20.9 |
| 4 1 | 13 12.56 | − 2 15.3 | 1.557 | 2.550 | 3.1 | 20.6 |
| 4 11 | 13 3.17 | − 1 18.3 | 1.539 | 2.535 | 3.2 | 20.6 |
| 4 21 | 12 54.00 | − 0 28.3 | 1.548 | 2.519 | 7.5 | 20.8 |
| 5 1 | 12 46.11 | + 0 8.7 | 1.583 | 2.503 | 11.8 | 21.0 |
| 5 11 | 12 40.33 | + 0 28.5 | 1.639 | 2.487 | 15.6 | 21.2 |

**238824** 2005 $QK_{90}$ 4 7.6 222°.88 0°.7/ 6.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.50 | − 6 56.9 | 2.682 | 3.489 | 10.8 | 21.4 |
| 3 12 | 13 23.42 | − 6 23.5 | 2.587 | 3.482 | 8.2 | 21.2 |
| 3 22 | 13 17.80 | − 5 41.6 | 2.517 | 3.476 | 5.3 | 21.0 |
| 4 1 | 13 11.10 | − 4 54.0 | 2.475 | 3.468 | 2.1 | 20.8 |
| 4 11 | 13 3.94 | − 4 5.0 | 2.462 | 3.461 | 1.6 | 20.8 |
| 4 21 | 12 56.97 | − 3 18.7 | 2.479 | 3.453 | 4.8 | 21.0 |
| 5 1 | 12 50.83 | − 2 39.2 | 2.524 | 3.445 | 7.9 | 21.2 |
| 5 11 | 12 46.01 | − 2 9.7 | 2.594 | 3.437 | 10.7 | 21.3 |

**162520** 2000 $QR_{119}$ 4 7.6 257°.78 4°.4/11.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.74 | −19 20.7 | 1.657 | 2.437 | 17.5 | 20.2 |
| 3 12 | 13 28.73 | −19 35.6 | 1.558 | 2.424 | 14.4 | 20.0 |
| 3 22 | 13 21.95 | −19 29.4 | 1.478 | 2.411 | 10.6 | 19.7 |
| 4 1 | 13 13.00 | −19 0.7 | 1.422 | 2.397 | 6.7 | 19.5 |
| 4 11 | 13 2.93 | −18 11.6 | 1.391 | 2.383 | 4.4 | 19.3 |
| 4 21 | 12 53.03 | −17 7.8 | 1.387 | 2.369 | 6.7 | 19.4 |
| 5 1 | 12 44.57 | −15 57.8 | 1.408 | 2.354 | 10.9 | 19.6 |
| 5 11 | 12 38.53 | −14 51.0 | 1.452 | 2.339 | 15.0 | 19.8 |

**105620** 2000 $RE_{104}$ 4 7.6 245°.02 5°.4/13.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.96 | −26 55.1 | 2.820 | 3.524 | 12.7 | 20.0 |
| 3 12 | 13 26.31 | −27 21.9 | 2.704 | 3.509 | 10.9 | 19.9 |
| 3 22 | 13 19.84 | −27 32.7 | 2.610 | 3.493 | 8.8 | 19.7 |
| 4 1 | 13 12.00 | −27 25.9 | 2.541 | 3.478 | 6.7 | 19.5 |
| 4 11 | 13 3.47 | −27 1.6 | 2.499 | 3.461 | 5.4 | 19.4 |
| 4 21 | 12 55.02 | −26 22.2 | 2.485 | 3.445 | 5.8 | 19.4 |
| 5 1 | 12 47.43 | −25 31.8 | 2.499 | 3.428 | 7.6 | 19.5 |
| 5 11 | 12 41.32 | −24 36.0 | 2.539 | 3.410 | 9.9 | 19.6 |

**378288** 2007 $EX_{132}$ 4 7.6 320°.07 0°.6/ 8.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.48 | −10 1.9 | 1.670 | 2.488 | 15.8 | 20.9 |
| 3 12 | 13 26.70 | − 9 57.8 | 1.582 | 2.481 | 12.3 | 20.6 |
| 3 22 | 13 20.43 | − 9 39.8 | 1.516 | 2.473 | 8.2 | 20.3 |
| 4 1 | 13 12.31 | − 9 10.1 | 1.474 | 2.466 | 3.6 | 20.0 |
| 4 11 | 13 3.32 | − 8 33.5 | 1.459 | 2.459 | 1.6 | 19.9 |
| 4 21 | 12 54.62 | − 7 55.7 | 1.470 | 2.453 | 6.3 | 20.2 |
| 5 1 | 12 47.30 | − 7 23.0 | 1.507 | 2.447 | 10.8 | 20.4 |
| 5 11 | 12 42.17 | − 7 0.8 | 1.565 | 2.441 | 14.8 | 20.6 |

**389191** 2009 $CS_{3}$ 4 7.6 9°.70 5°.4/ 2.2 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.19 | + 5 46.9 | 1.968 | 2.810 | 12.8 | 20.6 |
| 3 12 | 13 24.38 | + 6 50.0 | 1.899 | 2.810 | 9.8 | 20.4 |
| 3 22 | 13 18.59 | + 7 54.4 | 1.854 | 2.811 | 7.0 | 20.2 |
| 4 1 | 13 11.45 | + 8 53.1 | 1.836 | 2.812 | 5.4 | 20.1 |
| 4 11 | 13 3.79 | + 9 39.4 | 1.845 | 2.814 | 6.4 | 20.2 |
| 4 21 | 12 56.50 | +10 8.3 | 1.880 | 2.815 | 9.2 | 20.3 |
| 5 1 | 12 50.39 | +10 17.0 | 1.939 | 2.817 | 12.1 | 20.5 |
| 5 11 | 12 46.06 | +10 5.4 | 2.019 | 2.819 | 14.8 | 20.7 |

**296455** 2009 $HR_{73}$ 4 7.6 334.°96 9.°1/30.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.75 | +17 40.9 | 1.888 | 2.717 | 13.8 | 19.3 |
| 3 12 | 13 28.80 | +18 28.4 | 1.819 | 2.707 | 11.5 | 19.2 |
| 3 22 | 13 21.54 | +19 6.2 | 1.772 | 2.698 | 9.7 | 19.0 |
| 4 1 | 13 12.67 | +19 26.5 | 1.750 | 2.689 | 9.1 | 19.0 |
| 4 11 | 13 3.18 | +19 23.0 | 1.753 | 2.680 | 10.1 | 19.0 |
| 4 21 | 12 54.14 | +18 52.9 | 1.781 | 2.672 | 12.2 | 19.1 |
| 5 1 | 12 46.49 | +17 56.8 | 1.831 | 2.665 | 14.7 | 19.3 |
| 5 11 | 12 40.94 | +16 37.8 | 1.901 | 2.658 | 17.1 | 19.4 |

**263777** 2008 $LN_{2}$ 4 7.6 162.°58 8.°2/31.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.80 | +13 27.5 | 1.825 | 2.660 | 13.9 | 20.6 |
| 3 12 | 13 28.80 | +14 37.4 | 1.764 | 2.662 | 11.3 | 20.5 |
| 3 22 | 13 21.51 | +15 41.7 | 1.726 | 2.663 | 9.0 | 20.3 |
| 4 1 | 13 12.64 | +16 31.7 | 1.713 | 2.665 | 8.2 | 20.3 |
| 4 11 | 13 3.22 | +17 0.2 | 1.727 | 2.666 | 9.3 | 20.3 |
| 4 21 | 12 54.29 | +17 3.3 | 1.765 | 2.667 | 11.7 | 20.5 |
| 5 1 | 12 46.79 | +16 40.4 | 1.826 | 2.668 | 14.4 | 20.7 |
| 5 11 | 12 41.40 | +15 53.8 | 1.906 | 2.668 | 16.9 | 20.8 |

**313741** 2003 $UX_{221}$ 4 7.6 93.°08 2.°3/ 5.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.29 | − 4 11.8 | 1.624 | 2.453 | 15.6 | 21.3 |
| 3 12 | 13 28.51 | − 3 25.1 | 1.563 | 2.471 | 11.8 | 21.1 |
| 3 22 | 13 21.35 | − 2 28.4 | 1.525 | 2.489 | 7.5 | 20.8 |
| 4 1 | 13 12.57 | − 1 27.6 | 1.513 | 2.506 | 3.3 | 20.6 |
| 4 11 | 13 3.28 | − 0 30.2 | 1.528 | 2.523 | 3.4 | 20.7 |
| 4 21 | 12 54.60 | + 0 17.1 | 1.570 | 2.540 | 7.6 | 20.9 |
| 5 1 | 12 47.48 | + 0 49.1 | 1.637 | 2.556 | 11.6 | 21.2 |
| 5 11 | 12 42.57 | + 1 3.2 | 1.727 | 2.572 | 15.0 | 21.5 |

**230392** 2002 $GB_{166}$ 4 7.6 283.°47 5.°9/ 1.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.26 | + 6 7.8 | 1.915 | 2.757 | 13.1 | 20.2 |
| 3 12 | 13 25.44 | + 7 19.3 | 1.829 | 2.740 | 10.2 | 20.0 |
| 3 22 | 13 19.46 | + 8 33.7 | 1.766 | 2.722 | 7.4 | 19.7 |
| 4 1 | 13 11.88 | + 9 43.4 | 1.730 | 2.705 | 5.9 | 19.6 |
| 4 11 | 13 3.58 | +10 40.4 | 1.721 | 2.687 | 7.1 | 19.6 |
| 4 21 | 12 55.51 | +11 18.6 | 1.738 | 2.669 | 10.0 | 19.8 |
| 5 1 | 12 48.59 | +11 34.1 | 1.778 | 2.652 | 13.3 | 19.9 |
| 5 11 | 12 43.56 | +11 26.3 | 1.839 | 2.634 | 16.3 | 20.1 |

**145548** 2006 $KG_{99}$ 4 7.6 176.°83 0.°1/ 7.5 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.20 | − 9 36.2 | 1.972 | 2.778 | 14.2 | 21.3 |
| 3 12 | 13 27.52 | − 9 1.6 | 1.887 | 2.780 | 10.9 | 21.1 |
| 3 22 | 13 20.70 | − 8 13.5 | 1.825 | 2.782 | 7.1 | 20.9 |
| 4 1 | 13 12.35 | − 7 15.4 | 1.790 | 2.783 | 2.9 | 20.6 |
| 4 11 | 13 3.37 | − 6 12.8 | 1.783 | 2.783 | 1.6 | 20.5 |
| 4 21 | 12 54.73 | − 5 12.1 | 1.804 | 2.783 | 5.9 | 20.8 |
| 5 1 | 12 47.34 | − 4 19.4 | 1.853 | 2.782 | 9.9 | 21.0 |
| 5 11 | 12 41.86 | − 3 39.6 | 1.926 | 2.781 | 13.3 | 21.2 |

**28603** Jenkins 4 7.6 20.°49 0.°7/ 8.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.72 | −10 11.3 | 1.443 | 2.270 | 17.4 | 18.0 |
| 3 12 | 13 27.10 | −10 6.4 | 1.370 | 2.273 | 13.5 | 17.7 |
| 3 22 | 13 20.76 | − 9 45.9 | 1.318 | 2.277 | 8.9 | 17.5 |
| 4 1 | 13 12.45 | − 9 12.4 | 1.289 | 2.281 | 3.9 | 17.2 |
| 4 11 | 13 3.33 | − 8 31.6 | 1.285 | 2.286 | 1.7 | 17.1 |
| 4 21 | 12 54.68 | − 7 50.4 | 1.308 | 2.292 | 6.8 | 17.4 |
| 5 1 | 12 47.67 | − 7 15.7 | 1.355 | 2.298 | 11.5 | 17.7 |
| 5 11 | 12 43.11 | − 6 53.2 | 1.423 | 2.304 | 15.6 | 17.9 |

**57404** 2001 $RG_{101}$ 4 7.6 113.°03 2.°5/ 5.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.44 | − 2 29.5 | 1.947 | 2.771 | 13.6 | 20.0 |
| 3 12 | 13 27.52 | − 1 42.7 | 1.881 | 2.786 | 10.3 | 19.9 |
| 3 22 | 13 20.56 | − 0 48.6 | 1.840 | 2.802 | 6.6 | 19.7 |
| 4 1 | 13 12.24 | + 0 7.5 | 1.825 | 2.817 | 3.1 | 19.5 |
| 4 11 | 13 3.47 | + 0 59.2 | 1.839 | 2.831 | 3.5 | 19.5 |
| 4 21 | 12 55.17 | + 1 41.0 | 1.881 | 2.846 | 7.0 | 19.8 |
| 5 1 | 12 48.18 | + 2 8.9 | 1.950 | 2.859 | 10.5 | 20.0 |
| 5 11 | 12 43.07 | + 2 20.8 | 2.041 | 2.872 | 13.6 | 20.2 |

**207158** 2005 $CF_{34}$ 4 7.7 350.°81 0.°0/ 7.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.67 | − 8 17.4 | 1.180 | 2.028 | 19.1 | 19.7 |
| 3 12 | 13 26.16 | − 8 16.6 | 1.106 | 2.021 | 14.8 | 19.4 |
| 3 22 | 13 20.51 | − 7 59.8 | 1.050 | 2.016 | 9.8 | 19.1 |
| 4 1 | 13 12.45 | − 7 30.3 | 1.017 | 2.011 | 4.0 | 18.7 |
| 4 11 | 13 3.31 | − 6 54.4 | 1.007 | 2.008 | 2.0 | 18.6 |
| 4 21 | 12 54.58 | − 6 20.1 | 1.020 | 2.006 | 8.0 | 18.9 |
| 5 1 | 12 47.72 | − 5 55.3 | 1.056 | 2.004 | 13.4 | 19.2 |
| 5 11 | 12 43.70 | − 5 45.6 | 1.111 | 2.005 | 18.2 | 19.5 |

**92834** 2000 $QD_{185}$ 4 7.7 88.°22 1.°2/ 8.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.26 | −10 46.2 | 1.486 | 2.299 | 17.6 | 18.3 |
| 3 12 | 13 31.19 | −10 52.2 | 1.418 | 2.312 | 13.7 | 18.1 |
| 3 22 | 13 23.31 | −10 43.1 | 1.371 | 2.326 | 9.1 | 17.8 |
| 4 1 | 13 13.45 | −10 20.9 | 1.348 | 2.339 | 4.1 | 17.6 |
| 4 11 | 13 2.86 | − 9 50.4 | 1.351 | 2.352 | 1.8 | 17.4 |
| 4 21 | 12 52.85 | − 9 17.6 | 1.382 | 2.365 | 6.6 | 17.8 |
| 5 1 | 12 44.63 | − 8 49.2 | 1.437 | 2.377 | 11.2 | 18.1 |
| 5 11 | 12 38.97 | − 8 30.5 | 1.514 | 2.390 | 15.2 | 18.3 |

**215129** 1999 $RW_{153}$ 4 7.7 200.°63 0.°2/ 7.8 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.41 | −11 13.1 | 1.939 | 2.742 | 14.5 | 21.0 |
| 3 12 | 13 27.02 | −10 32.8 | 1.848 | 2.739 | 11.2 | 20.8 |
| 3 22 | 13 20.45 | − 9 36.7 | 1.780 | 2.735 | 7.4 | 20.6 |
| 4 1 | 13 12.28 | − 8 28.1 | 1.738 | 2.731 | 3.1 | 20.3 |
| 4 11 | 13 3.43 | − 7 13.0 | 1.725 | 2.726 | 1.4 | 20.2 |
| 4 21 | 12 54.87 | − 5 58.4 | 1.741 | 2.720 | 5.9 | 20.4 |
| 5 1 | 12 47.54 | − 4 51.3 | 1.783 | 2.714 | 10.0 | 20.7 |
| 5 11 | 12 42.15 | − 3 57.6 | 1.849 | 2.708 | 13.7 | 20.9 |

**283173** 2009 $HZ_{62}$ 4 7.7 242.°48 1.°6/ 4.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 20.58 | − 0 17.4 | 4.540 | 5.358 | 6.5 | 20.6 |
| 3 12 | 13 17.59 | + 0 22.0 | 4.452 | 5.355 | 4.9 | 20.5 |
| 3 22 | 13 13.78 | + 1 3.9 | 4.392 | 5.352 | 3.1 | 20.4 |
| 4 1 | 13 9.44 | + 1 46.0 | 4.361 | 5.349 | 1.7 | 20.3 |
| 4 11 | 13 4.88 | + 2 25.8 | 4.360 | 5.346 | 2.1 | 20.3 |
| 4 21 | 13 0.44 | + 3 1.1 | 4.389 | 5.343 | 3.7 | 20.4 |
| 5 1 | 12 56.43 | + 3 29.9 | 4.447 | 5.340 | 5.5 | 20.5 |
| 5 11 | 12 53.12 | + 3 50.8 | 4.530 | 5.337 | 7.1 | 20.6 |

**272557** 2005 $UD_{447}$ 4 7.7 73.°05 3.°1/10.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.26 | −16 50.8 | 1.754 | 2.542 | 16.4 | 20.7 |
| 3 12 | 13 27.80 | −16 57.1 | 1.683 | 2.557 | 13.1 | 20.5 |
| 3 22 | 13 20.97 | −16 45.0 | 1.631 | 2.571 | 9.3 | 20.3 |
| 4 1 | 13 12.47 | −16 15.4 | 1.605 | 2.586 | 5.3 | 20.1 |
| 4 11 | 13 3.36 | −15 32.0 | 1.605 | 2.601 | 3.1 | 20.0 |
| 4 21 | 12 54.73 | −14 40.7 | 1.632 | 2.616 | 5.7 | 20.2 |
| 5 1 | 12 47.56 | −13 48.5 | 1.686 | 2.630 | 9.6 | 20.5 |
| 5 11 | 12 42.57 | −13 2.2 | 1.763 | 2.645 | 13.1 | 20.7 |

**101645** 1999 $CM_{56}$ 4 7.7 40.°49 5.°7/11.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.77 | −17 58.1 | 1.420 | 2.210 | 19.5 | 19.6 |
| 3 12 | 13 32.67 | −19 10.1 | 1.355 | 2.225 | 15.9 | 19.4 |
| 3 22 | 13 24.46 | −20 3.3 | 1.310 | 2.242 | 11.8 | 19.2 |
| 4 1 | 13 13.98 | −20 34.7 | 1.287 | 2.259 | 7.8 | 19.0 |
| 4 11 | 13 2.59 | −20 44.4 | 1.289 | 2.276 | 5.7 | 18.9 |
| 4 21 | 12 51.80 | −20 36.1 | 1.317 | 2.295 | 7.6 | 19.0 |
| 5 1 | 12 42.96 | −20 16.9 | 1.369 | 2.313 | 11.3 | 19.3 |
| 5 11 | 12 36.95 | −19 55.0 | 1.443 | 2.332 | 15.0 | 19.6 |

**123799** 2001 $BK_{48}$ 4 7.7 36.°32 5.°4/14.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.08 | −26 37.0 | 2.348 | 3.075 | 14.4 | 19.0 |
| 3 12 | 13 23.50 | −26 44.8 | 2.259 | 3.080 | 12.2 | 18.8 |
| 3 22 | 13 18.05 | −26 32.4 | 2.190 | 3.086 | 9.6 | 18.7 |
| 4 1 | 13 11.27 | −25 59.1 | 2.145 | 3.092 | 7.1 | 18.5 |
| 4 11 | 13 3.96 | −25 6.9 | 2.126 | 3.098 | 5.5 | 18.4 |
| 4 21 | 12 56.93 | −23 59.9 | 2.134 | 3.104 | 5.9 | 18.5 |
| 5 1 | 12 50.97 | −22 44.4 | 2.170 | 3.110 | 8.0 | 18.6 |
| 5 11 | 12 46.67 | −21 27.3 | 2.231 | 3.117 | 10.5 | 18.8 |

**16921** 1998 $FZ_{52}$ 4 7.7 214.°85 0.°0/ 7.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.45 | − 9 36.3 | 2.498 | 3.300 | 11.6 | 18.7 |
| 3 12 | 13 23.50 | − 9 4.8 | 2.406 | 3.297 | 9.0 | 18.5 |
| 3 22 | 13 17.93 | − 8 22.5 | 2.338 | 3.293 | 5.8 | 18.3 |
| 4 1 | 13 11.20 | − 7 32.2 | 2.297 | 3.290 | 2.4 | 18.1 |
| 4 11 | 13 3.99 | − 6 38.2 | 2.286 | 3.286 | 1.2 | 18.0 |
| 4 21 | 12 57.00 | − 5 45.3 | 2.303 | 3.282 | 4.8 | 18.2 |
| 5 1 | 12 50.91 | − 4 57.9 | 2.349 | 3.278 | 8.1 | 18.4 |
| 5 11 | 12 46.25 | − 4 20.2 | 2.419 | 3.274 | 11.0 | 18.6 |

**297870** 2002 $CR_{99}$ 4 7.7 71.°10 2.°0/ 9.0 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.79 | −12 38.6 | 1.392 | 2.203 | 18.7 | 20.5 |
| 3 12 | 13 31.66 | −12 50.6 | 1.332 | 2.224 | 14.6 | 20.3 |
| 3 22 | 13 23.62 | −12 45.0 | 1.293 | 2.245 | 9.9 | 20.1 |
| 4 1 | 13 13.57 | −12 23.4 | 1.277 | 2.266 | 4.9 | 19.8 |
| 4 11 | 13 2.86 | −11 50.6 | 1.287 | 2.287 | 2.3 | 19.7 |
| 4 21 | 12 52.87 | −11 13.3 | 1.323 | 2.308 | 6.6 | 20.0 |
| 5 1 | 12 44.83 | −10 38.7 | 1.385 | 2.329 | 11.3 | 20.3 |
| 5 11 | 12 39.48 | −10 13.2 | 1.468 | 2.349 | 15.3 | 20.6 |

**81318** 2000 $GW_{14}$ 4 7.7 76.°74 0.°9/ 8.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.03 | −11 15.3 | 1.652 | 2.464 | 16.2 | 20.0 |
| 3 12 | 13 27.76 | −11 5.0 | 1.577 | 2.471 | 12.6 | 19.8 |
| 3 22 | 13 21.03 | −10 39.3 | 1.523 | 2.478 | 8.4 | 19.6 |
| 4 1 | 13 12.53 | −10 0.9 | 1.494 | 2.485 | 3.7 | 19.3 |
| 4 11 | 13 3.35 | − 9 14.9 | 1.491 | 2.492 | 1.6 | 19.2 |
| 4 21 | 12 54.60 | − 8 27.7 | 1.516 | 2.499 | 6.1 | 19.5 |
| 5 1 | 12 47.35 | − 7 46.0 | 1.567 | 2.507 | 10.5 | 19.7 |
| 5 11 | 12 42.33 | − 7 15.2 | 1.640 | 2.514 | 14.3 | 20.0 |

**364568** 2007 $PU_{17}$ 4 7.7 174.°86 0.°6/ 8.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.44 | −11 23.1 | 2.082 | 2.875 | 14.0 | 22.0 |
| 3 12 | 13 29.14 | −10 59.0 | 1.994 | 2.878 | 10.9 | 21.8 |
| 3 22 | 13 21.72 | −10 21.2 | 1.930 | 2.881 | 7.2 | 21.6 |
| 4 1 | 13 12.78 | − 9 32.3 | 1.892 | 2.883 | 3.1 | 21.3 |
| 4 11 | 13 3.22 | − 8 36.9 | 1.884 | 2.885 | 1.3 | 21.2 |
| 4 21 | 12 53.99 | − 7 40.7 | 1.905 | 2.885 | 5.4 | 21.4 |
| 5 1 | 12 45.98 | − 6 49.6 | 1.953 | 2.884 | 9.3 | 21.7 |
| 5 11 | 12 39.88 | − 6 8.6 | 2.027 | 2.883 | 12.7 | 21.9 |

**212654** 2006 $UM_{125}$ 4 7.7 265°.19 0°.0/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.85 | − 7 53.8 | 2.313 | 3.117 | 12.4 | 21.3 |
| 3 12 | 13 26.25 | − 7 51.0 | 2.221 | 3.113 | 9.5 | 21.1 |
| 3 22 | 13 19.79 | − 7 39.5 | 2.152 | 3.108 | 6.2 | 20.9 |
| 4 1 | 13 12.00 | − 7 21.4 | 2.111 | 3.103 | 2.6 | 20.7 |
| 4 11 | 13 3.61 | − 7 0.2 | 2.098 | 3.099 | 1.3 | 20.5 |
| 4 21 | 12 55.45 | − 6 39.4 | 2.115 | 3.094 | 5.1 | 20.8 |
| 5 1 | 12 48.30 | − 6 23.1 | 2.159 | 3.089 | 8.6 | 21.0 |
| 5 11 | 12 42.76 | − 6 14.3 | 2.227 | 3.084 | 11.7 | 21.2 |

**192816** 1999 $VR_{76}$ 4 7.7 293°.79 0°.5/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.61 | − 8 28.5 | 1.929 | 2.746 | 14.0 | 20.7 |
| 3 12 | 13 24.88 | − 7 55.6 | 1.842 | 2.742 | 10.8 | 20.5 |
| 3 22 | 13 19.05 | − 7 10.0 | 1.778 | 2.738 | 7.0 | 20.3 |
| 4 1 | 13 11.73 | − 6 15.2 | 1.740 | 2.734 | 2.8 | 20.0 |
| 4 11 | 13 3.75 | − 5 17.0 | 1.730 | 2.730 | 1.8 | 19.9 |
| 4 21 | 12 56.06 | − 4 21.4 | 1.748 | 2.726 | 6.0 | 20.2 |
| 5 1 | 12 49.55 | − 3 34.6 | 1.792 | 2.722 | 10.0 | 20.4 |
| 5 11 | 12 44.89 | − 3 1.1 | 1.859 | 2.719 | 13.5 | 20.6 |

**334118** 2001 $QN_{328}$ 4 7.7 202°.44 1°.7/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.01 | − 4 8.6 | 2.274 | 3.087 | 12.3 | 22.3 |
| 3 12 | 13 27.13 | − 3 29.2 | 2.184 | 3.083 | 9.3 | 22.1 |
| 3 22 | 13 20.35 | − 2 41.6 | 2.117 | 3.078 | 6.0 | 21.8 |
| 4 1 | 13 12.22 | − 1 49.7 | 2.079 | 3.072 | 2.6 | 21.6 |
| 4 11 | 13 3.51 | − 0 58.9 | 2.070 | 3.065 | 2.7 | 21.6 |
| 4 21 | 12 55.04 | − 0 14.1 | 2.090 | 3.058 | 6.1 | 21.8 |
| 5 1 | 12 47.62 | + 0 20.2 | 2.138 | 3.050 | 9.6 | 22.0 |
| 5 11 | 12 41.86 | + 0 41.0 | 2.209 | 3.041 | 12.7 | 22.2 |

**209107** Šafránek 4 7.7 286°.16 5°.4/11.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.27 | −19 35.7 | 1.558 | 2.340 | 18.4 | 20.4 |
| 3 12 | 13 30.04 | −20 16.7 | 1.470 | 2.335 | 15.2 | 20.1 |
| 3 22 | 13 22.87 | −20 37.8 | 1.401 | 2.331 | 11.4 | 19.9 |
| 4 1 | 13 13.42 | −20 36.5 | 1.355 | 2.326 | 7.5 | 19.6 |
| 4 11 | 13 2.87 | −20 13.8 | 1.334 | 2.322 | 5.4 | 19.5 |
| 4 21 | 12 52.57 | −19 34.2 | 1.338 | 2.318 | 7.3 | 19.6 |
| 5 1 | 12 43.89 | −18 45.4 | 1.368 | 2.314 | 11.2 | 19.8 |
| 5 11 | 12 37.80 | −17 56.6 | 1.419 | 2.309 | 15.1 | 20.0 |

**246946** 1999 $RC_{133}$ 4 7.7 244°.91 4°.8/13.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.72 | −26 5.9 | 3.010 | 3.715 | 11.9 | 21.4 |
| 3 12 | 13 26.02 | −26 28.8 | 2.891 | 3.698 | 10.2 | 21.2 |
| 3 22 | 13 19.61 | −26 36.7 | 2.794 | 3.681 | 8.1 | 21.0 |
| 4 1 | 13 11.94 | −26 28.5 | 2.723 | 3.663 | 6.1 | 20.9 |
| 4 11 | 13 3.63 | −26 4.5 | 2.679 | 3.645 | 4.9 | 20.8 |
| 4 21 | 12 55.38 | −25 26.8 | 2.665 | 3.627 | 5.4 | 20.8 |
| 5 1 | 12 47.91 | −24 39.4 | 2.678 | 3.607 | 7.2 | 20.9 |
| 5 11 | 12 41.81 | −23 47.4 | 2.718 | 3.588 | 9.4 | 21.0 |

**327944** 2007 $EW_{29}$ 4 7.7 192°.61 0°.4/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.76 | − 7 38.2 | 2.649 | 3.443 | 11.3 | 21.8 |
| 3 12 | 13 27.43 | − 7 16.1 | 2.553 | 3.441 | 8.6 | 21.6 |
| 3 22 | 13 20.43 | − 6 45.5 | 2.483 | 3.438 | 5.6 | 21.4 |
| 4 1 | 13 12.23 | − 6 8.8 | 2.441 | 3.434 | 2.2 | 21.2 |
| 4 11 | 13 3.52 | − 5 29.7 | 2.429 | 3.429 | 1.4 | 21.1 |
| 4 21 | 12 55.02 | − 4 52.3 | 2.448 | 3.424 | 4.8 | 21.3 |
| 5 1 | 12 47.44 | − 4 20.3 | 2.496 | 3.417 | 8.0 | 21.5 |
| 5 11 | 12 41.33 | − 3 57.0 | 2.569 | 3.410 | 10.8 | 21.7 |

**331906** 2004 $RR_{10}$ 4 7.7 218°.88 0°.7/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.58 | − 6 51.3 | 2.200 | 3.009 | 12.8 | 21.6 |
| 3 12 | 13 26.92 | − 6 26.0 | 2.106 | 3.002 | 9.8 | 21.3 |
| 3 22 | 13 20.28 | − 5 50.9 | 2.036 | 2.995 | 6.3 | 21.1 |
| 4 1 | 13 12.22 | − 5 9.2 | 1.993 | 2.987 | 2.5 | 20.8 |
| 4 11 | 13 3.53 | − 4 25.4 | 1.979 | 2.978 | 1.8 | 20.8 |
| 4 21 | 12 55.06 | − 3 44.5 | 1.994 | 2.969 | 5.7 | 21.0 |
| 5 1 | 12 47.65 | − 3 11.2 | 2.036 | 2.960 | 9.4 | 21.2 |
| 5 11 | 12 41.94 | − 2 49.2 | 2.102 | 2.950 | 12.7 | 21.4 |

**214996** 2008 $CU_{45}$ 4 7.7 152°.58 1°.9/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.64 | − 3 50.8 | 2.534 | 3.354 | 11.0 | 20.7 |
| 3 12 | 13 22.80 | − 2 56.4 | 2.454 | 3.357 | 8.3 | 20.6 |
| 3 22 | 13 17.43 | − 1 54.5 | 2.398 | 3.360 | 5.3 | 20.4 |
| 4 1 | 13 11.00 | − 0 49.5 | 2.371 | 3.363 | 2.4 | 20.2 |
| 4 11 | 13 4.16 | + 0 13.5 | 2.373 | 3.366 | 2.7 | 20.2 |
| 4 21 | 12 57.59 | + 1 9.6 | 2.404 | 3.368 | 5.7 | 20.4 |
| 5 1 | 12 51.90 | + 1 54.7 | 2.462 | 3.371 | 8.7 | 20.6 |
| 5 11 | 12 47.59 | + 2 26.2 | 2.545 | 3.373 | 11.3 | 20.8 |

**133288** 2003 $SJ_{27}$ 4 7.7 194°.32 1°.2/ 8.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.54 | −12 50.9 | 2.294 | 3.083 | 12.9 | 20.9 |
| 3 12 | 13 26.05 | −12 38.0 | 2.201 | 3.081 | 10.2 | 20.7 |
| 3 22 | 13 19.68 | −12 12.1 | 2.132 | 3.080 | 6.9 | 20.5 |
| 4 1 | 13 11.96 | −11 35.2 | 2.089 | 3.077 | 3.3 | 20.3 |
| 4 11 | 13 3.67 | −10 50.7 | 2.075 | 3.075 | 1.5 | 20.1 |
| 4 21 | 12 55.62 | −10 3.4 | 2.090 | 3.072 | 4.8 | 20.3 |
| 5 1 | 12 48.60 | − 9 18.3 | 2.133 | 3.069 | 8.4 | 20.6 |
| 5 11 | 12 43.23 | − 8 40.3 | 2.200 | 3.065 | 11.5 | 20.8 |

**199069** 2005 $XN_{41}$ 4 7.7 78°.33 2°.1/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.71 | − 5 55.0 | 1.341 | 2.176 | 18.0 | 21.1 |
| 3 12 | 13 29.97 | − 5 3.7 | 1.290 | 2.200 | 13.6 | 20.8 |
| 3 22 | 13 22.44 | − 3 58.9 | 1.259 | 2.224 | 8.6 | 20.6 |
| 4 1 | 13 13.07 | − 2 47.7 | 1.253 | 2.247 | 3.5 | 20.4 |
| 4 11 | 13 3.18 | − 1 39.3 | 1.273 | 2.270 | 3.4 | 20.4 |
| 4 21 | 12 54.10 | − 0 42.3 | 1.319 | 2.293 | 8.2 | 20.8 |
| 5 1 | 12 46.93 | − 0 2.7 | 1.390 | 2.316 | 12.7 | 21.1 |
| 5 11 | 12 42.35 | + 0 16.4 | 1.480 | 2.338 | 16.5 | 21.4 |

**335561** 2006 $BU_{249}$ 4 7.7 273°.02 2°.2/11.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.57 | −20 14.1 | 4.448 | 5.185 | 7.9 | 20.3 |
| 3 12 | 13 19.19 | −20 14.1 | 4.343 | 5.181 | 6.4 | 20.2 |
| 3 22 | 13 14.88 | −20 5.2 | 4.261 | 5.176 | 4.8 | 20.0 |
| 4 1 | 13 9.93 | −19 47.8 | 4.207 | 5.172 | 3.2 | 19.9 |
| 4 11 | 13 4.71 | −19 23.3 | 4.181 | 5.167 | 2.2 | 19.8 |
| 4 21 | 12 59.59 | −18 53.6 | 4.186 | 5.162 | 2.9 | 19.9 |
| 5 1 | 12 54.94 | −18 20.9 | 4.220 | 5.158 | 4.5 | 20.0 |
| 5 11 | 12 51.08 | −17 47.9 | 4.281 | 5.153 | 6.2 | 20.1 |

**317802** 2003 $SV_{206}$ 4 7.7 227°.25 1°.4/ 8.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.66 | −12 49.2 | 2.047 | 2.835 | 14.3 | 22.2 |
| 3 12 | 13 29.58 | −12 41.8 | 1.943 | 2.822 | 11.3 | 22.0 |
| 3 22 | 13 22.20 | −12 20.1 | 1.862 | 2.809 | 7.7 | 21.7 |
| 4 1 | 13 13.08 | −11 45.3 | 1.807 | 2.795 | 3.7 | 21.5 |
| 4 11 | 13 3.10 | −11 1.1 | 1.780 | 2.780 | 1.7 | 21.3 |
| 4 21 | 12 53.27 | −10 12.5 | 1.783 | 2.764 | 5.5 | 21.5 |
| 5 1 | 12 44.61 | − 9 25.6 | 1.813 | 2.748 | 9.6 | 21.7 |
| 5 11 | 12 37.90 | − 8 46.2 | 1.867 | 2.731 | 13.3 | 21.9 |

**328993** 2010 $WY_{71}$ 4 7.7 102°.68 2°.6/ 5.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.70 | − 2 20.3 | 1.755 | 2.584 | 14.6 | 20.8 |
| 3 12 | 13 28.02 | − 1 43.0 | 1.686 | 2.594 | 11.1 | 20.6 |
| 3 22 | 13 21.06 | − 0 58.0 | 1.640 | 2.603 | 7.1 | 20.4 |
| 4 1 | 13 12.53 | − 0 10.7 | 1.620 | 2.612 | 3.3 | 20.2 |
| 4 11 | 13 3.43 | + 0 32.3 | 1.627 | 2.621 | 3.7 | 20.2 |
| 4 21 | 12 54.80 | + 1 5.5 | 1.662 | 2.630 | 7.5 | 20.4 |
| 5 1 | 12 47.60 | + 1 24.5 | 1.723 | 2.638 | 11.3 | 20.7 |
| 5 11 | 12 42.47 | + 1 27.1 | 1.805 | 2.647 | 14.7 | 20.9 |

**30299** Shashkishore 4 7.7 173°.67 0°.0/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.44 | − 9 8.6 | 1.852 | 2.657 | 15.0 | 20.0 |
| 3 12 | 13 30.16 | − 8 45.7 | 1.768 | 2.660 | 11.6 | 19.8 |
| 3 22 | 13 22.51 | − 8 9.7 | 1.707 | 2.663 | 7.6 | 19.5 |
| 4 1 | 13 13.16 | − 7 23.7 | 1.672 | 2.665 | 3.1 | 19.3 |
| 4 11 | 13 3.10 | − 6 33.0 | 1.666 | 2.667 | 1.6 | 19.1 |
| 4 21 | 12 53.42 | − 5 43.8 | 1.688 | 2.667 | 6.2 | 19.4 |
| 5 1 | 12 45.12 | − 5 2.1 | 1.737 | 2.667 | 10.4 | 19.7 |
| 5 11 | 12 38.94 | − 4 32.5 | 1.810 | 2.666 | 14.0 | 19.9 |

**248863** 2006 $UW_{10}$ 4 7.7 352°.03 6°.5/ 3.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 39.42 | +12 46.8 | 2.061 | 2.879 | 13.2 | 19.8 |
| 3 12 | 13 32.84 | +12 57.8 | 1.986 | 2.877 | 10.6 | 19.7 |
| 3 22 | 13 24.05 | +13 1.8 | 1.935 | 2.875 | 8.0 | 19.5 |
| 4 1 | 13 13.72 | +12 53.3 | 1.911 | 2.874 | 6.5 | 19.4 |
| 4 11 | 13 2.84 | +12 27.8 | 1.915 | 2.872 | 7.2 | 19.4 |
| 4 21 | 12 52.44 | +11 43.8 | 1.947 | 2.872 | 9.6 | 19.6 |
| 5 1 | 12 43.44 | +10 41.7 | 2.005 | 2.871 | 12.3 | 19.7 |
| 5 11 | 12 36.49 | + 9 24.0 | 2.087 | 2.871 | 14.9 | 19.9 |

**219651** 2001 $UD_{160}$ 4 7.7 192°.66 4°.6/ 3.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.44 | + 5 46.0 | 2.302 | 3.124 | 11.9 | 21.6 |
| 3 12 | 13 28.89 | + 6 29.4 | 2.222 | 3.122 | 9.2 | 21.4 |
| 3 22 | 13 21.44 | + 7 13.3 | 2.166 | 3.120 | 6.4 | 21.2 |
| 4 1 | 13 12.67 | + 7 52.5 | 2.139 | 3.117 | 4.6 | 21.1 |
| 4 11 | 13 3.36 | + 8 21.5 | 2.141 | 3.113 | 5.4 | 21.2 |
| 4 21 | 12 54.37 | + 8 36.5 | 2.171 | 3.108 | 8.0 | 21.3 |
| 5 1 | 12 46.48 | + 8 35.2 | 2.228 | 3.103 | 10.9 | 21.5 |
| 5 11 | 12 40.29 | + 8 17.3 | 2.307 | 3.098 | 13.5 | 21.7 |

**361714** 2007 $VL_{307}$ 4 7.7 279°.84 4°.5/ 4.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.71 | + 1 34.7 | 1.522 | 2.364 | 15.9 | 20.5 |
| 3 12 | 13 29.41 | + 2 14.3 | 1.439 | 2.352 | 12.2 | 20.3 |
| 3 22 | 13 22.34 | + 2 59.7 | 1.377 | 2.340 | 8.2 | 20.0 |
| 4 1 | 13 13.18 | + 3 44.1 | 1.340 | 2.328 | 4.8 | 19.8 |
| 4 11 | 13 3.07 | + 4 19.5 | 1.329 | 2.316 | 5.7 | 19.8 |
| 4 21 | 12 53.27 | + 4 39.3 | 1.344 | 2.304 | 9.7 | 20.0 |
| 5 1 | 12 45.02 | + 4 39.2 | 1.383 | 2.293 | 14.0 | 20.2 |
| 5 11 | 12 39.21 | + 4 17.9 | 1.442 | 2.281 | 17.8 | 20.4 |

**458977** 2011 $WE_{62}$ 4 7.7 78°.14 1°.5/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.78 | − 6 49.4 | 1.470 | 2.301 | 16.9 | 22.1 |
| 3 12 | 13 28.38 | − 6 4.4 | 1.411 | 2.319 | 12.8 | 21.9 |
| 3 22 | 13 21.40 | − 5 5.6 | 1.374 | 2.338 | 8.1 | 21.7 |
| 4 1 | 13 12.67 | − 3 59.2 | 1.362 | 2.356 | 3.2 | 21.5 |
| 4 11 | 13 3.39 | − 2 53.3 | 1.376 | 2.374 | 2.8 | 21.5 |
| 4 21 | 12 54.76 | − 1 55.8 | 1.416 | 2.392 | 7.5 | 21.8 |
| 5 1 | 12 47.84 | − 1 13.1 | 1.482 | 2.410 | 11.9 | 22.1 |
| 5 11 | 12 43.29 | − 0 48.9 | 1.568 | 2.428 | 15.6 | 22.4 |

**258085** 2001 $QS_6$ 4 7.7 242°.69 2°.7/ 4.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.33 | − 3 46.8 | 1.851 | 2.681 | 14.0 | 20.2 |
| 3 12 | 13 25.53 | − 2 42.1 | 1.764 | 2.673 | 10.6 | 19.9 |
| 3 22 | 13 19.55 | − 1 25.9 | 1.700 | 2.664 | 6.8 | 19.7 |
| 4 1 | 13 11.97 | − 0 4.2 | 1.663 | 2.655 | 3.3 | 19.4 |
| 4 11 | 13 3.69 | + 1 15.2 | 1.654 | 2.646 | 3.9 | 19.5 |
| 4 21 | 12 55.69 | + 2 24.6 | 1.673 | 2.637 | 7.7 | 19.7 |
| 5 1 | 12 48.90 | + 3 17.8 | 1.716 | 2.627 | 11.6 | 19.9 |
| 5 11 | 12 44.03 | + 3 51.2 | 1.782 | 2.617 | 15.1 | 20.1 |

**79969** 1999 $CP_{133}$ 4 7.7 57°.58 0°.1/ 8.6 13 C

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 9.62 | − 9 51.4 | 32.787 | 33.571 | 1.0 | 22.8 |
| 3 12 | 13 8.86 | − 9 47.3 | 32.693 | 33.573 | 0.8 | 22.7 |
| 3 22 | 13 8.01 | − 9 42.6 | 32.626 | 33.575 | 0.5 | 22.7 |
| 4 1 | 13 7.10 | − 9 37.4 | 32.588 | 33.577 | 0.2 | 22.7 |
| 4 11 | 13 6.16 | − 9 31.8 | 32.579 | 33.580 | 0.1 | 22.6 |
| 4 21 | 13 5.24 | − 9 26.2 | 32.600 | 33.582 | 0.4 | 22.7 |
| 5 1 | 13 4.36 | − 9 20.8 | 32.651 | 33.584 | 0.7 | 22.7 |
| 5 11 | 13 3.57 | − 9 15.7 | 32.729 | 33.586 | 0.9 | 22.8 |

**376020** 2010 $AE_{70}$ 4 7.7 120°.09 5°.0/ 1.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.19 | + 5 0.5 | 2.206 | 3.040 | 11.9 | 21.1 |
| 3 12 | 13 24.87 | + 6 24.4 | 2.146 | 3.053 | 9.1 | 20.9 |
| 3 22 | 13 18.80 | + 7 49.9 | 2.111 | 3.066 | 6.4 | 20.7 |
| 4 1 | 13 11.56 | + 9 10.2 | 2.104 | 3.078 | 5.0 | 20.7 |
| 4 11 | 13 3.94 | +10 18.5 | 2.125 | 3.090 | 6.1 | 20.8 |
| 4 21 | 12 56.70 | +11 9.7 | 2.174 | 3.102 | 8.5 | 20.9 |
| 5 1 | 12 50.56 | +11 40.9 | 2.249 | 3.113 | 11.2 | 21.1 |
| 5 11 | 12 46.04 | +11 51.7 | 2.344 | 3.124 | 13.6 | 21.3 |

**505830** 2015 $BL_{496}$ 4 7.7 237°.03 0°.5/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.61 | −10 41.7 | 2.203 | 3.001 | 13.2 | 22.3 |
| 3 12 | 13 27.04 | −10 23.1 | 2.101 | 2.987 | 10.3 | 22.0 |
| 3 22 | 13 20.44 | − 9 52.1 | 2.021 | 2.974 | 6.8 | 21.8 |
| 4 1 | 13 12.33 | − 9 10.7 | 1.968 | 2.960 | 3.0 | 21.5 |
| 4 11 | 13 3.51 | − 8 23.0 | 1.944 | 2.945 | 1.3 | 21.4 |
| 4 21 | 12 54.84 | − 7 34.0 | 1.949 | 2.930 | 5.3 | 21.6 |
| 5 1 | 12 47.21 | − 6 49.2 | 1.982 | 2.914 | 9.1 | 21.8 |
| 5 11 | 12 41.31 | − 6 13.4 | 2.039 | 2.898 | 12.6 | 22.0 |

**230645** 2003 $RZ_{15}$ 4 7.7 253°.10 0°.8/ 8.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.88 | −12 1.0 | 2.232 | 3.027 | 13.1 | 21.2 |
| 3 12 | 13 25.72 | −11 39.2 | 2.126 | 3.011 | 10.2 | 21.0 |
| 3 22 | 13 19.59 | −11 3.7 | 2.044 | 2.995 | 6.9 | 20.7 |
| 4 1 | 13 11.99 | −10 16.7 | 1.988 | 2.978 | 3.1 | 20.5 |
| 4 11 | 13 3.68 | − 9 22.0 | 1.961 | 2.961 | 1.3 | 20.3 |
| 4 21 | 12 55.52 | − 8 25.0 | 1.962 | 2.944 | 5.1 | 20.5 |
| 5 1 | 12 48.35 | − 7 31.4 | 1.992 | 2.926 | 8.9 | 20.7 |
| 5 11 | 12 42.85 | − 6 46.5 | 2.045 | 2.908 | 12.4 | 20.9 |

**425180** 2009 $UL_{35}$ 4 7.7 173°.85 1°.0/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.64 | − 6 1.9 | 2.478 | 3.283 | 11.6 | 22.8 |
| 3 12 | 13 26.65 | − 5 28.5 | 2.392 | 3.286 | 8.9 | 22.6 |
| 3 22 | 13 19.94 | − 4 46.7 | 2.331 | 3.289 | 5.7 | 22.4 |
| 4 1 | 13 12.05 | − 3 59.9 | 2.298 | 3.291 | 2.3 | 22.2 |
| 4 11 | 13 3.69 | − 3 12.5 | 2.295 | 3.293 | 1.9 | 22.1 |
| 4 21 | 12 55.60 | − 2 29.1 | 2.322 | 3.294 | 5.3 | 22.4 |
| 5 1 | 12 48.49 | − 1 53.7 | 2.376 | 3.294 | 8.5 | 22.6 |
| 5 11 | 12 42.90 | − 1 29.4 | 2.456 | 3.293 | 11.4 | 22.7 |

**437112** 2012 $UP_{125}$ 4 7.7 338°.48 2°.1/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.09 | − 1 44.1 | 2.143 | 2.966 | 12.6 | 20.6 |
| 3 12 | 13 26.51 | − 1 26.8 | 2.061 | 2.965 | 9.6 | 20.4 |
| 3 22 | 13 19.99 | − 1 4.3 | 2.002 | 2.964 | 6.1 | 20.1 |
| 4 1 | 13 12.11 | − 0 40.3 | 1.970 | 2.962 | 2.8 | 19.9 |
| 4 11 | 13 3.66 | − 0 19.3 | 1.967 | 2.961 | 3.0 | 19.9 |
| 4 21 | 12 55.52 | − 0 5.1 | 1.992 | 2.960 | 6.4 | 20.1 |
| 5 1 | 12 48.47 | − 0 1.2 | 2.043 | 2.959 | 9.8 | 20.3 |
| 5 11 | 12 43.15 | − 0 9.2 | 2.118 | 2.958 | 12.9 | 20.5 |

**348927** 2006 $TR_{39}$ 4 7.7 193°.27 0°.1/ 7.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.34 | − 8 47.8 | 3.275 | 4.065 | 9.4 | 22.8 |
| 3 12 | 13 23.79 | − 8 21.7 | 3.178 | 4.063 | 7.2 | 22.7 |
| 3 22 | 13 17.95 | − 7 48.0 | 3.106 | 4.059 | 4.7 | 22.5 |
| 4 1 | 13 11.22 | − 7 8.7 | 3.063 | 4.055 | 1.9 | 22.3 |
| 4 11 | 13 4.11 | − 6 26.8 | 3.051 | 4.051 | 1.0 | 22.2 |
| 4 21 | 12 57.17 | − 5 45.8 | 3.069 | 4.046 | 3.9 | 22.4 |
| 5 1 | 12 50.92 | − 5 8.7 | 3.117 | 4.040 | 6.5 | 22.6 |
| 5 11 | 12 45.79 | − 4 38.5 | 3.191 | 4.034 | 8.9 | 22.8 |

**505439** 2013 $SW_{41}$ 4 7.7 212°.87 0°.2/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.55 | − 9 25.3 | 2.153 | 2.958 | 13.2 | 23.0 |
| 3 12 | 13 26.18 | − 8 48.3 | 2.059 | 2.952 | 10.2 | 22.8 |
| 3 22 | 13 19.84 | − 7 58.5 | 1.989 | 2.946 | 6.6 | 22.5 |
| 4 1 | 13 12.07 | − 6 59.2 | 1.945 | 2.939 | 2.7 | 22.3 |
| 4 11 | 13 3.68 | − 5 55.5 | 1.931 | 2.931 | 1.5 | 22.2 |
| 4 21 | 12 55.52 | − 4 53.4 | 1.945 | 2.923 | 5.6 | 22.4 |
| 5 1 | 12 48.43 | − 3 58.7 | 1.987 | 2.914 | 9.4 | 22.6 |
| 5 11 | 12 43.08 | − 3 16.0 | 2.053 | 2.905 | 12.7 | 22.8 |

**13057** Jorgensen 4 7.7 212°.83 0°.5/ 7.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.24 | − 6 58.0 | 2.393 | 3.196 | 12.1 | 19.0 |
| 3 12 | 13 27.27 | − 6 42.3 | 2.297 | 3.189 | 9.3 | 18.8 |
| 3 22 | 13 20.46 | − 6 18.0 | 2.226 | 3.183 | 6.0 | 18.6 |
| 4 1 | 13 12.31 | − 5 47.8 | 2.182 | 3.175 | 2.4 | 18.4 |
| 4 11 | 13 3.57 | − 5 15.3 | 2.168 | 3.167 | 1.5 | 18.3 |
| 4 21 | 12 55.04 | − 4 44.8 | 2.183 | 3.159 | 5.2 | 18.5 |
| 5 1 | 12 47.48 | − 4 20.2 | 2.226 | 3.150 | 8.7 | 18.7 |
| 5 11 | 12 41.53 | − 4 4.8 | 2.294 | 3.141 | 11.8 | 18.9 |

**141671** 2002 $JV_{101}$ 4 7.7 279°.83 4°.4/11.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.44 | −21 38.1 | 1.704 | 2.478 | 17.3 | 20.7 |
| 3 12 | 13 26.26 | −21 23.4 | 1.592 | 2.453 | 14.4 | 20.5 |
| 3 22 | 13 20.43 | −20 42.4 | 1.499 | 2.428 | 10.8 | 20.2 |
| 4 1 | 13 12.49 | −19 34.0 | 1.429 | 2.403 | 6.9 | 19.9 |
| 4 11 | 13 3.42 | −18 0.9 | 1.385 | 2.377 | 4.4 | 19.7 |
| 4 21 | 12 54.43 | −16 10.5 | 1.367 | 2.351 | 6.6 | 19.7 |
| 5 1 | 12 46.75 | −14 13.8 | 1.376 | 2.325 | 10.9 | 19.9 |
| 5 11 | 12 41.36 | −12 22.4 | 1.408 | 2.299 | 15.2 | 20.1 |

**366439** 2001 $XV_{22}$ 4 7.7 126°.10 0°.5/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.59 | − 7 31.3 | 2.363 | 3.162 | 12.3 | 22.2 |
| 3 12 | 13 28.08 | − 7 5.0 | 2.291 | 3.182 | 9.4 | 22.0 |
| 3 22 | 13 20.82 | − 6 29.7 | 2.244 | 3.200 | 6.0 | 21.9 |
| 4 1 | 13 12.39 | − 5 48.4 | 2.225 | 3.218 | 2.4 | 21.6 |
| 4 11 | 13 3.57 | − 5 5.7 | 2.236 | 3.236 | 1.5 | 21.6 |
| 4 21 | 12 55.15 | − 4 25.9 | 2.277 | 3.252 | 5.1 | 21.9 |
| 5 1 | 12 47.85 | − 3 53.1 | 2.346 | 3.268 | 8.4 | 22.1 |
| 5 11 | 12 42.19 | − 3 30.3 | 2.440 | 3.283 | 11.3 | 22.3 |

**277770** 2006 $DL_{176}$ 4 7.7 340°.07 2°.7/ 9.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.63 | −13 29.2 | 1.722 | 2.522 | 16.1 | 20.4 |
| 3 12 | 13 28.38 | −13 58.5 | 1.633 | 2.517 | 12.8 | 20.1 |
| 3 22 | 13 21.59 | −14 14.0 | 1.566 | 2.512 | 9.0 | 19.9 |
| 4 1 | 13 12.88 | −14 15.4 | 1.523 | 2.508 | 4.9 | 19.6 |
| 4 11 | 13 3.27 | −14 5.2 | 1.506 | 2.504 | 2.8 | 19.5 |
| 4 21 | 12 53.91 | −13 47.2 | 1.517 | 2.500 | 6.0 | 19.7 |
| 5 1 | 12 45.94 | −13 27.1 | 1.553 | 2.497 | 10.2 | 19.9 |
| 5 11 | 12 40.21 | −13 10.5 | 1.612 | 2.495 | 14.1 | 20.1 |

**171991** 2001 $TP_{210}$ 4 7.7 280°.48 4°.7/12.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.10 | −22 16.9 | 2.225 | 2.974 | 14.5 | 19.7 |
| 3 12 | 13 26.01 | −22 39.2 | 2.125 | 2.967 | 12.1 | 19.5 |
| 3 22 | 13 19.84 | −22 44.1 | 2.046 | 2.960 | 9.3 | 19.3 |
| 4 1 | 13 12.12 | −22 30.4 | 1.991 | 2.952 | 6.5 | 19.1 |
| 4 11 | 13 3.67 | −21 59.5 | 1.963 | 2.945 | 4.8 | 19.0 |
| 4 21 | 12 55.39 | −21 14.9 | 1.963 | 2.938 | 5.8 | 19.1 |
| 5 1 | 12 48.18 | −20 22.1 | 1.990 | 2.931 | 8.5 | 19.2 |
| 5 11 | 12 42.77 | −19 27.9 | 2.041 | 2.923 | 11.5 | 19.4 |

**24980** 1998 $KF_2$ 4 7.7 215°.33 7°.1/ 1.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 40.05 | +13 0.0 | 2.089 | 2.904 | 13.1 | 18.5 |
| 3 12 | 13 33.44 | +13 44.4 | 2.008 | 2.896 | 10.6 | 18.3 |
| 3 22 | 13 24.53 | +14 23.5 | 1.952 | 2.887 | 8.3 | 18.1 |
| 4 1 | 13 13.99 | +14 50.5 | 1.922 | 2.878 | 7.1 | 18.0 |
| 4 11 | 13 2.77 | +14 59.2 | 1.921 | 2.868 | 8.0 | 18.1 |
| 4 21 | 12 51.93 | +14 46.3 | 1.948 | 2.857 | 10.4 | 18.2 |
| 5 1 | 12 42.44 | +14 11.1 | 1.999 | 2.845 | 13.2 | 18.3 |
| 5 11 | 12 35.02 | +13 15.7 | 2.073 | 2.832 | 15.8 | 18.5 |

**13816** Stülpner 4 7.7 69°.73 4°.7/12.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.39 | −23 27.9 | 1.663 | 2.430 | 18.0 | 18.2 |
| 3 12 | 13 25.84 | −23 9.2 | 1.589 | 2.443 | 14.8 | 18.0 |
| 3 22 | 13 19.82 | −22 23.6 | 1.534 | 2.457 | 11.1 | 17.8 |
| 4 1 | 13 12.09 | −21 11.8 | 1.502 | 2.471 | 7.3 | 17.6 |
| 4 11 | 13 3.73 | −19 38.8 | 1.495 | 2.485 | 4.8 | 17.5 |
| 4 21 | 12 55.89 | −17 53.1 | 1.516 | 2.498 | 6.2 | 17.6 |
| 5 1 | 12 49.60 | −16 5.2 | 1.563 | 2.512 | 9.8 | 17.8 |
| 5 11 | 12 45.53 | −14 25.3 | 1.634 | 2.526 | 13.4 | 18.1 |

