4451 Grieve

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
12 27	12 14.40	−23 37.3	3.424	3.442	16.5	18.3	83 W	21	74*
1 6	12 18.89	−24 37.9	3.263	3.425	16.7	18.2	91 W	20	84*
1 16	12 21.72	−25 30.2	3.102	3.407	16.5	18.1	100 W	19	90
1 26	12 22.67	−26 11.5	2.945	3.387	16.0	18.0	108 W	19	90
2 5	12 21.56	−26 38.5	2.795	3.367	15.0	17.8	118 W	18	89
2 15	12 18.32	−26 47.6	2.656	3.347	13.6	17.6	127 W	18	89
2 25	12 13.03	−26 34.9	2.535	3.325	11.8	17.4	137 W	18	89
3 7	12 6.02	−25 57.7	2.434	3.302	9.7	17.3	146 W	19	90
3 17	11 57.82	−24 54.5	2.358	3.279	7.8	17.1	153 W	20	89
3 22	11 53.51	−24 13.5	2.330	3.267	7.1	17.0	156 E	21	88
3 27	11 49.20	−23 26.9	2.310	3.254	6.7	17.0	158 E	22	87
4 1	11 45.00	−22 35.4	2.297	3.242	6.8	17.0	157 E	22	87
4 6	11 41.00	−21 39.8	2.291	3.229	7.3	17.0	156 E	23	86
4 11	11 37.30	−20 41.1	2.292	3.216	8.2	17.0	153 E	24	85
4 16	11 33.98	−19 40.5	2.301	3.203	9.3	17.1	149 E	25	84
4 21	11 31.11	−18 39.0	2.316	3.189	10.5	17.1	145 E	26	83
4 26	11 28.74	−17 37.7	2.337	3.176	11.7	17.2	140 E	27	82
5 1	11 26.91	−16 37.6	2.364	3.162	12.9	17.2	135 E	28	81
5 6	11 25.62	−15 39.5	2.396	3.148	14.1	17.3	131 E	29	80
5 16	11 24.73	−13 52.1	2.475	3.119	16.1	17.4	121 E	31*	78
5 26	11 26.03	−12 19.6	2.567	3.089	17.7	17.5	112 E	31*	76
6 5	11 29.37	−11 4.1	2.669	3.058	18.9	17.6	103 E	29*	75
6 15	11 34.54	−10 5.8	2.777	3.027	19.6	17.7	94 E	26*	74
6 25	11 41.34	− 9 24.3	2.885	2.995	19.8	17.8	86 E	22*	73*
7 5	11 49.56	− 8 58.2	2.993	2.962	19.7	17.8	78 E	19*	69*
7 15	11 59.02	− 8 46.1	3.096	2.927	19.2	17.9	71 E	15*	64*
7 25	12 9.58	− 8 46.2	3.192	2.893	18.4	17.9	64 E	12*	58*
8 4	12 21.09	− 8 56.8	3.279	2.857	17.3	17.9	57 E	10*	51*
8 14	12 33.47	− 9 16.4	3.356	2.820	16.1	17.9	50 E	8*	44*
8 24	12 46.64	− 9 43.3	3.422	2.783	14.6	17.8	44 E	6*	38*
9 3	13 0.52	−10 16.1	3.475	2.745	13.0	17.8	38 E	4*	32*
9 13	13 15.10	−10 53.2	3.514	2.706	11.2	17.7	31 E	3*	25*
9 23	13 30.31	−11 33.3	3.539	2.667	9.3	17.6	25 E	2*	19*
10 3	13 46.16	−12 14.8	3.550	2.627	7.3	17.5	19 E	—	13*
10 13	14 2.62	−12 56.5	3.546	2.586	5.2	17.3	13 E	—	7*
10 23	14 19.67	−13 36.7	3.527	2.544	3.0	17.2	8 E	—	2*
11 2	14 37.33	−14 14.0	3.493	2.502	0.9	16.9	2 E	—	—
11 12	14 55.57	−14 47.0	3.446	2.459	1.7	17.0	4 W	—	—
11 22	15 14.37	−15 13.9	3.384	2.416	3.9	17.0	10 W	3*	—
12 2	15 33.73	−15 33.2	3.310	2.373	6.3	17.1	15 W	8*	3*
12 12	15 53.61	−15 43.3	3.224	2.329	8.6	17.1	21 W	12*	8*
12 22	16 13.98	−15 42.4	3.127	2.285	10.9	17.1	26 W	15*	13*
1 1	16 34.80	−15 28.8	3.020	2.241	13.2	17.0	31 W	18*	18*
1 11	16 56.01	−15 0.9	2.905	2.196	15.5	17.0	37 W	21*	24*
1 21	17 17.53	−14 17.0	2.783	2.152	17.7	16.9	42 W	23*	29*

44010 1997 UH_{11}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 14.48	+ 9 22.0	2.780	3.040	18.8	20.6	96 W	54	51*
1 6	12 18.97	+ 9 22.0	2.632	3.035	18.3	20.5	105 W	54	54*
1 16	12 21.49	+ 9 36.0	2.490	3.030	17.2	20.3	114 W	55	54
1 26	12 21.79	+10 4.2	2.357	3.023	15.6	20.1	124 W	55	54
2 5	12 19.71	+10 45.7	2.239	3.015	13.4	19.9	135 W	56	53
2 15	12 15.17	+11 38.3	2.140	3.006	10.7	19.7	145 W	57	52
2 25	12 8.33	+12 37.6	2.064	2.996	7.7	19.5	156 W	58	51
3 2	12 4.19	+13 8.0	2.036	2.991	6.2	19.4	161 W	58	51
3 7	11 59.66	+13 37.7	2.016	2.986	4.9	19.3	165 W	59	50
3 12	11 54.85	+14 5.8	2.002	2.980	4.1	19.3	167 W	59	50
3 17	11 49.87	+14 31.6	1.996	2.974	4.3	19.3	167 W	60	49
3 22	11 44.86	+14 54.3	1.998	2.968	5.4	19.3	164 E	60	49
3 27	11 39.93	+15 13.1	2.007	2.961	6.8	19.4	159 E	60	49
4 6	11 30.79	+15 37.8	2.045	2.948	10.1	19.6	149 E	61	48
4 16	11 23.27	+15 43.8	2.108	2.934	13.2	19.7	138 E	61	48
4 26	11 17.90	+15 31.4	2.191	2.918	15.8	19.9	128 E	61	48
5 6	11 14.93	+15 2.5	2.289	2.902	17.9	20.0	118 E	60	49
5 16	11 14.36	+14 19.3	2.398	2.885	19.4	20.2	109 E	59*	50
5 26	11 16.05	+13 24.1	2.514	2.866	20.4	20.3	100 E	55*	51
6 5	11 19.77	+12 19.0	2.632	2.847	20.9	20.4	92 E	50*	52
6 15	11 25.27	+11 5.5	2.749	2.827	20.9	20.5	84 E	43*	53
6 25	11 32.32	+ 9 45.0	2.864	2.806	20.6	20.5	76 E	36*	54*
7 5	11 40.70	+ 8 18.5	2.973	2.784	20.0	20.6	69 E	31*	53*
7 15	11 50.22	+ 6 46.9	3.076	2.762	19.1	20.6	63 E	26*	50*
7 25	12 0.74	+ 5 10.8	3.169	2.738	18.0	20.6	56 E	21*	47*
8 4	12 12.13	+ 3 31.1	3.253	2.714	16.6	20.6	50 E	17*	42*
8 14	12 24.29	+ 1 48.2	3.325	2.688	15.1	20.6	44 E	14*	37*
8 24	12 37.17	+ 0 2.8	3.386	2.662	13.5	20.6	38 E	11*	31*
9 3	12 50.69	− 1 44.5	3.435	2.635	11.7	20.5	32 E	9*	26*
9 13	13 4.83	− 3 33.2	3.471	2.607	9.9	20.4	26 E	6*	20*
9 23	13 19.56	− 5 22.6	3.493	2.579	7.9	20.3	21 E	4*	14*
10 3	13 34.87	− 7 12.0	3.502	2.549	5.9	20.2	15 E	2*	9*

44010 1997 UH_{11} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
10 13	13 50.75	− 9 0.8	3.497	2.519	3.8	20.1	10 E	—	3*
10 23	14 7.20	−10 48.2	3.479	2.488	1.7	19.9	4 E	—	—
11 2	14 24.24	−12 33.5	3.448	2.457	0.9	19.8	2 W	—	—
11 12	14 41.85	−14 16.0	3.403	2.424	2.9	19.9	7 W	1*	—
11 22	15 0.05	−15 54.6	3.346	2.392	5.1	19.9	12 W	5*	2*
12 2	15 18.84	−17 28.8	3.278	2.358	7.3	20.0	18 W	9*	7*
12 12	15 38.22	−18 57.7	3.197	2.324	9.6	20.0	23 W	11*	12*
12 22	15 58.16	−20 20.3	3.107	2.290	11.8	20.0	28 W	14*	18*
1 1	16 18.67	−21 36.1	3.007	2.255	14.0	20.0	34 W	15*	24*
1 11	16 39.71	−22 44.2	2.898	2.220	16.1	19.9	39 W	16*	30*
1 21	17 1.23	−23 44.2	2.782	2.185	18.2	19.9	44 W	16*	36*

298680 2004 DJ_{25}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 14.57	− 6 29.7	1.428	1.726	34.7	21.5	89 W	39	64*
1 6	12 27.52	− 7 37.3	1.356	1.759	33.8	21.4	96 W	37	70*
1 16	12 37.86	− 8 24.1	1.283	1.793	32.2	21.3	104 W	37	72
1 26	12 45.13	− 8 46.9	1.212	1.827	30.0	21.1	112 W	36	73
2 5	12 48.92	− 8 42.6	1.146	1.861	26.9	21.0	121 W	36	73
2 15	12 48.87	− 8 8.5	1.087	1.895	22.9	20.8	132 W	37	72
2 25	12 44.92	− 7 3.5	1.042	1.928	17.9	20.5	143 W	38	71
3 7	12 37.55	− 5 30.8	1.015	1.962	12.1	20.3	156 W	39	70
3 12	12 32.87	− 4 36.3	1.009	1.978	9.0	20.2	162 W	40	69
3 17	12 27.75	− 3 38.3	1.010	1.995	5.7	20.1	169 W	41	68
3 22	12 22.42	− 2 38.6	1.017	2.011	2.4	19.9	175 W	42	67
3 27	12 17.10	− 1 39.3	1.030	2.027	0.8	19.8	178 E	43	66
4 1	12 11.99	− 0 42.1	1.049	2.043	4.0	20.1	172 E	44	65
4 6	12 7.26	+ 0 11.3	1.075	2.059	7.0	20.3	165 E	45	64
4 11	12 3.08	+ 0 59.7	1.107	2.075	9.9	20.5	159 E	46	63
4 16	11 59.57	+ 1 42.1	1.145	2.090	12.5	20.7	153 E	47	62
4 21	11 56.81	+ 2 17.7	1.188	2.105	14.9	20.9	147 E	47	62
4 26	11 54.83	+ 2 46.3	1.235	2.121	17.0	21.1	142 E	48	61
5 1	11 53.65	+ 3 8.0	1.287	2.135	18.9	21.3	137 E	48	61
5 6	11 53.25	+ 3 23.1	1.343	2.150	20.5	21.4	132 E	48	61

121514 1999 UJ_{7}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 14.92	+11 8.9	1.075	1.535	39.6	19.9	96 W	56	49*
1 6	12 27.10	+ 8 41.7	0.989	1.540	38.5	19.7	103 W	54	54*
1 16	12 36.14	+ 6 16.1	0.905	1.545	36.8	19.4	110 W	51	58
1 26	12 41.30	+ 3 51.4	0.824	1.550	34.2	19.2	118 W	49	60
2 5	12 41.74	+ 1 26.3	0.748	1.555	30.5	18.8	127 W	46	63
2 15	12 36.51	− 0 59.1	0.682	1.559	25.4	18.5	137 W	44	65
2 25	12 25.04	− 3 23.2	0.629	1.563	18.9	18.1	149 W	42	67
3 2	12 17.04	− 4 33.2	0.609	1.565	15.2	17.9	155 W	40	69
3 7	12 7.75	− 5 40.5	0.594	1.567	11.4	17.7	162 W	39	70
3 12	11 57.47	− 6 43.6	0.584	1.569	7.9	17.6	167 W	38	71
3 17	11 46.63	− 7 41.4	0.581	1.571	5.8	17.5	171 W	37	72
3 22	11 35.71	− 8 33.2	0.583	1.573	6.8	17.5	169 E	36	73
3 27	11 25.22	− 9 18.6	0.591	1.574	10.0	17.7	164 E	36	73
4 1	11 15.59	− 9 57.8	0.604	1.576	13.7	17.9	158 E	35	74
4 6	11 7.15	−10 31.6	0.622	1.577	17.4	18.1	152 E	34	75
4 11	11 0.14	−11 0.9	0.645	1.578	20.8	18.3	146 E	34	75
4 16	10 54.70	−11 27.2	0.671	1.579	23.9	18.4	140 E	34	75
4 21	10 50.85	−11 51.7	0.701	1.580	26.7	18.6	135 E	33	76
4 26	10 48.54	−12 15.6	0.733	1.581	29.1	18.8	130 E	33	76
5 1	10 47.69	−12 39.8	0.768	1.582	31.2	19.0	126 E	32	77
5 6	10 48.16	−13 4.8	0.804	1.583	33.0	19.1	121 E	32	77
5 16	10 52.67	−13 59.8	0.880	1.584	35.8	19.4	114 E	30*	78
5 26	11 1.17	−15 3.4	0.960	1.584	37.7	19.6	107 E	27*	79
6 5	11 12.87	−16 16.2	1.040	1.584	39.0	19.8	101 E	23*	80
6 15	11 27.20	−17 37.9	1.121	1.584	39.7	20.0	96 E	19*	82
6 25	11 43.74	−19 7.8	1.200	1.583	39.9	20.2	91 E	14*	83*
7 5	12 2.17	−20 44.1	1.279	1.582	39.9	20.3	86 E	11*	80*
7 15	12 22.31	−22 25.1	1.355	1.580	39.6	20.4	82 E	7*	76*
7 25	12 44.04	−24 8.9	1.429	1.578	39.1	20.5	78 E	5*	72*
8 4	13 7.27	−25 52.7	1.501	1.575	38.4	20.6	75 E	3*	67*
8 14	13 31.99	−27 34.2	1.571	1.572	37.6	20.7	71 E	2*	63*
8 24	13 58.15	−29 10.4	1.638	1.569	36.7	20.7	68 E	1*	59*
9 3	14 25.71	−30 38.1	1.703	1.565	35.6	20.8	65 E	1*	56*
9 13	14 54.64	−31 54.3	1.767	1.561	34.5	20.8	62 E	1*	53*
9 23	15 24.81	−32 55.7	1.828	1.557	33.3	20.9	58 E	1*	50*
10 3	15 56.07	−33 39.0	1.887	1.552	32.0	20.9	55 E	2*	48*
10 13	16 28.20	−34 1.8	1.944	1.547	30.6	20.9	52 E	2*	45*
10 23	17 0.91	−34 1.7	1.999	1.542	29.2	20.9	49 E	3*	43*
11 2	17 33.88	−33 37.3	2.052	1.537	27.6	20.9	46 E	4*	40*
11 12	18 6.78	−32 47.7	2.103	1.532	26.0	20.9	43 E	6*	37*
11 22	18 39.29	−31 33.3	2.151	1.526	24.4	20.9	40 E	7*	33*
12 2	19 11.15	−29 54.9	2.197	1.521	22.6	20.9	36 E	8*	30*
12 12	19 42.18	−27 54.1	2.240	1.515	20.9	20.9	33 E	9*	26*
12 22	20 12.26	−25 32.8	2.279	1.510	19.0	20.9	30 E	10*	22*
1 1	20 41.36	−22 53.3	2.315	1.505	17.2	20.8	27 E	10*	18*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		121514 1999 UJ_7				*(continuation)*			
	h m	° ′			°	m	°	°	°
1 11	21 9.51	−19 58.0	2.347	1.500	15.3	20.8	24 E	10*	14*
1 21	21 36.77	−16 49.2	2.376	1.495	13.3	20.7	21 E	10*	11*
		361532 2007 HF_{44}							
12 27	12 15.90	− 0 14.4	0.749	1.253	51.6	20.8	92 W	45	59*
1 6	12 33.72	− 1 21.7	0.726	1.294	48.9	20.7	97 W	44	63*
1 16	12 47.70	− 2 1.1	0.699	1.337	45.5	20.6	104 W	43	66*
1 26	12 57.20	− 2 8.8	0.669	1.382	41.4	20.5	112 W	43	66
2 5	13 1.60	− 1 42.2	0.640	1.427	36.3	20.3	121 W	43	66
2 15	13 0.27	− 0 40.2	0.616	1.472	30.0	20.1	132 W	44	65
2 20	12 57.40	+ 0 3.3	0.606	1.494	26.4	20.0	138 W	45	64
2 25	12 53.15	+ 0 53.7	0.600	1.517	22.6	19.9	144 W	46	63
3 2	12 47.64	+ 1 49.5	0.597	1.539	18.5	19.8	150 W	47	62
3 7	12 41.09	+ 2 48.4	0.598	1.561	14.3	19.7	157 W	48	61
3 12	12 33.78	+ 3 48.2	0.604	1.583	10.2	19.6	164 W	49	60
3 17	12 26.05	+ 4 45.9	0.615	1.604	6.4	19.5	170 W	50	59
3 22	12 18.30	+ 5 39.1	0.632	1.625	4.3	19.4	173 W	51	58
3 27	12 10.86	+ 6 25.4	0.654	1.646	5.7	19.6	171 E	51	58
4 1	12 4.06	+ 7 3.5	0.681	1.667	8.8	19.9	165 E	52	57
4 6	11 58.10	+ 7 32.7	0.713	1.687	12.1	20.1	159 E	53	56
4 16	11 49.29	+ 8 3.6	0.792	1.726	18.0	20.6	148 E	53	56
4 26	11 44.95	+ 8 1.0	0.887	1.764	22.7	21.1	137 E	53	56
5 6	11 44.72	+ 7 31.2	0.994	1.800	26.2	21.5	128 E	53	56
5 16	11 48.00	+ 6 40.4	1.112	1.834	28.7	21.8	119 E	52	57
		267337 2001 VK_5							
12 27	12 16.02	+26 40.0	1.460	1.920	30.1	21.4	102 W	72	35*
1 6	12 24.67	+28 18.7	1.347	1.914	29.0	21.2	109 W	73	35*
1 16	12 30.09	+30 32.2	1.239	1.904	27.3	21.0	117 W	76	33
1 26	12 31.28	+33 20.6	1.141	1.890	25.1	20.7	125 W	78	31
2 5	12 27.04	+36 38.2	1.057	1.871	22.8	20.5	133 W	82	27
2 10	12 22.47	+38 23.7	1.020	1.861	21.6	20.3	136 W	83	26
2 15	12 16.05	+40 9.7	0.989	1.849	20.7	20.2	139 W	85	24
2 20	12 7.73	+41 52.3	0.963	1.836	20.1	20.1	140 W	87	22
2 25	11 57.55	+43 27.0	0.943	1.822	20.0	20.1	141 W	88	21
3 2	11 45.66	+44 49.1	0.928	1.807	20.3	20.0	141 W	90	19
3 7	11 32.40	+45 54.4	0.918	1.791	21.2	20.0	139 W	89	18
3 12	11 18.24	+46 39.4	0.914	1.773	22.6	20.0	137 E	88	17
3 17	11 3.83	+47 1.9	0.915	1.755	24.3	20.1	133 E	88	17
3 19	10 58.15	+47 4.4	0.917	1.747	25.0	20.1	132 E	88	17
3 21	10 52.58	+47 3.4	0.919	1.739	25.8	20.1	131 E	88	17
3 23	10 47.16	+46 58.9	0.922	1.731	26.6	20.1	129 E	88	17
3 25	10 41.93	+46 50.9	0.926	1.723	27.4	20.1	127 E	88	17
3 27	10 36.90	+46 39.8	0.930	1.715	28.2	20.2	126 E	88	17
4 1	10 25.43	+45 59.0	0.943	1.693	30.3	20.2	121 E	89	18
4 6	10 15.72	+45 2.2	0.959	1.670	32.3	20.3	117 E	90	19
4 11	10 7.91	+43 52.3	0.977	1.646	34.2	20.4	113 E	89	20
4 16	10 2.01	+42 32.4	0.996	1.621	36.0	20.4	108 E	88	21
4 21	9 57.92	+41 4.9	1.017	1.594	37.7	20.5	104 E	86	23
4 26	9 55.49	+39 31.7	1.037	1.566	39.2	20.5	100 E	85	24
5 1	9 54.55	+37 54.3	1.058	1.538	40.7	20.6	96 E	82*	26
5 6	9 54.92	+36 13.7	1.077	1.507	42.0	20.6	92 E	78*	28
5 11	9 56.45	+34 30.4	1.096	1.476	43.2	20.6	89 E	73*	29
5 16	9 59.01	+32 44.8	1.113	1.443	44.3	20.6	85 E	68*	31
5 21	10 2.46	+30 57.0	1.128	1.410	45.3	20.6	82 E	64*	33
5 26	10 6.67	+29 7.2	1.141	1.374	46.4	20.6	79 E	59*	35
5 31	10 11.55	+27 15.1	1.152	1.338	47.3	20.6	76 E	54*	37*
6 5	10 17.01	+25 20.4	1.159	1.300	48.3	20.6	73 E	50*	38*
6 10	10 22.98	+23 22.9	1.164	1.261	49.3	20.6	70 E	46*	40*
6 15	10 29.41	+21 22.2	1.165	1.221	50.3	20.5	68 E	41*	41*
6 20	10 36.23	+19 17.9	1.162	1.180	51.4	20.5	65 E	37*	43*
6 25	10 43.39	+17 9.5	1.156	1.138	52.6	20.4	63 E	34*	43*
7 5	10 58.52	+12 38.9	1.131	1.050	55.4	20.3	58 E	27*	44*
7 15	11 14.44	+ 7 46.1	1.089	0.959	59.1	20.1	54 E	20*	44*
7 25	11 30.61	+ 2 26.9	1.027	0.868	64.2	19.9	50 E	14*	43*
8 4	11 46.09	− 3 21.3	0.945	0.780	71.3	19.7	47 E	8*	41*
8 9	11 53.07	− 6 26.1	0.896	0.739	76.0	19.7	45 E	5*	39*
8 14	11 59.10	− 9 36.7	0.842	0.702	81.5	19.6	43 E	2*	37*
8 19	12 3.64	−12 50.2	0.783	0.669	88.0	19.6	41 E	—	34*
8 24	12 5.99	−16 2.0	0.722	0.644	95.4	19.6	39 E	—	31*
8 26	12 6.13	−17 16.5	0.696	0.635	98.6	19.7	38 E	—	30*
8 28	12 5.72	−18 28.9	0.671	0.629	102.0	19.8	38 E	—	28*
8 30	12 4.71	−19 38.3	0.646	0.623	105.4	19.8	37 E	—	26*
9 1	12 3.03	−20 43.8	0.620	0.619	109.0	19.9	35 E	—	25*
9 3	12 0.62	−21 44.4	0.596	0.617	112.6	20.1	34 E	—	22*
9 5	11 57.45	−22 39.0	0.571	0.617	116.2	20.2	33 E	—	20*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		267337 2001 VK_5				*(continuation)*			
	h m	° ′			°	m	°	°	°
9 7	11 53.48	−23 26.3	1.055	0.617	119.7	20.4	32 E	—	18*
9 9	11 48.70	−24 5.0	0.524	0.620	123.1	20.6	31 E	—	15*
9 11	11 43.11	−24 33.7	0.502	0.624	126.4	20.8	30 E	—	12*
9 13	11 36.76	−24 51.1	0.481	0.630	129.4	21.0	29 E	—	9*
9 15	11 29.71	−24 56.0	0.462	0.637	132.0	21.2	28 W	—	7*
9 17	11 22.06	−24 47.3	0.443	0.645	134.1	21.3	27 W	—	9*
9 19	11 13.94	−24 24.3	0.426	0.655	135.7	21.4	27 W	—	12*
		223456 2003 UB_{10}							
12 27	12 16.97	− 0 23.7	1.055	1.459	42.4	20.8	91 W	45	59*
1 6	12 45.45	− 2 31.0	0.942	1.410	44.1	20.5	94 W	42	63*
1 16	13 16.29	− 4 36.4	0.839	1.362	45.9	20.2	96 W	40	67*
1 26	13 50.10	− 6 36.5	0.745	1.315	47.9	20.0	98 W	38	70*
1 31	14 8.33	− 7 33.3	0.702	1.291	49.0	19.8	98 W	37	71*
2 5	14 27.55	− 8 26.9	0.662	1.268	50.2	19.7	99 W	37	72*
2 10	14 47.81	− 9 16.5	0.625	1.246	51.5	19.6	99 W	36	73*
2 15	15 9.13	−10 1.0	0.592	1.224	52.9	19.4	99 W	35	74*
2 20	15 31.51	−10 39.3	0.562	1.203	54.4	19.3	98 W	34	75*
2 25	15 54.93	−11 10.4	0.536	1.183	56.1	19.2	97 W	34	75*
3 2	16 19.28	−11 33.1	0.513	1.165	57.8	19.2	96 W	33	75*
3 7	16 44.42	−11 46.5	0.494	1.147	59.5	19.1	95 W	33	75*
3 12	17 10.10	−11 49.9	0.479	1.130	61.3	19.1	94 W	33*	75*
3 17	17 36.07	−11 43.1	0.467	1.116	63.0	19.0	92 W	33*	75*
3 22	18 2.03	−11 26.5	0.458	1.102	64.7	19.0	91 W	33*	74*
3 27	18 27.72	−11 1.0	0.453	1.091	66.2	19.0	89 W	33*	74*
4 1	18 52.87	−10 27.6	0.450	1.081	67.5	19.0	88 W	33*	73*
4 6	19 17.29	− 9 47.8	0.450	1.073	68.5	19.0	87 W	32*	72*
4 11	19 40.78	− 9 3.2	0.452	1.068	69.4	19.1	86 W	32*	71*
4 16	20 3.21	− 8 15.2	0.456	1.064	69.9	19.1	85 W	32*	70*
4 21	20 24.55	− 7 25.5	0.461	1.063	70.2	19.1	84 W	32*	70*
4 26	20 44.76	− 6 35.3	0.466	1.064	70.1	19.1	84 W	31*	69*
5 1	21 3.88	− 5 45.5	0.473	1.067	69.9	19.2	84 W	31*	69*
5 6	21 21.91	− 4 56.9	0.479	1.072	69.4	19.2	84 W	31*	68*
5 16	21 54.77	− 3 26.7	0.491	1.089	67.8	19.2	85 W	32*	67*
5 26	22 23.56	− 2 10.3	0.501	1.113	65.4	19.2	88 W	33*	66
6 5	22 48.46	− 1 11.6	0.507	1.144	62.5	19.2	91 W	35*	65
6 15	23 9.35	− 0 35.5	0.508	1.180	58.9	19.2	96 W	37*	65
6 25	23 26.02	− 0 27.0	0.505	1.221	54.7	19.1	101 W	40*	64
7 5	23 38.10	− 0 50.8	0.498	1.264	49.8	19.0	108 W	42*	65
7 15	23 44.97	− 1 52.4	0.489	1.311	43.9	18.9	117 W	43*	66
7 25	23 46.15	− 3 34.6	0.481	1.358	36.9	18.8	127 W	41	68
7 30	23 44.52	− 4 40.4	0.478	1.382	33.0	18.7	132 W	40	69
8 4	23 41.43	− 5 54.9	0.477	1.406	28.8	18.6	138 W	39	70
8 9	23 36.95	− 7 16.3	0.479	1.431	24.4	18.5	144 W	38	71
8 14	23 31.25	− 8 42.2	0.484	1.455	19.9	18.4	151 W	36	73
8 19	23 24.62	−10 9.2	0.493	1.479	15.3	18.4	157 W	35	74
8 24	23 17.35	−11 34.0	0.505	1.503	10.8	18.3	164 W	33	76
8 29	23 9.81	−12 53.4	0.522	1.527	6.9	18.2	170 W	32	77
9 3	23 2.33	−14 4.5	0.544	1.550	4.8	18.2	173 W	31	78
9 8	22 55.29	−15 5.2	0.571	1.573	6.2	18.4	170 E	30	79
9 13	22 48.97	−15 54.5	0.603	1.596	9.2	18.7	165 E	29	80
9 18	22 43.60	−16 31.8	0.639	1.619	12.5	19.0	160 E	28	81
9 23	22 39.32	−16 57.6	0.680	1.642	15.6	19.3	154 E	28	81
9 28	22 36.16	−17 12.9	0.724	1.664	18.3	19.6	149 E	28	81
10 3	22 34.14	−17 18.6	0.773	1.685	20.8	19.8	143 E	28	81
10 8	22 33.21	−17 15.8	0.825	1.706	22.9	20.0	138 E	28	81
10 13	22 33.34	−17 5.5	0.881	1.727	24.7	20.3	134 E	28	81
10 18	22 34.42	−16 48.7	0.939	1.747	26.3	20.5	129 E	28	81
10 23	22 36.36	−16 26.3	1.000	1.767	27.6	20.7	125 E	29	80
10 28	22 39.07	−15 59.0	1.063	1.787	28.6	20.9	121 E	29	80
11 2	22 42.47	−15 27.6	1.128	1.806	29.4	21.0	117 E	30	79
11 7	22 46.48	−14 52.4	1.195	1.824	30.1	21.2	113 E	30	79
11 12	22 51.03	−14 14.0	1.264	1.842	30.5	21.3	109 E	31	78
11 17	22 56.06	−13 32.7	1.333	1.859	30.8	21.5	105 E	31	78
		175622 2006 XX_4							
12 27	12 17.65	+21 41.0	2.630	2.959	19.1	20.2	100 W	67	39*
1 6	12 23.20	+23 10.7	2.533	2.991	18.2	20.1	108 W	68	40*
1 16	12 26.56	+24 58.4	2.444	3.023	16.8	20.0	117 W	70	39
1 26	12 27.47	+27 1.2	2.370	3.053	15.1	19.9	126 W	72	37
1 31	12 26.96	+28 6.5	2.339	3.068	14.2	19.9	130 W	73	36
2 5	12 25.79	+29 13.5	2.314	3.083	13.3	19.8	134 W	74	35
2 10	12 23.96	+30 20.9	2.293	3.098	12.3	19.8	138 W	75	34
2 15	12 21.49	+31 27.6	2.279	3.112	11.4	19.8	141 W	76	33
2 20	12 18.42	+32 32.2	2.271	3.126	10.7	19.7	144 W	78	31
2 25	12 14.82	+33 33.6	2.270	3.140	10.1	19.7	146 W	79	30
3 2	12 10.76	+34 30.4	2.275	3.154	9.8	19.7	147 W	80	29
3 7	12 6.34	+35 21.7	2.287	3.168	9.7	19.7	147 W	80	29
3 12	12 1.67	+36 6.4	2.305	3.181	9.9	19.8	146 W	81	28

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		175622 2006 XX_4				*(continuation)*			
	h m	° ′			°	m	°	°	°
3 17	11 56.87	+36 43.9	2.330	3.194	10.4	19.8	145 W	82	27
3 22	11 52.08	+37 13.6	2.362	3.207	11.0	19.9	142 E	82	27
3 27	11 47.43	+37 35.5	2.399	3.220	11.7	20.0	139 E	83	26
4 1	11 43.02	+37 49.6	2.441	3.232	12.5	20.0	136 E	83	26
4 6	11 38.97	+37 56.2	2.489	3.245	13.3	20.1	132 E	83	26
4 11	11 35.34	+37 55.6	2.542	3.257	14.0	20.2	128 E	83	26
4 16	11 32.22	+37 48.5	2.599	3.268	14.7	20.3	124 E	83	26
4 21	11 29.64	+37 35.3	2.659	3.280	15.4	20.3	120 E	83	26
4 26	11 27.64	+37 16.8	2.723	3.292	15.9	20.4	116 E	82	27
5 6	11 25.36	+36 26.4	2.858	3.314	16.8	20.6	108 E	81	28
5 16	11 25.33	+35 21.8	3.001	3.335	17.3	20.7	100 E	80*	29
5 26	11 27.36	+34 6.8	3.148	3.356	17.5	20.8	93 E	75*	30
6 5	11 31.18	+32 44.6	3.295	3.376	17.4	20.9	86 E	67*	31
6 15	11 36.55	+31 17.4	3.442	3.394	17.1	21.0	79 E	59*	33
6 25	11 43.22	+29 46.9	3.584	3.412	16.5	21.1	72 E	52*	34*
7 5	11 50.97	+28 14.6	3.720	3.430	15.7	21.2	66 E	46*	35*
7 15	11 59.63	+26 41.4	3.849	3.446	14.7	21.2	59 E	41*	34*
7 25	12 9.03	+25 8.1	3.968	3.461	13.6	21.3	54 E	36*	32*
8 4	12 19.05	+23 35.5	4.076	3.476	12.5	21.3	48 E	32*	29*
8 14	12 29.59	+22 4.3	4.173	3.490	11.2	21.3	42 E	29*	25*
8 24	12 40.55	+20 35.1	4.257	3.502	10.0	21.3	37 E	26*	20*
9 3	12 51.86	+19 8.5	4.327	3.514	8.8	21.3	32 E	24*	15*
9 13	13 3.45	+17 45.1	4.382	3.526	7.7	21.3	28 E	21*	9*
9 23	13 15.27	+16 25.7	4.422	3.536	6.8	21.3	25 E	19*	3*
10 3	13 27.27	+15 10.7	4.446	3.545	6.3	21.3	23 E	16*	—
10 13	13 39.38	+14 1.1	4.454	3.554	6.2	21.3	23 E	14*	—
10 23	13 51.55	+12 57.4	4.446	3.562	6.6	21.3	24 E	11*	—
11 2	14 3.73	+12 0.4	4.421	3.569	7.3	21.3	27 W	17*	—
11 12	14 15.84	+11 10.9	4.381	3.575	8.3	21.4	32 W	24*	—
11 22	14 27.81	+10 29.7	4.325	3.580	9.5	21.4	37 W	30*	—
12 2	14 39.56	+ 9 57.5	4.254	3.585	10.6	21.4	42 W	36*	4*
12 12	14 50.99	+ 9 35.0	4.169	3.588	11.8	21.4	48 W	42*	10*
12 22	15 1.99	+ 9 23.0	4.071	3.591	12.9	21.4	55 W	46*	17*
1 1	15 12.42	+ 9 21.9	3.962	3.593	13.9	21.4	61 W	50*	25*
1 11	15 22.14	+ 9 32.5	3.844	3.594	14.7	21.3	68 W	52*	32*
1 21	15 30.99	+ 9 55.0	3.718	3.594	15.3	21.3	75 W	54*	39*
		505657 2014 SR_{339}							
12 27	12 18.62	−63 14.3	0.339	0.923	90.0	19.2	70 W	—	51*
12 29	12 25.11	−61 34.8	0.327	0.927	90.0	19.1	71 W	—	52*
12 31	12 31.65	−59 47.5	0.316	0.932	89.9	19.0	71 W	—	54*
1 2	12 38.24	−57 51.4	0.304	0.937	89.7	18.9	72 W	—	56*
1 4	12 44.84	−55 45.5	0.293	0.942	89.4	18.9	73 W	—	58*
1 6	12 51.44	−53 28.8	0.282	0.947	89.0	18.8	74 W	—	60*
1 8	12 58.00	−50 59.9	0.271	0.953	88.4	18.7	76 W	—	63*
1 10	13 4.50	−48 17.6	0.260	0.959	87.6	18.6	77 W	—	65*
1 12	13 10.93	−45 20.5	0.249	0.966	86.7	18.5	79 W	—	68*
1 14	13 17.26	−42 7.4	0.240	0.972	85.6	18.3	80 W	3	71*
1 16	13 23.46	−38 37.1	0.230	0.979	84.3	18.2	82 W	6	74*
1 18	13 29.53	−34 48.8	0.222	0.987	82.8	18.1	84 W	10	77*
1 20	13 35.45	−30 42.0	0.214	0.994	81.1	18.0	86 W	14	80*
1 22	13 41.19	−26 17.0	0.208	1.002	79.2	17.9	89 W	19	82*
1 24	13 46.74	−21 35.1	0.202	1.010	77.0	17.7	91 W	23	82*
1 26	13 52.09	−16 38.4	0.198	1.018	74.8	17.6	94 W	28	79*
1 28	13 57.22	−11 30.3	0.196	1.026	72.4	17.5	97 W	33	75*
1 30	14 2.11	− 6 15.0	0.194	1.035	70.0	17.5	99 W	39	70*
2 1	14 6.74	− 0 57.4	0.195	1.043	67.5	17.4	102 W	44	65*
2 3	14 11.10	+ 4 17.4	0.197	1.052	65.2	17.4	104 W	49	60*
2 5	14 15.17	+ 9 24.6	0.200	1.061	62.9	17.4	107 W	54	55*
2 7	14 18.93	+14 19.9	0.205	1.070	60.8	17.4	109 W	59	50
2 9	14 22.35	+19 0.2	0.211	1.079	58.9	17.4	110 W	64	45
2 11	14 25.43	+23 23.1	0.219	1.088	57.2	17.5	112 W	68	41
2 13	14 28.14	+27 27.6	0.228	1.097	55.7	17.5	113 W	72	37
2 15	14 30.48	+31 13.1	0.238	1.107	54.4	17.6	114 W	76	33
2 20	14 34.62	+39 17.0	0.266	1.130	51.8	17.8	116 W	84	25
2 25	14 36.23	+45 38.9	0.297	1.154	50.0	18.0	117 W	89	18
3 2	14 35.21	+50 37.2	0.332	1.178	48.7	18.3	117 W	84	13
3 7	14 31.56	+54 27.9	0.369	1.202	47.7	18.5	116 W	81	10
3 9	14 29.38	+55 44.1	0.384	1.212	47.3	18.6	116 W	79	8
3 11	14 26.81	+56 52.1	0.399	1.222	47.0	18.7	116 W	78	7
3 13	14 23.87	+57 52.3	0.414	1.231	46.7	18.8	116 W	77	6
3 15	14 20.60	+58 45.2	0.429	1.241	46.4	18.9	115 W	76	5
3 17	14 17.01	+59 31.2	0.445	1.250	46.1	19.0	115 W	75	4
3 19	14 13.17	+60 10.8	0.461	1.260	45.9	19.1	115 W	75	4
3 21	14 9.10	+60 44.2	0.476	1.269	45.6	19.1	114 W	74	3
3 23	14 4.86	+61 11.8	0.492	1.278	45.4	19.2	114 W	74	3
3 25	14 0.49	+61 33.8	0.508	1.288	45.2	19.3	114 W	73	2
3 27	13 56.04	+61 50.7	0.523	1.297	45.0	19.4	113 W	73	2
3 29	13 51.56	+62 2.7	0.539	1.306	44.8	19.5	113 W	73	2
3 31	13 47.09	+62 10.0	0.555	1.315	44.6	19.5	112 W	73	2

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		505657 2014 SR_{339}				*(continuation)*			
	h m	° ′			°	m	°	°	°
4 2	13 42.67	+62 12.9	0.571	1.324	44.4	19.6	112 W	73	2
4 4	13 38.34	+62 11.7	0.587	1.333	44.2	19.7	112 W	73	2
4 6	13 34.14	+62 6.5	0.603	1.342	44.0	19.7	111 W	73	2
4 8	13 30.10	+61 57.6	0.618	1.351	43.9	19.8	111 W	73	2
4 10	13 26.25	+61 45.2	0.634	1.359	43.7	19.9	110 W	73	2
4 12	13 22.61	+61 29.5	0.650	1.368	43.5	19.9	110 W	74	3
4 14	13 19.20	+61 10.7	0.666	1.377	43.4	20.0	109 E	74	3
4 16	13 16.04	+60 49.0	0.682	1.385	43.2	20.0	109 E	74	3
4 21	13 9.30	+59 43.7	0.721	1.406	42.9	20.2	108 E	75	4
4 26	13 4.20	+58 24.6	0.761	1.426	42.5	20.3	107 E	77	6
5 1	13 0.68	+56 54.4	0.800	1.445	42.2	20.5	106 E	78	7
5 6	12 58.61	+55 15.0	0.840	1.464	41.9	20.6	104 E	80	9
5 11	12 57.84	+53 28.1	0.879	1.482	41.6	20.7	103 E	82	11
5 16	12 58.24	+51 35.0	0.919	1.500	41.3	20.8	102 E	83	12
5 21	12 59.67	+49 37.0	0.958	1.517	41.0	20.9	101 E	85	14
5 26	13 1.99	+47 35.3	0.998	1.533	40.7	21.0	99 E	87	16
5 31	13 5.08	+45 30.7	1.038	1.548	40.4	21.1	98 E	89	18
6 5	13 8.81	+43 23.8	1.077	1.563	40.2	21.2	97 E	88*	21
6 10	13 13.14	+41 15.2	1.118	1.576	39.9	21.3	95 E	84*	23
6 15	13 17.97	+39 5.5	1.158	1.589	39.6	21.4	94 E	80*	25
6 20	13 23.27	+36 55.2	1.198	1.602	39.3	21.5	92 E	77*	27
		225743 2001 SM_{36}							
12 27	12 20.57	+34 2.0	1.048	1.594	36.9	18.5	103 W	79	27*
1 1	12 28.44	+33 33.3	1.016	1.596	36.3	18.4	106 W	79	29*
1 6	12 35.24	+33 6.9	0.985	1.598	35.7	18.3	109 W	78	30*
1 11	12 40.88	+32 42.9	0.955	1.601	34.9	18.3	111 W	78	31*
1 16	12 45.26	+32 21.2	0.925	1.606	33.9	18.2	115 W	77	32*
1 21	12 48.29	+32 1.3	0.896	1.611	32.7	18.1	118 W	77	32
1 26	12 49.90	+31 42.4	0.869	1.617	31.3	18.0	121 W	77	32
1 31	12 50.01	+31 23.6	0.843	1.624	29.7	17.9	125 W	76	33
2 5	12 48.55	+31 3.6	0.819	1.632	27.9	17.8	129 W	76	33
2 10	12 45.48	+30 41.0	0.797	1.640	25.9	17.7	133 W	76	33
2 15	12 40.81	+30 13.6	0.779	1.650	23.7	17.6	138 W	75	34
2 20	12 34.66	+29 39.5	0.764	1.660	21.4	17.5	142 W	75	34
2 25	12 27.21	+28 56.5	0.753	1.671	19.0	17.4	147 W	74	35
3 2	12 18.73	+28 3.1	0.747	1.683	16.8	17.3	151 W	73	36
3 7	12 9.55	+26 58.2	0.746	1.695	14.8	17.2	154 W	72	37
3 12	12 0.07	+25 41.7	0.750	1.708	13.4	17.2	156 W	71	38
3 17	11 50.70	+24 14.3	0.761	1.722	12.9	17.2	157 W	69	40
3 22	11 41.85	+22 37.5	0.777	1.736	13.4	17.3	156 E	68	41
3 27	11 33.82	+20 53.5	0.800	1.751	14.6	17.5	154 E	66	43
4 1	11 26.83	+19 5.0	0.828	1.766	16.3	17.6	150 E	64	45
4 6	11 21.02	+17 14.3	0.862	1.782	18.2	17.8	146 E	62	47
4 11	11 16.44	+15 23.4	0.901	1.798	20.2	18.0	142 E	60	49
4 16	11 13.09	+13 34.0	0.944	1.815	22.0	18.1	137 E	59	50
4 21	11 10.94	+11 46.9	0.993	1.832	23.6	18.3	133 E	57	52
4 26	11 9.90	+10 3.1	1.045	1.849	25.1	18.5	129 E	55	54
5 6	11 10.74	+ 6 46.2	1.159	1.885	27.4	18.8	121 E	52	57
5 16	11 14.88	+ 3 43.4	1.285	1.922	28.9	19.1	113 E	49*	60
5 26	11 21.63	+ 0 52.8	1.419	1.960	29.8	19.4	106 E	44*	63
6 5	11 30.41	− 1 47.6	1.560	1.998	30.0	19.7	100 E	38*	66
6 15	11 40.80	− 4 20.0	1.705	2.037	29.9	19.9	93 E	32*	68
6 25	11 52.49	− 6 46.0	1.853	2.076	29.3	20.1	88 E	26*	71*
7 5	12 5.20	− 9 6.8	2.001	2.115	28.4	20.3	82 E	21*	71*
7 15	12 18.79	−11 23.4	2.150	2.154	27.3	20.5	77 E	16*	69*
7 25	12 33.12	−13 36.1	2.298	2.193	26.0	20.6	71 E	12*	65*
8 4	12 48.09	−15 45.4	2.443	2.232	24.5	20.7	66 E	9*	60*
8 14	13 3.65	−17 51.2	2.584	2.271	22.9	20.8	61 E	6*	55*
8 24	13 19.75	−19 53.5	2.720	2.309	21.2	20.9	56 E	3*	49*
9 3	13 36.36	−21 52.0	2.851	2.347	19.5	21.0	51 E	1*	44*
9 13	13 53.47	−23 46.6	2.975	2.385	17.6	21.1	46 E	—	38*
9 23	14 11.06	−25 36.7	3.091	2.421	15.7	21.1	41 E	—	33*
10 3	14 29.11	−27 21.9	3.198	2.458	13.8	21.2	36 E	—	28*
10 13	14 47.61	−29 1.9	3.295	2.493	11.9	21.2	31 E	—	23*
10 23	15 6.54	−30 36.1	3.382	2.528	10.0	21.2	26 E	—	18*
11 2	15 25.86	−32 4.0	3.457	2.562	8.3	21.2	22 E	—	13*
11 12	15 45.54	−33 25.4	3.520	2.595	6.7	21.2	18 E	—	9*
11 22	16 5.51	−34 39.8	3.569	2.628	5.6	21.2	15 E	—	4*
12 2	16 25.72	−35 47.1	3.606	2.660	5.1	21.2	14 W	—	2*
12 12	16 46.08	−36 47.1	3.629	2.691	5.5	21.3	15 W	—	6*
12 22	17 6.49	−37 40.1	3.637	2.721	6.5	21.4	18 W	—	11*
1 1	17 26.84	−38 26.1	3.631	2.750	7.9	21.5	23 W	—	16*
		189694 2001 SF_{276}							
12 27	12 20.94	−17 40.8	2.474	2.560	22.4	21.5	84 W	27	70*
1 6	12 26.16	−19 50.5	2.370	2.590	22.3	21.4	92 W	25	80*
1 16	12 29.16	−21 53.4	2.267	2.619	21.7	21.3	100 W	23	86
1 26	12 29.60	−23 46.8	2.167	2.648	20.7	21.2	108 W	21	88
2 5	12 27.24	−25 27.2	2.076	2.676	19.1	21.1	117 W	20	89
2 15	12 21.94	−26 49.7	1.996	2.703	17.1	21.0	127 W	18	89

189694 2001 SF_{276} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
2 25	12 13.87	−27 48.9	1.933	2.730	14.7	20.8	136 W	17	88
3 7	12 3.56	−28 20.0	1.891	2.755	12.3	20.7	144 W	17	88
3 17	11 51.93	−28 20.3	1.872	2.780	10.3	20.6	150 W	17	88
3 27	11 40.19	−27 50.9	1.879	2.803	9.4	20.6	153 E	17	88
4 6	11 29.56	−26 57.6	1.913	2.826	10.1	20.7	150 E	18	89
4 16	11 20.97	−25 48.6	1.972	2.848	11.9	20.9	144 E	19	90
4 26	11 15.04	−24 33.7	2.054	2.869	14.0	21.0	137 E	20	89
5 6	11 11.91	−23 21.3	2.155	2.889	15.9	21.2	128 E	22	87
5 16	11 11.51	−22 17.3	2.272	2.908	17.6	21.4	120 E	23*	86

168381 1997 LY_4

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 20.97	−12 9.6	1.960	2.127	27.5	21.0	86 W	33	67*
1 6	12 32.03	−14 0.5	1.816	2.104	27.8	20.8	93 W	31	75*
1 16	12 41.63	−15 45.8	1.672	2.080	27.8	20.6	100 W	29	80*
1 26	12 49.39	−17 23.3	1.532	2.054	27.2	20.4	107 W	28	81
2 5	12 54.84	−18 50.4	1.397	2.028	26.0	20.1	116 W	26	83
2 10	12 56.53	−19 28.9	1.332	2.014	25.2	20.0	120 W	26	83
2 15	12 57.44	−20 3.2	1.270	1.999	24.1	19.9	124 W	25	84
2 20	12 57.50	−20 32.6	1.210	1.985	22.9	19.7	129 W	24	85
2 25	12 56.67	−20 56.3	1.153	1.970	21.4	19.5	133 W	24	85
3 2	12 54.89	−21 13.4	1.100	1.955	19.7	19.4	138 W	24	85
3 7	12 52.16	−21 22.9	1.051	1.939	17.8	19.2	143 W	24	85
3 12	12 48.47	−21 23.9	1.006	1.924	15.7	19.0	148 W	24	85
3 17	12 43.90	−21 15.3	0.966	1.908	13.6	18.8	153 W	24	85
3 22	12 38.55	−20 56.6	0.931	1.892	11.4	18.6	158 W	24	85
3 27	12 32.60	−20 27.5	0.901	1.875	9.5	18.5	162 W	25	84
4 1	12 26.27	−19 48.3	0.877	1.859	8.4	18.3	164 E	25	84
4 6	12 19.79	−18 59.5	0.859	1.842	8.6	18.3	164 E	26	83
4 11	12 13.44	−18 2.7	0.846	1.825	10.0	18.3	162 E	27	82
4 16	12 7.49	−16 59.8	0.839	1.807	12.3	18.3	157 E	28	81
4 21	12 2.21	−15 53.3	0.838	1.790	15.1	18.4	152 E	29	80
4 26	11 57.79	−14 45.5	0.841	1.772	18.0	18.5	147 E	30	79
5 1	11 54.36	−13 38.8	0.849	1.754	20.8	18.6	142 E	31	78
5 6	11 52.03	−12 35.3	0.861	1.737	23.6	18.7	136 E	32	77
5 11	11 50.84	−11 36.5	0.876	1.719	26.2	18.8	131 E	33	76
5 16	11 50.80	−10 43.8	0.893	1.701	28.6	18.9	126 E	34	75
5 26	11 54.09	− 9 19.7	0.935	1.664	32.7	19.0	117 E	35*	73
6 5	12 1.46	− 8 25.4	0.982	1.628	36.0	19.2	109 E	34*	72
6 15	12 12.41	− 7 59.7	1.032	1.593	38.6	19.3	102 E	32*	72
6 25	12 26.48	− 8 0.0	1.081	1.557	40.5	19.4	96 E	29*	72
7 5	12 43.21	− 8 22.4	1.129	1.523	41.9	19.5	90 E	26*	72
7 15	13 2.32	− 9 3.0	1.174	1.490	42.9	19.6	85 E	24*	72*
7 25	13 23.57	− 9 58.0	1.217	1.458	43.5	19.6	81 E	22*	71*
8 4	13 46.78	−11 3.1	1.256	1.429	43.8	19.7	77 E	21*	69*
8 14	14 11.85	−12 14.4	1.293	1.402	43.9	19.7	74 E	20*	66*
8 24	14 38.71	−13 27.6	1.327	1.378	43.9	19.7	71 E	20*	64*
9 3	15 7.25	−14 38.4	1.359	1.357	43.6	19.7	68 E	19*	61*
9 13	15 37.42	−15 42.5	1.390	1.340	43.2	19.7	66 E	20*	59*
9 23	16 9.07	−16 35.4	1.421	1.326	42.7	19.7	64 E	20*	57*
10 3	16 42.03	−17 12.9	1.453	1.318	42.0	19.7	62 E	21*	55*
10 13	17 16.06	−17 31.4	1.487	1.314	41.2	19.8	60 E	22*	52*
10 23	17 50.85	−17 28.0	1.523	1.314	40.2	19.8	58 E	23*	50*
11 2	18 26.05	−17 0.8	1.564	1.319	39.1	19.8	57 E	24*	47*
11 12	19 1.30	−16 9.4	1.609	1.329	37.9	19.9	56 E	26*	45*
11 22	19 36.23	−14 54.5	1.659	1.343	36.6	19.9	54 E	27*	41*
12 2	20 10.55	−13 18.1	1.714	1.361	35.1	20.0	52 E	29*	38*
12 12	20 44.04	−11 23.0	1.775	1.382	33.5	20.0	51 E	30*	34*
12 22	21 16.55	− 9 12.7	1.841	1.407	31.8	20.1	49 E	31*	30*
1 1	21 48.01	− 6 51.0	1.913	1.434	30.1	20.2	47 E	32*	27*
1 11	22 18.42	− 4 21.4	1.989	1.464	28.2	20.3	45 E	32*	23*
1 21	22 47.84	− 1 47.6	2.069	1.496	26.3	20.3	42 E	32*	20*

138971 2001 CB_{21}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 21.54	+ 9 14.9	0.661	1.224	53.3	19.9	94 W	54	50*
1 1	12 37.60	+ 7 28.1	0.617	1.203	54.5	19.7	95 W	52	52*
1 6	12 54.71	+ 5 30.3	0.574	1.181	56.0	19.6	95 W	51	55*
1 11	13 13.11	+ 3 19.6	0.532	1.159	57.7	19.4	95 W	48	57*
1 16	13 33.13	+ 0 53.9	0.493	1.134	59.8	19.3	95 W	46	60*
1 21	13 55.16	− 1 49.2	0.457	1.109	62.3	19.1	93 W	43	63*
1 26	14 19.71	− 4 51.2	0.424	1.083	65.3	19.0	92 W	40	65*
1 31	14 47.29	− 8 12.1	0.396	1.056	68.9	18.9	89 W	37	68*
2 5	15 18.42	−11 48.2	0.373	1.028	73.0	18.9	86 W	33	69*
2 7	15 31.95	−13 17.3	0.365	1.017	74.8	18.9	84 W	32	69*
2 9	15 46.11	−14 46.7	0.359	1.005	76.7	18.9	83 W	30	69*
2 11	16 0.90	−16 15.4	0.354	0.994	78.7	18.9	81 W	29	69*
2 13	16 16.29	−17 42.5	0.349	0.982	80.7	18.9	79 W	27*	69*
2 15	16 32.25	−19 6.5	0.347	0.970	82.7	18.9	77 W	26*	68*
2 17	16 48.72	−20 26.3	0.345	0.958	84.7	19.0	75 W	24*	67*
2 19	17 5.62	−21 40.7	0.345	0.946	86.7	19.0	73 W	23*	65*
2 21	17 22.86	−22 48.5	0.346	0.934	88.7	19.1	71 W	21*	64*

138971 2001 CB_{21} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
2 23	17 40.32	−23 48.6	0.349	0.922	90.5	19.1	69 W	19*	62*
2 25	17 57.90	−24 40.4	0.353	0.910	92.3	19.2	67 W	18*	60*
2 27	18 15.46	−25 23.2	0.358	0.899	94.0	19.3	65 W	16*	59*
3 1	18 32.88	−25 56.8	0.365	0.887	95.5	19.4	63 W	15*	57*
3 3	18 50.04	−26 21.2	0.373	0.875	96.9	19.4	61 W	13*	55*
3 5	19 6.84	−26 36.7	0.382	0.863	98.1	19.5	59 W	12*	53*
3 7	19 23.19	−26 43.6	0.393	0.851	99.1	19.6	58 W	11*	52*
3 9	19 39.04	−26 42.6	0.405	0.840	99.9	19.7	56 W	10*	50*
3 11	19 54.32	−26 34.2	0.417	0.828	100.5	19.7	55 W	9*	49*
3 13	20 9.02	−26 19.2	0.431	0.817	101.0	19.8	54 W	8*	48*
3 15	20 23.12	−25 58.2	0.446	0.806	101.2	19.9	53 W	7*	46*
3 17	20 36.63	−25 31.9	0.462	0.796	101.3	19.9	52 W	6*	45*
3 19	20 49.57	−25 1.0	0.479	0.785	101.2	20.0	51 W	6*	44*
3 21	21 1.95	−24 25.8	0.496	0.775	100.9	20.0	50 W	5*	43*
3 23	21 13.82	−23 47.0	0.514	0.765	100.5	20.0	49 W	5*	43*
3 25	21 25.20	−23 4.9	0.534	0.756	99.9	20.0	48 W	4*	42*
3 27	21 36.13	−22 20.0	0.553	0.747	99.1	20.1	48 W	4*	41*
4 1	22 1.73	−20 16.9	0.606	0.727	96.7	20.1	46 W	3*	40*
4 6	22 25.31	−18 1.5	0.662	0.711	93.5	20.1	45 W	3*	39*
4 11	22 47.31	−15 36.8	0.721	0.699	89.8	20.1	44 W	3*	38*
4 16	23 8.12	−13 5.1	0.781	0.692	85.7	20.1	43 W	3*	37*
4 21	23 28.00	−10 28.6	0.842	0.690	81.3	20.1	43 W	3*	37*
4 26	23 47.19	− 7 49.3	0.904	0.693	76.9	20.1	42 W	4*	36*
5 1	0 5.82	− 5 9.0	0.964	0.701	72.5	20.1	42 W	5*	36*
5 6	0 24.01	− 2 29.8	1.023	0.713	68.4	20.1	41 W	5*	35*
5 11	0 41.82	+ 0 6.8	1.079	0.730	64.5	20.2	41 W	6*	35*
5 16	0 59.30	+ 2 39.1	1.132	0.751	61.0	20.2	41 W	7*	34*
5 21	1 16.48	+ 5 6.0	1.183	0.774	57.9	20.3	40 W	9*	34*
5 26	1 33.40	+ 7 26.6	1.229	0.800	55.1	20.4	40 W	10*	33*
6 5	2 6.61	+11 46.7	1.312	0.856	50.6	20.5	41 W	13*	33*
6 15	2 39.12	+15 36.6	1.379	0.916	47.4	20.7	42 W	16*	32*
6 25	3 11.06	+18 55.4	1.432	0.975	45.2	20.9	43 W	20*	31*
7 5	3 42.57	+21 44.0	1.471	1.033	43.7	21.0	45 W	24*	30*
7 15	4 13.70	+24 3.5	1.495	1.088	42.8	21.1	47 W	29*	29*
7 25	4 44.43	+25 55.5	1.507	1.139	42.4	21.2	49 W	33*	29*
8 4	5 14.77	+27 21.7	1.506	1.185	42.2	21.3	52 W	38*	28*
8 14	5 44.63	+28 24.2	1.492	1.227	42.4	21.4	55 W	43*	27*
8 24	6 13.92	+29 4.8	1.467	1.264	42.6	21.4	58 W	47*	27*
9 3	6 42.60	+29 25.8	1.431	1.296	43.1	21.4	61 W	51*	27*
9 13	7 10.56	+29 29.3	1.385	1.323	43.6	21.4	65 W	56*	27*
9 23	7 37.74	+29 17.7	1.329	1.344	44.1	21.4	69 W	60*	27*
10 3	8 4.11	+28 53.4	1.265	1.361	44.6	21.3	73 W	63*	28*
10 13	8 29.62	+28 18.9	1.193	1.372	45.1	21.2	77 W	67*	29*
10 23	8 54.25	+27 36.7	1.115	1.378	45.5	21.1	81 W	70*	30*
11 2	9 18.03	+26 49.4	1.031	1.379	45.9	20.9	86 W	71*	31*
11 12	9 40.92	+25 59.7	0.943	1.375	46.1	20.7	91 W	71	33*
11 22	10 2.94	+25 10.3	0.852	1.365	46.1	20.5	96 W	70	35*
12 2	10 24.12	+24 23.9	0.759	1.350	45.9	20.2	101 W	69	37*
12 12	10 44.43	+23 43.8	0.666	1.330	45.4	19.9	106 W	69	39*
12 22	11 3.89	+23 12.9	0.573	1.305	44.6	19.5	111 W	68	40*
1 1	11 22.59	+22 54.3	0.483	1.275	43.6	19.0	117 W	68	41
1 11	11 40.60	+22 51.9	0.396	1.240	42.2	18.5	122 W	68	41
1 21	11 58.43	+23 8.5	0.312	1.200	40.6	17.9	127 W	68	41

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 21.58	−26 46.5	3.598	3.564	15.8	20.7	80 W	18	73*
1 6	12 24.63	−28 34.5	3.465	3.572	16.0	20.6	88 W	16	82*
1 16	12 25.87	−30 18.0	3.333	3.579	15.8	20.5	96 W	15	86
1 26	12 25.06	−31 54.5	3.204	3.586	15.4	20.4	105 W	13	84
2 5	12 22.03	−33 20.8	3.084	3.591	14.6	20.3	113 W	12	83
2 15	12 16.72	−34 32.8	2.976	3.596	13.5	20.2	122 W	10	81
2 25	12 9.25	−35 26.1	2.884	3.600	12.2	20.1	130 W	10	81
3 2	12 4.82	−35 44.5	2.846	3.601	11.5	20.1	134 W	9	80
3 7	12 0.01	−35 56.8	2.813	3.603	10.8	20.0	137 W	9	80
3 12	11 54.91	−36 2.8	2.786	3.604	10.2	20.0	140 W	9	80
3 17	11 49.63	−36 2.2	2.764	3.605	9.7	19.9	142 W	9	80
3 22	11 44.28	−35 55.2	2.750	3.606	9.3	19.9	144 E	9	80
3 27	11 38.98	−35 41.9	2.741	3.606	9.1	19.9	145 E	9	80
4 1	11 33.84	−35 22.9	2.740	3.607	9.1	19.9	145 E	10	81
4 6	11 28.96	−34 58.7	2.744	3.607	9.2	19.9	145 E	10	81
4 11	11 24.44	−34 30.0	2.756	3.607	9.6	19.9	143 E	10	81
4 16	11 20.35	−33 57.7	2.773	3.606	10.1	20.0	141 E	11	82
4 21	11 16.77	−33 22.6	2.796	3.606	10.8	20.0	138 E	12	83
4 26	11 13.73	−32 45.8	2.825	3.605	11.4	20.0	135 E	12	83
5 1	11 11.27	−32 8.0	2.859	3.604	12.1	20.1	131 E	13	84
5 6	11 9.39	−31 30.1	2.898	3.603	12.8	20.1	128 E	13	84
5 16	11 7.38	−30 16.8	2.988	3.600	14.1	20.3	120 E	15*	86
5 26	11 7.61	−29 10.8	3.092	3.596	15.1	20.4	112 E	14*	87
6 5	11 9.89	−28 15.3	3.205	3.592	15.9	20.5	104 E	12*	88

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
6 15	11 13.98	−27 32.1	3.325	3.586	16.3	20.6	97 E	8*	88*
6 25	11 19.66	−27 2.2	3.447	3.580	16.5	20.6	89 E	5*	82*
7 5	11 26.69	−26 45.3	3.569	3.573	16.4	20.7	82 E	1*	74*
7 15	11 34.91	−26 41.2	3.688	3.565	16.0	20.8	75 E	—	66*
7 25	11 44.14	−26 49.1	3.801	3.556	15.4	20.8	68 E	—	58*
8 4	11 54.24	−27 8.0	3.908	3.546	14.6	20.8	62 E	—	51*
8 14	12 5.12	−27 36.8	4.005	3.535	13.7	20.8	56 E	—	44*
8 24	12 16.67	−28 14.7	4.092	3.524	12.7	20.8	50 E	—	37*
9 3	12 28.82	−29 0.5	4.166	3.512	11.5	20.8	44 E	—	31*
9 13	12 41.53	−29 53.4	4.228	3.498	10.3	20.8	39 E	—	25*
9 23	12 54.73	−30 52.3	4.276	3.484	9.2	20.8	34 E	—	19*
10 3	13 8.39	−31 56.3	4.309	3.469	8.1	20.7	29 E	—	13*
10 13	13 22.48	−33 4.6	4.327	3.453	7.2	20.7	26 E	—	8*
10 23	13 36.96	−34 16.3	4.329	3.437	6.5	20.7	23 W	—	7*
11 2	13 51.80	−35 30.7	4.316	3.419	6.4	20.6	22 W	—	11*
11 12	14 6.97	−36 47.1	4.286	3.401	6.7	20.6	23 W	—	15*
11 22	14 22.42	−38 4.6	4.241	3.382	7.4	20.6	26 W	—	19*
12 2	14 38.11	−39 22.9	4.180	3.361	8.4	20.6	30 W	—	23*
12 12	14 53.97	−40 41.4	4.104	3.340	9.6	20.6	35 W	—	28*
12 22	15 9.93	−41 59.5	4.014	3.319	10.9	20.6	40 W	—	34*
1 1	15 25.89	−43 17.1	3.911	3.296	12.3	20.6	45 W	—	39*
1 11	15 41.73	−44 34.1	3.796	3.272	13.6	20.6	51 W	—	45*
1 21	15 57.31	−45 50.3	3.669	3.248	14.8	20.5	57 W	—	50*

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 21.84	− 0 27.1	1.484	1.783	33.5	20.3	90 W	45	58*
1 6	12 37.42	− 2 55.0	1.314	1.720	34.7	20.0	96 W	42	64*
1 16	12 53.09	− 5 36.3	1.148	1.653	35.7	19.7	101 W	39	69*
1 26	13 9.03	− 8 37.1	0.988	1.583	36.5	19.3	107 W	36	73
1 31	13 17.20	−10 17.8	0.911	1.547	36.9	19.0	109 W	35	74
2 5	13 25.62	−12 7.6	0.835	1.510	37.3	18.8	112 W	33	76
2 10	13 34.36	−14 8.9	0.762	1.472	37.7	18.6	114 W	31	78
2 15	13 43.57	−16 24.4	0.691	1.434	38.2	18.3	116 W	29	80
2 20	13 53.47	−18 58.1	0.624	1.395	38.8	18.0	118 W	26	83
2 25	14 4.42	−21 54.8	0.559	1.355	39.5	17.8	119 W	23	86
3 2	14 16.94	−25 21.2	0.498	1.314	40.6	17.5	120 W	20	89
3 7	14 31.86	−29 24.9	0.441	1.273	42.3	17.2	120 W	16	87
3 9	14 38.79	−31 14.8	0.419	1.257	43.1	17.1	120 W	14	85
3 11	14 46.44	−33 12.7	0.399	1.240	44.1	17.0	120 W	12	83
3 13	14 54.97	−35 18.9	0.379	1.223	45.3	16.9	119 W	10	81
3 15	15 4.60	−37 33.8	0.360	1.206	46.7	16.8	118 W	7	78
3 17	15 15.58	−39 57.5	0.342	1.190	48.2	16.7	117 W	5	76
3 19	15 28.27	−42 29.4	0.326	1.173	50.0	16.6	115 W	3	74
3 21	15 43.08	−45 8.5	0.310	1.156	52.1	16.5	114 W	—	71
3 23	16 0.58	−47 52.5	0.296	1.139	54.5	16.4	112 W	—	68
3 25	16 21.44	−50 37.4	0.284	1.122	57.1	16.4	109 W	—	65
3 27	16 46.43	−53 17.4	0.273	1.105	60.1	16.3	106 W	—	63
3 28	17 0.72	−54 33.0	0.268	1.097	61.7	16.3	105 W	—	61
3 29	17 16.30	−55 43.9	0.264	1.089	63.3	16.3	103 W	—	60
3 30	17 33.22	−56 48.7	0.260	1.080	65.0	16.3	101 W	—	59
3 31	17 51.48	−57 45.7	0.257	1.072	66.8	16.4	100 W	—	58
4 1	18 11.02	−58 33.3	0.254	1.063	68.6	16.4	98 W	—	57
4 2	18 31.68	−59 9.9	0.252	1.055	70.5	16.4	96 W	—	57*
4 3	18 53.22	−59 34.1	0.250	1.047	72.3	16.4	94 W	—	56*
4 4	19 15.35	−59 45.0	0.249	1.039	74.3	16.5	92 W	—	56*
4 5	19 37.67	−59 41.9	0.248	1.030	76.2	16.5	90 W	—	55*
4 6	19 59.81	−59 24.7	0.248	1.022	78.1	16.5	88 W	—	54*
4 7	20 21.38	−58 53.8	0.248	1.014	80.0	16.6	86 W	—	53*
4 8	20 42.07	−58 10.3	0.249	1.006	81.9	16.7	84 W	—	53*
4 9	21 1.65	−57 15.3	0.250	0.998	83.7	16.7	82 W	—	52*
4 10	21 19.96	−56 10.5	0.252	0.989	85.5	16.8	80 W	—	51*
4 11	21 36.92	−54 57.3	0.255	0.981	87.3	16.9	78 W	—	50*
4 12	21 52.54	−53 37.3	0.257	0.973	89.0	16.9	76 W	—	49*
4 13	22 6.85	−52 12.2	0.261	0.966	90.6	17.0	74 W	—	49*
4 14	22 19.94	−50 43.2	0.265	0.958	92.1	17.1	73 W	—	48*
4 15	22 31.89	−49 11.6	0.269	0.950	93.6	17.2	71 W	—	47*
4 16	22 42.80	−47 38.3	0.273	0.942	95.0	17.2	69 W	—	47*
4 17	22 52.77	−46 4.2	0.278	0.934	96.3	17.3	68 W	—	46*
4 18	23 1.90	−44 30.1	0.284	0.927	97.5	17.4	66 W	—	45*
4 19	23 10.28	−42 56.5	0.289	0.919	98.6	17.5	65 W	—	45*
4 20	23 17.99	−41 23.8	0.295	0.912	99.7	17.6	63 W	—	44*
4 21	23 25.09	−39 52.5	0.302	0.905	100.6	17.6	62 W	—	44*
4 22	23 31.67	−38 22.7	0.308	0.897	101.5	17.7	61 W	—	43*
4 23	23 37.77	−36 54.7	0.315	0.890	102.3	17.8	60 W	—	43*
4 24	23 43.45	−35 28.6	0.322	0.883	102.9	17.8	59 W	—	43*
4 25	23 48.76	−34 4.4	0.330	0.876	103.5	17.9	58 W	—	42*
4 26	23 53.74	−32 42.3	0.337	0.869	104.1	18.0	57 W	—	42*
4 28	0 2.83	−30 4.0	0.353	0.856	104.9	18.1	55 W	—	41*
4 30	0 10.98	−27 33.6	0.370	0.844	105.4	18.2	54 W	—	41*

22771 1999 CU_3 *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
5 2	0 18.38	−25 10.7	0.388	0.831	105.6	18.3	53 W	—	41*
5 4	0 25.18	−22 54.8	0.406	0.820	105.6	18.3	52 W	—	41*
5 6	0 31.50	−20 45.3	0.425	0.809	105.3	18.4	51 W	—	41*
5 8	0 37.44	−18 41.7	0.445	0.799	104.8	18.4	50 W	—	41*
5 10	0 43.08	−16 43.3	0.465	0.790	104.1	18.5	49 W	—	41*
5 12	0 48.50	−14 49.8	0.485	0.782	103.3	18.5	49 W	—	41*
5 14	0 53.74	−13 0.7	0.506	0.774	102.2	18.5	48 W	—	41*
5 16	0 58.85	−11 15.6	0.528	0.768	101.0	18.5	48 W	—	41*
5 21	1 11.28	− 7 7.8	0.582	0.756	97.5	18.5	48 W	1*	42*
5 26	1 23.56	− 3 18.6	0.638	0.750	93.3	18.5	48 W	4*	42*
5 31	1 35.92	+ 0 14.8	0.695	0.752	88.9	18.5	48 W	7*	42*
6 5	1 48.50	+ 3 33.9	0.750	0.760	84.4	18.5	48 W	10*	41*
6 10	2 1.29	+ 6 39.5	0.805	0.775	79.9	18.6	49 W	13*	41*
6 15	2 14.28	+ 9 32.1	0.857	0.795	75.7	18.6	49 W	16*	40*
6 20	2 27.39	+12 12.2	0.907	0.821	71.9	18.7	50 W	19*	40*
6 25	2 40.55	+14 40.2	0.953	0.851	68.3	18.7	51 W	22*	39*
6 30	2 53.71	+16 56.7	0.995	0.885	65.2	18.8	52 W	25*	38*
7 5	3 6.79	+19 2.3	1.034	0.921	62.4	18.9	53 W	29*	37*
7 10	3 19.71	+20 57.6	1.068	0.959	59.9	19.0	55 W	32*	36*
7 15	3 32.41	+22 43.5	1.098	0.999	57.7	19.1	56 W	35*	36*
7 20	3 44.84	+24 20.6	1.125	1.040	55.8	19.2	58 W	38*	35*
7 25	3 56.96	+25 49.9	1.147	1.082	54.1	19.2	60 W	42*	34*
7 30	4 8.72	+27 12.0	1.165	1.124	52.6	19.3	62 W	45*	33*
8 4	4 20.08	+28 27.8	1.179	1.166	51.3	19.4	64 W	48*	32*
8 14	4 41.38	+30 43.3	1.195	1.250	48.9	19.5	68 W	55*	31*
8 24	5 0.46	+32 42.4	1.197	1.332	46.8	19.6	74 W	62*	30*
9 3	5 16.90	+34 30.5	1.185	1.412	44.7	19.6	80 W	69*	29*
9 8	5 23.95	+35 22.1	1.175	1.451	43.6	19.6	83 W	73*	28*
9 13	5 30.11	+36 12.8	1.163	1.489	42.4	19.6	86 W	76*	27*
9 18	5 35.30	+37 3.1	1.148	1.527	41.2	19.6	90 W	80*	27*
9 23	5 39.41	+37 53.3	1.131	1.563	39.8	19.6	94 W	82*	26*
9 28	5 42.33	+38 43.8	1.113	1.599	38.4	19.6	98 W	84	25
10 3	5 43.94	+39 34.6	1.094	1.634	36.7	19.6	102 W	85	24
10 8	5 44.09	+40 25.6	1.075	1.668	35.0	19.5	107 W	85	24
10 13	5 42.65	+41 16.1	1.056	1.701	33.0	19.5	112 W	86	23
10 18	5 39.51	+42 5.2	1.038	1.734	30.8	19.4	117 W	87	22
10 23	5 34.58	+42 51.7	1.021	1.765	28.5	19.3	122 W	88	21
10 28	5 27.81	+43 33.8	1.007	1.796	26.0	19.3	128 W	89	20
11 2	5 19.23	+44 9.1	0.997	1.826	23.3	19.2	133 W	89	20
11 7	5 8.99	+44 35.2	0.990	1.855	20.5	19.1	139 W	90	19
11 12	4 57.39	+44 49.8	0.988	1.884	17.8	19.1	144 W	90	19
11 17	4 44.84	+44 51.0	0.992	1.911	15.2	19.0	150 W	90	19
11 22	4 31.87	+44 37.9	1.001	1.938	13.0	19.0	154 W	90	19
11 27	4 19.01	+44 10.8	1.018	1.964	11.4	19.0	157 W	89	20
12 2	4 6.79	+43 31.1	1.041	1.989	10.8	19.1	158 E	89	20
12 7	3 55.66	+42 41.2	1.071	2.013	11.2	19.2	157 E	88	21
12 12	3 45.93	+41 44.0	1.107	2.036	12.5	19.3	154 E	87	22
12 17	3 37.79	+40 42.8	1.150	2.059	14.1	19.5	149 E	86	23
12 22	3 31.27	+39 40.4	1.199	2.081	15.8	19.6	145 E	85	24
12 27	3 26.35	+38 39.1	1.253	2.102	17.6	19.8	140 E	84	25
1 1	3 22.94	+37 40.7	1.312	2.123	19.2	20.0	135 E	83	26
1 6	3 20.92	+36 46.4	1.376	2.142	20.7	20.2	130 E	82	27
1 11	3 20.18	+35 56.9	1.443	2.161	21.9	20.3	125 E	81	28
1 16	3 20.58	+35 12.8	1.513	2.179	23.0	20.5	120 E	80	29
1 21	3 21.97	+34 33.8	1.586	2.196	23.9	20.6	115 E	80	29

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 21.89	−41 5.4	1.902	1.905	29.9	19.0	75 W	4	68*
1 1	12 29.41	−42 50.4	1.862	1.907	30.2	19.0	77 W	2	69*
1 6	12 36.65	−44 34.0	1.821	1.908	30.5	18.9	80 W	—	69*
1 11	12 43.56	−46 16.3	1.780	1.908	30.7	18.9	82 W	—	69*
1 16	12 50.08	−47 56.8	1.738	1.908	30.9	18.8	84 W	—	68*
1 21	12 56.13	−49 35.3	1.695	1.908	31.0	18.8	87 W	—	66
1 26	13 1.63	−51 11.5	1.653	1.907	31.1	18.7	89 W	—	65
1 31	13 6.51	−52 45.1	1.609	1.906	31.1	18.7	91 W	—	63
2 5	13 10.63	−54 15.6	1.566	1.904	31.1	18.6	94 W	—	62
2 10	13 13.86	−55 42.7	1.523	1.902	31.1	18.5	96 W	—	60
2 15	13 16.05	−57 5.4	1.479	1.899	30.9	18.5	99 W	—	59
2 20	13 17.05	−58 23.0	1.436	1.896	30.8	18.4	101 W	—	58
2 25	13 16.71	−59 34.3	1.394	1.892	30.5	18.3	104 W	—	56
3 2	13 14.89	−60 38.3	1.351	1.888	30.2	18.2	106 W	—	55
3 7	13 11.45	−61 33.4	1.310	1.884	29.9	18.2	109 W	—	54
3 12	13 6.32	−62 17.6	1.270	1.879	29.4	18.1	112 W	—	54
3 17	12 59.54	−62 48.7	1.231	1.874	28.9	18.0	114 W	—	53
3 22	12 51.30	−63 4.6	1.193	1.868	28.4	17.9	117 W	—	53
3 27	12 41.91	−63 3.0	1.158	1.862	27.8	17.8	119 W	—	53
3 29	12 37.94	−62 57.1	1.144	1.860	27.6	17.8	120 W	—	53
3 31	12 33.90	−62 47.9	1.131	1.857	27.4	17.7	121 E	—	53
4 2	12 29.82	−62 35.6	1.118	1.854	27.2	17.7	122 E	—	53

4957 Brucemurray *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 4	12 25.73	−62 19.8	1.105	1.851	26.9	17.7	123 E	—	54
4 6	12 21.68	−62 0.7	1.093	1.849	26.7	17.6	124 E	—	54
4 8	12 17.71	−61 38.1	1.082	1.846	26.5	17.6	125 E	—	54
4 10	12 13.84	−61 12.0	1.071	1.843	26.3	17.6	125 E	—	55
4 12	12 10.13	−60 42.5	1.060	1.840	26.1	17.5	126 E	—	55
4 14	12 6.59	−60 9.7	1.050	1.837	25.9	17.5	127 E	—	56
4 16	12 3.27	−59 33.5	1.041	1.833	25.7	17.5	127 E	—	56
4 21	11 56.00	−57 49.3	1.020	1.825	25.4	17.4	129 E	—	58
4 26	11 50.42	−55 47.2	1.003	1.817	25.3	17.4	129 E	—	60
5 1	11 46.61	−53 29.8	0.990	1.808	25.4	17.3	130 E	—	63
5 6	11 44.54	−51 0.0	0.981	1.798	25.7	17.3	129 E	—	65
5 11	11 44.14	−48 21.1	0.977	1.788	26.3	17.3	128 E	—	68
5 16	11 45.28	−45 36.5	0.978	1.778	27.1	17.3	127 E	—	70
5 21	11 47.79	−42 49.8	0.983	1.768	28.1	17.3	125 E	2*	73
5 26	11 51.50	−40 4.2	0.992	1.757	29.2	17.4	122 E	5*	76
5 31	11 56.25	−37 22.2	1.006	1.745	30.3	17.4	120 E	7*	79
6 5	12 1.89	−34 46.1	1.024	1.734	31.6	17.5	117 E	9*	81
6 10	12 8.31	−32 17.5	1.045	1.722	32.8	17.6	113 E	10*	84
6 15	12 15.41	−29 57.9	1.070	1.709	33.9	17.6	110 E	11*	86
6 20	12 23.08	−27 48.1	1.097	1.697	35.0	17.7	107 E	12*	88
6 25	12 31.24	−25 48.3	1.127	1.684	36.0	17.8	103 E	13*	90
7 5	12 48.77	−22 18.6	1.192	1.657	37.5	17.9	97 E	15*	86
7 15	13 7.61	−19 26.4	1.262	1.629	38.6	18.0	91 E	16*	83*
7 25	13 27.49	−17 6.9	1.335	1.600	39.2	18.1	85 E	16*	78*
8 4	13 48.21	−15 14.3	1.407	1.570	39.4	18.2	79 E	17*	72*
8 14	14 9.71	−13 43.2	1.477	1.540	39.2	18.2	74 E	18*	67*
8 24	14 31.91	−12 28.1	1.543	1.509	38.7	18.3	69 E	19*	62*
9 3	14 54.80	−11 24.1	1.603	1.478	38.0	18.3	64 E	21*	57*
9 13	15 18.42	−10 27.2	1.656	1.448	37.1	18.3	60 E	22*	53*
9 23	15 42.80	− 9 33.3	1.701	1.417	36.1	18.3	56 E	23*	48*
10 3	16 7.98	− 8 39.0	1.738	1.388	35.1	18.3	53 E	25*	44*
10 13	16 34.06	− 7 41.4	1.767	1.359	34.2	18.2	50 E	26*	39*
10 23	17 1.08	− 6 37.5	1.786	1.333	33.4	18.2	47 E	27*	35*
11 2	17 29.13	− 5 25.3	1.798	1.308	32.7	18.1	45 E	29*	30*
11 12	17 58.31	− 4 2.7	1.803	1.285	32.2	18.1	44 E	30*	25*
11 22	18 28.65	− 2 28.3	1.802	1.266	31.9	18.0	43 E	32*	21*
12 2	19 0.23	− 0 41.6	1.797	1.249	31.7	18.0	42 E	33*	17*
12 12	19 33.10	+ 1 17.4	1.792	1.237	31.7	18.0	41 E	34*	13*
12 22	20 7.21	+ 3 27.2	1.787	1.228	31.7	18.0	41 E	34*	9*
1 1	20 42.53	+ 5 45.3	1.786	1.223	31.6	17.9	41 E	35*	6*
1 11	21 18.92	+ 8 7.9	1.792	1.223	31.4	17.9	40 E	34*	4*
1 21	21 56.16	+10 30.2	1.806	1.227	31.0	18.0	40 E	34*	3*