**381155** 2007 $GN_{24}$ 4 7.7 311°.12 6°.8/ 2.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.09 | + 8 33.0 | 1.650 | 2.493 | 14.8 | 20.3 |
| 3 12 | 13 28.77 | + 9 16.5 | 1.566 | 2.475 | 11.7 | 20.1 |
| 3 22 | 13 21.86 | + 9 58.6 | 1.504 | 2.457 | 8.6 | 19.8 |
| 4 1 | 13 13.00 | +10 31.6 | 1.466 | 2.440 | 6.8 | 19.7 |
| 4 11 | 13 3.24 | +10 47.8 | 1.455 | 2.423 | 7.9 | 19.7 |
| 4 21 | 12 53.76 | +10 42.0 | 1.469 | 2.406 | 11.0 | 19.8 |
| 5 1 | 12 45.72 | +10 12.2 | 1.505 | 2.390 | 14.6 | 20.0 |
| 5 11 | 12 39.95 | + 9 19.4 | 1.562 | 2.374 | 17.9 | 20.2 |

**506701** 2006 $UF_{76}$ 4 7.7 160°.11 3°.6/ 4.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.14 | + 5 43.0 | 2.647 | 3.458 | 10.8 | 21.3 |
| 3 12 | 13 29.88 | + 5 54.9 | 2.567 | 3.462 | 8.3 | 21.1 |
| 3 22 | 13 21.94 | + 6 5.9 | 2.514 | 3.466 | 5.7 | 21.0 |
| 4 1 | 13 12.86 | + 6 12.3 | 2.489 | 3.469 | 3.8 | 20.8 |
| 4 11 | 13 3.35 | + 6 10.8 | 2.495 | 3.472 | 4.3 | 20.9 |
| 4 21 | 12 54.18 | + 5 59.0 | 2.530 | 3.475 | 6.6 | 21.0 |
| 5 1 | 12 46.02 | + 5 35.6 | 2.594 | 3.477 | 9.3 | 21.2 |
| 5 11 | 12 39.41 | + 5 0.8 | 2.683 | 3.480 | 11.7 | 21.4 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **273277** 2006 $QK_{73}$ | | | 4 7.7 195°.96 | 1°.5/ 8.9 17 | | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.50 | −12 25.2 | 1.950 | 2.743 | 14.8 | 21.7 |
| 3 12 | 13 29.46 | −12 24.5 | 1.859 | 2.741 | 11.6 | 21.4 |
| 3 22 | 13 22.10 | −12 10.0 | 1.790 | 2.738 | 7.9 | 21.2 |
| 4 1 | 13 13.05 | −11 43.0 | 1.747 | 2.736 | 3.8 | 21.0 |
| 4 11 | 13 3.23 | −11 7.2 | 1.732 | 2.732 | 1.7 | 20.8 |
| 4 21 | 12 53.68 | −10 27.4 | 1.746 | 2.728 | 5.6 | 21.0 |
| 5 1 | 12 45.42 | − 9 49.6 | 1.787 | 2.724 | 9.6 | 21.3 |
| 5 11 | 12 39.18 | − 9 19.0 | 1.852 | 2.719 | 13.2 | 21.5 |
| **427959** 2005 $XA_{71}$ | | | 4 7.7 237°.41 | 0°.0/ 7.8 17 | | |
| 3 2 | 13 31.67 | − 9 2.5 | 1.947 | 2.756 | 14.2 | 21.8 |
| 3 12 | 13 27.27 | − 8 49.0 | 1.857 | 2.751 | 11.0 | 21.5 |
| 3 22 | 13 20.67 | − 8 23.5 | 1.789 | 2.746 | 7.2 | 21.3 |
| 4 1 | 13 12.46 | − 7 48.8 | 1.747 | 2.740 | 3.0 | 21.0 |
| 4 11 | 13 3.53 | − 7 9.2 | 1.734 | 2.734 | 1.4 | 20.9 |
| 4 21 | 12 54.86 | − 6 30.0 | 1.748 | 2.729 | 5.8 | 21.2 |
| 5 1 | 12 47.40 | − 5 56.8 | 1.789 | 2.722 | 9.9 | 21.4 |
| 5 11 | 12 41.87 | − 5 33.9 | 1.854 | 2.716 | 13.4 | 21.6 |
| **497049** 2003 $SW_{324}$ | | | 4 7.7 277°.34 | 0°.6/ 8.1 17 | | |
| 3 2 | 13 34.68 | −10 12.3 | 1.722 | 2.529 | 15.8 | 22.9 |
| 3 12 | 13 30.28 | −10 4.7 | 1.606 | 2.499 | 12.5 | 22.6 |
| 3 22 | 13 23.10 | − 9 42.4 | 1.512 | 2.467 | 8.4 | 22.2 |
| 4 1 | 13 13.64 | − 9 6.9 | 1.443 | 2.435 | 3.7 | 21.9 |
| 4 11 | 13 2.86 | − 8 22.2 | 1.401 | 2.402 | 1.6 | 21.6 |
| 4 21 | 12 51.98 | − 7 34.5 | 1.386 | 2.368 | 6.8 | 21.9 |
| 5 1 | 12 42.32 | − 6 51.0 | 1.398 | 2.334 | 11.9 | 22.1 |
| 5 11 | 12 34.93 | − 6 18.5 | 1.432 | 2.299 | 16.4 | 22.3 |
| **3245** Jensch | | | 4 7.7 109°.72 | 0°.0/ 7.6 18 | | |
| 3 2 | 13 29.00 | − 9 30.8 | 2.522 | 3.321 | 11.6 | 18.5 |
| 3 12 | 13 24.58 | − 9 5.9 | 2.445 | 3.334 | 8.9 | 18.4 |
| 3 22 | 13 18.57 | − 8 31.2 | 2.393 | 3.348 | 5.8 | 18.2 |
| 4 1 | 13 11.50 | − 7 49.4 | 2.369 | 3.361 | 2.4 | 18.0 |
| 4 11 | 13 4.04 | − 7 4.5 | 2.373 | 3.374 | 1.1 | 17.9 |
| 4 21 | 12 56.89 | − 6 20.8 | 2.408 | 3.387 | 4.6 | 18.2 |
| 5 1 | 12 50.71 | − 5 42.4 | 2.470 | 3.399 | 7.7 | 18.4 |
| 5 11 | 12 45.97 | − 5 12.6 | 2.557 | 3.411 | 10.5 | 18.6 |
| **475789** 2006 $XL_{23}$ | | | 4 7.7 304°.02 | 6°.2/15.7 17 | | |
| 3 2 | 13 26.63 | −30 39.3 | 2.347 | 3.048 | 15.0 | 20.8 |
| 3 12 | 13 23.32 | −30 30.9 | 2.242 | 3.041 | 13.0 | 20.6 |
| 3 22 | 13 18.05 | −29 58.4 | 2.157 | 3.035 | 10.6 | 20.5 |
| 4 1 | 13 11.37 | −29 0.7 | 2.095 | 3.028 | 8.2 | 20.3 |
| 4 11 | 13 4.08 | −27 39.3 | 2.058 | 3.021 | 6.4 | 20.2 |
| 4 21 | 12 57.05 | −25 59.0 | 2.050 | 3.015 | 6.5 | 20.1 |
| 5 1 | 12 51.10 | −24 7.2 | 2.068 | 3.008 | 8.4 | 20.2 |
| 5 11 | 12 46.88 | −22 12.9 | 2.113 | 3.002 | 10.9 | 20.4 |
| **320630** 2008 $CQ_{74}$ | | | 4 7.7 359°.51 | 3°.2/ 9.2 17 | | |
| 3 2 | 13 32.79 | −10 59.1 | 1.151 | 1.987 | 20.2 | 20.2 |
| 3 12 | 13 29.56 | −12 2.0 | 1.078 | 1.983 | 16.1 | 19.9 |
| 3 22 | 13 22.91 | −12 51.5 | 1.024 | 1.981 | 11.2 | 19.6 |
| 4 1 | 13 13.56 | −13 26.4 | 0.991 | 1.980 | 5.9 | 19.3 |
| 4 11 | 13 2.96 | −13 47.6 | 0.982 | 1.980 | 3.4 | 19.2 |
| 4 21 | 12 52.77 | −13 58.6 | 0.996 | 1.982 | 7.8 | 19.4 |
| 5 1 | 12 44.61 | −14 5.3 | 1.032 | 1.986 | 13.0 | 19.7 |
| 5 11 | 12 39.58 | −14 14.4 | 1.088 | 1.991 | 17.7 | 20.0 |
| **169031** 2001 $EZ_{13}$ | | | 4 7.7 99°.55 | 3°.9/ 4.6 18 | | |
| 3 2 | 13 34.79 | + 0 43.1 | 1.630 | 2.465 | 15.3 | 19.8 |
| 3 12 | 13 29.71 | + 1 26.5 | 1.568 | 2.478 | 11.6 | 19.6 |
| 3 22 | 13 22.20 | + 2 15.0 | 1.529 | 2.492 | 7.6 | 19.4 |
| 4 1 | 13 13.03 | + 3 2.1 | 1.516 | 2.505 | 4.3 | 19.2 |
| 4 11 | 13 3.30 | + 3 40.6 | 1.530 | 2.518 | 5.0 | 19.2 |
| 4 21 | 12 54.16 | + 4 5.0 | 1.571 | 2.530 | 8.6 | 19.5 |
| 5 1 | 12 46.61 | + 4 11.8 | 1.636 | 2.543 | 12.4 | 19.7 |
| 5 11 | 12 41.31 | + 4 0.2 | 1.723 | 2.555 | 15.7 | 20.0 |
| **157873** 1999 $JW_{7}$ | | | 4 7.7 17°.13 | 10°.7/18.2 18 | | |
| 3 2 | 13 24.98 | −36 2.1 | 1.033 | 1.785 | 27.5 | 19.2 |
| 3 12 | 13 24.25 | −35 52.5 | 0.959 | 1.787 | 24.2 | 18.9 |
| 3 22 | 13 19.72 | −34 48.3 | 0.896 | 1.788 | 20.2 | 18.6 |
| 4 1 | 13 12.28 | −32 41.4 | 0.850 | 1.791 | 15.7 | 18.4 |
| 4 11 | 13 3.64 | −29 33.6 | 0.823 | 1.794 | 11.8 | 18.2 |
| 4 21 | 12 55.73 | −25 39.9 | 0.819 | 1.797 | 10.9 | 18.1 |
| 5 1 | 12 50.26 | −21 26.5 | 0.838 | 1.801 | 13.8 | 18.3 |
| 5 11 | 12 48.22 | −17 23.1 | 0.879 | 1.805 | 18.4 | 18.5 |
| **200571** 2001 $PP_{22}$ | | | 4 7.7 228°.09 | 3°.7/ 4.3 18 | | |
| 3 2 | 13 32.53 | − 1 59.3 | 1.725 | 2.557 | 14.8 | 20.9 |
| 3 12 | 13 28.21 | − 0 46.6 | 1.637 | 2.546 | 11.3 | 20.7 |
| 3 22 | 13 21.43 | + 0 37.4 | 1.572 | 2.535 | 7.3 | 20.4 |
| 4 1 | 13 12.82 | + 2 5.9 | 1.533 | 2.523 | 4.0 | 20.2 |
| 4 11 | 13 3.36 | + 3 29.8 | 1.522 | 2.510 | 4.9 | 20.2 |
| 4 21 | 12 54.18 | + 4 40.5 | 1.538 | 2.496 | 8.9 | 20.4 |
| 5 1 | 12 46.34 | + 5 31.5 | 1.580 | 2.482 | 13.0 | 20.6 |
| 5 11 | 12 40.64 | + 5 59.6 | 1.642 | 2.467 | 16.6 | 20.8 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **27565** 2000 $KX_{81}$ | | | 4 7.7 203°.64 | 2°.2/10.0 18 | | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.55 | −15 30.0 | 2.602 | 3.371 | 12.1 | 19.0 |
| 3 12 | 13 26.68 | −15 37.0 | 2.503 | 3.367 | 9.7 | 18.9 |
| 3 22 | 13 20.06 | −15 32.0 | 2.427 | 3.363 | 6.8 | 18.7 |
| 4 1 | 13 12.17 | −15 15.6 | 2.378 | 3.359 | 3.8 | 18.5 |
| 4 11 | 13 3.71 | −14 49.9 | 2.358 | 3.354 | 2.2 | 18.3 |
| 4 21 | 12 55.42 | −14 18.3 | 2.367 | 3.349 | 4.4 | 18.5 |
| 5 1 | 12 48.05 | −13 44.8 | 2.406 | 3.343 | 7.5 | 18.7 |
| 5 11 | 12 42.19 | −13 14.1 | 2.470 | 3.337 | 10.3 | 18.8 |
| **246326** 2007 $TK_{215}$ | | | 4 7.7 148°.54 | 1°.6/ 9.1 18 | | |
| 3 2 | 13 32.97 | −13 50.4 | 1.772 | 2.569 | 15.9 | 21.3 |
| 3 12 | 13 28.41 | −13 32.8 | 1.691 | 2.575 | 12.5 | 21.0 |
| 3 22 | 13 21.45 | −12 57.8 | 1.632 | 2.581 | 8.5 | 20.8 |
| 4 1 | 13 12.78 | −12 7.5 | 1.598 | 2.586 | 4.1 | 20.6 |
| 4 11 | 13 3.42 | −11 7.1 | 1.591 | 2.591 | 1.8 | 20.4 |
| 4 21 | 12 54.46 | −10 3.4 | 1.612 | 2.596 | 5.8 | 20.7 |
| 5 1 | 12 46.93 | − 9 3.6 | 1.660 | 2.600 | 10.0 | 20.9 |
| 5 11 | 12 41.54 | − 8 14.1 | 1.731 | 2.604 | 13.8 | 21.2 |
| **165343** 2000 $VJ_{37}$ | | | 4 7.7 66°.96 | 8°.0/ 2.2 18 | | |
| 3 2 | 13 36.90 | + 9 41.4 | 1.386 | 2.233 | 16.9 | 18.9 |
| 3 12 | 13 31.51 | +10 44.8 | 1.345 | 2.254 | 13.2 | 18.7 |
| 3 22 | 13 23.37 | +11 43.3 | 1.324 | 2.276 | 9.8 | 18.5 |
| 4 1 | 13 13.48 | +12 27.2 | 1.328 | 2.297 | 8.0 | 18.5 |
| 4 11 | 13 3.16 | +12 48.6 | 1.357 | 2.319 | 9.1 | 18.6 |
| 4 21 | 12 53.72 | +12 43.9 | 1.411 | 2.341 | 12.0 | 18.8 |
| 5 1 | 12 46.23 | +12 13.2 | 1.486 | 2.362 | 15.3 | 19.1 |
| 5 11 | 12 41.32 | +11 19.8 | 1.581 | 2.384 | 18.1 | 19.3 |
| **97314** 1999 $XV_{206}$ | | | 4 7.7 67°.61 | 7°.5/ 1.2 18 | R | |
| 3 2 | 13 34.11 | +12 47.3 | 1.872 | 2.706 | 13.7 | 19.2 |
| 3 12 | 13 28.82 | +13 43.6 | 1.826 | 2.724 | 10.9 | 19.1 |
| 3 22 | 13 21.41 | +14 33.5 | 1.802 | 2.742 | 8.5 | 19.0 |
| 4 1 | 13 12.65 | +15 9.5 | 1.805 | 2.761 | 7.5 | 18.9 |
| 4 11 | 13 3.54 | +15 25.8 | 1.834 | 2.779 | 8.4 | 19.0 |
| 4 21 | 12 55.05 | +15 19.8 | 1.889 | 2.798 | 10.7 | 19.2 |
| 5 1 | 12 48.01 | +14 51.3 | 1.967 | 2.817 | 13.2 | 19.4 |
| 5 11 | 12 42.98 | +14 2.8 | 2.065 | 2.835 | 15.5 | 19.6 |
| **461381** 2001 $HS$ | | | 4 7.7 2°.07 | 1°.2/ 6.8 17 | | |
| 3 2 | 13 29.92 | − 6 15.5 | 1.310 | 2.154 | 17.8 | 20.5 |
| 3 12 | 13 26.77 | − 5 56.3 | 1.238 | 2.153 | 13.7 | 20.2 |
| 3 22 | 13 20.74 | − 5 23.4 | 1.187 | 2.152 | 8.8 | 19.9 |
| 4 1 | 13 12.58 | − 4 41.6 | 1.158 | 2.153 | 3.5 | 19.6 |
| 4 11 | 13 3.52 | − 3 58.2 | 1.154 | 2.154 | 2.7 | 19.6 |
| 4 21 | 12 54.94 | − 3 20.8 | 1.175 | 2.155 | 8.0 | 19.9 |
| 5 1 | 12 48.08 | − 2 56.3 | 1.219 | 2.158 | 12.9 | 20.2 |
| 5 11 | 12 43.83 | − 2 48.8 | 1.283 | 2.161 | 17.2 | 20.4 |
| **109549** 2001 $QM_{257}$ | | | 4 7.7 229°.97 | 0°.1/ 7.9 18 | | |
| 3 2 | 13 24.23 | − 8 15.3 | 4.694 | 5.481 | 6.8 | 19.8 |
| 3 12 | 13 20.34 | − 8 13.2 | 4.594 | 5.477 | 5.2 | 19.6 |
| 3 22 | 13 15.59 | − 8 6.7 | 4.521 | 5.473 | 3.4 | 19.5 |
| 4 1 | 13 10.27 | − 7 57.0 | 4.478 | 5.469 | 1.4 | 19.3 |
| 4 11 | 13 4.69 | − 7 45.6 | 4.465 | 5.465 | 0.6 | 19.3 |
| 4 21 | 12 59.22 | − 7 34.1 | 4.482 | 5.461 | 2.7 | 19.4 |
| 5 1 | 12 54.18 | − 7 24.2 | 4.530 | 5.457 | 4.6 | 19.6 |
| 5 11 | 12 49.87 | − 7 17.6 | 4.605 | 5.452 | 6.3 | 19.7 |
| **192012** 2005 $YT_{60}$ | | | 4 7.7 117°.10 | 0°.3/ 7.9 17 | | |
| 3 2 | 13 30.81 | −10 3.9 | 1.917 | 2.726 | 14.4 | 20.8 |
| 3 12 | 13 26.56 | − 9 45.2 | 1.836 | 2.729 | 11.1 | 20.6 |
| 3 22 | 13 20.17 | − 9 13.5 | 1.777 | 2.733 | 7.3 | 20.4 |
| 4 1 | 13 12.25 | − 8 31.5 | 1.744 | 2.736 | 3.1 | 20.1 |
| 4 11 | 13 3.71 | − 7 44.3 | 1.739 | 2.740 | 1.4 | 20.0 |
| 4 21 | 12 55.52 | − 6 57.4 | 1.762 | 2.743 | 5.7 | 20.3 |
| 5 1 | 12 48.58 | − 6 16.6 | 1.811 | 2.746 | 9.7 | 20.5 |
| 5 11 | 12 43.55 | − 5 46.6 | 1.884 | 2.749 | 13.1 | 20.7 |
| **305401** 2008 $CD_{80}$ | | | 4 7.7 196°.58 | 5°.7/30.8 18 | | |
| 3 2 | 13 26.92 | +10 8.9 | 2.616 | 3.448 | 10.3 | 21.2 |
| 3 12 | 13 23.02 | +11 29.9 | 2.546 | 3.447 | 8.1 | 21.1 |
| 3 22 | 13 17.60 | +12 49.5 | 2.503 | 3.445 | 6.3 | 21.0 |
| 4 1 | 13 11.14 | +14 1.6 | 2.487 | 3.443 | 5.7 | 20.9 |
| 4 11 | 13 4.27 | +15 0.6 | 2.499 | 3.441 | 6.7 | 21.0 |
| 4 21 | 12 57.65 | +15 42.3 | 2.539 | 3.439 | 8.7 | 21.1 |
| 5 1 | 12 51.90 | +16 4.6 | 2.603 | 3.436 | 10.9 | 21.2 |
| 5 11 | 12 47.51 | +16 7.4 | 2.688 | 3.434 | 12.9 | 21.4 |
| **468984** 2015 $AG_{137}$ | | | 4 7.7 94°.60 | 0°.0/ 7.4 17 | | |
| 3 2 | 13 30.78 | − 9 13.9 | 1.834 | 2.648 | 14.7 | 21.8 |
| 3 12 | 13 26.61 | − 8 51.3 | 1.755 | 2.652 | 11.4 | 21.5 |
| 3 22 | 13 20.23 | − 8 15.6 | 1.698 | 2.656 | 7.4 | 21.3 |
| 4 1 | 13 12.28 | − 7 30.2 | 1.667 | 2.660 | 3.0 | 21.0 |
| 4 11 | 13 3.70 | − 6 40.4 | 1.664 | 2.664 | 1.5 | 20.9 |
| 4 21 | 12 55.49 | − 5 52.3 | 1.688 | 2.668 | 6.0 | 21.2 |
| 5 1 | 12 48.58 | − 5 11.7 | 1.738 | 2.672 | 10.1 | 21.5 |
| 5 11 | 12 43.66 | − 4 43.1 | 1.811 | 2.676 | 13.6 | 21.7 |

**428336** 2007 $HL_{90}$ 4 7.7 305°.67 8°.3/30.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.21 | +11 32.0 | 1.693 | 2.540 | 14.3 | 20.4 |
| 3 12 | 13 26.48 | +12 51.3 | 1.618 | 2.524 | 11.5 | 20.2 |
| 3 22 | 13 20.32 | +14 8.3 | 1.564 | 2.509 | 9.2 | 20.0 |
| 4 1 | 13 12.37 | +15 13.6 | 1.536 | 2.494 | 8.3 | 19.9 |
| 4 11 | 13 3.64 | +15 58.1 | 1.533 | 2.480 | 9.7 | 19.9 |
| 4 21 | 12 55.23 | +16 16.1 | 1.554 | 2.465 | 12.4 | 20.1 |
| 5 1 | 12 48.19 | +16 5.1 | 1.596 | 2.451 | 15.5 | 20.2 |
| 5 11 | 12 43.28 | +15 26.8 | 1.658 | 2.437 | 18.4 | 20.4 |

**136884** 1998 $FC_{148}$ 4 7.7 78°.29 3°.1/ 3.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.13 | − 1 22.1 | 2.230 | 3.061 | 11.9 | 19.7 |
| 3 12 | 13 22.65 | − 0 6.4 | 2.155 | 3.064 | 8.9 | 19.5 |
| 3 22 | 13 17.46 | + 1 16.7 | 2.104 | 3.067 | 5.8 | 19.3 |
| 4 1 | 13 11.10 | + 2 41.2 | 2.082 | 3.070 | 3.3 | 19.2 |
| 4 11 | 13 4.30 | + 4 0.3 | 2.088 | 3.073 | 4.1 | 19.2 |
| 4 21 | 12 57.79 | + 5 7.9 | 2.123 | 3.077 | 7.1 | 19.4 |
| 5 1 | 12 52.27 | + 5 59.4 | 2.184 | 3.080 | 10.2 | 19.6 |
| 5 11 | 12 48.28 | + 6 32.7 | 2.267 | 3.083 | 12.9 | 19.8 |

**306321** 2011 $SS_{97}$ 4 7.7 239°.39 2°.7/ 4.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.11 | − 1 14.5 | 2.525 | 3.349 | 10.9 | 20.9 |
| 3 12 | 13 23.27 | − 0 15.9 | 2.434 | 3.340 | 8.2 | 20.7 |
| 3 22 | 13 17.84 | + 0 49.2 | 2.368 | 3.330 | 5.3 | 20.5 |
| 4 1 | 13 11.27 | + 1 56.2 | 2.331 | 3.320 | 2.9 | 20.3 |
| 4 11 | 13 4.21 | + 2 59.5 | 2.323 | 3.310 | 3.6 | 20.4 |
| 4 21 | 12 57.35 | + 3 54.2 | 2.343 | 3.299 | 6.4 | 20.5 |
| 5 1 | 12 51.34 | + 4 36.2 | 2.391 | 3.289 | 9.4 | 20.7 |
| 5 11 | 12 46.72 | + 5 3.0 | 2.462 | 3.278 | 12.0 | 20.9 |

**31928** Limzhengtheng 4 7.7 256°.22 0°.8/ 7.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.76 | − 7 46.5 | 1.498 | 2.325 | 16.8 | 19.2 |
| 3 12 | 13 28.78 | − 7 20.1 | 1.411 | 2.316 | 13.0 | 18.9 |
| 3 22 | 13 22.02 | − 6 38.6 | 1.346 | 2.308 | 8.5 | 18.6 |
| 4 1 | 13 13.14 | − 5 46.0 | 1.305 | 2.299 | 3.4 | 18.3 |
| 4 11 | 13 3.27 | − 4 49.2 | 1.290 | 2.290 | 2.3 | 18.2 |
| 4 21 | 12 53.70 | − 3 56.0 | 1.302 | 2.281 | 7.5 | 18.5 |
| 5 1 | 12 45.69 | − 3 13.9 | 1.338 | 2.271 | 12.5 | 18.8 |
| 5 11 | 12 40.14 | − 2 48.3 | 1.395 | 2.262 | 16.7 | 19.0 |

**5247** Krylov 4 7.7 315°.57 7°.0/14.9 18 R

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 24.08 | −30 20.1 | 1.394 | 2.148 | 21.4 | 15.6 |
| 3 12 | 13 22.68 | −29 41.9 | 1.292 | 2.131 | 18.5 | 15.3 |
| 3 22 | 13 18.34 | −28 20.3 | 1.206 | 2.114 | 14.8 | 15.1 |
| 4 1 | 13 11.70 | −26 11.4 | 1.141 | 2.098 | 10.6 | 14.8 |
| 4 11 | 13 3.97 | −23 18.4 | 1.099 | 2.082 | 7.3 | 14.5 |
| 4 21 | 12 56.56 | −19 53.5 | 1.084 | 2.067 | 7.9 | 14.5 |
| 5 1 | 12 50.85 | −16 16.1 | 1.094 | 2.053 | 11.8 | 14.7 |
| 5 11 | 12 47.81 | −12 47.7 | 1.129 | 2.039 | 16.6 | 14.9 |

**235907** 2005 $EJ_{19}$ 4 7.7 31°.03 0°.4/ 7.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.52 | − 9 39.5 | 1.652 | 2.474 | 15.8 | 20.8 |
| 3 12 | 13 25.81 | − 9 29.2 | 1.584 | 2.484 | 12.2 | 20.6 |
| 3 22 | 13 19.77 | − 9 5.3 | 1.537 | 2.496 | 8.0 | 20.4 |
| 4 1 | 13 12.10 | − 8 30.9 | 1.515 | 2.507 | 3.4 | 20.1 |
| 4 11 | 13 3.83 | − 7 51.3 | 1.519 | 2.520 | 1.5 | 20.0 |
| 4 21 | 12 56.03 | − 7 12.5 | 1.550 | 2.533 | 6.1 | 20.3 |
| 5 1 | 12 49.67 | − 6 40.4 | 1.606 | 2.546 | 10.3 | 20.6 |
| 5 11 | 12 45.41 | − 6 19.4 | 1.684 | 2.560 | 13.9 | 20.9 |

**151042** 2001 $UR_{205}$ 4 7.7 283°.24 1°.3/ 8.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.63 | −12 18.9 | 1.753 | 2.561 | 15.6 | 20.4 |
| 3 12 | 13 26.84 | −12 10.3 | 1.658 | 2.549 | 12.3 | 20.2 |
| 3 22 | 13 20.62 | −11 45.8 | 1.584 | 2.537 | 8.3 | 19.9 |
| 4 1 | 13 12.54 | −11 7.1 | 1.535 | 2.525 | 3.9 | 19.6 |
| 4 11 | 13 3.58 | −10 18.6 | 1.513 | 2.513 | 1.7 | 19.4 |
| 4 21 | 12 54.82 | − 9 26.5 | 1.517 | 2.501 | 6.0 | 19.7 |
| 5 1 | 12 47.36 | − 8 37.7 | 1.548 | 2.489 | 10.5 | 19.9 |
| 5 11 | 12 42.01 | − 7 58.5 | 1.601 | 2.478 | 14.5 | 20.1 |

**201594** 2003 $SZ_{143}$ 4 7.7 211°.50 1°.2/ 8.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.50 | −13 11.0 | 2.216 | 3.008 | 13.3 | 20.8 |
| 3 12 | 13 25.37 | −12 50.8 | 2.123 | 3.005 | 10.4 | 20.6 |
| 3 22 | 13 19.33 | −12 16.5 | 2.052 | 3.001 | 7.0 | 20.4 |
| 4 1 | 13 11.92 | −11 30.1 | 2.008 | 2.997 | 3.4 | 20.1 |
| 4 11 | 13 3.91 | −10 35.8 | 1.993 | 2.993 | 1.4 | 20.0 |
| 4 21 | 12 56.14 | − 9 38.7 | 2.006 | 2.989 | 4.9 | 20.2 |
| 5 1 | 12 49.42 | − 8 44.6 | 2.047 | 2.984 | 8.6 | 20.4 |
| 5 11 | 12 44.38 | − 7 58.7 | 2.113 | 2.980 | 11.8 | 20.6 |

**121564** 1999 $VS_{55}$ 4 7.7 159°.41 0°.2/ 7.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.32 | −10 32.4 | 2.458 | 3.253 | 12.0 | 21.2 |
| 3 12 | 13 25.70 | −10 3.6 | 2.373 | 3.259 | 9.3 | 21.1 |
| 3 22 | 13 19.38 | − 9 23.4 | 2.312 | 3.265 | 6.1 | 20.9 |
| 4 1 | 13 11.89 | − 8 34.8 | 2.278 | 3.270 | 2.6 | 20.6 |
| 4 11 | 13 3.94 | − 7 41.8 | 2.274 | 3.274 | 1.1 | 20.5 |
| 4 21 | 12 56.28 | − 6 49.2 | 2.299 | 3.279 | 4.7 | 20.8 |
| 5 1 | 12 49.59 | − 6 1.8 | 2.353 | 3.282 | 8.0 | 21.0 |
| 5 11 | 12 44.42 | − 5 23.4 | 2.432 | 3.285 | 11.0 | 21.2 |

**297576** 2001 $RE_{117}$ 4 7.7 199°.37 1°.0/ 8.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 35.03 | −11 45.5 | 1.740 | 2.541 | 15.9 | 22.2 |
| 3 12 | 13 30.15 | −11 33.0 | 1.650 | 2.539 | 12.5 | 22.0 |
| 3 22 | 13 22.72 | −11 4.8 | 1.583 | 2.535 | 8.4 | 21.7 |
| 4 1 | 13 13.38 | −10 23.0 | 1.541 | 2.531 | 3.8 | 21.4 |
| 4 11 | 13 3.19 | − 9 32.2 | 1.526 | 2.527 | 1.6 | 21.2 |
| 4 21 | 12 53.30 | − 8 39.1 | 1.539 | 2.522 | 6.2 | 21.5 |
| 5 1 | 12 44.85 | − 7 50.5 | 1.579 | 2.516 | 10.7 | 21.8 |
| 5 11 | 12 38.65 | − 7 12.5 | 1.642 | 2.509 | 14.6 | 22.0 |

**471384** 2011 $SC_{122}$ 4 7.7 196°.04 0°.2/ 7.3 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.91 | − 9 10.9 | 3.063 | 3.858 | 9.9 | 22.3 |
| 3 12 | 13 22.83 | − 8 29.4 | 2.967 | 3.855 | 7.6 | 22.1 |
| 3 22 | 13 17.41 | − 7 38.6 | 2.896 | 3.851 | 4.9 | 22.0 |
| 4 1 | 13 11.08 | − 6 41.5 | 2.854 | 3.847 | 1.9 | 21.7 |
| 4 11 | 13 4.36 | − 5 41.7 | 2.843 | 3.843 | 1.1 | 21.7 |
| 4 21 | 12 57.82 | − 4 43.3 | 2.862 | 3.838 | 4.1 | 21.9 |
| 5 1 | 12 52.00 | − 3 50.4 | 2.910 | 3.833 | 6.9 | 22.1 |
| 5 11 | 12 47.35 | − 3 6.1 | 2.984 | 3.827 | 9.4 | 22.2 |

**366526** 2002 $QO_4$ 4 7.7 266°.65 3°.9/10.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.04 | −18 26.8 | 1.758 | 2.539 | 16.6 | 21.4 |
| 3 12 | 13 28.10 | −18 36.8 | 1.656 | 2.524 | 13.6 | 21.2 |
| 3 22 | 13 21.56 | −18 27.0 | 1.573 | 2.508 | 10.0 | 20.9 |
| 4 1 | 13 12.98 | −17 56.8 | 1.514 | 2.492 | 6.1 | 20.7 |
| 4 11 | 13 3.36 | −17 8.5 | 1.482 | 2.476 | 3.9 | 20.5 |
| 4 21 | 12 53.87 | −16 7.4 | 1.476 | 2.459 | 6.3 | 20.6 |
| 5 1 | 12 45.69 | −15 1.4 | 1.497 | 2.442 | 10.4 | 20.8 |
| 5 11 | 12 39.76 | −13 59.1 | 1.540 | 2.425 | 14.4 | 21.0 |

**6643** Morikubo 4 7.7 138°.09 0°.4/ 7.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.24 | − 7 27.0 | 2.957 | 3.754 | 10.1 | 18.9 |
| 3 12 | 13 24.54 | − 6 59.9 | 2.878 | 3.767 | 7.7 | 18.7 |
| 3 22 | 13 18.47 | − 6 25.5 | 2.824 | 3.780 | 4.9 | 18.6 |
| 4 1 | 13 11.49 | − 5 46.4 | 2.799 | 3.792 | 1.9 | 18.4 |
| 4 11 | 13 4.18 | − 5 5.9 | 2.804 | 3.804 | 1.3 | 18.3 |
| 4 21 | 12 57.13 | − 4 27.6 | 2.839 | 3.815 | 4.2 | 18.6 |
| 5 1 | 12 50.89 | − 3 54.9 | 2.904 | 3.825 | 7.0 | 18.7 |
| 5 11 | 12 45.90 | − 3 30.3 | 2.994 | 3.835 | 9.5 | 18.9 |

**163205** 2002 $EP_{42}$ 4 7.7 26°.16 0°.5/ 7.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.95 | − 9 6.6 | 1.354 | 2.189 | 17.8 | 20.3 |
| 3 12 | 13 26.70 | − 8 31.0 | 1.283 | 2.192 | 13.7 | 20.0 |
| 3 22 | 13 20.64 | − 7 37.6 | 1.232 | 2.195 | 8.9 | 19.8 |
| 4 1 | 13 12.55 | − 6 31.3 | 1.204 | 2.198 | 3.6 | 19.5 |
| 4 11 | 13 3.63 | − 5 20.4 | 1.202 | 2.202 | 2.2 | 19.4 |
| 4 21 | 12 55.21 | − 4 14.0 | 1.225 | 2.206 | 7.6 | 19.7 |
| 5 1 | 12 48.50 | − 3 20.6 | 1.272 | 2.211 | 12.5 | 20.0 |
| 5 11 | 12 44.30 | − 2 45.9 | 1.339 | 2.216 | 16.8 | 20.3 |

**230963** 2004 $XH_{182}$ 4 7.7 128°.56 1°.8/ 5.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.20 | − 4 24.3 | 2.397 | 3.211 | 11.7 | 21.5 |
| 3 12 | 13 25.53 | − 3 30.2 | 2.326 | 3.226 | 8.8 | 21.4 |
| 3 22 | 13 19.22 | − 2 28.3 | 2.281 | 3.241 | 5.6 | 21.2 |
| 4 1 | 13 11.81 | − 1 23.3 | 2.263 | 3.256 | 2.5 | 21.0 |
| 4 11 | 13 4.02 | − 0 20.4 | 2.276 | 3.270 | 2.7 | 21.0 |
| 4 21 | 12 56.60 | + 0 35.2 | 2.318 | 3.283 | 5.8 | 21.3 |
| 5 1 | 12 50.20 | + 1 19.4 | 2.387 | 3.296 | 8.9 | 21.5 |
| 5 11 | 12 45.32 | + 1 49.6 | 2.480 | 3.308 | 11.6 | 21.7 |

**150799** 2001 $RZ_{62}$ 4 7.7 180°.27 2°.0/ 5.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.45 | − 3 45.7 | 2.285 | 3.100 | 12.2 | 21.4 |
| 3 12 | 13 26.68 | − 2 57.6 | 2.202 | 3.102 | 9.2 | 21.2 |
| 3 22 | 13 20.09 | − 2 1.5 | 2.142 | 3.103 | 5.9 | 21.0 |
| 4 1 | 13 12.22 | − 1 1.7 | 2.111 | 3.103 | 2.7 | 20.8 |
| 4 11 | 13 3.83 | − 0 3.8 | 2.109 | 3.103 | 2.9 | 20.8 |
| 4 21 | 12 55.73 | + 0 46.9 | 2.136 | 3.102 | 6.2 | 21.0 |
| 5 1 | 12 48.67 | + 1 26.0 | 2.191 | 3.100 | 9.6 | 21.2 |
| 5 11 | 12 43.25 | + 1 50.8 | 2.269 | 3.098 | 12.5 | 21.4 |

**365153** 2009 $DY_{88}$ 4 7.7 319°.91 0°.3/ 7.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.50 | −10 39.4 | 1.288 | 2.126 | 18.4 | 20.9 |
| 3 12 | 13 25.24 | −10 18.1 | 1.200 | 2.109 | 14.4 | 20.6 |
| 3 22 | 13 20.01 | − 9 36.3 | 1.131 | 2.093 | 9.6 | 20.3 |
| 4 1 | 13 12.43 | − 8 37.1 | 1.084 | 2.078 | 4.1 | 19.9 |
| 4 11 | 13 3.66 | − 7 27.6 | 1.062 | 2.063 | 1.9 | 19.7 |
| 4 21 | 12 55.13 | − 6 17.2 | 1.064 | 2.049 | 7.8 | 20.0 |
| 5 1 | 12 48.24 | − 5 16.3 | 1.089 | 2.036 | 13.3 | 20.3 |
| 5 11 | 12 44.02 | − 4 33.0 | 1.133 | 2.023 | 18.1 | 20.5 |

**473063** 2015 $HR_{92}$ 4 7.7 6°.34 2°.4/ 5.6 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.89 | − 2 24.5 | 1.842 | 2.676 | 13.9 | 21.5 |
| 3 12 | 13 25.15 | − 1 53.9 | 1.767 | 2.677 | 10.5 | 21.2 |
| 3 22 | 13 19.29 | − 1 15.9 | 1.714 | 2.678 | 6.7 | 21.0 |
| 4 1 | 13 11.93 | − 0 35.4 | 1.686 | 2.679 | 3.1 | 20.8 |
| 4 11 | 13 3.98 | + 0 1.7 | 1.686 | 2.681 | 3.4 | 20.8 |
| 4 21 | 12 56.38 | + 0 30.3 | 1.714 | 2.683 | 7.1 | 21.0 |
| 5 1 | 12 50.02 | + 0 46.0 | 1.766 | 2.686 | 10.8 | 21.3 |
| 5 11 | 12 45.55 | + 0 46.6 | 1.840 | 2.689 | 14.2 | 21.5 |

**104188** 2000 $EW_{99}$ 4 7.7 177°.12 0°.2/ 7.9 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.01 | − 9 42.7 | 2.382 | 3.182 | 12.2 | 20.3 |
| 3 12 | 13 25.56 | − 9 21.6 | 2.294 | 3.183 | 9.4 | 20.1 |
| 3 22 | 13 19.36 | − 8 49.7 | 2.229 | 3.184 | 6.2 | 19.9 |
| 4 1 | 13 11.93 | − 8 9.8 | 2.192 | 3.184 | 2.6 | 19.7 |
| 4 11 | 13 3.98 | − 7 25.8 | 2.184 | 3.185 | 1.2 | 19.6 |
| 4 21 | 12 56.28 | − 6 42.1 | 2.205 | 3.185 | 4.9 | 19.8 |
| 5 1 | 12 49.58 | − 6 3.4 | 2.254 | 3.184 | 8.3 | 20.1 |
| 5 11 | 12 44.42 | − 5 33.5 | 2.327 | 3.184 | 11.3 | 20.2 |

**267370** 2001 $XZ_{104}$ 4 7.7 87°.88 2°.1/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.68 | − 4 10.0 | 1.813 | 2.640 | 14.3 | 21.0 |
| 3 12 | 13 26.47 | − 3 26.0 | 1.743 | 2.650 | 10.8 | 20.8 |
| 3 22 | 13 20.10 | − 2 32.5 | 1.696 | 2.659 | 6.9 | 20.6 |
| 4 1 | 13 12.24 | − 1 34.9 | 1.675 | 2.668 | 3.0 | 20.4 |
| 4 11 | 13 3.84 | − 0 39.6 | 1.682 | 2.678 | 3.2 | 20.4 |
| 4 21 | 12 55.88 | + 0 6.9 | 1.717 | 2.687 | 7.0 | 20.6 |
| 5 1 | 12 49.24 | + 0 39.9 | 1.777 | 2.696 | 10.8 | 20.9 |
| 5 11 | 12 44.56 | + 0 56.6 | 1.859 | 2.705 | 14.2 | 21.1 |

**492331** 2014 $DQ_{24}$ 4 7.7 64°.95 1°.0/ 6.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.04 | − 6 0.5 | 2.143 | 2.960 | 12.8 | 21.7 |
| 3 12 | 13 24.89 | − 5 31.2 | 2.072 | 2.973 | 9.7 | 21.5 |
| 3 22 | 13 18.92 | − 4 53.1 | 2.024 | 2.985 | 6.2 | 21.3 |
| 4 1 | 13 11.73 | − 4 10.0 | 2.004 | 2.998 | 2.5 | 21.1 |
| 4 11 | 13 4.10 | − 3 26.8 | 2.012 | 3.010 | 2.0 | 21.0 |
| 4 21 | 12 56.83 | − 2 48.2 | 2.048 | 3.023 | 5.6 | 21.3 |
| 5 1 | 12 50.68 | − 2 18.6 | 2.111 | 3.036 | 9.1 | 21.5 |
| 5 11 | 12 46.18 | − 2 0.8 | 2.198 | 3.049 | 12.1 | 21.8 |

**470165** 2006 $UE_{152}$ 4 7.7 215°.85 4°.4/13.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.93 | −25 57.0 | 2.729 | 3.447 | 12.8 | 21.8 |
| 3 12 | 13 23.98 | −25 48.0 | 2.623 | 3.442 | 10.8 | 21.7 |
| 3 22 | 13 18.35 | −25 20.7 | 2.539 | 3.436 | 8.4 | 21.5 |
| 4 1 | 13 11.53 | −24 34.7 | 2.480 | 3.431 | 6.1 | 21.3 |
| 4 11 | 13 4.19 | −23 32.1 | 2.449 | 3.424 | 4.5 | 21.2 |
| 4 21 | 12 57.05 | −22 16.8 | 2.446 | 3.418 | 5.1 | 21.2 |
| 5 1 | 12 50.82 | −20 54.4 | 2.472 | 3.412 | 7.2 | 21.4 |
| 5 11 | 12 46.03 | −19 31.4 | 2.525 | 3.405 | 9.7 | 21.5 |

**353827** 2012 $UJ_{56}$ 4 7.7 193°.43 1°.2/ 8.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.23 | −12 52.6 | 2.369 | 3.159 | 12.6 | 21.4 |
| 3 12 | 13 25.04 | −12 37.7 | 2.278 | 3.158 | 9.8 | 21.2 |
| 3 22 | 13 19.07 | −12 10.3 | 2.209 | 3.157 | 6.7 | 21.0 |
| 4 1 | 13 11.83 | −11 32.0 | 2.167 | 3.156 | 3.2 | 20.8 |
| 4 11 | 13 4.06 | −10 46.7 | 2.154 | 3.155 | 1.4 | 20.7 |
| 4 21 | 12 56.53 | − 9 58.8 | 2.170 | 3.153 | 4.6 | 20.9 |
| 5 1 | 12 49.97 | − 9 13.2 | 2.214 | 3.151 | 8.0 | 21.1 |
| 5 11 | 12 44.98 | − 8 34.6 | 2.283 | 3.149 | 11.1 | 21.3 |

**81978** 2000 $QV_{86}$ 4 7.7 247°.05 1°.4/ 5.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.28 | − 5 36.9 | 2.711 | 3.521 | 10.6 | 19.9 |
| 3 12 | 13 23.37 | − 4 43.3 | 2.607 | 3.505 | 8.1 | 19.7 |
| 3 22 | 13 17.92 | − 3 40.5 | 2.528 | 3.488 | 5.1 | 19.5 |
| 4 1 | 13 11.36 | − 2 32.2 | 2.477 | 3.471 | 2.2 | 19.2 |
| 4 11 | 13 4.29 | − 1 23.3 | 2.457 | 3.453 | 2.3 | 19.2 |
| 4 21 | 12 57.36 | − 0 18.8 | 2.467 | 3.434 | 5.3 | 19.4 |
| 5 1 | 12 51.19 | + 0 36.7 | 2.504 | 3.416 | 8.4 | 19.5 |
| 5 11 | 12 46.33 | + 1 19.8 | 2.567 | 3.397 | 11.2 | 19.7 |

**265603** 2005 $RW_{51}$ 4 7.7 101°.54 6°.4/31.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.58 | + 6 16.9 | 1.867 | 2.709 | 13.3 | 20.5 |
| 3 12 | 13 25.50 | + 8 7.6 | 1.814 | 2.724 | 10.3 | 20.3 |
| 3 22 | 13 19.40 | + 9 59.6 | 1.786 | 2.739 | 7.6 | 20.2 |
| 4 1 | 13 11.94 | +11 43.3 | 1.785 | 2.753 | 6.4 | 20.1 |
| 4 11 | 13 4.05 | +13 9.9 | 1.812 | 2.768 | 7.7 | 20.3 |
| 4 21 | 12 56.63 | +14 13.2 | 1.865 | 2.781 | 10.4 | 20.4 |
| 5 1 | 12 50.50 | +14 50.2 | 1.941 | 2.795 | 13.2 | 20.6 |
| 5 11 | 12 46.24 | +15 1.5 | 2.038 | 2.808 | 15.7 | 20.8 |

**375878** 2009 $VL_{58}$ 4 7.7 158°.89 0°.2/ 7.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.88 | − 9 45.5 | 2.054 | 2.862 | 13.6 | 21.9 |
| 3 12 | 13 25.72 | − 9 5.9 | 1.971 | 2.865 | 10.5 | 21.7 |
| 3 22 | 13 19.58 | − 8 13.0 | 1.911 | 2.868 | 6.8 | 21.5 |
| 4 1 | 13 12.06 | − 7 10.4 | 1.878 | 2.871 | 2.7 | 21.2 |
| 4 11 | 13 3.97 | − 6 3.8 | 1.874 | 2.874 | 1.5 | 21.2 |
| 4 21 | 12 56.21 | − 4 59.5 | 1.898 | 2.876 | 5.6 | 21.4 |
| 5 1 | 12 49.60 | − 4 3.3 | 1.949 | 2.878 | 9.4 | 21.7 |
| 5 11 | 12 44.75 | − 3 19.9 | 2.024 | 2.880 | 12.7 | 21.9 |

**60991** 2000 $KK_{24}$ 4 7.7 173°.76 1°.1/ 8.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.65 | −13 10.1 | 1.805 | 2.602 | 15.6 | 19.3 |
| 3 12 | 13 28.95 | −12 43.4 | 1.721 | 2.606 | 12.2 | 19.1 |
| 3 22 | 13 21.85 | −11 59.3 | 1.657 | 2.608 | 8.2 | 18.9 |
| 4 1 | 13 13.03 | −11 0.5 | 1.620 | 2.610 | 3.8 | 18.6 |
| 4 11 | 13 3.49 | − 9 52.4 | 1.610 | 2.611 | 1.6 | 18.4 |
| 4 21 | 12 54.31 | − 8 42.1 | 1.629 | 2.611 | 5.9 | 18.7 |
| 5 1 | 12 46.53 | − 7 37.1 | 1.674 | 2.611 | 10.2 | 19.0 |
| 5 11 | 12 40.87 | − 6 43.8 | 1.743 | 2.610 | 13.9 | 19.2 |

**406457** 2007 $TO_{435}$ 4 7.7 178°.05 2°.5/ 5.3 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.00 | − 2 36.3 | 2.087 | 2.904 | 13.1 | 22.4 |
| 3 12 | 13 28.80 | − 1 47.3 | 2.005 | 2.907 | 9.9 | 22.2 |
| 3 22 | 13 21.55 | − 0 50.3 | 1.948 | 2.908 | 6.4 | 22.0 |
| 4 1 | 13 12.86 | + 0 9.5 | 1.918 | 2.909 | 3.1 | 21.7 |
| 4 11 | 13 3.58 | + 1 6.1 | 1.918 | 2.910 | 3.5 | 21.8 |
| 4 21 | 12 54.65 | + 1 53.6 | 1.946 | 2.909 | 6.9 | 22.0 |
| 5 1 | 12 46.91 | + 2 27.6 | 2.001 | 2.907 | 10.5 | 22.2 |
| 5 11 | 12 41.00 | + 2 45.6 | 2.080 | 2.905 | 13.6 | 22.4 |

**456871** 2007 $VT_{43}$ 4 7.7 26°.87 7°.7/14.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.71 | −27 33.5 | 1.279 | 2.053 | 22.1 | 20.5 |
| 3 12 | 13 24.66 | −27 44.9 | 1.210 | 2.061 | 18.7 | 20.2 |
| 3 22 | 13 19.55 | −27 21.0 | 1.156 | 2.070 | 14.8 | 20.0 |
| 4 1 | 13 12.18 | −26 19.6 | 1.122 | 2.079 | 10.8 | 19.8 |
| 4 11 | 13 3.92 | −24 44.1 | 1.110 | 2.090 | 8.0 | 19.7 |
| 4 21 | 12 56.24 | −22 44.5 | 1.122 | 2.101 | 8.4 | 19.7 |
| 5 1 | 12 50.48 | −20 35.0 | 1.158 | 2.114 | 11.7 | 20.0 |
| 5 11 | 12 47.48 | −18 30.4 | 1.215 | 2.127 | 15.5 | 20.2 |

**58543** 1997 $ET_{32}$ 4 7.7 179°.90 0°.3/ 7.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.38 | − 8 35.4 | 2.907 | 3.706 | 10.3 | 20.8 |
| 3 12 | 13 23.25 | − 8 1.0 | 2.817 | 3.707 | 7.9 | 20.7 |
| 3 22 | 13 17.73 | − 7 17.9 | 2.751 | 3.707 | 5.1 | 20.5 |
| 4 1 | 13 11.25 | − 6 28.7 | 2.714 | 3.707 | 2.0 | 20.3 |
| 4 11 | 13 4.38 | − 5 37.1 | 2.707 | 3.707 | 1.2 | 20.2 |
| 4 21 | 12 57.71 | − 4 47.3 | 2.730 | 3.707 | 4.3 | 20.4 |
| 5 1 | 12 51.82 | − 4 3.0 | 2.782 | 3.706 | 7.2 | 20.6 |
| 5 11 | 12 47.16 | − 3 27.4 | 2.859 | 3.705 | 9.7 | 20.8 |

**441717** 2009 $BN_{19}$ 4 7.7 256°.89 20°.0/15.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.35 | +32 31.8 | 1.164 | 1.988 | 20.8 | 20.9 |
| 3 12 | 13 31.87 | +35 49.2 | 1.134 | 1.980 | 20.1 | 20.9 |
| 3 22 | 13 24.50 | +38 36.5 | 1.123 | 1.971 | 20.2 | 20.8 |
| 4 1 | 13 14.26 | +40 34.8 | 1.130 | 1.963 | 21.4 | 20.9 |
| 4 11 | 13 2.91 | +41 32.6 | 1.152 | 1.954 | 23.1 | 21.0 |
| 4 21 | 12 52.39 | +41 27.8 | 1.188 | 1.945 | 25.1 | 21.1 |
| 5 1 | 12 44.39 | +40 26.0 | 1.235 | 1.936 | 27.1 | 21.2 |
| 5 11 | 12 39.84 | +38 37.6 | 1.290 | 1.926 | 28.8 | 21.3 |

**340378** 2006 $DT_{189}$ 4 7.7 291°.39 0°.0/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.03 | − 8 35.8 | 1.911 | 2.724 | 14.3 | 20.8 |
| 3 12 | 13 26.91 | − 8 28.1 | 1.817 | 2.713 | 11.1 | 20.6 |
| 3 22 | 13 20.56 | − 8 9.0 | 1.745 | 2.703 | 7.3 | 20.3 |
| 4 1 | 13 12.53 | − 7 41.0 | 1.699 | 2.692 | 3.0 | 20.0 |
| 4 11 | 13 3.72 | − 7 8.2 | 1.681 | 2.681 | 1.5 | 19.9 |
| 4 21 | 12 55.12 | − 6 35.8 | 1.690 | 2.671 | 5.9 | 20.1 |
| 5 1 | 12 47.70 | − 6 9.0 | 1.726 | 2.661 | 10.1 | 20.4 |
| 5 11 | 12 42.23 | − 5 52.1 | 1.784 | 2.650 | 13.7 | 20.6 |

**53990** 2000 $GZ_{79}$ 4 7.7 117°.99 3°.0/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.89 | −16 46.6 | 1.475 | 2.274 | 18.4 | 19.6 |
| 3 12 | 13 28.89 | −16 39.2 | 1.398 | 2.280 | 14.7 | 19.3 |
| 3 22 | 13 22.06 | −16 9.1 | 1.340 | 2.285 | 10.4 | 19.1 |
| 4 1 | 13 13.18 | −15 17.6 | 1.306 | 2.290 | 5.7 | 18.8 |
| 4 11 | 13 3.43 | −14 9.7 | 1.298 | 2.296 | 3.0 | 18.7 |
| 4 21 | 12 54.16 | −12 53.8 | 1.315 | 2.301 | 6.5 | 18.9 |
| 5 1 | 12 46.59 | −11 39.4 | 1.358 | 2.305 | 11.1 | 19.2 |
| 5 11 | 12 41.56 | −10 35.5 | 1.423 | 2.310 | 15.3 | 19.4 |

**9816** von Matt 4 7.7 113°.36 2°.7/ 9.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 39.86 | −13 2.2 | 1.967 | 2.746 | 15.1 | 18.3 |
| 3 12 | 13 33.58 | −13 49.0 | 1.881 | 2.752 | 12.0 | 18.1 |
| 3 22 | 13 24.84 | −14 24.7 | 1.818 | 2.758 | 8.4 | 17.9 |
| 4 1 | 13 14.27 | −14 48.6 | 1.781 | 2.764 | 4.7 | 17.7 |
| 4 11 | 13 2.89 | −15 1.6 | 1.773 | 2.770 | 2.8 | 17.5 |
| 4 21 | 12 51.83 | −15 6.1 | 1.795 | 2.775 | 5.7 | 17.7 |
| 5 1 | 12 42.16 | −15 6.3 | 1.844 | 2.781 | 9.4 | 18.0 |
| 5 11 | 12 34.67 | −15 6.7 | 1.918 | 2.786 | 12.8 | 18.2 |

**146983** 2002 $NN_{61}$ 4 7.7 227°.26 1°.1/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.10 | − 6 26.2 | 2.044 | 2.855 | 13.5 | 21.6 |
| 3 12 | 13 28.34 | − 5 53.2 | 1.947 | 2.844 | 10.4 | 21.4 |
| 3 22 | 13 21.41 | − 5 9.3 | 1.873 | 2.832 | 6.7 | 21.1 |
| 4 1 | 13 12.87 | − 4 18.1 | 1.826 | 2.820 | 2.7 | 20.8 |
| 4 11 | 13 3.57 | − 3 24.9 | 1.808 | 2.806 | 2.2 | 20.8 |
| 4 21 | 12 54.47 | − 2 35.7 | 1.818 | 2.792 | 6.3 | 21.0 |
| 5 1 | 12 46.51 | − 1 55.9 | 1.856 | 2.778 | 10.3 | 21.2 |
| 5 11 | 12 40.42 | − 1 29.5 | 1.917 | 2.762 | 13.8 | 21.4 |

**310493** 2000 $UZ_{30}$ 4 7.7 150°.32 2°.0/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.54 | − 3 40.1 | 1.735 | 2.558 | 15.1 | 21.0 |
| 3 12 | 13 30.34 | − 3 12.0 | 1.661 | 2.564 | 11.5 | 20.8 |
| 3 22 | 13 22.72 | − 2 35.2 | 1.608 | 2.570 | 7.4 | 20.5 |
| 4 1 | 13 13.38 | − 1 54.3 | 1.582 | 2.575 | 3.2 | 20.3 |
| 4 11 | 13 3.36 | − 1 15.5 | 1.584 | 2.580 | 3.1 | 20.3 |
| 4 21 | 12 53.80 | − 0 44.4 | 1.614 | 2.585 | 7.3 | 20.5 |
| 5 1 | 12 45.71 | − 0 25.8 | 1.669 | 2.589 | 11.4 | 20.8 |
| 5 11 | 12 39.83 | − 0 22.3 | 1.747 | 2.593 | 14.9 | 21.0 |