3402 Wisdom

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 22.07	− 0 49.9	2.294	2.496	23.2	19.9	90 W	44	59*
1 6	12 30.02	− 1 49.1	2.137	2.473	23.2	19.7	98 W	43	64*
1 16	12 36.20	− 2 38.2	1.982	2.449	22.7	19.5	106 W	42	67
1 26	12 40.25	− 3 15.4	1.833	2.424	21.5	19.3	115 W	42	67
2 5	12 41.79	− 3 39.1	1.692	2.399	19.7	19.0	125 W	41	68
2 15	12 40.45	− 3 47.3	1.565	2.372	17.0	18.7	135 W	41	68
2 25	12 36.02	− 3 38.9	1.454	2.344	13.4	18.4	147 W	41	68
3 7	12 28.57	− 3 14.3	1.364	2.316	9.0	18.1	159 W	42	67
3 17	12 18.58	− 2 35.5	1.299	2.287	3.9	17.7	171 W	42	67
3 22	12 12.94	− 2 12.4	1.276	2.272	1.2	17.5	177 W	43	66
3 27	12 7.10	− 1 48.1	1.260	2.257	1.8	17.5	176 E	43	66
4 1	12 1.23	− 1 23.4	1.251	2.241	4.6	17.6	170 E	44	65
4 6	11 55.51	− 0 59.4	1.249	2.226	7.5	17.8	163 E	44	65
4 11	11 50.14	− 0 37.0	1.253	2.210	10.2	17.9	157 E	44	65
4 16	11 45.28	− 0 17.4	1.263	2.194	12.9	18.0	151 E	45	64
4 21	11 41.06	− 0 1.1	1.279	2.178	15.4	18.1	145 E	45	64
4 26	11 37.60	+ 0 11.1	1.299	2.162	17.8	18.2	139 E	45	64
5 6	11 33.13	+ 0 22.0	1.352	2.129	21.8	18.4	128 E	45	64
5 16	11 32.10	+ 0 14.1	1.417	2.096	25.1	18.5	118 E	45	64
5 26	11 34.39	− 0 12.6	1.490	2.062	27.6	18.7	109 E	44*	64
6 5	11 39.68	− 0 56.7	1.567	2.028	29.4	18.8	101 E	40*	65
6 15	11 47.64	− 1 56.4	1.645	1.994	30.5	18.9	94 E	35*	66
6 25	11 57.94	− 3 10.1	1.722	1.960	31.2	19.0	87 E	30*	67
7 5	12 10.26	− 4 35.8	1.797	1.926	31.5	19.0	81 E	25*	68*
7 15	12 24.40	− 6 12.1	1.867	1.891	31.4	19.1	76 E	21*	66*
7 25	12 40.19	− 7 57.0	1.933	1.858	31.0	19.1	70 E	18*	63*
8 4	12 57.50	− 9 48.9	1.994	1.824	30.4	19.1	66 E	15*	59*
8 14	13 16.27	−11 45.8	2.050	1.792	29.6	19.1	61 E	12*	55*
8 24	13 36.48	−13 45.8	2.100	1.760	28.7	19.1	57 E	11*	51*
9 3	13 58.12	−15 46.4	2.145	1.729	27.6	19.1	53 E	9*	47*
9 13	14 21.22	−17 45.4	2.185	1.700	26.5	19.0	49 E	8*	43*
9 23	14 45.78	−19 39.7	2.220	1.672	25.2	19.0	45 E	7*	39*
10 3	15 11.84	−21 26.4	2.252	1.646	23.9	19.0	42 E	7*	36*
10 13	15 39.39	−23 2.1	2.280	1.623	22.5	18.9	38 E	6*	32*
10 23	16 8.36	−24 23.3	2.306	1.601	21.1	18.9	35 E	6*	29*

3402 Wisdom *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
11 2	16 38.65	−25 26.6	2.329	1.583	19.6	18.8	32 E	6*	26*
11 12	17 10.08	−26 8.7	2.351	1.567	18.1	18.8	29 E	5*	23*
11 22	17 42.37	−26 27.0	2.372	1.554	16.6	18.7	27 E	5*	20*
12 2	18 15.22	−26 19.5	2.393	1.544	15.0	18.7	24 E	5*	17*
12 12	18 48.27	−25 45.3	2.414	1.538	13.4	18.6	21 E	5*	14*
12 22	19 21.15	−24 44.5	2.436	1.535	11.7	18.6	19 E	5*	11*
1 1	19 53.55	−23 18.5	2.458	1.536	10.1	18.5	16 E	4*	8*
1 11	20 25.21	−21 29.6	2.481	1.540	8.4	18.5	13 E	3*	5*
1 21	20 55.93	−19 20.7	2.505	1.548	6.7	18.4	11 E	2*	3*

353982 2000 EZ_{13}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 22.08	+32 50.8	1.723	2.164	26.3	20.7	103 W	78	28*
1 1	12 21.46	+32 45.3	1.659	2.163	25.8	20.6	107 W	78	30*
1 6	12 19.72	+32 43.5	1.596	2.161	25.0	20.4	112 W	78	31*
1 11	12 16.72	+32 44.8	1.534	2.160	24.1	20.3	116 W	78	31*
1 16	12 12.34	+32 48.3	1.475	2.158	22.9	20.2	121 W	78	31
1 21	12 6.46	+32 52.8	1.419	2.156	21.5	20.1	127 W	78	31
1 26	11 59.00	+32 56.5	1.366	2.154	19.8	19.9	132 W	78	31
1 31	11 49.92	+32 57.4	1.319	2.152	18.0	19.8	138 W	78	31
2 5	11 39.23	+32 53.2	1.277	2.149	16.0	19.7	143 W	78	31
2 10	11 27.05	+32 41.2	1.242	2.146	13.9	19.5	149 W	78	31
2 15	11 13.62	+32 18.6	1.215	2.143	12.0	19.4	153 W	77	32
2 20	10 59.32	+31 43.4	1.196	2.140	10.5	19.3	157 W	77	32
2 25	10 44.59	+30 54.2	1.186	2.137	9.9	19.3	158 W	76	33
3 2	10 29.95	+29 51.2	1.186	2.133	10.5	19.3	157 E	75	34
3 7	10 15.87	+28 35.4	1.195	2.129	12.0	19.4	154 E	74	35
3 12	10 2.78	+27 9.0	1.213	2.125	14.1	19.5	149 E	72	37
3 17	9 51.00	+25 34.7	1.239	2.121	16.3	19.6	143 E	71	38
3 22	9 40.72	+23 55.4	1.273	2.117	18.6	19.7	137 E	69	40
3 27	9 32.02	+22 13.8	1.314	2.112	20.7	19.8	132 E	67	42
4 1	9 24.89	+20 32.1	1.361	2.107	22.6	20.0	126 E	66	43
4 6	9 19.24	+18 51.8	1.413	2.103	24.3	20.1	120 E	64	45
4 11	9 14.99	+17 13.9	1.469	2.097	25.7	20.2	115 E	62	47
4 16	9 12.01	+15 39.0	1.528	2.092	26.8	20.3	110 E	61	48
4 26	9 9.36	+12 38.6	1.651	2.081	28.4	20.5	100 E	57*	51
5 6	9 10.32	+ 9 49.8	1.779	2.069	29.2	20.7	92 E	50*	54
5 16	9 14.11	+ 7 9.9	1.905	2.057	29.3	20.8	84 E	42*	57*
5 26	9 20.12	+ 4 35.7	2.027	2.044	28.8	21.0	77 E	33*	58*
6 5	9 27.89	+ 2 4.5	2.142	2.030	28.0	21.0	70 E	25*	58*
6 15	9 37.08	− 0 26.2	2.248	2.016	26.9	21.1	64 E	17*	55*
6 25	9 47.46	− 2 58.6	2.343	2.001	25.5	21.1	58 E	10*	52*
7 5	9 58.84	− 5 34.3	2.426	1.986	24.1	21.1	53 E	3*	47*
7 15	10 11.14	− 8 14.8	2.497	1.970	22.6	21.1	48 E	—	42*
7 25	10 24.28	−11 1.3	2.555	1.954	21.1	21.1	44 E	—	36*
8 4	10 38.26	−13 54.7	2.600	1.938	19.7	21.1	40 E	—	30*
8 14	10 53.12	−16 55.8	2.632	1.921	18.5	21.1	37 E	—	25*
8 24	11 8.90	−20 5.3	2.652	1.905	17.4	21.0	34 E	—	20*
9 3	11 25.74	−23 23.3	2.660	1.888	16.6	21.0	32 E	—	16*
9 13	11 43.82	−26 49.8	2.658	1.871	16.1	21.0	31 E	—	12*
9 23	12 3.37	−30 24.3	2.647	1.854	15.9	20.9	30 E	—	8*
10 3	12 24.71	−34 5.5	2.629	1.837	16.0	20.9	30 W	—	10*
10 13	12 48.28	−37 51.3	2.606	1.820	16.2	20.9	31 W	—	12*
10 23	13 14.61	−41 38.3	2.578	1.804	16.7	20.8	31 W	—	14*
11 2	13 44.39	−45 21.3	2.549	1.787	17.1	20.8	32 W	—	16*
11 12	14 18.42	−48 52.8	2.520	1.772	17.6	20.8	33 W	—	17*
11 22	14 57.45	−52 2.7	2.493	1.757	18.1	20.7	34 W	—	18*
12 2	15 41.93	−54 38.4	2.469	1.742	18.5	20.7	34 W	—	18*
12 12	16 31.50	−56 26.0	2.449	1.728	18.8	20.7	34 W	—	17*
12 22	17 24.52	−57 13.3	2.435	1.715	18.9	20.7	34 W	—	16*
1 1	18 18.16	−56 54.2	2.425	1.703	18.9	20.6	34 W	—	15*
1 11	19 9.32	−55 31.1	2.418	1.692	18.9	20.6	34 W	—	14*
1 21	19 55.78	−53 13.6	2.415	1.682	18.7	20.6	33 W	—	13*

153344 2001 OR_{106}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 22.19	− 8 46.3	2.370	2.515	23.0	21.0	87 W	36	65*
1 6	12 30.50	−10 19.9	2.210	2.488	23.2	20.8	94 W	35	72*
1 16	12 37.19	−11 47.7	2.053	2.461	23.0	20.6	102 W	33	76
1 26	12 41.92	−13 8.2	1.900	2.433	22.2	20.4	111 W	32	77
2 5	12 44.31	−14 19.0	1.755	2.404	20.8	20.2	120 W	31	78
2 15	12 43.97	−15 17.3	1.622	2.375	18.7	19.9	129 W	30	79
2 25	12 40.64	−15 59.3	1.502	2.345	15.9	19.6	139 W	29	80
3 7	12 34.28	−16 21.4	1.402	2.314	12.4	19.3	150 W	29	80
3 17	12 25.24	−16 20.1	1.323	2.283	8.7	19.0	160 W	29	80
3 27	12 14.42	−15 54.3	1.269	2.251	6.0	18.7	166 E	29	80
4 1	12 8.76	−15 33.2	1.252	2.235	6.1	18.7	166 E	29	80
4 6	12 3.16	−15 7.5	1.241	2.219	7.3	18.7	164 E	30	79
4 11	11 57.82	−14 38.2	1.237	2.203	9.2	18.8	159 E	30	79
4 16	11 52.93	−14 6.6	1.239	2.187	11.4	18.9	154 E	31	78
4 21	11 48.64	−13 34.1	1.246	2.171	13.7	18.9	149 E	31	78
4 26	11 45.07	−13 1.9	1.259	2.155	16.0	19.0	144 E	32	77
5 1	11 42.30	−12 31.3	1.276	2.138	18.1	19.1	139 E	32	77

153344 2001 OR_{106} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
5 6	11 40.39	−12 3.1	1.297	2.122	20.2	19.2	134 E	33	76
5 11	11 39.37	−11 38.3	1.322	2.106	22.0	19.3	129 E	33	76
5 16	11 39.25	−11 17.5	1.350	2.089	23.7	19.4	124 E	34	75
5 26	11 41.60	−10 49.5	1.414	2.057	26.5	19.5	115 E	33*	75
6 5	11 47.15	−10 40.4	1.483	2.024	28.7	19.6	107 E	31*	75
6 15	11 55.56	−10 50.2	1.556	1.992	30.2	19.8	99 E	28*	75
6 25	12 6.50	−11 17.4	1.630	1.960	31.2	19.9	93 E	24*	75
7 5	12 19.62	−12 0.1	1.703	1.928	31.7	19.9	86 E	20*	75*
7 15	12 34.70	−12 56.1	1.775	1.898	31.9	20.0	81 E	17*	73*
7 25	12 51.53	−14 3.1	1.843	1.868	31.8	20.0	75 E	14*	69*
8 4	13 9.97	−15 18.4	1.908	1.839	31.3	20.1	71 E	12*	65*
8 14	13 29.92	−16 39.6	1.970	1.812	30.7	20.1	66 E	11*	60*
8 24	13 51.31	−18 3.9	2.028	1.786	29.9	20.1	62 E	9*	56*
9 3	14 14.09	−19 28.4	2.083	1.761	28.9	20.1	58 E	8*	51*
9 13	14 38.23	−20 50.3	2.134	1.739	27.8	20.1	54 E	8*	48*
9 23	15 3.68	−22 6.4	2.182	1.718	26.6	20.1	50 E	8*	44*
10 3	15 30.36	−23 13.6	2.228	1.700	25.2	20.1	46 E	7*	40*
10 13	15 58.19	−24 8.8	2.271	1.684	23.8	20.0	43 E	8*	37*
10 23	16 27.01	−24 49.1	2.313	1.671	22.3	20.0	40 E	8*	34*
11 2	16 56.66	−25 11.8	2.353	1.660	20.7	20.0	36 E	8*	30*
11 12	17 26.90	−25 15.0	2.391	1.652	19.1	20.0	33 E	8*	26*
11 22	17 57.47	−24 57.1	2.429	1.647	17.4	19.9	30 E	8*	23*
12 2	18 28.09	−24 17.5	2.466	1.646	15.6	19.9	27 E	9*	19*
12 12	18 58.51	−23 16.3	2.502	1.647	13.8	19.9	24 E	8*	15*
12 22	19 28.48	−21 54.5	2.537	1.651	12.0	19.8	20 E	8*	11*
1 1	19 57.81	−20 13.5	2.571	1.658	10.1	19.8	17 E	7*	8*
1 11	20 26.37	−18 15.6	2.604	1.668	8.3	19.8	14 E	6*	4*
1 21	20 54.07	−16 3.1	2.636	1.681	6.4	19.7	11 E	4*	1*

153243 2001 AU_{47}

12 27	12 22.46	−25 9.5	1.677	1.799	32.6	21.2	81 W	20	72*
1 6	12 33.55	−30 0.6	1.530	1.757	33.9	21.0	86 W	15	80*
1 16	12 43.77	−35 24.1	1.387	1.711	35.1	20.7	91 W	10	81*
1 26	12 52.79	−41 25.7	1.252	1.660	36.2	20.5	95 W	4	75
1 31	12 56.71	−44 42.7	1.188	1.632	36.8	20.3	97 W	—	71
2 5	13 0.10	−48 11.2	1.127	1.604	37.4	20.2	99 W	—	68
2 10	13 2.81	−51 51.7	1.069	1.574	38.1	20.1	100 W	—	64
2 15	13 4.60	−55 44.3	1.015	1.543	39.0	19.9	101 W	—	60
2 20	13 5.12	−59 48.4	0.965	1.511	39.9	19.8	101 W	—	56
2 25	13 3.81	−64 3.4	0.919	1.478	41.0	19.7	101 W	—	52
2 27	13 2.55	−65 48.2	0.902	1.464	41.6	19.6	101 W	—	50
3 1	13 0.74	−67 34.3	0.885	1.450	42.1	19.6	101 W	—	48
3 3	12 58.21	−69 21.7	0.870	1.436	42.7	19.5	101 W	—	47
3 5	12 54.78	−71 10.0	0.854	1.422	43.3	19.5	100 W	—	45
3 7	12 50.14	−72 59.1	0.840	1.407	44.0	19.5	100 W	—	43
3 8	12 47.24	−73 53.8	0.833	1.400	44.3	19.4	100 W	—	42
3 9	12 43.88	−74 48.5	0.826	1.392	44.7	19.4	100 W	—	41
3 10	12 39.94	−75 43.2	0.819	1.385	45.1	19.4	99 W	—	40
3 11	12 35.33	−76 37.7	0.813	1.378	45.4	19.4	99 W	—	39
3 12	12 29.91	−77 31.9	0.806	1.370	45.8	19.4	99 W	—	38
3 13	12 23.48	−78 25.8	0.800	1.362	46.2	19.3	98 W	—	38
3 14	12 15.82	−79 19.0	0.794	1.355	46.6	19.3	98 W	—	37
3 15	12 6.60	−80 11.5	0.788	1.347	47.0	19.3	97 W	—	36
3 16	11 55.43	−81 2.8	0.783	1.339	47.5	19.3	97 W	—	35
3 17	11 41.73	−81 52.5	0.777	1.332	47.9	19.3	97 E	—	34
3 18	11 24.81	−82 40.0	0.772	1.324	48.4	19.3	96 E	—	33
3 19	11 3.72	−83 24.4	0.766	1.316	48.8	19.2	96 E	—	33
3 20	10 37.38	−84 4.5	0.761	1.308	49.3	19.2	95 E	—	32
3 21	10 4.70	−84 38.5	0.756	1.300	49.8	19.2	95 E	—	31
3 22	9 25.13	−85 4.4	0.751	1.292	50.3	19.2	94 E	—	31
3 23	8 39.51	−85 19.7	0.747	1.284	50.8	19.2	94 E	—	31
3 24	7 50.73	−85 22.6	0.742	1.276	51.3	19.2	93 E	—	31
3 25	7 3.08	−85 12.7	0.737	1.268	51.8	19.2	93 E	—	31
3 26	6 20.32	−84 51.3	0.733	1.259	52.3	19.2	92 E	—	31*
3 27	5 44.25	−84 20.3	0.729	1.251	52.9	19.1	92 E	—	31*
3 28	5 14.85	−83 42.3	0.725	1.243	53.4	19.1	91 E	—	32*
3 29	4 51.23	−82 58.9	0.721	1.234	54.0	19.1	90 E	—	32*
3 30	4 32.24	−82 11.8	0.717	1.226	54.5	19.1	90 E	—	32*
3 31	4 16.87	−81 21.9	0.713	1.218	55.1	19.1	89 E	—	32*
4 1	4 4.31	−80 30.0	0.709	1.209	55.7	19.1	88 E	—	33*
4 2	3 53.93	−79 36.5	0.705	1.200	56.3	19.1	88 E	—	33*
4 3	3 45.25	−78 41.8	0.702	1.192	56.9	19.1	87 E	—	33*
4 4	3 37.92	−77 46.2	0.698	1.183	57.5	19.1	86 E	—	33*
4 5	3 31.66	−76 49.8	0.695	1.175	58.1	19.1	86 E	—	33*
4 6	3 26.28	−75 52.8	0.692	1.166	58.8	19.0	85 E	—	33*
4 7	3 21.60	−74 55.3	0.689	1.157	59.4	19.0	84 E	—	33*
4 8	3 17.50	−73 57.4	0.685	1.148	60.1	19.0	84 E	—	33*
4 9	3 13.89	−72 59.1	0.682	1.139	60.7	19.0	83 E	—	33*
4 10	3 10.68	−72 0.5	0.679	1.130	61.4	19.0	82 E	—	33*

153243 2001 AU_{47} *(continuation)*

21/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 11	3 7.82	−71 1.6	0.676	1.121	62.1	19.0	81 E	—	32*
4 12	3 5.24	−70 2.4	0.673	1.112	62.7	19.0	81 E	—	32*
4 13	3 2.91	−69 2.9	0.670	1.103	63.4	19.0	80 E	—	32*
4 14	3 0.80	−68 3.2	0.668	1.094	64.1	19.0	79 E	—	32*
4 15	2 58.86	−67 3.1	0.665	1.085	64.8	19.0	78 E	—	31*
4 16	2 57.08	−66 2.8	0.662	1.076	65.6	19.0	78 E	—	31*
4 18	2 53.92	−64 1.3	0.657	1.058	67.0	19.0	76 E	—	30*
4 20	2 51.18	−61 58.5	0.651	1.039	68.5	19.0	74 E	—	29*
4 22	2 48.76	−59 54.0	0.646	1.021	70.1	19.0	73 E	—	28*
4 24	2 46.61	−57 47.8	0.641	1.002	71.7	19.0	71 E	—	27*
4 26	2 44.65	−55 39.4	0.637	0.983	73.3	18.9	69 E	—	25*
4 28	2 42.87	−53 28.5	0.632	0.964	75.0	18.9	68 E	—	24*
4 30	2 41.23	−51 14.8	0.628	0.945	76.7	18.9	66 E	—	22*
5 2	2 39.72	−48 57.9	0.623	0.927	78.4	18.9	64 E	—	20*
5 4	2 38.33	−46 37.5	0.619	0.908	80.2	19.0	63 W	—	20*
5 6	2 37.04	−44 13.0	0.616	0.889	82.0	19.0	61 W	—	21*
5 11	2 34.31	−37 52.2	0.608	0.842	86.7	19.0	56 W	—	24*
5 16	2 32.35	−30 59.3	0.604	0.797	91.4	19.0	52 W	—	27*
5 21	2 31.41	−23 32.2	0.605	0.753	95.7	19.1	48 W	—	30*
5 26	2 31.87	−15 33.6	0.614	0.713	99.3	19.2	44 W	—	32*
5 28	2 32.55	−12 15.3	0.620	0.698	100.4	19.2	43 W	—	33*
5 30	2 33.57	− 8 54.5	0.628	0.683	101.1	19.2	41 W	—	33*
6 1	2 34.96	− 5 32.1	0.638	0.670	101.6	19.3	40 W	—	33*
6 3	2 36.76	− 2 9.6	0.649	0.658	101.8	19.3	39 W	—	33*
6 5	2 39.00	+ 1 11.8	0.663	0.647	101.6	19.3	39 W	—	33*
6 7	2 41.71	+ 4 30.6	0.678	0.637	101.0	19.3	38 W	3*	32*
6 9	2 44.93	+ 7 45.7	0.696	0.629	100.0	19.2	38 W	6*	31*
6 11	2 48.68	+10 55.6	0.715	0.622	98.6	19.2	37 W	8*	30*
6 13	2 52.98	+13 59.2	0.736	0.616	96.9	19.2	37 W	11*	29*
6 15	2 57.84	+16 55.5	0.759	0.612	95.0	19.1	37 W	14*	28*
6 20	3 12.51	+23 39.2	0.823	0.610	89.0	19.0	37 W	19*	24*
6 25	3 30.68	+29 23.6	0.895	0.618	82.2	19.0	37 W	23*	20*
6 30	3 51.96	+34 6.1	0.971	0.636	75.3	19.0	37 W	26*	17*
7 5	4 15.69	+37 48.5	1.048	0.662	68.7	19.0	37 W	29*	13*
7 7	4 25.68	+39 1.6	1.079	0.675	66.3	19.0	37 W	29*	12*
7 9	4 35.87	+40 6.2	1.109	0.688	64.0	19.1	37 W	30*	11*
7 11	4 46.20	+41 2.8	1.139	0.703	61.7	19.1	38 W	30*	10*
7 13	4 56.63	+41 51.8	1.169	0.718	59.6	19.2	38 W	31*	9*
7 15	5 7.09	+42 33.6	1.198	0.734	57.7	19.2	38 W	31*	8*
7 17	5 17.54	+43 8.8	1.226	0.751	55.8	19.2	38 W	31*	7*
7 19	5 27.93	+43 37.8	1.254	0.768	54.1	19.3	38 W	31*	7*
7 21	5 38.23	+44 1.0	1.282	0.785	52.4	19.3	38 W	32*	6*
7 23	5 48.40	+44 19.0	1.308	0.803	50.9	19.4	38 W	32*	5*
7 25	5 58.41	+44 32.1	1.334	0.821	49.5	19.4	38 W	32*	5*
7 30	6 22.58	+44 46.3	1.395	0.867	46.4	19.6	38 W	32*	4*
8 4	6 45.35	+44 38.6	1.452	0.914	43.9	19.7	39 W	33*	3*
8 9	7 6.60	+44 14.0	1.503	0.962	41.8	19.8	39 W	33*	3*
8 14	7 26.29	+43 36.7	1.548	1.009	40.1	20.0	40 W	34*	3*
8 19	7 44.49	+42 50.0	1.589	1.055	38.8	20.1	41 W	35*	3*
8 24	8 1.30	+41 56.3	1.624	1.101	37.8	20.2	42 W	36*	3*
8 29	8 16.82	+40 57.7	1.654	1.146	37.0	20.3	43 W	37*	4*
9 3	8 31.18	+39 55.8	1.678	1.189	36.4	20.4	44 W	38*	4*
9 8	8 44.47	+38 52.0	1.698	1.232	36.0	20.5	46 W	40*	5*
9 13	8 56.79	+37 47.0	1.712	1.273	35.7	20.6	48 W	42*	6*
9 18	9 8.22	+36 41.7	1.720	1.314	35.6	20.6	50 W	43*	7*
9 23	9 18.83	+35 36.6	1.724	1.353	35.5	20.7	52 W	46*	9*
9 28	9 28.71	+34 32.2	1.723	1.390	35.6	20.8	54 W	48*	10*
10 3	9 37.88	+33 28.8	1.717	1.427	35.6	20.8	56 W	50*	11*
10 8	9 46.38	+32 26.9	1.707	1.462	35.7	20.8	59 W	53*	13*
10 13	9 54.23	+31 26.6	1.691	1.496	35.8	20.9	61 W	55*	15*
10 18	10 1.44	+30 28.2	1.672	1.529	35.9	20.9	64 W	58*	17*
10 23	10 8.04	+29 31.9	1.648	1.560	36.0	20.9	67 W	61*	18*
10 28	10 14.01	+28 37.9	1.620	1.590	36.0	20.9	70 W	63*	21*
11 2	10 19.33	+27 46.3	1.588	1.619	36.0	20.9	74 W	66*	23*
11 7	10 23.97	+26 57.4	1.553	1.647	35.9	20.9	77 W	68*	25*
11 12	10 27.89	+26 11.3	1.515	1.674	35.7	20.9	81 W	69*	27*
11 17	10 31.05	+25 28.2	1.474	1.699	35.4	20.8	85 W	70*	30*
11 22	10 33.38	+24 48.2	1.431	1.724	35.0	20.8	89 W	70	32*
11 27	10 34.82	+24 11.4	1.385	1.747	34.3	20.7	93 W	69	35*
12 2	10 35.25	+23 37.9	1.339	1.769	33.5	20.7	98 W	69	37*
12 7	10 34.59	+23 7.8	1.291	1.790	32.5	20.6	103 W	68	39*
12 12	10 32.71	+22 41.1	1.244	1.810	31.1	20.5	108 W	68	41*
12 17	10 29.49	+22 17.4	1.197	1.829	29.5	20.4	114 W	67	42*
12 22	10 24.83	+21 56.6	1.151	1.846	27.6	20.3	120 W	67	42
12 27	10 18.62	+21 37.9	1.108	1.863	25.4	20.1	126 W	67	42
1 1	10 10.77	+21 20.8	1.069	1.878	22.7	20.0	132 W	66	43
1 6	10 1.25	+21 4.2	1.034	1.893	19.7	19.8	140 W	66	43
1 11	9 50.13	+20 46.7	1.005	1.906	16.3	19.7	147 W	66	43
1 16	9 37.61	+20 27.0	0.982	1.919	12.6	19.5	155 W	65	44

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
464797 2004 FZ_1									
	h m	° ′			°	m	°	°	°
12 27	12 22.47	−13 44.9	1.111	1.416	43.8	21.0	85 W	31	68*
1 1	12 38.67	−12 45.1	1.023	1.376	45.5	20.8	87 W	32	69*
1 6	12 56.60	−11 23.0	0.937	1.336	47.4	20.6	88 W	34	69*
1 11	13 16.68	− 9 32.6	0.855	1.296	49.4	20.4	89 W	35	68*
1 16	13 39.38	− 7 7.1	0.778	1.256	51.6	20.2	90 W	38	66*
1 21	14 5.25	− 3 59.3	0.709	1.216	54.0	20.0	90 W	41	63*
1 26	14 34.82	− 0 4.2	0.649	1.176	56.9	19.8	90 W	45	59*
1 31	15 8.47	+ 4 37.8	0.603	1.137	60.0	19.6	88 W	50	54*
2 5	15 46.19	+ 9 55.1	0.573	1.098	63.5	19.5	85 W	55*	48*
2 7	16 2.28	+12 6.6	0.566	1.083	64.9	19.5	84 W	57*	45*
2 9	16 18.85	+14 17.6	0.562	1.068	66.3	19.5	82 W	59*	42*
2 11	16 35.77	+16 25.8	0.561	1.053	67.6	19.5	81 W	61*	39*
2 13	16 52.94	+18 29.0	0.563	1.039	68.9	19.6	79 W	62*	37*
2 15	17 10.22	+20 25.2	0.568	1.025	70.1	19.6	77 W	63*	34*
2 17	17 27.48	+22 12.8	0.576	1.011	71.1	19.6	75 W	63*	31*
2 19	17 44.58	+23 50.5	0.587	0.997	72.0	19.7	74 W	63*	29*
2 21	18 1.40	+25 17.7	0.599	0.984	72.8	19.7	72 W	62*	27*
2 23	18 17.83	+26 34.0	0.614	0.971	73.4	19.7	70 W	62*	25*
2 25	18 33.77	+27 39.6	0.631	0.958	73.8	19.8	68 W	61*	23*
2 27	18 49.16	+28 34.9	0.650	0.946	74.1	19.8	67 W	60*	21*
3 1	19 3.96	+29 20.5	0.670	0.935	74.2	19.9	65 W	58*	20*
3 3	19 18.12	+29 57.3	0.692	0.924	74.1	19.9	64 W	57*	19*
3 5	19 31.65	+30 26.1	0.714	0.913	74.0	20.0	62 W	56*	18*
3 7	19 44.55	+30 47.6	0.737	0.903	73.6	20.0	61 W	55*	17*
3 9	19 56.83	+31 2.7	0.761	0.894	73.2	20.0	60 W	53*	16*
3 11	20 8.51	+31 12.1	0.786	0.885	72.7	20.1	58 W	52*	16*
3 13	20 19.64	+31 16.4	0.811	0.878	72.0	20.1	57 W	51*	15*
3 15	20 30.23	+31 16.4	0.836	0.870	71.3	20.1	56 W	50*	15*
3 17	20 40.34	+31 12.4	0.861	0.864	70.5	20.1	55 W	49*	15*
3 22	21 3.70	+30 48.1	0.923	0.851	68.2	20.2	52 W	46*	15*
3 27	21 24.76	+30 8.1	0.983	0.844	65.7	20.2	50 W	44*	16*
4 1	21 44.01	+29 16.5	1.041	0.842	63.1	20.3	49 W	42*	17*
4 6	22 1.84	+28 16.7	1.094	0.845	60.5	20.3	47 W	40*	18*
4 11	22 18.54	+27 11.0	1.142	0.854	58.2	20.3	46 W	38*	20*
4 16	22 34.32	+26 1.1	1.184	0.868	56.0	20.4	46 W	36*	21*
4 21	22 49.35	+24 48.1	1.221	0.887	54.2	20.5	46 W	35*	23*
4 26	23 3.75	+23 32.9	1.252	0.910	52.6	20.5	46 W	33*	25*
5 1	23 17.62	+22 15.9	1.278	0.937	51.4	20.6	47 W	32*	28*
5 6	23 31.02	+20 57.3	1.297	0.967	50.4	20.7	48 W	31*	30*
5 11	23 43.98	+19 37.1	1.311	0.999	49.6	20.7	49 W	30*	32*
5 16	23 56.54	+18 15.0	1.319	1.034	49.1	20.8	51 W	29*	35*
5 21	0 8.72	+16 50.5	1.323	1.070	48.6	20.9	53 W	29*	37*
5 26	0 20.54	+15 22.9	1.322	1.108	48.3	20.9	55 W	28*	40*
5 31	0 32.00	+13 51.8	1.317	1.147	48.0	21.0	57 W	28*	43*
6 5	0 43.11	+12 16.4	1.309	1.186	47.7	21.1	60 W	28*	45*
6 10	0 53.86	+10 35.8	1.297	1.226	47.3	21.1	63 W	28*	48*
6 15	1 4.25	+ 8 49.2	1.282	1.266	47.0	21.1	66 W	28*	51*
6 20	1 14.24	+ 6 55.7	1.266	1.306	46.5	21.2	69 W	28*	54*
6 25	1 23.84	+ 4 54.4	1.247	1.347	45.9	21.2	72 W	29*	57*
6 30	1 33.02	+ 2 44.6	1.227	1.387	45.3	21.2	76 W	29*	60*
7 5	1 41.74	+ 0 25.4	1.206	1.426	44.5	21.2	79 W	29*	63*
7 10	1 49.97	− 2 3.8	1.185	1.466	43.5	21.2	83 W	29*	66*
7 15	1 57.65	− 4 43.6	1.165	1.505	42.4	21.2	87 W	29*	69*
7 20	2 4.73	− 7 34.3	1.145	1.543	41.2	21.2	91 W	29*	72
7 25	2 11.16	−10 35.6	1.128	1.581	39.8	21.1	95 W	28*	75
7 30	2 16.87	−13 47.1	1.113	1.619	38.3	21.1	99 W	27*	78
8 4	2 21.78	−17 7.8	1.101	1.655	36.7	21.1	103 W	25*	81
8 9	2 25.80	−20 36.1	1.092	1.692	35.0	21.1	107 W	23*	85
8 14	2 28.82	−24 9.9	1.088	1.727	33.3	21.1	111 W	20*	88
8 19	2 30.76	−27 46.2	1.089	1.762	31.7	21.1	114 W	17*	88
8 24	2 31.51	−31 21.7	1.095	1.797	30.1	21.1	117 W	14	85
8 29	2 30.99	−34 52.8	1.107	1.830	28.7	21.1	120 W	10	81
9 3	2 29.08	−38 15.9	1.124	1.863	27.4	21.1	122 W	7	78
9 8	2 25.74	−41 27.1	1.147	1.896	26.4	21.2	123 W	4	75
9 13	2 20.93	−44 23.1	1.176	1.928	25.7	21.3	124 W	1	72
9 18	2 14.72	−47 0.8	1.210	1.959	25.1	21.3	124 W	—	69
9 23	2 7.21	−49 18.1	1.249	1.989	24.8	21.4	124 W	—	67
9 28	1 58.61	−51 13.7	1.293	2.019	24.7	21.5	123 W	—	65
10 3	1 49.18	−52 46.9	1.341	2.048	24.7	21.6	121 W	—	63
10 8	1 39.29	−53 57.7	1.393	2.076	24.8	21.8	120 W	—	62
10 13	1 29.33	−54 46.9	1.449	2.104	24.9	21.9	117 W	—	61
10 18	1 19.71	−55 16.2	1.507	2.131	25.0	22.0	115 E	—	61
10 23	1 10.75	−55 27.5	1.568	2.158	25.2	22.1	113 E	—	61
10 28	1 2.73	−55 23.0	1.632	2.184	25.3	22.2	110 E	—	61
11 2	0 55.82	−55 4.9	1.697	2.209	25.4	22.3	108 E	—	61
11 7	0 50.13	−54 35.3	1.763	2.234	25.4	22.4	105 E	—	61
177279 2003 WD_{142}									
12 27	12 22.87	+ 5 22.9	2.189	2.435	23.8	21.3	92 W	50	53*
1 6	12 29.55	+ 5 10.0	2.096	2.475	23.0	21.2	101 W	50	57*
1 16	12 33.85	+ 5 13.7	2.004	2.515	21.6	21.1	110 W	50	59
1 26	12 35.51	+ 5 34.7	1.919	2.554	19.6	20.9	120 W	51	58

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
177279 2003 WD_{142} *(continuation)*									
	h m	° ′			°	m	°	°	°
2 5	12 34.37	+ 6 12.1	1.846	2.592	16.9	20.8	130 W	51	58
2 15	12 30.41	+ 7 3.7	1.788	2.630	13.6	20.6	141 W	52	57
2 25	12 23.88	+ 8 5.0	1.751	2.668	9.9	20.5	152 W	53	56
3 2	12 19.82	+ 8 37.3	1.741	2.686	7.9	20.4	158 W	54	55
3 7	12 15.37	+ 9 9.4	1.739	2.704	6.1	20.3	163 W	54	55
3 12	12 10.64	+ 9 40.5	1.743	2.722	4.4	20.3	168 W	55	54
3 17	12 5.76	+10 9.6	1.755	2.740	3.6	20.3	170 W	55	54
3 22	12 0.88	+10 35.9	1.774	2.758	4.0	20.3	169 E	56	53
3 27	11 56.12	+10 58.5	1.800	2.775	5.3	20.4	165 E	56	53
4 6	11 47.46	+11 31.4	1.872	2.810	8.7	20.7	155 E	57	52
4 16	11 40.54	+11 46.1	1.970	2.843	12.0	21.0	144 E	57	52
4 26	11 35.84	+11 42.9	2.089	2.876	14.7	21.2	134 E	57	52
5 6	11 33.50	+11 23.5	2.226	2.908	16.8	21.5	124 E	56	53
2099 Öpik									
12 27	12 23.84	−23 50.3	2.954	2.959	19.1	20.8	81 W	21	72*
1 6	12 29.34	−24 54.7	2.833	2.978	19.3	20.7	89 W	20	81*
1 16	12 32.91	−25 49.0	2.709	2.996	19.0	20.6	97 W	19	90
1 26	12 34.30	−26 30.3	2.588	3.013	18.3	20.5	106 W	18	89
2 5	12 33.34	−26 55.2	2.472	3.029	17.1	20.4	115 W	18	89
2 15	12 29.95	−26 59.8	2.366	3.043	15.4	20.2	125 W	18	89
2 25	12 24.24	−26 40.3	2.276	3.057	13.2	20.1	135 W	18	89
3 7	12 16.62	−25 54.1	2.205	3.069	10.8	19.9	145 W	19	90
3 12	12 12.29	−25 20.5	2.179	3.075	9.5	19.9	149 W	20	89
3 17	12 7.74	−24 40.3	2.159	3.081	8.3	19.8	153 W	20	89
3 22	12 3.11	−23 53.8	2.146	3.086	7.4	19.7	157 E	21	88
3 27	11 58.50	−23 1.9	2.140	3.091	6.8	19.7	159 E	22	87
4 1	11 54.03	−22 5.4	2.142	3.096	6.7	19.7	159 E	23	86
4 6	11 49.82	−21 5.4	2.151	3.100	7.1	19.7	158 E	24	85
4 11	11 45.94	−20 3.0	2.168	3.104	7.9	19.8	155 E	25	84
4 16	11 42.49	−18 59.4	2.192	3.108	9.0	19.9	151 E	26	83
4 21	11 39.53	−17 56.0	2.222	3.112	10.2	20.0	147 E	27	82
4 26	11 37.10	−16 53.7	2.259	3.115	11.4	20.0	142 E	28	81
5 1	11 35.23	−15 53.5	2.302	3.118	12.6	20.1	137 E	29	80
5 6	11 33.93	−14 56.2	2.350	3.121	13.8	20.2	132 E	30	79
5 16	11 33.01	−13 12.6	2.460	3.126	15.8	20.4	123 E	32	77
5 26	11 34.26	−11 46.2	2.585	3.130	17.3	20.6	113 E	32*	76
6 5	11 37.45	−10 38.0	2.721	3.133	18.3	20.7	105 E	30*	75
6 15	11 42.35	− 9 47.5	2.862	3.134	18.8	20.8	96 E	27*	74
6 25	11 48.73	− 9 13.6	3.005	3.135	18.9	20.9	88 E	23*	73*
7 5	11 56.36	− 8 54.6	3.148	3.134	18.6	21.0	80 E	20*	70*
7 15	12 5.08	− 8 48.7	3.286	3.133	18.0	21.1	72 E	16*	65*
7 25	12 14.70	− 8 54.1	3.419	3.130	17.1	21.2	65 E	13*	59*
8 4	12 25.11	− 9 9.0	3.543	3.126	16.0	21.2	58 E	10*	52*
8 14	12 36.19	− 9 31.9	3.656	3.121	14.6	21.2	51 E	8*	45*
8 24	12 47.85	−10 1.3	3.757	3.115	13.1	21.2	44 E	6*	38*
9 3	13 0.02	−10 35.7	3.845	3.108	11.4	21.2	38 E	4*	32*
9 13	13 12.65	−11 13.9	3.918	3.100	9.6	21.2	31 E	2*	25*
9 23	13 25.66	−11 54.6	3.976	3.091	7.7	21.1	24 E	1*	18*
10 3	13 39.04	−12 36.8	4.017	3.080	5.7	21.0	18 E	—	12*
10 13	13 52.73	−13 19.2	4.040	3.069	3.7	20.9	11 E	—	5*
10 23	14 6.68	−14 0.8	4.046	3.056	1.6	20.8	5 E	—	—
11 2	14 20.86	−14 40.6	4.034	3.043	0.6	20.7	2 W	—	—
11 12	14 35.22	−15 17.6	4.004	3.028	2.7	20.8	8 W	1*	—
11 22	14 49.70	−15 50.6	3.956	3.012	4.8	20.9	15 W	7*	5*
12 2	15 4.25	−16 18.9	3.891	2.995	6.9	20.9	21 W	12*	10*
12 12	15 18.79	−16 41.4	3.808	2.977	9.0	21.0	28 W	16*	16*
12 22	15 33.23	−16 57.1	3.710	2.958	11.0	21.0	35 W	19*	22*
1 1	15 47.48	−17 5.3	3.596	2.938	12.9	21.0	42 W	22*	29*
1 11	16 1.43	−17 5.0	3.469	2.917	14.7	20.9	49 W	24*	37*
1 21	16 14.93	−16 55.3	3.330	2.894	16.3	20.9	56 W	26*	44*
7445 Trajanus									
12 27	12 23.88	− 3 46.6	2.564	2.721	21.2	20.1	88 W	41	61*
1 6	12 30.49	− 4 31.8	2.417	2.715	21.1	19.9	97 W	40	67*
1 16	12 35.27	− 5 5.3	2.272	2.709	20.5	19.8	106 W	40	69
1 26	12 37.92	− 5 25.2	2.133	2.702	19.3	19.6	115 W	40	69
2 5	12 38.18	− 5 29.8	2.002	2.694	17.4	19.4	125 W	40	69
2 15	12 35.83	− 5 17.3	1.886	2.685	14.8	19.1	136 W	40	69
2 25	12 30.86	− 4 47.3	1.788	2.675	11.5	18.9	147 W	40	69
3 7	12 23.53	− 4 0.9	1.712	2.664	7.6	18.6	159 W	41	68
3 17	12 14.42	− 3 1.2	1.663	2.652	3.1	18.3	172 W	42	67
3 22	12 9.48	− 2 28.1	1.650	2.645	0.9	18.1	178 W	43	66
3 27	12 4.47	− 1 54.1	1.643	2.639	1.8	18.2	175 E	43	66
4 1	11 59.53	− 1 20.1	1.644	2.632	4.1	18.4	169 E	44	65
4 6	11 54.78	− 0 47.0	1.652	2.625	6.4	18.5	163 E	44	65
4 11	11 50.37	− 0 15.7	1.667	2.618	8.7	18.6	157 E	45	64
4 16	11 46.39	+ 0 13.0	1.688	2.611	10.8	18.7	151 E	45	64

7445 Trajanus *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 26	11 40.12	+ 1 0.0	1.748	2.595	14.6	18.9	139 E	46	63
5 6	11 36.39	+ 1 30.7	1.826	2.578	17.8	19.1	129 E	47	62
5 16	11 35.35	+ 1 44.1	1.919	2.561	20.3	19.3	119 E	47	62
5 26	11 36.90	+ 1 40.4	2.021	2.543	22.1	19.4	109 E	46*	62
6 5	11 40.81	+ 1 21.1	2.129	2.524	23.3	19.6	101 E	42*	63
6 15	11 46.81	+ 0 47.6	2.239	2.504	23.9	19.7	93 E	37*	63
6 25	11 54.65	+ 0 1.7	2.349	2.483	24.1	19.8	85 E	32*	64*
7 5	12 4.06	− 0 54.8	2.456	2.462	23.9	19.8	78 E	27*	64*
7 15	12 14.85	− 2 0.6	2.559	2.439	23.3	19.9	72 E	23*	61*
7 25	12 26.84	− 3 14.2	2.655	2.416	22.5	19.9	65 E	19*	57*
8 4	12 39.90	− 4 34.3	2.744	2.392	21.4	19.9	59 E	16*	52*
8 14	12 53.95	− 5 59.5	2.825	2.368	20.1	19.9	54 E	13*	47*
8 24	13 8.89	− 7 28.8	2.896	2.343	18.7	19.9	48 E	11*	42*
9 3	13 24.68	− 9 0.7	2.958	2.317	17.1	19.9	43 E	9*	36*
9 13	13 41.31	−10 34.3	3.010	2.291	15.4	19.8	37 E	7*	31*
9 23	13 58.75	−12 8.2	3.052	2.264	13.6	19.8	32 E	6*	26*
10 3	14 16.99	−13 41.1	3.083	2.236	11.7	19.7	27 E	4*	21*
10 13	14 36.05	−15 11.7	3.103	2.208	9.7	19.6	22 E	3*	16*
10 23	14 55.93	−16 38.5	3.113	2.180	7.6	19.5	17 E	1*	11*
11 2	15 16.62	−18 0.2	3.112	2.151	5.5	19.4	12 E	—	6*
11 12	15 38.14	−19 15.1	3.101	2.122	3.4	19.2	7 E	—	1*
11 22	16 0.46	−20 21.8	3.080	2.093	1.2	19.0	3 E	—	—
12 2	16 23.56	−21 18.6	3.049	2.064	1.0	18.9	2 W	—	—
12 12	16 47.40	−22 4.1	3.010	2.035	3.2	19.1	7 W	—	—
12 22	17 11.90	−22 36.8	2.962	2.006	5.4	19.1	11 W	2*	3*
1 1	17 36.99	−22 55.4	2.907	1.977	7.7	19.1	16 W	4*	8*
1 11	18 2.56	−22 58.8	2.845	1.949	9.9	19.2	20 W	6*	12*
1 21	18 28.48	−22 46.3	2.777	1.921	12.0	19.2	24 W	7*	17*

3122 Florence

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 24.38	− 6 27.7	2.258	2.419	24.0	18.9	87 W	39	63*
1 6	12 28.52	− 8 5.6	2.134	2.438	23.7	18.8	96 W	37	70*
1 16	12 30.20	− 9 35.9	2.009	2.455	22.8	18.7	105 W	35	74
1 26	12 29.02	−10 56.7	1.890	2.470	21.2	18.5	115 W	34	75
2 5	12 24.64	−12 5.3	1.780	2.483	18.9	18.3	125 W	33	76
2 15	12 16.87	−12 58.1	1.685	2.493	15.9	18.1	136 W	32	77
2 25	12 5.86	−13 31.3	1.610	2.502	12.3	17.9	148 W	31	78
3 7	11 52.26	−13 42.1	1.560	2.509	8.5	17.6	158 W	31	78
3 12	11 44.83	−13 38.7	1.546	2.512	6.9	17.6	162 W	31	78
3 17	11 37.23	−13 29.8	1.540	2.514	5.9	17.5	165 E	32	77
3 22	11 29.67	−13 16.0	1.541	2.515	6.1	17.5	165 E	32	77
3 27	11 22.33	−12 58.1	1.550	2.516	7.2	17.6	162 E	32	77
4 1	11 15.40	−12 37.1	1.566	2.517	8.8	17.7	157 E	32	77
4 6	11 9.04	−12 14.1	1.589	2.517	10.7	17.8	152 E	33	76
4 11	11 3.35	−11 50.2	1.618	2.517	12.6	17.9	147 E	33	76
4 16	10 58.44	−11 26.4	1.654	2.516	14.5	18.0	141 E	34	75
4 21	10 54.36	−11 3.8	1.695	2.515	16.2	18.1	136 E	34	75
4 26	10 51.14	−10 43.0	1.740	2.513	17.7	18.2	131 E	34	75
5 6	10 47.19	−10 9.5	1.842	2.508	20.3	18.4	120 E	35	74
5 16	10 46.40	− 9 48.8	1.955	2.501	22.2	18.6	111 E	34*	74
5 26	10 48.41	− 9 42.5	2.074	2.492	23.4	18.8	102 E	31*	74
6 5	10 52.81	− 9 50.6	2.194	2.481	24.1	18.9	94 E	27*	74
6 15	10 59.24	−10 12.5	2.314	2.468	24.3	19.0	86 E	22*	74*
6 25	11 7.40	−10 47.2	2.430	2.453	24.0	19.1	79 E	16*	71*
7 5	11 17.00	−11 33.7	2.541	2.436	23.5	19.2	72 E	12*	66*
7 15	11 27.86	−12 30.8	2.643	2.417	22.6	19.2	66 E	7*	60*
7 25	11 39.82	−13 37.7	2.736	2.396	21.5	19.2	60 E	4*	54*
8 4	11 52.76	−14 53.2	2.819	2.373	20.3	19.2	54 E	1*	47*
8 14	12 6.62	−16 16.4	2.891	2.348	18.9	19.2	49 E	—	41*
8 24	12 21.34	−17 46.3	2.951	2.320	17.4	19.2	43 E	—	35*
9 3	12 36.92	−19 22.0	2.999	2.291	15.8	19.1	38 E	—	30*
9 13	12 53.37	−21 2.5	3.033	2.260	14.1	19.1	33 E	—	24*
9 23	13 10.71	−22 46.8	3.055	2.226	12.5	19.0	29 E	—	19*
10 3	13 29.00	−24 33.6	3.063	2.191	10.9	18.9	24 E	—	14*
10 13	13 48.31	−26 21.9	3.059	2.154	9.4	18.8	21 E	—	10*
10 23	14 8.73	−28 10.1	3.042	2.114	8.1	18.7	17 E	—	6*
11 2	14 30.35	−29 56.7	3.013	2.072	7.3	18.6	15 E	—	2*
11 12	14 53.31	−31 39.7	2.972	2.028	7.0	18.5	14 W	—	4*
11 22	15 17.70	−33 16.9	2.920	1.983	7.4	18.5	15 W	—	7*
12 2	15 43.65	−34 45.7	2.859	1.935	8.4	18.4	17 W	—	9*
12 12	16 11.24	−36 3.1	2.788	1.885	9.8	18.3	19 W	—	12*
12 22	16 40.51	−37 5.7	2.709	1.833	11.5	18.3	22 W	—	15*
12 27	16 55.78	−37 30.2	2.667	1.807	12.4	18.3	23 W	—	17*
1 1	17 11.46	−37 49.6	2.624	1.780	13.4	18.2	25 W	—	18*
1 6	17 27.54	−38 3.3	2.580	1.752	14.4	18.2	26 W	—	20*
1 11	17 43.99	−38 10.8	2.534	1.725	15.4	18.1	28 W	—	21*
1 16	18 0.78	−38 11.4	2.487	1.696	16.4	18.1	29 W	—	23*
1 21	18 17.88	−38 4.8	2.440	1.668	17.4	18.1	30 W	—	24*

283377 2000 PO_9

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
12 27	12 24.58	− 8 34.2	1.850	2.040	28.8	20.5	86 W	36	64*
1 6	12 31.61	−10 48.0	1.761	2.076	28.2	20.5	94 W	34	72*
1 16	12 36.01	−12 53.2	1.670	2.111	27.1	20.4	102 W	32	77
1 26	12 37.34	−14 47.4	1.583	2.146	25.3	20.2	111 W	30	79
2 5	12 35.25	−16 27.4	1.503	2.179	22.9	20.1	121 W	29	80
2 15	12 29.46	−17 48.5	1.434	2.211	19.7	19.9	131 W	27	82
2 25	12 20.13	−18 45.1	1.381	2.242	16.0	19.7	141 W	26	83
3 2	12 14.33	−19 2.8	1.362	2.257	14.0	19.6	147 W	26	83
3 7	12 7.93	−19 12.6	1.349	2.271	12.0	19.6	152 W	26	83
3 12	12 1.11	−19 14.5	1.342	2.286	10.2	19.5	156 W	26	83
3 17	11 54.07	−19 8.7	1.342	2.300	8.8	19.4	159 W	26	83
3 22	11 47.05	−18 55.8	1.348	2.314	8.0	19.4	161 E	26	83
3 27	11 40.24	−18 36.6	1.362	2.327	8.1	19.5	161 E	26	83
4 1	11 33.86	−18 12.5	1.382	2.340	9.0	19.6	159 E	27	82
4 6	11 28.04	−17 44.8	1.408	2.353	10.4	19.7	155 E	27	82
4 11	11 22.92	−17 14.7	1.441	2.366	12.0	19.8	151 E	28	81
4 16	11 18.61	−16 43.7	1.479	2.378	13.7	19.9	146 E	28	81
4 21	11 15.14	−16 13.1	1.523	2.390	15.3	20.0	141 E	29	80
4 26	11 12.55	−15 44.0	1.572	2.401	16.9	20.2	136 E	29	80
5 1	11 10.81	−15 17.2	1.625	2.412	18.2	20.3	131 E	30	79
5 6	11 9.89	−14 53.3	1.681	2.423	19.5	20.4	127 E	30	79
5 16	11 10.37	−14 15.8	1.804	2.444	21.5	20.7	118 E	31*	78
5 26	11 13.61	−13 53.6	1.935	2.464	22.8	20.9	109 E	29*	78
6 5	11 19.15	−13 46.8	2.073	2.482	23.6	21.1	101 E	26*	78
6 15	11 26.61	−13 54.5	2.213	2.499	23.9	21.2	94 E	22*	78
6 25	11 35.66	−14 15.6	2.354	2.514	23.8	21.4	87 E	17*	77*

297342 1999 XM_{103}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 24.97	−14 18.7	3.181	3.231	17.6	20.9	84 W	31	68*
1 6	12 29.17	−15 27.4	3.049	3.247	17.6	20.8	93 W	30	76*
1 16	12 31.59	−16 27.7	2.917	3.262	17.2	20.7	102 W	29	80
1 26	12 32.01	−17 17.6	2.790	3.277	16.3	20.6	111 W	28	81
2 5	12 30.29	−17 54.9	2.672	3.291	14.9	20.5	121 W	27	82
2 15	12 26.40	−18 17.3	2.568	3.303	13.0	20.3	131 W	27	82
2 25	12 20.47	−18 22.5	2.482	3.315	10.7	20.2	142 W	27	82
3 7	12 12.87	−18 9.3	2.419	3.326	8.1	20.0	152 W	27	82
3 17	12 4.18	−17 37.8	2.382	3.336	5.7	19.9	160 W	27	82
3 27	11 55.17	−16 50.5	2.375	3.346	4.7	19.8	164 E	28	81
4 1	11 50.80	−16 22.3	2.382	3.350	5.1	19.8	163 E	29	80
4 6	11 46.65	−15 52.0	2.397	3.354	5.9	19.9	160 E	29	80
4 11	11 42.80	−15 20.3	2.419	3.358	7.1	20.0	156 E	30	79
4 16	11 39.32	−14 48.0	2.448	3.361	8.3	20.1	151 E	30	79
4 21	11 36.28	−14 15.9	2.483	3.365	9.6	20.1	146 E	31	78
4 26	11 33.72	−13 44.6	2.524	3.368	10.8	20.2	141 E	31	78
5 6	11 30.12	−12 46.9	2.623	3.374	13.0	20.4	131 E	32	77
5 16	11 28.61	−11 58.6	2.739	3.379	14.8	20.6	121 E	33*	76
5 26	11 29.13	−11 21.9	2.868	3.383	16.1	20.7	112 E	32*	75
6 5	11 31.50	−10 57.7	3.006	3.386	17.0	20.8	103 E	30*	75
6 15	11 35.55	−10 46.1	3.148	3.388	17.4	21.0	95 E	26*	75
6 25	11 41.05	−10 46.5	3.292	3.389	17.4	21.1	87 E	21*	74*
7 5	11 47.81	−10 57.9	3.435	3.389	17.1	21.1	79 E	17*	71*
7 15	11 55.66	−11 19.4	3.572	3.389	16.5	21.2	71 E	13*	65*
7 25	12 4.44	−11 49.8	3.703	3.388	15.7	21.2	64 E	9*	58*
8 4	12 14.02	−12 28.0	3.825	3.385	14.6	21.3	57 E	6*	51*
8 14	12 24.29	−13 13.0	3.937	3.382	13.3	21.3	50 E	3*	44*
8 24	12 35.17	−14 3.7	4.036	3.378	11.9	21.3	44 E	1*	37*
9 3	12 46.56	−14 59.2	4.122	3.373	10.4	21.3	37 E	—	30*
9 13	12 58.42	−15 58.6	4.193	3.368	8.8	21.2	31 E	—	24*
9 23	13 10.69	−17 1.0	4.249	3.361	7.1	21.2	24 E	—	17*
10 3	13 23.30	−18 5.6	4.288	3.353	5.4	21.1	18 E	—	11*
10 13	13 36.24	−19 11.6	4.310	3.345	3.8	21.1	13 E	—	4*
10 23	13 49.42	−20 18.4	4.315	3.336	2.7	21.0	9 W	—	—
11 2	14 2.83	−21 25.1	4.302	3.325	2.7	21.0	9 W	—	3*
11 12	14 16.40	−22 31.1	4.271	3.314	3.9	21.0	13 W	—	7*
11 22	14 30.07	−23 35.9	4.222	3.302	5.5	21.1	19 W	3*	12*
12 2	14 43.77	−24 38.9	4.156	3.290	7.3	21.1	25 W	7*	18*
12 12	14 57.44	−25 39.5	4.074	3.276	9.1	21.1	32 W	10*	24*
12 22	15 10.95	−26 37.5	3.976	3.261	10.8	21.1	38 W	13*	30*
1 1	15 24.22	−27 32.4	3.863	3.246	12.4	21.1	45 W	14*	37*
1 11	15 37.11	−28 24.1	3.736	3.229	13.9	21.1	52 W	15*	45*
1 21	15 49.47	−29 12.4	3.598	3.212	15.3	21.1	59 W	15*	53*

223042 2002 TN_{56}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 25.53	−10 10.4	2.334	2.461	23.5	21.3	86 W	35	65*
1 6	12 32.76	−11 8.2	2.227	2.491	23.2	21.2	94 W	34	72*
1 16	12 37.86	−11 52.6	2.121	2.521	22.4	21.1	102 W	33	76
1 26	12 40.56	−12 21.3	2.017	2.550	21.0	21.0	112 W	33	76
2 5	12 40.63	−12 31.9	1.921	2.578	19.0	20.8	122 W	32	77
2 15	12 37.95	−12 22.0	1.837	2.605	16.3	20.7	132 W	33	76

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
223042 2002 TN_{56} *(continuation)*									
	h m	° ′			°	m	°	°	°
2 25	12 32.61	−11 50.3	1.769	2.631	12.9	20.5	143 W	33	76
3 7	12 25.05	−10 57.1	1.723	2.656	9.0	20.3	155 W	34	75
3 12	12 20.65	−10 23.3	1.710	2.669	7.0	20.2	161 W	35	74
3 17	12 15.99	− 9 45.4	1.703	2.681	4.9	20.1	167 W	35	74
3 22	12 11.22	− 9 4.4	1.704	2.693	3.2	20.0	171 W	36	73
3 27	12 6.46	− 8 21.2	1.711	2.704	2.6	20.0	173 E	37	72
4 1	12 1.85	− 7 37.0	1.727	2.716	3.8	20.1	170 E	37	72
4 6	11 57.51	− 6 52.9	1.749	2.727	5.6	20.2	165 E	38	71
4 11	11 53.55	− 6 9.8	1.778	2.738	7.5	20.4	159 E	39	70
4 16	11 50.05	− 5 28.7	1.814	2.748	9.4	20.5	153 E	40	69
4 21	11 47.10	− 4 50.5	1.857	2.759	11.2	20.6	148 E	40	69
4 26	11 44.73	− 4 15.7	1.905	2.769	12.9	20.8	142 E	41	68
5 1	11 42.96	− 3 44.8	1.958	2.779	14.4	20.9	137 E	41	68
5 6	11 41.80	− 3 18.1	2.015	2.789	15.7	21.0	132 E	42	67
5 11	11 41.25	− 2 55.7	2.077	2.798	16.9	21.1	126 E	42	67
5 16	11 41.29	− 2 37.7	2.142	2.807	17.9	21.2	122 E	42	67
5 21	11 41.91	− 2 24.1	2.211	2.816	18.7	21.3	117 E	42*	66
5 26	11 43.06	− 2 14.7	2.281	2.825	19.4	21.4	112 E	42*	66
275611 1999 XX_{262}									
12 27	12 25.54	+ 0 38.0	0.951	1.365	46.1	20.4	90 W	46	57*
1 6	12 42.24	− 2 23.4	0.899	1.389	44.9	20.3	95 W	43	63*
1 16	12 56.17	− 5 15.6	0.846	1.413	43.1	20.2	101 W	40	69*
1 26	13 6.75	− 7 56.7	0.793	1.438	40.8	20.0	108 W	37	72
2 5	13 13.30	−10 25.3	0.740	1.464	37.5	19.8	115 W	35	74
2 15	13 14.96	−12 37.6	0.691	1.489	33.3	19.6	124 W	32	77
2 20	13 13.72	−13 36.1	0.669	1.502	30.8	19.4	129 W	31	78
2 25	13 11.02	−14 28.4	0.649	1.515	28.0	19.3	134 W	31	78
3 2	13 6.87	−15 13.5	0.632	1.528	24.9	19.2	140 W	30	79
3 7	13 1.31	−15 50.1	0.618	1.540	21.6	19.0	145 W	29	80
3 12	12 54.47	−16 17.2	0.607	1.553	18.1	18.9	151 W	29	80
3 17	12 46.61	−16 34.0	0.601	1.565	14.6	18.8	157 W	28	81
3 22	12 38.05	−16 40.1	0.600	1.577	11.3	18.7	162 W	28	81
3 27	12 29.22	−16 36.3	0.603	1.589	8.9	18.6	166 W	28	81
4 1	12 20.53	−16 23.6	0.612	1.601	8.1	18.6	167 E	29	80
4 6	12 12.34	−16 3.8	0.625	1.613	9.3	18.7	165 E	29	80
4 11	12 5.01	−15 38.9	0.644	1.624	11.7	18.9	161 E	29	80
4 16	11 58.80	−15 11.4	0.668	1.635	14.6	19.1	156 E	30	79
4 21	11 53.86	−14 43.6	0.696	1.646	17.5	19.3	150 E	30	79
4 26	11 50.26	−14 17.5	0.728	1.657	20.3	19.5	145 E	31	78
5 1	11 47.98	−13 54.3	0.763	1.667	22.8	19.7	140 E	31	78
5 6	11 46.97	−13 35.1	0.802	1.677	25.0	19.9	135 E	31	78
5 16	11 48.45	−13 10.5	0.888	1.696	28.6	20.3	126 E	32	77
5 26	11 53.92	−13 6.0	0.982	1.714	31.3	20.6	118 E	32*	77
6 5	12 2.58	−13 20.2	1.082	1.731	33.1	20.9	111 E	30*	77
6 15	12 13.78	−13 50.9	1.187	1.746	34.3	21.1	105 E	27*	78
6 25	12 27.01	−14 35.7	1.294	1.759	34.8	21.3	98 E	23*	79
7747 Michałowski									
12 27	12 25.59	− 7 41.3	2.661	2.780	20.7	19.1	86 W	37	63*
1 6	12 32.32	− 8 47.2	2.503	2.763	20.8	18.9	95 W	36	70*
1 16	12 37.37	− 9 44.5	2.347	2.745	20.4	18.8	103 W	35	74
1 26	12 40.41	−10 31.1	2.195	2.727	19.5	18.6	112 W	34	75
2 5	12 41.16	−11 5.1	2.051	2.707	18.0	18.4	122 W	34	75
2 15	12 39.36	−11 24.0	1.920	2.687	15.8	18.1	132 W	34	75
2 25	12 34.91	−11 25.5	1.806	2.666	12.9	17.9	143 W	34	75
3 7	12 27.97	−11 8.2	1.713	2.643	9.3	17.6	154 W	34	75
3 17	12 19.02	−10 32.1	1.645	2.620	5.4	17.3	166 W	34	75
3 27	12 8.95	− 9 40.0	1.605	2.597	3.1	17.1	172 E	35	74
4 1	12 3.83	− 9 9.6	1.595	2.584	4.0	17.1	170 E	36	73
4 6	11 58.85	− 8 37.6	1.593	2.572	5.8	17.2	165 E	36	73
4 11	11 54.14	− 8 4.8	1.597	2.560	8.0	17.3	159 E	37	72
4 16	11 49.85	− 7 32.3	1.608	2.547	10.1	17.4	154 E	37	72
4 21	11 46.08	− 7 1.0	1.626	2.534	12.2	17.5	148 E	38	71
4 26	11 42.91	− 6 32.0	1.648	2.521	14.1	17.6	142 E	38	71
5 6	11 38.57	− 5 42.8	1.708	2.494	17.6	17.8	132 E	39	70
5 16	11 37.08	− 5 8.5	1.783	2.466	20.5	17.9	121 E	40	69
5 26	11 38.39	− 4 51.2	1.869	2.438	22.6	18.1	112 E	39*	69
6 5	11 42.28	− 4 50.7	1.961	2.409	24.2	18.2	104 E	36*	69
6 15	11 48.50	− 5 6.3	2.056	2.380	25.1	18.3	96 E	32*	69
6 25	11 56.77	− 5 36.7	2.152	2.349	25.6	18.4	88 E	28*	70
7 5	12 6.82	− 6 20.0	2.245	2.319	25.7	18.5	81 E	23*	69*
7 15	12 18.44	− 7 14.9	2.335	2.288	25.4	18.5	75 E	19*	66*
7 25	12 31.47	− 8 19.5	2.420	2.256	24.8	18.5	69 E	16*	62*
8 4	12 45.76	− 9 32.3	2.498	2.225	23.9	18.5	63 E	13*	56*
8 14	13 1.22	−10 51.8	2.569	2.192	22.9	18.5	57 E	11*	51*
8 24	13 17.79	−12 16.3	2.632	2.160	21.6	18.5	52 E	9*	46*
9 3	13 35.42	−13 44.2	2.687	2.128	20.2	18.5	47 E	7*	41*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
7747 Michałowski *(continuation)*									
	h m	° ′			°	m	°	°	°
9 13	13 54.11	−15 13.9	2.734	2.095	18.7	18.4	42 E	6*	36*
9 23	14 13.84	−16 43.5	2.773	2.063	17.1	18.4	37 E	5*	31*
10 3	14 34.63	−18 11.3	2.803	2.031	15.3	18.3	32 E	4*	26*
10 13	14 56.48	−19 35.3	2.825	1.999	13.5	18.2	28 E	3*	22*
10 23	15 19.39	−20 53.3	2.839	1.967	11.7	18.1	24 E	2*	18*
11 2	15 43.36	−22 3.2	2.846	1.937	9.7	18.0	19 E	1*	13*
11 12	16 8.37	−23 2.7	2.845	1.907	7.8	17.9	15 E	—	9*
11 22	16 34.34	−23 49.7	2.837	1.877	5.8	17.8	11 E	—	5*
12 2	17 1.19	−24 21.9	2.824	1.849	3.8	17.6	7 E	—	1*
12 12	17 28.81	−24 37.4	2.805	1.823	1.8	17.5	3 E	—	—
12 22	17 57.02	−24 34.6	2.781	1.797	0.7	17.3	1 W	—	—
1 1	18 25.65	−24 12.1	2.752	1.774	2.5	17.4	4 W	—	—
1 11	18 54.49	−23 29.3	2.720	1.752	4.5	17.5	8 W	—	2*
1 21	19 23.33	−22 26.1	2.686	1.732	6.5	17.5	11 W	—	5*
307162 2002 DM_9									
12 27	12 26.29	+ 8 32.0	2.506	2.735	21.0	19.4	93 W	54	50*
1 6	12 31.85	+ 7 27.3	2.323	2.691	21.0	19.2	101 W	52	55*
1 16	12 35.47	+ 6 28.4	2.143	2.646	20.5	19.0	110 W	51	58
1 26	12 36.72	+ 5 35.2	1.972	2.600	19.3	18.7	119 W	51	58
2 5	12 35.19	+ 4 47.2	1.811	2.554	17.3	18.4	129 W	50	59
2 15	12 30.45	+ 4 3.6	1.666	2.507	14.6	18.1	140 W	49	60
2 25	12 22.30	+ 3 22.7	1.542	2.460	10.9	17.8	152 W	48	61
3 7	12 10.85	+ 2 42.3	1.442	2.413	6.3	17.4	165 W	48	61
3 17	11 56.75	+ 1 59.8	1.371	2.365	1.1	16.9	177 W	47	62
3 27	11 41.27	+ 1 12.5	1.331	2.318	4.7	17.1	169 E	46	63
4 6	11 26.06	+ 0 18.5	1.320	2.270	10.4	17.2	156 E	45	64
4 16	11 12.72	− 0 43.2	1.336	2.222	15.7	17.4	143 E	44	65
4 26	11 2.49	− 1 53.4	1.374	2.174	20.3	17.6	131 E	43	66
5 6	10 55.93	− 3 12.2	1.428	2.127	24.1	17.7	121 E	42	67
5 16	10 53.15	− 4 39.8	1.492	2.080	27.0	17.9	111 E	40*	69
5 26	10 53.95	− 6 16.8	1.562	2.034	29.1	18.0	102 E	35*	70
6 5	10 57.95	− 8 3.2	1.633	1.989	30.6	18.1	94 E	29*	72
6 15	11 4.79	− 9 59.3	1.703	1.945	31.5	18.1	88 E	23*	74*
6 25	11 14.16	−12 5.4	1.769	1.902	31.9	18.2	81 E	16*	73*
7 5	11 25.79	−14 21.1	1.830	1.861	32.0	18.2	76 E	11*	69*
7 15	11 39.53	−16 46.3	1.885	1.822	31.8	18.2	71 E	6*	65*
7 25	11 55.28	−19 20.1	1.934	1.785	31.4	18.2	66 E	2*	59*
8 4	12 13.03	−22 1.4	1.976	1.751	30.8	18.2	62 E	—	54*
8 14	12 32.87	−24 48.6	2.013	1.720	30.2	18.2	59 E	—	50*
8 24	12 54.91	−27 39.2	2.045	1.692	29.5	18.2	55 E	—	45*
9 3	13 19.34	−30 30.0	2.073	1.667	28.8	18.2	53 E	—	42*
9 13	13 46.37	−33 16.7	2.099	1.647	28.0	18.1	50 E	—	39*
9 23	14 16.21	−35 53.8	2.123	1.631	27.2	18.1	48 E	—	36*
10 3	14 48.98	−38 14.6	2.148	1.619	26.3	18.1	46 E	—	35*
10 13	15 24.64	−40 11.8	2.175	1.612	25.4	18.1	44 E	—	33*
10 18	15 43.47	−40 59.1	2.189	1.610	24.9	18.1	43 E	—	33*
10 23	16 2.87	−41 37.7	2.205	1.610	24.4	18.1	42 E	—	32*
10 28	16 22.75	−42 6.8	2.221	1.610	23.9	18.1	41 E	—	32*
11 2	16 43.01	−42 25.7	2.239	1.612	23.4	18.1	40 E	—	31*
11 7	17 3.50	−42 34.0	2.259	1.615	22.8	18.1	39 E	—	31*
11 12	17 24.10	−42 31.5	2.279	1.620	22.1	18.1	38 E	—	30*
11 17	17 44.63	−42 18.0	2.301	1.625	21.5	18.1	37 E	—	29*
11 22	18 4.97	−41 53.9	2.325	1.632	20.8	18.1	36 E	—	29*
11 27	18 24.99	−41 19.3	2.350	1.639	20.1	18.1	35 E	—	28*
12 2	18 44.58	−40 35.0	2.376	1.648	19.3	18.1	34 E	—	27*
12 7	19 3.64	−39 41.7	2.404	1.658	18.5	18.2	32 E	—	26*
12 12	19 22.11	−38 40.2	2.433	1.669	17.7	18.2	31 E	—	25*
12 17	19 39.94	−37 31.3	2.463	1.680	16.9	18.2	30 E	—	24*
12 22	19 57.10	−36 15.9	2.494	1.693	16.0	18.2	28 E	—	22*
12 27	20 13.58	−34 55.0	2.526	1.707	15.1	18.2	27 E	—	21*
1 1	20 29.41	−33 29.3	2.559	1.721	14.1	18.2	25 E	—	19*
1 6	20 44.59	−31 59.8	2.592	1.737	13.1	18.2	24 E	—	18*
1 11	20 59.14	−30 27.0	2.625	1.753	12.2	18.2	22 E	—	16*
1 16	21 13.10	−28 51.8	2.658	1.770	11.2	18.3	20 E	—	14*
1 21	21 26.51	−27 14.7	2.691	1.787	10.1	18.3	19 E	—	13*
368475 2003 SY_{223}									
12 27	12 26.75	+23 9.9	1.264	1.709	34.7	19.5	98 W	68	37*
1 6	12 37.79	+22 47.6	1.208	1.744	33.0	19.4	105 W	68	40*
1 16	12 44.90	+22 44.1	1.153	1.780	30.7	19.3	113 W	68	41*
1 26	12 47.57	+22 57.4	1.103	1.817	27.7	19.1	121 W	68	41
1 31	12 47.11	+23 8.9	1.080	1.836	25.9	19.1	125 W	68	41
2 5	12 45.40	+23 22.6	1.060	1.855	24.0	19.0	130 W	68	41
2 10	12 42.44	+23 37.1	1.043	1.874	21.9	18.9	135 W	69	40
2 15	12 38.25	+23 50.9	1.030	1.894	19.8	18.8	140 W	69	40
2 20	12 32.92	+24 2.4	1.021	1.913	17.5	18.8	144 W	69	40
2 25	12 26.62	+24 9.8	1.017	1.933	15.3	18.7	149 W	69	40
3 2	12 19.53	+24 11.5	1.018	1.953	13.4	18.7	153 W	69	40
3 7	12 11.90	+24 6.2	1.024	1.973	11.8	18.6	156 W	69	40
3 12	12 4.00	+23 52.9	1.037	1.993	10.9	18.7	158 W	69	40

20/21		α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
368475 2003 SY_{223} *(continuation)*										
		h m	° ′			°	m	°	°	°
3	17	11 56.12	+23 31.2	1.056	2.013	10.8	18.7	158 W	69	40
3	22	11 48.55	+23 1.0	1.081	2.032	11.4	18.8	156 E	68	41
3	27	11 41.54	+22 23.0	1.112	2.052	12.7	18.9	153 E	67	42
4	1	11 35.26	+21 38.2	1.149	2.072	14.2	19.1	149 E	67	42
4	6	11 29.84	+20 47.6	1.191	2.092	15.9	19.2	145 E	66	43
4	11	11 25.35	+19 52.4	1.239	2.112	17.5	19.4	141 E	65	44
4	16	11 21.85	+18 53.6	1.292	2.131	19.1	19.6	136 E	64	45
4	21	11 19.31	+17 52.1	1.349	2.151	20.5	19.7	132 E	63	46
4	26	11 17.69	+16 48.8	1.409	2.170	21.7	19.9	127 E	62	47
5	6	11 17.01	+14 39.3	1.541	2.209	23.7	20.2	119 E	60	49
5	16	11 19.27	+12 28.3	1.683	2.246	24.9	20.4	110 E	57*	52
5	26	11 23.95	+10 17.8	1.833	2.284	25.6	20.7	103 E	53*	54
6	5	11 30.57	+ 8 8.5	1.988	2.320	25.8	20.9	96 E	47*	56
6	15	11 38.73	+ 6 0.7	2.146	2.356	25.5	21.1	89 E	41*	58
6	25	11 48.13	+ 3 54.4	2.304	2.391	24.9	21.3	82 E	34*	60*
7	5	11 58.52	+ 1 49.5	2.461	2.426	24.0	21.4	76 E	29*	61*
470283 2007 DJ_{86}										
12	27	12 27.14	+10 33.5	1.411	1.767	33.8	21.3	93 W	56	48*
1	6	12 35.77	+ 8 23.4	1.334	1.796	32.6	21.2	101 W	53	54*
1	16	12 41.08	+ 6 22.0	1.257	1.826	30.7	21.0	109 W	51	58*
1	26	12 42.55	+ 4 29.5	1.184	1.858	28.0	20.9	118 W	49	60
2	5	12 39.77	+ 2 45.8	1.120	1.892	24.3	20.7	128 W	48	61
2	15	12 32.47	+ 1 11.4	1.067	1.925	19.6	20.5	139 W	46	63
2	25	12 20.95	− 0 13.2	1.033	1.960	14.0	20.2	151 W	45	64
3	7	12 6.27	− 1 27.1	1.022	1.995	7.7	20.0	164 W	44	65
3	17	11 50.20	− 2 30.0	1.037	2.031	2.0	19.8	176 W	42	67
3	27	11 34.90	− 3 23.0	1.080	2.066	5.8	20.1	168 E	42	67
4	6	11 22.17	− 4 9.1	1.149	2.102	11.3	20.5	156 E	41	68
4	16	11 13.06	− 4 51.7	1.242	2.138	15.9	20.9	144 E	40	69
4	26	11 7.90	− 5 34.8	1.354	2.173	19.6	21.2	134 E	39	70
121745 1999 XN_{207}										
12	27	12 27.24	+24 56.4	2.530	2.852	19.9	20.5	99 W	70	35*
1	6	12 33.74	+26 5.3	2.417	2.862	19.2	20.4	107 W	71	37*
1	16	12 38.02	+27 32.4	2.311	2.870	18.1	20.2	115 W	73	36
1	26	12 39.75	+29 15.2	2.216	2.878	16.6	20.1	123 W	74	35
1	31	12 39.57	+30 11.2	2.175	2.881	15.8	20.0	127 W	75	34
2	5	12 38.65	+31 9.2	2.138	2.885	14.9	20.0	131 W	76	33
2	10	12 36.98	+32 8.1	2.105	2.887	14.0	19.9	135 W	77	32
2	15	12 34.55	+33 6.8	2.078	2.890	13.2	19.9	138 W	78	31
2	20	12 31.39	+34 4.0	2.057	2.893	12.4	19.8	141 W	79	30
2	25	12 27.56	+34 58.2	2.041	2.895	11.8	19.8	143 W	80	29
3	2	12 23.11	+35 48.0	2.032	2.897	11.4	19.8	145 W	81	28
3	7	12 18.16	+36 32.2	2.028	2.898	11.3	19.7	145 W	82	27
3	12	12 12.81	+37 9.7	2.031	2.900	11.4	19.8	145 W	82	27
3	17	12 7.22	+37 39.4	2.040	2.901	11.8	19.8	143 W	83	26
3	22	12 1.54	+38 0.6	2.056	2.902	12.3	19.8	141 E	83	26
3	27	11 55.93	+38 13.1	2.076	2.903	13.1	19.9	139 E	83	26
4	1	11 50.55	+38 16.8	2.103	2.903	13.9	19.9	136 E	83	26
4	6	11 45.53	+38 12.1	2.134	2.903	14.8	20.0	132 E	83	26
4	11	11 40.97	+37 59.2	2.171	2.903	15.7	20.1	129 E	83	26
4	16	11 36.98	+37 38.9	2.211	2.903	16.5	20.1	125 E	83	26
4	21	11 33.63	+37 11.8	2.256	2.903	17.3	20.2	121 E	82	27
4	26	11 30.95	+36 38.7	2.303	2.902	18.0	20.3	117 E	82	27
5	1	11 28.95	+36 0.5	2.354	2.901	18.6	20.3	113 E	81	28
5	6	11 27.63	+35 17.8	2.407	2.899	19.2	20.4	109 E	80	29
5	16	11 26.96	+33 41.7	2.519	2.896	20.0	20.5	102 E	79*	30
5	26	11 28.73	+31 54.8	2.635	2.892	20.4	20.6	94 E	73*	32
6	5	11 32.60	+30 0.7	2.753	2.887	20.6	20.7	87 E	65*	34
6	15	11 38.28	+28 1.6	2.871	2.880	20.3	20.8	80 E	58*	36
6	25	11 45.47	+25 59.4	2.986	2.873	19.9	20.9	74 E	50*	38*
7	5	11 53.92	+23 55.3	3.096	2.865	19.1	20.9	67 E	44*	39*
7	15	12 3.43	+21 50.2	3.200	2.855	18.2	20.9	61 E	38*	39*
7	25	12 13.83	+19 44.6	3.296	2.845	17.1	21.0	55 E	34*	37*
8	4	12 24.97	+17 39.2	3.383	2.834	15.8	21.0	50 E	30*	34*
8	14	12 36.77	+15 34.5	3.461	2.822	14.5	21.0	44 E	26*	30*
8	24	12 49.13	+13 30.8	3.527	2.808	13.0	20.9	39 E	23*	26*
9	3	13 1.98	+11 28.8	3.582	2.794	11.4	20.9	33 E	20*	21*
9	13	13 15.29	+ 9 28.7	3.625	2.779	9.9	20.9	28 E	18*	16*
9	23	13 29.00	+ 7 31.1	3.654	2.763	8.3	20.8	24 E	15*	11*
10	3	13 43.08	+ 5 36.5	3.671	2.746	6.9	20.7	19 E	13*	5*
10	13	13 57.52	+ 3 45.4	3.673	2.728	5.8	20.7	16 E	10*	—
10	23	14 12.26	+ 1 58.3	3.661	2.709	5.2	20.6	14 E	7*	—
11	2	14 27.30	+ 0 15.8	3.636	2.689	5.4	20.6	15 W	5*	—
11	12	14 42.61	− 1 21.6	3.596	2.668	6.4	20.6	17 W	10*	—
11	22	14 58.13	− 2 53.5	3.543	2.647	7.8	20.6	21 W	15*	—
12	2	15 13.84	− 4 19.3	3.476	2.624	9.4	20.6	26 W	20*	3*
12	12	15 29.68	− 5 38.7	3.395	2.600	11.2	20.6	31 W	24*	9*
12	22	15 45.60	− 6 51.3	3.302	2.576	13.1	20.6	36 W	27*	15*