**477612** 2010 $KZ_{119}$ 4 7.7 294°.37 3°.2/10.5 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.28 | −16 43.7 | 2.282 | 3.054 | 13.5 | 21.1 |
| 3 12 | 13 26.98 | −17 6.2 | 2.166 | 3.030 | 11.0 | 20.9 |
| 3 22 | 13 20.60 | −17 15.5 | 2.072 | 3.005 | 8.0 | 20.6 |
| 4 1 | 13 12.58 | −17 11.2 | 2.003 | 2.981 | 4.9 | 20.4 |
| 4 11 | 13 3.69 | −16 54.5 | 1.963 | 2.956 | 3.2 | 20.2 |
| 4 21 | 12 54.81 | −16 28.5 | 1.950 | 2.931 | 5.2 | 20.3 |
| 5 1 | 12 46.85 | −15 57.8 | 1.965 | 2.906 | 8.6 | 20.5 |
| 5 11 | 12 40.60 | −15 27.7 | 2.005 | 2.882 | 12.0 | 20.6 |

**280400** 2003 $UW_{327}$ 4 7.7 65°.29 2°.3/10.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.47 | −16 41.7 | 1.929 | 2.718 | 15.1 | 20.9 |
| 3 12 | 13 24.85 | −16 19.2 | 1.846 | 2.722 | 12.0 | 20.7 |
| 3 22 | 13 19.12 | −15 38.0 | 1.785 | 2.727 | 8.4 | 20.5 |
| 4 1 | 13 11.90 | −14 40.0 | 1.748 | 2.732 | 4.5 | 20.3 |
| 4 11 | 13 4.08 | −13 29.9 | 1.739 | 2.737 | 2.3 | 20.1 |
| 4 21 | 12 56.61 | −12 14.4 | 1.758 | 2.742 | 5.3 | 20.3 |
| 5 1 | 12 50.37 | −11 0.9 | 1.803 | 2.747 | 9.1 | 20.6 |
| 5 11 | 12 46.01 | − 9 56.2 | 1.873 | 2.753 | 12.5 | 20.8 |

**290922** 2005 $WQ_{119}$ 4 7.7 130°.05 1°.6/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.96 | − 4 53.7 | 2.192 | 3.006 | 12.7 | 22.0 |
| 3 12 | 13 27.06 | − 4 12.3 | 2.120 | 3.020 | 9.6 | 21.9 |
| 3 22 | 13 20.32 | − 3 22.7 | 2.073 | 3.033 | 6.1 | 21.7 |
| 4 1 | 13 12.33 | − 2 28.9 | 2.053 | 3.046 | 2.6 | 21.5 |
| 4 11 | 13 3.90 | − 1 36.4 | 2.062 | 3.058 | 2.5 | 21.5 |
| 4 21 | 12 55.87 | − 0 50.4 | 2.100 | 3.070 | 6.0 | 21.7 |
| 5 1 | 12 48.97 | − 0 15.1 | 2.165 | 3.081 | 9.3 | 21.9 |
| 5 11 | 12 43.77 | + 0 6.8 | 2.255 | 3.091 | 12.3 | 22.2 |

**109691** 2001 $RR_{35}$ 4 7.7 111°.39 3°.4/ 3.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.72 | − 0 56.6 | 2.270 | 3.101 | 11.7 | 19.8 |
| 3 12 | 13 23.06 | + 0 30.0 | 2.199 | 3.108 | 8.8 | 19.6 |
| 3 22 | 13 17.74 | + 2 3.6 | 2.153 | 3.116 | 5.7 | 19.4 |
| 4 1 | 13 11.28 | + 3 37.9 | 2.136 | 3.123 | 3.5 | 19.3 |
| 4 11 | 13 4.41 | + 5 5.7 | 2.148 | 3.130 | 4.4 | 19.3 |
| 4 21 | 12 57.85 | + 6 20.8 | 2.188 | 3.137 | 7.3 | 19.5 |
| 5 1 | 12 52.29 | + 7 18.8 | 2.255 | 3.144 | 10.2 | 19.7 |
| 5 11 | 12 48.23 | + 7 57.5 | 2.345 | 3.151 | 12.9 | 19.9 |

**365202** 2009 $FB_{76}$ 4 7.7 37°.85 4°.1/ 4.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.50 | − 1 48.0 | 1.412 | 2.261 | 16.5 | 20.6 |
| 3 12 | 13 26.17 | − 0 35.1 | 1.346 | 2.265 | 12.5 | 20.4 |
| 3 22 | 13 20.22 | + 0 48.9 | 1.302 | 2.269 | 8.1 | 20.1 |
| 4 1 | 13 12.40 | + 2 15.2 | 1.283 | 2.273 | 4.4 | 19.9 |
| 4 11 | 13 3.87 | + 3 33.7 | 1.289 | 2.278 | 5.4 | 20.0 |
| 4 21 | 12 55.85 | + 4 35.3 | 1.321 | 2.283 | 9.6 | 20.2 |
| 5 1 | 12 49.44 | + 5 14.1 | 1.375 | 2.288 | 13.8 | 20.5 |
| 5 11 | 12 45.40 | + 5 27.9 | 1.450 | 2.294 | 17.5 | 20.7 |

**147911** 2006 $TF_{45}$ 4 7.7 255°.95 0°.1/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.73 | − 9 27.5 | 1.707 | 2.525 | 15.5 | 20.7 |
| 3 12 | 13 26.88 | − 8 58.4 | 1.621 | 2.520 | 12.0 | 20.5 |
| 3 22 | 13 20.62 | − 8 14.3 | 1.556 | 2.515 | 7.8 | 20.2 |
| 4 1 | 13 12.58 | − 7 18.7 | 1.517 | 2.510 | 3.2 | 19.9 |
| 4 11 | 13 3.75 | − 6 17.7 | 1.504 | 2.505 | 1.7 | 19.8 |
| 4 21 | 12 55.23 | − 5 18.4 | 1.519 | 2.499 | 6.5 | 20.1 |
| 5 1 | 12 48.07 | − 4 27.8 | 1.559 | 2.494 | 10.9 | 20.3 |
| 5 11 | 12 43.03 | − 3 51.4 | 1.622 | 2.489 | 14.8 | 20.6 |

**319656** 2006 $TO_{25}$ 4 7.7 223°.20 1°.3/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.76 | − 3 44.8 | 2.367 | 3.180 | 11.9 | 20.6 |
| 3 12 | 13 26.92 | − 3 35.5 | 2.280 | 3.178 | 9.1 | 20.4 |
| 3 22 | 13 20.27 | − 3 20.3 | 2.217 | 3.176 | 5.8 | 20.2 |
| 4 1 | 13 12.34 | − 3 2.2 | 2.181 | 3.174 | 2.4 | 20.0 |
| 4 11 | 13 3.89 | − 2 44.8 | 2.175 | 3.172 | 2.1 | 19.9 |
| 4 21 | 12 55.68 | − 2 31.5 | 2.197 | 3.170 | 5.5 | 20.2 |
| 5 1 | 12 48.47 | − 2 25.6 | 2.248 | 3.168 | 8.8 | 20.4 |
| 5 11 | 12 42.84 | − 2 29.2 | 2.322 | 3.166 | 11.8 | 20.5 |

**65345** 2002 $NF_{19}$ 4 7.7 229°.66 3°.2/10.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.41 | −17 44.4 | 1.890 | 2.668 | 15.7 | 19.9 |
| 3 12 | 13 28.12 | −17 42.6 | 1.792 | 2.660 | 12.7 | 19.6 |
| 3 22 | 13 21.43 | −17 22.1 | 1.715 | 2.652 | 9.2 | 19.4 |
| 4 1 | 13 12.94 | −16 42.8 | 1.663 | 2.642 | 5.4 | 19.2 |
| 4 11 | 13 3.58 | −15 48.1 | 1.637 | 2.633 | 3.2 | 19.0 |
| 4 21 | 12 54.44 | −14 43.5 | 1.640 | 2.623 | 5.8 | 19.1 |
| 5 1 | 12 46.57 | −13 36.6 | 1.669 | 2.613 | 9.7 | 19.3 |
| 5 11 | 12 40.78 | −12 35.1 | 1.722 | 2.602 | 13.5 | 19.5 |

**391647** 2007 $VU_{290}$ 4 7.7 151°.72 0°.2/ 7.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.12 | − 8 42.9 | 2.621 | 3.420 | 11.2 | 22.3 |
| 3 12 | 13 24.70 | − 8 14.9 | 2.537 | 3.427 | 8.6 | 22.1 |
| 3 22 | 13 18.73 | − 7 37.7 | 2.477 | 3.433 | 5.6 | 21.9 |
| 4 1 | 13 11.69 | − 6 53.9 | 2.445 | 3.438 | 2.2 | 21.7 |
| 4 11 | 13 4.24 | − 6 7.5 | 2.443 | 3.444 | 1.2 | 21.6 |
| 4 21 | 12 57.04 | − 5 22.8 | 2.471 | 3.449 | 4.6 | 21.9 |
| 5 1 | 12 50.74 | − 4 43.7 | 2.527 | 3.453 | 7.7 | 22.1 |
| 5 11 | 12 45.83 | − 4 13.5 | 2.608 | 3.457 | 10.4 | 22.2 |

**229522** 2005 $XQ_2$ 4 7.7 226°.56 0°.6/ 7.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.82 | − 7 3.3 | 2.100 | 2.909 | 13.3 | 20.7 |
| 3 12 | 13 28.05 | − 6 45.6 | 2.006 | 2.901 | 10.3 | 20.5 |
| 3 22 | 13 21.19 | − 6 18.0 | 1.934 | 2.892 | 6.7 | 20.2 |
| 4 1 | 13 12.79 | − 5 43.3 | 1.890 | 2.883 | 2.7 | 20.0 |
| 4 11 | 13 3.68 | − 5 6.1 | 1.874 | 2.874 | 1.7 | 19.9 |
| 4 21 | 12 54.79 | − 4 31.2 | 1.887 | 2.864 | 5.8 | 20.1 |
| 5 1 | 12 47.02 | − 4 3.3 | 1.927 | 2.854 | 9.7 | 20.3 |
| 5 11 | 12 41.05 | − 3 46.3 | 1.991 | 2.843 | 13.1 | 20.5 |

**413394** 2004 $RX_{173}$ 4 7.7 204°.01 0°.4/ 8.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.83 | −12 5.8 | 1.873 | 2.673 | 15.0 | 22.0 |
| 3 12 | 13 28.31 | −11 24.4 | 1.781 | 2.669 | 11.7 | 21.8 |
| 3 22 | 13 21.47 | −10 25.6 | 1.710 | 2.663 | 7.8 | 21.5 |
| 4 1 | 13 12.92 | − 9 12.5 | 1.666 | 2.657 | 3.4 | 21.3 |
| 4 11 | 13 3.62 | − 7 51.4 | 1.650 | 2.650 | 1.4 | 21.1 |
| 4 21 | 12 54.60 | − 6 29.8 | 1.662 | 2.643 | 6.0 | 21.4 |
| 5 1 | 12 46.86 | − 5 15.6 | 1.702 | 2.635 | 10.3 | 21.6 |
| 5 11 | 12 41.16 | − 4 15.1 | 1.765 | 2.625 | 14.1 | 21.8 |

**177095** 2003 $FT_{88}$ 4 7.7 21°.97 2°.3/ 5.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.31 | − 0 34.6 | 2.212 | 3.033 | 12.3 | 20.2 |
| 3 12 | 13 27.41 | − 0 24.6 | 2.132 | 3.035 | 9.4 | 20.0 |
| 3 22 | 13 20.61 | − 0 10.9 | 2.076 | 3.037 | 6.0 | 19.8 |
| 4 1 | 13 12.50 | + 0 3.0 | 2.047 | 3.039 | 2.9 | 19.6 |
| 4 11 | 13 3.86 | + 0 13.3 | 2.047 | 3.041 | 3.1 | 19.6 |
| 4 21 | 12 55.53 | + 0 16.5 | 2.076 | 3.043 | 6.3 | 19.8 |
| 5 1 | 12 48.30 | + 0 10.1 | 2.131 | 3.045 | 9.6 | 20.0 |
| 5 11 | 12 42.76 | − 0 7.5 | 2.211 | 3.048 | 12.5 | 20.2 |

**380828** 2005 $YV_{228}$ 4 7.7 235°.81 5°.9/31.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.22 | + 7 56.5 | 2.231 | 3.064 | 11.8 | 21.2 |
| 3 12 | 13 25.92 | + 9 17.6 | 2.148 | 3.051 | 9.3 | 21.0 |
| 3 22 | 13 19.73 | +10 39.8 | 2.090 | 3.038 | 6.9 | 20.8 |
| 4 1 | 13 12.17 | +11 56.2 | 2.059 | 3.025 | 5.9 | 20.7 |
| 4 11 | 13 4.00 | +12 59.5 | 2.057 | 3.011 | 7.0 | 20.8 |
| 4 21 | 12 56.07 | +13 44.3 | 2.082 | 2.997 | 9.5 | 20.9 |
| 5 1 | 12 49.16 | +14 7.4 | 2.131 | 2.982 | 12.3 | 21.1 |
| 5 11 | 12 43.89 | +14 8.5 | 2.201 | 2.967 | 14.8 | 21.2 |

**432200** 2009 $DQ_{78}$ 4 7.7 77°.29 3°.3/ 4.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.26 | + 0 35.3 | 2.130 | 2.961 | 12.4 | 21.0 |
| 3 12 | 13 25.06 | + 1 25.2 | 2.064 | 2.972 | 9.3 | 20.9 |
| 3 22 | 13 19.06 | + 2 19.4 | 2.023 | 2.984 | 6.1 | 20.7 |
| 4 1 | 13 11.84 | + 3 12.7 | 2.008 | 2.996 | 3.6 | 20.5 |
| 4 11 | 13 4.20 | + 3 59.2 | 2.022 | 3.008 | 4.2 | 20.6 |
| 4 21 | 12 56.94 | + 4 34.2 | 2.064 | 3.019 | 7.2 | 20.8 |
| 5 1 | 12 50.80 | + 4 54.5 | 2.131 | 3.031 | 10.2 | 21.0 |
| 5 11 | 12 46.32 | + 4 58.7 | 2.222 | 3.043 | 13.0 | 21.2 |

**140003** 2001 $SM_{42}$ 4 7.7 137°.95 1°.1/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.98 | − 5 48.1 | 2.428 | 3.239 | 11.6 | 20.5 |
| 3 12 | 13 24.71 | − 5 14.6 | 2.347 | 3.245 | 8.8 | 20.3 |
| 3 22 | 13 18.79 | − 4 32.9 | 2.291 | 3.251 | 5.6 | 20.1 |
| 4 1 | 13 11.73 | − 3 46.6 | 2.263 | 3.256 | 2.3 | 19.9 |
| 4 11 | 13 4.24 | − 3 0.1 | 2.264 | 3.261 | 2.0 | 19.9 |
| 4 21 | 12 57.02 | − 2 18.0 | 2.294 | 3.266 | 5.3 | 20.1 |
| 5 1 | 12 50.77 | − 1 44.2 | 2.351 | 3.271 | 8.5 | 20.3 |
| 5 11 | 12 46.00 | − 1 21.7 | 2.433 | 3.276 | 11.3 | 20.5 |

**498735** 2008 $TB_{140}$ 4 7.7 174°.06 1°.1/ 8.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.85 | −12 24.1 | 2.282 | 3.072 | 13.0 | 21.9 |
| 3 12 | 13 26.33 | −12 9.8 | 2.192 | 3.074 | 10.1 | 21.7 |
| 3 22 | 13 19.95 | −11 42.9 | 2.127 | 3.075 | 6.8 | 21.5 |
| 4 1 | 13 12.24 | −11 5.3 | 2.087 | 3.076 | 3.2 | 21.3 |
| 4 11 | 13 3.98 | −10 20.7 | 2.077 | 3.077 | 1.4 | 21.1 |
| 4 21 | 12 55.98 | − 9 33.9 | 2.095 | 3.078 | 4.8 | 21.4 |
| 5 1 | 12 49.02 | − 8 49.9 | 2.142 | 3.078 | 8.3 | 21.6 |
| 5 11 | 12 43.72 | − 8 13.3 | 2.213 | 3.078 | 11.5 | 21.8 |

**83649** 2001 $TU_2$ 4 7.7 333°.01 0°.7/ 8.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.39 | −13 4.9 | 1.889 | 2.699 | 14.5 | 19.3 |
| 3 12 | 13 22.60 | −12 23.8 | 1.798 | 2.691 | 11.4 | 19.0 |
| 3 22 | 13 17.75 | −11 25.0 | 1.729 | 2.683 | 7.6 | 18.8 |
| 4 1 | 13 11.40 | −10 11.4 | 1.685 | 2.676 | 3.4 | 18.5 |
| 4 11 | 13 4.38 | − 8 49.1 | 1.668 | 2.669 | 1.3 | 18.3 |
| 4 21 | 12 57.62 | − 7 25.5 | 1.679 | 2.662 | 5.6 | 18.6 |
| 5 1 | 12 52.00 | − 6 8.4 | 1.716 | 2.656 | 9.7 | 18.8 |
| 5 11 | 12 48.20 | − 5 4.3 | 1.777 | 2.651 | 13.4 | 19.0 |

**431376** 2007 $EX_{96}$ 4 7.7 33°.81 0°.0/ 7.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.24 | −11 54.6 | 1.721 | 2.537 | 15.5 | 20.7 |
| 3 12 | 13 24.10 | −10 57.7 | 1.642 | 2.540 | 12.0 | 20.5 |
| 3 22 | 13 18.73 | − 9 42.0 | 1.584 | 2.543 | 7.8 | 20.3 |
| 4 1 | 13 11.79 | − 8 12.3 | 1.553 | 2.546 | 3.2 | 20.0 |
| 4 11 | 13 4.21 | − 6 36.2 | 1.549 | 2.549 | 1.6 | 19.9 |
| 4 21 | 12 57.03 | − 5 2.6 | 1.572 | 2.553 | 6.2 | 20.2 |
| 5 1 | 12 51.15 | − 3 40.0 | 1.621 | 2.557 | 10.5 | 20.5 |
| 5 11 | 12 47.27 | − 2 34.6 | 1.693 | 2.561 | 14.3 | 20.7 |

**208962** 2002 $XK_{28}$ 4 7.7 147°.55 2°.7/10.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.95 | −18 32.2 | 2.479 | 3.242 | 12.8 | 20.7 |
| 3 12 | 13 24.78 | −18 19.6 | 2.389 | 3.248 | 10.3 | 20.5 |
| 3 22 | 13 18.89 | −17 51.5 | 2.322 | 3.252 | 7.4 | 20.3 |
| 4 1 | 13 11.79 | −17 8.9 | 2.280 | 3.257 | 4.4 | 20.1 |
| 4 11 | 13 4.22 | −16 14.9 | 2.268 | 3.262 | 2.7 | 20.0 |
| 4 21 | 12 56.90 | −15 14.1 | 2.284 | 3.266 | 4.5 | 20.2 |
| 5 1 | 12 50.56 | −14 12.0 | 2.328 | 3.270 | 7.5 | 20.3 |
| 5 11 | 12 45.74 | −13 14.0 | 2.399 | 3.274 | 10.3 | 20.5 |

**167072** 2003 $RS_{10}$ 4 7.7 160°.52 1°.0/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.26 | − 5 49.0 | 1.960 | 2.768 | 14.1 | 20.1 |
| 3 12 | 13 30.67 | − 5 31.7 | 1.879 | 2.775 | 10.8 | 19.9 |
| 3 22 | 13 22.85 | − 5 5.1 | 1.822 | 2.781 | 7.0 | 19.6 |
| 4 1 | 13 13.45 | − 4 32.8 | 1.792 | 2.786 | 2.8 | 19.4 |
| 4 11 | 13 3.42 | − 3 59.5 | 1.791 | 2.790 | 2.1 | 19.3 |
| 4 21 | 12 53.78 | − 3 30.2 | 1.819 | 2.794 | 6.2 | 19.6 |
| 5 1 | 12 45.46 | − 3 9.4 | 1.874 | 2.797 | 10.1 | 19.8 |
| 5 11 | 12 39.15 | − 3 0.3 | 1.952 | 2.800 | 13.5 | 20.1 |

**57260** 2001 $QE_{106}$ 4 7.7 96°.36 4°.2/12.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.34 | −22 35.0 | 1.939 | 2.693 | 16.2 | 19.5 |
| 3 12 | 13 27.73 | −22 23.0 | 1.867 | 2.715 | 13.2 | 19.3 |
| 3 22 | 13 20.93 | −21 48.7 | 1.815 | 2.735 | 9.9 | 19.1 |
| 4 1 | 13 12.64 | −20 52.9 | 1.788 | 2.756 | 6.4 | 19.0 |
| 4 11 | 13 3.84 | −19 39.6 | 1.788 | 2.776 | 4.3 | 18.9 |
| 4 21 | 12 55.54 | −18 15.5 | 1.816 | 2.796 | 5.6 | 19.0 |
| 5 1 | 12 48.65 | −16 48.8 | 1.871 | 2.815 | 8.8 | 19.2 |
| 5 11 | 12 43.78 | −15 27.5 | 1.951 | 2.834 | 12.0 | 19.4 |

**228578** 2001 $YB_{92}$ 4 7.7 240°.21 2°.5/10.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.94 | −16 58.7 | 2.466 | 3.229 | 12.9 | 21.2 |
| 3 12 | 13 28.04 | −16 53.3 | 2.349 | 3.209 | 10.4 | 20.9 |
| 3 22 | 13 21.18 | −16 33.2 | 2.256 | 3.189 | 7.4 | 20.7 |
| 4 1 | 13 12.81 | −15 58.7 | 2.189 | 3.168 | 4.3 | 20.5 |
| 4 11 | 13 3.69 | −15 12.3 | 2.151 | 3.147 | 2.5 | 20.3 |
| 4 21 | 12 54.64 | −14 18.0 | 2.143 | 3.124 | 4.8 | 20.4 |
| 5 1 | 12 46.51 | −13 21.3 | 2.163 | 3.100 | 8.2 | 20.6 |
| 5 11 | 12 39.99 | −12 27.9 | 2.209 | 3.076 | 11.4 | 20.8 |

**389157** 2009 $BL_{47}$ 4 7.7 103°.41 3°.9/ 3.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.71 | + 1 44.6 | 2.256 | 3.089 | 11.7 | 21.2 |
| 3 12 | 13 23.82 | + 2 57.0 | 2.189 | 3.098 | 8.8 | 21.1 |
| 3 22 | 13 18.23 | + 4 13.6 | 2.147 | 3.107 | 5.9 | 20.9 |
| 4 1 | 13 11.51 | + 5 28.4 | 2.132 | 3.116 | 4.0 | 20.8 |
| 4 11 | 13 4.38 | + 6 34.9 | 2.147 | 3.125 | 4.9 | 20.8 |
| 4 21 | 12 57.58 | + 7 27.9 | 2.189 | 3.133 | 7.5 | 21.0 |
| 5 1 | 12 51.81 | + 8 4.0 | 2.257 | 3.142 | 10.4 | 21.2 |
| 5 11 | 12 47.57 | + 8 21.7 | 2.348 | 3.150 | 12.9 | 21.4 |

**419602** 2010 $RT_{120}$ 4 7.7 276°.35 2°.9/ 9.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.83 | −15 9.6 | 1.668 | 2.463 | 16.8 | 22.2 |
| 3 12 | 13 29.75 | −15 22.1 | 1.559 | 2.439 | 13.6 | 21.9 |
| 3 22 | 13 22.86 | −15 17.1 | 1.471 | 2.415 | 9.7 | 21.6 |
| 4 1 | 13 13.68 | −14 54.3 | 1.406 | 2.391 | 5.4 | 21.3 |
| 4 11 | 13 3.22 | −14 15.9 | 1.368 | 2.366 | 3.0 | 21.1 |
| 4 21 | 12 52.76 | −13 27.3 | 1.357 | 2.341 | 6.6 | 21.2 |
| 5 1 | 12 43.61 | −12 36.0 | 1.371 | 2.315 | 11.3 | 21.4 |
| 5 11 | 12 36.83 | −11 50.0 | 1.407 | 2.289 | 15.7 | 21.6 |

**406447** 2007 $TB_{382}$ 4 7.7 135°.38 0°.7/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.90 | − 8 15.3 | 1.881 | 2.691 | 14.6 | 22.7 |
| 3 12 | 13 28.88 | − 7 37.8 | 1.808 | 2.703 | 11.2 | 22.5 |
| 3 22 | 13 21.68 | − 6 47.7 | 1.757 | 2.716 | 7.2 | 22.3 |
| 4 1 | 13 12.96 | − 5 49.3 | 1.734 | 2.727 | 2.8 | 22.1 |
| 4 11 | 13 3.69 | − 4 48.5 | 1.738 | 2.738 | 1.9 | 22.0 |
| 4 21 | 12 54.87 | − 3 51.9 | 1.772 | 2.748 | 6.2 | 22.3 |
| 5 1 | 12 47.41 | − 3 5.2 | 1.832 | 2.758 | 10.1 | 22.6 |
| 5 11 | 12 41.96 | − 2 32.6 | 1.915 | 2.767 | 13.5 | 22.8 |

**221893** 2008 $JU_{19}$ 4 7.7 255°.74 6°.5/30.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.19 | +15 30.1 | 2.758 | 3.580 | 10.1 | 20.1 |
| 3 12 | 13 24.75 | +16 27.4 | 2.684 | 3.571 | 8.3 | 20.0 |
| 3 22 | 13 18.77 | +17 19.5 | 2.636 | 3.562 | 6.9 | 19.9 |
| 4 1 | 13 11.73 | +18 1.1 | 2.615 | 3.553 | 6.5 | 19.8 |
| 4 11 | 13 4.28 | +18 27.4 | 2.621 | 3.543 | 7.4 | 19.9 |
| 4 21 | 12 57.06 | +18 35.6 | 2.654 | 3.534 | 9.1 | 20.0 |
| 5 1 | 12 50.72 | +18 24.6 | 2.711 | 3.525 | 11.0 | 20.1 |
| 5 11 | 12 45.73 | +17 55.3 | 2.788 | 3.515 | 12.9 | 20.2 |

**504217** 2006 $UR_{72}$ 4 7.7 118°.38 1°.5/ 9.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.34 | −12 52.7 | 2.486 | 3.268 | 12.2 | 21.8 |
| 3 12 | 13 26.53 | −12 57.4 | 2.400 | 3.276 | 9.6 | 21.6 |
| 3 22 | 13 20.00 | −12 51.2 | 2.339 | 3.284 | 6.6 | 21.4 |
| 4 1 | 13 12.26 | −12 35.4 | 2.304 | 3.291 | 3.3 | 21.2 |
| 4 11 | 13 4.02 | −12 12.5 | 2.299 | 3.298 | 1.6 | 21.1 |
| 4 21 | 12 56.06 | −11 45.9 | 2.323 | 3.305 | 4.4 | 21.3 |
| 5 1 | 12 49.08 | −11 19.9 | 2.375 | 3.312 | 7.6 | 21.5 |
| 5 11 | 12 43.63 | −10 58.1 | 2.453 | 3.319 | 10.4 | 21.7 |

**117629** 2005 $ET_{121}$ 4 7.7 303°.55 1°.8/ 6.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.30 | − 7 28.0 | 1.428 | 2.268 | 16.8 | 19.9 |
| 3 12 | 13 24.85 | − 6 30.4 | 1.333 | 2.246 | 13.0 | 19.6 |
| 3 22 | 13 19.68 | − 5 13.2 | 1.259 | 2.225 | 8.4 | 19.3 |
| 4 1 | 13 12.35 | − 3 42.0 | 1.209 | 2.204 | 3.4 | 19.0 |
| 4 11 | 13 3.92 | − 2 6.1 | 1.185 | 2.183 | 3.3 | 18.9 |
| 4 21 | 12 55.66 | − 0 36.4 | 1.186 | 2.162 | 8.6 | 19.1 |
| 5 1 | 12 48.84 | + 0 36.9 | 1.210 | 2.142 | 13.7 | 19.4 |
| 5 11 | 12 44.43 | + 1 26.9 | 1.255 | 2.122 | 18.3 | 19.6 |

**406380** 2007 $RX_{316}$ 4 7.7 121°.25 1°.7/ 9.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.67 | −13 37.2 | 1.638 | 2.440 | 16.7 | 22.0 |
| 3 12 | 13 29.16 | −13 27.7 | 1.562 | 2.448 | 13.2 | 21.8 |
| 3 22 | 13 22.10 | −13 0.3 | 1.506 | 2.456 | 9.0 | 21.5 |
| 4 1 | 13 13.20 | −12 17.3 | 1.475 | 2.463 | 4.4 | 21.3 |
| 4 11 | 13 3.57 | −11 23.6 | 1.471 | 2.471 | 2.0 | 21.1 |
| 4 21 | 12 54.38 | −10 26.0 | 1.493 | 2.478 | 6.1 | 21.4 |
| 5 1 | 12 46.74 | − 9 32.1 | 1.542 | 2.484 | 10.5 | 21.7 |
| 5 11 | 12 41.41 | − 8 48.4 | 1.614 | 2.491 | 14.4 | 21.9 |

**292219** 2006 $SE_{49}$ 4 7.7 297°.99 0°.6/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.17 | −10 17.9 | 1.488 | 2.311 | 17.1 | 20.5 |
| 3 12 | 13 27.89 | −10 11.0 | 1.386 | 2.287 | 13.5 | 20.2 |
| 3 22 | 13 21.73 | − 9 47.7 | 1.304 | 2.263 | 9.1 | 19.9 |
| 4 1 | 13 13.24 | − 9 9.7 | 1.246 | 2.238 | 4.0 | 19.5 |
| 4 11 | 13 3.47 | − 8 22.1 | 1.213 | 2.214 | 1.7 | 19.3 |
| 4 21 | 12 53.73 | − 7 31.8 | 1.206 | 2.190 | 7.2 | 19.5 |
| 5 1 | 12 45.41 | − 6 47.1 | 1.223 | 2.166 | 12.5 | 19.8 |
| 5 11 | 12 39.59 | − 6 15.3 | 1.260 | 2.142 | 17.3 | 20.0 |

**128030** 2003 $KK_{14}$ 4 7.7 262°.75 0°.3/ 7.5 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.36 | − 8 33.7 | 1.584 | 2.404 | 16.4 | 21.0 |
| 3 12 | 13 29.27 | − 8 14.7 | 1.489 | 2.389 | 12.8 | 20.7 |
| 3 22 | 13 22.43 | − 7 41.0 | 1.415 | 2.374 | 8.4 | 20.4 |
| 4 1 | 13 13.45 | − 6 55.5 | 1.365 | 2.359 | 3.4 | 20.1 |
| 4 11 | 13 3.40 | − 6 4.1 | 1.343 | 2.343 | 1.9 | 19.9 |
| 4 21 | 12 53.53 | − 5 14.0 | 1.347 | 2.327 | 7.1 | 20.2 |
| 5 1 | 12 45.11 | − 4 32.5 | 1.376 | 2.311 | 12.1 | 20.4 |
| 5 11 | 12 39.06 | − 4 5.4 | 1.426 | 2.294 | 16.4 | 20.7 |

**334455** 2002 $NZ_{73}$ 4 7.7 225°.98 2°.5/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.44 | −15 49.0 | 1.952 | 2.734 | 15.1 | 22.4 |
| 3 12 | 13 28.84 | −15 48.8 | 1.853 | 2.725 | 12.1 | 22.1 |
| 3 22 | 13 21.88 | −15 31.8 | 1.775 | 2.716 | 8.6 | 21.9 |
| 4 1 | 13 13.15 | −14 58.8 | 1.723 | 2.706 | 4.7 | 21.7 |
| 4 11 | 13 3.57 | −14 12.8 | 1.699 | 2.696 | 2.6 | 21.5 |
| 4 21 | 12 54.18 | −13 19.0 | 1.702 | 2.685 | 5.6 | 21.7 |
| 5 1 | 12 46.02 | −12 24.1 | 1.733 | 2.674 | 9.6 | 21.9 |
| 5 11 | 12 39.88 | −11 34.9 | 1.788 | 2.662 | 13.3 | 22.1 |

**113843** 2002 $TG_{237}$ 4 7.7 275°.94 6°.3/12.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.95 | −24 34.6 | 1.873 | 2.618 | 17.0 | 20.5 |
| 3 12 | 13 28.99 | −25 0.3 | 1.754 | 2.591 | 14.5 | 20.2 |
| 3 22 | 13 22.34 | −25 4.0 | 1.654 | 2.562 | 11.4 | 19.9 |
| 4 1 | 13 13.48 | −24 42.7 | 1.577 | 2.534 | 8.3 | 19.7 |
| 4 11 | 13 3.35 | −23 56.0 | 1.526 | 2.504 | 6.4 | 19.5 |
| 4 21 | 12 53.15 | −22 47.5 | 1.501 | 2.475 | 7.4 | 19.5 |
| 5 1 | 12 44.16 | −21 24.5 | 1.502 | 2.444 | 10.7 | 19.6 |
| 5 11 | 12 37.41 | −19 57.4 | 1.526 | 2.413 | 14.4 | 19.7 |

**70495** 1999 $TY_{68}$ 4 7.7 344°.67 0°.2/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.54 | − 6 55.5 | 1.644 | 2.464 | 15.9 | 18.8 |
| 3 12 | 13 29.95 | − 7 17.8 | 1.559 | 2.459 | 12.3 | 18.6 |
| 3 22 | 13 22.72 | − 7 31.3 | 1.496 | 2.455 | 8.1 | 18.3 |
| 4 1 | 13 13.52 | − 7 37.7 | 1.457 | 2.450 | 3.4 | 18.0 |
| 4 11 | 13 3.41 | − 7 40.1 | 1.446 | 2.447 | 1.6 | 17.8 |
| 4 21 | 12 53.59 | − 7 42.4 | 1.461 | 2.444 | 6.5 | 18.2 |
| 5 1 | 12 45.25 | − 7 48.5 | 1.502 | 2.441 | 11.0 | 18.4 |
| 5 11 | 12 39.22 | − 8 2.3 | 1.566 | 2.439 | 14.9 | 18.6 |

**24142** 1999 $VP_{114}$ 4 7.7 112°.48 4°.2/11.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.97 | −19 0.2 | 1.727 | 2.502 | 17.1 | 18.9 |
| 3 12 | 13 30.16 | −19 21.1 | 1.649 | 2.512 | 13.9 | 18.7 |
| 3 22 | 13 22.76 | −19 22.3 | 1.590 | 2.521 | 10.2 | 18.5 |
| 4 1 | 13 13.49 | −19 3.4 | 1.556 | 2.530 | 6.4 | 18.3 |
| 4 11 | 13 3.44 | −18 26.9 | 1.548 | 2.539 | 4.2 | 18.2 |
| 4 21 | 12 53.82 | −17 38.1 | 1.567 | 2.548 | 6.3 | 18.3 |
| 5 1 | 12 45.73 | −16 44.4 | 1.612 | 2.557 | 9.9 | 18.5 |
| 5 11 | 12 39.96 | −15 53.7 | 1.681 | 2.565 | 13.5 | 18.8 |

**234026** Unioneastrofili 4 7.7 217°.38 1°.4/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.22 | − 6 44.3 | 1.792 | 2.608 | 15.0 | 21.5 |
| 3 12 | 13 29.50 | − 6 0.7 | 1.699 | 2.599 | 11.5 | 21.2 |
| 3 22 | 13 22.34 | − 5 3.7 | 1.630 | 2.590 | 7.4 | 21.0 |
| 4 1 | 13 13.34 | − 3 57.7 | 1.586 | 2.580 | 3.0 | 20.7 |
| 4 11 | 13 3.50 | − 2 49.6 | 1.571 | 2.569 | 2.6 | 20.6 |
| 4 21 | 12 53.91 | − 1 46.8 | 1.584 | 2.558 | 7.1 | 20.9 |
| 5 1 | 12 45.65 | − 0 56.0 | 1.623 | 2.545 | 11.5 | 21.1 |
| 5 11 | 12 39.52 | − 0 21.9 | 1.685 | 2.532 | 15.3 | 21.3 |

**520074** 2013 $WK_{113}$ 4 7.7 133°.35 2°.8/10.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.46 | −16 24.1 | 2.381 | 3.146 | 13.2 | 21.4 |
| 3 12 | 13 29.04 | −16 44.3 | 2.295 | 3.155 | 10.6 | 21.3 |
| 3 22 | 13 21.69 | −16 51.5 | 2.232 | 3.164 | 7.6 | 21.1 |
| 4 1 | 13 12.98 | −16 45.9 | 2.196 | 3.173 | 4.5 | 20.9 |
| 4 11 | 13 3.70 | −16 29.3 | 2.188 | 3.182 | 2.8 | 20.8 |
| 4 21 | 12 54.71 | −16 5.1 | 2.210 | 3.190 | 4.8 | 21.0 |
| 5 1 | 12 46.81 | −15 37.5 | 2.260 | 3.198 | 7.9 | 21.2 |
| 5 11 | 12 40.61 | −15 11.5 | 2.336 | 3.206 | 10.8 | 21.3 |

**67954** 2000 $WW_{166}$ 4 7.7 294°.62 4°.5/ 4.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.61 | + 0 22.8 | 1.436 | 2.283 | 16.3 | 18.9 |
| 3 12 | 13 28.04 | + 1 14.8 | 1.353 | 2.270 | 12.6 | 18.6 |
| 3 22 | 13 21.66 | + 2 15.5 | 1.291 | 2.256 | 8.4 | 18.3 |
| 4 1 | 13 13.13 | + 3 17.2 | 1.254 | 2.243 | 4.9 | 18.1 |
| 4 11 | 13 3.60 | + 4 10.9 | 1.242 | 2.230 | 5.8 | 18.1 |
| 4 21 | 12 54.37 | + 4 48.4 | 1.256 | 2.217 | 10.0 | 18.3 |
| 5 1 | 12 46.69 | + 5 4.1 | 1.292 | 2.205 | 14.5 | 18.5 |
| 5 11 | 12 41.51 | + 4 55.9 | 1.347 | 2.192 | 18.5 | 18.7 |

**205836** 2002 $EB_{13}$ 4 7.7 275°.90 7°.0/10.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 45.28 | −19 1.7 | 1.647 | 2.406 | 18.4 | 19.9 |
| 3 12 | 13 39.07 | −20 41.6 | 1.538 | 2.387 | 15.5 | 19.7 |
| 3 22 | 13 29.33 | −22 10.5 | 1.450 | 2.368 | 12.0 | 19.4 |
| 4 1 | 13 16.53 | −23 22.6 | 1.387 | 2.349 | 8.6 | 19.2 |
| 4 11 | 13 1.84 | −24 13.2 | 1.351 | 2.329 | 7.0 | 19.0 |
| 4 21 | 12 46.86 | −24 41.1 | 1.342 | 2.309 | 8.9 | 19.1 |
| 5 1 | 12 33.35 | −24 49.8 | 1.360 | 2.290 | 12.6 | 19.2 |
| 5 11 | 12 22.72 | −24 47.2 | 1.400 | 2.270 | 16.6 | 19.4 |

**131241** 2001 $EY_{8}$ 4 7.7 177°.85 2°.5/ 5.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.08 | − 2 54.6 | 2.029 | 2.856 | 13.0 | 19.9 |
| 3 12 | 13 25.15 | − 2 3.2 | 1.949 | 2.856 | 9.9 | 19.7 |
| 3 22 | 13 19.27 | − 1 3.5 | 1.894 | 2.857 | 6.3 | 19.5 |
| 4 1 | 13 12.01 | − 0 0.6 | 1.865 | 2.857 | 3.0 | 19.2 |
| 4 11 | 13 4.20 | + 0 59.0 | 1.865 | 2.857 | 3.5 | 19.3 |
| 4 21 | 12 56.70 | + 1 49.6 | 1.892 | 2.857 | 6.9 | 19.5 |
| 5 1 | 12 50.32 | + 2 26.4 | 1.945 | 2.857 | 10.5 | 19.7 |
| 5 11 | 12 45.69 | + 2 46.6 | 2.021 | 2.856 | 13.6 | 19.9 |

**98539** 2000 $VS_{48}$ 4 7.7 128°.72 1°.0/ 8.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.87 | −12 22.4 | 1.763 | 2.564 | 15.8 | 20.1 |
| 3 12 | 13 29.09 | −11 59.7 | 1.688 | 2.575 | 12.3 | 19.9 |
| 3 22 | 13 21.93 | −11 20.7 | 1.634 | 2.586 | 8.2 | 19.7 |
| 4 1 | 13 13.12 | −10 28.4 | 1.607 | 2.597 | 3.7 | 19.5 |
| 4 11 | 13 3.68 | − 9 28.1 | 1.607 | 2.607 | 1.5 | 19.3 |
| 4 21 | 12 54.70 | − 8 26.8 | 1.634 | 2.617 | 5.9 | 19.6 |
| 5 1 | 12 47.17 | − 7 31.4 | 1.689 | 2.626 | 10.1 | 19.9 |
| 5 11 | 12 41.79 | − 6 47.6 | 1.767 | 2.635 | 13.7 | 20.1 |

**251951** 1999 $XE_{80}$ 4 7.7 178°.11 1°.4/ 6.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.63 | − 5 34.1 | 2.144 | 2.953 | 13.0 | 21.9 |
| 3 12 | 13 28.53 | − 4 57.0 | 2.059 | 2.956 | 10.0 | 21.7 |
| 3 22 | 13 21.42 | − 4 10.4 | 1.999 | 2.958 | 6.4 | 21.4 |
| 4 1 | 13 12.89 | − 3 18.3 | 1.965 | 2.958 | 2.6 | 21.2 |
| 4 11 | 13 3.79 | − 2 26.1 | 1.961 | 2.959 | 2.3 | 21.2 |
| 4 21 | 12 54.99 | − 1 39.1 | 1.987 | 2.958 | 6.1 | 21.4 |
| 5 1 | 12 47.35 | − 1 2.3 | 2.039 | 2.957 | 9.7 | 21.6 |
| 5 11 | 12 41.49 | − 0 38.7 | 2.116 | 2.955 | 12.9 | 21.8 |

**358997** 2008 $TQ_{3}$ 4 7.7 194°.89 4°.3/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 48.48 | −15 52.2 | 1.887 | 2.642 | 16.5 | 20.7 |
| 3 12 | 13 40.69 | −17 0.8 | 1.787 | 2.640 | 13.5 | 20.4 |
| 3 22 | 13 29.83 | −17 57.8 | 1.710 | 2.637 | 9.9 | 20.2 |
| 4 1 | 13 16.53 | −18 40.0 | 1.659 | 2.633 | 6.2 | 20.0 |
| 4 11 | 13 1.97 | −19 6.0 | 1.639 | 2.628 | 4.4 | 19.9 |
| 4 21 | 12 47.54 | −19 17.1 | 1.649 | 2.623 | 6.8 | 20.0 |
| 5 1 | 12 34.65 | −19 17.6 | 1.688 | 2.617 | 10.6 | 20.2 |
| 5 11 | 12 24.35 | −19 13.7 | 1.752 | 2.610 | 14.3 | 20.4 |

**174026** 2001 $YD_{141}$ 4 7.7 197°.03 1°.0/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.86 | − 5 29.2 | 2.930 | 3.734 | 10.1 | 21.8 |
| 3 12 | 13 24.41 | − 4 57.0 | 2.837 | 3.731 | 7.6 | 21.7 |
| 3 22 | 13 18.54 | − 4 17.8 | 2.769 | 3.727 | 4.9 | 21.5 |
| 4 1 | 13 11.67 | − 3 34.7 | 2.730 | 3.723 | 2.0 | 21.3 |
| 4 11 | 13 4.39 | − 2 51.2 | 2.721 | 3.718 | 1.8 | 21.2 |
| 4 21 | 12 57.29 | − 2 11.2 | 2.742 | 3.713 | 4.6 | 21.4 |
| 5 1 | 12 50.96 | − 1 38.0 | 2.792 | 3.707 | 7.5 | 21.6 |
| 5 11 | 12 45.86 | − 1 14.3 | 2.867 | 3.701 | 10.0 | 21.8 |

**135391** 2001 $TM_{196}$ 4 7.8 121°.07 5°.1/ 1.7 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.31 | + 8 45.1 | 2.536 | 3.363 | 10.7 | 19.6 |
| 3 12 | 13 25.57 | + 9 41.7 | 2.476 | 3.375 | 8.4 | 19.5 |
| 3 22 | 13 19.28 | +10 36.6 | 2.440 | 3.387 | 6.2 | 19.4 |
| 4 1 | 13 11.95 | +11 24.4 | 2.433 | 3.399 | 5.1 | 19.3 |
| 4 11 | 13 4.28 | +12 0.1 | 2.454 | 3.411 | 5.9 | 19.4 |
| 4 21 | 12 56.96 | +12 20.4 | 2.503 | 3.422 | 8.0 | 19.5 |
| 5 1 | 12 50.63 | +12 23.9 | 2.578 | 3.433 | 10.3 | 19.7 |
| 5 11 | 12 45.75 | +12 10.6 | 2.674 | 3.443 | 12.4 | 19.9 |

**426685** 2013 $TA_{22}$ 4 7.8 195°.90 0°.9/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.70 | − 6 47.2 | 2.105 | 2.916 | 13.2 | 22.0 |
| 3 12 | 13 27.14 | − 6 18.4 | 2.018 | 2.915 | 10.1 | 21.8 |
| 3 22 | 13 20.58 | − 5 39.3 | 1.954 | 2.913 | 6.5 | 21.6 |
| 4 1 | 13 12.57 | − 4 53.6 | 1.917 | 2.910 | 2.6 | 21.3 |
| 4 11 | 13 3.96 | − 4 6.1 | 1.908 | 2.907 | 1.9 | 21.3 |
| 4 21 | 12 55.62 | − 3 22.2 | 1.929 | 2.904 | 5.9 | 21.5 |
| 5 1 | 12 48.40 | − 2 46.9 | 1.976 | 2.900 | 9.6 | 21.7 |
| 5 11 | 12 42.94 | − 2 23.7 | 2.047 | 2.896 | 12.9 | 21.9 |

**458796** 2011 $SL_{171}$ 4 7.8 140°.55 1°.2/ 8.8 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.70 | −12 49.9 | 1.762 | 2.559 | 15.9 | 23.0 |
| 3 12 | 13 29.76 | −12 31.9 | 1.684 | 2.569 | 12.5 | 22.8 |
| 3 22 | 13 22.41 | −11 57.3 | 1.629 | 2.579 | 8.4 | 22.6 |
| 4 1 | 13 13.34 | −11 8.8 | 1.598 | 2.588 | 3.9 | 22.3 |
| 4 11 | 13 3.60 | −10 11.4 | 1.596 | 2.596 | 1.6 | 22.2 |
| 4 21 | 12 54.31 | − 9 11.8 | 1.621 | 2.604 | 5.9 | 22.5 |
| 5 1 | 12 46.48 | − 8 17.1 | 1.673 | 2.611 | 10.1 | 22.8 |
| 5 11 | 12 40.84 | − 7 33.3 | 1.749 | 2.618 | 13.8 | 23.0 |

**267373** 2001 $XV_{158}$ 4 7.8 134°.22 1°.9/ 9.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.81 | −15 17.6 | 2.102 | 2.884 | 14.2 | 20.6 |
| 3 12 | 13 27.21 | −15 1.9 | 2.020 | 2.894 | 11.2 | 20.4 |
| 3 22 | 13 20.59 | −14 30.3 | 1.961 | 2.904 | 7.7 | 20.2 |
| 4 1 | 13 12.56 | −13 44.8 | 1.928 | 2.913 | 4.1 | 20.0 |
| 4 11 | 13 3.99 | −12 49.3 | 1.923 | 2.922 | 2.0 | 19.9 |
| 4 21 | 12 55.77 | −11 49.5 | 1.947 | 2.930 | 5.0 | 20.1 |
| 5 1 | 12 48.74 | −10 51.4 | 1.998 | 2.938 | 8.6 | 20.3 |
| 5 11 | 12 43.53 | −10 0.8 | 2.074 | 2.945 | 11.9 | 20.6 |

**522693** 2016 $KX_{5}$ 4 7.8 261°.50 0°.4/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.15 | −12 13.6 | 2.012 | 2.816 | 14.0 | 22.3 |
| 3 12 | 13 24.62 | −11 31.6 | 1.916 | 2.806 | 10.9 | 22.0 |
| 3 22 | 13 19.05 | −10 33.2 | 1.843 | 2.797 | 7.3 | 21.8 |
| 4 1 | 13 11.98 | − 9 21.5 | 1.796 | 2.787 | 3.2 | 21.5 |
| 4 11 | 13 4.24 | − 8 2.0 | 1.777 | 2.778 | 1.3 | 21.3 |
| 4 21 | 12 56.72 | − 6 41.8 | 1.786 | 2.768 | 5.5 | 21.6 |
| 5 1 | 12 50.31 | − 5 28.2 | 1.823 | 2.758 | 9.6 | 21.8 |
| 5 11 | 12 45.68 | − 4 27.0 | 1.883 | 2.748 | 13.2 | 22.0 |

**462854** 2010 $UU_{79}$ 4 7.8 43°.40 3°.6/10.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.02 | −16 10.6 | 1.374 | 2.181 | 19.1 | 20.8 |
| 3 12 | 13 29.00 | −16 30.7 | 1.314 | 2.200 | 15.3 | 20.5 |
| 3 22 | 13 22.13 | −16 29.8 | 1.274 | 2.219 | 10.8 | 20.3 |
| 4 1 | 13 13.26 | −16 8.4 | 1.256 | 2.239 | 6.2 | 20.1 |
| 4 11 | 13 3.69 | −15 31.0 | 1.263 | 2.260 | 3.6 | 20.0 |
| 4 21 | 12 54.78 | −14 44.3 | 1.296 | 2.281 | 6.6 | 20.3 |
| 5 1 | 12 47.72 | −13 56.8 | 1.353 | 2.303 | 10.9 | 20.6 |
| 5 11 | 12 43.26 | −13 16.3 | 1.431 | 2.325 | 14.8 | 20.8 |

**242317** 2003 $WW_{141}$ 4 7.8 115°.99 2°.7/11.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.95 | −19 17.2 | 2.600 | 3.353 | 12.5 | 21.1 |
| 3 12 | 13 26.14 | −19 4.6 | 2.521 | 3.373 | 10.1 | 21.0 |
| 3 22 | 13 19.69 | −18 36.9 | 2.466 | 3.392 | 7.3 | 20.8 |
| 4 1 | 13 12.15 | −17 55.2 | 2.436 | 3.411 | 4.4 | 20.7 |
| 4 11 | 13 4.22 | −17 2.6 | 2.436 | 3.429 | 2.7 | 20.6 |
| 4 21 | 12 56.63 | −16 3.4 | 2.466 | 3.447 | 4.3 | 20.7 |
| 5 1 | 12 50.04 | −15 2.9 | 2.524 | 3.464 | 7.1 | 20.9 |
| 5 11 | 12 44.97 | −14 6.2 | 2.608 | 3.480 | 9.7 | 21.1 |

**388724** 2007 $VX_{191}$ 4 7.8 143°.64 0°.8/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.11 | − 6 15.4 | 2.735 | 3.540 | 10.7 | 22.1 |
| 3 12 | 13 24.63 | − 5 43.9 | 2.655 | 3.549 | 8.1 | 21.9 |
| 3 22 | 13 18.68 | − 5 4.8 | 2.599 | 3.557 | 5.2 | 21.8 |
| 4 1 | 13 11.74 | − 4 21.4 | 2.572 | 3.565 | 2.1 | 21.6 |
| 4 11 | 13 4.41 | − 3 37.5 | 2.575 | 3.573 | 1.6 | 21.5 |
| 4 21 | 12 57.35 | − 2 57.1 | 2.607 | 3.580 | 4.7 | 21.8 |
| 5 1 | 12 51.15 | − 2 23.6 | 2.668 | 3.587 | 7.6 | 22.0 |
| 5 11 | 12 46.27 | − 1 59.8 | 2.754 | 3.594 | 10.2 | 22.1 |

**134520** 1999 $PK_{3}$ 4 7.8 312°.22 4°.5/ 4.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.74 | − 0 19.2 | 1.317 | 2.172 | 17.1 | 20.1 |
| 3 12 | 13 26.94 | + 0 30.8 | 1.231 | 2.152 | 13.2 | 19.8 |
| 3 22 | 13 21.17 | + 1 31.3 | 1.165 | 2.132 | 8.7 | 19.5 |
| 4 1 | 13 13.05 | + 2 34.7 | 1.122 | 2.112 | 4.9 | 19.2 |
| 4 11 | 13 3.74 | + 3 31.2 | 1.104 | 2.094 | 5.9 | 19.2 |
| 4 21 | 12 54.65 | + 4 11.5 | 1.109 | 2.075 | 10.5 | 19.4 |
| 5 1 | 12 47.17 | + 4 28.8 | 1.137 | 2.058 | 15.4 | 19.6 |
| 5 11 | 12 42.31 | + 4 20.5 | 1.183 | 2.041 | 19.8 | 19.8 |

**377427** 2004 $TQ_{187}$ 4 7.8 200°.32 0°.2/ 7.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.71 | −10 52.5 | 2.104 | 2.907 | 13.5 | 22.0 |
| 3 12 | 13 25.66 | −10 17.3 | 2.014 | 2.905 | 10.5 | 21.8 |
| 3 22 | 13 19.65 | − 9 28.2 | 1.948 | 2.903 | 6.9 | 21.6 |
| 4 1 | 13 12.22 | − 8 28.3 | 1.908 | 2.900 | 2.9 | 21.3 |
| 4 11 | 13 4.19 | − 7 22.8 | 1.897 | 2.897 | 1.3 | 21.2 |
| 4 21 | 12 56.44 | − 6 17.8 | 1.914 | 2.894 | 5.4 | 21.5 |
| 5 1 | 12 49.78 | − 5 19.4 | 1.958 | 2.891 | 9.2 | 21.7 |
| 5 11 | 12 44.85 | − 4 32.5 | 2.027 | 2.887 | 12.6 | 21.9 |

**377875** 2006 $DV_8$ 4 7.8 22°.24 5°.3/ 4.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.79 | + 4 4.4 | 1.405 | 2.257 | 16.3 | 19.8 |
| 3 12 | 13 27.87 | + 4 38.3 | 1.348 | 2.266 | 12.5 | 19.6 |
| 3 22 | 13 21.30 | + 5 13.7 | 1.313 | 2.275 | 8.5 | 19.4 |
| 4 1 | 13 12.91 | + 5 43.0 | 1.301 | 2.286 | 5.6 | 19.2 |
| 4 11 | 13 3.90 | + 5 59.2 | 1.315 | 2.298 | 6.4 | 19.3 |
| 4 21 | 12 55.51 | + 5 57.4 | 1.353 | 2.311 | 9.9 | 19.5 |
| 5 1 | 12 48.83 | + 5 35.7 | 1.414 | 2.324 | 13.7 | 19.8 |
| 5 11 | 12 44.56 | + 4 54.7 | 1.495 | 2.338 | 17.1 | 20.0 |

**27988** Menabrea 4 7.8 73°.85 1°.3/ 6.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.76 | − 6 32.8 | 2.118 | 2.935 | 12.9 | 19.2 |
| 3 12 | 13 24.68 | − 5 39.6 | 2.055 | 2.956 | 9.7 | 19.1 |
| 3 22 | 13 18.83 | − 4 36.6 | 2.017 | 2.978 | 6.2 | 18.9 |
| 4 1 | 13 11.81 | − 3 28.4 | 2.005 | 2.999 | 2.5 | 18.7 |
| 4 11 | 13 4.43 | − 2 21.3 | 2.023 | 3.020 | 2.3 | 18.7 |
| 4 21 | 12 57.47 | − 1 20.9 | 2.069 | 3.041 | 5.8 | 19.0 |
| 5 1 | 12 51.64 | − 0 32.1 | 2.142 | 3.062 | 9.2 | 19.2 |
| 5 11 | 12 47.46 | + 0 2.1 | 2.238 | 3.083 | 12.1 | 19.4 |

**121238** 1999 $RM_{40}$ 4 7.8 120°.72 10°.9/13.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 48.88 | −25 40.0 | 1.292 | 2.038 | 23.2 | 20.3 |
| 3 12 | 13 42.42 | −27 47.0 | 1.220 | 2.049 | 19.9 | 20.1 |
| 3 22 | 13 31.72 | −29 31.5 | 1.165 | 2.059 | 16.3 | 19.9 |
| 4 1 | 13 17.54 | −30 43.4 | 1.131 | 2.069 | 12.9 | 19.7 |
| 4 11 | 13 1.58 | −31 16.6 | 1.120 | 2.079 | 11.0 | 19.6 |
| 4 21 | 12 46.03 | −31 11.7 | 1.134 | 2.088 | 11.8 | 19.7 |
| 5 1 | 12 32.99 | −30 37.5 | 1.171 | 2.096 | 14.6 | 19.9 |
| 5 11 | 12 23.84 | −29 48.1 | 1.228 | 2.104 | 18.0 | 20.1 |