20/22		α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
121745 1999 XN_{207} *(continuation)*										
		h m	° ′			°	m	°	°	°
1	1	16 1.52	− 7 57.1	3.197	2.551	14.9	20.6	42 W	29*	23*
1	11	16 17.38	− 8 55.8	3.081	2.525	16.7	20.5	48 W	30*	30*
1	21	16 33.06	− 9 47.7	2.955	2.498	18.5	20.5	53 W	31*	37*
58046 2002 XA_{14}										
12	27	12 27.70	+15 15.0	2.513	2.778	20.6	20.2	95 W	60	44*
1	6	12 34.39	+16 11.0	2.398	2.797	20.0	20.1	104 W	61	47*
1	16	12 39.03	+17 26.4	2.288	2.815	18.8	20.0	113 W	62	47*
1	26	12 41.31	+19 0.5	2.188	2.832	17.2	19.9	122 W	64	45
2	5	12 41.01	+20 50.3	2.103	2.848	15.2	19.7	131 W	66	43
2	10	12 39.84	+21 49.6	2.067	2.856	14.0	19.7	135 W	67	42
2	15	12 37.99	+22 50.6	2.037	2.863	12.9	19.6	140 W	68	41
2	20	12 35.48	+23 52.1	2.012	2.870	11.7	19.5	144 W	69	40
2	25	12 32.36	+24 52.9	1.993	2.877	10.7	19.5	147 W	70	39
3	2	12 28.68	+25 51.6	1.981	2.884	9.8	19.4	150 W	71	38
3	7	12 24.51	+26 47.0	1.975	2.890	9.2	19.4	152 W	72	37
3	12	12 19.97	+27 37.7	1.976	2.896	9.0	19.4	153 W	73	36
3	17	12 15.17	+28 22.7	1.985	2.902	9.2	19.4	152 W	73	36
3	22	12 10.25	+29 0.9	1.999	2.908	9.7	19.5	150 W	74	35
3	27	12 5.34	+29 31.8	2.021	2.913	10.5	19.5	148 E	75	34
4	1	12 0.58	+29 55.0	2.048	2.918	11.5	19.6	144 E	75	34
4	6	11 56.08	+30 10.4	2.082	2.923	12.6	19.7	140 E	75	34
4	11	11 51.96	+30 18.1	2.120	2.928	13.7	19.8	136 E	75	34
4	16	11 48.30	+30 18.5	2.164	2.933	14.7	19.8	132 E	75	34
4	21	11 45.18	+30 12.1	2.212	2.937	15.7	19.9	128 E	75	34
4	26	11 42.65	+29 59.4	2.265	2.941	16.6	20.0	123 E	75	34
5	6	11 39.38	+29 17.8	2.378	2.948	18.1	20.2	115 E	74	35
5	16	11 38.54	+28 18.5	2.502	2.954	19.1	20.3	107 E	73	36
5	26	11 39.99	+27 5.9	2.632	2.959	19.8	20.4	99 E	70*	37
6	5	11 43.45	+25 43.5	2.764	2.964	20.0	20.6	91 E	64*	38
6	15	11 48.67	+24 13.9	2.897	2.967	19.9	20.7	84 E	57*	40
6	25	11 55.40	+22 39.2	3.027	2.969	19.5	20.8	77 E	50*	41*
7	5	12 3.38	+21 0.9	3.153	2.970	18.8	20.8	70 E	44*	42*
7	15	12 12.44	+19 20.2	3.272	2.971	17.9	20.9	64 E	38*	42*
7	25	12 22.39	+17 37.9	3.384	2.970	16.8	20.9	58 E	34*	40*
8	4	12 33.11	+15 55.0	3.486	2.968	15.6	20.9	52 E	30*	37*
8	14	12 44.49	+14 12.1	3.578	2.966	14.2	20.9	46 E	26*	33*
8	24	12 56.44	+12 29.8	3.659	2.962	12.8	20.9	40 E	24*	28*
9	3	13 8.88	+10 48.9	3.727	2.957	11.3	20.9	35 E	21*	23*
9	13	13 21.76	+ 9 9.9	3.783	2.952	9.7	20.9	30 E	18*	18*
9	23	13 35.03	+ 7 33.4	3.825	2.945	8.3	20.8	25 E	16*	12*
10	3	13 48.64	+ 6 0.2	3.852	2.938	6.9	20.8	21 E	14*	6*
10	13	14 2.57	+ 4 30.9	3.865	2.929	5.9	20.7	17 E	11*	—
10	23	14 16.76	+ 3 6.1	3.864	2.920	5.4	20.7	16 E	9*	—
11	2	14 31.18	+ 1 46.5	3.847	2.909	5.5	20.7	16 E	6*	—
11	12	14 45.78	+ 0 32.9	3.816	2.897	6.4	20.7	19 W	11*	—
11	22	15 0.51	− 0 34.2	3.769	2.885	7.7	20.7	23 W	16*	—
12	2	15 15.31	− 1 34.1	3.708	2.872	9.2	20.7	28 W	22*	1*
12	12	15 30.12	− 2 26.2	3.633	2.857	10.8	20.8	33 W	26*	7*
12	22	15 44.84	− 3 10.0	3.545	2.842	12.4	20.8	38 W	30*	14*
1	1	15 59.41	− 3 45.1	3.444	2.825	14.1	20.7	44 W	33*	21*
1	11	16 13.70	− 4 11.1	3.332	2.808	15.6	20.7	50 W	35*	29*
1	21	16 27.58	− 4 27.8	3.209	2.790	17.1	20.7	57 W	37*	36*
42805 1999 JU_1										
12	27	12 27.97	+ 3 41.2	2.378	2.581	22.4	20.4	90 W	49	54*
1	6	12 36.06	+ 3 20.7	2.227	2.565	22.3	20.3	99 W	48	59*
1	16	12 42.42	+ 3 15.0	2.078	2.548	21.6	20.1	107 W	48	61*
1	26	12 46.68	+ 3 25.7	1.935	2.530	20.4	19.9	116 W	48	61
2	5	12 48.51	+ 3 54.1	1.802	2.512	18.5	19.6	126 W	49	60
2	15	12 47.61	+ 4 40.7	1.682	2.492	15.9	19.4	136 W	50	59
2	25	12 43.80	+ 5 43.7	1.581	2.472	12.5	19.1	147 W	51	58
3	2	12 40.83	+ 6 20.2	1.538	2.461	10.6	19.0	153 W	51	58
3	7	12 37.20	+ 6 59.1	1.501	2.450	8.6	18.8	158 W	52	57
3	12	12 32.97	+ 7 39.3	1.471	2.439	6.7	18.7	163 W	53	56
3	17	12 28.27	+ 8 19.7	1.447	2.428	5.1	18.6	168 W	53	56
3	22	12 23.21	+ 8 59.0	1.430	2.417	4.3	18.5	169 W	54	55
3	27	12 17.95	+ 9 36.0	1.421	2.405	5.0	18.5	168 E	55	54
4	1	12 12.66	+10 9.6	1.418	2.393	6.7	18.6	164 E	55	54
4	6	12 7.48	+10 38.6	1.421	2.381	8.8	18.6	159 E	56	53
4	11	12 2.59	+11 2.5	1.431	2.369	11.0	18.7	153 E	56	53
4	16	11 58.12	+11 20.4	1.447	2.357	13.2	18.8	148 E	56	53
4	26	11 50.93	+11 37.6	1.495	2.331	17.2	19.0	137 E	57	52
5	6	11 46.52	+11 30.3	1.559	2.305	20.6	19.2	126 E	57	52
5	16	11 45.13	+11 0.7	1.636	2.278	23.3	19.4	117 E	56	53
5	26	11 46.70	+10 11.7	1.721	2.251	25.3	19.5	108 E	54*	54
6	5	11 50.95	+ 9 6.4	1.810	2.223	26.7	19.6	100 E	50*	55
6	15	11 57.60	+ 7 47.6	1.901	2.194	27.6	19.7	92 E	45*	56
6	25	12 6.34	+ 6 17.3	1.991	2.165	27.9	19.8	86 E	39*	58

42805 1999 JU_1 *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
	h m	° ′			°	m	°	°	°
7 5	12 16.87	+ 4 37.5	2.079	2.135	27.9	19.9	79 E	34*	59*
7 15	12 28.99	+ 2 49.8	2.162	2.106	27.5	19.9	73 E	29*	59*
7 25	12 42.51	+ 0 55.6	2.240	2.075	26.9	19.9	68 E	25*	56*
8 4	12 57.30	− 1 3.9	2.312	2.045	26.0	20.0	62 E	22*	53*
8 14	13 13.28	− 3 7.3	2.378	2.015	25.0	20.0	57 E	19*	49*
8 24	13 30.37	− 5 13.3	2.436	1.984	23.7	19.9	52 E	16*	45*
9 3	13 48.56	− 7 20.6	2.488	1.954	22.4	19.9	48 E	14*	41*
9 13	14 7.85	− 9 27.8	2.533	1.924	20.9	19.9	43 E	13*	37*
9 23	14 28.23	−11 33.0	2.571	1.894	19.3	19.8	39 E	11*	32*
10 3	14 49.73	−13 34.7	2.602	1.865	17.7	19.8	34 E	10*	28*
10 13	15 12.38	−15 30.9	2.627	1.837	16.0	19.7	30 E	8*	24*
10 23	15 36.18	−17 19.3	2.645	1.810	14.2	19.6	26 E	7*	20*
11 2	16 1.16	−18 57.9	2.658	1.783	12.4	19.5	23 E	6*	16*
11 12	16 27.28	−20 24.3	2.665	1.758	10.5	19.4	19 E	4*	12*
11 22	16 54.50	−21 36.1	2.668	1.734	8.6	19.3	15 E	3*	8*
12 2	17 22.71	−22 31.1	2.666	1.712	6.7	19.2	12 E	1*	5*
12 12	17 51.79	−23 7.3	2.660	1.692	4.8	19.1	8 E	—	1*
12 22	18 21.53	−23 23.1	2.651	1.673	2.9	18.9	5 E	—	—
1 1	18 51.75	−23 17.4	2.640	1.657	1.0	18.8	2 E	—	—
1 11	19 22.21	−22 49.8	2.626	1.643	1.0	18.7	2 W	—	—
1 21	19 52.65	−22 0.6	2.611	1.632	2.9	18.8	5 W	—	—

29075 1950 *DA*

12 27	12 27.98	+13 40.8	0.750	1.282	49.9	18.9	94 W	59	45*
1 1	12 48.00	+11 13.0	0.697	1.243	52.1	18.7	94 W	56	48*
1 6	13 9.48	+ 8 24.1	0.649	1.204	54.7	18.6	93 W	53	51*
1 11	13 32.65	+ 5 11.9	0.605	1.165	57.5	18.4	91 W	50	54*
1 16	13 57.70	+ 1 35.7	0.568	1.127	60.7	18.3	89 W	47	56*
1 21	14 24.80	− 2 23.3	0.537	1.090	64.3	18.2	86 W	43	59*
1 26	14 54.07	− 6 40.4	0.514	1.053	68.1	18.2	83 W	38	62*
1 28	15 6.39	− 8 26.4	0.507	1.039	69.6	18.2	82 W	37	62*
1 30	15 19.05	−10 13.2	0.502	1.025	71.1	18.2	80 W	35	63*
2 1	15 32.03	−11 59.7	0.498	1.012	72.7	18.2	78 W	33	63*
2 3	15 45.32	−13 45.3	0.496	0.998	74.1	18.2	77 W	31*	63*
2 5	15 58.89	−15 28.8	0.494	0.985	75.6	18.2	75 W	29*	63*
2 7	16 12.70	−17 9.2	0.495	0.972	77.0	18.2	74 W	28*	63*
2 9	16 26.72	−18 45.8	0.497	0.960	78.2	18.2	72 W	26*	63*
2 11	16 40.90	−20 17.5	0.500	0.948	79.4	18.3	71 W	24*	62*
2 13	16 55.20	−21 43.6	0.505	0.936	80.5	18.3	69 W	22*	61*
2 15	17 9.57	−23 3.5	0.511	0.925	81.4	18.3	68 W	21*	61*
2 20	17 45.42	−25 53.0	0.531	0.899	83.2	18.4	65 W	17*	58*
2 25	18 20.59	−27 57.0	0.559	0.878	84.0	18.5	62 W	13*	56*
3 2	18 54.40	−29 16.3	0.592	0.860	83.9	18.6	60 W	10*	54*
3 7	19 26.39	−29 55.2	0.630	0.847	83.0	18.6	58 W	8*	52*
3 12	19 56.26	−29 59.5	0.672	0.839	81.4	18.7	57 W	6*	50*
3 17	20 23.92	−29 35.3	0.715	0.836	79.4	18.8	56 W	4*	49*
3 22	20 49.42	−28 48.7	0.760	0.839	76.9	18.8	55 W	3*	48*
3 27	21 12.87	−27 44.8	0.805	0.847	74.3	18.9	55 W	2*	47*
4 1	21 34.46	−26 27.9	0.850	0.860	71.5	18.9	55 W	2*	47*
4 6	21 54.34	−25 1.9	0.893	0.877	68.8	19.0	55 W	2*	48*
4 11	22 12.69	−23 29.7	0.934	0.899	66.2	19.1	55 W	2*	48*
4 16	22 29.65	−21 53.9	0.972	0.925	63.8	19.1	56 W	2*	49*
4 21	22 45.36	−20 16.5	1.008	0.953	61.6	19.2	57 W	3*	50*
4 26	22 59.94	−18 39.0	1.040	0.984	59.5	19.3	57 W	4*	51*
5 1	23 13.52	−17 2.5	1.069	1.018	57.7	19.4	59 W	4*	52*
5 6	23 26.17	−15 28.0	1.094	1.053	56.0	19.4	60 W	6*	54*
5 16	23 48.99	−12 27.5	1.134	1.127	53.1	19.6	63 W	8*	57*
5 26	0 8.79	− 9 41.2	1.159	1.204	50.7	19.7	67 W	12*	61*
6 5	0 25.86	− 7 10.6	1.169	1.281	48.7	19.8	71 W	16*	64*
6 15	0 40.24	− 4 57.0	1.166	1.359	46.7	19.9	77 W	21*	66*
6 25	0 51.83	− 3 1.0	1.150	1.435	44.6	19.9	83 W	27*	67*
7 5	1 0.43	− 1 22.8	1.124	1.510	42.3	19.9	90 W	33*	65
7 15	1 5.64	− 0 3.5	1.090	1.582	39.6	19.9	97 W	39*	64
7 25	1 7.00	+ 0 56.2	1.051	1.652	36.2	19.8	106 W	44*	63
8 4	1 4.02	+ 1 35.1	1.012	1.720	32.0	19.7	116 W	47	62
8 14	0 56.29	+ 1 51.9	0.978	1.784	26.8	19.5	127 W	47	62
8 24	0 43.88	+ 1 46.8	0.955	1.847	20.6	19.4	140 W	47	62
9 3	0 27.58	+ 1 22.2	0.949	1.906	13.7	19.2	154 W	46	63
9 8	0 18.45	+ 1 4.2	0.955	1.935	10.0	19.1	161 W	46	63
9 13	0 9.03	+ 0 43.7	0.967	1.963	6.2	19.0	168 W	46	63
9 18	23 59.64	+ 0 22.1	0.987	1.990	2.6	18.8	175 W	45	64
9 23	23 50.56	+ 0 0.6	1.013	2.016	1.1	18.8	178 E	45	64
9 28	23 42.06	− 0 19.7	1.047	2.042	4.5	19.1	171 E	45	64
10 3	23 34.34	− 0 37.8	1.087	2.068	7.6	19.4	164 E	44	65
10 13	23 21.81	− 1 4.7	1.187	2.116	13.2	19.9	151 E	44	65
10 23	23 13.56	− 1 16.3	1.308	2.162	17.5	20.3	139 E	44	65
11 2	23 9.41	− 1 12.3	1.448	2.205	20.7	20.6	128 E	44	65
11 12	23 8.91	− 0 53.4	1.600	2.245	22.8	21.0	118 E	44	65
11 22	23 11.45	− 0 21.2	1.761	2.283	24.1	21.2	109 E	45	64
12 2	23 16.46	+ 0 22.6	1.928	2.319	24.7	21.5	100 E	45	63*

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20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
	h m	° ′			°	m	°	°	°
12 27	12 28.01	+58 54.5	1.266	1.842	30.3	19.5	109 W	76	3*
1 1	12 41.94	+60 57.0	1.273	1.860	29.7	19.6	110 W	74	2*
1 6	12 55.21	+62 56.0	1.283	1.879	29.2	19.6	111 W	72	—
1 11	13 7.58	+64 50.8	1.296	1.898	28.7	19.6	112 W	70	—
1 16	13 18.79	+66 40.9	1.312	1.916	28.3	19.7	112 W	68	—
1 18	13 22.87	+67 23.6	1.320	1.924	28.2	19.7	112 W	68	—
1 20	13 26.71	+68 5.3	1.327	1.931	28.1	19.7	113 W	67	—
1 22	13 30.26	+68 46.2	1.335	1.939	28.0	19.7	113 W	66	—
1 24	13 33.52	+69 26.1	1.344	1.946	27.9	19.7	113 W	66	—
1 26	13 36.45	+70 5.1	1.353	1.954	27.8	19.7	112 W	65	—
1 28	13 39.03	+70 43.1	1.362	1.961	27.7	19.8	112 W	64	—
1 30	13 41.24	+71 20.1	1.372	1.969	27.6	19.8	112 W	64	—
2 1	13 43.03	+71 56.0	1.382	1.976	27.5	19.8	112 W	63	—
2 3	13 44.39	+72 30.8	1.393	1.984	27.4	19.8	112 W	62	—
2 5	13 45.28	+73 4.5	1.404	1.991	27.4	19.9	112 W	62	—
2 7	13 45.66	+73 37.0	1.415	1.999	27.3	19.9	111 W	61	—
2 9	13 45.50	+74 8.2	1.426	2.006	27.3	19.9	111 W	61	—
2 11	13 44.78	+74 38.0	1.438	2.014	27.2	19.9	111 W	60	—
2 13	13 43.45	+75 6.3	1.450	2.021	27.2	20.0	111 W	60	—
2 15	13 41.50	+75 33.1	1.462	2.029	27.2	20.0	110 W	59	—
2 17	13 38.90	+75 58.1	1.475	2.036	27.1	20.0	110 W	59	—
2 19	13 35.64	+76 21.4	1.487	2.043	27.1	20.0	110 W	59	—
2 21	13 31.72	+76 42.7	1.500	2.051	27.1	20.1	109 W	58	—
2 23	13 27.13	+77 1.9	1.513	2.058	27.1	20.1	109 W	58	—
2 25	13 21.90	+77 18.9	1.527	2.065	27.0	20.1	108 W	58	—
2 27	13 16.06	+77 33.5	1.541	2.073	27.0	20.1	108 W	57	—
3 1	13 9.65	+77 45.7	1.554	2.080	27.0	20.2	108 W	57	—
3 3	13 2.74	+77 55.3	1.568	2.087	27.0	20.2	107 W	57	—
3 5	12 55.40	+78 2.2	1.583	2.095	27.0	20.2	107 W	57	—
3 7	12 47.72	+78 6.3	1.597	2.102	27.0	20.2	106 W	57	—
3 8	12 43.79	+78 7.3	1.604	2.106	27.0	20.3	106 W	57	—
3 9	12 39.82	+78 7.6	1.612	2.109	26.9	20.3	106 W	57	—
3 10	12 35.82	+78 7.1	1.619	2.113	26.9	20.3	105 W	57	—
3 11	12 31.80	+78 5.9	1.626	2.116	26.9	20.3	105 W	57	—
3 12	12 27.78	+78 4.0	1.634	2.120	26.9	20.3	105 W	57	—
3 13	12 23.78	+78 1.4	1.641	2.124	26.9	20.3	105 W	57	—
3 14	12 19.81	+77 58.1	1.649	2.127	26.9	20.3	104 W	57	—
3 15	12 15.88	+77 54.0	1.656	2.131	26.9	20.3	104 W	57	—
3 16	12 12.00	+77 49.3	1.664	2.134	26.9	20.4	104 W	57	—
3 17	12 8.19	+77 43.8	1.672	2.138	26.9	20.4	104 W	57	—
3 18	12 4.45	+77 37.7	1.679	2.141	26.9	20.4	103 W	57	—
3 19	12 0.80	+77 30.9	1.687	2.145	26.9	20.4	103 W	57	—
3 20	11 57.25	+77 23.5	1.695	2.149	26.9	20.4	103 E	58	—
3 21	11 53.80	+77 15.4	1.703	2.152	26.8	20.4	103 E	58	—
3 22	11 50.46	+77 6.7	1.710	2.156	26.8	20.4	102 E	58	—
3 23	11 47.24	+76 57.4	1.718	2.159	26.8	20.5	102 E	58	—
3 24	11 44.14	+76 47.6	1.726	2.163	26.8	20.5	102 E	58	—
3 25	11 41.16	+76 37.2	1.734	2.166	26.8	20.5	102 E	58	—
3 26	11 38.31	+76 26.2	1.742	2.170	26.8	20.5	101 E	59	—
3 27	11 35.59	+76 14.7	1.750	2.173	26.8	20.5	101 E	59	—
4 1	11 23.90	+75 10.2	1.791	2.191	26.7	20.6	100 E	60	—
4 6	11 15.30	+73 55.2	1.832	2.208	26.7	20.6	98 E	61	—
4 11	11 9.47	+72 31.7	1.874	2.225	26.6	20.7	97 E	62	—
4 16	11 6.03	+71 1.4	1.917	2.242	26.5	20.8	95 E	64	—
4 21	11 4.56	+69 25.6	1.961	2.258	26.4	20.8	94 E	66	—
4 26	11 4.69	+67 45.5	2.005	2.275	26.2	20.9	92 E	67	—
5 1	11 6.11	+66 1.9	2.050	2.291	26.1	20.9	90 E	69	—
5 6	11 8.55	+64 15.6	2.096	2.307	25.9	21.0	89 E	71	—
5 11	11 11.82	+62 27.2	2.143	2.323	25.7	21.1	87 E	73	2
5 16	11 15.77	+60 37.1	2.190	2.339	25.5	21.1	85 E	74*	3
5 21	11 20.26	+58 45.8	2.238	2.354	25.3	21.2	84 E	75*	5
5 26	11 25.18	+56 53.9	2.287	2.369	25.1	21.2	82 E	75*	7
5 31	11 30.45	+55 1.5	2.336	2.384	24.8	21.3	80 E	74*	9
6 5	11 35.99	+53 9.0	2.386	2.398	24.5	21.3	78 E	72*	11
6 10	11 41.77	+51 16.6	2.436	2.413	24.2	21.4	77 E	70*	13
6 15	11 47.75	+49 24.5	2.487	2.427	23.8	21.4	75 E	68*	15
6 20	11 53.88	+47 33.1	2.538	2.441	23.5	21.5	73 E	65*	16

15790 Keizan

12 27	12 28.55	+16 12.2	2.764	3.017	18.9	19.2	95 W	61	43*
1 6	12 33.11	+16 12.0	2.612	3.003	18.5	19.0	104 W	61	47*
1 16	12 35.63	+16 25.2	2.464	2.989	17.6	18.9	113 W	61	48
1 26	12 35.79	+16 51.2	2.325	2.973	16.2	18.7	123 W	62	47
2 5	12 33.33	+17 28.1	2.200	2.956	14.2	18.5	132 W	62	47
2 15	12 28.09	+18 12.5	2.093	2.939	11.8	18.3	143 W	63	46
2 20	12 24.45	+18 35.9	2.048	2.930	10.5	18.2	147 W	64	45
2 25	12 20.17	+18 58.9	2.008	2.920	9.1	18.1	152 W	64	45
3 2	12 15.33	+19 20.5	1.976	2.911	7.9	18.0	156 W	64	45
3 7	12 9.99	+19 40.0	1.950	2.901	6.9	17.9	160 W	65	44

15790 Keizan *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
3 12	12 4.27	+19 56.2	1.932	2.891	6.3	17.8	161 W	65	44
3 17	11 58.31	+20 8.4	1.921	2.880	6.4	17.8	161 W	65	44
3 22	11 52.24	+20 15.7	1.917	2.870	7.1	17.8	159 E	65	44
3 27	11 46.22	+20 17.8	1.921	2.859	8.3	17.9	156 E	65	44
4 1	11 40.38	+20 14.2	1.932	2.848	9.7	17.9	151 E	65	44
4 6	11 34.87	+20 5.0	1.949	2.837	11.3	18.0	146 E	65	44
4 16	11 25.25	+19 30.1	2.001	2.814	14.3	18.2	136 E	64	45
4 26	11 18.05	+18 35.3	2.074	2.789	16.9	18.3	126 E	64	45
5 6	11 13.54	+17 24.5	2.163	2.764	19.1	18.5	116 E	62	47
5 16	11 11.73	+16 1.0	2.262	2.738	20.6	18.6	107 E	61*	48
5 26	11 12.46	+14 27.7	2.368	2.712	21.7	18.7	99 E	56*	50
6 5	11 15.43	+12 47.0	2.476	2.684	22.2	18.8	90 E	49*	51
6 15	11 20.37	+11 0.2	2.584	2.655	22.3	18.9	83 E	42*	53
6 25	11 27.01	+ 9 8.4	2.689	2.626	22.0	18.9	75 E	35*	54*
7 5	11 35.09	+ 7 12.2	2.788	2.596	21.4	18.9	69 E	29*	53*
7 15	11 44.44	+ 5 12.1	2.881	2.565	20.5	19.0	62 E	23*	51*
7 25	11 54.87	+ 3 8.4	2.964	2.533	19.3	19.0	56 E	19*	47*
8 4	12 6.27	+ 1 1.4	3.037	2.500	18.0	18.9	49 E	15*	42*
8 14	12 18.56	− 1 8.8	3.100	2.467	16.4	18.9	44 E	11*	37*
8 24	12 31.66	− 3 21.7	3.151	2.433	14.8	18.8	38 E	8*	32*
9 3	12 45.54	− 5 37.0	3.191	2.399	13.0	18.8	32 E	5*	26*
9 13	13 0.18	− 7 54.6	3.218	2.363	11.1	18.7	27 E	2*	21*
9 23	13 15.59	−10 13.9	3.232	2.328	9.1	18.6	22 E	—	15*
10 3	13 31.78	−12 34.5	3.234	2.292	7.1	18.5	16 E	—	10*
10 13	13 48.81	−14 55.8	3.224	2.255	5.1	18.3	12 E	—	5*
10 23	14 6.70	−17 17.1	3.201	2.218	3.3	18.2	7 E	—	—
11 2	14 25.54	−19 37.7	3.168	2.181	2.3	18.1	5 W	—	—
11 12	14 45.40	−21 56.6	3.123	2.143	3.2	18.0	7 W	—	1*
11 22	15 6.36	−24 12.6	3.068	2.106	5.1	18.1	11 W	—	5*
12 2	15 28.52	−26 24.4	3.004	2.069	7.2	18.1	15 W	—	9*
12 12	15 51.99	−28 30.6	2.932	2.031	9.4	18.1	20 W	2*	13*
12 22	16 16.84	−30 29.1	2.852	1.995	11.6	18.1	24 W	3*	18*
1 1	16 43.16	−32 17.9	2.768	1.958	13.8	18.1	28 W	3*	22*
1 11	17 11.00	−33 54.7	2.678	1.922	15.9	18.0	32 W	3*	26*
1 21	17 40.34	−35 16.8	2.586	1.887	18.0	18.0	36 W	2*	30*

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12 27	12 28.66	+ 8 48.3	3.795	3.958	14.4	21.5	92 W	54	50*
1 6	12 31.85	+ 9 10.7	3.657	3.975	14.0	21.4	102 W	54	53*
1 16	12 33.49	+ 9 45.2	3.524	3.990	13.3	21.3	111 W	55	54
1 26	12 33.44	+10 31.5	3.400	4.005	12.1	21.2	122 W	56	53
2 5	12 31.65	+11 28.2	3.292	4.019	10.5	21.1	132 W	56	53
2 15	12 28.13	+12 32.9	3.204	4.032	8.6	20.9	142 W	58	51
2 25	12 23.05	+13 42.1	3.141	4.044	6.5	20.8	153 W	59	50
3 7	12 16.71	+14 51.4	3.105	4.056	4.6	20.7	161 W	60	49
3 17	12 9.57	+15 55.8	3.100	4.067	3.8	20.7	164 W	61	48
3 27	12 2.18	+16 50.8	3.125	4.077	4.8	20.7	160 E	62	47
4 6	11 55.12	+17 33.1	3.180	4.086	6.8	20.9	151 E	63	46
4 16	11 48.89	+18 0.7	3.262	4.095	8.8	21.0	141 E	63	46
4 26	11 43.92	+18 13.4	3.367	4.102	10.6	21.2	131 E	63	46
5 6	11 40.43	+18 11.8	3.491	4.109	12.1	21.3	122 E	63	46
5 16	11 38.55	+17 57.4	3.628	4.116	13.2	21.4	112 E	63	46

138977 2001 CY_{31}

12 27	12 29.06	+41 29.5	1.106	1.651	35.3	20.2	104 W	86	20*
1 1	12 37.96	+41 55.2	1.074	1.649	34.9	20.1	107 W	87	20*
1 6	12 45.91	+42 25.5	1.042	1.647	34.4	20.0	109 W	87	20*
1 11	12 52.78	+43 0.5	1.011	1.646	33.9	19.9	111 W	88	20*
1 16	12 58.45	+43 39.9	0.980	1.644	33.2	19.8	114 W	89	20*
1 21	13 2.75	+44 23.4	0.952	1.642	32.6	19.7	116 W	89	20*
1 26	13 5.55	+45 10.0	0.924	1.641	31.8	19.7	119 W	90	19
1 31	13 6.68	+45 58.7	0.898	1.640	31.0	19.6	121 W	89	18
2 5	13 5.98	+46 47.8	0.874	1.638	30.2	19.5	123 W	88	17
2 10	13 3.27	+47 35.1	0.852	1.637	29.3	19.4	126 W	87	16
2 15	12 58.45	+48 17.8	0.832	1.636	28.4	19.3	128 W	87	16
2 20	12 51.50	+48 52.3	0.814	1.635	27.6	19.3	130 W	86	15
2 25	12 42.52	+49 14.7	0.800	1.634	26.9	19.2	132 W	86	15
3 2	12 31.79	+49 21.1	0.788	1.634	26.4	19.1	133 W	86	15
3 7	12 19.70	+49 8.2	0.781	1.633	26.0	19.1	134 W	86	15
3 9	12 14.61	+48 56.9	0.779	1.633	25.9	19.1	134 W	86	15
3 11	12 9.43	+48 41.9	0.777	1.633	25.9	19.1	134 W	86	15
3 13	12 4.22	+48 23.2	0.776	1.632	25.9	19.1	134 W	87	16
3 15	11 59.01	+48 0.6	0.776	1.632	26.0	19.1	134 W	87	16
3 17	11 53.85	+47 34.3	0.776	1.632	26.1	19.1	134 W	87	16
3 22	11 41.43	+46 12.1	0.781	1.632	26.5	19.1	133 E	89	18
3 27	11 30.12	+44 28.5	0.789	1.632	27.2	19.2	132 E	89	20
4 1	11 20.29	+42 26.5	0.801	1.632	28.1	19.2	130 E	87	22
4 6	11 12.15	+40 9.7	0.817	1.632	29.2	19.3	127 E	85	24
4 11	11 5.76	+37 42.0	0.838	1.632	30.3	19.4	125 E	83	26
4 16	11 1.10	+35 6.8	0.862	1.632	31.5	19.5	122 E	80	29

138977 2001 CY_{31} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 21	10 58.05	+32 27.5	0.890	1.632	32.6	19.6	119 E	77	32
4 26	10 56.47	+29 46.7	0.921	1.633	33.7	19.7	116 E	75	34
5 1	10 56.17	+27 6.3	0.954	1.634	34.7	19.8	113 E	72	37
5 6	10 57.01	+24 27.8	0.990	1.634	35.5	19.9	110 E	69	40
5 11	10 58.85	+21 52.2	1.029	1.635	36.3	20.0	107 E	67*	42
5 16	11 1.56	+19 20.1	1.070	1.636	36.9	20.1	104 E	64*	45
5 26	11 9.19	+14 27.4	1.156	1.638	37.8	20.3	98 E	56*	50
6 5	11 19.13	+ 9 50.5	1.247	1.641	38.2	20.5	92 E	47*	54
6 15	11 30.94	+ 5 28.4	1.341	1.644	38.1	20.6	87 E	39*	59
6 25	11 44.25	+ 1 19.3	1.436	1.647	37.7	20.8	82 E	32*	63*
7 5	11 58.82	− 2 38.3	1.532	1.651	37.0	20.9	78 E	25*	65*
7 15	12 14.56	− 6 25.9	1.626	1.655	36.1	21.0	73 E	19*	65*
7 25	12 31.37	−10 4.5	1.719	1.659	34.9	21.1	69 E	15*	63*
8 4	12 49.24	−13 34.7	1.809	1.664	33.6	21.2	65 E	11*	59*
8 14	13 8.21	−16 56.9	1.896	1.669	32.2	21.3	61 E	7*	55*
8 24	13 28.32	−20 10.9	1.978	1.674	30.7	21.3	58 E	4*	51*
9 3	13 49.65	−23 16.1	2.057	1.679	29.1	21.4	54 E	2*	47*
9 13	14 12.30	−26 11.5	2.131	1.684	27.5	21.4	51 E	—	43*
9 23	14 36.36	−28 55.7	2.200	1.689	25.9	21.4	47 E	—	39*
10 3	15 1.91	−31 26.8	2.264	1.695	24.2	21.5	44 E	—	36*
10 13	15 29.03	−33 42.8	2.324	1.700	22.6	21.5	41 E	—	33*
10 23	15 57.72	−35 41.1	2.378	1.705	21.0	21.5	38 E	—	30*
11 2	16 27.92	−37 18.9	2.428	1.711	19.4	21.5	35 E	—	27*
11 12	16 59.49	−38 33.7	2.473	1.716	17.8	21.5	32 E	—	25*
11 22	17 32.15	−39 23.3	2.514	1.721	16.3	21.5	29 E	—	22*
12 2	18 5.55	−39 45.7	2.550	1.726	14.9	21.4	27 E	—	20*
12 12	18 39.26	−39 40.3	2.581	1.731	13.5	21.4	24 E	—	17*
12 22	19 12.83	−39 7.1	2.609	1.736	12.2	21.4	22 E	—	15*
1 1	19 45.82	−38 7.2	2.632	1.740	11.1	21.4	20 E	—	13*
1 11	20 17.91	−36 42.6	2.651	1.745	10.2	21.4	18 E	—	11*
1 21	20 48.82	−34 56.0	2.665	1.749	9.5	21.4	17 E	—	8*

82474 2001 OB_{23}

12 27	12 29.96	+10 38.5	2.776	2.989	19.2	21.3	93 W	56	48*
1 6	12 35.36	+10 38.2	2.629	2.983	18.8	21.1	101 W	56	52*
1 16	12 38.87	+10 52.0	2.485	2.977	18.0	21.0	111 W	56	53*
1 26	12 40.21	+11 20.1	2.349	2.969	16.7	20.8	120 W	56	53
2 5	12 39.14	+12 1.7	2.225	2.960	14.7	20.6	130 W	57	52
2 15	12 35.52	+12 54.6	2.119	2.950	12.3	20.4	141 W	58	51
2 25	12 29.38	+13 54.6	2.034	2.939	9.4	20.2	151 W	59	50
3 2	12 25.47	+14 25.3	2.001	2.933	8.0	20.1	156 W	59	50
3 7	12 21.07	+14 55.4	1.975	2.927	6.6	20.0	160 W	60	49
3 12	12 16.28	+15 24.0	1.956	2.921	5.7	19.9	163 W	60	49
3 17	12 11.20	+15 50.0	1.944	2.915	5.3	19.9	164 W	61	48
3 22	12 5.97	+16 12.6	1.940	2.908	5.7	19.9	163 W	61	48
3 27	12 0.72	+16 31.1	1.942	2.901	6.7	20.0	160 E	62	47
4 1	11 55.57	+16 45.0	1.952	2.894	8.1	20.0	156 E	62	47
4 6	11 50.64	+16 53.8	1.969	2.886	9.6	20.1	151 E	62	47
4 16	11 41.91	+16 55.7	2.021	2.870	12.7	20.3	141 E	62	47
4 26	11 35.24	+16 37.1	2.094	2.854	15.5	20.4	131 E	62	47
5 6	11 30.97	+16 0.2	2.184	2.836	17.8	20.6	121 E	61	48
5 16	11 29.21	+15 7.9	2.286	2.817	19.5	20.7	111 E	60*	49
5 26	11 29.86	+14 2.9	2.396	2.798	20.7	20.9	103 E	57*	50
6 5	11 32.69	+12 47.7	2.510	2.777	21.4	21.0	94 E	51*	51
6 15	11 37.46	+11 24.2	2.625	2.756	21.6	21.0	86 E	45*	53
6 25	11 43.92	+ 9 53.8	2.737	2.733	21.4	21.1	79 E	38*	54*
7 5	11 51.82	+ 8 17.8	2.845	2.710	20.9	21.2	72 E	32*	54*
7 15	12 0.97	+ 6 37.0	2.947	2.686	20.1	21.2	65 E	27*	52*
7 25	12 11.22	+ 4 52.2	3.041	2.660	19.1	21.2	59 E	23*	49*
8 4	12 22.43	+ 3 4.0	3.125	2.634	17.8	21.2	53 E	19*	44*
8 14	12 34.49	+ 1 13.0	3.200	2.607	16.4	21.2	46 E	15*	39*
8 24	12 47.34	− 0 40.3	3.263	2.580	14.8	21.2	41 E	13*	34*
9 3	13 0.91	− 2 35.2	3.314	2.551	13.0	21.1	35 E	10*	28*
9 13	13 15.18	− 4 31.2	3.353	2.521	11.2	21.0	29 E	8*	23*
9 23	13 30.11	− 6 27.7	3.379	2.491	9.2	20.9	23 E	5*	17*
10 3	13 45.70	− 8 24.1	3.392	2.460	7.2	20.8	18 E	3*	12*
10 13	14 1.96	−10 19.6	3.393	2.428	5.1	20.7	13 E	1*	6*
10 23	14 18.88	−12 13.6	3.380	2.396	3.0	20.5	7 E	—	1*
11 2	14 36.49	−14 5.2	3.354	2.363	0.9	20.3	2 E	—	—
11 12	14 54.80	−15 53.7	3.316	2.329	1.6	20.3	4 W	—	—
11 22	15 13.82	−17 38.1	3.266	2.295	3.8	20.4	9 W	2*	—
12 2	15 33.57	−19 17.6	3.204	2.260	6.0	20.5	14 W	5*	5*
12 12	15 54.06	−20 51.2	3.132	2.225	8.3	20.5	19 W	8*	10*
12 22	16 15.30	−22 17.9	3.049	2.189	10.6	20.5	24 W	10*	15*
1 1	16 37.29	−23 37.0	2.958	2.153	12.9	20.5	29 W	11*	21*
1 11	17 0.01	−24 47.4	2.859	2.117	15.1	20.4	34 W	12*	26*
1 21	17 23.43	−25 48.4	2.753	2.081	17.3	20.4	39 W	12*	32*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
85158 Phyllistrapp									
12 27	12 30.00	− 8 39.4	2.920	3.001	19.1	21.4	85 W	36	63*
1 6	12 35.60	− 9 39.1	2.766	2.993	19.1	21.3	94 W	35	71*
1 16	12 39.48	−10 30.3	2.612	2.984	18.8	21.1	103 W	34	75*
1 26	12 41.37	−11 10.9	2.463	2.974	17.9	21.0	112 W	34	75
2 5	12 41.05	−11 39.1	2.322	2.963	16.4	20.8	122 W	33	76
2 15	12 38.33	−11 52.9	2.194	2.951	14.3	20.6	132 W	33	76
2 25	12 33.20	−11 50.3	2.084	2.938	11.6	20.3	143 W	33	76
3 7	12 25.89	−11 30.5	1.997	2.924	8.4	20.1	155 W	33	76
3 17	12 16.90	−10 53.9	1.935	2.909	4.9	19.9	166 W	34	75
3 27	12 7.05	−10 3.4	1.903	2.893	2.9	19.7	171 E	35	74
4 1	12 2.11	− 9 34.5	1.898	2.885	3.8	19.7	169 E	35	74
4 6	11 57.32	− 9 4.1	1.900	2.876	5.4	19.8	164 E	36	73
4 11	11 52.80	− 8 33.2	1.909	2.867	7.2	19.9	159 E	36	73
4 16	11 48.65	− 8 2.5	1.926	2.858	9.1	20.0	153 E	37	72
4 21	11 44.97	− 7 32.9	1.948	2.849	10.8	20.1	148 E	37	72
4 26	11 41.83	− 7 5.2	1.977	2.839	12.6	20.2	142 E	38	71
5 6	11 37.31	− 6 17.4	2.049	2.819	15.6	20.4	131 E	39	70
5 16	11 35.29	− 5 42.5	2.137	2.798	18.0	20.5	121 E	39	70
5 26	11 35.74	− 5 22.3	2.238	2.776	19.8	20.7	112 E	39*	69
6 5	11 38.47	− 5 16.9	2.345	2.753	21.1	20.8	103 E	36*	69
6 15	11 43.28	− 5 25.8	2.456	2.730	21.8	20.9	94 E	31*	69
6 25	11 49.92	− 5 47.9	2.567	2.705	22.0	21.0	87 E	27*	70*
7 5	11 58.14	− 6 21.8	2.675	2.679	21.9	21.0	79 E	22*	68*
7 15	12 7.77	− 7 6.4	2.779	2.652	21.4	21.1	72 E	18*	64*
7 25	12 18.62	− 8 0.2	2.876	2.624	20.6	21.1	66 E	14*	59*
8 4	12 30.56	− 9 1.9	2.965	2.596	19.6	21.1	59 E	11*	53*
8 14	12 43.51	−10 10.4	3.045	2.566	18.4	21.1	53 E	9*	47*
8 24	12 57.36	−11 24.3	3.115	2.536	17.0	21.1	47 E	6*	41*
9 3	13 12.07	−12 42.5	3.173	2.505	15.4	21.0	41 E	4*	35*
9 13	13 27.62	−14 3.9	3.221	2.473	13.7	21.0	36 E	3*	29*
9 23	13 43.97	−15 27.1	3.256	2.440	11.9	20.9	30 E	1*	24*
10 3	14 1.13	−16 51.1	3.279	2.406	10.0	20.8	25 E	—	19*
10 13	14 19.10	−18 14.5	3.290	2.372	8.0	20.7	19 E	—	13*
10 23	14 37.87	−19 35.9	3.289	2.337	6.0	20.6	14 E	—	8*
11 2	14 57.47	−20 54.1	3.275	2.302	4.0	20.5	9 E	—	3*
11 12	15 17.90	−22 7.6	3.250	2.265	2.2	20.3	5 E	—	—
11 22	15 39.16	−23 14.7	3.213	2.229	1.8	20.2	4 W	—	—
12 2	16 1.24	−24 14.0	3.165	2.192	3.4	20.2	7 W	—	1*
12 12	16 24.12	−25 3.9	3.108	2.154	5.4	20.3	12 W	—	5*
12 22	16 47.75	−25 42.7	3.041	2.117	7.6	20.3	17 W	3*	10*
1 1	17 12.07	−26 9.0	2.965	2.079	9.9	20.3	21 W	5*	14*
1 11	17 37.01	−26 21.3	2.882	2.041	12.1	20.3	26 W	6*	19*
1 21	18 2.44	−26 18.4	2.792	2.003	14.3	20.2	30 W	7*	23*
306613 2000 QX_1									
12 27	12 31.87	−30 59.1	3.898	3.792	14.6	21.3	77 W	14	70*
1 6	12 35.46	−32 40.0	3.773	3.804	14.9	21.2	84 W	12	78*
1 16	12 37.36	−34 16.7	3.646	3.816	14.9	21.1	92 W	11	82
1 26	12 37.34	−35 46.6	3.521	3.826	14.6	21.1	101 W	9	80
2 5	12 35.23	−37 6.9	3.402	3.836	14.1	21.0	109 W	8	79
2 15	12 30.93	−38 14.0	3.293	3.845	13.2	20.9	117 W	7	78
2 25	12 24.55	−39 3.9	3.198	3.853	12.1	20.8	125 W	6	77
3 7	12 16.38	−39 32.8	3.120	3.861	10.9	20.7	133 W	5	76
3 17	12 6.96	−39 38.0	3.064	3.867	9.8	20.6	139 W	5	76
3 27	11 57.04	−39 18.5	3.032	3.873	9.0	20.6	143 E	6	77
4 6	11 47.47	−38 36.0	3.025	3.878	8.8	20.5	144 E	6	77
4 16	11 38.99	−37 34.5	3.043	3.882	9.2	20.6	142 E	7	78
4 26	11 32.21	−36 20.1	3.086	3.885	10.1	20.6	137 E	9	80
5 6	11 27.48	−34 59.2	3.151	3.888	11.3	20.7	131 E	10	81
5 16	11 24.93	−33 38.2	3.236	3.890	12.5	20.8	124 E	11*	82
5 26	11 24.51	−32 22.3	3.336	3.891	13.5	20.9	116 E	12*	84
6 5	11 26.06	−31 15.1	3.449	3.891	14.3	21.0	108 E	10*	85
6 15	11 29.40	−30 19.1	3.571	3.890	14.9	21.1	101 E	7*	86
6 25	11 34.30	−29 35.5	3.697	3.889	15.1	21.2	93 E	4*	84*
7 5	11 40.55	−29 4.6	3.826	3.887	15.1	21.3	86 E	1*	77*
7 15	11 47.98	−28 46.2	3.953	3.884	14.9	21.4	79 E	—	69*
7 25	11 56.41	−28 39.8	4.077	3.880	14.4	21.4	72 E	—	61*
8 4	12 5.69	−28 44.4	4.194	3.875	13.7	21.4	65 E	—	54*
8 14	12 15.73	−28 59.1	4.303	3.870	12.9	21.5	58 E	—	46*
8 24	12 26.41	−29 23.0	4.402	3.863	11.9	21.5	52 E	—	40*
9 3	12 37.64	−29 54.9	4.489	3.856	10.8	21.5	46 E	—	33*
9 13	12 49.38	−30 33.9	4.563	3.848	9.7	21.5	40 E	—	26*
9 23	13 1.55	−31 19.1	4.623	3.840	8.5	21.4	35 E	—	20*
10 3	13 14.09	−32 9.4	4.667	3.830	7.4	21.4	30 E	—	14*
10 13	13 26.97	−33 4.2	4.695	3.820	6.5	21.4	26 E	—	9*
10 23	13 40.12	−34 2.6	4.706	3.809	5.8	21.3	23 W	—	7*
11 2	13 53.50	−35 3.9	4.700	3.797	5.6	21.3	22 W	—	10*
11 12	14 7.05	−36 7.4	4.676	3.784	5.9	21.3	23 W	—	14*
11 22	14 20.70	−37 12.5	4.635	3.771	6.6	21.3	26 W	—	19*
12 2	14 34.40	−38 18.7	4.577	3.756	7.6	21.3	30 W	—	24*
12 12	14 48.04	−39 25.5	4.502	3.741	8.7	21.3	35 W	—	29*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
306613 2000 QX_1 *(continuation)*									
12 22	15 1.51	−40 32.7	4.411	3.725	10.0	21.3	41 W	—	35*
1 1	15 14.71	−41 39.9	4.305	3.708	11.2	21.3	47 W	1*	41*
1 11	15 27.48	−42 47.2	4.186	3.691	12.4	21.3	54 W	1*	47*
1 21	15 39.63	−43 54.3	4.055	3.672	13.5	21.2	61 W	1*	53*
232397 2003 CX_3									
12 27	12 32.91	+ 7 54.8	2.579	2.776	20.7	20.8	91 W	53	50*
1 6	12 39.95	+ 8 38.8	2.457	2.795	20.3	20.7	100 W	54	53*
1 16	12 45.08	+ 9 42.5	2.339	2.814	19.3	20.6	109 W	55	54*
1 26	12 48.04	+11 6.4	2.229	2.831	17.8	20.4	118 W	56	53
2 5	12 48.59	+12 49.4	2.131	2.848	15.8	20.3	128 W	58	51
2 15	12 46.60	+14 48.3	2.052	2.864	13.3	20.1	138 W	60	49
2 20	12 44.66	+15 51.9	2.020	2.871	12.0	20.0	143 W	61	48
2 25	12 42.11	+16 56.8	1.994	2.879	10.6	20.0	147 W	62	47
3 2	12 39.01	+18 1.9	1.975	2.886	9.4	19.9	152 W	63	46
3 7	12 35.41	+19 5.9	1.963	2.893	8.3	19.8	155 W	64	45
3 12	12 31.41	+20 7.5	1.957	2.899	7.6	19.8	157 W	65	44
3 17	12 27.10	+21 5.4	1.959	2.906	7.4	19.8	158 W	66	43
3 22	12 22.61	+21 58.4	1.968	2.912	7.7	19.8	157 W	67	42
3 27	12 18.05	+22 45.5	1.984	2.918	8.4	19.9	155 E	68	41
4 1	12 13.56	+23 26.1	2.007	2.923	9.4	20.0	151 E	68	41
4 6	12 9.24	+23 59.6	2.036	2.929	10.6	20.1	147 E	69	40
4 11	12 5.21	+24 25.8	2.072	2.934	11.9	20.1	143 E	69	40
4 16	12 1.56	+24 44.7	2.113	2.939	13.1	20.2	138 E	70	39
4 26	11 55.70	+25 1.6	2.210	2.948	15.4	20.4	129 E	70	39
5 6	11 52.04	+24 53.8	2.323	2.956	17.2	20.6	120 E	70	39
5 16	11 50.69	+24 25.3	2.447	2.964	18.6	20.8	111 E	69	40
5 26	11 51.57	+23 40.3	2.579	2.970	19.4	20.9	103 E	68*	40
6 5	11 54.49	+22 42.6	2.715	2.976	19.9	21.0	95 E	63*	41
6 15	11 59.21	+21 35.0	2.852	2.980	19.9	21.1	87 E	56*	42
6 25	12 5.48	+20 20.1	2.986	2.984	19.6	21.2	80 E	50*	44
7 5	12 13.08	+18 59.8	3.117	2.986	19.0	21.3	73 E	44*	45*
7 15	12 21.81	+17 35.4	3.242	2.988	18.2	21.4	67 E	39*	44*
7 25	12 31.51	+16 8.2	3.359	2.989	17.2	21.4	60 E	34*	42*
8 4	12 42.02	+14 39.3	3.467	2.989	16.0	21.4	54 E	30*	39*
8 14	12 53.25	+13 9.5	3.564	2.987	14.7	21.5	48 E	27*	35*
8 24	13 5.09	+11 39.8	3.651	2.985	13.2	21.5	43 E	24*	30*
9 3	13 17.47	+10 10.9	3.725	2.982	11.8	21.4	37 E	22*	25*
9 13	13 30.33	+ 8 43.6	3.786	2.978	10.3	21.4	32 E	20*	20*
9 23	13 43.62	+ 7 18.7	3.833	2.973	8.8	21.4	27 E	17*	14*
10 3	13 57.28	+ 5 56.8	3.866	2.967	7.4	21.3	23 E	15*	8*
10 13	14 11.29	+ 4 38.9	3.884	2.960	6.4	21.3	19 E	13*	2*
10 23	14 25.58	+ 3 25.7	3.888	2.952	5.7	21.3	17 E	11*	—
11 2	14 40.13	+ 2 18.0	3.877	2.944	5.7	21.2	17 E	8*	—
11 12	14 54.89	+ 1 16.5	3.851	2.934	6.4	21.3	19 W	10*	—
11 22	15 9.79	+ 0 22.2	3.810	2.923	7.5	21.3	23 W	16*	—
12 2	15 24.78	− 0 24.4	3.755	2.912	8.9	21.3	27 W	21*	—
12 12	15 39.79	− 1 2.5	3.686	2.899	10.4	21.3	32 W	26*	5*
12 22	15 54.74	− 1 31.3	3.604	2.886	12.0	21.3	37 W	30*	11*
1 1	16 9.53	− 1 50.5	3.509	2.871	13.5	21.3	43 W	33*	18*
1 11	16 24.06	− 1 59.4	3.403	2.856	15.1	21.3	49 W	36*	25*
1 21	16 38.20	− 1 57.7	3.287	2.840	16.5	21.2	55 W	38*	33*
14982 1997 TH_{19}									
12 27	12 33.17	− 2 49.3	2.852	2.963	19.4	20.0	87 W	42	59*
1 6	12 39.28	− 3 32.5	2.691	2.947	19.4	19.9	95 W	41	65*
1 16	12 43.73	− 4 5.5	2.531	2.930	19.0	19.7	104 W	41	68*
1 26	12 46.23	− 4 26.9	2.376	2.913	18.0	19.5	114 W	41	68
2 5	12 46.53	− 4 35.2	2.229	2.894	16.5	19.3	124 W	40	69
2 15	12 44.40	− 4 29.2	2.097	2.875	14.2	19.1	134 W	41	68
2 25	12 39.79	− 4 8.4	1.982	2.854	11.3	18.9	146 W	41	68
3 7	12 32.86	− 3 33.8	1.891	2.833	7.7	18.6	157 W	41	68
3 17	12 24.06	− 2 47.6	1.825	2.810	3.6	18.3	170 W	42	67
3 22	12 19.19	− 2 21.6	1.804	2.798	1.4	18.1	176 W	43	66
3 27	12 14.18	− 1 54.5	1.789	2.787	0.8	18.0	178 E	43	66
4 1	12 9.15	− 1 27.3	1.782	2.774	3.1	18.2	171 E	44	65
4 6	12 4.22	− 1 0.5	1.783	2.762	5.3	18.3	165 E	44	65
4 11	11 59.52	− 0 35.1	1.790	2.750	7.5	18.4	159 E	44	65
4 16	11 55.18	− 0 11.8	1.804	2.737	9.6	18.5	153 E	45	64
4 26	11 47.93	+ 0 26.2	1.851	2.710	13.4	18.7	141 E	45	64
5 6	11 43.02	+ 0 50.2	1.918	2.683	16.6	18.8	130 E	46	63
5 16	11 40.68	+ 0 58.6	2.000	2.655	19.2	19.0	120 E	46	63
5 26	11 40.93	+ 0 51.3	2.093	2.626	21.2	19.1	111 E	45*	63
6 5	11 43.60	+ 0 29.1	2.192	2.596	22.5	19.3	102 E	41*	64
6 15	11 48.46	− 0 6.7	2.294	2.565	23.3	19.3	94 E	37*	64
6 25	11 55.27	− 0 54.7	2.395	2.534	23.6	19.4	86 E	31*	65*
7 5	12 3.77	− 1 53.4	2.493	2.501	23.5	19.5	79 E	26*	65*
7 15	12 13.78	− 3 1.6	2.587	2.468	23.0	19.5	72 E	22*	62*
7 25	12 25.13	− 4 18.0	2.674	2.434	22.3	19.5	65 E	18*	58*

14982 1997 TH_{19} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
8 4	12 37.68	− 5 41.3	2.753	2.400	21.3	19.5	59 E	15*	53*
8 14	12 51.33	− 7 10.4	2.823	2.364	20.1	19.5	53 E	12*	47*
8 24	13 6.01	− 8 44.2	2.884	2.329	18.8	19.5	48 E	10*	42*
9 3	13 21.68	−10 21.4	2.935	2.292	17.2	19.4	42 E	8*	36*
9 13	13 38.33	−12 1.1	2.975	2.255	15.6	19.4	37 E	6*	31*
9 23	13 55.94	−13 41.8	3.005	2.218	13.8	19.3	32 E	4*	26*
10 3	14 14.52	−15 22.2	3.025	2.180	12.0	19.2	27 E	3*	21*
10 13	14 34.11	−17 0.9	3.034	2.142	10.1	19.1	22 E	1*	16*
10 23	14 54.72	−18 36.3	3.033	2.104	8.1	19.0	17 E	—	11*
11 2	15 16.39	−20 6.6	3.022	2.066	6.1	18.9	13 E	—	7*
11 12	15 39.13	−21 30.2	3.002	2.028	4.0	18.7	8 E	—	2*
11 22	16 2.94	−22 44.9	2.974	1.990	2.0	18.5	4 E	—	—
12 2	16 27.83	−23 48.7	2.937	1.952	1.1	18.4	2 W	—	—
12 12	16 53.75	−24 39.5	2.894	1.915	2.7	18.4	5 W	—	—
12 22	17 20.62	−25 15.2	2.844	1.879	4.8	18.4	9 W	—	3*
1 1	17 48.35	−25 34.0	2.788	1.844	6.9	18.5	13 W	—	6*
1 11	18 16.78	−25 34.1	2.729	1.810	9.0	18.5	17 W	2*	10*
1 21	18 45.73	−25 14.2	2.666	1.777	11.1	18.5	20 W	3*	14*

481315 2006 AU_{23}

12 27	12 33.63	− 5 9.4	1.594	1.808	32.8	21.0	86 W	40	60*
1 6	12 52.10	− 7 34.3	1.474	1.781	33.5	20.8	91 W	37	67*
1 16	13 9.99	− 9 56.3	1.358	1.756	33.9	20.6	96 W	35	72*
1 26	13 27.08	−12 13.9	1.247	1.733	33.8	20.4	101 W	33	76*
2 5	13 43.08	−14 25.6	1.142	1.713	33.4	20.2	107 W	31	78
2 15	13 57.55	−16 29.7	1.045	1.696	32.4	19.9	113 W	29	80
2 25	14 9.97	−18 24.1	0.955	1.681	30.8	19.6	120 W	27	82
3 2	14 15.24	−19 17.1	0.913	1.675	29.7	19.5	123 W	26	83
3 7	14 19.78	−20 7.0	0.874	1.669	28.4	19.4	127 W	25	84
3 12	14 23.50	−20 53.1	0.837	1.665	26.9	19.2	131 W	24	85
3 17	14 26.32	−21 35.1	0.803	1.661	25.2	19.1	135 W	23	86
3 22	14 28.20	−22 12.4	0.772	1.658	23.3	18.9	139 W	23	86
3 27	14 29.12	−22 44.7	0.744	1.656	21.1	18.8	143 W	22	87
4 6	14 28.08	−23 31.8	0.700	1.654	16.2	18.5	153 W	21	88
4 16	14 23.67	−23 52.3	0.671	1.655	10.7	18.2	162 W	21	88
4 26	14 17.25	−23 45.9	0.660	1.660	6.3	18.0	170 W	21	88
5 1	14 13.88	−23 34.0	0.662	1.664	5.8	18.0	170 E	21	88
5 6	14 10.70	−23 17.6	0.668	1.668	7.1	18.1	168 E	22	87
5 11	14 7.97	−22 58.2	0.678	1.673	9.4	18.2	164 E	22	87
5 16	14 5.88	−22 37.1	0.694	1.679	12.0	18.4	160 E	22	87
5 21	14 4.58	−22 16.0	0.713	1.686	14.6	18.5	155 E	23	86
5 26	14 4.17	−21 56.2	0.736	1.694	17.1	18.7	151 E	23	86
5 31	14 4.67	−21 38.7	0.764	1.702	19.4	18.9	146 E	23	86
6 5	14 6.10	−21 24.1	0.795	1.711	21.6	19.0	142 E	24	85
6 15	14 11.67	−21 5.6	0.866	1.731	25.2	19.3	134 E	24	85
6 25	14 20.51	−21 2.2	0.950	1.753	27.9	19.6	126 E	24*	85
7 5	14 32.09	−21 12.2	1.043	1.777	29.9	19.9	119 E	23*	85
7 15	14 45.94	−21 32.9	1.145	1.804	31.2	20.2	113 E	22*	86
7 25	15 1.64	−22 1.1	1.255	1.833	32.0	20.5	107 E	21*	86
8 4	15 18.81	−22 33.4	1.371	1.863	32.2	20.7	102 E	19*	87
8 14	15 37.17	−23 7.0	1.493	1.894	32.1	20.9	96 E	19*	87
8 24	15 56.49	−23 39.3	1.620	1.927	31.6	21.1	91 E	18*	85*
9 3	16 16.56	−24 8.0	1.751	1.961	30.9	21.3	86 E	17*	80*
9 13	16 37.22	−24 31.4	1.886	1.995	29.9	21.5	81 E	17*	75*

232772 2004 PG_{61}

12 27	12 33.85	+ 0 14.1	2.771	2.903	19.8	21.3	88 W	45	56*
1 6	12 39.76	− 0 34.5	2.611	2.888	19.8	21.2	96 W	44	62*
1 16	12 43.92	− 1 13.6	2.454	2.873	19.3	21.0	105 W	44	65*
1 26	12 46.04	− 1 42.0	2.301	2.856	18.3	20.8	115 W	43	66
2 5	12 45.83	− 1 58.8	2.159	2.839	16.6	20.6	125 W	43	66
2 15	12 43.08	− 2 3.2	2.030	2.821	14.2	20.4	135 W	43	66
2 25	12 37.70	− 1 55.3	1.920	2.801	11.1	20.1	147 W	43	66
3 7	12 29.91	− 1 36.3	1.833	2.781	7.4	19.9	159 W	43	66
3 17	12 20.20	− 1 8.9	1.773	2.760	3.2	19.6	171 W	44	65
3 27	12 9.44	− 0 37.4	1.742	2.738	1.4	19.4	176 E	44	65
4 1	12 4.00	− 0 21.8	1.738	2.727	3.7	19.5	170 E	45	64
4 6	11 58.71	− 0 7.1	1.741	2.716	6.0	19.6	164 E	45	64
4 11	11 53.69	+ 0 6.0	1.751	2.704	8.2	19.7	157 E	45	64
4 16	11 49.07	+ 0 17.0	1.768	2.692	10.3	19.8	151 E	45	64
4 26	11 41.41	+ 0 30.6	1.819	2.668	14.1	20.0	140 E	46	63
5 6	11 36.24	+ 0 31.3	1.890	2.643	17.3	20.2	129 E	46	63
5 16	11 33.77	+ 0 18.2	1.975	2.617	19.8	20.4	119 E	45	64
5 26	11 33.98	− 0 8.7	2.071	2.590	21.7	20.5	109 E	44*	64
6 5	11 36.65	− 0 48.4	2.172	2.562	22.9	20.6	101 E	40*	65
6 15	11 41.54	− 1 39.9	2.276	2.534	23.6	20.7	93 E	34*	66
6 25	11 48.38	− 2 42.3	2.379	2.505	23.8	20.8	85 E	29*	67*
7 5	11 56.92	− 3 54.1	2.479	2.475	23.7	20.9	78 E	24*	66*

232772 2004 PG_{61} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
7 15	12 6.97	− 5 14.5	2.574	2.445	23.2	20.9	71 E	19*	63*
7 25	12 18.34	− 6 42.3	2.662	2.414	22.4	20.9	65 E	15*	58*
8 4	12 30.91	− 8 16.6	2.742	2.382	21.4	20.9	59 E	12*	53*
8 14	12 44.59	− 9 56.4	2.814	2.350	20.2	20.9	53 E	9*	47*
8 24	12 59.31	−11 40.7	2.876	2.318	18.8	20.9	48 E	6*	42*
9 3	13 15.02	−13 28.4	2.929	2.285	17.3	20.8	42 E	4*	36*
9 13	13 31.74	−15 18.5	2.971	2.251	15.6	20.8	37 E	2*	31*
9 23	13 49.45	−17 9.7	3.003	2.218	13.9	20.7	32 E	1*	26*
10 3	14 8.18	−19 0.8	3.025	2.184	12.1	20.6	27 E	—	21*
10 13	14 27.96	−20 50.4	3.037	2.150	10.2	20.5	23 E	—	16*
10 23	14 48.83	−22 36.8	3.039	2.116	8.4	20.4	18 E	—	12*
11 2	15 10.83	−24 18.3	3.032	2.082	6.6	20.3	14 E	—	7*
11 12	15 33.99	−25 52.9	3.015	2.048	4.9	20.2	10 E	—	3*
11 22	15 58.32	−27 18.6	2.990	2.015	3.7	20.0	8 E	—	—
12 2	16 23.82	−28 33.2	2.957	1.982	3.4	20.0	7 W	—	—
12 12	16 50.45	−29 34.3	2.917	1.950	4.4	20.0	9 W	—	2*
12 22	17 18.11	−30 19.8	2.871	1.918	5.9	20.0	12 W	—	6*
1 1	17 46.66	−30 47.6	2.820	1.887	7.8	20.0	15 W	—	9*
1 11	18 15.94	−30 55.8	2.764	1.858	9.7	20.0	19 W	—	13*
1 21	18 45.69	−30 43.1	2.704	1.830	11.6	20.0	22 W	—	16*

388508 2007 EM_{167}

12 27	12 34.53	+25 1.9	1.255	1.691	35.2	20.5	97 W	70	35*
1 6	12 46.95	+23 58.9	1.188	1.709	34.0	20.4	103 W	69	38*
1 16	12 55.58	+23 9.5	1.121	1.729	32.2	20.2	110 W	68	41*
1 26	12 59.87	+22 32.3	1.058	1.752	29.7	20.0	118 W	68	41
1 31	13 0.22	+22 17.2	1.029	1.764	28.2	19.9	122 W	67	42
2 5	12 59.29	+22 3.5	1.001	1.777	26.4	19.8	127 W	67	42
2 10	12 57.03	+21 50.2	0.977	1.790	24.4	19.7	131 W	67	42
2 15	12 53.44	+21 36.3	0.955	1.803	22.2	19.6	136 W	67	42
2 20	12 48.56	+21 20.1	0.936	1.817	19.8	19.5	141 W	66	43
2 25	12 42.50	+21 0.3	0.923	1.832	17.3	19.5	147 W	66	43
3 2	12 35.42	+20 35.4	0.914	1.846	14.8	19.4	151 W	66	43
3 7	12 27.54	+20 4.3	0.910	1.861	12.5	19.3	156 W	65	44
3 12	12 19.14	+19 26.3	0.912	1.876	10.6	19.2	160 W	64	45
3 17	12 10.53	+18 40.8	0.921	1.892	9.5	19.2	162 W	64	45
3 22	12 2.05	+17 48.2	0.936	1.908	9.5	19.3	162 E	63	46
3 27	11 54.01	+16 48.9	0.957	1.924	10.5	19.4	159 E	62	47
4 1	11 46.65	+15 44.3	0.985	1.940	12.2	19.5	156 E	61	48
4 6	11 40.14	+14 35.6	1.019	1.956	14.2	19.7	151 E	60	49
4 11	11 34.63	+13 24.0	1.058	1.973	16.3	19.9	147 E	58	51
4 16	11 30.17	+12 10.5	1.103	1.990	18.2	20.0	142 E	57	52
4 21	11 26.79	+10 56.2	1.152	2.006	20.0	20.2	137 E	56	53
4 26	11 24.46	+ 9 41.8	1.206	2.023	21.7	20.4	132 E	55	54
5 6	11 22.68	+ 7 14.7	1.325	2.058	24.2	20.7	123 E	52	57
5 16	11 24.28	+ 4 51.3	1.455	2.092	26.0	21.0	115 E	50*	59
5 26	11 28.68	+ 2 32.0	1.595	2.126	27.1	21.3	107 E	46*	61
6 5	11 35.31	+ 0 16.7	1.741	2.161	27.5	21.5	100 E	40*	64

282052 1999 SO_2

12 27	12 34.73	− 8 42.1	2.219	2.331	24.8	20.0	84 W	36	63*
1 6	12 40.57	−10 47.9	2.126	2.374	24.5	20.0	92 W	34	71*
1 16	12 44.02	−12 45.9	2.033	2.416	23.6	19.9	101 W	32	77*
1 26	12 44.74	−14 34.2	1.944	2.457	22.2	19.8	110 W	30	79
2 5	12 42.48	−16 10.4	1.862	2.498	20.1	19.6	119 W	29	80
2 15	12 37.09	−17 30.9	1.792	2.539	17.4	19.5	130 W	27	82
2 25	12 28.73	−18 31.7	1.740	2.579	14.3	19.4	140 W	26	83
3 7	12 17.94	−19 9.4	1.709	2.618	10.8	19.2	150 W	26	83
3 12	12 11.92	−19 18.8	1.704	2.637	9.2	19.2	155 W	26	83
3 17	12 5.68	−19 22.1	1.705	2.656	7.8	19.1	159 W	26	83
3 22	11 59.40	−19 19.5	1.713	2.675	6.9	19.1	161 E	26	83
3 27	11 53.23	−19 11.6	1.728	2.694	6.7	19.1	162 E	26	83
4 1	11 47.34	−18 59.3	1.751	2.713	7.1	19.2	160 E	26	83
4 6	11 41.85	−18 43.4	1.780	2.731	8.1	19.3	157 E	26	83
4 11	11 36.88	−18 24.9	1.816	2.749	9.4	19.4	153 E	27	82
4 16	11 32.52	−18 4.8	1.858	2.767	10.8	19.5	149 E	27	82
4 21	11 28.84	−17 44.1	1.907	2.785	12.2	19.7	144 E	27	82
4 26	11 25.86	−17 23.8	1.961	2.803	13.5	19.8	139 E	28	81
5 6	11 22.03	−16 47.1	2.083	2.837	15.8	20.0	130 E	28	81
5 16	11 20.93	−16 18.7	2.220	2.871	17.6	20.2	121 E	29*	80
5 26	11 22.31	−16 1.5	2.369	2.904	18.9	20.5	112 E	27*	80
6 5	11 25.82	−15 56.3	2.526	2.936	19.6	20.6	104 E	24*	80
6 15	11 31.14	−16 2.9	2.687	2.968	19.9	20.8	96 E	20*	80
6 25	11 37.99	−16 20.8	2.850	2.998	19.8	21.0	88 E	16*	80*
7 5	11 46.09	−16 49.1	3.012	3.027	19.4	21.1	81 E	12*	75*
7 15	11 55.26	−17 26.6	3.171	3.056	18.7	21.2	74 E	8*	68*
7 25	12 5.31	−18 12.4	3.324	3.084	17.7	21.3	68 E	4*	61*
8 4	12 16.09	−19 5.3	3.471	3.111	16.6	21.4	61 E	1*	54*
8 14	12 27.51	−20 4.4	3.609	3.137	15.3	21.4	55 E	—	47*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
282052 1999 SO_2									*(continuation)*
	h m	° ′			°	m	°	°	°
8 24	12 39.48	−21 8.6	3.737	3.162	13.9	21.5	49 E	—	40*
9 3	12 51.91	−22 17.1	3.853	3.186	12.4	21.5	43 E	—	34*
9 13	13 4.76	−23 29.2	3.957	3.209	10.8	21.5	37 E	—	28*
9 23	13 17.96	−24 43.9	4.048	3.231	9.3	21.5	31 E	—	21*
10 3	13 31.49	−26 0.6	4.124	3.253	7.7	21.5	26 E	—	16*
10 13	13 45.29	−27 18.7	4.184	3.273	6.3	21.5	21 E	—	10*
10 23	13 59.32	−28 37.4	4.229	3.293	5.2	21.5	17 E	—	4*
11 2	14 13.54	−29 56.4	4.256	3.312	4.6	21.4	16 W	—	4*
11 12	14 27.89	−31 15.1	4.267	3.330	4.8	21.5	16 W	—	8*
307493 2002 XP_{90}									
12 27	12 35.10	+36 21.1	0.487	1.180	54.8	19.3	101 W	81	24*
1 1	12 39.79	+39 28.6	0.510	1.222	50.8	19.4	105 W	84	22*
1 6	12 42.52	+42 26.3	0.533	1.265	47.1	19.4	109 W	87	21*
1 11	12 43.09	+45 14.5	0.556	1.308	43.7	19.5	113 W	90	18*
1 16	12 41.30	+47 51.9	0.581	1.351	40.5	19.6	117 W	87	16*
1 21	12 37.02	+50 16.5	0.608	1.394	37.5	19.7	120 W	85	14
1 26	12 30.22	+52 25.5	0.636	1.437	34.9	19.7	123 W	83	12
1 31	12 20.98	+54 15.9	0.667	1.480	32.6	19.8	126 W	81	10
2 5	12 9.56	+55 45.1	0.701	1.522	30.6	20.0	128 W	79	8
2 7	12 4.47	+56 14.3	0.715	1.539	29.9	20.0	129 W	79	8
2 9	11 59.15	+56 39.5	0.729	1.556	29.3	20.1	130 W	78	7
2 11	11 53.62	+57 0.9	0.745	1.573	28.7	20.1	130 W	78	7
2 13	11 47.95	+57 18.1	0.760	1.590	28.2	20.2	130 W	78	7
2 15	11 42.19	+57 31.3	0.777	1.606	27.8	20.2	131 W	77	6
2 17	11 36.39	+57 40.5	0.793	1.623	27.4	20.3	131 W	77	6
2 19	11 30.60	+57 45.8	0.811	1.639	27.0	20.3	131 W	77	6
2 21	11 24.87	+57 47.2	0.829	1.656	26.7	20.4	131 W	77	6
2 23	11 19.26	+57 44.9	0.847	1.672	26.5	20.5	131 W	77	6
2 25	11 13.80	+57 39.1	0.866	1.689	26.3	20.5	131 W	77	6
2 27	11 8.54	+57 30.0	0.885	1.705	26.2	20.6	131 W	78	7
3 1	11 3.50	+57 17.8	0.906	1.721	26.0	20.6	130 W	78	7
3 3	10 58.71	+57 2.7	0.926	1.737	26.0	20.7	130 W	78	7
3 5	10 54.18	+56 44.8	0.947	1.753	25.9	20.8	129 E	78	7
3 7	10 49.94	+56 24.6	0.969	1.769	25.9	20.9	129 E	79	8
3 12	10 40.66	+55 24.5	1.026	1.809	26.0	21.0	127 E	80	9
3 17	10 33.28	+54 13.6	1.086	1.847	26.1	21.2	125 E	81	10
3 22	10 27.74	+52 54.8	1.149	1.886	26.3	21.4	123 E	82	11
3 27	10 23.89	+51 30.6	1.216	1.923	26.6	21.5	120 E	83	12
4 1	10 21.54	+50 3.0	1.285	1.961	26.8	21.7	118 E	85	14
484757 2009 BL_2									
12 27	12 35.59	− 5 23.6	0.911	1.282	49.8	21.5	85 W	40	60*
1 1	12 58.00	− 7 1.4	0.868	1.247	51.7	21.4	84 W	38	61*
1 6	13 21.79	− 8 38.3	0.830	1.213	53.7	21.3	83 W	36	62*
1 11	13 46.89	−10 11.8	0.799	1.180	55.7	21.2	82 W	35	63*
1 16	14 13.19	−11 39.3	0.773	1.150	57.6	21.1	81 W	33	63*
1 21	14 40.48	−12 58.0	0.754	1.121	59.5	21.1	79 W	32	64*
1 26	15 8.47	−14 5.4	0.742	1.096	61.3	21.0	77 W	31	63*
1 31	15 36.81	−14 59.4	0.735	1.073	62.8	21.0	76 W	30*	63*
2 5	16 5.10	−15 38.8	0.735	1.053	64.1	21.0	74 W	29*	62*
2 10	16 32.97	−16 3.4	0.740	1.037	65.0	21.0	72 W	28*	61*
2 15	17 0.07	−16 13.5	0.749	1.025	65.5	21.0	71 W	28*	61*
2 20	17 26.12	−16 10.7	0.762	1.017	65.7	21.1	70 W	27*	60*
2 25	17 50.97	−15 56.6	0.779	1.013	65.6	21.1	69 W	27*	59*
3 2	18 14.51	−15 33.1	0.797	1.013	65.1	21.1	68 W	26*	59*
3 7	18 36.70	−15 2.1	0.818	1.018	64.4	21.2	68 W	26*	59*
3 12	18 57.54	−14 25.2	0.839	1.026	63.4	21.2	68 W	26*	59*
3 17	19 17.05	−13 44.0	0.860	1.039	62.3	21.3	68 W	25*	59*
3 22	19 35.27	−12 59.7	0.881	1.056	61.1	21.3	68 W	25*	60*
3 27	19 52.27	−12 13.6	0.901	1.076	59.9	21.4	69 W	25*	60*
4 1	20 8.10	−11 26.6	0.920	1.099	58.5	21.4	70 W	25*	61*
4 6	20 22.83	−10 39.4	0.937	1.125	57.2	21.5	71 W	26*	62*
440179 2004 BF_{41}									
12 27	12 36.74	−12 11.2	1.943	2.056	28.3	20.8	82 W	33	64*
1 6	12 43.46	−15 13.2	1.866	2.104	27.9	20.7	90 W	30	74*
1 16	12 47.58	−18 9.5	1.789	2.152	27.0	20.6	98 W	27	82*
1 26	12 48.65	−20 57.8	1.715	2.200	25.5	20.6	106 W	24	85
2 5	12 46.30	−23 34.5	1.648	2.248	23.5	20.5	115 W	21	88
2 10	12 43.74	−24 46.8	1.619	2.272	22.2	20.4	119 W	20	89
2 15	12 40.25	−25 53.8	1.592	2.296	20.9	20.3	124 W	19	90
2 20	12 35.83	−26 54.5	1.570	2.320	19.4	20.3	129 W	18	89
2 25	12 30.57	−27 47.9	1.552	2.343	17.9	20.2	133 W	17	88
3 2	12 24.54	−28 33.2	1.539	2.367	16.4	20.2	138 W	16	87
3 7	12 17.88	−29 9.4	1.531	2.390	14.9	20.1	142 W	16	87
3 12	12 10.76	−29 36.0	1.529	2.414	13.5	20.1	145 W	15	86
3 17	12 3.37	−29 52.6	1.533	2.437	12.4	20.1	148 W	15	86
3 22	11 55.94	−29 59.4	1.544	2.460	11.5	20.1	150 E	15	86
3 27	11 48.68	−29 57.2	1.561	2.483	11.1	20.1	151 E	15	86