**507320** 2011 $RR_{15}$ 4 7.8 249°.37 3°.4/11.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.13 | −19 38.9 | 2.326 | 3.087 | 13.6 | 22.1 |
| 3 12 | 13 25.17 | −19 40.9 | 2.229 | 3.083 | 11.1 | 21.9 |
| 3 22 | 13 19.32 | −19 26.6 | 2.153 | 3.079 | 8.2 | 21.7 |
| 4 1 | 13 12.10 | −18 56.0 | 2.103 | 3.075 | 5.2 | 21.5 |
| 4 11 | 13 4.26 | −18 11.7 | 2.080 | 3.071 | 3.4 | 21.4 |
| 4 21 | 12 56.62 | −17 17.8 | 2.086 | 3.067 | 5.0 | 21.4 |
| 5 1 | 12 49.99 | −16 20.0 | 2.119 | 3.062 | 8.0 | 21.6 |
| 5 11 | 12 45.00 | −15 24.3 | 2.177 | 3.058 | 11.0 | 21.8 |

**523069** 2016 $QR_{92}$ 4 7.8 297°.48 1°.2/ 8.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.59 | −12 1.8 | 2.113 | 2.912 | 13.6 | 21.8 |
| 3 12 | 13 25.78 | −11 58.9 | 2.005 | 2.890 | 10.7 | 21.6 |
| 3 22 | 13 19.89 | −11 43.1 | 1.918 | 2.869 | 7.3 | 21.3 |
| 4 1 | 13 12.40 | −11 15.8 | 1.858 | 2.847 | 3.5 | 21.1 |
| 4 11 | 13 4.09 | −10 40.3 | 1.826 | 2.826 | 1.5 | 20.9 |
| 4 21 | 12 55.87 | −10 1.0 | 1.821 | 2.805 | 5.3 | 21.1 |
| 5 1 | 12 48.64 | − 9 23.3 | 1.844 | 2.783 | 9.2 | 21.3 |
| 5 11 | 12 43.16 | − 8 52.5 | 1.890 | 2.762 | 12.8 | 21.4 |

**422049** 2014 $QE_{359}$ 4 7.8 174°.22 0°.3/ 8.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.04 | −10 49.3 | 1.826 | 2.632 | 15.1 | 21.7 |
| 3 12 | 13 28.49 | −10 20.9 | 1.742 | 2.634 | 11.8 | 21.5 |
| 3 22 | 13 21.61 | − 9 37.3 | 1.681 | 2.636 | 7.8 | 21.3 |
| 4 1 | 13 13.06 | − 8 41.8 | 1.645 | 2.637 | 3.3 | 21.0 |
| 4 11 | 13 3.82 | − 7 39.8 | 1.637 | 2.638 | 1.4 | 20.9 |
| 4 21 | 12 54.92 | − 6 38.3 | 1.657 | 2.638 | 6.0 | 21.2 |
| 5 1 | 12 47.36 | − 5 43.8 | 1.704 | 2.638 | 10.2 | 21.4 |
| 5 11 | 12 41.87 | − 5 2.0 | 1.774 | 2.637 | 13.9 | 21.6 |

**466456** 2013 $TM_{105}$ 4 7.8 235°.49 3°.2/ 4.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.38 | − 0 36.9 | 2.114 | 2.939 | 12.6 | 22.1 |
| 3 12 | 13 26.97 | + 0 18.7 | 2.021 | 2.926 | 9.7 | 21.9 |
| 3 22 | 13 20.54 | + 1 21.6 | 1.952 | 2.913 | 6.3 | 21.7 |
| 4 1 | 13 12.62 | + 2 26.5 | 1.911 | 2.900 | 3.5 | 21.5 |
| 4 11 | 13 4.02 | + 3 26.7 | 1.899 | 2.886 | 4.2 | 21.5 |
| 4 21 | 12 55.63 | + 4 16.2 | 1.914 | 2.871 | 7.5 | 21.6 |
| 5 1 | 12 48.30 | + 4 50.5 | 1.956 | 2.856 | 11.0 | 21.8 |
| 5 11 | 12 42.72 | + 5 7.0 | 2.021 | 2.840 | 14.2 | 22.0 |

**306948** 2001 $UU_{143}$ 4 7.8 144°.58 3°.8/12.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.42 | −23 35.6 | 1.876 | 2.634 | 16.5 | 20.5 |
| 3 12 | 13 25.01 | −22 47.0 | 1.784 | 2.636 | 13.6 | 20.2 |
| 3 22 | 13 19.37 | −21 31.2 | 1.713 | 2.637 | 10.1 | 20.0 |
| 4 1 | 13 12.14 | −19 49.3 | 1.667 | 2.639 | 6.3 | 19.8 |
| 4 11 | 13 4.27 | −17 47.0 | 1.648 | 2.640 | 3.8 | 19.6 |
| 4 21 | 12 56.79 | −15 33.4 | 1.657 | 2.642 | 5.6 | 19.8 |
| 5 1 | 12 50.62 | −13 19.6 | 1.695 | 2.643 | 9.3 | 20.0 |
| 5 11 | 12 46.45 | −11 15.9 | 1.758 | 2.644 | 12.9 | 20.2 |

**133146** 2003 $QB_{17}$ 4 7.8 187°.82 2°.7/ 4.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.47 | − 1 50.2 | 2.237 | 3.061 | 12.1 | 20.4 |
| 3 12 | 13 25.29 | − 0 53.8 | 2.156 | 3.061 | 9.2 | 20.2 |
| 3 22 | 13 19.31 | + 0 9.7 | 2.098 | 3.060 | 5.9 | 20.0 |
| 4 1 | 13 12.07 | + 1 15.3 | 2.069 | 3.059 | 3.1 | 19.8 |
| 4 11 | 13 4.31 | + 2 16.9 | 2.068 | 3.058 | 3.6 | 19.9 |
| 4 21 | 12 56.83 | + 3 9.1 | 2.096 | 3.056 | 6.8 | 20.0 |
| 5 1 | 12 50.37 | + 3 47.6 | 2.151 | 3.054 | 10.0 | 20.2 |
| 5 11 | 12 45.51 | + 4 9.9 | 2.228 | 3.052 | 12.9 | 20.4 |

**412663** 2014 $OP_{195}$ 4 7.8 169°.62 0°.9/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.59 | − 7 31.9 | 1.994 | 2.802 | 13.9 | 22.4 |
| 3 12 | 13 28.66 | − 6 53.3 | 1.911 | 2.807 | 10.7 | 22.2 |
| 3 22 | 13 21.60 | − 6 2.9 | 1.852 | 2.811 | 6.9 | 22.0 |
| 4 1 | 13 13.03 | − 5 4.8 | 1.820 | 2.814 | 2.7 | 21.7 |
| 4 11 | 13 3.85 | − 4 4.6 | 1.817 | 2.816 | 2.0 | 21.7 |
| 4 21 | 12 55.03 | − 3 8.6 | 1.842 | 2.818 | 6.1 | 22.0 |
| 5 1 | 12 47.44 | − 2 22.4 | 1.895 | 2.819 | 10.0 | 22.2 |
| 5 11 | 12 41.76 | − 1 50.1 | 1.971 | 2.819 | 13.4 | 22.4 |

**111762** 2002 $CL_{131}$ 4 7.8 117°.19 1°.8/ 5.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.14 | − 3 54.3 | 2.585 | 3.402 | 10.8 | 20.5 |
| 3 12 | 13 23.22 | − 3 0.8 | 2.510 | 3.411 | 8.2 | 20.3 |
| 3 22 | 13 17.82 | − 2 0.3 | 2.460 | 3.421 | 5.2 | 20.2 |
| 4 1 | 13 11.41 | − 0 56.9 | 2.438 | 3.430 | 2.4 | 20.0 |
| 4 11 | 13 4.64 | + 0 4.3 | 2.446 | 3.439 | 2.6 | 20.0 |
| 4 21 | 12 58.14 | + 0 58.7 | 2.483 | 3.448 | 5.5 | 20.2 |
| 5 1 | 12 52.53 | + 1 42.3 | 2.548 | 3.456 | 8.4 | 20.4 |
| 5 11 | 12 48.26 | + 2 12.7 | 2.636 | 3.465 | 11.0 | 20.6 |

**417929** 2007 $RE_{289}$ 4 7.8 258°.52 0°.5/ 8.2 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.87 | −11 12.5 | 1.780 | 2.586 | 15.4 | 22.1 |
| 3 12 | 13 28.71 | −10 46.7 | 1.674 | 2.566 | 12.2 | 21.8 |
| 3 22 | 13 22.03 | −10 4.1 | 1.590 | 2.545 | 8.1 | 21.5 |
| 4 1 | 13 13.35 | − 9 7.0 | 1.531 | 2.523 | 3.6 | 21.2 |
| 4 11 | 13 3.65 | − 8 0.7 | 1.500 | 2.501 | 1.5 | 21.0 |
| 4 21 | 12 54.03 | − 6 52.3 | 1.496 | 2.477 | 6.4 | 21.2 |
| 5 1 | 12 45.65 | − 5 49.6 | 1.518 | 2.454 | 11.1 | 21.4 |
| 5 11 | 12 39.42 | − 4 59.6 | 1.564 | 2.430 | 15.3 | 21.6 |

**273088** 2006 $EO_{24}$ 4 7.8 214°.93 2°.0/ 5.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.10 | − 4 37.1 | 2.049 | 2.872 | 13.1 | 20.8 |
| 3 12 | 13 25.21 | − 3 44.4 | 1.965 | 2.870 | 9.9 | 20.6 |
| 3 22 | 13 19.36 | − 2 41.7 | 1.905 | 2.867 | 6.3 | 20.4 |
| 4 1 | 13 12.12 | − 1 33.9 | 1.871 | 2.864 | 2.8 | 20.1 |
| 4 11 | 13 4.29 | − 0 27.4 | 1.866 | 2.861 | 3.0 | 20.1 |
| 4 21 | 12 56.75 | + 0 31.6 | 1.889 | 2.858 | 6.6 | 20.4 |
| 5 1 | 12 50.31 | + 1 17.8 | 1.939 | 2.854 | 10.3 | 20.6 |
| 5 11 | 12 45.59 | + 1 47.8 | 2.011 | 2.851 | 13.5 | 20.8 |

**82646** 2001 $PB_9$ 4 7.8 87°.22 1°.6/ 6.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.71 | − 4 26.6 | 2.252 | 3.070 | 12.2 | 19.2 |
| 3 12 | 13 25.34 | − 3 49.2 | 2.184 | 3.086 | 9.2 | 19.1 |
| 3 22 | 13 19.25 | − 3 4.3 | 2.140 | 3.101 | 5.9 | 18.9 |
| 4 1 | 13 12.01 | − 2 16.1 | 2.124 | 3.117 | 2.5 | 18.7 |
| 4 11 | 13 4.37 | − 1 29.5 | 2.137 | 3.133 | 2.5 | 18.7 |
| 4 21 | 12 57.11 | − 0 49.2 | 2.178 | 3.148 | 5.7 | 18.9 |
| 5 1 | 12 50.91 | − 0 19.2 | 2.246 | 3.163 | 9.0 | 19.2 |
| 5 11 | 12 46.30 | − 0 1.8 | 2.338 | 3.178 | 11.8 | 19.4 |

**902** Probitas 4 7.8 175°.28 1°.5/ 9.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.87 | −13 2.4 | 2.093 | 2.879 | 14.1 | 16.7 |
| 3 12 | 13 29.65 | −12 58.5 | 2.004 | 2.881 | 11.1 | 16.5 |
| 3 22 | 13 22.26 | −12 40.9 | 1.938 | 2.884 | 7.6 | 16.3 |
| 4 1 | 13 13.33 | −12 11.2 | 1.898 | 2.885 | 3.7 | 16.0 |
| 4 11 | 13 3.72 | −11 32.8 | 1.886 | 2.886 | 1.7 | 15.9 |
| 4 21 | 12 54.41 | −10 50.4 | 1.904 | 2.886 | 5.2 | 16.1 |
| 5 1 | 12 46.30 | −10 9.7 | 1.949 | 2.886 | 9.0 | 16.4 |
| 5 11 | 12 40.09 | − 9 35.7 | 2.019 | 2.885 | 12.4 | 16.6 |

**488938** 2005 $UG_{137}$ 4 7.8 105°.68 0°.0/ 7.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.32 | −10 13.3 | 1.881 | 2.690 | 14.6 | 22.6 |
| 3 12 | 13 27.00 | − 9 43.5 | 1.807 | 2.700 | 11.3 | 22.4 |
| 3 22 | 13 20.54 | − 8 59.9 | 1.755 | 2.711 | 7.4 | 22.2 |
| 4 1 | 13 12.60 | − 8 6.0 | 1.728 | 2.721 | 3.1 | 22.0 |
| 4 11 | 13 4.09 | − 7 7.4 | 1.730 | 2.731 | 1.4 | 21.9 |
| 4 21 | 12 56.00 | − 6 10.4 | 1.760 | 2.741 | 5.7 | 22.2 |
| 5 1 | 12 49.21 | − 5 21.1 | 1.817 | 2.750 | 9.7 | 22.4 |
| 5 11 | 12 44.35 | − 4 44.1 | 1.896 | 2.760 | 13.2 | 22.7 |

**211158** 2002 $GR_{168}$ 4 7.8 41°.64 1°.0/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.86 | − 6 48.3 | 1.175 | 2.020 | 19.3 | 19.9 |
| 3 12 | 13 29.14 | − 6 30.4 | 1.122 | 2.036 | 14.8 | 19.6 |
| 3 22 | 13 22.33 | − 5 57.8 | 1.088 | 2.053 | 9.5 | 19.4 |
| 4 1 | 13 13.39 | − 5 16.0 | 1.077 | 2.071 | 3.8 | 19.1 |
| 4 11 | 13 3.74 | − 4 32.8 | 1.090 | 2.089 | 2.5 | 19.1 |
| 4 21 | 12 54.88 | − 3 56.3 | 1.127 | 2.109 | 8.0 | 19.4 |
| 5 1 | 12 48.05 | − 3 33.1 | 1.187 | 2.128 | 13.0 | 19.8 |
| 5 11 | 12 44.01 | − 3 26.9 | 1.267 | 2.148 | 17.2 | 20.1 |

**302840** 2003 $FP_{58}$ 4 7.8 311°.62 0°.7/ 8.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.01 | −12 2.3 | 2.245 | 3.045 | 12.8 | 20.8 |
| 3 12 | 13 23.53 | −11 34.3 | 2.152 | 3.040 | 10.0 | 20.6 |
| 3 22 | 13 18.24 | −10 52.7 | 2.083 | 3.036 | 6.7 | 20.4 |
| 4 1 | 13 11.66 | −10 0.2 | 2.040 | 3.031 | 3.0 | 20.2 |
| 4 11 | 13 4.53 | − 9 1.2 | 2.026 | 3.026 | 1.2 | 20.0 |
| 4 21 | 12 57.62 | − 8 1.0 | 2.039 | 3.022 | 4.9 | 20.3 |
| 5 1 | 12 51.69 | − 7 5.4 | 2.081 | 3.018 | 8.5 | 20.5 |
| 5 11 | 12 47.33 | − 6 19.1 | 2.146 | 3.013 | 11.7 | 20.7 |

**427532** 2002 $PJ_{188}$ 4 7.8 295°.19 3°.8/10.9 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.26 | −17 59.6 | 1.954 | 2.731 | 15.3 | 21.4 |
| 3 12 | 13 27.43 | −18 19.4 | 1.839 | 2.704 | 12.6 | 21.1 |
| 3 22 | 13 21.20 | −18 22.6 | 1.744 | 2.678 | 9.3 | 20.9 |
| 4 1 | 13 13.04 | −18 8.4 | 1.675 | 2.651 | 5.8 | 20.6 |
| 4 11 | 13 3.80 | −17 37.9 | 1.632 | 2.624 | 3.8 | 20.4 |
| 4 21 | 12 54.55 | −16 55.2 | 1.615 | 2.597 | 6.0 | 20.5 |
| 5 1 | 12 46.38 | −16 6.3 | 1.626 | 2.571 | 9.8 | 20.6 |
| 5 11 | 12 40.21 | −15 18.5 | 1.660 | 2.544 | 13.6 | 20.8 |

**291994** 2006 $QO_{108}$ 4 7.8 269°.39 0°.7/ 8.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.15 | −11 35.2 | 1.771 | 2.577 | 15.5 | 21.7 |
| 3 12 | 13 28.20 | −11 14.3 | 1.664 | 2.555 | 12.2 | 21.5 |
| 3 22 | 13 21.72 | −10 36.6 | 1.578 | 2.532 | 8.2 | 21.2 |
| 4 1 | 13 13.25 | − 9 44.2 | 1.518 | 2.509 | 3.7 | 20.9 |
| 4 11 | 13 3.72 | − 8 41.9 | 1.484 | 2.485 | 1.5 | 20.6 |
| 4 21 | 12 54.26 | − 7 36.5 | 1.478 | 2.461 | 6.4 | 20.9 |
| 5 1 | 12 46.02 | − 6 36.1 | 1.499 | 2.436 | 11.1 | 21.1 |
| 5 11 | 12 39.92 | − 5 47.3 | 1.542 | 2.411 | 15.3 | 21.3 |

**147780** 2005 $QM_{107}$ 4 7.8 206°.72 4°.1/ 3.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.34 | + 1 6.6 | 1.850 | 2.685 | 13.8 | 20.5 |
| 3 12 | 13 27.10 | + 2 5.5 | 1.773 | 2.683 | 10.5 | 20.3 |
| 3 22 | 13 20.67 | + 3 10.3 | 1.719 | 2.681 | 7.0 | 20.0 |
| 4 1 | 13 12.68 | + 4 14.5 | 1.692 | 2.678 | 4.3 | 19.9 |
| 4 11 | 13 4.05 | + 5 10.6 | 1.692 | 2.676 | 5.2 | 19.9 |
| 4 21 | 12 55.76 | + 5 52.6 | 1.719 | 2.673 | 8.5 | 20.1 |
| 5 1 | 12 48.74 | + 6 16.0 | 1.772 | 2.670 | 12.1 | 20.3 |
| 5 11 | 12 43.67 | + 6 19.5 | 1.845 | 2.667 | 15.2 | 20.5 |

**422376** 2014 $SE_{258}$ 4 7.8 181°.52 1°.5/ 6.4 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.98 | − 5 27.4 | 2.023 | 2.835 | 13.6 | 22.4 |
| 3 12 | 13 28.96 | − 4 49.6 | 1.939 | 2.837 | 10.4 | 22.2 |
| 3 22 | 13 21.81 | − 4 1.8 | 1.878 | 2.837 | 6.7 | 21.9 |
| 4 1 | 13 13.14 | − 3 8.3 | 1.844 | 2.837 | 2.8 | 21.7 |
| 4 11 | 13 3.85 | − 2 14.7 | 1.839 | 2.837 | 2.5 | 21.7 |
| 4 21 | 12 54.87 | − 1 26.9 | 1.864 | 2.835 | 6.4 | 21.9 |
| 5 1 | 12 47.11 | − 0 49.9 | 1.915 | 2.833 | 10.2 | 22.1 |
| 5 11 | 12 41.24 | − 0 27.2 | 1.989 | 2.830 | 13.5 | 22.3 |

**310326** 2011 $UO_{164}$ 4 7.8 142°.68 2°.2/ 5.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.34 | − 5 10.0 | 1.789 | 2.611 | 14.7 | 21.4 |
| 3 12 | 13 28.61 | − 4 9.7 | 1.718 | 2.621 | 11.2 | 21.2 |
| 3 22 | 13 21.61 | − 2 57.9 | 1.669 | 2.631 | 7.1 | 20.9 |
| 4 1 | 13 13.05 | − 1 40.6 | 1.647 | 2.640 | 3.1 | 20.7 |
| 4 11 | 13 3.92 | − 0 25.3 | 1.654 | 2.649 | 3.3 | 20.7 |
| 4 21 | 12 55.24 | + 0 40.4 | 1.688 | 2.657 | 7.3 | 21.0 |
| 5 1 | 12 47.96 | + 1 30.8 | 1.749 | 2.664 | 11.2 | 21.2 |
| 5 11 | 12 42.73 | + 2 2.5 | 1.832 | 2.671 | 14.6 | 21.5 |

**133185** 2003 $QF_{53}$ 4 7.8 251°.05 3°.2/ 4.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.81 | − 2 2.1 | 1.774 | 2.603 | 14.5 | 20.5 |
| 3 12 | 13 28.54 | − 1 7.4 | 1.679 | 2.586 | 11.1 | 20.3 |
| 3 22 | 13 21.82 | − 0 2.3 | 1.607 | 2.569 | 7.3 | 20.0 |
| 4 1 | 13 13.25 | + 1 7.0 | 1.561 | 2.552 | 3.7 | 19.8 |
| 4 11 | 13 3.77 | + 2 13.0 | 1.543 | 2.534 | 4.4 | 19.7 |
| 4 21 | 12 54.48 | + 3 8.1 | 1.552 | 2.515 | 8.4 | 19.9 |
| 5 1 | 12 46.45 | + 3 46.1 | 1.587 | 2.496 | 12.5 | 20.1 |
| 5 11 | 12 40.52 | + 4 3.9 | 1.642 | 2.476 | 16.3 | 20.3 |

**284384** 2006 $SD_{371}$ 4 7.8 151°.19 8°.9/25.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.91 | +28 32.6 | 2.949 | 3.729 | 10.6 | 20.8 |
| 3 12 | 13 28.22 | +29 39.7 | 2.909 | 3.737 | 9.5 | 20.7 |
| 3 22 | 13 20.96 | +30 33.7 | 2.892 | 3.745 | 9.0 | 20.7 |
| 4 1 | 13 12.69 | +31 9.3 | 2.901 | 3.752 | 9.1 | 20.7 |
| 4 11 | 13 4.13 | +31 22.5 | 2.934 | 3.759 | 9.8 | 20.8 |
| 4 21 | 12 55.97 | +31 12.3 | 2.990 | 3.765 | 11.0 | 20.8 |
| 5 1 | 12 48.86 | +30 39.5 | 3.068 | 3.771 | 12.2 | 20.9 |
| 5 11 | 12 43.26 | +29 46.7 | 3.164 | 3.776 | 13.3 | 21.1 |

**458871** 2011 $UM_{132}$ 4 7.8 143°.69 2°.4/ 9.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.96 | −16 7.3 | 1.844 | 2.626 | 15.9 | 22.6 |
| 3 12 | 13 29.94 | −15 56.5 | 1.764 | 2.637 | 12.7 | 22.4 |
| 3 22 | 13 22.55 | −15 27.4 | 1.706 | 2.647 | 8.8 | 22.2 |
| 4 1 | 13 13.47 | −14 41.5 | 1.672 | 2.656 | 4.8 | 21.9 |
| 4 11 | 13 3.73 | −13 43.1 | 1.667 | 2.665 | 2.5 | 21.8 |
| 4 21 | 12 54.41 | −12 38.7 | 1.689 | 2.673 | 5.6 | 22.0 |
| 5 1 | 12 46.52 | −11 35.4 | 1.739 | 2.680 | 9.6 | 22.3 |
| 5 11 | 12 40.76 | −10 40.2 | 1.813 | 2.686 | 13.2 | 22.5 |

**140150** 2001 $SC_{163}$ 4 7.8 152°.17 0°.2/ 7.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.61 | −10 3.7 | 2.638 | 3.435 | 11.2 | 20.9 |
| 3 12 | 13 23.62 | − 9 15.9 | 2.553 | 3.441 | 8.6 | 20.7 |
| 3 22 | 13 18.12 | − 8 17.0 | 2.492 | 3.447 | 5.6 | 20.5 |
| 4 1 | 13 11.58 | − 7 10.5 | 2.460 | 3.452 | 2.2 | 20.3 |
| 4 11 | 13 4.65 | − 6 0.8 | 2.457 | 3.457 | 1.2 | 20.2 |
| 4 21 | 12 57.96 | − 4 53.1 | 2.485 | 3.462 | 4.6 | 20.5 |
| 5 1 | 12 52.15 | − 3 52.1 | 2.540 | 3.466 | 7.7 | 20.7 |
| 5 11 | 12 47.69 | − 3 1.7 | 2.622 | 3.470 | 10.4 | 20.9 |

**480884** 2002 $AN_{7}$ 4 7.8 86°.66 19°.7/19.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.88 | +26 31.5 | 0.976 | 1.831 | 21.7 | 21.1 |
| 3 12 | 13 30.70 | +30 28.8 | 0.965 | 1.844 | 20.0 | 21.1 |
| 3 22 | 13 23.65 | +33 51.7 | 0.974 | 1.857 | 19.8 | 21.1 |
| 4 1 | 13 13.98 | +36 19.2 | 1.000 | 1.870 | 20.7 | 21.2 |
| 4 11 | 13 3.57 | +37 40.0 | 1.044 | 1.883 | 22.6 | 21.3 |
| 4 21 | 12 54.34 | +37 54.7 | 1.102 | 1.895 | 24.6 | 21.5 |
| 5 1 | 12 47.74 | +37 11.7 | 1.171 | 1.908 | 26.6 | 21.7 |
| 5 11 | 12 44.51 | +35 43.2 | 1.249 | 1.920 | 28.2 | 21.9 |

**78140** 2002 $NR_{16}$ 4 7.8 206°.46 1°.4/ 6.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.70 | − 5 25.6 | 2.055 | 2.867 | 13.4 | 20.4 |
| 3 12 | 13 28.79 | − 4 52.3 | 1.964 | 2.862 | 10.3 | 20.2 |
| 3 22 | 13 21.75 | − 4 9.1 | 1.897 | 2.856 | 6.6 | 20.0 |
| 4 1 | 13 13.17 | − 3 20.1 | 1.857 | 2.850 | 2.7 | 19.7 |
| 4 11 | 13 3.89 | − 2 30.5 | 1.845 | 2.843 | 2.4 | 19.7 |
| 4 21 | 12 54.87 | − 1 46.1 | 1.863 | 2.835 | 6.3 | 19.9 |
| 5 1 | 12 47.01 | − 1 11.9 | 1.907 | 2.826 | 10.2 | 20.1 |
| 5 11 | 12 41.00 | − 0 51.2 | 1.975 | 2.817 | 13.6 | 20.3 |

**507533** 2012 $WY_{26}$ 4 7.8 158°.13 4°.6/ 1.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.78 | + 9 45.5 | 3.135 | 3.954 | 9.1 | 22.7 |
| 3 12 | 13 24.96 | +10 41.9 | 3.068 | 3.962 | 7.1 | 22.5 |
| 3 22 | 13 18.83 | +11 36.3 | 3.028 | 3.970 | 5.4 | 22.4 |
| 4 1 | 13 11.84 | +12 24.5 | 3.017 | 3.977 | 4.6 | 22.4 |
| 4 11 | 13 4.55 | +13 2.2 | 3.035 | 3.984 | 5.3 | 22.4 |
| 4 21 | 12 57.51 | +13 26.7 | 3.082 | 3.990 | 7.0 | 22.6 |
| 5 1 | 12 51.25 | +13 36.5 | 3.155 | 3.995 | 9.0 | 22.7 |
| 5 11 | 12 46.19 | +13 31.4 | 3.251 | 4.000 | 10.8 | 22.8 |

**399405** 2001 $TB_{57}$ 4 7.8 267°.10 1°.0/ 8.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.64 | −10 42.4 | 1.579 | 2.389 | 16.9 | 21.0 |
| 3 12 | 13 31.27 | −10 43.8 | 1.475 | 2.368 | 13.4 | 20.7 |
| 3 22 | 13 23.96 | −10 30.1 | 1.392 | 2.347 | 9.1 | 20.4 |
| 4 1 | 13 14.28 | −10 2.5 | 1.334 | 2.325 | 4.2 | 20.0 |
| 4 11 | 13 3.30 | − 9 25.1 | 1.302 | 2.302 | 1.7 | 19.8 |
| 4 21 | 12 52.35 | − 8 43.9 | 1.296 | 2.280 | 6.9 | 20.1 |
| 5 1 | 12 42.81 | − 8 6.3 | 1.316 | 2.256 | 12.1 | 20.3 |
| 5 11 | 12 35.77 | − 7 39.1 | 1.358 | 2.233 | 16.7 | 20.5 |

**295892** 2008 $WS_{74}$ 4 7.8 116°.01 0°.2/ 7.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.27 | − 8 44.1 | 2.058 | 2.868 | 13.5 | 21.8 |
| 3 12 | 13 26.09 | − 8 18.3 | 1.978 | 2.873 | 10.4 | 21.6 |
| 3 22 | 13 19.93 | − 7 40.9 | 1.920 | 2.877 | 6.7 | 21.4 |
| 4 1 | 13 12.39 | − 6 55.3 | 1.889 | 2.882 | 2.7 | 21.2 |
| 4 11 | 13 4.28 | − 6 6.3 | 1.886 | 2.886 | 1.5 | 21.1 |
| 4 21 | 12 56.50 | − 5 19.3 | 1.911 | 2.890 | 5.5 | 21.4 |
| 5 1 | 12 49.87 | − 4 39.6 | 1.963 | 2.894 | 9.3 | 21.6 |
| 5 11 | 12 44.99 | − 4 11.2 | 2.039 | 2.898 | 12.5 | 21.8 |

**140357** 2001 $TY_{20}$ 4 7.8 74°.63 3°.3/10.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.87 | −17 22.6 | 2.254 | 3.019 | 13.9 | 19.7 |
| 3 12 | 13 28.70 | −17 49.8 | 2.177 | 3.036 | 11.2 | 19.5 |
| 3 22 | 13 21.55 | −18 3.1 | 2.122 | 3.052 | 8.1 | 19.3 |
| 4 1 | 13 13.04 | −18 2.2 | 2.094 | 3.068 | 5.0 | 19.2 |
| 4 11 | 13 3.98 | −17 49.1 | 2.093 | 3.085 | 3.3 | 19.1 |
| 4 21 | 12 55.27 | −17 27.1 | 2.122 | 3.101 | 5.0 | 19.2 |
| 5 1 | 12 47.73 | −17 0.8 | 2.178 | 3.118 | 8.0 | 19.4 |
| 5 11 | 12 41.96 | −16 35.1 | 2.259 | 3.134 | 10.9 | 19.6 |

**216303** 2007 $RE_{220}$ 4 7.8 72°.77 0°.8/ 8.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.62 | −12 15.5 | 2.090 | 2.891 | 13.7 | 20.6 |
| 3 12 | 13 24.83 | −11 49.1 | 2.008 | 2.895 | 10.6 | 20.4 |
| 3 22 | 13 19.12 | −11 8.6 | 1.948 | 2.900 | 7.1 | 20.2 |
| 4 1 | 13 12.05 | −10 16.7 | 1.914 | 2.904 | 3.2 | 19.9 |
| 4 11 | 13 4.45 | − 9 18.1 | 1.908 | 2.909 | 1.3 | 19.8 |
| 4 21 | 12 57.15 | − 8 18.5 | 1.931 | 2.914 | 5.1 | 20.1 |
| 5 1 | 12 50.96 | − 7 23.9 | 1.980 | 2.918 | 8.8 | 20.3 |
| 5 11 | 12 46.48 | − 6 39.2 | 2.054 | 2.923 | 12.1 | 20.5 |

**127623** 2003 $BG_{67}$ 4 7.8 122°.58 1°.4/ 6.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.03 | − 5 50.5 | 1.571 | 2.392 | 16.5 | 20.3 |
| 3 12 | 13 31.73 | − 5 24.6 | 1.503 | 2.405 | 12.6 | 20.0 |
| 3 22 | 13 23.79 | − 4 47.4 | 1.457 | 2.417 | 8.1 | 19.8 |
| 4 1 | 13 14.00 | − 4 3.4 | 1.436 | 2.429 | 3.3 | 19.5 |
| 4 11 | 13 3.55 | − 3 19.1 | 1.442 | 2.441 | 2.6 | 19.5 |
| 4 21 | 12 53.66 | − 2 41.2 | 1.476 | 2.452 | 7.2 | 19.8 |
| 5 1 | 12 45.44 | − 2 15.1 | 1.536 | 2.463 | 11.7 | 20.1 |
| 5 11 | 12 39.64 | − 2 4.2 | 1.617 | 2.473 | 15.4 | 20.4 |

**255645** 2006 $QP_{15}$ 4 7.8 269°.39 1°.0/ 6.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.92 | − 8 16.1 | 1.713 | 2.533 | 15.3 | 21.4 |
| 3 12 | 13 27.27 | − 7 31.6 | 1.611 | 2.513 | 11.9 | 21.2 |
| 3 22 | 13 21.11 | − 6 30.9 | 1.532 | 2.493 | 7.7 | 20.9 |
| 4 1 | 13 13.03 | − 5 17.9 | 1.479 | 2.472 | 3.1 | 20.5 |
| 4 11 | 13 3.95 | − 3 59.8 | 1.452 | 2.451 | 2.3 | 20.4 |
| 4 21 | 12 55.01 | − 2 44.7 | 1.453 | 2.430 | 7.2 | 20.7 |
| 5 1 | 12 47.33 | − 1 40.8 | 1.479 | 2.408 | 11.9 | 20.9 |
| 5 11 | 12 41.79 | − 0 54.2 | 1.527 | 2.386 | 16.0 | 21.1 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **103352** 2000 $AO_{90}$ | | | 4 7.8 124°.81 | | 4°.3/ 4.4 18 | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.41 | − 0 35.8 | 1.457 | 2.297 | 16.5 | 19.9 |
| 3 12 | 13 29.90 | + 0 29.0 | 1.393 | 2.306 | 12.6 | 19.7 |
| 3 22 | 13 22.68 | + 1 42.4 | 1.351 | 2.314 | 8.2 | 19.4 |
| 4 1 | 13 13.57 | + 2 56.3 | 1.333 | 2.323 | 4.6 | 19.3 |
| 4 11 | 13 3.76 | + 4 1.2 | 1.343 | 2.330 | 5.5 | 19.3 |
| 4 21 | 12 54.53 | + 4 49.4 | 1.378 | 2.338 | 9.5 | 19.6 |
| 5 1 | 12 47.00 | + 5 15.7 | 1.436 | 2.345 | 13.7 | 19.8 |
| 5 11 | 12 41.91 | + 5 18.8 | 1.515 | 2.351 | 17.3 | 20.1 |
| **377347** 2004 $RB_{15}$ | | | 4 7.8 300°.02 | | 5°.9/11.8 17 | |
| 3 2 | 13 34.34 | −20 39.6 | 1.751 | 2.518 | 17.2 | 20.5 |
| 3 12 | 13 30.12 | −21 33.8 | 1.650 | 2.504 | 14.4 | 20.3 |
| 3 22 | 13 23.13 | −22 10.9 | 1.569 | 2.490 | 11.1 | 20.0 |
| 4 1 | 13 13.92 | −22 27.7 | 1.511 | 2.475 | 7.7 | 19.8 |
| 4 11 | 13 3.51 | −22 23.8 | 1.479 | 2.461 | 5.9 | 19.7 |
| 4 21 | 12 53.15 | −22 1.8 | 1.472 | 2.448 | 7.3 | 19.7 |
| 5 1 | 12 44.13 | −21 27.5 | 1.492 | 2.434 | 10.7 | 19.9 |
| 5 11 | 12 37.47 | −20 49.0 | 1.534 | 2.421 | 14.4 | 20.1 |
| **329079** 2011 $BD_{30}$ | | | 4 7.8 228°.48 | | 5°.9/ 2.0 17 | |
| 3 2 | 13 32.63 | + 7 7.3 | 1.999 | 2.832 | 12.9 | 21.3 |
| 3 12 | 13 28.01 | + 8 12.4 | 1.920 | 2.824 | 10.1 | 21.1 |
| 3 22 | 13 21.25 | + 9 18.5 | 1.864 | 2.816 | 7.4 | 20.9 |
| 4 1 | 13 12.97 | +10 18.3 | 1.835 | 2.807 | 5.9 | 20.8 |
| 4 11 | 13 4.03 | +11 4.7 | 1.834 | 2.798 | 6.9 | 20.9 |
| 4 21 | 12 55.39 | +11 32.5 | 1.860 | 2.788 | 9.7 | 21.0 |
| 5 1 | 12 47.94 | +11 38.7 | 1.910 | 2.778 | 12.7 | 21.2 |
| 5 11 | 12 42.36 | +11 23.4 | 1.980 | 2.768 | 15.5 | 21.3 |
| **343057** Lucaravenni | | | 4 7.8 48°.29 | | 3°.4/ 4.7 17 | |
| 3 2 | 13 31.61 | + 1 27.0 | 2.000 | 2.830 | 13.1 | 20.2 |
| 3 12 | 13 27.07 | + 1 56.8 | 1.929 | 2.837 | 9.9 | 20.0 |
| 3 22 | 13 20.54 | + 2 29.9 | 1.883 | 2.843 | 6.5 | 19.8 |
| 4 1 | 13 12.63 | + 3 1.3 | 1.862 | 2.850 | 3.7 | 19.7 |
| 4 11 | 13 4.21 | + 3 25.8 | 1.870 | 2.857 | 4.3 | 19.7 |
| 4 21 | 12 56.19 | + 3 39.3 | 1.905 | 2.865 | 7.4 | 19.9 |
| 5 1 | 12 49.37 | + 3 38.9 | 1.967 | 2.872 | 10.7 | 20.1 |
| 5 11 | 12 44.36 | + 3 23.6 | 2.050 | 2.879 | 13.6 | 20.3 |
| **5058** Tarrega | | | 4 7.8 210°.65 | | 4°.1/ 3.9 18 | |
| 3 2 | 13 34.61 | + 0 59.3 | 1.925 | 2.751 | 13.7 | 18.2 |
| 3 12 | 13 29.62 | + 2 2.5 | 1.839 | 2.744 | 10.5 | 18.0 |
| 3 22 | 13 22.36 | + 3 12.3 | 1.776 | 2.736 | 7.0 | 17.8 |
| 4 1 | 13 13.45 | + 4 22.3 | 1.741 | 2.727 | 4.3 | 17.6 |
| 4 11 | 13 3.80 | + 5 24.9 | 1.735 | 2.717 | 5.2 | 17.6 |
| 4 21 | 12 54.43 | + 6 13.5 | 1.756 | 2.707 | 8.6 | 17.8 |
| 5 1 | 12 46.30 | + 6 43.6 | 1.803 | 2.695 | 12.2 | 18.0 |
| 5 11 | 12 40.16 | + 6 53.2 | 1.872 | 2.683 | 15.4 | 18.2 |
| **147268** 2002 $YH_{15}$ | | | 4 7.8 107°.20 | | 2°.4/ 5.5 18 | |
| 3 2 | 13 31.95 | − 3 56.0 | 1.822 | 2.647 | 14.3 | 20.5 |
| 3 12 | 13 27.48 | − 3 1.6 | 1.755 | 2.661 | 10.8 | 20.3 |
| 3 22 | 13 20.85 | − 1 57.8 | 1.712 | 2.675 | 6.9 | 20.1 |
| 4 1 | 13 12.76 | − 0 50.2 | 1.696 | 2.688 | 3.1 | 19.9 |
| 4 11 | 13 4.17 | + 0 13.8 | 1.707 | 2.701 | 3.4 | 20.0 |
| 4 21 | 12 56.04 | + 1 7.9 | 1.747 | 2.714 | 7.2 | 20.2 |
| 5 1 | 12 49.27 | + 1 47.0 | 1.812 | 2.726 | 10.9 | 20.5 |
| 5 11 | 12 44.46 | + 2 8.6 | 1.899 | 2.738 | 14.2 | 20.7 |
| **201732** 2003 $UG_{228}$ | | | 4 7.8 263°.95 | | 0°.3/ 7.4 17 | |
| 3 2 | 13 28.13 | − 9 47.7 | 2.110 | 2.919 | 13.2 | 20.3 |
| 3 12 | 13 24.56 | − 9 1.6 | 2.012 | 2.907 | 10.2 | 20.1 |
| 3 22 | 13 19.03 | − 8 1.3 | 1.937 | 2.895 | 6.7 | 19.8 |
| 4 1 | 13 12.07 | − 6 50.2 | 1.889 | 2.882 | 2.7 | 19.6 |
| 4 11 | 13 4.46 | − 5 34.2 | 1.869 | 2.869 | 1.6 | 19.5 |
| 4 21 | 12 57.03 | − 4 19.8 | 1.878 | 2.856 | 5.7 | 19.7 |
| 5 1 | 12 50.63 | − 3 13.6 | 1.914 | 2.843 | 9.6 | 19.9 |
| 5 11 | 12 45.91 | − 2 20.8 | 1.973 | 2.830 | 13.0 | 20.1 |
| **191755** 2004 $SQ_{54}$ | | | 4 7.8 156°.25 | | 1°.8/ 5.6 17 | R |
| 3 2 | 13 29.23 | − 5 30.6 | 2.333 | 3.147 | 12.0 | 20.8 |
| 3 12 | 13 25.03 | − 4 22.3 | 2.253 | 3.153 | 9.1 | 20.6 |
| 3 22 | 13 19.11 | − 3 4.0 | 2.199 | 3.160 | 5.7 | 20.4 |
| 4 1 | 13 12.03 | − 1 40.8 | 2.173 | 3.165 | 2.5 | 20.2 |
| 4 11 | 13 4.51 | − 0 18.9 | 2.176 | 3.170 | 2.8 | 20.2 |
| 4 21 | 12 57.28 | + 0 55.5 | 2.209 | 3.175 | 6.0 | 20.4 |
| 5 1 | 12 51.05 | + 1 57.3 | 2.270 | 3.179 | 9.3 | 20.6 |
| 5 11 | 12 46.36 | + 2 43.3 | 2.354 | 3.183 | 12.1 | 20.8 |
| **55823** 1995 $OF_{12}$ | | | 4 7.8 69°.74 | | 6°.3/31.1 18 | |
| 3 2 | 13 27.85 | + 8 20.4 | 2.103 | 2.943 | 12.1 | 18.8 |
| 3 12 | 13 24.04 | +10 0.8 | 2.055 | 2.962 | 9.4 | 18.6 |
| 3 22 | 13 18.47 | +11 39.9 | 2.033 | 2.981 | 7.1 | 18.5 |
| 4 1 | 13 11.74 | +13 9.5 | 2.038 | 3.000 | 6.3 | 18.5 |
| 4 11 | 13 4.66 | +14 22.5 | 2.070 | 3.018 | 7.4 | 18.6 |
| 4 21 | 12 58.00 | +15 14.1 | 2.129 | 3.037 | 9.7 | 18.8 |
| 5 1 | 12 52.47 | +15 42.3 | 2.211 | 3.056 | 12.1 | 19.0 |
| 5 11 | 12 48.56 | +15 47.5 | 2.314 | 3.074 | 14.3 | 19.2 |

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| **55917** 1998 $FN_{30}$ | | | 4 7.8 289°.07 | | 3°.1/10.6 18 | |
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.50 | −16 48.8 | 2.260 | 3.032 | 13.6 | 19.1 |
| 3 12 | 13 27.15 | −17 10.9 | 2.155 | 3.019 | 11.1 | 18.9 |
| 3 22 | 13 20.76 | −17 19.6 | 2.073 | 3.006 | 8.0 | 18.6 |
| 4 1 | 13 12.81 | −17 14.5 | 2.016 | 2.993 | 4.9 | 18.4 |
| 4 11 | 13 4.10 | −16 57.2 | 1.987 | 2.980 | 3.1 | 18.3 |
| 4 21 | 12 55.49 | −16 31.0 | 1.987 | 2.968 | 5.1 | 18.4 |
| 5 1 | 12 47.89 | −16 0.4 | 2.013 | 2.955 | 8.4 | 18.6 |
| 5 11 | 12 42.00 | −15 30.8 | 2.065 | 2.942 | 11.6 | 18.7 |
| **134414** 1998 $HA_{26}$ | | | 4 7.8 329°.68 | | 2°.7/ 6.0 18 | |
| 3 2 | 13 31.28 | − 3 1.6 | 1.311 | 2.159 | 17.5 | 19.5 |
| 3 12 | 13 28.07 | − 2 37.9 | 1.232 | 2.149 | 13.5 | 19.2 |
| 3 22 | 13 21.87 | − 2 3.6 | 1.173 | 2.140 | 8.8 | 18.9 |
| 4 1 | 13 13.38 | − 1 24.3 | 1.137 | 2.130 | 3.9 | 18.6 |
| 4 11 | 13 3.83 | − 0 47.8 | 1.126 | 2.122 | 3.9 | 18.6 |
| 4 21 | 12 54.62 | − 0 21.5 | 1.139 | 2.114 | 8.9 | 18.8 |
| 5 1 | 12 47.11 | − 0 11.5 | 1.175 | 2.107 | 13.9 | 19.1 |
| 5 11 | 12 42.25 | − 0 20.9 | 1.230 | 2.101 | 18.3 | 19.3 |
| **209578** 2004 $XE_{84}$ | | | 4 7.8 82°.44 | | 3°.4/ 5.4 18 | |
| 3 2 | 13 35.28 | − 1 3.6 | 1.457 | 2.295 | 16.6 | 20.2 |
| 3 12 | 13 30.60 | − 0 30.9 | 1.391 | 2.302 | 12.7 | 20.0 |
| 3 22 | 13 23.16 | + 0 9.1 | 1.347 | 2.310 | 8.2 | 19.7 |
| 4 1 | 13 13.79 | + 0 50.1 | 1.327 | 2.318 | 4.1 | 19.5 |
| 4 11 | 13 3.70 | + 1 24.9 | 1.333 | 2.326 | 4.5 | 19.5 |
| 4 21 | 12 54.17 | + 1 47.0 | 1.366 | 2.334 | 8.7 | 19.8 |
| 5 1 | 12 46.36 | + 1 52.4 | 1.422 | 2.342 | 13.0 | 20.1 |
| 5 11 | 12 41.04 | + 1 39.5 | 1.500 | 2.349 | 16.7 | 20.3 |
| **246269** 2007 $TF_{32}$ | | | 4 7.8 313°.61 | | 2°.2/ 9.4 17 | |
| 3 2 | 13 31.30 | −12 47.0 | 1.744 | 2.549 | 15.8 | 20.6 |
| 3 12 | 13 27.60 | −13 5.7 | 1.642 | 2.530 | 12.6 | 20.3 |
| 3 22 | 13 21.38 | −13 10.6 | 1.562 | 2.511 | 8.8 | 20.1 |
| 4 1 | 13 13.17 | −13 2.0 | 1.506 | 2.493 | 4.6 | 19.8 |
| 4 11 | 13 3.92 | −12 42.4 | 1.476 | 2.475 | 2.3 | 19.6 |
| 4 21 | 12 54.76 | −12 16.3 | 1.473 | 2.458 | 6.0 | 19.8 |
| 5 1 | 12 46.84 | −11 49.4 | 1.495 | 2.441 | 10.5 | 20.0 |
| 5 11 | 12 41.08 | −11 27.9 | 1.540 | 2.424 | 14.5 | 20.2 |
| **181038** 2005 $OZ_{22}$ | | | 4 7.8 235°.52 | | 4°.3/ 1.9 18 | |
| 3 2 | 13 27.40 | + 5 4.7 | 2.691 | 3.520 | 10.1 | 20.4 |
| 3 12 | 13 23.51 | + 6 16.5 | 2.604 | 3.509 | 7.8 | 20.3 |
| 3 22 | 13 18.11 | + 7 30.8 | 2.544 | 3.498 | 5.5 | 20.1 |
| 4 1 | 13 11.64 | + 8 42.3 | 2.512 | 3.487 | 4.3 | 20.0 |
| 4 11 | 13 4.70 | + 9 45.2 | 2.509 | 3.475 | 5.2 | 20.0 |
| 4 21 | 12 57.94 | +10 35.0 | 2.535 | 3.463 | 7.5 | 20.2 |
| 5 1 | 12 51.99 | +11 8.7 | 2.587 | 3.450 | 10.0 | 20.3 |
| 5 11 | 12 47.33 | +11 24.8 | 2.661 | 3.438 | 12.2 | 20.4 |
| **453243** 2008 $RB_{121}$ | | | 4 7.8 88°.07 | | 1°.4/ 8.9 18 | |
| 3 2 | 13 31.84 | −13 42.2 | 1.382 | 2.199 | 18.5 | 21.6 |
| 3 12 | 13 28.27 | −13 15.4 | 1.308 | 2.204 | 14.6 | 21.3 |
| 3 22 | 13 21.84 | −12 26.4 | 1.254 | 2.209 | 9.8 | 21.1 |
| 4 1 | 13 13.31 | −11 18.5 | 1.223 | 2.213 | 4.6 | 20.8 |
| 4 11 | 13 3.92 | − 9 58.8 | 1.217 | 2.218 | 1.8 | 20.6 |
| 4 21 | 12 55.02 | − 8 36.9 | 1.238 | 2.223 | 6.8 | 20.9 |
| 5 1 | 12 47.86 | − 7 22.8 | 1.282 | 2.228 | 11.9 | 21.2 |
| 5 11 | 12 43.27 | − 6 24.5 | 1.348 | 2.232 | 16.2 | 21.5 |
| **349396** 2007 $XW_{46}$ | | | 4 7.8 132°.91 | | 4°.4/13.1 17 | |
| 3 2 | 13 30.16 | −24 0.0 | 2.585 | 3.314 | 13.2 | 21.2 |
| 3 12 | 13 25.78 | −24 7.6 | 2.494 | 3.322 | 11.0 | 21.1 |
| 3 22 | 13 19.64 | −23 58.2 | 2.426 | 3.330 | 8.5 | 20.9 |
| 4 1 | 13 12.28 | −23 31.4 | 2.382 | 3.337 | 6.0 | 20.8 |
| 4 11 | 13 4.41 | −22 49.1 | 2.366 | 3.345 | 4.4 | 20.7 |
| 4 21 | 12 56.80 | −21 55.0 | 2.379 | 3.351 | 5.1 | 20.7 |
| 5 1 | 12 50.17 | −20 54.4 | 2.419 | 3.358 | 7.3 | 20.9 |
| 5 11 | 12 45.08 | −19 53.0 | 2.486 | 3.365 | 9.9 | 21.1 |
| **165225** 2000 $SL_{57}$ | | | 4 7.8 299°.22 | | 2°.6/ 9.4 17 | |
| 3 2 | 13 33.45 | −13 4.9 | 1.408 | 2.223 | 18.3 | 20.0 |
| 3 12 | 13 29.84 | −13 25.9 | 1.316 | 2.209 | 14.7 | 19.7 |
| 3 22 | 13 23.15 | −13 30.0 | 1.242 | 2.194 | 10.3 | 19.4 |
| 4 1 | 13 13.99 | −13 17.1 | 1.192 | 2.179 | 5.4 | 19.1 |
| 4 11 | 13 3.53 | −12 50.2 | 1.166 | 2.165 | 2.7 | 18.9 |
| 4 21 | 12 53.22 | −12 15.0 | 1.165 | 2.151 | 7.1 | 19.1 |
| 5 1 | 12 44.51 | −11 39.2 | 1.189 | 2.138 | 12.2 | 19.4 |
| 5 11 | 12 38.50 | −11 10.7 | 1.234 | 2.124 | 16.9 | 19.6 |
| **266838** 2009 $UW_{21}$ | | | 4 7.8 247°.90 | | 2°.9/ 4.9 18 | |
| 3 2 | 13 30.46 | − 2 17.0 | 1.894 | 2.724 | 13.7 | 21.2 |
| 3 12 | 13 26.50 | − 1 22.6 | 1.807 | 2.715 | 10.4 | 20.9 |
| 3 22 | 13 20.37 | − 0 19.0 | 1.744 | 2.706 | 6.8 | 20.7 |
| 4 1 | 13 12.65 | + 0 48.1 | 1.706 | 2.697 | 3.4 | 20.4 |
| 4 11 | 13 4.23 | + 1 51.6 | 1.697 | 2.688 | 4.0 | 20.5 |
| 4 21 | 12 56.06 | + 2 44.9 | 1.715 | 2.678 | 7.7 | 20.7 |
| 5 1 | 12 49.08 | + 3 22.5 | 1.759 | 2.669 | 11.5 | 20.9 |
| 5 11 | 12 44.00 | + 3 41.7 | 1.824 | 2.659 | 14.8 | 21.1 |

**381478** 2008 $SR_{32}$ 4 7.8 266°.63 2°.7/10.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.88 | −16 56.1 | 1.969 | 2.753 | 15.0 | 21.0 |
| 3 12 | 13 26.06 | −16 49.0 | 1.879 | 2.751 | 12.0 | 20.8 |
| 3 22 | 13 20.08 | −16 24.2 | 1.810 | 2.749 | 8.5 | 20.6 |
| 4 1 | 13 12.53 | −15 42.7 | 1.766 | 2.748 | 4.9 | 20.3 |
| 4 11 | 13 4.29 | −14 48.1 | 1.749 | 2.746 | 2.7 | 20.2 |
| 4 21 | 12 56.31 | −13 46.1 | 1.760 | 2.744 | 5.3 | 20.4 |
| 5 1 | 12 49.53 | −12 43.6 | 1.798 | 2.742 | 9.0 | 20.6 |
| 5 11 | 12 44.65 | −11 47.2 | 1.859 | 2.741 | 12.5 | 20.8 |

**77633** 2001 $KP_{52}$ 4 7.8 353°.63 1°.2/ 8.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.12 | −11 12.2 | 1.272 | 2.107 | 18.8 | 18.8 |
| 3 12 | 13 26.49 | −11 13.7 | 1.196 | 2.102 | 14.8 | 18.5 |
| 3 22 | 13 20.88 | −10 56.9 | 1.139 | 2.098 | 10.0 | 18.2 |
| 4 1 | 13 12.99 | −10 24.1 | 1.104 | 2.095 | 4.6 | 17.9 |
| 4 11 | 13 4.07 | − 9 40.7 | 1.093 | 2.094 | 1.8 | 17.7 |
| 4 21 | 12 55.53 | − 8 54.7 | 1.106 | 2.093 | 7.2 | 18.0 |
| 5 1 | 12 48.74 | − 8 14.4 | 1.142 | 2.093 | 12.4 | 18.3 |
| 5 11 | 12 44.64 | − 7 46.9 | 1.199 | 2.094 | 17.0 | 18.6 |

**409051** 2003 $SC_{83}$ 4 7.8 174°.70 0°.2/ 7.6 14 C

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.47 | − 8 46.4 | 1.967 | 2.772 | 14.3 | 22.8 |
| 3 12 | 13 29.44 | − 8 21.5 | 1.883 | 2.775 | 11.0 | 22.6 |
| 3 22 | 13 22.20 | − 7 44.3 | 1.821 | 2.777 | 7.2 | 22.3 |
| 4 1 | 13 13.39 | − 6 58.0 | 1.786 | 2.778 | 2.9 | 22.1 |
| 4 11 | 13 3.91 | − 6 7.8 | 1.779 | 2.779 | 1.5 | 22.0 |
| 4 21 | 12 54.77 | − 5 19.5 | 1.801 | 2.780 | 5.9 | 22.3 |
| 5 1 | 12 46.88 | − 4 38.6 | 1.850 | 2.779 | 9.9 | 22.5 |
| 5 11 | 12 40.96 | − 4 9.5 | 1.923 | 2.778 | 13.4 | 22.7 |

**289903** 2005 $MC_{55}$ 4 7.8 252°.66 6°.2/30.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.01 | +11 43.3 | 2.522 | 3.351 | 10.7 | 20.6 |
| 3 12 | 13 24.87 | +12 56.3 | 2.441 | 3.337 | 8.6 | 20.4 |
| 3 22 | 13 19.06 | +14 7.3 | 2.385 | 3.323 | 6.8 | 20.3 |
| 4 1 | 13 12.06 | +15 10.0 | 2.357 | 3.309 | 6.2 | 20.2 |
| 4 11 | 13 4.54 | +15 58.5 | 2.357 | 3.295 | 7.3 | 20.3 |
| 4 21 | 12 57.22 | +16 28.6 | 2.383 | 3.280 | 9.3 | 20.4 |
| 5 1 | 12 50.80 | +16 38.3 | 2.433 | 3.265 | 11.6 | 20.5 |
| 5 11 | 12 45.83 | +16 27.6 | 2.505 | 3.250 | 13.7 | 20.6 |

**286319** 2001 $WY_{78}$ 4 7.8 230°.29 2°.2/10.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.90 | −17 6.4 | 2.453 | 3.226 | 12.7 | 20.7 |
| 3 12 | 13 24.13 | −16 46.1 | 2.355 | 3.221 | 10.1 | 20.6 |
| 3 22 | 13 18.63 | −16 10.3 | 2.279 | 3.216 | 7.2 | 20.4 |
| 4 1 | 13 11.89 | −15 20.4 | 2.230 | 3.211 | 4.0 | 20.1 |
| 4 11 | 13 4.62 | −14 19.9 | 2.209 | 3.206 | 2.2 | 20.0 |
| 4 21 | 12 57.54 | −13 13.6 | 2.217 | 3.201 | 4.4 | 20.1 |
| 5 1 | 12 51.40 | −12 7.3 | 2.254 | 3.196 | 7.7 | 20.3 |
| 5 11 | 12 46.75 | −11 6.4 | 2.316 | 3.190 | 10.7 | 20.5 |

**316066** 2009 $HA_{83}$ 4 7.8 323°.07 3°.7/10.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.80 | −16 5.6 | 1.322 | 2.139 | 19.2 | 20.6 |
| 3 12 | 13 26.44 | −16 24.8 | 1.230 | 2.122 | 15.6 | 20.3 |
| 3 22 | 13 21.02 | −16 22.5 | 1.157 | 2.105 | 11.3 | 20.0 |
| 4 1 | 13 13.14 | −15 57.7 | 1.105 | 2.090 | 6.5 | 19.7 |
| 4 11 | 13 3.96 | −15 13.5 | 1.077 | 2.075 | 3.8 | 19.5 |
| 4 21 | 12 54.93 | −14 16.5 | 1.073 | 2.060 | 7.3 | 19.7 |
| 5 1 | 12 47.53 | −13 16.3 | 1.092 | 2.047 | 12.3 | 19.9 |
| 5 11 | 12 42.86 | −12 23.1 | 1.131 | 2.034 | 17.1 | 20.1 |