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
440179 2004 BF_{41}									*(continuation)*
	h m	° ′			°	m	°	°	°
4 1	11 41.80	−29 46.7	1.585	2.506	11.1	20.2	151 E	15	86
4 6	11 35.47	−29 29.3	1.615	2.529	11.6	20.3	150 E	16	87
4 11	11 29.81	−29 6.4	1.651	2.551	12.3	20.4	147 E	16	87
4 16	11 24.94	−28 39.4	1.693	2.573	13.2	20.5	144 E	16	87
4 21	11 20.92	−28 10.0	1.740	2.595	14.2	20.6	141 E	17	88
4 26	11 17.77	−27 39.6	1.792	2.617	15.3	20.7	137 E	17	88
5 1	11 15.47	−27 9.2	1.849	2.639	16.3	20.8	133 E	18	89
5 6	11 14.01	−26 39.8	1.911	2.661	17.2	20.9	129 E	18	89
5 11	11 13.34	−26 12.3	1.975	2.682	18.0	21.1	125 E	19	90
5 16	11 13.43	−25 47.3	2.044	2.703	18.8	21.2	121 E	19*	90
5 21	11 14.21	−25 25.3	2.115	2.724	19.4	21.3	117 E	19*	89
5 26	11 15.63	−25 6.5	2.188	2.745	19.9	21.4	113 E	18*	89
5 31	11 17.64	−24 51.0	2.264	2.765	20.3	21.5	109 E	17*	89
75933 2000 CB_{75}									
12 27	12 36.98	+ 6 46.4	2.952	3.105	18.5	20.7	90 W	52	50*
1 6	12 42.70	+ 7 41.8	2.828	3.131	18.1	20.6	99 W	53	54*
1 16	12 46.65	+ 8 55.7	2.708	3.156	17.2	20.5	108 W	54	55*
1 26	12 48.59	+10 28.5	2.597	3.180	15.9	20.3	118 W	55	54
2 5	12 48.38	+12 18.6	2.500	3.204	14.0	20.2	128 W	57	52
2 15	12 45.91	+14 23.0	2.422	3.226	11.8	20.1	138 W	59	50
2 20	12 43.85	+15 28.7	2.391	3.237	10.6	20.0	143 W	60	49
2 25	12 41.28	+16 35.6	2.367	3.248	9.4	20.0	148 W	62	47
3 2	12 38.24	+17 42.6	2.350	3.258	8.2	19.9	152 W	63	46
3 7	12 34.79	+18 48.6	2.340	3.268	7.3	19.8	155 W	64	45
3 12	12 30.99	+19 52.5	2.338	3.278	6.7	19.8	158 W	65	44
3 17	12 26.95	+20 53.0	2.343	3.288	6.4	19.8	158 W	66	43
3 22	12 22.75	+21 49.2	2.356	3.298	6.7	19.9	157 W	67	42
3 27	12 18.50	+22 40.3	2.377	3.307	7.4	19.9	155 E	68	41
4 1	12 14.30	+23 25.5	2.404	3.316	8.3	20.0	151 E	68	41
4 6	12 10.25	+24 4.5	2.438	3.325	9.4	20.1	147 E	69	40
4 16	12 2.95	+25 3.0	2.526	3.342	11.5	20.2	138 E	70	39
4 26	11 57.18	+25 35.9	2.635	3.358	13.5	20.4	129 E	71	38
5 6	11 53.30	+25 45.8	2.761	3.373	15.1	20.6	119 E	71	38
5 16	11 51.44	+25 36.0	2.899	3.388	16.2	20.7	110 E	71	38
5 26	11 51.57	+25 10.3	3.045	3.401	16.9	20.9	102 E	69*	39
6 5	11 53.55	+24 32.1	3.194	3.414	17.3	21.0	94 E	64*	39
6 15	11 57.19	+23 44.1	3.344	3.425	17.2	21.1	86 E	58*	40
6 25	12 2.30	+22 48.8	3.492	3.436	16.8	21.2	78 E	51*	41
7 5	12 8.66	+21 48.0	3.634	3.446	16.2	21.3	71 E	45*	42*
7 15	12 16.10	+20 43.3	3.769	3.455	15.4	21.3	64 E	40*	41*
7 25	12 24.47	+19 35.9	3.894	3.463	14.4	21.4	58 E	35*	38*
8 4	12 33.61	+18 27.0	4.009	3.470	13.2	21.4	52 E	32*	35*
8 14	12 43.44	+17 17.4	4.111	3.477	12.0	21.4	46 E	28*	30*
8 24	12 53.83	+16 8.2	4.199	3.482	10.7	21.4	40 E	26*	25*
9 3	13 4.71	+15 0.2	4.273	3.486	9.4	21.4	34 E	23*	20*
9 13	13 16.02	+13 54.0	4.331	3.490	8.1	21.4	29 E	21*	14*
9 23	13 27.67	+12 50.7	4.374	3.493	7.1	21.3	25 E	19*	8*
10 3	13 39.63	+11 51.0	4.400	3.495	6.2	21.3	22 E	16*	1*
10 13	13 51.82	+10 55.8	4.409	3.496	5.9	21.3	21 E	14*	—
10 23	14 4.20	+10 5.9	4.401	3.496	6.0	21.3	22 E	12*	—
11 2	14 16.71	+ 9 22.2	4.376	3.495	6.7	21.3	24 W	13*	—
11 12	14 29.28	+ 8 45.6	4.335	3.493	7.7	21.3	28 W	20*	—
11 22	14 41.84	+ 8 17.1	4.279	3.491	8.8	21.4	33 W	26*	—
12 2	14 54.31	+ 7 57.6	4.207	3.487	10.1	21.4	38 W	32*	2*
12 12	15 6.60	+ 7 47.9	4.121	3.483	11.4	21.4	44 W	38*	8*
12 22	15 18.61	+ 7 49.1	4.022	3.477	12.6	21.4	50 W	43*	15*
1 1	15 30.23	+ 8 1.8	3.911	3.471	13.7	21.4	57 W	47*	22*
1 11	15 41.30	+ 8 26.9	3.792	3.464	14.7	21.3	63 W	50*	29*
1 21	15 51.69	+ 9 4.9	3.664	3.456	15.5	21.3	70 W	52*	36*
482054 2010 AE									
12 27	12 38.96	−13 42.1	0.730	1.131	59.2	21.2	81 W	31	65*
1 1	13 0.53	−17 57.3	0.706	1.104	61.2	21.1	80 W	27	67*
1 6	13 23.79	−22 13.9	0.689	1.079	63.1	21.1	78 W	23	69*
1 11	13 48.91	−26 24.8	0.677	1.054	65.0	21.1	76 W	19	69*
1 16	14 16.03	−30 22.0	0.671	1.031	66.7	21.1	74 W	15	68*
1 21	14 45.19	−33 57.2	0.671	1.010	68.3	21.1	72 W	11	66*
1 26	15 16.24	−37 2.7	0.677	0.991	69.5	21.1	70 W	8*	64*
1 31	15 48.87	−39 32.4	0.687	0.973	70.4	21.1	69 W	5*	62*
2 5	16 22.50	−41 22.3	0.701	0.959	71.0	21.1	67 W	3*	59*
2 10	16 56.41	−42 31.3	0.718	0.946	71.2	21.2	65 W	2*	57*
2 15	17 29.79	−43 0.4	0.739	0.937	71.1	21.2	64 W	—	55*
2 20	18 1.92	−42 53.1	0.761	0.931	70.7	21.2	63 W	—	54*
2 25	18 32.28	−42 14.2	0.785	0.928	70.0	21.3	62 W	—	53*
3 2	19 0.57	−41 8.9	0.810	0.928	69.1	21.3	61 W	—	52*
3 7	19 26.68	−39 42.5	0.835	0.932	68.1	21.3	61 W	—	51*
3 12	19 50.62	−37 59.7	0.859	0.938	67.0	21.4	60 W	—	51*
3 17	20 12.52	−36 4.7	0.883	0.948	65.7	21.4	60 W	—	51*
3 22	20 32.55	−34 0.8	0.905	0.960	64.5	21.5	60 W	1*	52*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	164207 2004 GU_9								
	h m	° ′			°	m	°	°	°
12 27	12 39.59	+57 41.5	0.292	1.107	57.9	20.7	107 W	77	4*
1 1	12 52.62	+60 1.1	0.293	1.113	56.7	20.7	109 W	75	2*
1 6	13 3.99	+62 22.4	0.293	1.119	55.5	20.7	110 W	73	—
1 11	13 13.14	+64 45.8	0.293	1.124	54.6	20.7	111 W	70	—
1 16	13 19.31	+67 10.8	0.293	1.128	53.8	20.7	112 W	68	—
1 21	13 21.46	+69 35.5	0.293	1.131	53.1	20.7	113 W	65	—
1 26	13 18.12	+71 57.4	0.293	1.134	52.7	20.6	114 W	63	—
1 31	13 7.15	+74 11.9	0.293	1.136	52.4	20.6	114 W	61	—
2 5	12 45.59	+76 11.7	0.293	1.137	52.4	20.6	114 W	59	—
2 10	12 10.41	+77 43.7	0.294	1.138	52.5	20.7	114 W	57	—
2 15	11 21.85	+78 29.9	0.294	1.137	52.9	20.7	113 W	57	—
2 20	10 27.69	+78 14.9	0.295	1.136	53.4	20.7	113 W	57	—
2 25	9 39.78	+76 57.4	0.296	1.134	54.1	20.7	112 E	58	—
3 2	9 4.60	+74 49.5	0.297	1.131	55.0	20.7	111 E	60	—
3 7	8 41.72	+72 5.7	0.299	1.128	56.0	20.8	110 E	63	—
3 12	8 28.22	+68 57.1	0.300	1.123	57.2	20.8	108 E	66	—
3 17	8 21.33	+65 31.5	0.302	1.119	58.6	20.9	106 E	69	—
3 22	8 18.96	+61 54.0	0.304	1.113	60.0	20.9	105 E	73	2
3 27	8 19.62	+58 8.1	0.307	1.106	61.6	20.9	103 E	77	6
4 1	8 22.31	+54 16.0	0.309	1.099	63.3	21.0	101 E	81	10
4 6	8 26.37	+50 19.1	0.311	1.092	65.0	21.1	99 E	85	14
4 11	8 31.40	+46 18.6	0.314	1.083	66.8	21.1	96 E	89	18
4 16	8 37.11	+42 15.3	0.316	1.074	68.7	21.2	94 E	86*	22
4 21	8 43.25	+38 10.2	0.319	1.065	70.6	21.2	92 E	80*	26
4 26	8 49.62	+34 4.0	0.321	1.055	72.5	21.3	90 E	75*	30
5 1	8 56.06	+29 57.1	0.323	1.045	74.5	21.3	88 E	69*	34
5 6	9 2.45	+25 49.8	0.325	1.034	76.5	21.4	85 E	63*	38
5 11	9 8.74	+21 42.4	0.327	1.023	78.6	21.5	83 E	57*	42
	140928 2001 VG_{75}								
12 27	12 39.76	−34 26.9	0.773	1.069	62.1	20.0	74 W	11	68*
1 1	13 0.63	−37 3.0	0.779	1.068	62.0	20.0	74 W	8	67*
1 6	13 21.92	−39 20.5	0.786	1.068	61.8	20.0	73 W	6	67*
1 11	13 43.56	−41 19.1	0.793	1.071	61.6	20.0	73 W	4	66*
1 16	14 5.40	−42 58.7	0.800	1.075	61.2	20.1	73 W	2	65*
1 21	14 27.32	−44 19.5	0.806	1.082	60.8	20.1	74 W	1	65*
1 26	14 49.13	−45 22.0	0.810	1.090	60.3	20.1	74 W	—	64*
1 31	15 10.67	−46 7.0	0.813	1.099	59.8	20.1	75 W	—	64*
2 5	15 31.74	−46 35.6	0.815	1.111	59.2	20.1	75 W	—	64*
2 10	15 52.14	−46 48.8	0.815	1.123	58.7	20.1	76 W	—	64*
2 15	16 11.69	−46 47.8	0.813	1.138	58.0	20.1	78 W	—	65*
2 20	16 30.24	−46 33.7	0.809	1.153	57.4	20.1	79 W	—	66*
2 25	16 47.66	−46 7.7	0.803	1.170	56.6	20.1	81 W	—	67*
3 2	17 3.86	−45 31.2	0.794	1.187	55.9	20.1	83 W	—	68*
3 7	17 18.78	−44 45.1	0.784	1.206	55.0	20.1	85 W	—	69*
3 12	17 32.32	−43 50.4	0.772	1.225	54.1	20.1	87 W	1*	71*
3 17	17 44.42	−42 47.8	0.758	1.245	53.1	20.0	89 W	2*	72*
3 22	17 55.05	−41 37.9	0.743	1.265	51.9	20.0	92 W	3*	74*
3 27	18 4.17	−40 21.3	0.726	1.286	50.6	19.9	95 W	4*	76*
4 1	18 11.75	−38 58.1	0.707	1.307	49.1	19.9	98 W	6*	77
4 6	18 17.73	−37 28.4	0.688	1.328	47.4	19.8	102 W	7*	79
4 11	18 22.05	−35 52.2	0.669	1.350	45.5	19.7	106 W	9*	80
4 16	18 24.65	−34 9.2	0.649	1.371	43.3	19.6	110 W	11*	82
4 21	18 25.48	−32 18.9	0.629	1.393	40.8	19.5	115 W	13	84
4 26	18 24.54	−30 21.1	0.611	1.415	38.0	19.4	120 W	15	86
5 6	18 17.38	−26 1.8	0.579	1.458	31.2	19.2	131 W	19	90
5 16	18 3.71	−21 14.3	0.559	1.500	23.2	18.9	144 W	24	85
5 26	17 45.40	−16 14.2	0.557	1.542	14.8	18.7	157 W	29	80
5 31	17 35.43	−13 48.1	0.565	1.562	11.1	18.6	163 W	31	78
6 5	17 25.45	−11 30.3	0.578	1.582	8.7	18.6	166 W	33	76
6 10	17 15.87	− 9 24.6	0.597	1.601	8.6	18.7	166 W	36	73
6 15	17 7.03	− 7 34.0	0.622	1.620	10.5	18.9	163 E	37	72
6 20	16 59.22	− 5 59.9	0.652	1.639	13.3	19.1	158 E	39	70
6 25	16 52.60	− 4 42.7	0.687	1.658	16.3	19.4	153 E	40	69
6 30	16 47.24	− 3 41.7	0.727	1.675	19.1	19.6	147 E	41	68
7 5	16 43.15	− 2 55.6	0.771	1.693	21.6	19.8	142 E	42	67
7 10	16 40.32	− 2 22.9	0.818	1.710	23.8	20.0	137 E	43	66
7 15	16 38.68	− 2 1.6	0.869	1.726	25.8	20.3	132 E	43	66
7 20	16 38.15	− 1 50.1	0.922	1.742	27.4	20.5	128 E	43	66
7 25	16 38.65	− 1 46.6	0.977	1.758	28.7	20.6	124 E	43	66
7 30	16 40.07	− 1 49.5	1.034	1.772	29.8	20.8	120 E	43	66
8 4	16 42.33	− 1 57.7	1.093	1.787	30.7	21.0	116 E	43*	66
8 9	16 45.36	− 2 10.0	1.153	1.801	31.4	21.1	112 E	43*	66
8 14	16 49.08	− 2 25.5	1.214	1.814	31.9	21.3	109 E	42*	66
8 19	16 53.43	− 2 43.1	1.276	1.827	32.3	21.4	105 E	42*	67
	206342 2003 PQ_6								
12 27	12 39.98	−12 29.4	1.629	1.772	33.3	21.0	81 W	33	64*
1 6	12 53.60	−15 40.5	1.534	1.781	33.5	20.9	87 W	29	72*
1 16	13 5.58	−18 50.7	1.438	1.789	33.3	20.7	93 W	26	80*
1 26	13 15.48	−21 59.2	1.344	1.797	32.7	20.6	100 W	23	86
2 5	13 22.78	−25 4.6	1.253	1.805	31.5	20.4	107 W	20	89

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	206342 2003 PQ_6 *(continuation)*								
	h m	° ′			°	m	°	°	°
2 10	13 25.24	−26 35.4	1.209	1.809	30.7	20.3	111 W	18	89
2 15	13 26.80	−28 4.2	1.167	1.813	29.8	20.2	114 W	17	88
2 20	13 27.35	−29 30.3	1.127	1.816	28.7	20.1	118 W	15	86
2 25	13 26.81	−30 52.7	1.090	1.820	27.4	20.0	122 W	14	85
3 2	13 25.13	−32 10.5	1.054	1.824	26.0	19.9	126 W	13	84
3 7	13 22.24	−33 22.2	1.022	1.827	24.5	19.8	130 W	12	83
3 12	13 18.12	−34 26.2	0.993	1.830	22.9	19.7	134 W	11	82
3 17	13 12.82	−35 20.6	0.968	1.833	21.3	19.6	138 W	10	81
3 22	13 6.46	−36 3.9	0.948	1.836	19.7	19.5	142 W	9	80
3 27	12 59.25	−36 34.5	0.931	1.839	18.2	19.4	145 W	8	79
4 1	12 51.44	−36 51.5	0.920	1.842	17.0	19.3	147 W	8	79
4 6	12 43.34	−36 54.2	0.913	1.845	16.1	19.3	149 E	8	79
4 11	12 35.30	−36 43.0	0.911	1.847	15.8	19.3	150 E	8	79
4 16	12 27.69	−36 18.9	0.914	1.850	16.0	19.3	149 E	9	80
4 21	12 20.82	−35 43.9	0.922	1.852	16.7	19.4	148 E	9	80
4 26	12 14.94	−35 0.4	0.935	1.855	17.8	19.4	146 E	10	81
5 1	12 10.20	−34 10.9	0.952	1.857	19.2	19.5	143 E	11	82
5 6	12 6.71	−33 18.0	0.974	1.859	20.7	19.6	139 E	12	83
5 11	12 4.49	−32 23.8	0.999	1.861	22.3	19.7	136 E	13	84
5 16	12 3.54	−31 30.5	1.028	1.862	23.8	19.8	132 E	13	84
5 21	12 3.81	−30 39.8	1.060	1.864	25.3	19.9	128 E	14	85
5 26	12 5.20	−29 52.8	1.094	1.865	26.6	20.1	124 E	15*	86
5 31	12 7.63	−29 10.4	1.132	1.867	27.8	20.2	121 E	15*	87
6 5	12 11.01	−28 32.9	1.171	1.868	28.9	20.3	117 E	15*	87
6 10	12 15.25	−28 0.6	1.212	1.869	29.8	20.4	114 E	15*	88
6 15	12 20.28	−27 33.8	1.255	1.870	30.6	20.5	110 E	14*	88
6 25	12 32.39	−26 55.6	1.343	1.871	31.8	20.7	104 E	12*	89
7 5	12 46.78	−26 36.3	1.436	1.872	32.5	20.8	98 E	11*	89
7 15	13 3.09	−26 33.0	1.530	1.872	32.9	21.0	92 E	9*	86*
7 25	13 21.00	−26 42.7	1.626	1.872	32.8	21.1	87 E	7*	80*
8 4	13 40.27	−27 2.0	1.721	1.871	32.5	21.2	82 E	6*	75*
8 14	14 0.75	−27 27.9	1.816	1.869	31.9	21.3	77 E	6*	69*
8 24	14 22.30	−27 57.4	1.909	1.867	31.0	21.4	72 E	5*	65*
9 3	14 44.80	−28 27.5	2.000	1.864	30.0	21.5	68 E	5*	60*
	6456 Golombek								
12 27	12 40.05	− 9 46.7	2.419	2.487	23.1	20.9	82 W	35	62*
1 6	12 49.63	−11 24.2	2.245	2.447	23.7	20.7	90 W	34	70*
1 16	12 57.96	−12 58.5	2.073	2.406	23.9	20.5	97 W	32	76*
1 26	13 4.69	−14 28.3	1.903	2.363	23.7	20.3	105 W	31	78
2 5	13 9.43	−15 52.5	1.738	2.319	22.9	20.0	114 W	29	80
2 15	13 11.71	−17 8.9	1.583	2.274	21.4	19.7	123 W	28	81
2 25	13 11.04	−18 14.8	1.439	2.228	19.2	19.4	132 W	27	82
3 7	13 7.03	−19 6.1	1.310	2.180	16.2	19.1	142 W	26	83
3 17	12 59.48	−19 37.9	1.200	2.132	12.5	18.7	152 W	25	84
3 27	12 48.72	−19 45.0	1.112	2.083	8.7	18.3	162 W	25	84
4 1	12 42.42	−19 38.3	1.077	2.058	7.3	18.2	165 W	25	84
4 6	12 35.74	−19 24.6	1.048	2.033	7.0	18.1	166 E	26	83
4 11	12 28.89	−19 4.3	1.025	2.007	7.9	18.0	164 E	26	83
4 16	12 22.12	−18 38.2	1.009	1.982	9.9	18.0	160 E	26	83
4 21	12 15.71	−18 7.7	0.998	1.956	12.4	18.1	155 E	27	82
4 26	12 9.86	−17 34.1	0.993	1.930	15.1	18.2	150 E	27	82
5 1	12 4.77	−16 59.2	0.992	1.905	17.9	18.2	144 E	28	81
5 6	12 0.59	−16 24.4	0.997	1.879	20.6	18.3	139 E	29	80
5 11	11 57.43	−15 51.3	1.005	1.853	23.2	18.3	134 E	29	80
5 16	11 55.37	−15 21.2	1.016	1.827	25.6	18.4	129 E	30	79
5 21	11 54.42	−14 55.2	1.030	1.800	27.9	18.5	124 E	30*	79
5 26	11 54.59	−14 34.0	1.046	1.774	29.9	18.5	119 E	30*	79
6 5	11 58.14	−14 7.8	1.082	1.723	33.5	18.7	110 E	29*	78
6 15	12 5.71	−14 4.1	1.121	1.671	36.3	18.7	103 E	26*	78
6 25	12 16.91	−14 22.6	1.159	1.621	38.6	18.8	96 E	22*	78
7 5	12 31.37	−15 1.0	1.195	1.572	40.3	18.9	90 E	19*	79*
7 15	12 48.84	−15 56.4	1.228	1.525	41.6	18.9	85 E	16*	77*
7 25	13 9.13	−17 5.5	1.257	1.481	42.6	18.9	81 E	14*	74*
8 4	13 32.10	−18 24.0	1.282	1.440	43.3	18.9	77 E	13*	71*
8 14	13 57.73	−19 47.5	1.304	1.402	43.8	18.9	73 E	12*	67*
8 24	14 25.94	−21 10.7	1.323	1.369	44.1	18.9	70 E	11*	64*
9 3	14 56.66	−22 27.4	1.342	1.342	44.2	18.9	68 E	11*	62*
9 13	15 29.78	−23 31.6	1.360	1.320	44.1	18.9	66 E	12*	60*
9 23	16 5.04	−24 16.5	1.380	1.305	43.8	18.9	64 E	13*	58*
10 3	16 42.02	−24 36.2	1.404	1.296	43.3	18.9	63 E	14*	57*
10 13	17 20.19	−24 26.1	1.432	1.295	42.6	18.9	61 E	16*	55*
10 18	17 39.52	−24 9.0	1.449	1.297	42.1	18.9	61 E	17*	54*
10 23	17 58.88	−23 43.5	1.467	1.301	41.6	18.9	60 E	18*	54*
10 28	18 18.20	−23 9.9	1.487	1.307	41.0	19.0	60 E	19*	53*
11 2	18 37.40	−22 28.2	1.509	1.314	40.4	19.0	59 E	20*	52*
11 7	18 56.40	−21 39.0	1.534	1.323	39.7	19.0	59 E	21*	50*
11 12	19 15.15	−20 42.5	1.560	1.334	39.0	19.0	58 E	22*	49*
11 17	19 33.59	−19 39.5	1.589	1.346	38.3	19.1	57 E	23*	48*

6456 Golombek *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
11 22	19 51.66	−18 30.6	1.620	1.360	37.4	19.1	57 E	25*	46*
11 27	20 9.34	−17 16.5	1.653	1.375	36.6	19.2	56 E	26*	44*
12 2	20 26.61	−15 57.8	1.689	1.391	35.7	19.2	55 E	27*	42*
12 7	20 43.47	−14 35.4	1.726	1.408	34.8	19.3	55 E	28*	40*
12 12	20 59.91	−13 9.8	1.766	1.427	33.9	19.3	54 E	29*	38*
12 17	21 15.93	−11 41.8	1.808	1.446	32.9	19.4	53 E	31*	36*
12 22	21 31.53	−10 11.9	1.851	1.467	31.9	19.4	52 E	32*	34*
12 27	21 46.74	− 8 40.8	1.897	1.488	30.9	19.5	51 E	32*	32*
1 1	22 1.57	− 7 9.0	1.944	1.510	29.9	19.5	50 E	33*	30*
1 6	22 16.04	− 5 36.8	1.992	1.533	28.8	19.6	49 E	34*	28*
1 11	22 30.18	− 4 4.8	2.042	1.557	27.8	19.6	47 E	34*	26*
1 16	22 44.00	− 2 33.2	2.093	1.580	26.7	19.7	46 E	34*	24*
1 21	22 57.52	− 1 2.5	2.145	1.605	25.6	19.8	45 E	34*	22*

523600 2003 RC_2

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 40.09	−41 19.7	0.796	1.055	62.3	21.3	72 W	4	65*
1 1	12 51.83	−39 29.5	0.775	1.077	61.6	21.3	74 W	6	68*
1 6	13 2.95	−37 26.1	0.752	1.100	60.8	21.3	77 W	8	71*
1 11	13 13.40	−35 7.2	0.725	1.124	59.7	21.2	81 W	10	74*
1 16	13 23.08	−32 29.8	0.697	1.149	58.4	21.1	84 W	13	78*
1 21	13 31.92	−29 30.6	0.667	1.175	56.8	21.0	89 W	15	83*
1 26	13 39.83	−26 6.2	0.638	1.202	54.9	20.9	93 W	19	87*
1 31	13 46.71	−22 12.9	0.608	1.229	52.5	20.8	98 W	23	86
2 5	13 52.44	−17 47.6	0.581	1.257	49.7	20.7	104 W	27	82
2 10	13 56.90	−12 47.9	0.556	1.284	46.4	20.5	110 W	32	77
2 15	13 59.94	− 7 13.8	0.536	1.312	42.7	20.4	116 W	38	71
2 20	14 1.46	− 1 9.3	0.521	1.340	38.7	20.3	122 W	44	65
2 25	14 1.38	+ 5 17.0	0.514	1.368	34.7	20.2	128 W	50	59
2 27	14 0.89	+ 7 54.7	0.513	1.379	33.2	20.1	130 W	53	56
3 1	14 0.13	+10 32.7	0.514	1.390	31.8	20.1	132 W	56	53
3 3	13 59.11	+13 10.0	0.516	1.401	30.4	20.1	134 W	58	51
3 5	13 57.82	+15 45.5	0.519	1.412	29.2	20.1	136 W	61	48
3 7	13 56.26	+18 18.1	0.524	1.423	28.2	20.1	137 W	63	46
3 9	13 54.45	+20 46.7	0.530	1.434	27.3	20.1	139 W	66	43
3 11	13 52.39	+23 10.5	0.538	1.444	26.6	20.2	139 W	68	41
3 13	13 50.09	+25 28.6	0.546	1.455	26.1	20.2	140 W	70	39
3 15	13 47.56	+27 40.2	0.557	1.466	25.8	20.2	140 W	73	36
3 17	13 44.84	+29 44.9	0.568	1.477	25.6	20.3	140 W	75	34
3 22	13 37.27	+34 23.3	0.602	1.503	25.8	20.5	139 W	79	30
3 27	13 28.95	+38 12.8	0.642	1.529	26.7	20.7	137 W	83	26
4 1	13 20.29	+41 14.7	0.688	1.555	27.8	20.9	133 W	86	23
4 6	13 11.71	+43 33.0	0.738	1.580	29.0	21.1	130 W	89	20
4 11	13 3.62	+45 12.7	0.791	1.604	30.1	21.3	126 E	90	19
4 16	12 56.37	+46 19.6	0.848	1.628	31.1	21.5	123 E	89	18
4 21	12 50.19	+46 58.9	0.906	1.652	32.0	21.7	120 E	88	17
4 26	12 45.23	+47 15.8	0.967	1.675	32.6	21.9	116 E	88	17
5 1	12 41.52	+47 14.6	1.028	1.697	33.1	22.1	113 E	88	17
5 6	12 39.03	+46 58.6	1.090	1.719	33.5	22.3	110 E	88	17

98117 2000 SP_2

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 40.10	+29 49.5	2.444	2.759	20.7	20.2	98 W	75	30*
1 6	12 48.92	+30 47.6	2.307	2.734	20.3	20.0	105 W	76	32*
1 16	12 55.73	+32 4.3	2.177	2.708	19.6	19.8	112 W	77	32*
1 26	13 0.07	+33 38.2	2.058	2.682	18.7	19.7	119 W	79	30
1 31	13 1.18	+34 30.5	2.003	2.668	18.1	19.6	123 W	80	29
2 5	13 1.50	+35 25.6	1.952	2.654	17.5	19.5	126 W	80	29
2 10	13 0.98	+36 22.5	1.904	2.640	16.8	19.4	129 W	81	28
2 15	12 59.56	+37 20.2	1.861	2.626	16.2	19.3	132 W	82	27
2 20	12 57.23	+38 17.1	1.823	2.612	15.7	19.2	134 W	83	26
2 25	12 53.98	+39 11.7	1.789	2.597	15.2	19.2	136 W	84	25
3 2	12 49.85	+40 2.5	1.761	2.583	14.9	19.1	138 W	85	24
3 7	12 44.88	+40 47.7	1.737	2.568	14.8	19.1	139 W	86	23
3 12	12 39.18	+41 25.7	1.720	2.553	14.9	19.0	139 W	86	23
3 17	12 32.88	+41 54.9	1.707	2.537	15.1	19.0	138 W	87	22
3 22	12 26.18	+42 13.9	1.700	2.522	15.6	19.0	137 W	87	22
3 27	12 19.28	+42 22.0	1.698	2.506	16.3	19.0	135 E	87	22
4 1	12 12.40	+42 18.7	1.701	2.491	17.1	19.0	133 E	87	22
4 6	12 5.75	+42 3.8	1.709	2.475	18.0	19.1	130 E	87	22
4 11	11 59.52	+41 37.7	1.721	2.458	19.0	19.1	127 E	87	22
4 16	11 53.89	+41 1.0	1.737	2.442	20.0	19.1	124 E	86	23
4 21	11 48.99	+40 14.6	1.757	2.426	20.9	19.2	120 E	85	24
4 26	11 44.91	+39 19.6	1.781	2.409	21.9	19.2	117 E	84	25
5 1	11 41.70	+38 17.0	1.807	2.393	22.7	19.3	113 E	83	26
5 6	11 39.35	+37 8.0	1.835	2.376	23.5	19.3	110 E	82	27
5 11	11 37.88	+35 53.5	1.866	2.359	24.3	19.3	106 E	81	28
5 16	11 37.25	+34 34.3	1.899	2.342	24.9	19.4	103 E	80	29
5 21	11 37.43	+33 11.4	1.933	2.325	25.4	19.4	99 E	78*	31
5 26	11 38.36	+31 45.4	1.968	2.307	25.9	19.5	96 E	74*	32
5 31	11 39.97	+30 16.9	2.004	2.290	26.2	19.5	93 E	70*	34
6 5	11 42.23	+28 46.4	2.041	2.273	26.5	19.5	90 E	66*	35

98117 2000 SP_2 *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
6 15	11 48.47	+25 40.6	2.115	2.237	26.8	19.6	83 E	58*	38
6 25	11 56.69	+22 30.3	2.188	2.202	26.8	19.6	77 E	50*	41
7 5	12 6.56	+19 17.2	2.260	2.167	26.5	19.6	72 E	43*	44*
7 15	12 17.84	+16 2.0	2.328	2.131	25.9	19.7	66 E	37*	45*
7 25	12 30.35	+12 45.5	2.393	2.096	25.1	19.7	61 E	32*	45*
8 4	12 43.93	+ 9 28.2	2.452	2.060	24.0	19.6	56 E	27*	43*
8 14	12 58.53	+ 6 10.6	2.506	2.025	22.8	19.6	51 E	23*	41*
8 24	13 14.06	+ 2 53.2	2.555	1.991	21.4	19.6	46 E	20*	37*
9 3	13 30.52	− 0 23.5	2.597	1.957	19.9	19.5	41 E	17*	34*
9 13	13 47.93	− 3 38.8	2.632	1.924	18.3	19.5	37 E	14*	30*
9 23	14 6.30	− 6 51.8	2.661	1.891	16.5	19.4	32 E	11*	25*
10 3	14 25.70	−10 1.6	2.684	1.860	14.6	19.3	28 E	8*	21*
10 13	14 46.21	−13 7.2	2.700	1.831	12.7	19.2	24 E	6*	17*
10 23	15 7.90	−16 7.0	2.709	1.802	10.7	19.1	20 E	4*	13*
11 2	15 30.88	−18 59.4	2.712	1.776	8.6	19.0	16 E	1*	9*
11 12	15 55.23	−21 42.7	2.709	1.751	6.6	18.9	12 E	—	6*
11 22	16 21.03	−24 14.4	2.700	1.729	4.8	18.8	8 E	—	2*
12 2	16 48.35	−26 32.2	2.687	1.709	3.4	18.6	6 E	—	—
12 12	17 17.22	−28 33.4	2.669	1.692	3.2	18.6	6 E	—	—
12 22	17 47.56	−30 15.1	2.648	1.678	4.3	18.6	7 W	—	—
1 1	18 19.26	−31 34.7	2.625	1.666	6.0	18.7	10 W	—	3*
1 11	18 52.09	−32 29.7	2.599	1.658	7.9	18.7	13 W	—	6*
1 21	19 25.73	−32 58.5	2.573	1.652	9.7	18.8	16 W	—	9*

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 40.40	−29 38.4	2.763	2.687	20.7	21.3	75 W	15	69*
1 6	12 50.13	−31 55.0	2.615	2.659	21.5	21.2	82 W	13	76*
1 16	12 58.60	−34 10.8	2.465	2.630	22.0	21.0	89 W	11	81*
1 26	13 5.43	−36 24.4	2.317	2.601	22.1	20.9	95 W	9	80
2 5	13 10.25	−38 33.4	2.171	2.571	22.0	20.7	102 W	6	77
2 15	13 12.55	−40 34.6	2.031	2.539	21.5	20.5	110 W	4	75
2 25	13 11.87	−42 23.1	1.900	2.508	20.6	20.3	117 W	3	74
3 2	13 10.30	−43 10.7	1.838	2.491	20.1	20.2	120 W	2	73
3 7	13 7.87	−43 52.5	1.779	2.475	19.4	20.1	124 W	1	72
3 12	13 4.58	−44 27.5	1.724	2.458	18.7	20.0	127 W	1	72
3 17	13 0.45	−44 54.4	1.672	2.442	18.0	19.9	131 W	—	71
3 22	12 55.58	−45 12.1	1.625	2.425	17.2	19.8	134 W	—	71
3 27	12 50.09	−45 19.5	1.582	2.408	16.5	19.7	137 W	—	71
4 1	12 44.13	−45 16.0	1.544	2.391	15.9	19.6	139 W	—	71
4 6	12 37.90	−45 0.9	1.510	2.373	15.4	19.5	141 E	—	71
4 11	12 31.61	−44 33.9	1.482	2.356	15.1	19.5	142 E	—	71
4 16	12 25.52	−43 55.3	1.459	2.338	15.0	19.4	143 E	1	72
4 21	12 19.86	−43 6.0	1.441	2.320	15.3	19.4	143 E	2	73
4 26	12 14.82	−42 7.3	1.428	2.303	15.8	19.3	141 E	3	74
5 1	12 10.56	−41 0.7	1.421	2.285	16.6	19.3	140 E	4	75
5 6	12 7.20	−39 48.0	1.419	2.267	17.5	19.4	137 E	5	76
5 11	12 4.81	−38 31.0	1.421	2.248	18.6	19.4	135 E	6	77
5 16	12 3.45	−37 11.7	1.428	2.230	19.9	19.4	131 E	8	79
5 21	12 3.12	−35 52.0	1.439	2.212	21.1	19.4	128 E	9	80
5 26	12 3.79	−34 33.3	1.454	2.194	22.4	19.5	125 E	10*	81
5 31	12 5.41	−33 17.2	1.472	2.175	23.6	19.5	121 E	11*	83
6 5	12 7.94	−32 4.4	1.494	2.157	24.7	19.6	117 E	12*	84
6 10	12 11.31	−30 55.9	1.518	2.138	25.8	19.6	114 E	12*	85
6 15	12 15.49	−29 52.4	1.544	2.120	26.8	19.7	110 E	12*	86
6 20	12 20.40	−28 54.1	1.572	2.101	27.6	19.7	107 E	11*	87
6 25	12 25.98	−28 1.2	1.602	2.083	28.4	19.8	103 E	11*	88
7 5	12 38.96	−26 31.6	1.666	2.046	29.6	19.9	96 E	10*	89
7 15	12 54.07	−25 22.4	1.732	2.009	30.4	19.9	90 E	9*	84*
7 25	13 11.02	−24 31.5	1.800	1.973	30.8	20.0	84 E	8*	78*
8 4	13 29.55	−23 55.6	1.867	1.937	30.9	20.0	78 E	8*	72*
8 14	13 49.50	−23 31.7	1.933	1.902	30.6	20.0	73 E	8*	66*
8 24	14 10.72	−23 16.3	1.997	1.869	30.1	20.1	68 E	8*	61*
9 3	14 33.09	−23 5.9	2.057	1.836	29.3	20.1	63 E	8*	57*
9 13	14 56.52	−22 57.4	2.115	1.804	28.4	20.1	58 E	9*	52*
9 23	15 20.91	−22 47.5	2.168	1.774	27.2	20.0	54 E	9*	48*
10 3	15 46.16	−22 33.2	2.218	1.746	25.9	20.0	50 E	10*	44*
10 13	16 12.18	−22 11.8	2.264	1.721	24.5	20.0	46 E	11*	40*
10 23	16 38.86	−21 40.6	2.305	1.697	23.0	20.0	42 E	12*	35*
11 2	17 6.06	−20 57.4	2.343	1.676	21.4	19.9	38 E	13*	31*
11 12	17 33.66	−20 0.4	2.377	1.658	19.7	19.9	34 E	14*	26*
11 22	18 1.50	−18 48.2	2.407	1.642	18.1	19.8	31 E	14*	22*
12 2	18 29.45	−17 20.1	2.435	1.630	16.5	19.8	28 E	15*	17*
12 12	18 57.39	−15 35.6	2.459	1.622	14.9	19.7	25 E	15*	12*
12 22	19 25.18	−13 35.1	2.482	1.616	13.4	19.7	22 E	14*	7*
1 1	19 52.74	−11 19.4	2.503	1.615	12.0	19.7	20 E	13*	3*
1 11	20 20.00	− 8 49.6	2.523	1.617	10.8	19.6	18 E	12*	—
1 21	20 46.90	− 6 7.6	2.542	1.622	9.8	19.6	16 E	10*	—