**206736** 2004 $BV_{119}$ 4 7.8 79°.08 2°.3/ 9.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.87 | −14 18.7 | 2.151 | 2.934 | 13.9 | 20.1 |
| 3 12 | 13 28.09 | −14 35.5 | 2.067 | 2.940 | 11.0 | 19.9 |
| 3 22 | 13 21.27 | −14 39.4 | 2.005 | 2.946 | 7.7 | 19.7 |
| 4 1 | 13 13.00 | −14 31.2 | 1.969 | 2.952 | 4.2 | 19.5 |
| 4 11 | 13 4.10 | −14 13.0 | 1.961 | 2.958 | 2.3 | 19.4 |
| 4 21 | 12 55.50 | −13 48.8 | 1.982 | 2.964 | 5.0 | 19.6 |
| 5 1 | 12 48.05 | −13 23.1 | 2.030 | 2.971 | 8.4 | 19.8 |
| 5 11 | 12 42.39 | −13 0.8 | 2.102 | 2.977 | 11.6 | 20.0 |

**310476** 2000 $SU_{168}$ 4 7.8 197°.19 1°.6/ 9.1 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.83 | −13 5.5 | 1.957 | 2.745 | 14.9 | 21.9 |
| 3 12 | 13 30.64 | −13 2.3 | 1.863 | 2.742 | 11.8 | 21.7 |
| 3 22 | 13 23.10 | −12 44.6 | 1.792 | 2.739 | 8.1 | 21.4 |
| 4 1 | 13 13.81 | −12 13.6 | 1.747 | 2.735 | 4.0 | 21.2 |
| 4 11 | 13 3.71 | −11 32.9 | 1.730 | 2.730 | 1.8 | 21.0 |
| 4 21 | 12 53.88 | −10 47.7 | 1.742 | 2.724 | 5.6 | 21.2 |
| 5 1 | 12 45.31 | −10 4.0 | 1.781 | 2.718 | 9.6 | 21.5 |
| 5 11 | 12 38.79 | − 9 27.6 | 1.844 | 2.711 | 13.3 | 21.7 |

**230120** 2001 $DU_{44}$ 4 7.8 28°.05 4°.3/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.06 | − 0 34.5 | 1.559 | 2.408 | 15.2 | 19.0 |
| 3 12 | 13 24.10 | + 0 42.8 | 1.498 | 2.416 | 11.4 | 18.8 |
| 3 22 | 13 18.85 | + 2 8.4 | 1.460 | 2.425 | 7.5 | 18.6 |
| 4 1 | 13 12.01 | + 3 34.0 | 1.447 | 2.435 | 4.5 | 18.4 |
| 4 11 | 13 4.60 | + 4 50.2 | 1.460 | 2.445 | 5.5 | 18.5 |
| 4 21 | 12 57.68 | + 5 49.2 | 1.499 | 2.456 | 9.1 | 18.7 |
| 5 1 | 12 52.16 | + 6 26.2 | 1.561 | 2.467 | 12.9 | 19.0 |
| 5 11 | 12 48.71 | + 6 39.6 | 1.644 | 2.479 | 16.2 | 19.2 |

**376146** 2011 $BX_{27}$ 4 7.8 134°.28 3°.0/10.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.26 | −16 18.0 | 1.935 | 2.716 | 15.3 | 20.9 |
| 3 12 | 13 28.67 | −16 30.1 | 1.849 | 2.720 | 12.3 | 20.7 |
| 3 22 | 13 21.80 | −16 26.1 | 1.785 | 2.723 | 8.7 | 20.5 |
| 4 1 | 13 13.26 | −16 6.4 | 1.746 | 2.727 | 5.0 | 20.3 |
| 4 11 | 13 4.01 | −15 33.7 | 1.734 | 2.730 | 3.0 | 20.2 |
| 4 21 | 12 55.05 | −14 52.8 | 1.750 | 2.733 | 5.5 | 20.3 |
| 5 1 | 12 47.39 | −14 9.7 | 1.793 | 2.736 | 9.2 | 20.6 |
| 5 11 | 12 41.74 | −13 30.6 | 1.860 | 2.739 | 12.6 | 20.8 |

**290103** 2005 $QA_{114}$ 4 7.8 264°.54 0°.7/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.88 | − 6 48.8 | 2.525 | 3.333 | 11.4 | 21.6 |
| 3 12 | 13 24.83 | − 6 21.6 | 2.421 | 3.316 | 8.7 | 21.4 |
| 3 22 | 13 19.09 | − 5 45.5 | 2.341 | 3.299 | 5.6 | 21.2 |
| 4 1 | 13 12.11 | − 5 3.3 | 2.289 | 3.282 | 2.3 | 20.9 |
| 4 11 | 13 4.55 | − 4 19.1 | 2.266 | 3.265 | 1.6 | 20.9 |
| 4 21 | 12 57.11 | − 3 37.3 | 2.272 | 3.248 | 5.1 | 21.1 |
| 5 1 | 12 50.51 | − 3 2.1 | 2.306 | 3.230 | 8.4 | 21.2 |
| 5 11 | 12 45.33 | − 2 36.9 | 2.364 | 3.212 | 11.4 | 21.4 |

**403006** 2007 $VD_{288}$ 4 7.8 86°.35 2°.9/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.92 | −16 6.0 | 1.600 | 2.392 | 17.5 | 21.2 |
| 3 12 | 13 30.18 | −16 8.6 | 1.532 | 2.410 | 13.9 | 21.0 |
| 3 22 | 13 22.85 | −15 51.7 | 1.485 | 2.427 | 9.8 | 20.8 |
| 4 1 | 13 13.69 | −15 16.6 | 1.461 | 2.445 | 5.4 | 20.6 |
| 4 11 | 13 3.86 | −14 27.6 | 1.464 | 2.462 | 2.9 | 20.5 |
| 4 21 | 12 54.60 | −13 31.6 | 1.494 | 2.479 | 6.0 | 20.7 |
| 5 1 | 12 46.98 | −12 36.2 | 1.550 | 2.495 | 10.2 | 21.0 |
| 5 11 | 12 41.74 | −11 48.8 | 1.629 | 2.512 | 13.9 | 21.3 |

**21852** Bolander 4 7.8 51°.61 3°.7/10.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.36 | −16 17.2 | 1.390 | 2.193 | 19.1 | 18.3 |
| 3 12 | 13 30.17 | −16 40.9 | 1.325 | 2.207 | 15.3 | 18.1 |
| 3 22 | 13 23.05 | −16 44.0 | 1.279 | 2.222 | 10.9 | 17.9 |
| 4 1 | 13 13.82 | −16 26.6 | 1.255 | 2.237 | 6.3 | 17.6 |
| 4 11 | 13 3.80 | −15 52.3 | 1.257 | 2.253 | 3.7 | 17.5 |
| 4 21 | 12 54.36 | −15 7.7 | 1.284 | 2.269 | 6.7 | 17.7 |
| 5 1 | 12 46.77 | −14 21.1 | 1.335 | 2.285 | 11.1 | 18.0 |
| 5 11 | 12 41.83 | −13 40.7 | 1.409 | 2.301 | 15.1 | 18.3 |

**22150** 2000 $WM_{49}$ 4 7.8 75°.62 8°.0/31.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.75 | + 8 2.6 | 1.469 | 2.321 | 15.8 | 18.0 |
| 3 12 | 13 27.77 | + 9 46.2 | 1.420 | 2.333 | 12.3 | 17.8 |
| 3 22 | 13 21.25 | +11 29.0 | 1.394 | 2.346 | 9.3 | 17.7 |
| 4 1 | 13 13.00 | +12 59.7 | 1.392 | 2.359 | 8.0 | 17.6 |
| 4 11 | 13 4.20 | +14 8.0 | 1.416 | 2.372 | 9.4 | 17.8 |
| 4 21 | 12 56.03 | +14 47.6 | 1.464 | 2.385 | 12.3 | 18.0 |
| 5 1 | 12 49.51 | +14 56.7 | 1.533 | 2.398 | 15.5 | 18.2 |
| 5 11 | 12 45.31 | +14 37.3 | 1.621 | 2.411 | 18.3 | 18.4 |

**424155** 2007 $GT_{45}$ 4 7.8 48°.82 0°.8/ 8.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.01 | −13 40.1 | 1.847 | 2.651 | 15.0 | 20.9 |
| 3 12 | 13 24.67 | −12 52.5 | 1.764 | 2.653 | 11.8 | 20.7 |
| 3 22 | 13 19.19 | −11 46.1 | 1.702 | 2.655 | 7.9 | 20.4 |
| 4 1 | 13 12.19 | −10 24.6 | 1.666 | 2.656 | 3.6 | 20.2 |
| 4 11 | 13 4.56 | − 8 54.4 | 1.657 | 2.658 | 1.3 | 20.0 |
| 4 21 | 12 57.27 | − 7 23.7 | 1.677 | 2.660 | 5.6 | 20.3 |
| 5 1 | 12 51.22 | − 6 0.5 | 1.723 | 2.662 | 9.8 | 20.5 |
| 5 11 | 12 47.07 | − 4 51.4 | 1.792 | 2.663 | 13.4 | 20.8 |

**501178** 2013 $TC_{99}$ 4 7.8 165°.81 1°.1/ 6.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.60 | − 7 27.2 | 2.222 | 3.032 | 12.6 | 21.3 |
| 3 12 | 13 25.45 | − 6 33.9 | 2.138 | 3.036 | 9.6 | 21.1 |
| 3 22 | 13 19.49 | − 5 29.3 | 2.079 | 3.039 | 6.1 | 20.9 |
| 4 1 | 13 12.27 | − 4 17.6 | 2.048 | 3.042 | 2.5 | 20.6 |
| 4 11 | 13 4.53 | − 3 4.7 | 2.046 | 3.044 | 2.1 | 20.6 |
| 4 21 | 12 57.10 | − 1 56.8 | 2.073 | 3.046 | 5.7 | 20.9 |
| 5 1 | 12 50.70 | − 0 59.2 | 2.127 | 3.047 | 9.2 | 21.1 |
| 5 11 | 12 45.92 | − 0 15.8 | 2.205 | 3.049 | 12.3 | 21.3 |

**303793** 2005 $SQ_{24}$ 4 7.8 280°.21 1°.4/ 6.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.51 | − 2 59.7 | 2.355 | 3.166 | 12.0 | 20.3 |
| 3 12 | 13 28.51 | − 2 56.7 | 2.251 | 3.148 | 9.2 | 20.1 |
| 3 22 | 13 21.57 | − 2 48.7 | 2.171 | 3.130 | 6.0 | 19.8 |
| 4 1 | 13 13.18 | − 2 38.2 | 2.119 | 3.111 | 2.6 | 19.6 |
| 4 11 | 13 4.08 | − 2 28.7 | 2.096 | 3.093 | 2.2 | 19.5 |
| 4 21 | 12 55.10 | − 2 23.6 | 2.102 | 3.075 | 5.7 | 19.7 |
| 5 1 | 12 47.06 | − 2 25.9 | 2.137 | 3.056 | 9.2 | 19.9 |
| 5 11 | 12 40.64 | − 2 37.9 | 2.195 | 3.038 | 12.4 | 20.1 |

**209421** 2004 $FW_{37}$ 4 7.8 44°.53 2°.2/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.40 | −16 6.6 | 1.939 | 2.730 | 14.9 | 19.7 |
| 3 12 | 13 24.83 | −15 51.8 | 1.864 | 2.741 | 11.8 | 19.6 |
| 3 22 | 13 19.22 | −15 19.6 | 1.809 | 2.753 | 8.3 | 19.4 |
| 4 1 | 13 12.18 | −14 32.0 | 1.780 | 2.764 | 4.5 | 19.2 |
| 4 11 | 13 4.59 | −13 33.4 | 1.778 | 2.776 | 2.3 | 19.0 |
| 4 21 | 12 57.38 | −12 29.9 | 1.803 | 2.788 | 5.1 | 19.2 |
| 5 1 | 12 51.39 | −11 28.2 | 1.856 | 2.801 | 8.8 | 19.5 |
| 5 11 | 12 47.24 | −10 34.3 | 1.932 | 2.814 | 12.1 | 19.7 |

**348886** 2006 $SF_{264}$ 4 7.8 52°.47 3°.4/11.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.28 | −21 2.0 | 2.187 | 2.949 | 14.3 | 20.7 |
| 3 12 | 13 23.83 | −20 42.7 | 2.103 | 2.958 | 11.7 | 20.5 |
| 3 22 | 13 18.50 | −20 3.9 | 2.040 | 2.966 | 8.6 | 20.3 |
| 4 1 | 13 11.87 | −19 6.8 | 2.002 | 2.975 | 5.4 | 20.1 |
| 4 11 | 13 4.73 | −17 55.3 | 1.992 | 2.983 | 3.4 | 20.0 |
| 4 21 | 12 57.91 | −16 34.9 | 2.010 | 2.992 | 4.9 | 20.1 |
| 5 1 | 12 52.19 | −15 12.9 | 2.055 | 3.001 | 8.0 | 20.3 |
| 5 11 | 12 48.14 | −13 55.9 | 2.126 | 3.011 | 11.0 | 20.5 |

**419781** 2010 $VP_{178}$ 4 7.8 67°.17 0°.0/ 7.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.87 | − 9 45.0 | 1.618 | 2.437 | 16.2 | 21.8 |
| 3 12 | 13 27.85 | − 9 24.0 | 1.545 | 2.444 | 12.5 | 21.5 |
| 3 22 | 13 21.36 | − 8 48.2 | 1.492 | 2.450 | 8.2 | 21.3 |
| 4 1 | 13 13.11 | − 8 1.0 | 1.465 | 2.457 | 3.4 | 21.0 |
| 4 11 | 13 4.15 | − 7 8.5 | 1.464 | 2.464 | 1.5 | 20.9 |
| 4 21 | 12 55.64 | − 6 17.5 | 1.490 | 2.472 | 6.4 | 21.2 |
| 5 1 | 12 48.61 | − 5 34.7 | 1.541 | 2.479 | 10.8 | 21.5 |
| 5 11 | 12 43.79 | − 5 5.2 | 1.614 | 2.486 | 14.6 | 21.7 |

**519981** 2013 $TL_{167}$ 4 7.8 135°.30 3°.2/ 4.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.74 | + 1 5.4 | 2.182 | 3.003 | 12.4 | 21.6 |
| 3 12 | 13 28.54 | + 1 39.1 | 2.110 | 3.013 | 9.5 | 21.4 |
| 3 22 | 13 21.45 | + 2 16.2 | 2.063 | 3.022 | 6.2 | 21.3 |
| 4 1 | 13 13.05 | + 2 52.1 | 2.043 | 3.030 | 3.5 | 21.1 |
| 4 11 | 13 4.19 | + 3 21.8 | 2.052 | 3.039 | 4.0 | 21.1 |
| 4 21 | 12 55.71 | + 3 41.2 | 2.089 | 3.047 | 7.0 | 21.3 |
| 5 1 | 12 48.38 | + 3 47.4 | 2.154 | 3.054 | 10.1 | 21.5 |
| 5 11 | 12 42.79 | + 3 39.4 | 2.241 | 3.061 | 12.9 | 21.7 |

**334704** 2003 $FM_{6}$ 4 7.8 303°.51 4°.3/ 2.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.42 | − 5 45.9 | 1.660 | 2.497 | 15.0 | 20.1 |
| 3 12 | 13 23.99 | − 3 19.5 | 1.547 | 2.461 | 11.5 | 19.8 |
| 3 22 | 13 19.14 | − 0 25.7 | 1.459 | 2.425 | 7.4 | 19.5 |
| 4 1 | 13 12.33 | + 2 46.3 | 1.399 | 2.389 | 4.4 | 19.2 |
| 4 11 | 13 4.45 | + 6 1.8 | 1.370 | 2.352 | 6.2 | 19.2 |
| 4 21 | 12 56.57 | + 9 4.6 | 1.369 | 2.316 | 10.8 | 19.4 |
| 5 1 | 12 49.83 | +11 40.4 | 1.393 | 2.280 | 15.5 | 19.6 |
| 5 11 | 12 45.16 | +13 40.7 | 1.439 | 2.243 | 19.6 | 19.7 |

**430236** 2013 $WQ_{2}$ 4 7.8 204°.03 5°.1/ 1.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.12 | + 8 30.1 | 2.543 | 3.365 | 10.9 | 21.7 |
| 3 12 | 13 27.92 | + 9 25.4 | 2.462 | 3.359 | 8.5 | 21.6 |
| 3 22 | 13 21.01 | +10 19.9 | 2.407 | 3.353 | 6.3 | 21.4 |
| 4 1 | 13 12.88 | +11 8.2 | 2.379 | 3.346 | 5.1 | 21.3 |
| 4 11 | 13 4.26 | +11 44.9 | 2.381 | 3.338 | 6.0 | 21.4 |
| 4 21 | 12 55.89 | +12 6.4 | 2.410 | 3.330 | 8.2 | 21.5 |
| 5 1 | 12 48.48 | +12 10.4 | 2.466 | 3.321 | 10.7 | 21.6 |
| 5 11 | 12 42.58 | +11 56.9 | 2.544 | 3.312 | 13.0 | 21.8 |

**286091** 2001 $TO_{28}$ 4 7.8 211°.78 2°.7/10.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.01 | −16 48.7 | 1.920 | 2.696 | 15.6 | 21.9 |
| 3 12 | 13 30.17 | −16 40.0 | 1.820 | 2.689 | 12.5 | 21.7 |
| 3 22 | 13 22.91 | −16 12.7 | 1.742 | 2.681 | 8.9 | 21.4 |
| 4 1 | 13 13.80 | −15 27.4 | 1.690 | 2.672 | 5.0 | 21.2 |
| 4 11 | 13 3.82 | −14 27.7 | 1.665 | 2.662 | 2.7 | 21.0 |
| 4 21 | 12 54.04 | −13 19.6 | 1.668 | 2.651 | 5.7 | 21.2 |
| 5 1 | 12 45.55 | −12 10.6 | 1.699 | 2.640 | 9.8 | 21.4 |
| 5 11 | 12 39.15 | −11 8.2 | 1.754 | 2.628 | 13.6 | 21.6 |

**423592** 2005 $VK_{113}$ 4 7.8 219°.68 0°.4/ 8.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.92 | −10 34.9 | 2.341 | 3.132 | 12.7 | 22.7 |
| 3 12 | 13 28.07 | −10 16.9 | 2.239 | 3.122 | 9.9 | 22.5 |
| 3 22 | 13 21.28 | − 9 47.2 | 2.160 | 3.112 | 6.6 | 22.2 |
| 4 1 | 13 13.06 | − 9 8.0 | 2.109 | 3.100 | 2.9 | 22.0 |
| 4 11 | 13 4.18 | − 8 23.0 | 2.088 | 3.088 | 1.2 | 21.8 |
| 4 21 | 12 55.46 | − 7 36.9 | 2.095 | 3.076 | 5.0 | 22.1 |
| 5 1 | 12 47.73 | − 6 54.7 | 2.132 | 3.063 | 8.6 | 22.3 |
| 5 11 | 12 41.63 | − 6 20.8 | 2.192 | 3.049 | 11.9 | 22.4 |

**254443** 2005 $AA_{65}$ 4 7.8 172°.57 4°.4/ 3.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.33 | + 1 18.3 | 1.875 | 2.706 | 13.8 | 21.2 |
| 3 12 | 13 28.60 | + 2 29.7 | 1.802 | 2.709 | 10.5 | 21.0 |
| 3 22 | 13 21.68 | + 3 47.2 | 1.752 | 2.712 | 7.0 | 20.8 |
| 4 1 | 13 13.21 | + 5 3.6 | 1.729 | 2.714 | 4.5 | 20.7 |
| 4 11 | 13 4.14 | + 6 11.0 | 1.735 | 2.715 | 5.5 | 20.7 |
| 4 21 | 12 55.45 | + 7 2.9 | 1.768 | 2.716 | 8.7 | 20.9 |
| 5 1 | 12 48.06 | + 7 35.0 | 1.826 | 2.716 | 12.2 | 21.1 |
| 5 11 | 12 42.64 | + 7 45.9 | 1.906 | 2.716 | 15.2 | 21.3 |

**20803** 2000 $SK_{188}$ 4 7.8 330°.11 2°.1/10.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.63 | −15 40.3 | 2.165 | 2.952 | 13.7 | 18.4 |
| 3 12 | 13 24.17 | −15 28.2 | 2.071 | 2.947 | 10.9 | 18.2 |
| 3 22 | 13 18.80 | −15 0.5 | 2.000 | 2.943 | 7.6 | 18.0 |
| 4 1 | 13 12.04 | −14 18.6 | 1.954 | 2.939 | 4.1 | 17.8 |
| 4 11 | 13 4.67 | −13 26.1 | 1.936 | 2.935 | 2.1 | 17.6 |
| 4 21 | 12 57.52 | −12 28.2 | 1.946 | 2.931 | 4.8 | 17.8 |
| 5 1 | 12 51.41 | −11 30.8 | 1.983 | 2.927 | 8.4 | 18.0 |
| 5 11 | 12 46.96 | −10 39.7 | 2.045 | 2.924 | 11.7 | 18.2 |

**178033** 2006 $RR_{55}$ 4 7.8 161°.55 0°.3/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.81 | − 8 7.2 | 2.862 | 3.660 | 10.4 | 21.6 |
| 3 12 | 13 24.45 | − 7 36.8 | 2.776 | 3.665 | 8.0 | 21.4 |
| 3 22 | 13 18.67 | − 6 58.1 | 2.714 | 3.670 | 5.1 | 21.2 |
| 4 1 | 13 11.90 | − 6 13.7 | 2.681 | 3.674 | 2.1 | 21.0 |
| 4 11 | 13 4.75 | − 5 27.4 | 2.678 | 3.678 | 1.2 | 20.9 |
| 4 21 | 12 57.83 | − 4 43.0 | 2.705 | 3.682 | 4.3 | 21.2 |
| 5 1 | 12 51.70 | − 4 4.2 | 2.761 | 3.685 | 7.2 | 21.4 |
| 5 11 | 12 46.84 | − 3 34.0 | 2.842 | 3.688 | 9.8 | 21.5 |

**171387** 2006 $PR_{9}$ 4 7.8 257°.45 1°.5/ 6.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.68 | − 6 4.8 | 1.801 | 2.622 | 14.7 | 21.0 |
| 3 12 | 13 28.50 | − 5 27.2 | 1.702 | 2.604 | 11.4 | 20.7 |
| 3 22 | 13 21.89 | − 4 36.9 | 1.625 | 2.586 | 7.4 | 20.5 |
| 4 1 | 13 13.41 | − 3 38.2 | 1.574 | 2.567 | 3.0 | 20.1 |
| 4 11 | 13 4.00 | − 2 37.3 | 1.550 | 2.548 | 2.7 | 20.1 |
| 4 21 | 12 54.74 | − 1 41.5 | 1.554 | 2.529 | 7.1 | 20.3 |
| 5 1 | 12 46.70 | − 0 57.2 | 1.584 | 2.509 | 11.6 | 20.5 |
| 5 11 | 12 40.73 | − 0 29.2 | 1.637 | 2.488 | 15.5 | 20.7 |

**305356** 2008 $BB_{23}$ 4 7.8 129°.73 5°.0/14.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.33 | −27 1.7 | 2.993 | 3.688 | 12.2 | 21.9 |
| 3 12 | 13 28.02 | −27 31.6 | 2.904 | 3.702 | 10.4 | 21.8 |
| 3 22 | 13 21.04 | −27 45.9 | 2.837 | 3.716 | 8.3 | 21.7 |
| 4 1 | 13 12.91 | −27 43.8 | 2.796 | 3.729 | 6.3 | 21.6 |
| 4 11 | 13 4.28 | −27 25.7 | 2.782 | 3.742 | 5.1 | 21.5 |
| 4 21 | 12 55.89 | −26 54.2 | 2.797 | 3.754 | 5.4 | 21.5 |
| 5 1 | 12 48.40 | −26 13.0 | 2.840 | 3.766 | 7.0 | 21.7 |
| 5 11 | 12 42.36 | −25 27.4 | 2.910 | 3.778 | 8.9 | 21.8 |

**472600** 2015 $DG_{138}$ 4 7.8 175°.09 7°.9/28.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.05 | +16 1.4 | 2.332 | 3.164 | 11.4 | 20.5 |
| 3 12 | 13 24.23 | +17 38.1 | 2.275 | 3.164 | 9.5 | 20.4 |
| 3 22 | 13 18.67 | +19 9.0 | 2.242 | 3.164 | 8.1 | 20.3 |
| 4 1 | 13 11.94 | +20 26.4 | 2.236 | 3.164 | 8.0 | 20.3 |
| 4 11 | 13 4.75 | +21 24.0 | 2.256 | 3.164 | 9.1 | 20.4 |
| 4 21 | 12 57.86 | +21 57.9 | 2.301 | 3.164 | 10.9 | 20.5 |
| 5 1 | 12 52.00 | +22 6.9 | 2.368 | 3.164 | 13.0 | 20.6 |
| 5 11 | 12 47.68 | +21 52.2 | 2.454 | 3.164 | 14.8 | 20.8 |

**64556** 2001 $WB_{22}$ 4 7.8 27°.74 5°.7/ 2.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.38 | + 5 28.2 | 1.702 | 2.543 | 14.5 | 19.2 |
| 3 12 | 13 28.08 | + 6 24.3 | 1.633 | 2.544 | 11.2 | 19.0 |
| 3 22 | 13 21.44 | + 7 21.9 | 1.588 | 2.545 | 7.9 | 18.8 |
| 4 1 | 13 13.13 | + 8 13.4 | 1.568 | 2.547 | 5.8 | 18.7 |
| 4 11 | 13 4.19 | + 8 51.3 | 1.575 | 2.548 | 6.8 | 18.7 |
| 4 21 | 12 55.68 | + 9 10.2 | 1.607 | 2.550 | 9.9 | 18.9 |
| 5 1 | 12 48.59 | + 9 7.4 | 1.663 | 2.551 | 13.3 | 19.1 |
| 5 11 | 12 43.61 | + 8 43.2 | 1.740 | 2.553 | 16.3 | 19.3 |

**381606** 2008 $WF_{12}$ 4 7.8 65°.86 3°.2/ 4.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.36 | + 0 13.8 | 1.955 | 2.785 | 13.3 | 20.5 |
| 3 12 | 13 26.98 | + 0 50.7 | 1.883 | 2.791 | 10.1 | 20.3 |
| 3 22 | 13 20.56 | + 1 32.5 | 1.836 | 2.797 | 6.6 | 20.1 |
| 4 1 | 13 12.74 | + 2 13.9 | 1.814 | 2.803 | 3.6 | 19.9 |
| 4 11 | 13 4.38 | + 2 49.2 | 1.821 | 2.809 | 4.1 | 19.9 |
| 4 21 | 12 56.41 | + 3 13.5 | 1.855 | 2.816 | 7.4 | 20.1 |
| 5 1 | 12 49.65 | + 3 23.5 | 1.914 | 2.822 | 10.8 | 20.3 |
| 5 11 | 12 44.73 | + 3 17.7 | 1.996 | 2.828 | 13.8 | 20.6 |

**107598** 2001 $DW_{104}$ 4 7.8 353°.47 1°.4/ 8.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.48 | −11 15.6 | 1.246 | 2.081 | 19.1 | 19.9 |
| 3 12 | 13 26.86 | −11 20.4 | 1.170 | 2.076 | 15.0 | 19.7 |
| 3 22 | 13 21.20 | −11 6.7 | 1.113 | 2.073 | 10.1 | 19.4 |
| 4 1 | 13 13.20 | −10 36.7 | 1.078 | 2.070 | 4.7 | 19.0 |
| 4 11 | 13 4.13 | − 9 55.9 | 1.067 | 2.068 | 1.9 | 18.8 |
| 4 21 | 12 55.45 | − 9 11.8 | 1.080 | 2.067 | 7.3 | 19.2 |
| 5 1 | 12 48.55 | − 8 33.1 | 1.116 | 2.067 | 12.6 | 19.5 |
| 5 11 | 12 44.40 | − 8 6.9 | 1.171 | 2.068 | 17.2 | 19.7 |

**266384** 2007 $EV_{122}$ 4 7.8 39°.39 2°.5/ 9.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.26 | −12 23.7 | 1.718 | 2.514 | 16.3 | 20.3 |
| 3 12 | 13 32.03 | −13 2.2 | 1.636 | 2.518 | 13.0 | 20.0 |
| 3 22 | 13 24.17 | −13 28.2 | 1.575 | 2.521 | 9.0 | 19.8 |
| 4 1 | 13 14.33 | −13 41.6 | 1.539 | 2.524 | 4.8 | 19.6 |
| 4 11 | 13 3.62 | −13 44.0 | 1.530 | 2.528 | 2.6 | 19.4 |
| 4 21 | 12 53.24 | −13 39.0 | 1.549 | 2.532 | 6.0 | 19.6 |
| 5 1 | 12 44.35 | −13 31.4 | 1.594 | 2.536 | 10.2 | 19.9 |
| 5 11 | 12 37.80 | −13 26.5 | 1.662 | 2.540 | 14.0 | 20.1 |

**281646** 2008 $UA_{338}$ 4 7.8 289°.04 2°.7/ 5.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.62 | − 1 0.3 | 1.929 | 2.756 | 13.6 | 20.5 |
| 3 12 | 13 28.20 | − 0 38.8 | 1.837 | 2.743 | 10.4 | 20.3 |
| 3 22 | 13 21.55 | − 0 11.6 | 1.768 | 2.730 | 6.8 | 20.0 |
| 4 1 | 13 13.23 | + 0 17.1 | 1.725 | 2.717 | 3.4 | 19.8 |
| 4 11 | 13 4.15 | + 0 41.8 | 1.711 | 2.704 | 3.6 | 19.8 |
| 4 21 | 12 55.27 | + 0 57.9 | 1.723 | 2.691 | 7.2 | 20.0 |
| 5 1 | 12 47.57 | + 1 1.5 | 1.762 | 2.678 | 11.1 | 20.2 |
| 5 11 | 12 41.80 | + 0 50.5 | 1.823 | 2.665 | 14.5 | 20.3 |

**240355** 2003 $SQ_{13}$ 4 7.8 78°.92 2°.0/ 5.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.52 | − 4 13.7 | 2.168 | 2.983 | 12.8 | 21.0 |
| 3 12 | 13 27.41 | − 3 15.7 | 2.119 | 3.019 | 9.6 | 20.9 |
| 3 22 | 13 20.57 | − 2 10.5 | 2.095 | 3.055 | 6.0 | 20.7 |
| 4 1 | 13 12.66 | − 1 3.3 | 2.098 | 3.090 | 2.7 | 20.5 |
| 4 11 | 13 4.49 | + 0 0.1 | 2.131 | 3.125 | 2.9 | 20.6 |
| 4 21 | 12 56.86 | + 0 54.2 | 2.193 | 3.159 | 6.1 | 20.9 |
| 5 1 | 12 50.43 | + 1 35.4 | 2.283 | 3.192 | 9.2 | 21.1 |
| 5 11 | 12 45.68 | + 2 1.5 | 2.396 | 3.225 | 11.9 | 21.4 |

**516926** 2011 $UY_{414}$ 4 7.8 70°.19 4°.3/ 4.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.39 | + 0 15.5 | 1.388 | 2.232 | 17.0 | 21.4 |
| 3 12 | 13 30.03 | + 1 2.5 | 1.326 | 2.241 | 12.9 | 21.1 |
| 3 22 | 13 22.89 | + 1 56.4 | 1.286 | 2.250 | 8.5 | 20.9 |
| 4 1 | 13 13.77 | + 2 49.4 | 1.270 | 2.259 | 4.8 | 20.7 |
| 4 11 | 13 3.95 | + 3 33.0 | 1.279 | 2.268 | 5.4 | 20.8 |
| 4 21 | 12 54.74 | + 4 0.5 | 1.314 | 2.277 | 9.5 | 21.0 |
| 5 1 | 12 47.29 | + 4 7.7 | 1.372 | 2.286 | 13.7 | 21.3 |
| 5 11 | 12 42.37 | + 3 53.8 | 1.450 | 2.295 | 17.4 | 21.5 |

**123674** 2000 $YA_{90}$ 4 7.8 153°.39 1°.1/ 8.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.98 | −12 58.9 | 2.217 | 3.007 | 13.3 | 20.3 |
| 3 12 | 13 26.57 | −12 37.2 | 2.131 | 3.012 | 10.4 | 20.1 |
| 3 22 | 13 20.27 | −12 1.7 | 2.069 | 3.017 | 7.0 | 19.9 |
| 4 1 | 13 12.64 | −11 14.7 | 2.033 | 3.022 | 3.3 | 19.7 |
| 4 11 | 13 4.46 | −10 20.4 | 2.026 | 3.026 | 1.3 | 19.5 |
| 4 21 | 12 56.58 | − 9 24.1 | 2.047 | 3.030 | 4.8 | 19.8 |
| 5 1 | 12 49.78 | − 8 31.2 | 2.097 | 3.034 | 8.4 | 20.0 |
| 5 11 | 12 44.67 | − 7 46.8 | 2.171 | 3.037 | 11.6 | 20.2 |

**386158** 2007 $TH_{366}$ 4 7.8 204°.36 4°.7/12.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.67 | −23 9.6 | 2.604 | 3.330 | 13.1 | 21.7 |
| 3 12 | 13 28.61 | −23 39.9 | 2.501 | 3.327 | 11.0 | 21.5 |
| 3 22 | 13 21.64 | −23 55.1 | 2.420 | 3.322 | 8.5 | 21.3 |
| 4 1 | 13 13.24 | −23 53.9 | 2.364 | 3.318 | 6.1 | 21.2 |
| 4 11 | 13 4.16 | −23 36.9 | 2.337 | 3.313 | 4.7 | 21.0 |
| 4 21 | 12 55.22 | −23 6.8 | 2.338 | 3.307 | 5.5 | 21.1 |
| 5 1 | 12 47.23 | −22 27.7 | 2.367 | 3.302 | 7.7 | 21.2 |
| 5 11 | 12 40.84 | −21 45.4 | 2.422 | 3.296 | 10.3 | 21.4 |

**79061** 2286 $T\text{-}_3$ 4 7.8 289°.24 2°.1/ 9.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.48 | −12 13.5 | 1.549 | 2.358 | 17.2 | 19.8 |
| 3 12 | 13 30.35 | −12 32.1 | 1.456 | 2.346 | 13.7 | 19.6 |
| 3 22 | 13 23.36 | −12 35.7 | 1.383 | 2.334 | 9.5 | 19.3 |
| 4 1 | 13 14.12 | −12 24.8 | 1.334 | 2.323 | 4.8 | 19.0 |
| 4 11 | 13 3.73 | −12 2.4 | 1.311 | 2.311 | 2.3 | 18.8 |
| 4 21 | 12 53.52 | −11 33.6 | 1.315 | 2.300 | 6.6 | 19.0 |
| 5 1 | 12 44.80 | −11 5.1 | 1.343 | 2.288 | 11.4 | 19.2 |
| 5 11 | 12 38.58 | −10 43.6 | 1.393 | 2.277 | 15.8 | 19.5 |

**466113** 2012 $DN_{35}$ 4 7.8 71°.14 1°.6/ 6.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.01 | − 5 24.3 | 1.532 | 2.361 | 16.4 | 21.7 |
| 3 12 | 13 29.45 | − 4 54.9 | 1.471 | 2.378 | 12.5 | 21.5 |
| 3 22 | 13 22.35 | − 4 14.6 | 1.432 | 2.395 | 8.0 | 21.2 |
| 4 1 | 13 13.52 | − 3 28.4 | 1.418 | 2.411 | 3.3 | 21.0 |
| 4 11 | 13 4.11 | − 2 43.1 | 1.430 | 2.428 | 2.7 | 21.0 |
| 4 21 | 12 55.29 | − 2 5.3 | 1.469 | 2.445 | 7.3 | 21.3 |
| 5 1 | 12 48.11 | − 1 40.3 | 1.533 | 2.462 | 11.5 | 21.6 |
| 5 11 | 12 43.24 | − 1 31.2 | 1.618 | 2.478 | 15.2 | 21.9 |

**330020** 2005 $UP_{100}$ 4 7.8 172°.26 1°.6/ 6.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.41 | − 5 51.9 | 1.849 | 2.672 | 14.3 | 21.7 |
| 3 12 | 13 26.48 | − 5 6.5 | 1.769 | 2.673 | 10.9 | 21.5 |
| 3 22 | 13 20.38 | − 4 9.6 | 1.711 | 2.673 | 7.0 | 21.2 |
| 4 1 | 13 12.73 | − 3 6.0 | 1.680 | 2.674 | 2.9 | 21.0 |
| 4 11 | 13 4.45 | − 2 2.4 | 1.677 | 2.674 | 2.7 | 20.9 |
| 4 21 | 12 56.49 | − 1 5.6 | 1.701 | 2.674 | 6.7 | 21.2 |
| 5 1 | 12 49.79 | − 0 21.2 | 1.751 | 2.674 | 10.7 | 21.4 |
| 5 11 | 12 45.01 | + 0 6.9 | 1.824 | 2.674 | 14.2 | 21.6 |

**336915** 2011 $HP_{22}$ 4 7.8 209°.69 2°.7/ 5.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.30 | − 1 38.3 | 2.174 | 2.998 | 12.4 | 20.9 |
| 3 12 | 13 26.08 | − 0 51.5 | 2.090 | 2.995 | 9.4 | 20.7 |
| 3 22 | 13 19.98 | + 0 2.2 | 2.030 | 2.992 | 6.1 | 20.5 |
| 4 1 | 13 12.54 | + 0 57.8 | 1.998 | 2.988 | 3.1 | 20.3 |
| 4 11 | 13 4.54 | + 1 49.6 | 1.994 | 2.984 | 3.6 | 20.3 |
| 4 21 | 12 56.80 | + 2 32.3 | 2.018 | 2.980 | 6.8 | 20.5 |
| 5 1 | 12 50.11 | + 3 1.8 | 2.069 | 2.976 | 10.1 | 20.7 |
| 5 11 | 12 45.08 | + 3 15.8 | 2.143 | 2.972 | 13.1 | 20.9 |

**181717** 1994 $GD_6$ 4 7.8 182°.97 0°.0/ 7.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.93 | − 8 12.0 | 2.425 | 3.224 | 12.0 | 20.7 |
| 3 12 | 13 27.15 | − 8 5.5 | 2.335 | 3.224 | 9.3 | 20.5 |
| 3 22 | 13 20.60 | − 7 50.4 | 2.270 | 3.224 | 6.1 | 20.3 |
| 4 1 | 13 12.78 | − 7 28.8 | 2.232 | 3.224 | 2.5 | 20.1 |
| 4 11 | 13 4.43 | − 7 4.0 | 2.223 | 3.223 | 1.2 | 19.9 |
| 4 21 | 12 56.31 | − 6 39.7 | 2.243 | 3.223 | 4.8 | 20.2 |
| 5 1 | 12 49.16 | − 6 19.7 | 2.292 | 3.222 | 8.2 | 20.4 |
| 5 11 | 12 43.56 | − 6 7.2 | 2.365 | 3.221 | 11.2 | 20.6 |

**300886** 2008 $AT_{136}$ 4 7.8 66°.38 2°.1/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 27.75 | − 3 43.5 | 2.186 | 3.011 | 12.3 | 21.0 |
| 3 12 | 13 24.01 | − 2 48.5 | 2.118 | 3.024 | 9.3 | 20.8 |
| 3 22 | 13 18.53 | − 1 45.7 | 2.075 | 3.037 | 5.9 | 20.7 |
| 4 1 | 13 11.90 | − 0 40.0 | 2.058 | 3.051 | 2.7 | 20.5 |
| 4 11 | 13 4.87 | + 0 22.6 | 2.071 | 3.064 | 3.0 | 20.5 |
| 4 21 | 12 58.18 | + 1 16.7 | 2.112 | 3.078 | 6.2 | 20.7 |
| 5 1 | 12 52.54 | + 1 58.0 | 2.179 | 3.091 | 9.4 | 21.0 |
| 5 11 | 12 48.47 | + 2 24.0 | 2.269 | 3.105 | 12.3 | 21.2 |

**142447** 2002 $ST_{59}$ 4 7.8 219°.30 4°.5/ 3.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.12 | + 1 53.8 | 1.862 | 2.696 | 13.7 | 20.8 |
| 3 12 | 13 27.81 | + 3 0.4 | 1.782 | 2.691 | 10.5 | 20.6 |
| 3 22 | 13 21.27 | + 4 12.9 | 1.724 | 2.684 | 7.1 | 20.4 |
| 4 1 | 13 13.12 | + 5 24.3 | 1.694 | 2.678 | 4.7 | 20.2 |
| 4 11 | 13 4.28 | + 6 26.9 | 1.691 | 2.671 | 5.6 | 20.2 |
| 4 21 | 12 55.74 | + 7 14.0 | 1.715 | 2.664 | 8.9 | 20.4 |
| 5 1 | 12 48.45 | + 7 41.2 | 1.764 | 2.656 | 12.4 | 20.6 |
| 5 11 | 12 43.11 | + 7 47.0 | 1.834 | 2.648 | 15.6 | 20.8 |

**34923** 4870 $P\text{–}L$ 4 7.8 269°.14 0°.9/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.21 | − 8 22.9 | 1.688 | 2.510 | 15.4 | 19.8 |
| 3 12 | 13 26.69 | − 7 38.5 | 1.596 | 2.499 | 11.9 | 19.5 |
| 3 22 | 13 20.75 | − 6 38.2 | 1.526 | 2.487 | 7.7 | 19.2 |
| 4 1 | 13 12.97 | − 5 26.5 | 1.481 | 2.475 | 3.1 | 18.9 |
| 4 11 | 13 4.33 | − 4 10.4 | 1.464 | 2.463 | 2.2 | 18.8 |
| 4 21 | 12 55.92 | − 2 58.1 | 1.473 | 2.451 | 7.0 | 19.1 |
| 5 1 | 12 48.82 | − 1 57.4 | 1.508 | 2.439 | 11.5 | 19.3 |
| 5 11 | 12 43.84 | − 1 13.9 | 1.565 | 2.427 | 15.5 | 19.5 |

**285643** 2000 $SC_{18}$ 4 7.8 200°.49 4°.5/13.1 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.20 | −24 14.8 | 2.951 | 3.664 | 12.0 | 21.9 |
| 3 12 | 13 28.05 | −24 45.4 | 2.845 | 3.660 | 10.1 | 21.7 |
| 3 22 | 13 21.18 | −25 2.0 | 2.762 | 3.656 | 7.9 | 21.6 |
| 4 1 | 13 13.05 | −25 3.5 | 2.705 | 3.652 | 5.8 | 21.4 |
| 4 11 | 13 4.31 | −24 50.4 | 2.676 | 3.647 | 4.6 | 21.3 |
| 4 21 | 12 55.69 | −24 24.8 | 2.677 | 3.642 | 5.2 | 21.4 |
| 5 1 | 12 47.90 | −23 50.4 | 2.706 | 3.636 | 7.1 | 21.5 |
| 5 11 | 12 41.52 | −23 11.8 | 2.761 | 3.630 | 9.3 | 21.6 |

**89805** 2002 $AM_{159}$ 4 7.8 211°.86 8°.1/24.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.39 | +22 19.5 | 2.909 | 3.719 | 10.0 | 20.2 |
| 3 12 | 13 24.27 | +24 1.6 | 2.852 | 3.713 | 8.7 | 20.1 |
| 3 22 | 13 18.64 | +25 35.5 | 2.820 | 3.706 | 8.1 | 20.1 |
| 4 1 | 13 11.95 | +26 54.7 | 2.816 | 3.699 | 8.3 | 20.1 |
| 4 11 | 13 4.84 | +27 53.9 | 2.837 | 3.692 | 9.3 | 20.1 |
| 4 21 | 12 57.93 | +28 30.3 | 2.882 | 3.684 | 10.7 | 20.2 |
| 5 1 | 12 51.86 | +28 42.9 | 2.949 | 3.676 | 12.2 | 20.3 |
| 5 11 | 12 47.11 | +28 33.3 | 3.034 | 3.668 | 13.5 | 20.4 |

**143458** 2003 $BF_{86}$ 4 7.8 309°.15 5°.9/14.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.51 | −26 27.7 | 2.250 | 2.976 | 15.0 | 20.2 |
| 3 12 | 13 25.77 | −26 51.3 | 2.151 | 2.971 | 12.7 | 20.0 |
| 3 22 | 13 19.96 | −26 55.1 | 2.071 | 2.965 | 10.2 | 19.8 |
| 4 1 | 13 12.60 | −26 37.4 | 2.016 | 2.960 | 7.7 | 19.6 |
| 4 11 | 13 4.52 | −25 59.0 | 1.986 | 2.955 | 6.0 | 19.5 |
| 4 21 | 12 56.62 | −25 3.6 | 1.983 | 2.950 | 6.4 | 19.5 |
| 5 1 | 12 49.80 | −23 56.9 | 2.006 | 2.945 | 8.6 | 19.6 |
| 5 11 | 12 44.77 | −22 46.4 | 2.054 | 2.941 | 11.3 | 19.8 |

**190083** 2004 $TB_{79}$ 4 7.8 201°.84 2°.5/10.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.33 | −18 41.1 | 2.424 | 3.185 | 13.1 | 20.7 |
| 3 12 | 13 26.06 | −18 15.9 | 2.323 | 3.181 | 10.6 | 20.5 |
| 3 22 | 13 19.96 | −17 33.5 | 2.245 | 3.176 | 7.6 | 20.3 |
| 4 1 | 13 12.55 | −16 35.2 | 2.193 | 3.171 | 4.4 | 20.1 |
| 4 11 | 13 4.57 | −15 24.5 | 2.170 | 3.165 | 2.5 | 20.0 |
| 4 21 | 12 56.80 | −14 6.7 | 2.176 | 3.159 | 4.6 | 20.1 |
| 5 1 | 12 50.01 | −12 48.1 | 2.212 | 3.153 | 7.8 | 20.3 |
| 5 11 | 12 44.80 | −11 34.9 | 2.273 | 3.145 | 10.9 | 20.5 |

**430088** 2013 $SP_{59}$ 4 7.8 149°.67 2°.2/ 5.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.56 | − 3 8.4 | 2.202 | 3.022 | 12.4 | 21.7 |
| 3 12 | 13 26.20 | − 2 22.5 | 2.125 | 3.028 | 9.4 | 21.5 |
| 3 22 | 13 20.00 | − 1 29.1 | 2.072 | 3.033 | 6.0 | 21.3 |
| 4 1 | 13 12.54 | − 0 32.8 | 2.046 | 3.037 | 2.8 | 21.1 |
| 4 11 | 13 4.59 | + 0 20.8 | 2.049 | 3.042 | 3.1 | 21.1 |
| 4 21 | 12 56.95 | + 1 6.4 | 2.080 | 3.046 | 6.3 | 21.3 |
| 5 1 | 12 50.38 | + 1 40.0 | 2.139 | 3.050 | 9.7 | 21.5 |
| 5 11 | 12 45.44 | + 1 58.9 | 2.220 | 3.053 | 12.6 | 21.7 |

**282318** 2002 $TS_{146}$ 4 7.8 225°.61 1°.4/ 9.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.43 | −15 32.4 | 2.512 | 3.289 | 12.3 | 21.4 |
| 3 12 | 13 24.53 | −14 53.5 | 2.408 | 3.280 | 9.7 | 21.2 |
| 3 22 | 13 18.94 | −13 59.2 | 2.328 | 3.271 | 6.7 | 21.0 |
| 4 1 | 13 12.12 | −12 51.4 | 2.276 | 3.262 | 3.4 | 20.8 |
| 4 11 | 13 4.77 | −11 34.5 | 2.252 | 3.252 | 1.5 | 20.6 |
| 4 21 | 12 57.59 | −10 13.7 | 2.258 | 3.242 | 4.4 | 20.8 |
| 5 1 | 12 51.31 | − 8 55.4 | 2.294 | 3.231 | 7.8 | 21.0 |
| 5 11 | 12 46.49 | − 7 45.0 | 2.354 | 3.220 | 10.8 | 21.2 |

**276571** 2003 $SF_{237}$ 4 7.8 219°.53 0°.7/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.92 | − 7 44.7 | 2.175 | 2.985 | 12.9 | 20.9 |
| 3 12 | 13 25.85 | − 7 9.6 | 2.085 | 2.981 | 9.9 | 20.7 |
| 3 22 | 13 19.88 | − 6 23.4 | 2.018 | 2.976 | 6.4 | 20.5 |
| 4 1 | 13 12.53 | − 5 29.6 | 1.978 | 2.972 | 2.6 | 20.2 |
| 4 11 | 13 4.59 | − 4 33.3 | 1.967 | 2.967 | 1.7 | 20.1 |
| 4 21 | 12 56.89 | − 3 40.0 | 1.985 | 2.961 | 5.6 | 20.4 |
| 5 1 | 12 50.22 | − 2 55.0 | 2.029 | 2.956 | 9.3 | 20.6 |
| 5 11 | 12 45.22 | − 2 22.2 | 2.098 | 2.950 | 12.5 | 20.8 |

**266990** 2010 $XB_{37}$ 4 7.8 150°.02 4°.6/ 3.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.17 | + 4 22.7 | 2.103 | 2.929 | 12.7 | 21.6 |
| 3 12 | 13 28.97 | + 5 16.8 | 2.034 | 2.937 | 9.7 | 21.4 |
| 3 22 | 13 21.80 | + 6 12.7 | 1.990 | 2.945 | 6.7 | 21.2 |
| 4 1 | 13 13.28 | + 7 4.3 | 1.973 | 2.953 | 4.7 | 21.1 |
| 4 11 | 13 4.27 | + 7 45.5 | 1.985 | 2.959 | 5.5 | 21.2 |
| 4 21 | 12 55.67 | + 8 11.8 | 2.024 | 2.966 | 8.2 | 21.4 |
| 5 1 | 12 48.27 | + 8 20.6 | 2.090 | 2.971 | 11.2 | 21.6 |
| 5 11 | 12 42.67 | + 8 11.4 | 2.177 | 2.977 | 13.9 | 21.8 |

**249139** 2008 $AV_{4}$ 4 7.8 297°.67 7°.9/15.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.20 | −31 3.8 | 2.281 | 2.974 | 15.6 | 20.0 |
| 3 12 | 13 27.32 | −31 54.0 | 2.169 | 2.956 | 13.8 | 19.8 |
| 3 22 | 13 21.16 | −32 24.3 | 2.077 | 2.939 | 11.6 | 19.6 |
| 4 1 | 13 13.19 | −32 30.9 | 2.007 | 2.922 | 9.5 | 19.5 |
| 4 11 | 13 4.24 | −32 12.7 | 1.961 | 2.905 | 8.1 | 19.3 |
| 4 21 | 12 55.33 | −31 31.4 | 1.941 | 2.888 | 8.2 | 19.3 |
| 5 1 | 12 47.49 | −30 31.8 | 1.947 | 2.871 | 9.7 | 19.4 |
| 5 11 | 12 41.56 | −29 21.6 | 1.976 | 2.855 | 12.1 | 19.5 |

**289351** 2005 $BA_{17}$ 4 7.8 1°.71 2°.9/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.85 | − 4 21.8 | 1.113 | 1.975 | 18.9 | 20.3 |
| 3 12 | 13 24.98 | − 3 38.7 | 1.048 | 1.973 | 14.5 | 20.0 |
| 3 22 | 13 20.00 | − 2 40.5 | 1.002 | 1.972 | 9.3 | 19.7 |
| 4 1 | 13 12.74 | − 1 35.0 | 0.978 | 1.972 | 4.1 | 19.4 |
| 4 11 | 13 4.51 | − 0 32.4 | 0.977 | 1.973 | 4.3 | 19.4 |
| 4 21 | 12 56.80 | + 0 17.1 | 0.999 | 1.976 | 9.5 | 19.7 |
| 5 1 | 12 50.96 | + 0 45.9 | 1.042 | 1.980 | 14.7 | 20.0 |
| 5 11 | 12 47.88 | + 0 50.5 | 1.103 | 1.985 | 19.1 | 20.3 |

**497911** 2006 $VQ_{40}$ 4 7.8 258°.03 1°.6/ 6.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.35 | − 5 9.5 | 1.866 | 2.685 | 14.3 | 22.3 |
| 3 12 | 13 28.96 | − 4 37.8 | 1.766 | 2.667 | 11.1 | 22.1 |
| 3 22 | 13 22.19 | − 3 55.2 | 1.688 | 2.648 | 7.2 | 21.8 |
| 4 1 | 13 13.59 | − 3 5.8 | 1.636 | 2.629 | 3.0 | 21.5 |
| 4 11 | 13 4.08 | − 2 15.3 | 1.612 | 2.610 | 2.7 | 21.4 |
| 4 21 | 12 54.69 | − 1 30.2 | 1.616 | 2.590 | 7.0 | 21.6 |
| 5 1 | 12 46.50 | − 0 56.2 | 1.646 | 2.569 | 11.3 | 21.8 |
| 5 11 | 12 40.32 | − 0 37.4 | 1.699 | 2.548 | 15.1 | 22.0 |

**131221** 2001 $DZ_{80}$ 4 7.8 52°.09 2°.0/ 6.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.57 | − 2 49.4 | 1.783 | 2.609 | 14.6 | 19.9 |
| 3 12 | 13 28.88 | − 2 35.3 | 1.713 | 2.618 | 11.1 | 19.6 |
| 3 22 | 13 21.92 | − 2 14.3 | 1.665 | 2.627 | 7.1 | 19.4 |
| 4 1 | 13 13.37 | − 1 50.7 | 1.643 | 2.636 | 3.1 | 19.2 |
| 4 11 | 13 4.24 | − 1 29.5 | 1.649 | 2.645 | 2.9 | 19.2 |
| 4 21 | 12 55.54 | − 1 15.4 | 1.682 | 2.655 | 6.8 | 19.5 |
| 5 1 | 12 48.23 | − 1 12.0 | 1.741 | 2.665 | 10.7 | 19.7 |
| 5 11 | 12 42.97 | − 1 21.4 | 1.822 | 2.675 | 14.1 | 19.9 |

**110541** 2001 $TE_{96}$ 4 7.8 219°.89 0°.9/ 8.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.29 | −12 28.9 | 2.304 | 3.091 | 13.0 | 20.7 |
| 3 12 | 13 27.66 | −12 5.6 | 2.201 | 3.081 | 10.2 | 20.5 |
| 3 22 | 13 21.07 | −11 28.8 | 2.122 | 3.070 | 6.9 | 20.3 |
| 4 1 | 13 13.05 | −10 40.4 | 2.070 | 3.059 | 3.2 | 20.0 |
| 4 11 | 13 4.36 | − 9 44.4 | 2.046 | 3.047 | 1.3 | 19.9 |
| 4 21 | 12 55.83 | − 8 45.8 | 2.053 | 3.034 | 4.9 | 20.1 |
| 5 1 | 12 48.30 | − 7 50.5 | 2.087 | 3.021 | 8.6 | 20.3 |
| 5 11 | 12 42.43 | − 7 3.6 | 2.147 | 3.007 | 11.9 | 20.5 |

**505502** 2013 $WW_{76}$ 4 7.8 207°.03 5°.2/ 1.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.86 | + 8 8.6 | 2.453 | 3.276 | 11.2 | 22.1 |
| 3 12 | 13 27.83 | + 9 6.1 | 2.372 | 3.270 | 8.7 | 21.9 |
| 3 22 | 13 21.03 | +10 3.2 | 2.316 | 3.264 | 6.4 | 21.8 |
| 4 1 | 13 12.98 | +10 54.2 | 2.289 | 3.257 | 5.2 | 21.7 |
| 4 11 | 13 4.41 | +11 33.5 | 2.290 | 3.249 | 6.1 | 21.7 |
| 4 21 | 12 56.10 | +11 57.0 | 2.319 | 3.240 | 8.4 | 21.9 |
| 5 1 | 12 48.76 | +12 2.7 | 2.373 | 3.231 | 10.9 | 22.0 |
| 5 11 | 12 42.98 | +11 50.2 | 2.450 | 3.222 | 13.3 | 22.2 |

**120578** 1995 $QV_{12}$ 4 7.8 140°.76 2°.3/10.3 17 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.79 | −16 25.1 | 2.523 | 3.285 | 12.6 | 21.4 |
| 3 12 | 13 28.49 | −16 25.2 | 2.438 | 3.298 | 10.1 | 21.3 |
| 3 22 | 13 21.42 | −16 12.0 | 2.377 | 3.311 | 7.1 | 21.1 |
| 4 1 | 13 13.13 | −15 46.4 | 2.343 | 3.323 | 4.0 | 20.9 |
| 4 11 | 13 4.35 | −15 11.0 | 2.338 | 3.334 | 2.3 | 20.8 |
| 4 21 | 12 55.87 | −14 29.8 | 2.363 | 3.344 | 4.4 | 21.0 |
| 5 1 | 12 48.42 | −13 47.2 | 2.416 | 3.354 | 7.4 | 21.2 |
| 5 11 | 12 42.56 | −13 8.2 | 2.496 | 3.364 | 10.2 | 21.4 |

**261395** 2005 $UN_{438}$ 4 7.8 280°.76 0°.3/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.14 | −10 17.3 | 2.434 | 3.234 | 12.0 | 21.5 |
| 3 12 | 13 24.32 | − 9 57.1 | 2.341 | 3.229 | 9.3 | 21.3 |
| 3 22 | 13 18.80 | − 9 26.2 | 2.272 | 3.225 | 6.1 | 21.1 |
| 4 1 | 13 12.08 | − 8 46.7 | 2.230 | 3.221 | 2.6 | 20.9 |
| 4 11 | 13 4.83 | − 8 2.6 | 2.216 | 3.217 | 1.1 | 20.7 |
| 4 21 | 12 57.79 | − 7 18.3 | 2.232 | 3.213 | 4.6 | 21.0 |
| 5 1 | 12 51.65 | − 6 38.3 | 2.275 | 3.209 | 8.0 | 21.2 |
| 5 11 | 12 46.97 | − 6 6.5 | 2.343 | 3.205 | 11.0 | 21.4 |

**232578** 2003 $SQ_{344}$ 4 7.8 250°.86 0°.8/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.53 | − 7 45.1 | 2.061 | 2.875 | 13.3 | 21.1 |
| 3 12 | 13 25.68 | − 7 8.6 | 1.971 | 2.869 | 10.2 | 20.9 |
| 3 22 | 13 19.84 | − 6 20.3 | 1.903 | 2.862 | 6.6 | 20.7 |
| 4 1 | 13 12.55 | − 5 23.8 | 1.862 | 2.856 | 2.7 | 20.4 |
| 4 11 | 13 4.61 | − 4 24.7 | 1.850 | 2.849 | 1.8 | 20.3 |
| 4 21 | 12 56.91 | − 3 28.8 | 1.865 | 2.842 | 5.9 | 20.6 |
| 5 1 | 12 50.30 | − 2 41.8 | 1.908 | 2.835 | 9.7 | 20.8 |
| 5 11 | 12 45.41 | − 2 8.0 | 1.973 | 2.828 | 13.1 | 21.0 |

**139379** 2001 $MZ_{22}$ 4 7.8 199°.03 1°.3/ 6.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.79 | − 5 57.7 | 2.112 | 2.923 | 13.2 | 20.9 |
| 3 12 | 13 28.09 | − 5 22.5 | 2.023 | 2.920 | 10.1 | 20.7 |
| 3 22 | 13 21.36 | − 4 37.3 | 1.957 | 2.916 | 6.5 | 20.5 |
| 4 1 | 13 13.17 | − 3 45.9 | 1.919 | 2.912 | 2.7 | 20.2 |
| 4 11 | 13 4.33 | − 2 53.8 | 1.910 | 2.908 | 2.2 | 20.2 |
| 4 21 | 12 55.76 | − 2 6.3 | 1.929 | 2.902 | 6.1 | 20.4 |
| 5 1 | 12 48.30 | − 1 28.5 | 1.976 | 2.897 | 9.8 | 20.6 |
| 5 11 | 12 42.62 | − 1 4.0 | 2.046 | 2.890 | 13.1 | 20.8 |

**194246** 2001 $TG_{192}$ 4 7.9 138°.60 2°.7/10.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.56 | −16 6.6 | 1.772 | 2.554 | 16.5 | 20.7 |
| 3 12 | 13 31.35 | −16 7.0 | 1.693 | 2.565 | 13.1 | 20.5 |
| 3 22 | 13 23.64 | −15 49.4 | 1.636 | 2.576 | 9.2 | 20.2 |
| 4 1 | 13 14.13 | −15 14.5 | 1.603 | 2.586 | 5.1 | 20.0 |
| 4 11 | 13 3.90 | −14 26.2 | 1.598 | 2.596 | 2.7 | 19.9 |
| 4 21 | 12 54.11 | −13 30.7 | 1.621 | 2.605 | 5.8 | 20.1 |
| 5 1 | 12 45.82 | −12 35.1 | 1.671 | 2.613 | 9.8 | 20.3 |
| 5 11 | 12 39.79 | −11 46.4 | 1.744 | 2.620 | 13.5 | 20.6 |

**501212** 2013 $TB_{145}$ 4 7.9 171°.26 2°.2/ 5.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.19 | − 1 38.5 | 2.552 | 3.363 | 11.2 | 22.6 |
| 3 12 | 13 27.95 | − 1 4.4 | 2.470 | 3.367 | 8.5 | 22.4 |
| 3 22 | 13 21.04 | − 0 25.3 | 2.412 | 3.371 | 5.5 | 22.2 |
| 4 1 | 13 12.97 | + 0 15.2 | 2.383 | 3.374 | 2.7 | 22.0 |
| 4 11 | 13 4.45 | + 0 52.6 | 2.384 | 3.376 | 2.9 | 22.0 |
| 4 21 | 12 56.20 | + 1 23.1 | 2.415 | 3.377 | 5.8 | 22.2 |
| 5 1 | 12 48.90 | + 1 43.3 | 2.474 | 3.378 | 8.8 | 22.4 |
| 5 11 | 12 43.10 | + 1 51.3 | 2.557 | 3.379 | 11.5 | 22.6 |

**61027** 2000 $KP_{53}$ 4 7.9 257°.15 2°.2/ 9.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.45 | −15 25.0 | 1.952 | 2.739 | 15.0 | 19.9 |
| 3 12 | 13 27.46 | −15 15.6 | 1.849 | 2.725 | 12.0 | 19.6 |
| 3 22 | 13 21.19 | −14 49.0 | 1.768 | 2.711 | 8.4 | 19.4 |
| 4 1 | 13 13.18 | −14 6.3 | 1.712 | 2.697 | 4.5 | 19.1 |
| 4 11 | 13 4.31 | −13 10.9 | 1.683 | 2.682 | 2.2 | 18.9 |
| 4 21 | 12 55.59 | −12 8.6 | 1.682 | 2.667 | 5.5 | 19.1 |
| 5 1 | 12 48.03 | −11 6.3 | 1.709 | 2.651 | 9.6 | 19.3 |
| 5 11 | 12 42.42 | −10 11.1 | 1.759 | 2.636 | 13.4 | 19.5 |

**239544** 2008 $SH_{93}$ 4 7.9 188°.12 1°.6/ 9.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.66 | −14 59.3 | 2.112 | 2.899 | 14.0 | 20.5 |
| 3 12 | 13 25.76 | −14 36.0 | 2.022 | 2.899 | 11.1 | 20.3 |
| 3 22 | 13 19.87 | −13 56.6 | 1.954 | 2.899 | 7.6 | 20.1 |
| 4 1 | 13 12.56 | −13 2.9 | 1.912 | 2.898 | 3.9 | 19.9 |
| 4 11 | 13 4.64 | −11 59.4 | 1.898 | 2.897 | 1.7 | 19.7 |
| 4 21 | 12 56.98 | −10 51.8 | 1.912 | 2.896 | 5.0 | 19.9 |
| 5 1 | 12 50.43 | − 9 46.7 | 1.954 | 2.895 | 8.7 | 20.2 |
| 5 11 | 12 45.62 | − 8 49.9 | 2.021 | 2.894 | 12.0 | 20.4 |

**429234** 2010 $AK_{45}$ 4 7.9 101°.16 2°.9/ 5.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.13 | − 1 16.8 | 1.941 | 2.770 | 13.5 | 21.2 |
| 3 12 | 13 26.89 | − 0 34.1 | 1.866 | 2.774 | 10.2 | 21.0 |
| 3 22 | 13 20.58 | + 0 15.2 | 1.816 | 2.778 | 6.6 | 20.8 |
| 4 1 | 13 12.83 | + 1 5.9 | 1.791 | 2.782 | 3.4 | 20.6 |
| 4 11 | 13 4.53 | + 1 51.6 | 1.795 | 2.786 | 3.9 | 20.7 |
| 4 21 | 12 56.58 | + 2 27.1 | 1.826 | 2.790 | 7.3 | 20.9 |
| 5 1 | 12 49.85 | + 2 48.4 | 1.883 | 2.794 | 10.8 | 21.1 |
| 5 11 | 12 44.96 | + 2 53.3 | 1.963 | 2.798 | 13.9 | 21.3 |

**130620** 2000 $SJ_{38}$ 4 7.9 185°.38 1°.3/ 6.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.30 | − 7 1.3 | 1.779 | 2.596 | 15.0 | 21.0 |
| 3 12 | 13 28.83 | − 6 17.1 | 1.696 | 2.597 | 11.5 | 20.7 |
| 3 22 | 13 22.01 | − 5 19.9 | 1.636 | 2.596 | 7.4 | 20.5 |
| 4 1 | 13 13.48 | − 4 14.1 | 1.602 | 2.596 | 3.0 | 20.2 |
| 4 11 | 13 4.23 | − 3 6.8 | 1.596 | 2.594 | 2.4 | 20.2 |
| 4 21 | 12 55.32 | − 2 5.1 | 1.618 | 2.592 | 6.8 | 20.4 |
| 5 1 | 12 47.76 | − 1 15.5 | 1.665 | 2.590 | 11.1 | 20.7 |
| 5 11 | 12 42.29 | − 0 42.3 | 1.736 | 2.587 | 14.7 | 20.9 |

**173296** 1999 $TM_{262}$ 4 7.9 213°.04 1°.9/ 9.7 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.23 | −15 20.1 | 2.233 | 3.007 | 13.7 | 21.2 |
| 3 12 | 13 29.26 | −15 5.9 | 2.130 | 2.998 | 11.0 | 21.0 |
| 3 22 | 13 22.19 | −14 36.3 | 2.049 | 2.989 | 7.6 | 20.8 |
| 4 1 | 13 13.56 | −13 52.3 | 1.994 | 2.978 | 4.0 | 20.5 |
| 4 11 | 13 4.19 | −12 57.4 | 1.968 | 2.967 | 2.0 | 20.4 |
| 4 21 | 12 54.99 | −11 56.6 | 1.972 | 2.955 | 5.0 | 20.5 |
| 5 1 | 12 46.86 | −10 56.2 | 2.004 | 2.941 | 8.7 | 20.7 |
| 5 11 | 12 40.51 | −10 2.0 | 2.061 | 2.927 | 12.1 | 20.9 |

**423744** 2006 $BB_{263}$ 4 7.9 127°.20 2°.0/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.73 | − 3 58.7 | 2.071 | 2.892 | 13.0 | 21.4 |
| 3 12 | 13 26.44 | − 3 12.2 | 1.996 | 2.899 | 9.9 | 21.3 |
| 3 22 | 13 20.22 | − 2 17.1 | 1.945 | 2.907 | 6.3 | 21.0 |
| 4 1 | 13 12.68 | − 1 18.3 | 1.921 | 2.914 | 2.8 | 20.8 |
| 4 11 | 13 4.63 | − 0 21.8 | 1.926 | 2.921 | 3.0 | 20.9 |
| 4 21 | 12 56.93 | + 0 26.8 | 1.959 | 2.927 | 6.4 | 21.1 |
| 5 1 | 12 50.37 | + 1 3.1 | 2.019 | 2.934 | 9.9 | 21.3 |
| 5 11 | 12 45.54 | + 1 24.2 | 2.101 | 2.940 | 13.0 | 21.5 |

**276509** 2003 $QD_{88}$ 4 7.9 243°.84 0°.8/ 8.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.89 | −11 52.9 | 2.286 | 3.078 | 12.9 | 21.3 |
| 3 12 | 13 26.64 | −11 32.9 | 2.182 | 3.065 | 10.1 | 21.1 |
| 3 22 | 13 20.45 | −11 0.0 | 2.101 | 3.051 | 6.8 | 20.8 |
| 4 1 | 13 12.83 | −10 16.0 | 2.047 | 3.037 | 3.1 | 20.6 |
| 4 11 | 13 4.53 | − 9 24.7 | 2.021 | 3.022 | 1.2 | 20.4 |
| 4 21 | 12 56.36 | − 8 31.3 | 2.025 | 3.007 | 5.0 | 20.6 |
| 5 1 | 12 49.16 | − 7 41.2 | 2.056 | 2.991 | 8.7 | 20.8 |
| 5 11 | 12 43.60 | − 6 59.2 | 2.112 | 2.975 | 12.0 | 21.0 |

**33157** Pertile 4 7.9 133°.33 2°.9/ 4.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.17 | − 2 30.8 | 2.159 | 2.982 | 12.5 | 18.7 |
| 3 12 | 13 25.89 | − 1 14.5 | 2.089 | 2.994 | 9.4 | 18.5 |
| 3 22 | 13 19.80 | + 0 9.9 | 2.043 | 3.005 | 6.1 | 18.3 |
| 4 1 | 13 12.49 | + 1 36.3 | 2.026 | 3.015 | 3.2 | 18.1 |
| 4 11 | 13 4.73 | + 2 57.7 | 2.038 | 3.026 | 3.9 | 18.2 |
| 4 21 | 12 57.33 | + 4 7.7 | 2.078 | 3.035 | 7.0 | 18.4 |
| 5 1 | 12 51.03 | + 5 1.7 | 2.145 | 3.045 | 10.2 | 18.6 |
| 5 11 | 12 46.37 | + 5 37.2 | 2.236 | 3.053 | 13.0 | 18.8 |

**462841** 2010 $TA_{174}$ 4 7.9 137°.26 5°.1/ 3.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.13 | + 5 17.8 | 2.007 | 2.834 | 13.1 | 21.9 |
| 3 12 | 13 29.76 | + 6 16.3 | 1.943 | 2.846 | 10.1 | 21.8 |
| 3 22 | 13 22.34 | + 7 15.8 | 1.904 | 2.858 | 7.1 | 21.6 |
| 4 1 | 13 13.54 | + 8 9.6 | 1.892 | 2.869 | 5.1 | 21.5 |
| 4 11 | 13 4.26 | + 8 51.4 | 1.908 | 2.880 | 6.0 | 21.6 |
| 4 21 | 12 55.44 | + 9 16.5 | 1.952 | 2.890 | 8.7 | 21.8 |
| 5 1 | 12 47.92 | + 9 22.6 | 2.022 | 2.899 | 11.7 | 22.0 |
| 5 11 | 12 42.30 | + 9 9.8 | 2.113 | 2.908 | 14.4 | 22.2 |

**403233** 2008 $UM_{338}$ 4 7.9 276°.83 3°.2/10.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.65 | −16 22.0 | 1.475 | 2.276 | 18.3 | 21.6 |
| 3 12 | 13 29.26 | −16 25.3 | 1.374 | 2.257 | 14.9 | 21.3 |
| 3 22 | 13 22.87 | −16 6.7 | 1.293 | 2.238 | 10.7 | 21.0 |
| 4 1 | 13 14.05 | −15 25.9 | 1.235 | 2.219 | 6.0 | 20.7 |
| 4 11 | 13 3.92 | −14 26.1 | 1.201 | 2.199 | 3.2 | 20.4 |
| 4 21 | 12 53.86 | −13 14.5 | 1.193 | 2.179 | 6.9 | 20.6 |
| 5 1 | 12 45.31 | −12 0.8 | 1.210 | 2.159 | 12.0 | 20.8 |
| 5 11 | 12 39.36 | −10 55.2 | 1.248 | 2.139 | 16.7 | 21.0 |

**298343** 2003 $HV_{6}$ 4 7.9 25°.48 0°.1/ 7.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.12 | − 8 25.7 | 2.152 | 2.963 | 13.0 | 20.9 |
| 3 12 | 13 25.22 | − 8 8.4 | 2.070 | 2.966 | 10.0 | 20.7 |
| 3 22 | 13 19.46 | − 7 40.7 | 2.012 | 2.969 | 6.5 | 20.5 |
| 4 1 | 13 12.38 | − 7 5.6 | 1.979 | 2.972 | 2.7 | 20.2 |
| 4 11 | 13 4.77 | − 6 27.3 | 1.975 | 2.976 | 1.3 | 20.1 |
| 4 21 | 12 57.44 | − 5 50.5 | 1.999 | 2.980 | 5.2 | 20.4 |
| 5 1 | 12 51.16 | − 5 19.8 | 2.050 | 2.984 | 8.8 | 20.6 |
| 5 11 | 12 46.54 | − 4 58.8 | 2.125 | 2.988 | 12.0 | 20.8 |

**30572** 2001 $OE_{98}$ 4 7.9 139°.23 3°.2/11.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.64 | −20 53.2 | 2.610 | 3.357 | 12.6 | 18.6 |
| 3 12 | 13 25.38 | −20 45.7 | 2.520 | 3.365 | 10.3 | 18.4 |
| 3 22 | 13 19.44 | −20 22.4 | 2.453 | 3.373 | 7.6 | 18.2 |
| 4 1 | 13 12.35 | −19 43.7 | 2.411 | 3.380 | 4.9 | 18.1 |
| 4 11 | 13 4.79 | −18 52.4 | 2.398 | 3.387 | 3.3 | 18.0 |
| 4 21 | 12 57.48 | −17 52.6 | 2.414 | 3.394 | 4.5 | 18.1 |
| 5 1 | 12 51.12 | −16 49.5 | 2.459 | 3.400 | 7.1 | 18.2 |
| 5 11 | 12 46.24 | −15 48.7 | 2.529 | 3.407 | 9.8 | 18.4 |

**224419** 2005 $UA_{389}$ 4 7.9 305°.19 0°.6/ 7.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.02 | − 6 30.5 | 1.599 | 2.425 | 16.0 | 20.6 |
| 3 12 | 13 29.06 | − 6 26.2 | 1.508 | 2.412 | 12.4 | 20.3 |
| 3 22 | 13 22.45 | − 6 10.9 | 1.438 | 2.399 | 8.1 | 20.1 |
| 4 1 | 13 13.78 | − 5 47.7 | 1.393 | 2.386 | 3.3 | 19.7 |
| 4 11 | 13 4.11 | − 5 21.4 | 1.374 | 2.374 | 2.0 | 19.6 |
| 4 21 | 12 54.64 | − 4 57.8 | 1.381 | 2.362 | 7.0 | 19.9 |
| 5 1 | 12 46.58 | − 4 42.4 | 1.414 | 2.350 | 11.7 | 20.1 |
| 5 11 | 12 40.83 | − 4 39.6 | 1.468 | 2.339 | 15.9 | 20.3 |

**51008** 2000 $GD_{103}$ 4 7.9 119°.95 1°.4/ 6.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.86 | − 5 15.7 | 2.223 | 3.039 | 12.4 | 19.0 |
| 3 12 | 13 25.67 | − 4 37.2 | 2.146 | 3.046 | 9.4 | 18.8 |
| 3 22 | 13 19.69 | − 3 50.1 | 2.093 | 3.053 | 6.0 | 18.6 |
| 4 1 | 13 12.46 | − 2 58.4 | 2.066 | 3.060 | 2.5 | 18.4 |
| 4 11 | 13 4.76 | − 2 7.4 | 2.069 | 3.066 | 2.3 | 18.4 |
| 4 21 | 12 57.37 | − 1 22.0 | 2.100 | 3.072 | 5.8 | 18.6 |
| 5 1 | 12 51.03 | − 0 46.5 | 2.159 | 3.078 | 9.1 | 18.8 |
| 5 11 | 12 46.29 | − 0 24.0 | 2.241 | 3.084 | 12.1 | 19.0 |

**303263** 2004 $RJ_{102}$ 4 7.9 329°.86 6°.7/11.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.14 | −17 9.8 | 1.059 | 1.889 | 22.1 | 20.0 |
| 3 12 | 13 27.66 | −18 24.3 | 0.970 | 1.866 | 18.4 | 19.6 |
| 3 22 | 13 22.50 | −19 20.0 | 0.898 | 1.844 | 14.0 | 19.3 |
| 4 1 | 13 14.14 | −19 51.9 | 0.845 | 1.824 | 9.3 | 19.0 |
| 4 11 | 13 3.85 | −19 58.1 | 0.813 | 1.805 | 6.7 | 18.7 |
| 4 21 | 12 53.47 | −19 41.2 | 0.802 | 1.787 | 9.4 | 18.8 |
| 5 1 | 12 45.00 | −19 9.6 | 0.811 | 1.771 | 14.6 | 19.0 |
| 5 11 | 12 39.98 | −18 35.1 | 0.837 | 1.757 | 19.8 | 19.2 |

**331245** 2011 $BV_{122}$ 4 7.9 171°.28 2°.8/ 5.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.45 | − 2 12.1 | 1.976 | 2.801 | 13.4 | 21.1 |
| 3 12 | 13 27.14 | − 1 21.3 | 1.897 | 2.803 | 10.2 | 20.9 |
| 3 22 | 13 20.77 | − 0 22.7 | 1.843 | 2.805 | 6.6 | 20.7 |
| 4 1 | 13 12.95 | + 0 38.5 | 1.815 | 2.806 | 3.3 | 20.5 |
| 4 11 | 13 4.54 | + 1 35.7 | 1.816 | 2.807 | 3.7 | 20.5 |
| 4 21 | 12 56.46 | + 2 22.9 | 1.844 | 2.808 | 7.2 | 20.7 |
| 5 1 | 12 49.57 | + 2 55.5 | 1.898 | 2.808 | 10.8 | 20.9 |
| 5 11 | 12 44.51 | + 3 11.2 | 1.975 | 2.808 | 13.9 | 21.1 |

**458941** 2011 $UX_{336}$ 4 7.9 188°.92 2°.7/ 5.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.13 | − 2 22.6 | 1.922 | 2.739 | 14.0 | 22.6 |
| 3 12 | 13 30.82 | − 1 39.5 | 1.838 | 2.739 | 10.7 | 22.4 |
| 3 22 | 13 23.24 | − 0 48.3 | 1.778 | 2.738 | 6.9 | 22.2 |
| 4 1 | 13 14.00 | + 0 6.0 | 1.744 | 2.735 | 3.4 | 21.9 |
| 4 11 | 13 4.06 | + 0 56.8 | 1.740 | 2.732 | 3.6 | 21.9 |
| 4 21 | 12 54.45 | + 1 38.4 | 1.764 | 2.729 | 7.4 | 22.1 |
| 5 1 | 12 46.13 | + 2 5.8 | 1.814 | 2.724 | 11.2 | 22.4 |
| 5 11 | 12 39.83 | + 2 16.6 | 1.887 | 2.718 | 14.6 | 22.6 |

**76804** 2000 $QE$ 4 7.9 241°.91 1°.5/ 4.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 21.77 | − 0 38.8 | 4.505 | 5.320 | 6.6 | 19.4 |
| 3 12 | 13 18.71 | − 0 3.0 | 4.415 | 5.316 | 5.0 | 19.3 |
| 3 22 | 13 14.83 | + 0 35.5 | 4.352 | 5.312 | 3.2 | 19.1 |
| 4 1 | 13 10.39 | + 1 14.4 | 4.319 | 5.308 | 1.7 | 19.0 |
| 4 11 | 13 5.73 | + 1 51.2 | 4.316 | 5.304 | 2.0 | 19.0 |
| 4 21 | 13 1.17 | + 2 23.7 | 4.343 | 5.300 | 3.7 | 19.2 |
| 5 1 | 12 57.04 | + 2 50.0 | 4.398 | 5.296 | 5.4 | 19.3 |
| 5 11 | 12 53.62 | + 3 8.7 | 4.479 | 5.292 | 7.1 | 19.4 |

**101916** 1999 $RN_{13}$ 4 7.9 157°.48 0°.4/ 7.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.17 | − 8 38.9 | 2.058 | 2.860 | 13.8 | 20.5 |
| 3 12 | 13 29.13 | − 8 4.5 | 1.977 | 2.868 | 10.6 | 20.3 |
| 3 22 | 13 22.02 | − 7 18.1 | 1.920 | 2.876 | 6.9 | 20.1 |
| 4 1 | 13 13.46 | − 6 23.3 | 1.890 | 2.882 | 2.8 | 19.9 |
| 4 11 | 13 4.34 | − 5 25.5 | 1.888 | 2.888 | 1.6 | 19.8 |
| 4 21 | 12 55.56 | − 4 30.5 | 1.916 | 2.893 | 5.7 | 20.1 |
| 5 1 | 12 48.01 | − 3 43.8 | 1.971 | 2.898 | 9.5 | 20.3 |
| 5 11 | 12 42.31 | − 3 9.5 | 2.051 | 2.902 | 12.8 | 20.5 |

**184983** 2006 $CS_{19}$ 4 7.9 246°.84 2°.1/ 3.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 21.63 | + 2 30.7 | 4.565 | 5.385 | 6.4 | 20.6 |
| 3 12 | 13 18.61 | + 3 10.3 | 4.479 | 5.381 | 4.9 | 20.5 |
| 3 22 | 13 14.76 | + 3 51.4 | 4.419 | 5.376 | 3.3 | 20.4 |
| 4 1 | 13 10.37 | + 4 31.5 | 4.389 | 5.372 | 2.1 | 20.3 |
| 4 11 | 13 5.76 | + 5 8.2 | 4.389 | 5.368 | 2.6 | 20.3 |
| 4 21 | 13 1.25 | + 5 39.2 | 4.419 | 5.363 | 4.0 | 20.4 |
| 5 1 | 12 57.17 | + 6 2.9 | 4.477 | 5.359 | 5.7 | 20.6 |
| 5 11 | 12 53.79 | + 6 18.1 | 4.559 | 5.354 | 7.2 | 20.7 |

**153081** 2000 $RU_{19}$ 4 7.9 145°.90 0°.2/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.31 | −10 39.6 | 2.308 | 3.105 | 12.6 | 20.9 |
| 3 12 | 13 25.96 | − 9 42.4 | 2.227 | 3.115 | 9.7 | 20.7 |
| 3 22 | 13 19.85 | − 8 32.0 | 2.170 | 3.125 | 6.3 | 20.5 |
| 4 1 | 13 12.54 | − 7 12.2 | 2.141 | 3.134 | 2.6 | 20.3 |
| 4 11 | 13 4.78 | − 5 48.9 | 2.142 | 3.142 | 1.4 | 20.2 |
| 4 21 | 12 57.35 | − 4 28.3 | 2.172 | 3.150 | 5.1 | 20.5 |
| 5 1 | 12 50.95 | − 3 16.4 | 2.231 | 3.157 | 8.6 | 20.7 |
| 5 11 | 12 46.13 | − 2 17.6 | 2.315 | 3.164 | 11.6 | 20.9 |

**462591** 2009 $GZ_{4}$ 4 7.9 352°.00 1°.8/ 9.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.74 | −12 9.6 | 1.244 | 2.076 | 19.3 | 21.1 |
| 3 12 | 13 27.15 | −12 16.5 | 1.167 | 2.071 | 15.2 | 20.9 |
| 3 22 | 13 21.49 | −12 4.2 | 1.109 | 2.067 | 10.4 | 20.6 |
| 4 1 | 13 13.46 | −11 34.1 | 1.073 | 2.064 | 5.0 | 20.3 |
| 4 11 | 13 4.33 | −10 51.6 | 1.061 | 2.062 | 2.1 | 20.0 |
| 4 21 | 12 55.58 | −10 4.4 | 1.073 | 2.060 | 7.2 | 20.3 |
| 5 1 | 12 48.61 | − 9 21.3 | 1.107 | 2.060 | 12.5 | 20.6 |
| 5 11 | 12 44.40 | − 8 50.1 | 1.162 | 2.060 | 17.2 | 20.9 |

**158224** 2001 $SJ_{184}$ 4 7.9 147°.84 3°.7/ 4.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.47 | − 1 24.4 | 1.738 | 2.566 | 14.8 | 20.8 |
| 3 12 | 13 29.63 | − 0 13.1 | 1.669 | 2.576 | 11.2 | 20.6 |
| 3 22 | 13 22.47 | + 1 7.0 | 1.623 | 2.585 | 7.3 | 20.3 |
| 4 1 | 13 13.67 | + 2 28.4 | 1.605 | 2.593 | 4.0 | 20.2 |
| 4 11 | 13 4.28 | + 3 42.9 | 1.614 | 2.601 | 4.8 | 20.2 |
| 4 21 | 12 55.36 | + 4 42.9 | 1.650 | 2.608 | 8.4 | 20.5 |
| 5 1 | 12 47.87 | + 5 23.5 | 1.713 | 2.614 | 12.2 | 20.7 |
| 5 11 | 12 42.51 | + 5 42.7 | 1.796 | 2.620 | 15.5 | 20.9 |

**349007** 2006 $UA_{274}$ 4 7.9 182°.13 0°.8/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.30 | − 5 43.5 | 2.713 | 3.516 | 10.8 | 21.5 |
| 3 12 | 13 25.74 | − 5 23.4 | 2.624 | 3.517 | 8.2 | 21.3 |
| 3 22 | 13 19.64 | − 4 56.5 | 2.560 | 3.517 | 5.3 | 21.1 |
| 4 1 | 13 12.46 | − 4 25.5 | 2.524 | 3.517 | 2.1 | 20.9 |
| 4 11 | 13 4.82 | − 3 53.8 | 2.517 | 3.516 | 1.6 | 20.8 |
| 4 21 | 12 57.40 | − 3 25.0 | 2.541 | 3.515 | 4.7 | 21.1 |
| 5 1 | 12 50.83 | − 3 2.5 | 2.593 | 3.514 | 7.7 | 21.2 |
| 5 11 | 12 45.60 | − 2 48.7 | 2.670 | 3.513 | 10.4 | 21.4 |

**293394** 2007 $EE_{59}$ 4 7.9 330°.89 1°.4/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.63 | − 7 29.5 | 1.162 | 2.011 | 19.2 | 21.1 |
| 3 12 | 13 27.22 | − 6 53.8 | 1.086 | 2.003 | 14.9 | 20.8 |
| 3 22 | 13 21.62 | − 5 59.3 | 1.029 | 1.996 | 9.7 | 20.5 |
| 4 1 | 13 13.54 | − 4 51.3 | 0.994 | 1.989 | 3.9 | 20.1 |
| 4 11 | 13 4.31 | − 3 39.5 | 0.983 | 1.982 | 3.0 | 20.1 |
| 4 21 | 12 55.47 | − 2 34.4 | 0.995 | 1.977 | 8.8 | 20.4 |
| 5 1 | 12 48.48 | − 1 45.9 | 1.030 | 1.972 | 14.4 | 20.7 |
| 5 11 | 12 44.35 | − 1 19.9 | 1.083 | 1.967 | 19.2 | 20.9 |

**121391** 1999 $TP_{118}$ 4 7.9 147°.90 1°.6/ 9.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.13 | −13 26.7 | 2.061 | 2.851 | 14.2 | 20.1 |
| 3 12 | 13 27.70 | −13 23.7 | 1.975 | 2.854 | 11.2 | 19.9 |
| 3 22 | 13 21.18 | −13 6.7 | 1.910 | 2.857 | 7.7 | 19.7 |
| 4 1 | 13 13.17 | −12 37.2 | 1.872 | 2.859 | 3.9 | 19.5 |
| 4 11 | 13 4.51 | −11 58.9 | 1.862 | 2.862 | 1.8 | 19.4 |
| 4 21 | 12 56.14 | −11 16.4 | 1.880 | 2.864 | 5.1 | 19.6 |
| 5 1 | 12 48.93 | −10 35.3 | 1.925 | 2.866 | 8.8 | 19.8 |
| 5 11 | 12 43.56 | −10 0.8 | 1.995 | 2.868 | 12.2 | 20.0 |

**146822** 2001 $YF_{130}$ 4 7.9 191°.15 6°.5/30.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.90 | +14 38.0 | 2.655 | 3.476 | 10.5 | 20.3 |
| 3 12 | 13 26.20 | +15 38.1 | 2.588 | 3.475 | 8.5 | 20.2 |
| 3 22 | 13 19.93 | +16 33.3 | 2.546 | 3.474 | 7.0 | 20.1 |
| 4 1 | 13 12.57 | +17 17.9 | 2.531 | 3.473 | 6.5 | 20.0 |
| 4 11 | 13 4.80 | +17 47.0 | 2.544 | 3.471 | 7.4 | 20.1 |
| 4 21 | 12 57.32 | +17 57.7 | 2.583 | 3.469 | 9.1 | 20.2 |
| 5 1 | 12 50.77 | +17 48.9 | 2.647 | 3.467 | 11.1 | 20.3 |
| 5 11 | 12 45.64 | +17 21.7 | 2.732 | 3.464 | 13.0 | 20.4 |

**169360** 2001 $UE_{64}$ 4 7.9 49°.18 4°.5/13.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.22 | −24 0.2 | 1.985 | 2.737 | 15.9 | 19.1 |
| 3 12 | 13 24.75 | −23 46.0 | 1.912 | 2.756 | 13.1 | 19.0 |
| 3 22 | 13 19.24 | −23 8.9 | 1.860 | 2.775 | 9.9 | 18.8 |
| 4 1 | 13 12.33 | −22 9.9 | 1.831 | 2.794 | 6.7 | 18.6 |
| 4 11 | 13 4.92 | −20 52.8 | 1.828 | 2.814 | 4.6 | 18.6 |
| 4 21 | 12 57.95 | −19 24.3 | 1.854 | 2.834 | 5.5 | 18.7 |
| 5 1 | 12 52.25 | −17 52.3 | 1.906 | 2.854 | 8.4 | 18.9 |
| 5 11 | 12 48.40 | −16 25.0 | 1.983 | 2.874 | 11.4 | 19.1 |

**370973** 2005 $SK_{211}$ 4 7.9 226°.70 0°.1/ 8.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.58 | − 9 23.4 | 2.136 | 2.936 | 13.4 | 22.3 |
| 3 12 | 13 28.82 | − 9 8.2 | 2.038 | 2.926 | 10.5 | 22.0 |
| 3 22 | 13 21.95 | − 8 41.4 | 1.962 | 2.916 | 6.9 | 21.8 |
| 4 1 | 13 13.52 | − 8 5.5 | 1.913 | 2.905 | 2.9 | 21.5 |
| 4 11 | 13 4.34 | − 7 24.5 | 1.892 | 2.893 | 1.3 | 21.4 |
| 4 21 | 12 55.35 | − 6 43.3 | 1.901 | 2.881 | 5.4 | 21.6 |
| 5 1 | 12 47.43 | − 6 7.1 | 1.937 | 2.869 | 9.3 | 21.8 |
| 5 11 | 12 41.30 | − 5 40.3 | 1.998 | 2.856 | 12.8 | 22.0 |

**463282** 2012 $HR_{15}$ 4 7.9 36°.85 20°.9/ 9.2 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 14 29.83 | +41 8.7 | 1.086 | 1.810 | 27.9 | 19.8 |
| 3 12 | 14 9.25 | +43 16.8 | 1.144 | 1.911 | 24.7 | 19.9 |
| 3 22 | 13 45.60 | +44 21.0 | 1.220 | 2.009 | 22.4 | 20.1 |
| 4 1 | 13 21.96 | +44 15.7 | 1.314 | 2.104 | 21.2 | 20.3 |
| 4 11 | 13 1.20 | +43 9.1 | 1.428 | 2.196 | 21.0 | 20.6 |
| 4 21 | 12 44.93 | +41 17.2 | 1.561 | 2.284 | 21.3 | 20.9 |
| 5 1 | 12 33.56 | +38 56.5 | 1.710 | 2.370 | 21.8 | 21.2 |
| 5 11 | 12 26.70 | +36 21.1 | 1.873 | 2.453 | 22.2 | 21.5 |

**508481** 2016 $PE_{41}$ 4 7.9 223°.63 3°.8/ 3.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.81 | + 3 22.5 | 2.433 | 3.260 | 11.1 | 21.3 |
| 3 12 | 13 25.55 | + 4 9.3 | 2.352 | 3.256 | 8.5 | 21.1 |
| 3 22 | 13 19.60 | + 4 58.5 | 2.295 | 3.252 | 5.8 | 20.9 |
| 4 1 | 13 12.47 | + 5 45.3 | 2.265 | 3.248 | 3.9 | 20.8 |
| 4 11 | 13 4.86 | + 6 24.6 | 2.265 | 3.243 | 4.6 | 20.8 |
| 4 21 | 12 57.48 | + 6 52.2 | 2.293 | 3.238 | 7.2 | 21.0 |
| 5 1 | 12 51.04 | + 7 5.3 | 2.347 | 3.233 | 10.0 | 21.1 |
| 5 11 | 12 46.07 | + 7 2.8 | 2.423 | 3.228 | 12.5 | 21.3 |

**242730** 2005 $UT_{216}$ 4 7.9 175°.15 2°.5/10.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.44 | −19 0.1 | 2.448 | 3.205 | 13.1 | 20.7 |
| 3 12 | 13 26.87 | −18 33.7 | 2.353 | 3.208 | 10.6 | 20.6 |
| 3 22 | 13 20.50 | −17 50.3 | 2.281 | 3.211 | 7.6 | 20.4 |
| 4 1 | 13 12.86 | −16 51.2 | 2.235 | 3.212 | 4.5 | 20.2 |
| 4 11 | 13 4.69 | −15 39.9 | 2.218 | 3.213 | 2.5 | 20.0 |
| 4 21 | 12 56.78 | −14 21.7 | 2.231 | 3.214 | 4.5 | 20.2 |
| 5 1 | 12 49.88 | −13 3.1 | 2.273 | 3.214 | 7.7 | 20.4 |
| 5 11 | 12 44.57 | −11 50.0 | 2.341 | 3.213 | 10.7 | 20.6 |

**168872** 2000 $WZ_{9}$ 4 7.9 81°.00 2°.7/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.45 | − 3 30.5 | 1.506 | 2.339 | 16.4 | 20.4 |
| 3 12 | 13 29.82 | − 2 42.7 | 1.449 | 2.358 | 12.4 | 20.2 |
| 3 22 | 13 22.65 | − 1 45.1 | 1.414 | 2.377 | 8.0 | 20.0 |
| 4 1 | 13 13.76 | − 0 44.1 | 1.403 | 2.396 | 3.6 | 19.8 |
| 4 11 | 13 4.32 | + 0 12.1 | 1.420 | 2.414 | 3.8 | 19.8 |
| 4 21 | 12 55.52 | + 0 56.7 | 1.463 | 2.433 | 8.0 | 20.1 |
| 5 1 | 12 48.38 | + 1 24.5 | 1.530 | 2.451 | 12.1 | 20.4 |
| 5 11 | 12 43.58 | + 1 33.3 | 1.619 | 2.469 | 15.7 | 20.7 |

**265710** 2005 $UM_{238}$ 4 7.9 222°.03 2°.2/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.73 | − 4 10.8 | 1.911 | 2.735 | 13.8 | 21.4 |
| 3 12 | 13 26.75 | − 3 22.0 | 1.827 | 2.732 | 10.5 | 21.2 |
| 3 22 | 13 20.63 | − 2 23.1 | 1.766 | 2.728 | 6.8 | 20.9 |
| 4 1 | 13 12.97 | − 1 19.2 | 1.732 | 2.725 | 3.1 | 20.7 |
| 4 11 | 13 4.65 | − 0 16.8 | 1.726 | 2.721 | 3.2 | 20.7 |
| 4 21 | 12 56.63 | + 0 37.4 | 1.747 | 2.716 | 7.0 | 20.9 |
| 5 1 | 12 49.79 | + 1 18.0 | 1.795 | 2.712 | 10.8 | 21.1 |
| 5 11 | 12 44.82 | + 1 41.7 | 1.865 | 2.708 | 14.2 | 21.3 |

**209387** 2004 $EZ_{47}$ 4 7.9 17°.06 0°.3/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.25 | − 8 51.2 | 1.968 | 2.784 | 13.8 | 20.8 |
| 3 12 | 13 24.77 | − 8 21.0 | 1.888 | 2.786 | 10.6 | 20.6 |
| 3 22 | 13 19.29 | − 7 38.5 | 1.830 | 2.789 | 6.9 | 20.4 |
| 4 1 | 13 12.39 | − 6 47.2 | 1.798 | 2.791 | 2.8 | 20.1 |
| 4 11 | 13 4.93 | − 5 52.5 | 1.794 | 2.794 | 1.5 | 20.0 |
| 4 21 | 12 57.76 | − 5 0.2 | 1.818 | 2.798 | 5.6 | 20.3 |
| 5 1 | 12 51.74 | − 4 15.9 | 1.867 | 2.801 | 9.5 | 20.5 |
| 5 11 | 12 47.48 | − 3 43.9 | 1.941 | 2.805 | 12.8 | 20.7 |

**123528** 2000 $XZ_{12}$ 4 7.9 172°.01 2°.5/10.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.27 | −16 51.2 | 2.287 | 3.057 | 13.6 | 20.6 |
| 3 12 | 13 27.65 | −16 46.8 | 2.195 | 3.059 | 10.9 | 20.4 |
| 3 22 | 13 21.09 | −16 27.2 | 2.126 | 3.061 | 7.7 | 20.2 |
| 4 1 | 13 13.14 | −15 53.2 | 2.083 | 3.063 | 4.4 | 20.0 |
| 4 11 | 13 4.59 | −15 8.0 | 2.068 | 3.065 | 2.5 | 19.9 |
| 4 21 | 12 56.29 | −14 16.0 | 2.083 | 3.065 | 4.8 | 20.0 |
| 5 1 | 12 49.06 | −13 22.9 | 2.125 | 3.066 | 8.1 | 20.2 |
| 5 11 | 12 43.52 | −12 34.2 | 2.192 | 3.066 | 11.2 | 20.4 |

**498098** 2007 $RC_{292}$ 4 7.9 151°.17 0°.6/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.74 | − 7 48.2 | 2.295 | 3.103 | 12.4 | 22.3 |
| 3 12 | 13 25.59 | − 7 15.4 | 2.212 | 3.106 | 9.5 | 22.1 |
| 3 22 | 13 19.68 | − 6 32.5 | 2.152 | 3.110 | 6.1 | 21.9 |
| 4 1 | 13 12.53 | − 5 42.8 | 2.120 | 3.113 | 2.5 | 21.7 |
| 4 11 | 13 4.87 | − 4 51.0 | 2.116 | 3.116 | 1.6 | 21.6 |
| 4 21 | 12 57.49 | − 4 2.2 | 2.141 | 3.119 | 5.2 | 21.9 |
| 5 1 | 12 51.11 | − 3 21.0 | 2.194 | 3.121 | 8.7 | 22.1 |
| 5 11 | 12 46.30 | − 2 50.9 | 2.271 | 3.123 | 11.7 | 22.3 |

**8804** Eliason 4 7.9 287°.22 3°.0/ 5.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.90 | + 1 17.6 | 2.314 | 3.136 | 11.8 | 16.9 |
| 3 12 | 13 27.24 | + 1 39.6 | 2.229 | 3.132 | 9.0 | 16.7 |
| 3 22 | 13 20.76 | + 2 4.6 | 2.169 | 3.128 | 5.9 | 16.5 |
| 4 1 | 13 12.99 | + 2 28.5 | 2.136 | 3.125 | 3.3 | 16.3 |
| 4 11 | 13 4.68 | + 2 46.9 | 2.133 | 3.121 | 3.7 | 16.4 |
| 4 21 | 12 56.62 | + 2 56.4 | 2.157 | 3.117 | 6.6 | 16.5 |
| 5 1 | 12 49.58 | + 2 54.1 | 2.208 | 3.113 | 9.7 | 16.7 |
| 5 11 | 12 44.12 | + 2 39.0 | 2.283 | 3.109 | 12.5 | 16.9 |

**177994** 2006 $QP_{63}$ 4 7.9 240°.17 0°.1/ 8.0 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.39 | −10 49.4 | 1.947 | 2.750 | 14.4 | 21.2 |
| 3 12 | 13 28.17 | −10 16.1 | 1.846 | 2.736 | 11.3 | 20.9 |
| 3 22 | 13 21.68 | − 9 27.3 | 1.767 | 2.721 | 7.5 | 20.7 |
| 4 1 | 13 13.48 | − 8 25.9 | 1.714 | 2.706 | 3.2 | 20.4 |
| 4 11 | 13 4.43 | − 7 17.3 | 1.690 | 2.690 | 1.4 | 20.2 |
| 4 21 | 12 55.55 | − 6 8.1 | 1.694 | 2.674 | 5.9 | 20.4 |
| 5 1 | 12 47.82 | − 5 5.4 | 1.724 | 2.657 | 10.2 | 20.7 |
| 5 11 | 12 42.02 | − 4 15.3 | 1.779 | 2.640 | 14.0 | 20.9 |

**268430** 2005 $UM_{512}$ 4 7.9 199°.10 2°.8/ 4.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.47 | − 1 54.0 | 2.133 | 2.955 | 12.7 | 21.3 |
| 3 12 | 13 27.08 | − 1 0.1 | 2.049 | 2.953 | 9.6 | 21.1 |
| 3 22 | 13 20.73 | + 0 1.3 | 1.989 | 2.950 | 6.2 | 20.9 |
| 4 1 | 13 13.00 | + 1 5.1 | 1.956 | 2.946 | 3.2 | 20.7 |
| 4 11 | 13 4.68 | + 2 5.1 | 1.952 | 2.942 | 3.7 | 20.7 |
| 4 21 | 12 56.63 | + 2 55.6 | 1.976 | 2.938 | 7.0 | 20.9 |
| 5 1 | 12 49.66 | + 3 31.9 | 2.027 | 2.933 | 10.4 | 21.1 |
| 5 11 | 12 44.40 | + 3 51.6 | 2.101 | 2.927 | 13.5 | 21.3 |

**192878** 1999 $XD_{47}$ 4 7.9 206°.22 2°.2/10.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.22 | −17 9.6 | 2.620 | 3.382 | 12.2 | 21.4 |
| 3 12 | 13 26.67 | −16 56.1 | 2.517 | 3.376 | 9.8 | 21.2 |
| 3 22 | 13 20.38 | −16 28.5 | 2.436 | 3.370 | 7.0 | 21.0 |
| 4 1 | 13 12.85 | −15 47.5 | 2.383 | 3.363 | 4.0 | 20.8 |
| 4 11 | 13 4.75 | −14 56.0 | 2.359 | 3.355 | 2.2 | 20.6 |
| 4 21 | 12 56.82 | −13 58.3 | 2.364 | 3.347 | 4.3 | 20.8 |
| 5 1 | 12 49.78 | −12 59.5 | 2.398 | 3.338 | 7.4 | 21.0 |
| 5 11 | 12 44.20 | −12 4.7 | 2.459 | 3.328 | 10.3 | 21.1 |

**511634** 2015 $BA_{107}$ 4 7.9 12°.48 8°.2/15.0 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.29 | −28 31.7 | 1.865 | 2.588 | 17.8 | 20.9 |
| 3 12 | 13 29.26 | −29 35.1 | 1.778 | 2.589 | 15.4 | 20.8 |
| 3 22 | 13 22.60 | −30 16.4 | 1.710 | 2.591 | 12.7 | 20.6 |
| 4 1 | 13 13.91 | −30 31.7 | 1.663 | 2.593 | 10.1 | 20.4 |
| 4 11 | 13 4.25 | −30 19.9 | 1.641 | 2.596 | 8.4 | 20.3 |
| 4 21 | 12 54.82 | −29 43.6 | 1.643 | 2.599 | 8.6 | 20.3 |
| 5 1 | 12 46.79 | −28 49.3 | 1.670 | 2.602 | 10.5 | 20.5 |
| 5 11 | 12 41.07 | −27 46.0 | 1.720 | 2.605 | 13.2 | 20.6 |

**498846** 2008 $WY_{99}$ 4 7.9 205°.22 2°.3/ 5.5 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.29 | − 2 13.3 | 2.200 | 3.020 | 12.4 | 22.1 |
| 3 12 | 13 26.88 | − 1 36.0 | 2.115 | 3.018 | 9.4 | 21.8 |
| 3 22 | 13 20.58 | − 0 52.1 | 2.054 | 3.015 | 6.1 | 21.6 |
| 4 1 | 13 12.94 | − 0 5.8 | 2.021 | 3.012 | 2.9 | 21.4 |
| 4 11 | 13 4.73 | + 0 37.5 | 2.016 | 3.009 | 3.2 | 21.4 |
| 4 21 | 12 56.78 | + 1 13.1 | 2.039 | 3.005 | 6.4 | 21.6 |
| 5 1 | 12 49.88 | + 1 36.8 | 2.090 | 3.001 | 9.8 | 21.8 |
| 5 11 | 12 44.63 | + 1 46.5 | 2.163 | 2.997 | 12.8 | 22.0 |

**322290** 2011 $FV_{42}$ 4 7.9 233°.38 1°.2/ 6.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.42 | − 5 22.5 | 2.060 | 2.874 | 13.3 | 20.6 |
| 3 12 | 13 27.93 | − 5 1.7 | 1.970 | 2.869 | 10.2 | 20.4 |
| 3 22 | 13 21.37 | − 4 32.1 | 1.904 | 2.864 | 6.6 | 20.2 |
| 4 1 | 13 13.30 | − 3 57.1 | 1.865 | 2.858 | 2.7 | 19.9 |
| 4 11 | 13 4.57 | − 3 21.5 | 1.854 | 2.852 | 2.1 | 19.9 |
| 4 21 | 12 56.07 | − 2 50.1 | 1.871 | 2.846 | 6.0 | 20.1 |
| 5 1 | 12 48.69 | − 2 27.4 | 1.915 | 2.840 | 9.8 | 20.3 |
| 5 11 | 12 43.11 | − 2 16.7 | 1.983 | 2.834 | 13.2 | 20.5 |

**364201** 2006 $QG_{76}$ 4 7.9 250°.90 1°.4/ 6.6 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.67 | − 6 30.0 | 1.850 | 2.667 | 14.5 | 21.7 |
| 3 12 | 13 28.50 | − 5 49.4 | 1.751 | 2.651 | 11.2 | 21.4 |
| 3 22 | 13 21.96 | − 4 55.9 | 1.675 | 2.635 | 7.3 | 21.2 |
| 4 1 | 13 13.62 | − 3 53.7 | 1.624 | 2.618 | 3.0 | 20.8 |
| 4 11 | 13 4.40 | − 2 49.1 | 1.602 | 2.600 | 2.5 | 20.8 |
| 4 21 | 12 55.33 | − 1 49.1 | 1.608 | 2.582 | 6.9 | 21.0 |
| 5 1 | 12 47.45 | − 1 0.4 | 1.639 | 2.563 | 11.2 | 21.2 |
| 5 11 | 12 41.58 | − 0 27.8 | 1.693 | 2.544 | 15.1 | 21.4 |

**391737** 2008 $CO_{196}$ 4 7.9 135°.19 3°.7/11.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.86 | −20 6.2 | 2.454 | 3.207 | 13.2 | 21.2 |
| 3 12 | 13 26.52 | −20 21.6 | 2.361 | 3.209 | 10.8 | 21.1 |
| 3 22 | 13 20.35 | −20 21.9 | 2.290 | 3.211 | 8.1 | 20.9 |
| 4 1 | 13 12.85 | −20 7.0 | 2.245 | 3.213 | 5.3 | 20.7 |
| 4 11 | 13 4.77 | −19 38.8 | 2.227 | 3.214 | 3.7 | 20.6 |
| 4 21 | 12 56.90 | −19 0.5 | 2.238 | 3.216 | 4.9 | 20.7 |
| 5 1 | 12 50.01 | −18 17.0 | 2.276 | 3.218 | 7.6 | 20.9 |
| 5 11 | 12 44.71 | −17 33.7 | 2.340 | 3.220 | 10.4 | 21.0 |

**16644** Otemaedaigaku 4 7.9 228°.66 1°.6/ 6.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.13 | − 7 0.7 | 1.763 | 2.583 | 15.0 | 18.2 |
| 3 12 | 13 28.10 | − 6 3.9 | 1.672 | 2.574 | 11.5 | 18.0 |
| 3 22 | 13 21.69 | − 4 52.3 | 1.604 | 2.565 | 7.4 | 17.7 |
| 4 1 | 13 13.49 | − 3 30.9 | 1.561 | 2.555 | 3.1 | 17.4 |
| 4 11 | 13 4.47 | − 2 7.4 | 1.547 | 2.544 | 2.8 | 17.4 |
| 4 21 | 12 55.70 | − 0 50.1 | 1.560 | 2.533 | 7.2 | 17.6 |
| 5 1 | 12 48.22 | + 0 13.4 | 1.599 | 2.521 | 11.6 | 17.8 |
| 5 11 | 12 42.80 | + 0 58.2 | 1.660 | 2.509 | 15.4 | 18.0 |

**89202** 2001 $UJ_{90}$ 4 7.9 20°.55 0°.8/ 8.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.52 | −13 40.6 | 2.057 | 2.857 | 13.9 | 19.7 |
| 3 12 | 13 23.40 | −12 57.1 | 1.973 | 2.860 | 10.8 | 19.5 |
| 3 22 | 13 18.38 | −11 57.0 | 1.911 | 2.863 | 7.3 | 19.3 |
| 4 1 | 13 12.04 | −10 43.6 | 1.876 | 2.866 | 3.4 | 19.1 |
| 4 11 | 13 5.16 | − 9 22.6 | 1.868 | 2.869 | 1.2 | 18.9 |
| 4 21 | 12 58.58 | − 8 0.6 | 1.889 | 2.873 | 5.1 | 19.2 |
| 5 1 | 12 53.07 | − 6 44.7 | 1.937 | 2.877 | 8.8 | 19.4 |
| 5 11 | 12 49.23 | − 5 40.6 | 2.009 | 2.881 | 12.2 | 19.6 |

**84270** 2002 $TT_{8}$ 4 7.9 123°.52 0°.0/ 7.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.58 | −10 58.2 | 2.376 | 3.174 | 12.3 | 19.9 |
| 3 12 | 13 24.63 | −10 9.7 | 2.296 | 3.184 | 9.5 | 19.7 |
| 3 22 | 13 19.01 | − 9 8.6 | 2.239 | 3.193 | 6.2 | 19.6 |
| 4 1 | 13 12.26 | − 7 58.4 | 2.211 | 3.203 | 2.6 | 19.3 |
| 4 11 | 13 5.08 | − 6 44.3 | 2.211 | 3.212 | 1.2 | 19.2 |
| 4 21 | 12 58.19 | − 5 32.0 | 2.241 | 3.220 | 4.8 | 19.5 |
| 5 1 | 12 52.29 | − 4 26.9 | 2.299 | 3.229 | 8.2 | 19.7 |
| 5 11 | 12 47.87 | − 3 33.4 | 2.382 | 3.237 | 11.1 | 19.9 |

**255456** 2005 $YW_{52}$ 4 7.9 158°.71 18°.5/19.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 39.73 | +32 3.7 | 1.295 | 2.106 | 19.8 | 20.3 |
| 3 12 | 13 34.87 | +34 58.0 | 1.273 | 2.111 | 18.7 | 20.2 |
| 3 22 | 13 26.41 | +37 22.6 | 1.270 | 2.116 | 18.5 | 20.2 |
| 4 1 | 13 15.44 | +39 1.5 | 1.285 | 2.119 | 19.2 | 20.3 |
| 4 11 | 13 3.68 | +39 45.4 | 1.319 | 2.123 | 20.6 | 20.4 |
| 4 21 | 12 52.90 | +39 33.9 | 1.367 | 2.125 | 22.3 | 20.5 |
| 5 1 | 12 44.54 | +38 32.5 | 1.429 | 2.127 | 24.1 | 20.6 |
| 5 11 | 12 39.42 | +36 51.3 | 1.501 | 2.129 | 25.6 | 20.8 |

**468667** 2008 $YD_{66}$ 4 7.9 263°.12 13°.4/20.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 45.53 | +38 14.6 | 2.350 | 3.083 | 14.2 | 20.8 |
| 3 12 | 13 38.07 | +39 32.0 | 2.291 | 3.061 | 13.6 | 20.7 |
| 3 22 | 13 27.97 | +40 28.5 | 2.252 | 3.038 | 13.4 | 20.7 |
| 4 1 | 13 16.03 | +40 55.3 | 2.234 | 3.014 | 13.8 | 20.6 |
| 4 11 | 13 3.40 | +40 46.4 | 2.238 | 2.990 | 14.7 | 20.7 |
| 4 21 | 12 51.33 | +40 0.4 | 2.261 | 2.966 | 15.9 | 20.7 |
| 5 1 | 12 40.92 | +38 39.6 | 2.303 | 2.941 | 17.2 | 20.8 |
| 5 11 | 12 32.94 | +36 49.6 | 2.360 | 2.916 | 18.5 | 20.8 |

**121349** 1999 $TM_{34}$ 4 7.9 259°.97 2°.9/ 8.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 49.88 | − 8 20.6 | 1.194 | 2.006 | 21.2 | 19.0 |
| 3 12 | 13 43.51 | − 9 45.5 | 1.105 | 1.997 | 17.0 | 18.7 |
| 3 22 | 13 32.84 | −11 5.4 | 1.036 | 1.988 | 11.8 | 18.4 |
| 4 1 | 13 18.53 | −12 17.1 | 0.990 | 1.979 | 6.0 | 18.0 |
| 4 11 | 13 2.14 | −13 18.4 | 0.970 | 1.969 | 3.3 | 17.8 |
| 4 21 | 12 45.83 | −14 8.8 | 0.977 | 1.960 | 8.7 | 18.1 |
| 5 1 | 12 31.78 | −14 51.2 | 1.009 | 1.950 | 14.7 | 18.4 |
| 5 11 | 12 21.53 | −15 31.1 | 1.061 | 1.940 | 19.9 | 18.7 |

**501461** 2014 $AS_{49}$ 4 7.9 29°.84 5°.6/ 2.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.84 | + 6 11.9 | 1.943 | 2.784 | 12.9 | 21.0 |
| 3 12 | 13 25.16 | + 7 20.8 | 1.879 | 2.789 | 10.0 | 20.8 |
| 3 22 | 13 19.50 | + 8 30.5 | 1.839 | 2.794 | 7.2 | 20.7 |
| 4 1 | 13 12.50 | + 9 33.9 | 1.825 | 2.799 | 5.6 | 20.6 |
| 4 11 | 13 4.99 | +10 23.9 | 1.838 | 2.805 | 6.7 | 20.7 |
| 4 21 | 12 57.86 | +10 55.5 | 1.877 | 2.810 | 9.3 | 20.8 |
| 5 1 | 12 51.91 | +11 6.0 | 1.941 | 2.816 | 12.2 | 21.0 |
| 5 11 | 12 47.73 | +10 55.6 | 2.024 | 2.823 | 14.9 | 21.2 |

**438411** 2006 $VE_{23}$ 4 7.9 308°.76 2°.6/10.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.66 | −18 26.4 | 2.336 | 3.106 | 13.3 | 20.9 |
| 3 12 | 13 24.14 | −18 8.3 | 2.241 | 3.104 | 10.7 | 20.7 |
| 3 22 | 13 18.83 | −17 33.3 | 2.169 | 3.102 | 7.7 | 20.5 |
| 4 1 | 13 12.24 | −16 42.8 | 2.122 | 3.100 | 4.5 | 20.3 |
| 4 11 | 13 5.10 | −15 40.2 | 2.103 | 3.099 | 2.6 | 20.2 |
| 4 21 | 12 58.18 | −14 30.5 | 2.113 | 3.097 | 4.6 | 20.3 |
| 5 1 | 12 52.24 | −13 19.9 | 2.151 | 3.095 | 7.8 | 20.5 |
| 5 11 | 12 47.86 | −12 14.5 | 2.214 | 3.094 | 10.9 | 20.7 |

**199089** 2005 $YC_{7}$ 4 7.9 107°.54 3°.3/10.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.67 | −15 54.8 | 1.515 | 2.308 | 18.3 | 20.9 |
| 3 12 | 13 32.67 | −16 12.8 | 1.443 | 2.320 | 14.7 | 20.6 |
| 3 22 | 13 24.78 | −16 11.6 | 1.390 | 2.332 | 10.4 | 20.4 |
| 4 1 | 13 14.80 | −15 51.3 | 1.361 | 2.344 | 5.9 | 20.2 |
| 4 11 | 13 3.97 | −15 15.3 | 1.358 | 2.355 | 3.3 | 20.1 |
| 4 21 | 12 53.66 | −14 30.0 | 1.382 | 2.366 | 6.5 | 20.3 |
| 5 1 | 12 45.10 | −13 43.0 | 1.431 | 2.377 | 10.8 | 20.5 |
| 5 11 | 12 39.15 | −13 2.2 | 1.503 | 2.387 | 14.8 | 20.8 |

**360165** 2013 $CE_{80}$ 4 7.9 351°.32 2°.3/ 9.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.84 | −14 21.7 | 1.218 | 2.045 | 19.9 | 20.8 |
| 3 12 | 13 27.34 | −14 18.3 | 1.141 | 2.041 | 15.9 | 20.5 |
| 3 22 | 13 21.69 | −13 51.5 | 1.084 | 2.038 | 11.0 | 20.2 |
| 4 1 | 13 13.63 | −13 2.7 | 1.047 | 2.036 | 5.6 | 19.9 |
| 4 11 | 13 4.47 | −11 58.0 | 1.034 | 2.034 | 2.5 | 19.7 |
| 4 21 | 12 55.70 | −10 46.6 | 1.045 | 2.033 | 7.2 | 20.0 |
| 5 1 | 12 48.76 | − 9 39.5 | 1.080 | 2.033 | 12.6 | 20.3 |
| 5 11 | 12 44.65 | − 8 46.0 | 1.134 | 2.034 | 17.4 | 20.5 |

**232553** Randypeterson 4 7.9 251°.94 0°.0/ 7.7 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.45 | −10 10.7 | 2.047 | 2.854 | 13.7 | 20.7 |
| 3 12 | 13 25.70 | − 9 37.8 | 1.956 | 2.849 | 10.6 | 20.5 |
| 3 22 | 13 19.95 | − 8 51.4 | 1.888 | 2.844 | 7.0 | 20.3 |
| 4 1 | 13 12.74 | − 7 54.5 | 1.847 | 2.839 | 2.9 | 20.0 |
| 4 11 | 13 4.89 | − 6 52.5 | 1.834 | 2.834 | 1.3 | 19.9 |
| 4 21 | 12 57.28 | − 5 51.3 | 1.849 | 2.829 | 5.5 | 20.1 |
| 5 1 | 12 50.76 | − 4 57.0 | 1.890 | 2.824 | 9.4 | 20.4 |
| 5 11 | 12 45.99 | − 4 14.6 | 1.956 | 2.819 | 12.8 | 20.6 |

**95574** 2002 $EQ_{139}$ 4 7.9 210°.77 1°.6/ 6.3 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.95 | − 4 40.4 | 2.109 | 2.925 | 13.0 | 20.3 |
| 3 12 | 13 27.51 | − 4 7.4 | 2.022 | 2.922 | 9.9 | 20.1 |
| 3 22 | 13 21.08 | − 3 25.6 | 1.957 | 2.918 | 6.4 | 19.9 |
| 4 1 | 13 13.20 | − 2 39.0 | 1.920 | 2.913 | 2.7 | 19.6 |
| 4 11 | 13 4.70 | − 1 52.9 | 1.912 | 2.908 | 2.5 | 19.6 |
| 4 21 | 12 56.44 | − 1 12.4 | 1.932 | 2.903 | 6.2 | 19.8 |
| 5 1 | 12 49.28 | − 0 42.2 | 1.978 | 2.898 | 9.9 | 20.0 |
| 5 11 | 12 43.87 | − 0 25.4 | 2.048 | 2.892 | 13.1 | 20.2 |

**283554** 2001 $UR_{227}$ 4 7.9 214°.97 1°.9/ 5.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.82 | − 2 43.2 | 2.656 | 3.470 | 10.7 | 21.5 |
| 3 12 | 13 25.48 | − 2 5.8 | 2.564 | 3.463 | 8.1 | 21.3 |
| 3 22 | 13 19.56 | − 1 22.3 | 2.497 | 3.456 | 5.2 | 21.1 |
| 4 1 | 13 12.53 | − 0 36.3 | 2.458 | 3.449 | 2.5 | 20.9 |
| 4 11 | 13 5.00 | + 0 7.8 | 2.448 | 3.441 | 2.6 | 20.9 |
| 4 21 | 12 57.67 | + 0 45.9 | 2.468 | 3.434 | 5.5 | 21.1 |
| 5 1 | 12 51.16 | + 1 14.4 | 2.516 | 3.425 | 8.5 | 21.3 |
| 5 11 | 12 46.01 | + 1 31.1 | 2.588 | 3.416 | 11.2 | 21.4 |

**222550** 2001 $VT_{11}$ 4 7.9 207°.19 2°.8/ 5.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.34 | + 0 51.3 | 2.340 | 3.150 | 12.1 | 21.2 |
| 3 12 | 13 31.43 | + 1 11.8 | 2.248 | 3.144 | 9.3 | 21.0 |
| 3 22 | 13 23.53 | + 1 35.5 | 2.181 | 3.138 | 6.1 | 20.8 |
| 4 1 | 13 14.21 | + 1 58.6 | 2.142 | 3.130 | 3.3 | 20.6 |
| 4 11 | 13 4.26 | + 2 16.8 | 2.133 | 3.122 | 3.6 | 20.6 |
| 4 21 | 12 54.53 | + 2 26.3 | 2.153 | 3.113 | 6.6 | 20.7 |
| 5 1 | 12 45.87 | + 2 24.5 | 2.202 | 3.103 | 9.9 | 20.9 |
| 5 11 | 12 38.92 | + 2 10.0 | 2.274 | 3.093 | 12.8 | 21.1 |

**180974** 2005 $MB_{47}$ 4 7.9 181°.01 2°.9/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.71 | + 2 15.5 | 3.074 | 3.892 | 9.3 | 21.5 |
| 3 12 | 13 24.36 | + 3 4.0 | 2.992 | 3.893 | 7.1 | 21.4 |
| 3 22 | 13 18.69 | + 3 55.2 | 2.937 | 3.893 | 4.7 | 21.2 |
| 4 1 | 13 12.13 | + 4 45.0 | 2.910 | 3.893 | 3.0 | 21.1 |
| 4 11 | 13 5.20 | + 5 29.4 | 2.914 | 3.893 | 3.6 | 21.1 |
| 4 21 | 12 58.48 | + 6 5.0 | 2.946 | 3.892 | 5.8 | 21.3 |
| 5 1 | 12 52.48 | + 6 29.2 | 3.007 | 3.890 | 8.1 | 21.4 |
| 5 11 | 12 47.64 | + 6 40.7 | 3.091 | 3.889 | 10.3 | 21.6 |

**271744** 2004 $RB_{324}$ 4 7.9 214°.70 4°.5/11.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.04 | −20 46.7 | 2.283 | 3.027 | 14.3 | 21.3 |
| 3 12 | 13 30.78 | −21 21.6 | 2.181 | 3.021 | 11.9 | 21.1 |
| 3 22 | 13 23.33 | −21 41.2 | 2.100 | 3.015 | 9.0 | 20.9 |
| 4 1 | 13 14.20 | −21 44.2 | 2.045 | 3.008 | 6.2 | 20.7 |
| 4 11 | 13 4.23 | −21 31.1 | 2.018 | 3.001 | 4.5 | 20.6 |
| 4 21 | 12 54.39 | −21 4.7 | 2.019 | 2.993 | 5.7 | 20.7 |
| 5 1 | 12 45.63 | −20 29.6 | 2.048 | 2.985 | 8.6 | 20.8 |
| 5 11 | 12 38.72 | −19 52.2 | 2.102 | 2.977 | 11.6 | 21.0 |

**471786** 2012 $VE_{24}$ 4 7.9 160°.60 3°.9/12.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.25 | −22 12.5 | 2.435 | 3.180 | 13.5 | 20.8 |
| 3 12 | 13 25.33 | −22 11.9 | 2.341 | 3.182 | 11.1 | 20.7 |
| 3 22 | 13 19.60 | −21 53.9 | 2.268 | 3.183 | 8.4 | 20.5 |
| 4 1 | 13 12.58 | −21 18.6 | 2.220 | 3.184 | 5.7 | 20.3 |
| 4 11 | 13 4.99 | −20 28.2 | 2.200 | 3.185 | 3.9 | 20.2 |
| 4 21 | 12 57.63 | −19 27.1 | 2.208 | 3.186 | 5.0 | 20.3 |
| 5 1 | 12 51.26 | −18 20.8 | 2.244 | 3.187 | 7.6 | 20.4 |
| 5 11 | 12 46.46 | −17 15.7 | 2.305 | 3.188 | 10.4 | 20.6 |

**125589** 2001 $XS_{31}$ 4 7.9 134°.99 1°.2/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.17 | − 7 14.5 | 1.758 | 2.572 | 15.3 | 20.3 |
| 3 12 | 13 30.21 | − 6 31.6 | 1.686 | 2.584 | 11.7 | 20.1 |
| 3 22 | 13 22.90 | − 5 36.1 | 1.637 | 2.596 | 7.5 | 19.9 |
| 4 1 | 13 13.95 | − 4 32.7 | 1.614 | 2.608 | 3.0 | 19.6 |
| 4 11 | 13 4.41 | − 3 28.3 | 1.620 | 2.619 | 2.3 | 19.6 |
| 4 21 | 12 55.34 | − 2 29.9 | 1.653 | 2.629 | 6.7 | 19.9 |
| 5 1 | 12 47.72 | − 1 43.6 | 1.713 | 2.638 | 10.8 | 20.2 |
| 5 11 | 12 42.22 | − 1 13.2 | 1.796 | 2.647 | 14.3 | 20.4 |

**81795** 2000 $JZ_{85}$ 4 7.9 245°.32 4°.9/ 1.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.36 | + 6 57.7 | 2.595 | 3.423 | 10.5 | 19.9 |
| 3 12 | 13 25.22 | + 8 6.8 | 2.506 | 3.407 | 8.2 | 19.7 |
| 3 22 | 13 19.45 | + 9 17.3 | 2.442 | 3.392 | 6.0 | 19.6 |
| 4 1 | 13 12.51 | +10 23.6 | 2.406 | 3.375 | 4.9 | 19.5 |
| 4 11 | 13 5.03 | +11 19.8 | 2.399 | 3.359 | 5.8 | 19.5 |
| 4 21 | 12 57.72 | +12 1.4 | 2.420 | 3.341 | 8.1 | 19.6 |
| 5 1 | 12 51.24 | +12 25.5 | 2.466 | 3.324 | 10.6 | 19.7 |
| 5 11 | 12 46.13 | +12 31.1 | 2.535 | 3.306 | 12.9 | 19.9 |

**342941** 2009 $AU_{30}$ 4 7.9 221°.02 1°.5/ 6.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.11 | − 4 51.9 | 2.273 | 3.089 | 12.2 | 21.7 |
| 3 12 | 13 25.97 | − 4 15.8 | 2.185 | 3.084 | 9.3 | 21.5 |
| 3 22 | 13 20.01 | − 3 31.1 | 2.120 | 3.080 | 6.0 | 21.2 |
| 4 1 | 13 12.75 | − 2 41.8 | 2.082 | 3.075 | 2.5 | 21.0 |
| 4 11 | 13 4.93 | − 1 52.8 | 2.073 | 3.070 | 2.4 | 21.0 |
| 4 21 | 12 57.33 | − 1 9.1 | 2.093 | 3.065 | 5.8 | 21.2 |
| 5 1 | 12 50.73 | − 0 35.1 | 2.140 | 3.060 | 9.3 | 21.4 |
| 5 11 | 12 45.69 | − 0 13.9 | 2.211 | 3.054 | 12.3 | 21.6 |

**271646** 2004 $PZ_{103}$ 4 7.9 238°.82 3°.8/11.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.44 | −20 0.4 | 2.493 | 3.236 | 13.3 | 21.7 |
| 3 12 | 13 30.22 | −20 21.4 | 2.377 | 3.219 | 11.0 | 21.5 |
| 3 22 | 13 22.93 | −20 27.9 | 2.283 | 3.201 | 8.2 | 21.3 |
| 4 1 | 13 14.05 | −20 19.1 | 2.215 | 3.182 | 5.4 | 21.1 |
| 4 11 | 13 4.34 | −19 55.9 | 2.176 | 3.163 | 3.8 | 20.9 |
| 4 21 | 12 54.65 | −19 21.1 | 2.166 | 3.143 | 5.2 | 21.0 |
| 5 1 | 12 45.88 | −18 39.3 | 2.185 | 3.122 | 8.1 | 21.1 |
| 5 11 | 12 38.77 | −17 56.2 | 2.229 | 3.101 | 11.2 | 21.3 |

**507388** 2012 $FB_{85}$ 4 7.9 255°.06 4°.7/ 3.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 33.74 | + 3 54.2 | 1.966 | 2.796 | 13.3 | 21.6 |
| 3 12 | 13 29.12 | + 4 42.9 | 1.876 | 2.781 | 10.3 | 21.3 |
| 3 22 | 13 22.27 | + 5 34.9 | 1.809 | 2.766 | 7.1 | 21.1 |
| 4 1 | 13 13.77 | + 6 24.0 | 1.769 | 2.751 | 4.9 | 20.9 |
| 4 11 | 13 4.49 | + 7 3.6 | 1.757 | 2.735 | 5.7 | 21.0 |
| 4 21 | 12 55.41 | + 7 28.2 | 1.772 | 2.718 | 8.8 | 21.1 |
| 5 1 | 12 47.51 | + 7 34.2 | 1.812 | 2.702 | 12.3 | 21.3 |
| 5 11 | 12 41.51 | + 7 20.7 | 1.873 | 2.685 | 15.4 | 21.5 |

**57238** 2001 $QW_{80}$ 4 7.9 258°.18 4°.4/11.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.90 | −19 17.8 | 1.658 | 2.434 | 17.6 | 19.6 |
| 3 12 | 13 30.82 | −19 32.9 | 1.552 | 2.416 | 14.5 | 19.3 |
| 3 22 | 13 23.88 | −19 27.0 | 1.466 | 2.397 | 10.8 | 19.0 |
| 4 1 | 13 14.61 | −18 58.4 | 1.403 | 2.378 | 6.8 | 18.7 |
| 4 11 | 13 4.07 | −18 8.7 | 1.365 | 2.358 | 4.4 | 18.5 |
| 4 21 | 12 53.56 | −17 3.4 | 1.355 | 2.337 | 6.8 | 18.6 |
| 5 1 | 12 44.45 | −15 51.0 | 1.370 | 2.316 | 11.1 | 18.8 |
| 5 11 | 12 37.77 | −14 41.3 | 1.407 | 2.295 | 15.4 | 19.0 |

**42282** 2001 $SB_{283}$ 4 7.9 176°.62 5°.4/13.7 18 R

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.52 | −25 50.8 | 2.380 | 3.096 | 14.5 | 19.4 |
| 3 12 | 13 29.52 | −26 12.5 | 2.283 | 3.099 | 12.3 | 19.2 |
| 3 22 | 13 22.43 | −26 15.5 | 2.207 | 3.100 | 9.7 | 19.0 |
| 4 1 | 13 13.81 | −25 58.1 | 2.156 | 3.102 | 7.2 | 18.9 |
| 4 11 | 13 4.49 | −25 21.5 | 2.131 | 3.102 | 5.5 | 18.7 |
| 4 21 | 12 55.39 | −24 28.9 | 2.135 | 3.102 | 6.1 | 18.8 |
| 5 1 | 12 47.41 | −23 26.1 | 2.166 | 3.101 | 8.3 | 18.9 |
| 5 11 | 12 41.22 | −22 20.2 | 2.223 | 3.100 | 10.9 | 19.1 |

**2334** Cuffey 4 7.9 325°.69 3°.5/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.91 | − 2 59.2 | 1.302 | 2.151 | 17.6 | 16.3 |
| 3 12 | 13 27.87 | − 2 7.4 | 1.227 | 2.145 | 13.5 | 16.0 |
| 3 22 | 13 21.90 | − 1 2.7 | 1.172 | 2.139 | 8.7 | 15.7 |
| 4 1 | 13 13.71 | + 0 7.6 | 1.141 | 2.133 | 4.3 | 15.4 |
| 4 11 | 13 4.53 | + 1 13.6 | 1.134 | 2.128 | 4.8 | 15.4 |
| 4 21 | 12 55.74 | + 2 6.0 | 1.152 | 2.123 | 9.5 | 15.7 |
| 5 1 | 12 48.65 | + 2 37.5 | 1.193 | 2.119 | 14.4 | 15.9 |
| 5 11 | 12 44.17 | + 2 45.1 | 1.252 | 2.115 | 18.6 | 16.2 |

**499299** 2009 $WN_{15}$ 4 7.9 194°.85 2°.4/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.65 | − 2 32.0 | 2.146 | 2.966 | 12.7 | 22.2 |
| 3 12 | 13 27.23 | − 1 46.7 | 2.061 | 2.964 | 9.6 | 22.0 |
| 3 22 | 13 20.87 | − 0 53.9 | 2.002 | 2.962 | 6.2 | 21.7 |
| 4 1 | 13 13.13 | + 0 1.6 | 1.969 | 2.960 | 3.0 | 21.5 |
| 4 11 | 13 4.81 | + 0 54.2 | 1.965 | 2.957 | 3.3 | 21.5 |
| 4 21 | 12 56.76 | + 1 38.5 | 1.989 | 2.954 | 6.7 | 21.7 |
| 5 1 | 12 49.79 | + 2 10.0 | 2.040 | 2.951 | 10.1 | 21.9 |
| 5 11 | 12 44.52 | + 2 26.2 | 2.115 | 2.947 | 13.2 | 22.1 |

**237488** 2000 $KP_{34}$ 4 7.9 302°.58 5°.7/ 3.7 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.91 | + 1 58.8 | 1.315 | 2.168 | 17.1 | 20.4 |
| 3 12 | 13 28.71 | + 3 1.3 | 1.235 | 2.155 | 13.3 | 20.1 |
| 3 22 | 13 22.52 | + 4 11.9 | 1.177 | 2.141 | 9.1 | 19.8 |
| 4 1 | 13 14.00 | + 5 21.7 | 1.142 | 2.128 | 5.9 | 19.6 |
| 4 11 | 13 4.39 | + 6 20.0 | 1.131 | 2.115 | 7.1 | 19.6 |
| 4 21 | 12 55.08 | + 6 57.6 | 1.145 | 2.102 | 11.3 | 19.8 |
| 5 1 | 12 47.44 | + 7 9.1 | 1.180 | 2.090 | 15.8 | 20.0 |
| 5 11 | 12 42.45 | + 6 53.0 | 1.233 | 2.078 | 19.9 | 20.2 |

**257496** 1995 $VQ_{9}$ 4 7.9 108°.94 0°.3/ 8.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.56 | −10 34.1 | 1.791 | 2.595 | 15.4 | 21.8 |
| 3 12 | 13 29.70 | −10 8.5 | 1.721 | 2.612 | 11.9 | 21.6 |
| 3 22 | 13 22.55 | − 9 28.6 | 1.674 | 2.628 | 7.8 | 21.4 |
| 4 1 | 13 13.82 | − 8 37.8 | 1.652 | 2.644 | 3.3 | 21.1 |
| 4 11 | 13 4.53 | − 7 41.7 | 1.658 | 2.659 | 1.3 | 21.0 |
| 4 21 | 12 55.73 | − 6 46.9 | 1.693 | 2.674 | 5.8 | 21.3 |
| 5 1 | 12 48.36 | − 5 59.5 | 1.754 | 2.689 | 9.9 | 21.6 |
| 5 11 | 12 43.07 | − 5 24.3 | 1.838 | 2.703 | 13.4 | 21.9 |

**307938** 2004 $EE_{84}$ 4 7.9 147°.71 1°.8/ 5.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.06 | − 6 29.7 | 2.105 | 2.919 | 13.1 | 19.7 |
| 3 12 | 13 26.73 | − 5 17.1 | 2.029 | 2.928 | 9.9 | 19.5 |
| 3 22 | 13 20.49 | − 3 52.6 | 1.976 | 2.937 | 6.3 | 19.3 |
| 4 1 | 13 12.95 | − 2 21.8 | 1.952 | 2.945 | 2.7 | 19.1 |
| 4 11 | 13 4.91 | − 0 52.0 | 1.957 | 2.952 | 2.8 | 19.1 |
| 4 21 | 12 57.23 | + 0 29.9 | 1.991 | 2.959 | 6.4 | 19.3 |
| 5 1 | 12 50.67 | + 1 37.9 | 2.053 | 2.966 | 9.9 | 19.6 |
| 5 11 | 12 45.83 | + 2 28.3 | 2.138 | 2.972 | 13.0 | 19.8 |

**413712** 2005 $YM_{237}$ 4 7.9 198°.04 0°.0/ 8.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.54 | − 9 12.7 | 4.369 | 5.159 | 7.2 | 21.5 |
| 3 12 | 13 19.39 | − 8 51.5 | 4.275 | 5.159 | 5.5 | 21.4 |
| 3 22 | 13 15.36 | − 8 24.6 | 4.206 | 5.159 | 3.6 | 21.2 |
| 4 1 | 13 10.75 | − 7 53.7 | 4.167 | 5.158 | 1.5 | 21.1 |
| 4 11 | 13 5.89 | − 7 20.9 | 4.157 | 5.158 | 0.6 | 21.0 |
| 4 21 | 13 1.15 | − 6 48.3 | 4.179 | 5.158 | 2.8 | 21.2 |
| 5 1 | 12 56.86 | − 6 18.3 | 4.229 | 5.158 | 4.8 | 21.3 |
| 5 11 | 12 53.32 | − 5 52.8 | 4.306 | 5.158 | 6.6 | 21.4 |

**195336** 2002 $EV_{139}$ 4 7.9 276°.88 2°.3/ 5.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.13 | − 4 28.9 | 1.906 | 2.733 | 13.7 | 19.9 |
| 3 12 | 13 25.57 | − 3 33.8 | 1.821 | 2.728 | 10.5 | 19.6 |
| 3 22 | 13 19.93 | − 2 27.8 | 1.760 | 2.723 | 6.7 | 19.4 |
| 4 1 | 13 12.78 | − 1 16.3 | 1.726 | 2.718 | 3.0 | 19.2 |
| 4 11 | 13 4.98 | − 0 6.2 | 1.719 | 2.713 | 3.3 | 19.2 |
| 4 21 | 12 57.45 | + 0 55.5 | 1.739 | 2.708 | 7.0 | 19.4 |
| 5 1 | 12 51.07 | + 1 43.0 | 1.786 | 2.703 | 10.9 | 19.6 |
| 5 11 | 12 46.52 | + 2 12.9 | 1.854 | 2.698 | 14.2 | 19.8 |

**88370** 2001 $PQ_{14}$ 4 7.9 279°.51 3°.7/ 4.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.49 | − 3 15.6 | 1.445 | 2.286 | 16.6 | 19.5 |
| 3 12 | 13 28.31 | − 2 7.0 | 1.349 | 2.263 | 12.8 | 19.2 |
| 3 22 | 13 22.27 | − 0 42.5 | 1.275 | 2.240 | 8.4 | 18.9 |
| 4 1 | 13 13.95 | + 0 50.8 | 1.225 | 2.217 | 4.3 | 18.6 |
| 4 11 | 13 4.41 | + 2 22.3 | 1.201 | 2.193 | 5.1 | 18.5 |
| 4 21 | 12 54.98 | + 3 41.4 | 1.203 | 2.169 | 9.9 | 18.7 |
| 5 1 | 12 46.99 | + 4 38.8 | 1.228 | 2.145 | 14.8 | 18.9 |
| 5 11 | 12 41.48 | + 5 9.7 | 1.272 | 2.120 | 19.2 | 19.1 |

**237486** 2000 $KM_2$ 4 7.9 273°.47 8°.2/29.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.86 | + 5 41.9 | 1.652 | 2.498 | 14.6 | 20.0 |
| 3 12 | 13 27.54 | + 8 25.3 | 1.557 | 2.469 | 11.6 | 19.7 |
| 3 22 | 13 21.64 | +11 22.2 | 1.487 | 2.438 | 8.9 | 19.5 |
| 4 1 | 13 13.66 | +14 19.1 | 1.446 | 2.408 | 8.3 | 19.4 |
| 4 11 | 13 4.55 | +17 0.3 | 1.432 | 2.376 | 10.5 | 19.4 |
| 4 21 | 12 55.47 | +19 12.7 | 1.445 | 2.344 | 14.0 | 19.5 |
| 5 1 | 12 47.60 | +20 47.7 | 1.480 | 2.311 | 17.7 | 19.7 |
| 5 11 | 12 41.93 | +21 43.3 | 1.532 | 2.277 | 21.0 | 19.8 |

**259548** 2003 $UZ_{121}$ 4 7.9 94°.75 7°.2/ 1.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.56 | + 8 41.7 | 1.688 | 2.525 | 14.8 | 20.3 |
| 3 12 | 13 30.38 | +10 6.9 | 1.643 | 2.548 | 11.5 | 20.1 |
| 3 22 | 13 22.90 | +11 29.5 | 1.622 | 2.570 | 8.6 | 20.0 |
| 4 1 | 13 13.93 | +12 40.4 | 1.627 | 2.592 | 7.2 | 20.0 |
| 4 11 | 13 4.55 | +13 31.4 | 1.658 | 2.614 | 8.3 | 20.1 |
| 4 21 | 12 55.83 | +13 58.2 | 1.715 | 2.635 | 10.9 | 20.3 |
| 5 1 | 12 48.68 | +13 59.3 | 1.796 | 2.656 | 13.8 | 20.5 |
| 5 11 | 12 43.69 | +13 36.7 | 1.896 | 2.676 | 16.4 | 20.7 |

**184981** 2006 $BK_{222}$ 4 7.9 262°.80 0°.2/ 8.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.38 | − 9 36.4 | 4.619 | 5.406 | 6.9 | 21.1 |
| 3 12 | 13 19.24 | − 9 18.3 | 4.517 | 5.398 | 5.3 | 21.0 |
| 3 22 | 13 15.27 | − 8 54.7 | 4.440 | 5.391 | 3.5 | 20.8 |
| 4 1 | 13 10.72 | − 8 27.1 | 4.393 | 5.384 | 1.5 | 20.7 |
| 4 11 | 13 5.93 | − 7 57.3 | 4.376 | 5.376 | 0.6 | 20.6 |
| 4 21 | 13 1.23 | − 7 27.4 | 4.389 | 5.369 | 2.6 | 20.7 |
| 5 1 | 12 56.95 | − 6 59.6 | 4.432 | 5.362 | 4.6 | 20.9 |
| 5 11 | 12 53.36 | − 6 35.6 | 4.501 | 5.354 | 6.3 | 21.0 |

**516677** 2008 $SF_{312}$ 4 7.9 156°.84 3°.4/ 4.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.25 | + 0 4.1 | 2.083 | 2.912 | 12.7 | 21.7 |
| 3 12 | 13 26.17 | + 1 0.9 | 2.007 | 2.915 | 9.6 | 21.5 |
| 3 22 | 13 20.18 | + 2 3.6 | 1.956 | 2.917 | 6.3 | 21.3 |
| 4 1 | 13 12.85 | + 3 6.4 | 1.931 | 2.918 | 3.7 | 21.1 |
| 4 11 | 13 4.99 | + 4 2.9 | 1.935 | 2.920 | 4.4 | 21.1 |
| 4 21 | 12 57.44 | + 4 47.7 | 1.966 | 2.922 | 7.4 | 21.3 |
| 5 1 | 12 50.99 | + 5 16.7 | 2.023 | 2.923 | 10.7 | 21.5 |
| 5 11 | 12 46.24 | + 5 28.2 | 2.103 | 2.924 | 13.6 | 21.7 |

**97844** 2000 $PE_{27}$ 4 7.9 161°.95 0°.9/ 8.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.79 | −11 15.6 | 1.900 | 2.694 | 15.1 | 19.6 |
| 3 12 | 13 31.46 | −11 8.0 | 1.816 | 2.700 | 11.8 | 19.4 |
| 3 22 | 13 23.77 | −10 46.8 | 1.755 | 2.705 | 7.9 | 19.1 |
| 4 1 | 13 14.40 | −10 14.1 | 1.720 | 2.710 | 3.6 | 18.9 |
| 4 11 | 13 4.30 | − 9 34.1 | 1.714 | 2.714 | 1.4 | 18.7 |
| 4 21 | 12 54.56 | − 8 52.2 | 1.736 | 2.718 | 5.6 | 19.0 |
| 5 1 | 12 46.18 | − 8 14.1 | 1.785 | 2.720 | 9.7 | 19.3 |
| 5 11 | 12 39.87 | − 7 45.0 | 1.858 | 2.723 | 13.3 | 19.5 |

**63056** 2000 $WQ_{110}$ 4 7.9 219°.28 4°.6/ 2.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.85 | + 7 56.4 | 2.659 | 3.480 | 10.5 | 19.2 |
| 3 12 | 13 26.99 | + 8 34.3 | 2.578 | 3.476 | 8.2 | 19.0 |
| 3 22 | 13 20.54 | + 9 11.2 | 2.522 | 3.470 | 5.9 | 18.9 |
| 4 1 | 13 12.98 | + 9 42.3 | 2.494 | 3.465 | 4.6 | 18.8 |
| 4 11 | 13 4.96 | +10 3.3 | 2.495 | 3.459 | 5.3 | 18.8 |
| 4 21 | 12 57.18 | +10 11.2 | 2.525 | 3.454 | 7.4 | 18.9 |
| 5 1 | 12 50.28 | +10 4.1 | 2.580 | 3.448 | 9.9 | 19.1 |
| 5 11 | 12 44.80 | + 9 42.0 | 2.659 | 3.441 | 12.1 | 19.2 |

**290470** 2005 $TH_{181}$ 4 7.9 331°.71 0°.8/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.03 | − 6 57.3 | 2.227 | 3.042 | 12.4 | 20.8 |
| 3 12 | 13 24.45 | − 6 27.4 | 2.139 | 3.038 | 9.5 | 20.6 |
| 3 22 | 13 19.07 | − 5 47.7 | 2.075 | 3.034 | 6.1 | 20.4 |
| 4 1 | 13 12.41 | − 5 1.6 | 2.037 | 3.030 | 2.5 | 20.1 |
| 4 11 | 13 5.20 | − 4 13.8 | 2.027 | 3.027 | 1.7 | 20.1 |
| 4 21 | 12 58.21 | − 3 29.3 | 2.046 | 3.023 | 5.4 | 20.3 |
| 5 1 | 12 52.20 | − 2 52.9 | 2.092 | 3.020 | 8.9 | 20.5 |
| 5 11 | 12 47.75 | − 2 27.9 | 2.161 | 3.017 | 12.1 | 20.7 |

**510571** 2012 $QB_{32}$ 4 7.9 288°.49 1°.9/ 9.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.17 | −14 56.3 | 1.929 | 2.721 | 14.9 | 21.9 |
| 3 12 | 13 26.71 | −14 41.5 | 1.815 | 2.695 | 12.0 | 21.7 |
| 3 22 | 13 20.93 | −14 9.0 | 1.722 | 2.668 | 8.4 | 21.4 |
| 4 1 | 13 13.33 | −13 19.5 | 1.655 | 2.641 | 4.4 | 21.1 |
| 4 11 | 13 4.74 | −12 16.8 | 1.614 | 2.614 | 2.0 | 20.9 |
| 4 21 | 12 56.18 | −11 6.9 | 1.602 | 2.587 | 5.6 | 21.0 |
| 5 1 | 12 48.69 | − 9 57.3 | 1.616 | 2.559 | 10.0 | 21.2 |
| 5 11 | 12 43.12 | − 8 55.4 | 1.653 | 2.532 | 14.0 | 21.4 |

**434954** 2006 $UF_{46}$ 4 7.9 351°.92 2°.8/11.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.00 | −19 58.6 | 2.302 | 3.067 | 13.6 | 20.6 |
| 3 12 | 13 23.69 | −19 27.2 | 2.208 | 3.066 | 11.0 | 20.4 |
| 3 22 | 13 18.58 | −18 36.9 | 2.136 | 3.066 | 8.0 | 20.2 |
| 4 1 | 13 12.21 | −17 29.2 | 2.089 | 3.066 | 4.8 | 20.0 |
| 4 11 | 13 5.30 | −16 8.0 | 2.071 | 3.065 | 2.8 | 19.9 |
| 4 21 | 12 58.64 | −14 39.3 | 2.081 | 3.065 | 4.6 | 20.0 |
| 5 1 | 12 52.97 | −13 10.1 | 2.119 | 3.065 | 7.8 | 20.2 |
| 5 11 | 12 48.88 | −11 47.1 | 2.183 | 3.065 | 10.9 | 20.4 |

**363113** 2000 $XU_1$ 4 7.9 92°.28 3°.8/ 4.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.24 | − 0 18.1 | 1.605 | 2.436 | 15.7 | 21.0 |
| 3 12 | 13 31.06 | + 0 34.2 | 1.550 | 2.458 | 11.9 | 20.8 |
| 3 22 | 13 23.43 | + 1 32.5 | 1.518 | 2.480 | 7.7 | 20.6 |
| 4 1 | 13 14.20 | + 2 30.0 | 1.512 | 2.501 | 4.2 | 20.5 |
| 4 11 | 13 4.48 | + 3 18.9 | 1.533 | 2.522 | 4.8 | 20.5 |
| 4 21 | 12 55.40 | + 3 53.5 | 1.581 | 2.542 | 8.4 | 20.8 |
| 5 1 | 12 47.96 | + 4 9.9 | 1.654 | 2.562 | 12.2 | 21.1 |
| 5 11 | 12 42.77 | + 4 7.2 | 1.749 | 2.582 | 15.4 | 21.3 |

**350170** 2011 $UP_{18}$ 4 7.9 270°.85 0°.5/ 8.4 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.99 | − 9 33.2 | 2.431 | 3.226 | 12.1 | 21.3 |
| 3 12 | 13 27.45 | − 9 34.5 | 2.326 | 3.211 | 9.5 | 21.1 |
| 3 22 | 13 21.05 | − 9 26.6 | 2.245 | 3.197 | 6.3 | 20.9 |
| 4 1 | 13 13.28 | − 9 11.0 | 2.191 | 3.182 | 2.8 | 20.6 |
| 4 11 | 13 4.83 | − 8 50.6 | 2.166 | 3.167 | 1.1 | 20.4 |
| 4 21 | 12 56.48 | − 8 28.9 | 2.170 | 3.152 | 4.7 | 20.7 |
| 5 1 | 12 49.04 | − 8 9.7 | 2.202 | 3.136 | 8.2 | 20.9 |
| 5 11 | 12 43.13 | − 7 56.7 | 2.259 | 3.121 | 11.4 | 21.0 |

**136472** Makemake 4 7.9 165°.29 0°.5/25.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 9.77 | +23 39.6 | 51.779 | 52.576 | 0.6 | 17.1 |
| 3 12 | 13 9.21 | +23 45.2 | 51.728 | 52.576 | 0.6 | 17.1 |
| 3 22 | 13 8.59 | +23 50.1 | 51.702 | 52.577 | 0.5 | 17.1 |
| 4 1 | 13 7.92 | +23 54.3 | 51.703 | 52.578 | 0.5 | 17.1 |
| 4 11 | 13 7.24 | +23 57.5 | 51.730 | 52.579 | 0.6 | 17.1 |
| 4 21 | 13 6.57 | +23 59.7 | 51.782 | 52.580 | 0.7 | 17.1 |
| 5 1 | 13 5.93 | +24 0.7 | 51.858 | 52.580 | 0.8 | 17.1 |
| 5 11 | 13 5.34 | +24 0.5 | 51.954 | 52.581 | 0.9 | 17.1 |

**461970** 2006 $UU_{165}$ 4 7.9 251°.84 3°.2/ 5.4 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.64 | − 0 46.8 | 1.739 | 2.568 | 14.8 | 21.7 |
| 3 12 | 13 30.08 | − 0 14.6 | 1.652 | 2.559 | 11.3 | 21.4 |
| 3 22 | 13 23.05 | + 0 24.5 | 1.588 | 2.550 | 7.4 | 21.2 |
| 4 1 | 13 14.17 | + 1 5.1 | 1.550 | 2.540 | 3.8 | 20.9 |
| 4 11 | 13 4.44 | + 1 40.7 | 1.539 | 2.531 | 4.2 | 20.9 |
| 4 21 | 12 54.98 | + 2 5.6 | 1.555 | 2.521 | 8.0 | 21.1 |
| 5 1 | 12 46.86 | + 2 15.3 | 1.597 | 2.511 | 12.1 | 21.3 |
| 5 11 | 12 40.90 | + 2 7.6 | 1.660 | 2.501 | 15.8 | 21.6 |

**436816** 2012 $RD_{24}$ 4 7.9 119°.45 1°.7/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.24 | − 5 15.2 | 2.341 | 3.158 | 11.9 | 21.2 |
| 3 12 | 13 24.42 | − 4 16.0 | 2.265 | 3.166 | 9.0 | 21.0 |
| 3 22 | 13 18.94 | − 3 7.7 | 2.212 | 3.173 | 5.7 | 20.8 |
| 4 1 | 13 12.33 | − 1 54.9 | 2.188 | 3.181 | 2.5 | 20.6 |
| 4 11 | 13 5.28 | − 0 43.6 | 2.193 | 3.188 | 2.6 | 20.6 |
| 4 21 | 12 58.53 | + 0 20.9 | 2.227 | 3.195 | 5.8 | 20.8 |
| 5 1 | 12 52.74 | + 1 13.6 | 2.288 | 3.202 | 9.0 | 21.0 |
| 5 11 | 12 48.43 | + 1 51.7 | 2.373 | 3.209 | 11.8 | 21.2 |

**506963** 2008 $RB_{88}$ 4 7.9 243°.03 2°.2/10.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.41 | −16 10.2 | 2.247 | 3.022 | 13.6 | 21.9 |
| 3 12 | 13 27.21 | −15 59.9 | 2.141 | 3.009 | 10.9 | 21.7 |
| 3 22 | 13 21.00 | −15 33.8 | 2.057 | 2.996 | 7.7 | 21.5 |
| 4 1 | 13 13.28 | −14 53.0 | 1.999 | 2.982 | 4.3 | 21.3 |
| 4 11 | 13 4.83 | −14 0.6 | 1.970 | 2.967 | 2.2 | 21.1 |
| 4 21 | 12 56.51 | −13 1.4 | 1.969 | 2.953 | 4.9 | 21.2 |
| 5 1 | 12 49.19 | −12 1.4 | 1.996 | 2.937 | 8.5 | 21.4 |
| 5 11 | 12 43.56 | −11 6.6 | 2.048 | 2.922 | 11.9 | 21.6 |

**73520** Boslough 4 7.9 222°.48 5°.3/13.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.72 | −26 24.3 | 2.570 | 3.280 | 13.7 | 19.8 |
| 3 12 | 13 28.10 | −26 39.2 | 2.459 | 3.270 | 11.6 | 19.6 |
| 3 22 | 13 21.53 | −26 36.0 | 2.369 | 3.259 | 9.3 | 19.5 |
| 4 1 | 13 13.50 | −26 13.2 | 2.304 | 3.248 | 6.9 | 19.3 |
| 4 11 | 13 4.74 | −25 31.6 | 2.267 | 3.236 | 5.4 | 19.2 |
| 4 21 | 12 56.11 | −24 34.4 | 2.257 | 3.224 | 5.8 | 19.2 |
| 5 1 | 12 48.44 | −23 26.8 | 2.275 | 3.211 | 7.9 | 19.3 |
| 5 11 | 12 42.40 | −22 15.6 | 2.320 | 3.197 | 10.5 | 19.4 |

**321066** 2008 $SF_{56}$ 4 7.9 249°.26 0°.4/ 7.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 32.76 | − 7 12.1 | 2.036 | 2.846 | 13.6 | 20.4 |
| 3 12 | 13 28.30 | − 7 0.4 | 1.945 | 2.840 | 10.5 | 20.2 |
| 3 22 | 13 21.72 | − 6 38.8 | 1.877 | 2.834 | 6.9 | 19.9 |
| 4 1 | 13 13.57 | − 6 10.2 | 1.835 | 2.828 | 2.8 | 19.7 |
| 4 11 | 13 4.72 | − 5 38.8 | 1.821 | 2.821 | 1.5 | 19.6 |
| 4 21 | 12 56.10 | − 5 9.4 | 1.836 | 2.815 | 5.7 | 19.8 |
| 5 1 | 12 48.60 | − 4 46.5 | 1.877 | 2.808 | 9.6 | 20.0 |
| 5 11 | 12 42.93 | − 4 33.8 | 1.942 | 2.801 | 13.1 | 20.2 |

**435424** 2008 $CQ_{8}$ 4 7.9 161°.80 3°.3/ 3.7 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.23 | + 1 37.4 | 2.614 | 3.438 | 10.5 | 21.5 |
| 3 12 | 13 24.25 | + 2 36.7 | 2.537 | 3.441 | 8.0 | 21.4 |
| 3 22 | 13 18.77 | + 3 39.7 | 2.486 | 3.444 | 5.3 | 21.2 |
| 4 1 | 13 12.26 | + 4 41.6 | 2.463 | 3.447 | 3.4 | 21.1 |
| 4 11 | 13 5.34 | + 5 37.2 | 2.469 | 3.449 | 4.1 | 21.1 |
| 4 21 | 12 58.66 | + 6 22.2 | 2.504 | 3.451 | 6.6 | 21.3 |
| 5 1 | 12 52.84 | + 6 53.4 | 2.566 | 3.453 | 9.2 | 21.5 |
| 5 11 | 12 48.35 | + 7 9.2 | 2.651 | 3.455 | 11.6 | 21.6 |

**396585** 2000 $SG_{72}$ 4 7.9 156°.28 2°.2/ 5.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.53 | − 5 1.4 | 2.025 | 2.840 | 13.5 | 21.7 |
| 3 12 | 13 28.70 | − 3 52.7 | 1.949 | 2.849 | 10.3 | 21.5 |
| 3 22 | 13 21.84 | − 2 33.0 | 1.897 | 2.858 | 6.6 | 21.3 |
| 4 1 | 13 13.57 | − 1 8.3 | 1.873 | 2.865 | 3.0 | 21.1 |
| 4 11 | 13 4.77 | + 0 14.3 | 1.878 | 2.872 | 3.2 | 21.1 |
| 4 21 | 12 56.33 | + 1 27.6 | 1.913 | 2.878 | 6.8 | 21.3 |
| 5 1 | 12 49.12 | + 2 26.2 | 1.974 | 2.883 | 10.4 | 21.5 |
| 5 11 | 12 43.73 | + 3 6.6 | 2.058 | 2.887 | 13.6 | 21.8 |

**147353** 2003 $BH_{81}$ 4 7.9 341°.73 12°.0/28.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.20 | +14 56.6 | 1.212 | 2.079 | 17.4 | 18.8 |
| 3 12 | 13 25.29 | +16 39.1 | 1.150 | 2.064 | 14.6 | 18.6 |
| 3 22 | 13 20.35 | +18 15.1 | 1.108 | 2.049 | 12.5 | 18.4 |
| 4 1 | 13 13.14 | +19 30.4 | 1.086 | 2.036 | 12.1 | 18.4 |
| 4 11 | 13 4.93 | +20 12.5 | 1.087 | 2.024 | 13.8 | 18.4 |
| 4 21 | 12 57.16 | +20 14.4 | 1.107 | 2.013 | 16.7 | 18.5 |
| 5 1 | 12 51.15 | +19 35.1 | 1.145 | 2.005 | 20.0 | 18.7 |
| 5 11 | 12 47.82 | +18 19.3 | 1.198 | 1.997 | 23.0 | 18.9 |

**292514** 2006 $TU_{28}$ 4 7.9 259°.52 0°.4/ 7.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.41 | − 8 7.6 | 2.438 | 3.242 | 11.8 | 21.6 |
| 3 12 | 13 25.44 | − 7 39.1 | 2.335 | 3.228 | 9.1 | 21.4 |
| 3 22 | 13 19.72 | − 7 0.5 | 2.257 | 3.213 | 6.0 | 21.2 |
| 4 1 | 13 12.72 | − 6 14.5 | 2.205 | 3.198 | 2.4 | 20.9 |
| 4 11 | 13 5.11 | − 5 25.3 | 2.183 | 3.183 | 1.4 | 20.8 |
| 4 21 | 12 57.64 | − 4 37.6 | 2.190 | 3.167 | 5.0 | 21.0 |
| 5 1 | 12 51.03 | − 3 56.1 | 2.224 | 3.152 | 8.5 | 21.2 |
| 5 11 | 12 45.90 | − 3 24.6 | 2.283 | 3.136 | 11.6 | 21.4 |

**2337** Boubín 4 7.9 113°.74 2°.9/ 5.6 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.91 | + 0 21.6 | 1.963 | 2.781 | 13.8 | 16.6 |
| 3 12 | 13 32.01 | + 0 40.6 | 1.896 | 2.796 | 10.5 | 16.4 |
| 3 22 | 13 23.95 | + 1 3.3 | 1.852 | 2.811 | 6.8 | 16.2 |
| 4 1 | 13 14.43 | + 1 25.2 | 1.835 | 2.825 | 3.5 | 16.0 |
| 4 11 | 13 4.40 | + 1 41.4 | 1.848 | 2.839 | 3.7 | 16.0 |
| 4 21 | 12 54.86 | + 1 48.3 | 1.888 | 2.852 | 7.0 | 16.3 |
| 5 1 | 12 46.68 | + 1 43.0 | 1.956 | 2.865 | 10.5 | 16.5 |
| 5 11 | 12 40.50 | + 1 24.7 | 2.047 | 2.878 | 13.6 | 16.7 |

**348460** 2005 $SK_{15}$ 4 7.9 106°.71 1°.9/ 9.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.14 | −12 52.0 | 1.423 | 2.232 | 18.5 | 21.4 |
| 3 12 | 13 32.43 | −12 57.5 | 1.352 | 2.241 | 14.6 | 21.1 |
| 3 22 | 13 24.76 | −12 44.9 | 1.300 | 2.251 | 10.0 | 20.9 |
| 4 1 | 13 14.91 | −12 15.8 | 1.271 | 2.260 | 4.9 | 20.6 |
| 4 11 | 13 4.17 | −11 35.0 | 1.269 | 2.269 | 2.1 | 20.4 |
| 4 21 | 12 53.96 | −10 49.4 | 1.293 | 2.278 | 6.6 | 20.7 |
| 5 1 | 12 45.55 | −10 6.8 | 1.341 | 2.286 | 11.5 | 21.0 |
| 5 11 | 12 39.82 | − 9 34.1 | 1.412 | 2.295 | 15.7 | 21.3 |

**264326** 1999 $TP_{286}$ 4 7.9 175°.48 1°.9/ 9.7 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.14 | −14 28.9 | 2.011 | 2.793 | 14.8 | 21.6 |
| 3 12 | 13 30.16 | −14 23.3 | 1.922 | 2.796 | 11.7 | 21.4 |
| 3 22 | 13 22.94 | −14 2.3 | 1.855 | 2.798 | 8.1 | 21.1 |
| 4 1 | 13 14.09 | −13 27.2 | 1.814 | 2.799 | 4.2 | 20.9 |
| 4 11 | 13 4.53 | −12 41.6 | 1.801 | 2.800 | 2.0 | 20.8 |
| 4 21 | 12 55.25 | −11 50.7 | 1.817 | 2.800 | 5.3 | 21.0 |
| 5 1 | 12 47.21 | −11 0.8 | 1.860 | 2.800 | 9.1 | 21.2 |
| 5 11 | 12 41.14 | −10 17.7 | 1.928 | 2.799 | 12.6 | 21.4 |

**437805** 2015 $DG_{24}$ 4 7.9 127°.82 1°.0/ 6.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.24 | − 6 44.5 | 2.053 | 2.867 | 13.4 | 21.8 |
| 3 12 | 13 26.99 | − 6 12.9 | 1.974 | 2.872 | 10.2 | 21.6 |
| 3 22 | 13 20.77 | − 5 31.0 | 1.918 | 2.877 | 6.6 | 21.4 |
| 4 1 | 13 13.15 | − 4 42.8 | 1.888 | 2.882 | 2.7 | 21.2 |
| 4 11 | 13 4.97 | − 3 53.3 | 1.887 | 2.886 | 1.9 | 21.1 |
| 4 21 | 12 57.11 | − 3 8.1 | 1.914 | 2.891 | 5.8 | 21.4 |
| 5 1 | 12 50.39 | − 2 32.1 | 1.968 | 2.895 | 9.5 | 21.6 |
| 5 11 | 12 45.43 | − 2 8.6 | 2.046 | 2.899 | 12.7 | 21.8 |

**70477** 1999 $TC_{38}$ 4 7.9 117°.57 1°.6/ 6.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.35 | − 7 22.1 | 1.639 | 2.464 | 15.7 | 18.8 |
| 3 12 | 13 27.54 | − 6 24.5 | 1.565 | 2.470 | 12.0 | 18.6 |
| 3 22 | 13 21.34 | − 5 12.1 | 1.513 | 2.475 | 7.7 | 18.3 |
| 4 1 | 13 13.44 | − 3 50.8 | 1.487 | 2.481 | 3.1 | 18.1 |
| 4 11 | 13 4.86 | − 2 28.6 | 1.488 | 2.486 | 2.7 | 18.0 |
| 4 21 | 12 56.71 | − 1 14.2 | 1.517 | 2.492 | 7.2 | 18.3 |
| 5 1 | 12 49.98 | − 0 14.5 | 1.570 | 2.497 | 11.5 | 18.6 |
| 5 11 | 12 45.38 | + 0 25.8 | 1.646 | 2.502 | 15.2 | 18.8 |

**84992** 2003 $YM_{100}$ 4 7.9 9°.05 5°.9/ 1.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.45 | + 7 46.7 | 2.001 | 2.839 | 12.8 | 19.3 |
| 3 12 | 13 26.42 | + 8 48.6 | 1.933 | 2.839 | 10.0 | 19.1 |
| 3 22 | 13 20.41 | + 9 50.1 | 1.888 | 2.840 | 7.3 | 19.0 |
| 4 1 | 13 13.00 | +10 44.2 | 1.870 | 2.840 | 5.9 | 18.9 |
| 4 11 | 13 5.06 | +11 24.2 | 1.879 | 2.841 | 6.9 | 19.0 |
| 4 21 | 12 57.47 | +11 45.6 | 1.913 | 2.842 | 9.5 | 19.1 |
| 5 1 | 12 51.04 | +11 46.1 | 1.972 | 2.843 | 12.3 | 19.3 |
| 5 11 | 12 46.39 | +11 26.1 | 2.052 | 2.844 | 14.9 | 19.5 |

**399318** 1997 $XJ_{1}$ 4 7.9 128°.48 10°.8/20.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.30 | −40 51.0 | 1.938 | 2.567 | 19.8 | 21.0 |
| 3 12 | 13 32.49 | −41 25.1 | 1.856 | 2.581 | 17.9 | 20.8 |
| 3 22 | 13 24.76 | −41 27.6 | 1.788 | 2.594 | 15.6 | 20.7 |
| 4 1 | 13 14.91 | −40 53.5 | 1.739 | 2.607 | 13.4 | 20.6 |
| 4 11 | 13 4.22 | −39 41.6 | 1.712 | 2.619 | 11.6 | 20.5 |
| 4 21 | 12 54.07 | −37 55.9 | 1.708 | 2.630 | 10.8 | 20.4 |
| 5 1 | 12 45.72 | −35 45.6 | 1.730 | 2.641 | 11.6 | 20.5 |
| 5 11 | 12 40.00 | −33 23.3 | 1.777 | 2.651 | 13.4 | 20.6 |

**378881** 2008 $TW_{149}$ 4 7.9 97°.89 0°.9/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.14 | − 6 20.8 | 1.984 | 2.799 | 13.7 | 21.3 |
| 3 12 | 13 27.74 | − 5 58.1 | 1.907 | 2.805 | 10.5 | 21.1 |
| 3 22 | 13 21.29 | − 5 25.8 | 1.852 | 2.812 | 6.8 | 20.9 |
| 4 1 | 13 13.38 | − 4 47.4 | 1.825 | 2.818 | 2.8 | 20.6 |
| 4 11 | 13 4.90 | − 4 7.9 | 1.825 | 2.824 | 1.9 | 20.6 |
| 4 21 | 12 56.76 | − 3 32.5 | 1.853 | 2.830 | 5.9 | 20.9 |
| 5 1 | 12 49.82 | − 3 5.7 | 1.908 | 2.836 | 9.7 | 21.1 |
| 5 11 | 12 44.72 | − 2 50.9 | 1.986 | 2.842 | 13.0 | 21.3 |

**465112** 2006 $VE_{65}$ 4 7.9 109°.46 1°.5/ 6.6 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.57 | − 5 27.6 | 1.887 | 2.703 | 14.3 | 22.6 |
| 3 12 | 13 29.58 | − 4 53.4 | 1.820 | 2.719 | 10.9 | 22.5 |
| 3 22 | 13 22.43 | − 4 9.7 | 1.776 | 2.736 | 7.0 | 22.3 |
| 4 1 | 13 13.83 | − 3 20.9 | 1.759 | 2.752 | 2.9 | 22.0 |
| 4 11 | 13 4.73 | − 2 32.8 | 1.770 | 2.767 | 2.4 | 22.0 |
| 4 21 | 12 56.08 | − 1 51.1 | 1.809 | 2.783 | 6.4 | 22.3 |
| 5 1 | 12 48.79 | − 1 20.5 | 1.875 | 2.797 | 10.1 | 22.6 |
| 5 11 | 12 43.46 | − 1 4.0 | 1.963 | 2.811 | 13.4 | 22.8 |

**218040** 2002 $AY_{206}$ 4 7.9 196°.51 3°.4/ 3.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.87 | − 0 40.5 | 2.296 | 3.118 | 11.9 | 21.5 |
| 3 12 | 13 26.55 | + 0 36.4 | 2.211 | 3.115 | 9.0 | 21.3 |
| 3 22 | 13 20.42 | + 2 0.7 | 2.152 | 3.111 | 5.9 | 21.1 |
| 4 1 | 13 13.01 | + 3 26.5 | 2.120 | 3.107 | 3.5 | 20.9 |
| 4 11 | 13 5.06 | + 4 46.9 | 2.119 | 3.102 | 4.3 | 21.0 |
| 4 21 | 12 57.36 | + 5 55.8 | 2.146 | 3.097 | 7.3 | 21.1 |
| 5 1 | 12 50.64 | + 6 48.4 | 2.201 | 3.091 | 10.4 | 21.3 |
| 5 11 | 12 45.49 | + 7 22.4 | 2.278 | 3.084 | 13.2 | 21.5 |

**140352** 2001 $TK_{18}$ 4 7.9 126°.68 1°.1/ 9.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.89 | −13 9.0 | 2.123 | 2.911 | 13.9 | 19.5 |
| 3 12 | 13 28.17 | −12 44.4 | 2.045 | 2.925 | 10.8 | 19.4 |
| 3 22 | 13 21.49 | −12 5.5 | 1.990 | 2.938 | 7.3 | 19.2 |
| 4 1 | 13 13.45 | −11 14.6 | 1.962 | 2.951 | 3.5 | 18.9 |
| 4 11 | 13 4.90 | −10 16.6 | 1.963 | 2.963 | 1.3 | 18.8 |
| 4 21 | 12 56.71 | − 9 16.9 | 1.992 | 2.975 | 4.9 | 19.1 |
| 5 1 | 12 49.71 | − 8 21.5 | 2.049 | 2.986 | 8.6 | 19.3 |
| 5 11 | 12 44.48 | − 7 35.3 | 2.131 | 2.997 | 11.8 | 19.5 |

**54435** 2000 $LM_{35}$ 4 7.9 191°.18 3°.4/11.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.86 | −20 40.1 | 2.516 | 3.266 | 13.0 | 19.2 |
| 3 12 | 13 25.78 | −20 40.1 | 2.419 | 3.265 | 10.6 | 19.1 |
| 3 22 | 13 19.94 | −20 24.1 | 2.344 | 3.264 | 7.9 | 18.9 |
| 4 1 | 13 12.83 | −19 52.4 | 2.295 | 3.263 | 5.2 | 18.7 |
| 4 11 | 13 5.15 | −19 7.2 | 2.273 | 3.262 | 3.5 | 18.6 |
| 4 21 | 12 57.68 | −18 12.5 | 2.281 | 3.261 | 4.7 | 18.7 |
| 5 1 | 12 51.14 | −17 13.6 | 2.316 | 3.259 | 7.4 | 18.8 |
| 5 11 | 12 46.12 | −16 16.2 | 2.377 | 3.257 | 10.2 | 19.0 |

**466991** 2016 $BT_{59}$ 4 7.9 66°.22 4°.7/11.4 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.83 | −19 0.0 | 1.513 | 2.298 | 18.7 | 20.8 |
| 3 12 | 13 30.72 | −19 28.4 | 1.434 | 2.302 | 15.3 | 20.5 |
| 3 22 | 13 23.72 | −19 35.5 | 1.374 | 2.307 | 11.3 | 20.3 |
| 4 1 | 13 14.54 | −19 20.2 | 1.336 | 2.311 | 7.2 | 20.1 |
| 4 11 | 13 4.39 | −18 44.6 | 1.324 | 2.316 | 4.7 | 19.9 |
| 4 21 | 12 54.61 | −17 54.5 | 1.337 | 2.320 | 6.8 | 20.1 |
| 5 1 | 12 46.51 | −16 58.3 | 1.376 | 2.325 | 10.9 | 20.3 |
| 5 11 | 12 40.97 | −16 5.0 | 1.436 | 2.330 | 14.8 | 20.5 |

**429817** 2012 $KG_{38}$ 4 7.9 239°.42 1°.1/ 6.7 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 31.72 | − 6 50.1 | 2.215 | 3.024 | 12.7 | 22.6 |
| 3 12 | 13 27.41 | − 6 7.5 | 2.113 | 3.009 | 9.8 | 22.4 |
| 3 22 | 13 21.12 | − 5 13.5 | 2.035 | 2.993 | 6.3 | 22.1 |
| 4 1 | 13 13.37 | − 4 11.9 | 1.984 | 2.977 | 2.6 | 21.8 |
| 4 11 | 13 4.90 | − 3 8.1 | 1.962 | 2.960 | 2.1 | 21.8 |
| 4 21 | 12 56.58 | − 2 8.0 | 1.969 | 2.942 | 5.9 | 22.0 |
| 5 1 | 12 49.24 | − 1 17.1 | 2.003 | 2.924 | 9.7 | 22.2 |
| 5 11 | 12 43.56 | − 0 39.7 | 2.062 | 2.906 | 13.0 | 22.3 |

**237628** 2001 $RL_{114}$ 4 7.9 229°.39 0°.4/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.07 | − 8 35.2 | 1.805 | 2.612 | 15.2 | 21.4 |
| 3 12 | 13 31.25 | − 8 11.0 | 1.707 | 2.600 | 11.9 | 21.2 |
| 3 22 | 13 23.90 | − 7 33.1 | 1.631 | 2.587 | 7.8 | 20.9 |
| 4 1 | 13 14.61 | − 6 44.7 | 1.581 | 2.573 | 3.2 | 20.6 |
| 4 11 | 13 4.36 | − 5 51.0 | 1.559 | 2.559 | 1.7 | 20.4 |
| 4 21 | 12 54.27 | − 4 58.6 | 1.564 | 2.544 | 6.5 | 20.7 |
| 5 1 | 12 45.47 | − 4 14.2 | 1.597 | 2.528 | 11.0 | 20.9 |
| 5 11 | 12 38.83 | − 3 43.1 | 1.652 | 2.511 | 15.0 | 21.1 |

**308118** 2004 $XM_{75}$ 4 7.9 133°.12 4°.5/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 36.41 | + 2 44.1 | 1.915 | 2.740 | 13.8 | 21.3 |
| 3 12 | 13 30.92 | + 3 46.6 | 1.853 | 2.756 | 10.5 | 21.1 |
| 3 22 | 13 23.28 | + 4 52.5 | 1.815 | 2.772 | 7.1 | 20.9 |
| 4 1 | 13 14.19 | + 5 54.9 | 1.804 | 2.786 | 4.7 | 20.8 |
| 4 11 | 13 4.62 | + 6 46.9 | 1.822 | 2.800 | 5.5 | 20.9 |
| 4 21 | 12 55.55 | + 7 23.1 | 1.867 | 2.813 | 8.5 | 21.1 |
| 5 1 | 12 47.85 | + 7 40.4 | 1.938 | 2.825 | 11.7 | 21.3 |
| 5 11 | 12 42.14 | + 7 38.4 | 2.031 | 2.837 | 14.6 | 21.5 |

**60914** 2000 $JL_{35}$ 4 7.9 33°.66 0°.1/ 7.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.10 | − 8 46.4 | 1.546 | 2.370 | 16.6 | 19.5 |
| 3 12 | 13 28.32 | − 8 30.1 | 1.472 | 2.374 | 12.8 | 19.3 |
| 3 22 | 13 21.97 | − 7 59.6 | 1.420 | 2.379 | 8.4 | 19.0 |
| 4 1 | 13 13.76 | − 7 18.6 | 1.391 | 2.384 | 3.5 | 18.7 |
| 4 11 | 13 4.78 | − 6 32.9 | 1.389 | 2.389 | 1.6 | 18.6 |
| 4 21 | 12 56.22 | − 5 49.3 | 1.413 | 2.395 | 6.6 | 18.9 |
| 5 1 | 12 49.18 | − 5 14.3 | 1.461 | 2.401 | 11.2 | 19.2 |
| 5 11 | 12 44.43 | − 4 52.8 | 1.532 | 2.407 | 15.1 | 19.5 |

**466534** 2014 $SJ_{96}$ 4 7.9 131°.65 0°.9/ 8.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.49 | −12 23.6 | 1.884 | 2.679 | 15.1 | 22.8 |
| 3 12 | 13 29.67 | −12 1.2 | 1.807 | 2.691 | 11.8 | 22.6 |
| 3 22 | 13 22.60 | −11 23.5 | 1.753 | 2.703 | 7.9 | 22.3 |
| 4 1 | 13 13.96 | −10 33.2 | 1.724 | 2.714 | 3.6 | 22.1 |
| 4 11 | 13 4.72 | − 9 35.4 | 1.724 | 2.725 | 1.4 | 21.9 |
| 4 21 | 12 55.88 | − 8 36.4 | 1.752 | 2.735 | 5.5 | 22.2 |
| 5 1 | 12 48.39 | − 7 42.7 | 1.807 | 2.744 | 9.5 | 22.5 |
| 5 11 | 12 42.92 | − 6 59.7 | 1.886 | 2.753 | 13.0 | 22.7 |

**112187** 2002 $JP_{102}$ 4 7.9 332°.64 0°.2/ 7.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.84 | − 9 12.8 | 1.278 | 2.118 | 18.4 | 19.9 |
| 3 12 | 13 26.49 | − 8 51.0 | 1.196 | 2.107 | 14.3 | 19.6 |
| 3 22 | 13 21.18 | − 8 10.8 | 1.133 | 2.097 | 9.5 | 19.3 |
| 4 1 | 13 13.57 | − 7 15.9 | 1.093 | 2.087 | 4.0 | 19.0 |
| 4 11 | 13 4.84 | − 6 13.8 | 1.077 | 2.078 | 1.9 | 18.8 |
| 4 21 | 12 56.40 | − 5 13.7 | 1.086 | 2.070 | 7.7 | 19.1 |
| 5 1 | 12 49.62 | − 4 24.7 | 1.117 | 2.063 | 13.1 | 19.4 |
| 5 11 | 12 45.48 | − 3 53.7 | 1.168 | 2.057 | 17.8 | 19.6 |

**273089** 2006 $EZ_{28}$ 4 7.9 281°.36 2°.1/ 5.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.57 | − 5 13.5 | 1.930 | 2.756 | 13.6 | 20.6 |
| 3 12 | 13 25.21 | − 4 14.5 | 1.840 | 2.746 | 10.4 | 20.4 |
| 3 22 | 13 19.78 | − 3 3.4 | 1.773 | 2.736 | 6.7 | 20.1 |
| 4 1 | 13 12.83 | − 1 45.5 | 1.733 | 2.726 | 3.0 | 19.9 |
| 4 11 | 13 5.19 | − 0 27.9 | 1.721 | 2.716 | 3.1 | 19.9 |
| 4 21 | 12 57.77 | + 0 42.1 | 1.736 | 2.706 | 7.0 | 20.1 |
| 5 1 | 12 51.46 | + 1 38.2 | 1.778 | 2.696 | 10.9 | 20.3 |
| 5 11 | 12 46.95 | + 2 16.3 | 1.841 | 2.686 | 14.3 | 20.5 |

**380548** 2004 $NR_{33}$ 4 7.9 237°.05 5°.3/ 2.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.49 | + 7 59.5 | 2.413 | 3.234 | 11.4 | 22.3 |
| 3 12 | 13 29.34 | + 8 55.2 | 2.320 | 3.217 | 9.0 | 22.1 |
| 3 22 | 13 22.28 | + 9 51.0 | 2.252 | 3.199 | 6.6 | 21.9 |
| 4 1 | 13 13.84 | +10 41.2 | 2.213 | 3.181 | 5.3 | 21.8 |
| 4 11 | 13 4.76 | +11 19.9 | 2.201 | 3.162 | 6.2 | 21.8 |
| 4 21 | 12 55.84 | +11 42.8 | 2.219 | 3.142 | 8.6 | 21.9 |
| 5 1 | 12 47.88 | +11 47.2 | 2.262 | 3.122 | 11.3 | 22.0 |
| 5 11 | 12 41.51 | +11 32.8 | 2.327 | 3.101 | 13.9 | 22.2 |

**102940** 1999 $XY_{49}$ 4 7.9 159°.58 3°.4/ 5.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.58 | − 1 16.5 | 1.539 | 2.370 | 16.3 | 20.4 |
| 3 12 | 13 32.50 | − 0 36.1 | 1.467 | 2.374 | 12.5 | 20.2 |
| 3 22 | 13 24.68 | + 0 12.5 | 1.417 | 2.379 | 8.1 | 19.9 |
| 4 1 | 13 14.90 | + 1 2.7 | 1.392 | 2.382 | 4.1 | 19.7 |
| 4 11 | 13 4.32 | + 1 47.1 | 1.394 | 2.386 | 4.5 | 19.7 |
| 4 21 | 12 54.22 | + 2 18.8 | 1.422 | 2.388 | 8.6 | 19.9 |
| 5 1 | 12 45.77 | + 2 33.2 | 1.476 | 2.391 | 12.9 | 20.2 |
| 5 11 | 12 39.76 | + 2 28.4 | 1.550 | 2.392 | 16.6 | 20.4 |

**258794** 2002 $LA$ 4 7.9 346°.81 19°.7/ 5.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 21.45 | +36 54.8 | 1.255 | 2.077 | 19.8 | 18.7 |
| 3 12 | 13 21.32 | +40 28.9 | 1.234 | 2.061 | 19.9 | 18.6 |
| 3 22 | 13 17.98 | +43 27.7 | 1.232 | 2.046 | 20.8 | 18.6 |
| 4 1 | 13 12.23 | +45 36.0 | 1.247 | 2.033 | 22.3 | 18.7 |
| 4 11 | 13 5.47 | +46 45.1 | 1.275 | 2.022 | 24.0 | 18.8 |
| 4 21 | 12 59.26 | +46 54.2 | 1.314 | 2.013 | 25.6 | 18.9 |
| 5 1 | 12 54.99 | +46 7.9 | 1.362 | 2.006 | 27.1 | 19.0 |
| 5 11 | 12 53.53 | +44 34.5 | 1.416 | 2.001 | 28.3 | 19.1 |

**34710** 2001 $OS_{97}$ 4 7.9 172°.69 4°.8/ 2.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.58 | + 7 24.7 | 2.558 | 3.384 | 10.7 | 19.4 |
| 3 12 | 13 26.10 | + 8 23.3 | 2.486 | 3.386 | 8.3 | 19.2 |
| 3 22 | 13 20.01 | + 9 21.7 | 2.439 | 3.388 | 6.1 | 19.1 |
| 4 1 | 13 12.84 | +10 14.4 | 2.420 | 3.390 | 4.8 | 19.0 |
| 4 11 | 13 5.23 | +10 56.3 | 2.430 | 3.391 | 5.7 | 19.0 |
| 4 21 | 12 57.90 | +11 23.7 | 2.467 | 3.392 | 7.8 | 19.2 |
| 5 1 | 12 51.48 | +11 34.3 | 2.530 | 3.392 | 10.2 | 19.3 |
| 5 11 | 12 46.49 | +11 27.9 | 2.616 | 3.392 | 12.5 | 19.5 |

**7100** Martin Luther 4 7.9 249°.57 0°.0/ 7.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.04 | − 9 43.9 | 2.196 | 2.999 | 13.0 | 19.0 |
| 3 12 | 13 26.11 | − 9 17.9 | 2.101 | 2.992 | 10.1 | 18.7 |
| 3 22 | 13 20.26 | − 8 39.9 | 2.029 | 2.984 | 6.6 | 18.5 |
| 4 1 | 13 13.01 | − 7 52.5 | 1.984 | 2.976 | 2.8 | 18.2 |
| 4 11 | 13 5.13 | − 7 0.4 | 1.967 | 2.968 | 1.2 | 18.1 |
| 4 21 | 12 57.45 | − 6 8.7 | 1.979 | 2.959 | 5.2 | 18.4 |
| 5 1 | 12 50.76 | − 5 22.9 | 2.018 | 2.951 | 8.9 | 18.6 |
| 5 11 | 12 45.73 | − 4 47.3 | 2.081 | 2.943 | 12.2 | 18.8 |

**470176** 2006 $UR_{258}$ 4 7.9 97°.56 1°.7/10.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 27.49 | −16 56.6 | 2.362 | 3.138 | 13.0 | 21.6 |
| 3 12 | 13 23.98 | −16 16.5 | 2.274 | 3.143 | 10.3 | 21.4 |
| 3 22 | 13 18.75 | −15 19.7 | 2.208 | 3.148 | 7.2 | 21.2 |
| 4 1 | 13 12.34 | −14 8.6 | 2.169 | 3.153 | 3.8 | 21.0 |
| 4 11 | 13 5.45 | −12 47.7 | 2.159 | 3.158 | 1.8 | 20.9 |
| 4 21 | 12 58.83 | −11 22.9 | 2.178 | 3.163 | 4.4 | 21.1 |
| 5 1 | 12 53.19 | −10 0.8 | 2.226 | 3.168 | 7.7 | 21.3 |
| 5 11 | 12 49.05 | − 8 47.2 | 2.298 | 3.172 | 10.8 | 21.5 |

**377467** 2004 $XX_{106}$ 4 7.9 180°.58 2°.3/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 32.82 | − 0 52.9 | 2.675 | 3.485 | 10.7 | 21.5 |
| 3 12 | 13 27.75 | − 0 15.8 | 2.589 | 3.486 | 8.2 | 21.3 |
| 3 22 | 13 21.08 | + 0 25.8 | 2.529 | 3.487 | 5.3 | 21.2 |
| 4 1 | 13 13.29 | + 1 8.3 | 2.498 | 3.487 | 2.7 | 21.0 |
| 4 11 | 13 5.05 | + 1 47.3 | 2.497 | 3.487 | 3.0 | 21.0 |
| 4 21 | 12 57.04 | + 2 18.9 | 2.526 | 3.486 | 5.7 | 21.2 |
| 5 1 | 12 49.92 | + 2 40.1 | 2.583 | 3.484 | 8.6 | 21.4 |
| 5 11 | 12 44.20 | + 2 49.1 | 2.664 | 3.481 | 11.2 | 21.5 |

**140871** 2001 $VH_{15}$ 4 7.9 114°.57 0°.8/ 7.1 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.75 | − 5 43.4 | 2.475 | 3.281 | 11.6 | 20.3 |
| 3 12 | 13 27.03 | − 5 27.4 | 2.397 | 3.290 | 8.9 | 20.1 |
| 3 22 | 13 20.64 | − 5 4.3 | 2.343 | 3.300 | 5.7 | 19.9 |
| 4 1 | 13 13.11 | − 4 37.0 | 2.317 | 3.310 | 2.3 | 19.7 |
| 4 11 | 13 5.14 | − 4 9.1 | 2.320 | 3.319 | 1.6 | 19.6 |
| 4 21 | 12 57.45 | − 3 44.3 | 2.352 | 3.328 | 4.9 | 19.9 |
| 5 1 | 12 50.74 | − 3 26.0 | 2.413 | 3.337 | 8.1 | 20.1 |
| 5 11 | 12 45.51 | − 3 16.8 | 2.498 | 3.345 | 10.9 | 20.3 |

**461947** 2006 $SO_{402}$ 4 7.9 296°.71 2°.4/ 6.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.23 | − 2 15.8 | 1.558 | 2.390 | 16.0 | 20.9 |
| 3 12 | 13 30.94 | − 2 4.1 | 1.469 | 2.377 | 12.4 | 20.7 |
| 3 22 | 13 23.88 | − 1 44.9 | 1.400 | 2.363 | 8.1 | 20.4 |
| 4 1 | 13 14.68 | − 1 22.7 | 1.357 | 2.349 | 3.7 | 20.1 |
| 4 11 | 13 4.41 | − 1 3.2 | 1.339 | 2.336 | 3.5 | 20.0 |
| 4 21 | 12 54.35 | − 0 52.2 | 1.348 | 2.323 | 8.0 | 20.2 |
| 5 1 | 12 45.75 | − 0 54.1 | 1.382 | 2.310 | 12.7 | 20.5 |
| 5 11 | 12 39.56 | − 1 11.7 | 1.437 | 2.297 | 16.8 | 20.7 |

**236730** 2007 $HQ_{27}$ 4 7.9 315°.16 1°.4/ 7.1 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.87 | − 6 55.2 | 1.225 | 2.070 | 18.7 | 21.0 |
| 3 12 | 13 28.25 | − 6 29.7 | 1.142 | 2.056 | 14.5 | 20.7 |
| 3 22 | 13 22.46 | − 5 47.3 | 1.078 | 2.043 | 9.5 | 20.3 |
| 4 1 | 13 14.17 | − 4 52.8 | 1.036 | 2.031 | 3.9 | 20.0 |
| 4 11 | 13 4.62 | − 3 54.4 | 1.019 | 2.018 | 2.8 | 19.9 |
| 4 21 | 12 55.33 | − 3 1.4 | 1.025 | 2.007 | 8.6 | 20.2 |
| 5 1 | 12 47.78 | − 2 22.9 | 1.054 | 1.996 | 14.2 | 20.4 |
| 5 11 | 12 43.04 | − 2 4.8 | 1.102 | 1.986 | 19.0 | 20.7 |

**248004** 2004 $EG_{34}$ 4 7.9 34°.63 0°.5/ 7.3 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 25.34 | − 8 16.1 | 2.602 | 3.411 | 11.0 | 20.0 |
| 3 12 | 13 22.10 | − 7 36.1 | 2.526 | 3.421 | 8.4 | 19.9 |
| 3 22 | 13 17.42 | − 6 46.8 | 2.474 | 3.432 | 5.4 | 19.7 |
| 4 1 | 13 11.76 | − 5 51.6 | 2.450 | 3.443 | 2.2 | 19.5 |
| 4 11 | 13 5.73 | − 4 54.9 | 2.454 | 3.454 | 1.4 | 19.4 |
| 4 21 | 12 59.96 | − 4 1.2 | 2.488 | 3.466 | 4.5 | 19.7 |
| 5 1 | 12 55.02 | − 3 14.7 | 2.549 | 3.478 | 7.6 | 19.9 |
| 5 11 | 12 51.36 | − 2 38.5 | 2.636 | 3.490 | 10.2 | 20.1 |

**140810** 2001 $UM_{158}$ 4 7.9 85°.50 1°.1/ 9.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 28.17 | −14 10.4 | 2.301 | 3.090 | 12.9 | 20.4 |
| 3 12 | 13 24.51 | −13 37.6 | 2.218 | 3.097 | 10.1 | 20.2 |
| 3 22 | 13 19.11 | −12 50.2 | 2.157 | 3.104 | 6.9 | 20.0 |
| 4 1 | 13 12.50 | −11 50.8 | 2.124 | 3.112 | 3.4 | 19.8 |
| 4 11 | 13 5.42 | −10 43.9 | 2.118 | 3.119 | 1.3 | 19.7 |
| 4 21 | 12 58.62 | − 9 35.0 | 2.142 | 3.126 | 4.5 | 19.9 |
| 5 1 | 12 52.81 | − 8 30.1 | 2.194 | 3.133 | 8.0 | 20.1 |
| 5 11 | 12 48.55 | − 7 34.0 | 2.270 | 3.141 | 11.0 | 20.4 |

**141217** 2001 $XN_{220}$ 4 7.9 263°.73 2°.3/10.5 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.43 | −16 36.3 | 2.529 | 3.297 | 12.5 | 20.4 |
| 3 12 | 13 26.33 | −16 30.5 | 2.413 | 3.277 | 10.0 | 20.2 |
| 3 22 | 13 20.41 | −16 10.8 | 2.321 | 3.256 | 7.2 | 20.0 |
| 4 1 | 13 13.11 | −15 37.6 | 2.255 | 3.235 | 4.1 | 19.8 |
| 4 11 | 13 5.12 | −14 53.4 | 2.218 | 3.214 | 2.3 | 19.6 |
| 4 21 | 12 57.20 | −14 2.3 | 2.209 | 3.192 | 4.5 | 19.7 |
| 5 1 | 12 50.11 | −13 9.1 | 2.229 | 3.170 | 7.8 | 19.9 |
| 5 11 | 12 44.51 | −12 19.3 | 2.275 | 3.148 | 10.9 | 20.1 |

**321817** 2010 $RJ_{36}$ 4 7.9 79°.34 1°.8/ 9.4 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.20 | −14 2.0 | 1.558 | 2.363 | 17.3 | 21.1 |
| 3 12 | 13 29.17 | −13 50.6 | 1.486 | 2.373 | 13.7 | 20.9 |
| 3 22 | 13 22.53 | −13 20.3 | 1.433 | 2.383 | 9.4 | 20.7 |
| 4 1 | 13 14.02 | −12 33.4 | 1.405 | 2.393 | 4.7 | 20.4 |
| 4 11 | 13 4.76 | −11 35.2 | 1.403 | 2.403 | 2.0 | 20.3 |
| 4 21 | 12 55.97 | −10 33.1 | 1.428 | 2.413 | 6.1 | 20.6 |
| 5 1 | 12 48.76 | − 9 35.1 | 1.478 | 2.423 | 10.6 | 20.8 |
| 5 11 | 12 43.88 | − 8 48.1 | 1.550 | 2.433 | 14.5 | 21.1 |

**29649** 1998 $WP_{6}$ 4 7.9 69°.66 2°.2/ 6.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.42 | − 3 33.3 | 1.590 | 2.420 | 15.9 | 18.2 |
| 3 12 | 13 29.84 | − 3 3.0 | 1.529 | 2.436 | 12.1 | 18.0 |
| 3 22 | 13 22.80 | − 2 23.8 | 1.489 | 2.451 | 7.7 | 17.8 |
| 4 1 | 13 14.08 | − 1 41.0 | 1.474 | 2.467 | 3.4 | 17.5 |
| 4 11 | 13 4.76 | − 1 1.3 | 1.486 | 2.483 | 3.2 | 17.6 |
| 4 21 | 12 56.00 | − 0 30.6 | 1.525 | 2.498 | 7.4 | 17.8 |
| 5 1 | 12 48.81 | − 0 13.4 | 1.589 | 2.514 | 11.5 | 18.1 |
| 5 11 | 12 43.85 | − 0 12.2 | 1.675 | 2.530 | 15.0 | 18.4 |

**41391** 2000 $AX_{148}$ 4 7.9 210°.87 1°.5/ 6.2 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.72 | − 6 2.5 | 2.380 | 3.191 | 11.9 | 18.9 |
| 3 12 | 13 25.67 | − 5 8.0 | 2.288 | 3.186 | 9.1 | 18.7 |
| 3 22 | 13 19.88 | − 4 3.4 | 2.220 | 3.180 | 5.8 | 18.5 |
| 4 1 | 13 12.85 | − 2 52.7 | 2.180 | 3.173 | 2.5 | 18.3 |
| 4 11 | 13 5.28 | − 1 41.7 | 2.170 | 3.166 | 2.3 | 18.2 |
| 4 21 | 12 57.91 | − 0 35.9 | 2.189 | 3.159 | 5.7 | 18.5 |
| 5 1 | 12 51.47 | + 0 19.5 | 2.236 | 3.152 | 9.1 | 18.6 |
| 5 11 | 12 46.53 | + 1 1.0 | 2.306 | 3.143 | 12.0 | 18.8 |

**369580** 2011 $BZ_{97}$ 4 7.9 167°.89 1°.9/ 6.1 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.36 | − 3 51.3 | 2.042 | 2.858 | 13.3 | 21.8 |
| 3 12 | 13 28.66 | − 3 15.6 | 1.961 | 2.862 | 10.2 | 21.6 |
| 3 22 | 13 21.91 | − 2 31.7 | 1.904 | 2.864 | 6.6 | 21.4 |
| 4 1 | 13 13.71 | − 1 43.9 | 1.874 | 2.867 | 2.9 | 21.2 |
| 4 11 | 13 4.92 | − 0 57.8 | 1.873 | 2.868 | 2.8 | 21.1 |
| 4 21 | 12 56.44 | − 0 18.6 | 1.900 | 2.870 | 6.4 | 21.4 |
| 5 1 | 12 49.13 | + 0 9.1 | 1.953 | 2.871 | 10.1 | 21.6 |
| 5 11 | 12 43.64 | + 0 22.6 | 2.030 | 2.872 | 13.3 | 21.8 |

**265581** 2005 $QU_{146}$ 4 7.9 198°.96 5°.7/ 1.4 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.85 | + 6 36.6 | 2.186 | 3.016 | 12.1 | 21.5 |
| 3 12 | 13 27.41 | + 8 2.8 | 2.110 | 3.013 | 9.4 | 21.3 |
| 3 22 | 13 21.06 | + 9 30.9 | 2.059 | 3.009 | 6.9 | 21.2 |
| 4 1 | 13 13.35 | +10 53.6 | 2.036 | 3.005 | 5.7 | 21.1 |
| 4 11 | 13 5.08 | +12 3.6 | 2.041 | 3.000 | 6.8 | 21.1 |
| 4 21 | 12 57.08 | +12 55.2 | 2.073 | 2.994 | 9.3 | 21.3 |
| 5 1 | 12 50.14 | +13 25.1 | 2.131 | 2.988 | 12.1 | 21.4 |
| 5 11 | 12 44.88 | +13 32.8 | 2.209 | 2.981 | 14.6 | 21.6 |

**54864** 2001 $OP_{28}$ 4 7.9 184°.85 4°.2/ 3.6 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.95 | + 4 24.5 | 2.311 | 3.137 | 11.7 | 19.8 |
| 3 12 | 13 27.34 | + 5 6.9 | 2.234 | 3.137 | 9.0 | 19.6 |
| 3 22 | 13 20.93 | + 5 50.7 | 2.181 | 3.137 | 6.2 | 19.5 |
| 4 1 | 13 13.28 | + 6 31.0 | 2.156 | 3.137 | 4.3 | 19.3 |
| 4 11 | 13 5.12 | + 7 2.5 | 2.160 | 3.136 | 5.0 | 19.4 |
| 4 21 | 12 57.25 | + 7 21.2 | 2.191 | 3.135 | 7.5 | 19.5 |
| 5 1 | 12 50.41 | + 7 24.7 | 2.248 | 3.134 | 10.4 | 19.7 |
| 5 11 | 12 45.14 | + 7 12.3 | 2.328 | 3.133 | 13.0 | 19.9 |

**261974** 2006 $QZ_{3}$ 4 7.9 246°.98 1°.3/ 6.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.05 | − 6 47.3 | 1.878 | 2.694 | 14.4 | 21.5 |
| 3 12 | 13 28.84 | − 6 7.7 | 1.779 | 2.678 | 11.1 | 21.3 |
| 3 22 | 13 22.30 | − 5 15.2 | 1.703 | 2.663 | 7.2 | 21.0 |
| 4 1 | 13 13.98 | − 4 13.8 | 1.653 | 2.647 | 3.0 | 20.7 |
| 4 11 | 13 4.78 | − 3 9.7 | 1.631 | 2.630 | 2.4 | 20.6 |
| 4 21 | 12 55.74 | − 2 10.0 | 1.637 | 2.613 | 6.7 | 20.9 |
| 5 1 | 12 47.88 | − 1 21.0 | 1.670 | 2.595 | 11.0 | 21.1 |
| 5 11 | 12 41.99 | − 0 47.5 | 1.725 | 2.576 | 14.8 | 21.3 |

**167577** 2004 $BK_{71}$ 4 7.9 70°.75 1°.1/ 6.9 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 30.97 | − 6 13.8 | 2.046 | 2.861 | 13.4 | 20.1 |
| 3 12 | 13 26.75 | − 5 45.0 | 1.976 | 2.875 | 10.2 | 19.9 |
| 3 22 | 13 20.60 | − 5 6.8 | 1.929 | 2.888 | 6.5 | 19.7 |
| 4 1 | 13 13.14 | − 4 23.2 | 1.909 | 2.902 | 2.7 | 19.5 |
| 4 11 | 13 5.20 | − 3 39.2 | 1.917 | 2.916 | 2.0 | 19.5 |
| 4 21 | 12 57.63 | − 2 59.9 | 1.953 | 2.929 | 5.7 | 19.7 |
| 5 1 | 12 51.23 | − 2 29.8 | 2.016 | 2.943 | 9.3 | 20.0 |
| 5 11 | 12 46.57 | − 2 12.0 | 2.102 | 2.956 | 12.4 | 20.2 |

**385906** 2006 $SH_{379}$ 4 7.9 76°.25 0°.9/ 6.9 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.71 | − 6 38.5 | 2.223 | 3.035 | 12.5 | 21.6 |
| 3 12 | 13 25.66 | − 6 5.9 | 2.149 | 3.047 | 9.5 | 21.4 |
| 3 22 | 13 19.84 | − 5 24.1 | 2.100 | 3.059 | 6.1 | 21.2 |
| 4 1 | 13 12.82 | − 4 36.9 | 2.077 | 3.070 | 2.5 | 21.0 |
| 4 11 | 13 5.34 | − 3 49.0 | 2.083 | 3.082 | 1.8 | 21.0 |
| 4 21 | 12 58.19 | − 3 5.3 | 2.117 | 3.093 | 5.4 | 21.2 |
| 5 1 | 12 52.09 | − 2 30.3 | 2.179 | 3.105 | 8.8 | 21.4 |
| 5 11 | 12 47.57 | − 2 7.0 | 2.264 | 3.116 | 11.7 | 21.7 |

**187471** 2006 $BV_{72}$ 4 7.9 237°.63 1°.9/ 4.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 22.46 | + 1 53.4 | 4.672 | 5.489 | 6.4 | 20.9 |
| 3 12 | 13 19.32 | + 2 24.9 | 4.585 | 5.485 | 4.8 | 20.8 |
| 3 22 | 13 15.37 | + 2 57.9 | 4.524 | 5.481 | 3.2 | 20.7 |
| 4 1 | 13 10.88 | + 3 30.2 | 4.492 | 5.477 | 2.0 | 20.6 |
| 4 11 | 13 6.18 | + 3 59.4 | 4.491 | 5.473 | 2.3 | 20.6 |
| 4 21 | 13 1.57 | + 4 23.7 | 4.520 | 5.469 | 3.8 | 20.7 |
| 5 1 | 12 57.38 | + 4 41.4 | 4.576 | 5.465 | 5.4 | 20.8 |
| 5 11 | 12 53.88 | + 4 51.3 | 4.658 | 5.461 | 7.0 | 20.9 |

**83781** 2001 $TD_{199}$ 4 7.9 109°.43 4°.5/ 2.8 17

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 29.92 | + 4 50.3 | 2.317 | 3.147 | 11.5 | 19.7 |
| 3 12 | 13 25.73 | + 5 50.5 | 2.251 | 3.156 | 8.8 | 19.6 |
| 3 22 | 13 19.85 | + 6 52.0 | 2.209 | 3.164 | 6.2 | 19.4 |
| 4 1 | 13 12.81 | + 7 49.2 | 2.195 | 3.172 | 4.5 | 19.3 |
| 4 11 | 13 5.36 | + 8 36.3 | 2.209 | 3.180 | 5.4 | 19.4 |
| 4 21 | 12 58.23 | + 9 9.3 | 2.250 | 3.187 | 7.8 | 19.5 |
| 5 1 | 12 52.10 | + 9 25.4 | 2.318 | 3.195 | 10.4 | 19.7 |
| 5 11 | 12 47.51 | + 9 24.0 | 2.407 | 3.202 | 12.9 | 19.9 |

**105232** 2000 $PL_{11}$ 4 7.9 169°.04 3°.9/11.8 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 37.35 | −20 19.5 | 2.809 | 3.539 | 12.2 | 19.4 |
| 3 12 | 13 31.38 | −21 1.1 | 2.710 | 3.541 | 10.1 | 19.3 |
| 3 22 | 13 23.58 | −21 30.5 | 2.635 | 3.544 | 7.6 | 19.1 |
| 4 1 | 13 14.43 | −21 46.6 | 2.586 | 3.546 | 5.2 | 18.9 |
| 4 11 | 13 4.64 | −21 49.9 | 2.567 | 3.548 | 3.9 | 18.9 |
| 4 21 | 12 54.98 | −21 42.0 | 2.578 | 3.550 | 4.9 | 18.9 |
| 5 1 | 12 46.23 | −21 26.5 | 2.619 | 3.551 | 7.2 | 19.1 |
| 5 11 | 12 39.00 | −21 7.5 | 2.686 | 3.552 | 9.7 | 19.2 |

**458934** 2011 $UJ_{316}$ 4 7.9 81°.03 0°.3/ 7.7 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.32 | − 8 45.7 | 1.481 | 2.302 | 17.3 | 21.8 |
| 3 12 | 13 30.77 | − 8 23.9 | 1.418 | 2.318 | 13.3 | 21.6 |
| 3 22 | 13 23.53 | − 7 47.4 | 1.375 | 2.334 | 8.7 | 21.3 |
| 4 1 | 13 14.43 | − 7 0.4 | 1.357 | 2.350 | 3.6 | 21.1 |
| 4 11 | 13 4.67 | − 6 9.7 | 1.365 | 2.366 | 1.7 | 21.0 |
| 4 21 | 12 55.50 | − 5 22.3 | 1.400 | 2.382 | 6.8 | 21.3 |
| 5 1 | 12 48.03 | − 4 45.0 | 1.460 | 2.398 | 11.3 | 21.6 |
| 5 11 | 12 42.98 | − 4 22.2 | 1.542 | 2.413 | 15.2 | 21.9 |

**463257** 2012 $GG_{1}$ 4 7.9 219°.15 8°.5/12.3 16

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 49.42 | −24 8.1 | 1.330 | 2.079 | 22.5 | 21.8 |
| 3 12 | 13 43.44 | −25 9.2 | 1.229 | 2.068 | 19.2 | 21.5 |
| 3 22 | 13 33.13 | −25 46.0 | 1.144 | 2.053 | 15.2 | 21.2 |
| 4 1 | 13 18.99 | −25 50.6 | 1.080 | 2.037 | 11.1 | 20.9 |
| 4 11 | 13 2.51 | −25 18.6 | 1.040 | 2.018 | 8.6 | 20.7 |
| 4 21 | 12 45.81 | −24 12.6 | 1.026 | 1.998 | 10.2 | 20.7 |
| 5 1 | 12 31.18 | −22 43.7 | 1.036 | 1.975 | 14.7 | 20.9 |
| 5 11 | 12 20.32 | −21 8.0 | 1.068 | 1.950 | 19.7 | 21.1 |

**399693** 2004 $TT_{102}$ 4 7.9 146°.74 1°.0/ 8.9 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.97 | −13 13.8 | 1.874 | 2.666 | 15.3 | 22.2 |
| 3 12 | 13 30.09 | −12 43.1 | 1.795 | 2.677 | 12.0 | 22.0 |
| 3 22 | 13 22.94 | −11 55.7 | 1.738 | 2.687 | 8.1 | 21.8 |
| 4 1 | 13 14.17 | −10 54.3 | 1.707 | 2.696 | 3.8 | 21.6 |
| 4 11 | 13 4.78 | − 9 44.6 | 1.704 | 2.704 | 1.4 | 21.4 |
| 4 21 | 12 55.79 | − 8 33.6 | 1.729 | 2.712 | 5.5 | 21.7 |
| 5 1 | 12 48.15 | − 7 28.2 | 1.782 | 2.719 | 9.7 | 22.0 |
| 5 11 | 12 42.56 | − 6 34.6 | 1.859 | 2.725 | 13.2 | 22.2 |

**9771** 1993 $FU_{17}$ 4 7.9 123°.57 2°.6/ 6.1 18

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 2 | 13 38.41 | − 2 37.3 | 1.580 | 2.405 | 16.2 | 18.2 |
| 3 12 | 13 33.00 | − 2 8.8 | 1.513 | 2.417 | 12.4 | 18.0 |
| 3 22 | 13 24.94 | − 1 32.1 | 1.468 | 2.429 | 8.0 | 17.7 |
| 4 1 | 13 15.03 | − 0 52.6 | 1.448 | 2.440 | 3.7 | 17.5 |
| 4 11 | 13 4.43 | − 0 16.9 | 1.456 | 2.451 | 3.6 | 17.5 |
| 4 21 | 12 54.38 | + 0 9.1 | 1.490 | 2.461 | 7.8 | 17.8 |
| 5 1 | 12 46.00 | + 0 20.9 | 1.550 | 2.471 | 12.0 | 18.0 |
| 5 11 | 12 40.01 | + 0 16.5 | 1.632 | 2.480 | 15.7 | 18.3 |

**388332** 2006 $SW_{385}$ 4 7.9 135°.56 4°.6/ 2.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 29.54 | + 6 43.7 | 2.614 | 3.440 | 10.5 | 21.4 |
| 3 12 | 13 25.26 | + 7 44.4 | 2.547 | 3.448 | 8.1 | 21.3 |
| 3 22 | 13 19.47 | + 8 45.2 | 2.506 | 3.456 | 5.8 | 21.2 |
| 4 1 | 13 12.65 | + 9 40.7 | 2.492 | 3.464 | 4.6 | 21.1 |
| 4 11 | 13 5.46 | +10 25.9 | 2.508 | 3.471 | 5.4 | 21.1 |
| 4 21 | 12 58.55 | +10 57.2 | 2.551 | 3.478 | 7.5 | 21.3 |
| 5 1 | 12 52.53 | +11 12.3 | 2.621 | 3.484 | 9.9 | 21.4 |
| 5 11 | 12 47.88 | +11 10.9 | 2.712 | 3.491 | 12.0 | 21.6 |

**378344** 2007 $HS_{59}$ 4 7.9 338°.34 2°.9/ 5.8 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.88 | − 0 19.6 | 1.717 | 2.547 | 14.9 | 20.8 |
| 3 12 | 13 30.27 | − 0 5.2 | 1.637 | 2.544 | 11.4 | 20.6 |
| 3 22 | 13 23.20 | + 0 14.1 | 1.580 | 2.541 | 7.5 | 20.4 |
| 4 1 | 13 14.34 | + 0 33.7 | 1.548 | 2.539 | 3.7 | 20.1 |
| 4 11 | 13 4.70 | + 0 48.1 | 1.543 | 2.536 | 3.8 | 20.1 |
| 4 21 | 12 55.41 | + 0 52.7 | 1.565 | 2.534 | 7.7 | 20.3 |
| 5 1 | 12 47.50 | + 0 44.3 | 1.613 | 2.532 | 11.7 | 20.6 |
| 5 11 | 12 41.76 | + 0 21.3 | 1.682 | 2.531 | 15.3 | 20.8 |

**355249** 2007 $GE_{58}$ 4 7.9 313°.74 3°.7/ 5.5 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.61 | − 2 21.5 | 1.217 | 2.070 | 18.3 | 21.2 |
| 3 12 | 13 28.80 | − 1 39.5 | 1.137 | 2.057 | 14.1 | 20.8 |
| 3 22 | 13 22.83 | − 0 44.9 | 1.076 | 2.044 | 9.3 | 20.5 |
| 4 1 | 13 14.36 | + 0 15.2 | 1.039 | 2.031 | 4.6 | 20.2 |
| 4 11 | 13 4.66 | + 1 10.8 | 1.025 | 2.019 | 5.0 | 20.2 |
| 4 21 | 12 55.25 | + 1 52.5 | 1.035 | 2.007 | 10.0 | 20.4 |
| 5 1 | 12 47.61 | + 2 13.0 | 1.066 | 1.996 | 15.2 | 20.7 |
| 5 11 | 12 42.78 | + 2 8.9 | 1.116 | 1.986 | 19.8 | 20.9 |

**12926** Brianmason 4 7.9 212°.23 1°.9/ 6.0 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.62 | − 2 43.2 | 2.434 | 3.243 | 11.7 | 18.7 |
| 3 12 | 13 28.63 | − 2 14.5 | 2.340 | 3.236 | 8.9 | 18.5 |
| 3 22 | 13 21.82 | − 1 39.7 | 2.270 | 3.228 | 5.8 | 18.3 |
| 4 1 | 13 13.70 | − 1 2.1 | 2.229 | 3.220 | 2.7 | 18.1 |
| 4 11 | 13 4.99 | − 0 26.4 | 2.217 | 3.211 | 2.7 | 18.0 |
| 4 21 | 12 56.47 | + 0 3.3 | 2.234 | 3.201 | 5.8 | 18.2 |
| 5 1 | 12 48.90 | + 0 23.4 | 2.280 | 3.191 | 9.1 | 18.4 |
| 5 11 | 12 42.88 | + 0 31.5 | 2.349 | 3.181 | 12.0 | 18.6 |

**370128** 2001 $VL_{109}$ 4 7.9 215°.67 0°.8/ 7.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.51 | − 6 30.7 | 2.386 | 3.185 | 12.2 | 22.4 |
| 3 12 | 13 29.40 | − 6 7.9 | 2.286 | 3.176 | 9.4 | 22.2 |
| 3 22 | 13 22.38 | − 5 36.2 | 2.210 | 3.166 | 6.1 | 22.0 |
| 4 1 | 13 13.96 | − 4 58.6 | 2.163 | 3.155 | 2.5 | 21.7 |
| 4 11 | 13 4.88 | − 4 19.1 | 2.145 | 3.144 | 1.7 | 21.7 |
| 4 21 | 12 55.96 | − 3 42.2 | 2.156 | 3.132 | 5.4 | 21.9 |
| 5 1 | 12 48.01 | − 3 12.2 | 2.196 | 3.119 | 8.9 | 22.1 |
| 5 11 | 12 41.67 | − 2 52.5 | 2.261 | 3.105 | 12.0 | 22.3 |

**89905** 2002 $DN_{7}$ 4 7.9 170°.69 2°.9/ 5.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.80 | + 0 38.0 | 2.324 | 3.137 | 12.0 | 20.1 |
| 3 12 | 13 30.25 | + 1 5.2 | 2.243 | 3.141 | 9.2 | 20.0 |
| 3 22 | 13 22.83 | + 1 36.1 | 2.186 | 3.144 | 6.0 | 19.8 |
| 4 1 | 13 14.10 | + 2 6.3 | 2.158 | 3.146 | 3.3 | 19.6 |
| 4 11 | 13 4.84 | + 2 31.4 | 2.160 | 3.148 | 3.6 | 19.6 |
| 4 21 | 12 55.89 | + 2 47.6 | 2.190 | 3.150 | 6.5 | 19.8 |
| 5 1 | 12 48.01 | + 2 52.0 | 2.249 | 3.151 | 9.7 | 20.0 |
| 5 11 | 12 41.81 | + 2 43.4 | 2.331 | 3.151 | 12.5 | 20.2 |

**462139** 2007 $SA_{21}$ 4 7.9 243°.18 3°.2/10.7 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.32 | −17 44.8 | 1.833 | 2.610 | 16.2 | 21.7 |
| 3 12 | 13 30.06 | −17 43.4 | 1.728 | 2.595 | 13.2 | 21.4 |
| 3 22 | 13 23.26 | −17 22.5 | 1.645 | 2.580 | 9.5 | 21.2 |
| 4 1 | 13 14.46 | −16 42.0 | 1.585 | 2.565 | 5.6 | 20.9 |
| 4 11 | 13 4.64 | −15 44.7 | 1.553 | 2.549 | 3.2 | 20.7 |
| 4 21 | 12 54.93 | −14 36.5 | 1.548 | 2.532 | 5.9 | 20.8 |
| 5 1 | 12 46.48 | −13 25.2 | 1.570 | 2.515 | 10.1 | 21.0 |
| 5 11 | 12 40.18 | −12 19.3 | 1.615 | 2.497 | 14.1 | 21.2 |

**223211** 2003 $BE_{57}$ 4 7.9 50°.81 0°.7/ 7.1 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 26.37 | − 6 56.7 | 2.786 | 3.593 | 10.4 | 20.6 |
| 3 12 | 13 22.79 | − 6 25.4 | 2.712 | 3.607 | 7.9 | 20.4 |
| 3 22 | 13 17.84 | − 5 46.6 | 2.662 | 3.620 | 5.1 | 20.2 |
| 4 1 | 13 11.98 | − 5 3.2 | 2.641 | 3.634 | 2.0 | 20.1 |
| 4 11 | 13 5.78 | − 4 19.2 | 2.649 | 3.648 | 1.4 | 20.0 |
| 4 21 | 12 59.83 | − 3 38.2 | 2.686 | 3.662 | 4.4 | 20.3 |
| 5 1 | 12 54.67 | − 3 3.9 | 2.751 | 3.676 | 7.2 | 20.5 |
| 5 11 | 12 50.73 | − 2 38.6 | 2.841 | 3.690 | 9.7 | 20.6 |

**208719** 2002 $JJ_{114}$ 4 7.9 297°.80 0°.2/ 8.2 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.78 | − 9 49.7 | 1.464 | 2.289 | 17.3 | 20.6 |
| 3 12 | 13 28.62 | − 9 37.0 | 1.368 | 2.270 | 13.6 | 20.3 |
| 3 22 | 13 22.59 | − 9 7.7 | 1.291 | 2.250 | 9.1 | 20.0 |
| 4 1 | 13 14.27 | − 8 24.1 | 1.238 | 2.231 | 4.0 | 19.7 |
| 4 11 | 13 4.72 | − 7 31.9 | 1.210 | 2.212 | 1.6 | 19.4 |
| 4 21 | 12 55.28 | − 6 38.7 | 1.208 | 2.193 | 7.2 | 19.7 |
| 5 1 | 12 47.28 | − 5 52.6 | 1.230 | 2.174 | 12.4 | 20.0 |
| 5 11 | 12 41.77 | − 5 20.7 | 1.273 | 2.155 | 17.1 | 20.2 |

**329614** 2003 $KU_{2}$ 4 7.9 260°.96 1°.9/ 5.5 16

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| | h m | ° ′ | | | ° | m |
| 3 2 | 13 34.11 | − 2 32.7 | 3.150 | 3.946 | 9.6 | 23.7 |
| 3 12 | 13 28.76 | − 1 46.1 | 3.021 | 3.911 | 7.4 | 23.5 |
| 3 22 | 13 21.85 | − 0 52.7 | 2.918 | 3.874 | 4.8 | 23.3 |
| 4 1 | 13 13.74 | + 0 4.1 | 2.846 | 3.836 | 2.4 | 23.1 |
| 4 11 | 13 4.99 | + 1 0.4 | 2.806 | 3.797 | 2.6 | 23.0 |
| 4 21 | 12 56.21 | + 1 51.8 | 2.797 | 3.756 | 5.3 | 23.1 |
| 5 1 | 12 48.05 | + 2 34.6 | 2.818 | 3.714 | 8.2 | 23.3 |
| 5 11 | 12 41.06 | + 3 6.0 | 2.865 | 3.671 | 10.8 | 23.4 |

**36737** 2000 $RP_{60}$ 4 7.9 159°.59 6°.6/15.3 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 33.08 | −29 22.4 | 2.239 | 2.941 | 15.7 | 19.1 |
| 3 12 | 13 28.68 | −29 44.2 | 2.145 | 2.945 | 13.5 | 19.0 |
| 3 22 | 13 22.08 | −29 44.0 | 2.071 | 2.948 | 11.0 | 18.8 |
| 4 1 | 13 13.87 | −29 19.7 | 2.020 | 2.952 | 8.5 | 18.7 |
| 4 11 | 13 4.95 | −28 32.2 | 1.995 | 2.955 | 6.8 | 18.6 |
| 4 21 | 12 56.30 | −27 25.2 | 1.997 | 2.957 | 7.0 | 18.6 |
| 5 1 | 12 48.84 | −26 5.3 | 2.025 | 2.960 | 8.8 | 18.7 |
| 5 11 | 12 43.30 | −24 40.8 | 2.079 | 2.962 | 11.3 | 18.8 |

**353583** 2011 $ST_{274}$ 4 7.9 74°.33 0°.2/ 8.2 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 31.37 | − 8 58.1 | 2.317 | 3.117 | 12.5 | 20.8 |
| 3 12 | 13 26.95 | − 8 52.0 | 2.235 | 3.123 | 9.6 | 20.7 |
| 3 22 | 13 20.72 | − 8 36.4 | 2.176 | 3.130 | 6.3 | 20.5 |
| 4 1 | 13 13.24 | − 8 13.7 | 2.145 | 3.136 | 2.7 | 20.2 |
| 4 11 | 13 5.25 | − 7 47.2 | 2.142 | 3.143 | 1.1 | 20.1 |
| 4 21 | 12 57.53 | − 7 20.8 | 2.168 | 3.150 | 4.7 | 20.4 |
| 5 1 | 12 50.82 | − 6 58.5 | 2.222 | 3.156 | 8.2 | 20.6 |
| 5 11 | 12 45.69 | − 6 43.7 | 2.300 | 3.163 | 11.2 | 20.8 |

**292272** 2006 $SQ_{114}$ 4 7.9 48°.09 0°.3/ 7.6 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 28.22 | − 9 15.6 | 2.099 | 2.910 | 13.2 | 20.5 |
| 3 12 | 13 24.68 | − 8 38.1 | 2.023 | 2.918 | 10.2 | 20.3 |
| 3 22 | 13 19.31 | − 7 48.5 | 1.970 | 2.927 | 6.6 | 20.1 |
| 4 1 | 13 12.65 | − 6 50.5 | 1.943 | 2.936 | 2.7 | 19.9 |
| 4 11 | 13 5.51 | − 5 49.5 | 1.945 | 2.946 | 1.4 | 19.8 |
| 4 21 | 12 58.68 | − 4 51.3 | 1.975 | 2.955 | 5.3 | 20.1 |
| 5 1 | 12 52.93 | − 4 1.2 | 2.032 | 2.965 | 8.9 | 20.3 |
| 5 11 | 12 48.82 | − 3 23.3 | 2.113 | 2.975 | 12.1 | 20.5 |

**92930** 2000 $RH_{26}$ 4 7.9 200°.89 0°.0/ 7.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.74 | −11 16.4 | 2.459 | 3.249 | 12.1 | 20.4 |
| 3 12 | 13 26.43 | −10 25.3 | 2.361 | 3.245 | 9.4 | 20.2 |
| 3 22 | 13 20.40 | − 9 20.8 | 2.288 | 3.240 | 6.2 | 20.0 |
| 4 1 | 13 13.12 | − 8 5.9 | 2.243 | 3.234 | 2.6 | 19.8 |
| 4 11 | 13 5.30 | − 6 45.9 | 2.227 | 3.228 | 1.1 | 19.7 |
| 4 21 | 12 57.68 | − 5 26.5 | 2.242 | 3.221 | 4.8 | 19.9 |
| 5 1 | 12 50.99 | − 4 13.7 | 2.286 | 3.213 | 8.3 | 20.1 |
| 5 11 | 12 45.79 | − 3 12.3 | 2.354 | 3.205 | 11.4 | 20.3 |

**300944** 2008 $CC_{176}$ 4 7.9 75°.37 4°.1/11.9 17

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.92 | −19 50.3 | 2.365 | 3.113 | 13.8 | 20.6 |
| 3 12 | 13 29.79 | −20 29.7 | 2.278 | 3.122 | 11.3 | 20.5 |
| 3 22 | 13 22.66 | −20 55.0 | 2.214 | 3.131 | 8.5 | 20.3 |
| 4 1 | 13 14.09 | −21 5.1 | 2.175 | 3.140 | 5.7 | 20.1 |
| 4 11 | 13 4.87 | −21 0.9 | 2.164 | 3.149 | 4.2 | 20.0 |
| 4 21 | 12 55.89 | −20 45.1 | 2.182 | 3.158 | 5.3 | 20.1 |
| 5 1 | 12 47.99 | −20 21.9 | 2.228 | 3.166 | 7.9 | 20.3 |
| 5 11 | 12 41.82 | −19 56.5 | 2.299 | 3.175 | 10.7 | 20.5 |

**87847** 2000 $SM_{210}$ 4 7.9 208°.35 3°.3/ 3.8 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 30.56 | + 3 27.5 | 2.836 | 3.655 | 10.0 | 20.3 |
| 3 12 | 13 26.01 | + 4 8.4 | 2.750 | 3.650 | 7.6 | 20.2 |
| 3 22 | 13 19.98 | + 4 51.3 | 2.689 | 3.644 | 5.2 | 20.0 |
| 4 1 | 13 12.91 | + 5 32.0 | 2.656 | 3.638 | 3.5 | 19.9 |
| 4 11 | 13 5.41 | + 6 6.3 | 2.654 | 3.632 | 4.0 | 19.9 |
| 4 21 | 12 58.09 | + 6 30.9 | 2.680 | 3.625 | 6.3 | 20.0 |
| 5 1 | 12 51.57 | + 6 43.1 | 2.733 | 3.618 | 8.8 | 20.2 |
| 5 11 | 12 46.32 | + 6 42.0 | 2.811 | 3.610 | 11.1 | 20.3 |

**227594** 2006 $AB_{32}$ 4 7.9 115°.68 4°.0/ 4.5 18

| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 34.82 | + 2 43.1 | 1.996 | 2.822 | 13.3 | 20.3 |
| 3 12 | 13 29.74 | + 3 20.1 | 1.928 | 2.832 | 10.1 | 20.1 |
| 3 22 | 13 22.59 | + 3 59.6 | 1.883 | 2.841 | 6.8 | 20.0 |
| 4 1 | 13 14.03 | + 4 36.1 | 1.866 | 2.851 | 4.2 | 19.8 |
| 4 11 | 13 4.96 | + 5 4.1 | 1.876 | 2.860 | 4.8 | 19.9 |
| 4 21 | 12 56.30 | + 5 19.4 | 1.915 | 2.868 | 7.8 | 20.1 |
| 5 1 | 12 48.90 | + 5 19.3 | 1.979 | 2.877 | 11.0 | 20.3 |
| 5 11 | 12 43.37 | + 5 3.2 | 2.066 | 2.885 | 13.9 | 20.5 |

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| 2020 | $\alpha_{2000}$ | $\delta_{2000}$ | $\Delta$ | $r$ | $\beta$ | $V$ |
|---|---|---|---|---|---|---|
| 3 2 | 13 35.41 | +16 24.9 | 1.885 | 2.713 | 13.8 | 20.6 |
| 3 12 | 13 30.45 | +17 19.8 | 1.819 | 2.708 | 11.5 | 20.5 |
| 3 22 | 13 23.18 | +18 6.4 | 1.776 | 2.704 | 9.5 | 20.3 |
| 4 1 | 13 14.32 | +18 36.6 | 1.758 | 2.700 | 8.8 | 20.3 |
| 4 11 | 13 4.84 | +18 43.9 | 1.765 | 2.696 | 9.8 | 20.3 |
| 4 21 | 12 55.79 | +18 25.3 | 1.797 | 2.692 | 12.0 | 20.4 |
| 5 1 | 12 48.13 | +17 40.7 | 1.852 | 2.689 | 14.5 | 20.6 |
| 5 11 | 12 42.53 | +16 33.3 | 1.927 | 2.686 | 16.8 | 20.8 |