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		475 Ocllo							
	h m	° ′			°	m	°	°	°
12 27	12 41.09	+11 21.8	3.417	3.564	16.0	17.8	91 W	56	46*
1 6	12 45.05	+11 21.7	3.262	3.559	15.8	17.7	99 W	56	50*
1 16	12 47.33	+11 33.3	3.111	3.553	15.2	17.6	109 W	57	52*
1 26	12 47.73	+11 56.4	2.968	3.546	14.1	17.4	119 W	57	52
2 5	12 46.08	+12 29.9	2.837	3.538	12.6	17.3	129 W	57	52
2 15	12 42.30	+13 11.8	2.723	3.529	10.6	17.1	139 W	58	51
2 25	12 36.47	+13 58.4	2.632	3.519	8.3	16.9	149 W	59	50
3 7	12 28.86	+14 45.2	2.567	3.508	6.0	16.7	158 W	60	49
3 12	12 24.52	+15 7.1	2.545	3.503	5.1	16.7	162 W	60	49
3 17	12 19.95	+15 27.0	2.531	3.497	4.6	16.6	164 W	60	49
3 22	12 15.22	+15 44.3	2.524	3.491	4.6	16.6	164 W	61	48
3 27	12 10.44	+15 58.4	2.525	3.485	5.3	16.7	161 E	61	48
4 6	12 1.12	+16 15.8	2.549	3.471	7.5	16.8	153 E	61	48
4 16	11 52.70	+16 17.1	2.600	3.457	10.0	16.9	143 E	61	48
4 26	11 45.80	+16 2.0	2.676	3.442	12.3	17.1	133 E	61	48
5 6	11 40.77	+15 31.8	2.770	3.426	14.3	17.2	123 E	61	48
5 16	11 37.77	+14 48.4	2.879	3.409	15.8	17.3	113 E	60	49
5 26	11 36.80	+13 53.9	2.998	3.392	16.8	17.4	104 E	57*	50
6 5	11 37.75	+12 50.5	3.123	3.373	17.4	17.5	95 E	52*	51
6 15	11 40.43	+11 39.6	3.249	3.354	17.6	17.6	87 E	46*	52
6 25	11 44.66	+10 22.7	3.373	3.333	17.4	17.7	79 E	39*	54*
7 5	11 50.23	+ 9 0.8	3.493	3.312	16.9	17.7	71 E	33*	53*
7 15	11 56.98	+ 7 34.7	3.606	3.290	16.1	17.7	64 E	27*	51*
7 25	12 4.75	+ 6 5.2	3.709	3.267	15.1	17.8	57 E	22*	47*
8 4	12 13.40	+ 4 32.9	3.802	3.243	13.9	17.7	50 E	18*	41*
8 14	12 22.82	+ 2 58.1	3.882	3.218	12.4	17.7	43 E	15*	36*
8 24	12 32.92	+ 1 21.3	3.948	3.193	10.9	17.7	36 E	12*	30*
9 3	12 43.61	− 0 16.9	4.000	3.166	9.2	17.6	30 E	9*	23*
9 13	12 54.85	− 1 56.3	4.036	3.139	7.3	17.5	24 E	6*	17*
9 23	13 6.57	− 3 36.4	4.055	3.110	5.5	17.4	17 E	3*	11*
10 3	13 18.73	− 5 16.8	4.058	3.081	3.5	17.3	11 E	1*	4*
10 13	13 31.29	− 6 57.2	4.044	3.051	1.6	17.2	5 E	—	—
10 23	13 44.22	− 8 37.0	4.013	3.020	1.0	17.1	3 W	—	—
11 2	13 57.48	−10 16.0	3.965	2.988	2.9	17.2	9 W	2*	—
11 12	14 11.05	−11 53.8	3.901	2.956	5.0	17.2	15 W	8*	4*
11 22	14 24.86	−13 30.0	3.820	2.922	7.0	17.3	21 W	12*	9*
12 2	14 38.91	−15 4.3	3.725	2.888	9.1	17.3	28 W	16*	15*
12 12	14 53.12	−16 36.6	3.614	2.853	11.2	17.3	34 W	19*	21*
12 22	15 7.44	−18 6.6	3.490	2.817	13.1	17.2	41 W	21*	28*
1 1	15 21.81	−19 34.4	3.354	2.780	15.0	17.2	47 W	22*	36*
1 11	15 36.13	−21 0.1	3.208	2.743	16.8	17.1	54 W	22*	44*
1 21	15 50.31	−22 23.9	3.052	2.704	18.4	17.0	60 W	22*	51*
		29180 1990 SW_1							
12 27	12 41.62	−14 13.2	2.816	2.823	20.1	19.9	80 W	31	64*
1 6	12 48.74	−14 39.0	2.691	2.843	20.2	19.8	89 W	30	72*
1 16	12 54.10	−14 51.3	2.563	2.862	19.9	19.7	97 W	30	78*
1 26	12 57.43	−14 47.8	2.437	2.880	19.1	19.6	107 W	30	79
2 5	12 58.54	−14 26.1	2.316	2.898	17.7	19.5	117 W	31	78
2 15	12 57.27	−13 43.9	2.206	2.914	15.6	19.3	127 W	31	78
2 25	12 53.62	−12 39.6	2.112	2.929	12.9	19.1	139 W	32	77
3 7	12 47.82	−11 13.7	2.040	2.944	9.6	18.9	150 W	34	75
3 17	12 40.34	− 9 28.5	1.993	2.957	5.7	18.7	163 W	36	73
3 22	12 36.20	− 8 30.5	1.980	2.964	3.7	18.6	169 W	36	73
3 27	12 31.93	− 7 30.0	1.975	2.970	1.8	18.5	175 W	37	72
4 1	12 27.64	− 6 28.3	1.979	2.976	1.3	18.4	176 E	39	70
4 6	12 23.45	− 5 26.5	1.989	2.982	3.0	18.6	171 E	40	69
4 11	12 19.45	− 4 25.6	2.008	2.987	5.0	18.7	165 E	41	68
4 16	12 15.76	− 3 26.8	2.034	2.993	6.9	18.8	159 E	42	67
4 21	12 12.44	− 2 31.1	2.067	2.998	8.8	19.0	153 E	42	67
4 26	12 9.57	− 1 39.2	2.107	3.003	10.5	19.1	147 E	43	66
5 6	12 5.34	− 0 8.9	2.204	3.011	13.5	19.3	136 E	45	64
5 16	12 3.24	+ 1 1.5	2.321	3.019	15.9	19.5	125 E	46	63
5 26	12 3.30	+ 1 51.6	2.452	3.027	17.6	19.7	115 E	47*	62
6 5	12 5.36	+ 2 22.8	2.592	3.033	18.8	19.8	106 E	45*	62
6 15	12 9.24	+ 2 37.0	2.738	3.038	19.4	20.0	97 E	41*	61
6 25	12 14.71	+ 2 36.5	2.886	3.042	19.5	20.1	89 E	37*	61
7 5	12 21.55	+ 2 23.6	3.032	3.045	19.3	20.2	81 E	32*	61*
7 15	12 29.59	+ 2 0.4	3.175	3.048	18.7	20.3	74 E	28*	59*
7 25	12 38.64	+ 1 28.7	3.310	3.049	17.8	20.3	66 E	25*	55*
8 4	12 48.57	+ 0 50.3	3.438	3.050	16.6	20.4	59 E	22*	50*
8 14	12 59.25	+ 0 6.7	3.555	3.049	15.3	20.4	53 E	19*	45*
8 24	13 10.60	− 0 40.8	3.661	3.048	13.8	20.4	46 E	16*	39*
9 3	13 22.53	− 1 30.8	3.753	3.046	12.2	20.4	40 E	14*	32*
9 13	13 34.97	− 2 22.1	3.832	3.042	10.5	20.4	33 E	12*	26*
9 23	13 47.87	− 3 13.7	3.895	3.038	8.7	20.4	27 E	11*	20*
10 3	14 1.17	− 4 4.5	3.943	3.033	6.9	20.3	21 E	9*	13*
10 13	14 14.83	− 4 53.4	3.975	3.027	5.1	20.2	16 E	7*	7*
10 23	14 28.81	− 5 39.4	3.990	3.020	3.7	20.2	11 E	5*	—

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		29180 1990 SW_1 *(continuation)*							
	h m	° ′			°	m	°	°	°
11 2	14 43.05	− 6 21.5	3.988	3.012	3.0	20.1	9 E	2*	—
11 12	14 57.51	− 6 58.7	3.969	3.003	3.6	20.1	11 W	3*	—
11 22	15 12.12	− 7 30.1	3.934	2.993	5.1	20.2	15 W	9*	—
12 2	15 26.83	− 7 54.6	3.882	2.983	6.8	20.2	21 W	15*	1*
12 12	15 41.57	− 8 11.5	3.814	2.971	8.7	20.3	27 W	20*	7*
12 22	15 56.24	− 8 19.8	3.731	2.958	10.5	20.3	33 W	24*	14*
1 1	16 10.76	− 8 18.7	3.634	2.945	12.3	20.3	40 W	28*	21*
1 11	16 25.01	− 8 7.4	3.525	2.930	14.0	20.3	46 W	30*	28*
1 21	16 38.88	− 7 45.2	3.404	2.915	15.6	20.2	53 W	33*	35*
		79137 1991 PD_{15}							
12 27	12 41.73	−10 0.5	2.780	2.815	20.2	21.1	82 W	35	62*
1 6	12 49.15	−11 10.6	2.621	2.798	20.6	20.9	90 W	34	70*
1 16	12 55.04	−12 13.3	2.461	2.780	20.5	20.8	98 W	33	76*
1 26	12 59.08	−13 6.9	2.304	2.761	19.9	20.6	107 W	32	77
2 5	13 0.97	−13 49.5	2.154	2.740	18.8	20.4	117 W	31	78
2 15	13 0.40	−14 18.8	2.013	2.719	17.0	20.2	126 W	31	78
2 25	12 57.19	−14 32.1	1.888	2.697	14.5	20.0	137 W	30	79
3 7	12 51.35	−14 27.2	1.780	2.674	11.4	19.7	148 W	31	78
3 17	12 43.16	−14 2.8	1.696	2.650	7.7	19.4	159 W	31	78
3 27	12 33.31	−13 19.5	1.639	2.625	4.2	19.1	169 W	32	77
4 1	12 28.07	−12 51.8	1.620	2.612	3.4	19.1	171 E	32	77
4 6	12 22.82	−12 21.1	1.609	2.599	4.2	19.1	169 E	33	76
4 11	12 17.69	−11 48.1	1.605	2.585	5.8	19.2	165 E	33	76
4 16	12 12.83	−11 14.0	1.608	2.572	7.9	19.2	159 E	34	75
4 21	12 8.39	−10 39.7	1.617	2.558	10.0	19.3	154 E	34	75
4 26	12 4.46	−10 6.3	1.633	2.544	12.0	19.4	148 E	35	74
5 1	12 1.13	− 9 34.7	1.654	2.530	14.0	19.5	143 E	35	74
5 6	11 58.46	− 9 5.7	1.680	2.515	15.8	19.6	137 E	36	73
5 16	11 55.23	− 8 17.8	1.745	2.486	19.0	19.8	127 E	37	72
5 26	11 54.90	− 7 45.9	1.824	2.455	21.6	19.9	117 E	37*	72
6 5	11 57.29	− 7 31.3	1.911	2.424	23.5	20.0	108 E	35*	72
6 15	12 2.20	− 7 33.5	2.003	2.392	24.8	20.1	100 E	31*	72
6 25	12 9.33	− 7 51.7	2.096	2.359	25.5	20.2	92 E	27*	72
7 5	12 18.42	− 8 24.0	2.188	2.326	25.8	20.3	85 E	23*	72*
7 15	12 29.25	− 9 8.9	2.278	2.292	25.7	20.4	78 E	19*	69*
7 25	12 41.62	−10 4.5	2.362	2.257	25.3	20.4	72 E	16*	65*
8 4	12 55.37	−11 9.2	2.440	2.222	24.6	20.4	66 E	13*	59*
8 14	13 10.42	−12 21.2	2.511	2.186	23.6	20.4	60 E	11*	54*
8 24	13 26.69	−13 38.8	2.575	2.150	22.5	20.4	54 E	9*	48*
9 3	13 44.11	−15 0.2	2.630	2.114	21.2	20.4	49 E	8*	43*
9 13	14 2.69	−16 23.7	2.677	2.078	19.7	20.3	44 E	6*	38*
9 23	14 22.41	−17 47.5	2.715	2.041	18.2	20.3	39 E	5*	33*
10 3	14 43.27	−19 9.4	2.745	2.005	16.5	20.2	35 E	4*	29*
10 13	15 5.30	−20 27.5	2.766	1.968	14.8	20.1	30 E	3*	24*
10 23	15 28.48	−21 39.5	2.779	1.932	12.9	20.0	26 E	2*	20*
11 2	15 52.81	−22 43.0	2.784	1.897	11.1	19.9	22 E	2*	15*
11 12	16 18.28	−23 35.7	2.783	1.862	9.2	19.8	17 E	1*	11*
11 22	16 44.80	−24 15.0	2.774	1.828	7.2	19.7	13 E	—	7*
12 2	17 12.29	−24 38.7	2.760	1.795	5.3	19.5	10 E	—	3*
12 12	17 40.62	−24 44.6	2.740	1.763	3.3	19.3	6 E	—	—
12 22	18 9.60	−24 30.8	2.716	1.733	1.4	19.2	2 E	—	—
1 1	18 39.05	−23 56.1	2.688	1.705	0.9	19.0	2 W	—	—
1 11	19 8.74	−22 59.7	2.657	1.679	2.7	19.1	5 W	—	—
1 21	19 38.47	−21 41.5	2.625	1.655	4.6	19.2	8 W	—	2*
		68267 2001 EA_{16}							
12 27	12 41.88	+43 5.4	1.649	2.095	27.3	20.7	103 W	88	17*
1 1	12 43.91	+43 51.1	1.608	2.104	26.7	20.7	106 W	89	18*
1 6	12 44.80	+44 43.1	1.568	2.112	26.0	20.6	110 W	90	18*
1 11	12 44.42	+45 41.1	1.530	2.119	25.3	20.5	113 W	89	18*
1 16	12 42.59	+46 44.0	1.494	2.126	24.4	20.4	117 W	88	17*
1 21	12 39.16	+47 50.3	1.460	2.132	23.5	20.4	120 W	87	16
1 26	12 33.96	+48 58.2	1.430	2.137	22.6	20.3	124 W	86	15
1 31	12 26.87	+50 5.1	1.403	2.142	21.7	20.2	127 W	85	14
2 5	12 17.80	+51 8.2	1.380	2.146	20.8	20.2	129 W	84	13
2 10	12 6.75	+52 3.8	1.362	2.149	20.1	20.1	132 W	83	12
2 15	11 53.86	+52 48.2	1.350	2.151	19.5	20.1	133 W	82	11
2 20	11 39.46	+53 17.9	1.343	2.153	19.2	20.1	134 W	82	11
2 25	11 24.04	+53 29.8	1.342	2.155	19.1	20.1	134 W	82	11
2 27	11 17.71	+53 29.2	1.343	2.155	19.2	20.1	134 W	82	11
3 1	11 11.37	+53 25.4	1.345	2.155	19.3	20.1	134 W	82	11
3 3	11 5.05	+53 18.4	1.349	2.155	19.5	20.1	134 W	82	11
3 5	10 58.79	+53 8.2	1.353	2.155	19.7	20.1	133 E	82	11
3 7	10 52.63	+52 54.9	1.358	2.155	19.9	20.1	132 E	82	11
3 9	10 46.61	+52 38.5	1.364	2.155	20.2	20.1	132 E	82	11
3 11	10 40.76	+52 19.2	1.371	2.154	20.5	20.2	131 E	83	12
3 13	10 35.13	+51 57.0	1.379	2.154	20.8	20.2	130 E	83	12
3 15	10 29.73	+51 32.2	1.388	2.153	21.2	20.2	129 E	83	12
3 17	10 24.58	+51 4.9	1.397	2.153	21.5	20.2	127 E	84	13

68267 2001 EA_{16} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
3 22	10 12.95	+49 47.1	1.425	2.150	22.5	20.3	124 E	85	14
3 27	10 3.17	+48 18.1	1.458	2.148	23.5	20.4	121 E	87	16
4 1	9 55.25	+46 41.1	1.495	2.144	24.5	20.5	117 E	88	17
4 6	9 49.11	+44 58.5	1.536	2.140	25.4	20.6	113 E	90	19
4 11	9 44.60	+43 12.5	1.580	2.135	26.3	20.6	109 E	88	21
4 16	9 41.57	+41 24.9	1.627	2.129	27.0	20.7	106 E	86	23
4 21	9 39.85	+39 37.0	1.677	2.123	27.6	20.8	102 E	85	24
4 26	9 39.29	+37 49.6	1.728	2.116	28.1	20.9	98 E	83*	26
5 1	9 39.71	+36 3.5	1.780	2.108	28.5	20.9	94 E	79*	28
5 6	9 41.00	+34 18.8	1.833	2.100	28.7	21.0	91 E	75*	30
5 11	9 43.04	+32 35.8	1.886	2.091	28.8	21.0	87 E	70*	31
5 16	9 45.74	+30 54.6	1.939	2.081	28.9	21.1	83 E	65*	33
5 21	9 49.00	+29 15.0	1.992	2.071	28.8	21.1	80 E	60*	35
5 26	9 52.76	+27 37.0	2.044	2.060	28.6	21.2	77 E	56*	36*
5 31	9 56.94	+26 0.5	2.095	2.048	28.3	21.2	73 E	51*	38*
6 5	10 1.50	+24 25.3	2.144	2.035	27.9	21.2	70 E	47*	39*
6 10	10 6.39	+22 51.1	2.192	2.022	27.5	21.3	67 E	42*	40*
6 15	10 11.58	+21 17.8	2.238	2.008	27.0	21.3	64 E	38*	40*
6 20	10 17.04	+19 45.1	2.282	1.993	26.4	21.3	61 E	34*	41*
6 25	10 22.73	+18 13.0	2.324	1.978	25.8	21.3	58 E	31*	40*
6 30	10 28.64	+16 41.2	2.363	1.962	25.1	21.3	55 E	27*	40*
7 5	10 34.75	+15 9.6	2.399	1.945	24.3	21.3	52 E	24*	39*
7 10	10 41.05	+13 37.9	2.433	1.928	23.5	21.3	49 E	21*	38*
7 15	10 47.52	+12 6.0	2.463	1.910	22.7	21.2	46 E	18*	37*
7 20	10 54.16	+10 33.8	2.491	1.891	21.8	21.2	44 E	16*	35*
7 25	11 0.97	+ 9 1.1	2.515	1.871	20.9	21.2	41 E	13*	33*
7 30	11 7.93	+ 7 27.8	2.536	1.851	19.9	21.2	38 E	11*	31*
8 4	11 15.05	+ 5 53.7	2.553	1.830	18.9	21.1	36 E	9*	29*
8 9	11 22.34	+ 4 18.6	2.567	1.808	17.9	21.1	33 E	7*	27*
8 14	11 29.80	+ 2 42.5	2.578	1.785	16.9	21.0	31 E	5*	25*
8 19	11 37.43	+ 1 5.3	2.584	1.762	15.9	21.0	28 E	3*	22*
8 24	11 45.25	− 0 33.3	2.588	1.738	14.9	20.9	26 E	2*	20*
8 29	11 53.26	− 2 13.2	2.587	1.713	13.8	20.8	24 E	—	18*
9 3	12 1.48	− 3 54.7	2.583	1.688	12.8	20.8	22 E	—	16*
9 8	12 9.94	− 5 37.9	2.576	1.662	11.8	20.7	20 E	—	13*
9 13	12 18.66	− 7 22.8	2.564	1.635	10.8	20.6	18 E	—	11*
9 18	12 27.65	− 9 9.6	2.550	1.608	9.9	20.5	16 E	—	9*
9 23	12 36.95	−10 58.3	2.532	1.580	9.1	20.4	14 E	—	7*
10 3	12 56.63	−14 41.8	2.486	1.521	7.9	20.2	12 E	—	3*
10 13	13 18.08	−18 33.5	2.428	1.461	7.5	20.1	11 E	—	—
10 23	13 41.81	−22 32.8	2.360	1.398	8.1	20.0	11 W	—	1*
10 28	13 54.73	−24 34.8	2.322	1.366	8.7	19.9	12 W	—	2*
11 2	14 8.51	−26 37.8	2.283	1.334	9.5	19.8	13 W	—	4*
11 7	14 23.25	−28 41.1	2.242	1.301	10.4	19.8	14 W	—	5*
11 12	14 39.11	−30 44.0	2.200	1.268	11.4	19.7	15 W	—	6*
11 17	14 56.24	−32 45.0	2.158	1.235	12.5	19.7	16 W	—	7*
11 22	15 14.80	−34 42.6	2.115	1.202	13.5	19.6	17 W	—	8*
11 27	15 34.98	−36 34.7	2.073	1.169	14.6	19.5	17 W	—	8*
12 2	15 56.93	−38 18.6	2.032	1.136	15.6	19.5	18 W	—	9*
12 7	16 20.79	−39 51.0	1.992	1.104	16.6	19.4	19 W	—	9*
12 12	16 46.59	−41 8.0	1.954	1.073	17.5	19.3	19 W	—	8*
12 17	17 14.28	−42 5.2	1.918	1.042	18.3	19.2	19 W	—	8*
12 22	17 43.63	−42 38.2	1.886	1.013	18.9	19.2	20 W	—	7*
12 27	18 14.26	−42 42.7	1.857	0.985	19.4	19.1	19 W	—	6*
1 1	18 45.61	−42 15.5	1.832	0.960	19.7	19.0	19 E	—	4*
1 6	19 17.00	−41 14.8	1.812	0.936	19.8	18.9	19 E	—	6*
1 11	19 47.78	−39 40.4	1.796	0.916	19.7	18.9	18 E	—	7*
1 16	20 17.37	−37 34.0	1.785	0.898	19.3	18.8	18 E	—	7*
1 21	20 45.37	−34 58.7	1.779	0.884	18.7	18.7	17 E	—	8*

12009 1996 *UE*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 42.68	− 0 53.2	2.708	2.803	20.5	20.5	85 W	44	56*
1 6	12 49.60	− 1 30.5	2.561	2.800	20.5	20.4	94 W	43	62*
1 16	12 54.81	− 1 56.2	2.415	2.796	20.1	20.3	102 W	43	66*
1 26	12 58.00	− 2 9.0	2.273	2.791	19.1	20.1	112 W	43	66
2 5	12 58.92	− 2 7.7	2.139	2.785	17.5	19.9	122 W	43	66
2 15	12 57.31	− 1 51.6	2.017	2.778	15.3	19.7	132 W	43	66
2 25	12 53.08	− 1 21.0	1.912	2.770	12.3	19.5	143 W	44	65
3 7	12 46.38	− 0 37.5	1.829	2.761	8.7	19.2	155 W	44	65
3 17	12 37.63	+ 0 15.3	1.771	2.750	4.6	18.9	167 W	45	64
3 22	12 32.73	+ 0 43.5	1.753	2.745	2.6	18.8	173 W	46	63
3 27	12 27.63	+ 1 11.8	1.743	2.739	1.4	18.7	176 W	46	63
4 1	12 22.47	+ 1 39.4	1.740	2.733	2.8	18.8	172 E	47	62
4 6	12 17.39	+ 2 5.5	1.744	2.727	4.9	18.9	167 E	47	62
4 11	12 12.51	+ 2 29.3	1.755	2.720	7.1	19.0	161 E	47	62
4 16	12 7.95	+ 2 50.2	1.773	2.713	9.1	19.1	155 E	48	61
4 26	12 0.25	+ 3 21.1	1.827	2.699	13.0	19.3	143 E	48	61
5 6	11 54.84	+ 3 35.8	1.903	2.684	16.2	19.5	132 E	49	60
5 16	11 52.00	+ 3 33.8	1.994	2.667	18.8	19.7	122 E	49	60

12009 1996 *UE* *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
5 26	11 51.73	+ 3 15.8	2.097	2.650	20.7	19.8	112 E	48*	61
6 5	11 53.87	+ 2 43.4	2.207	2.631	22.0	20.0	103 E	44*	61
6 15	11 58.18	+ 1 58.4	2.320	2.612	22.8	20.1	95 E	40*	62
6 25	12 4.41	+ 1 2.3	2.434	2.592	23.1	20.2	87 E	34*	63
7 5	12 12.29	− 0 3.3	2.545	2.570	22.9	20.3	80 E	29*	63*
7 15	12 21.63	− 1 16.9	2.652	2.548	22.4	20.3	73 E	24*	61*
7 25	12 32.23	− 2 37.4	2.753	2.525	21.6	20.4	66 E	20*	58*
8 4	12 43.96	− 4 3.4	2.846	2.501	20.6	20.4	60 E	17*	53*
8 14	12 56.70	− 5 34.2	2.930	2.475	19.3	20.4	54 E	14*	48*
8 24	13 10.38	− 7 8.4	3.005	2.450	17.9	20.4	48 E	12*	42*
9 3	13 24.93	− 8 45.2	3.069	2.423	16.3	20.3	42 E	9*	36*
9 13	13 40.32	−10 23.6	3.123	2.395	14.6	20.3	37 E	7*	31*
9 23	13 56.52	−12 2.4	3.164	2.367	12.8	20.2	31 E	6*	25*
10 3	14 13.53	−13 40.7	3.195	2.337	10.8	20.1	26 E	4*	20*
10 13	14 31.36	−15 17.4	3.213	2.308	8.8	20.0	21 E	2*	15*
10 23	14 49.99	−16 51.2	3.219	2.277	6.8	19.9	16 E	—	10*
11 2	15 9.44	−18 21.0	3.214	2.246	4.6	19.8	11 E	—	4*
11 12	15 29.73	−19 45.4	3.197	2.214	2.5	19.6	6 E	—	—
11 22	15 50.84	−21 3.0	3.169	2.181	0.5	19.4	1 E	—	—
12 2	16 12.77	−22 12.6	3.130	2.149	2.1	19.5	5 W	—	—
12 12	16 35.51	−23 12.7	3.081	2.116	4.3	19.6	9 W	—	2*
12 22	16 59.00	−24 2.0	3.023	2.082	6.6	19.6	14 W	3*	7*
1 1	17 23.21	−24 39.1	2.956	2.048	8.8	19.6	19 W	5*	11*
1 11	17 48.06	−25 2.9	2.881	2.015	11.1	19.6	23 W	6*	16*
1 21	18 13.45	−25 12.4	2.800	1.981	13.3	19.6	28 W	7*	21*

337118 1999 TX_2

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 42.95	−60 17.6	1.158	1.199	49.3	20.9	68 W	—	52*
1 1	13 6.15	−60 38.6	1.097	1.161	51.5	20.7	68 W	—	52*
1 6	13 31.29	−60 43.7	1.033	1.123	54.1	20.6	68 W	—	51*
1 11	13 58.61	−60 28.1	0.965	1.084	57.0	20.5	68 W	—	51*
1 16	14 28.30	−59 45.0	0.895	1.044	60.4	20.3	67 W	—	51*
1 18	14 40.86	−59 18.0	0.866	1.028	61.9	20.3	67 W	—	51*
1 20	14 53.82	−58 44.2	0.838	1.012	63.5	20.2	67 W	—	51*
1 22	15 7.16	−58 2.8	0.809	0.996	65.1	20.1	67 W	—	52*
1 24	15 20.88	−57 12.7	0.779	0.980	66.9	20.1	66 W	—	52*
1 26	15 34.96	−56 12.8	0.750	0.965	68.8	20.0	66 W	—	52*
1 28	15 49.36	−55 1.6	0.722	0.949	70.8	20.0	65 W	—	52*
1 30	16 4.06	−53 37.8	0.693	0.933	72.9	19.9	65 W	—	52*
2 1	16 19.01	−51 59.6	0.666	0.917	75.1	19.9	64 W	—	52*
2 3	16 34.16	−50 5.4	0.639	0.902	77.5	19.8	63 W	—	53*
2 5	16 49.46	−47 53.4	0.613	0.887	80.0	19.8	62 W	—	53*
2 7	17 4.84	−45 21.9	0.588	0.872	82.5	19.7	61 W	—	52*
2 9	17 20.26	−42 29.4	0.566	0.857	85.2	19.7	60 W	1*	52*
2 11	17 35.64	−39 14.8	0.545	0.842	88.0	19.7	58 W	3*	52*
2 13	17 50.93	−35 37.8	0.528	0.828	90.7	19.7	57 W	6*	51*
2 15	18 6.07	−31 39.3	0.514	0.814	93.4	19.7	55 W	9*	49*
2 17	18 21.02	−27 21.6	0.503	0.800	95.9	19.8	54 W	12*	48*
2 19	18 35.73	−22 48.4	0.496	0.787	98.2	19.8	52 W	16*	45*
2 21	18 50.16	−18 5.2	0.494	0.775	100.0	19.8	51 W	19*	43*
2 23	19 4.28	−13 18.2	0.497	0.763	101.4	19.9	49 W	22*	40*
2 25	19 18.09	− 8 34.5	0.504	0.752	102.2	19.9	48 W	25*	37*
2 26	19 24.86	− 6 15.9	0.510	0.746	102.4	19.9	47 W	27*	36*
2 27	19 31.55	− 4 0.5	0.517	0.741	102.4	20.0	47 W	28*	34*
2 28	19 38.14	− 1 49.0	0.525	0.736	102.2	20.0	47 W	29*	32*
3 1	19 44.66	+ 0 18.2	0.533	0.731	102.0	20.0	46 W	30*	31*
3 2	19 51.08	+ 2 20.6	0.543	0.727	101.6	20.0	46 W	31*	30*
3 3	19 57.41	+ 4 17.9	0.554	0.723	101.0	20.0	46 W	32*	28*
3 4	20 3.65	+ 6 9.7	0.566	0.718	100.4	20.0	45 W	33*	27*
3 5	20 9.81	+ 7 56.0	0.579	0.714	99.6	20.0	45 W	34*	25*
3 6	20 15.88	+ 9 36.7	0.592	0.711	98.7	20.0	45 W	34*	24*
3 7	20 21.86	+11 11.7	0.607	0.707	97.8	20.0	45 W	35*	23*
3 9	20 33.55	+14 5.0	0.637	0.701	95.6	20.0	45 W	36*	21*
3 11	20 44.91	+16 37.1	0.670	0.696	93.3	20.0	44 W	36*	19*
3 13	20 55.93	+18 49.3	0.705	0.692	90.7	19.9	44 W	37*	17*
3 15	21 6.62	+20 43.3	0.741	0.689	88.0	19.9	44 W	37*	16*
3 17	21 17.00	+22 20.9	0.778	0.688	85.2	19.9	44 W	37*	14*
3 19	21 27.07	+23 43.8	0.817	0.687	82.4	19.9	43 W	37*	13*
3 21	21 36.84	+24 53.8	0.855	0.688	79.6	19.9	43 W	36*	12*
3 23	21 46.33	+25 52.3	0.894	0.689	76.8	19.9	42 W	36*	12*
3 25	21 55.54	+26 40.8	0.933	0.692	74.0	19.9	42 W	36*	11*
3 27	22 4.49	+27 20.4	0.972	0.696	71.3	20.0	41 W	35*	11*
3 29	22 13.19	+27 52.4	1.010	0.701	68.7	20.0	41 W	35*	11*
3 31	22 21.64	+28 17.6	1.047	0.708	66.1	20.0	40 W	34*	10*
4 2	22 29.85	+28 37.1	1.084	0.715	63.7	20.0	40 W	34*	10*
4 4	22 37.84	+28 51.5	1.120	0.723	61.3	20.0	39 W	33*	10*
4 6	22 45.61	+29 1.5	1.155	0.732	59.1	20.1	39 W	33*	10*
4 11	23 4.15	+29 11.2	1.238	0.758	54.0	20.1	38 W	31*	11*
4 16	23 21.51	+29 4.2	1.313	0.788	49.7	20.2	37 W	30*	12*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
337118 1999 TX_2									*(continuation)*
	h m	° ′			°	m	°	°	°
4 21	23 37.83	+28 45.6	1.380	0.821	46.2	20.3	36 W	29*	13*
4 26	23 53.22	+28 18.9	1.438	0.857	43.4	20.4	36 W	28*	14*
5 1	0 7.80	+27 46.3	1.489	0.895	41.3	20.5	36 W	27*	16*
5 6	0 21.66	+27 9.5	1.531	0.933	39.8	20.7	36 W	26*	18*
5 11	0 34.88	+26 29.3	1.565	0.973	38.7	20.8	37 W	26*	19*
5 16	0 47.53	+25 46.2	1.591	1.013	38.1	20.9	38 W	25*	21*
5 21	0 59.66	+25 0.5	1.610	1.052	37.9	21.0	40 W	25*	24*
5 26	1 11.33	+24 12.0	1.622	1.092	37.8	21.1	41 W	25*	26*
5 31	1 22.58	+23 20.6	1.628	1.131	38.0	21.2	43 W	25*	28*
6 5	1 33.44	+22 26.1	1.627	1.169	38.3	21.2	46 W	26*	30*
6 10	1 43.94	+21 28.1	1.621	1.206	38.7	21.3	48 W	26*	33*
6 15	1 54.10	+20 26.1	1.609	1.243	39.2	21.4	51 W	27*	35*
6 20	2 3.92	+19 19.4	1.592	1.279	39.6	21.4	53 W	28*	37*
6 25	2 13.42	+18 7.4	1.570	1.314	40.1	21.5	56 W	29*	40*
6 30	2 22.60	+16 49.6	1.544	1.347	40.4	21.5	59 W	31*	42*
124357 2001 QH_{129}									
12 27	12 43.09	− 2 45.4	2.213	2.333	24.8	20.3	84 W	42	57*
1 6	12 52.97	− 2 29.6	2.111	2.366	24.5	20.2	92 W	43	62*
1 16	13 0.87	− 1 53.3	2.008	2.399	23.7	20.1	101 W	43	65*
1 26	13 6.49	− 0 54.4	1.909	2.431	22.3	20.0	110 W	44	65
2 5	13 9.55	+ 0 28.3	1.817	2.463	20.3	19.9	120 W	45	64
2 15	13 9.82	+ 2 14.5	1.737	2.494	17.6	19.7	130 W	47	62
2 25	13 7.26	+ 4 21.1	1.675	2.524	14.2	19.5	141 W	49	60
3 2	13 4.96	+ 5 30.1	1.652	2.539	12.4	19.5	147 W	51	58
3 7	13 2.05	+ 6 41.5	1.634	2.554	10.5	19.4	152 W	52	57
3 12	12 58.60	+ 7 54.0	1.624	2.568	8.7	19.3	157 W	53	56
3 17	12 54.71	+ 9 6.0	1.620	2.583	7.1	19.2	161 W	54	55
3 22	12 50.49	+10 15.9	1.623	2.597	5.9	19.2	164 W	55	54
3 27	12 46.09	+11 22.3	1.634	2.611	5.7	19.2	165 W	56	53
4 1	12 41.63	+12 23.8	1.652	2.624	6.3	19.3	163 W	57	52
4 6	12 37.25	+13 19.3	1.677	2.638	7.6	19.4	160 E	58	51
4 11	12 33.08	+14 8.1	1.709	2.651	9.2	19.5	155 E	59	50
4 16	12 29.22	+14 49.4	1.747	2.665	10.8	19.6	150 E	60	49
4 26	12 22.86	+15 49.4	1.841	2.690	13.9	19.9	140 E	61	48
5 6	12 18.64	+16 20.4	1.955	2.715	16.5	20.1	130 E	61	48
5 16	12 16.78	+16 25.6	2.084	2.739	18.5	20.3	121 E	61	48
5 26	12 17.23	+16 9.3	2.223	2.763	19.9	20.5	112 E	61*	48
6 5	12 19.81	+15 35.9	2.370	2.785	20.8	20.7	103 E	59*	48
6 15	12 24.26	+14 49.0	2.522	2.807	21.1	20.9	95 E	54*	49
6 25	12 30.34	+13 51.8	2.674	2.827	21.1	21.0	88 E	48*	50
7 5	12 37.79	+12 46.8	2.824	2.847	20.6	21.1	81 E	43*	51*
7 15	12 46.41	+11 36.0	2.972	2.866	19.9	21.2	74 E	38*	51*
7 25	12 56.01	+10 21.1	3.114	2.884	19.0	21.3	68 E	34*	50*
8 4	13 6.45	+ 9 3.6	3.249	2.901	17.9	21.4	61 E	31*	47*
8 14	13 17.61	+ 7 44.7	3.376	2.917	16.6	21.5	55 E	28*	43*
8 24	13 29.38	+ 6 25.5	3.493	2.932	15.1	21.5	49 E	25*	38*
89454 2001 XG									
12 27	12 43.13	+21 6.3	2.808	3.039	18.8	20.5	94 W	66	37*
1 6	12 49.00	+21 39.2	2.676	3.040	18.4	20.4	102 W	67	40*
1 16	12 52.87	+22 27.9	2.549	3.040	17.6	20.3	111 W	67	41*
1 26	12 54.46	+23 31.3	2.431	3.038	16.4	20.1	119 W	69	40
2 5	12 53.49	+24 46.7	2.326	3.036	14.8	20.0	128 W	70	39
2 10	12 51.98	+25 27.5	2.279	3.034	13.9	19.9	133 W	70	39
2 15	12 49.78	+26 9.4	2.237	3.033	12.9	19.8	137 W	71	38
2 20	12 46.89	+26 51.2	2.201	3.031	12.0	19.7	141 W	72	37
2 25	12 43.35	+27 32.0	2.170	3.028	11.1	19.7	144 W	73	36
3 2	12 39.21	+28 10.7	2.146	3.026	10.3	19.6	147 W	73	36
3 7	12 34.53	+28 46.0	2.128	3.023	9.7	19.6	149 W	74	35
3 12	12 29.41	+29 16.9	2.116	3.020	9.4	19.5	150 W	74	35
3 17	12 23.96	+29 42.3	2.111	3.016	9.4	19.5	150 W	75	34
3 22	12 18.31	+30 1.3	2.113	3.013	9.7	19.6	149 W	75	34
3 27	12 12.62	+30 13.5	2.121	3.009	10.3	19.6	147 E	75	34
4 1	12 7.01	+30 18.4	2.136	3.005	11.2	19.6	144 E	75	34
4 6	12 1.62	+30 16.0	2.157	3.001	12.2	19.7	141 E	75	34
4 11	11 56.57	+30 6.4	2.184	2.996	13.2	19.7	137 E	75	34
4 16	11 51.96	+29 49.9	2.216	2.991	14.2	19.8	133 E	75	34
4 21	11 47.89	+29 27.0	2.253	2.986	15.2	19.9	129 E	74	35
4 26	11 44.41	+28 58.3	2.295	2.981	16.2	19.9	124 E	74	35
5 6	11 39.32	+27 46.0	2.388	2.969	17.8	20.1	116 E	73	36
5 16	11 36.78	+26 18.0	2.493	2.957	19.1	20.2	107 E	71	38
5 26	11 36.69	+24 38.5	2.606	2.943	19.9	20.3	99 E	68*	39
6 5	11 38.80	+22 51.0	2.722	2.929	20.3	20.4	91 E	61*	41
6 15	11 42.82	+20 57.9	2.839	2.913	20.3	20.5	84 E	53*	43
6 25	11 48.51	+19 1.0	2.954	2.896	20.0	20.6	77 E	46*	45*
7 5	11 55.60	+17 1.4	3.065	2.879	19.4	20.6	70 E	39*	46*
7 15	12 3.88	+15 0.0	3.170	2.860	18.5	20.6	63 E	34*	45*
7 25	12 13.19	+12 57.4	3.267	2.841	17.4	20.7	57 E	29*	42*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
89454 2001 XG									*(continuation)*
	h m	° ′			°	m	°	°	°
8 4	12 23.38	+10 54.0	3.354	2.820	16.1	20.7	51 E	25*	39*
8 14	12 34.34	+ 8 50.3	3.431	2.799	14.7	20.6	44 E	21*	34*
8 24	12 45.97	+ 6 46.5	3.496	2.776	13.1	20.6	38 E	18*	29*
9 3	12 58.21	+ 4 43.0	3.549	2.753	11.4	20.6	33 E	15*	24*
9 13	13 11.02	+ 2 40.2	3.588	2.728	9.6	20.5	27 E	12*	18*
9 23	13 24.34	+ 0 38.4	3.614	2.703	7.7	20.4	21 E	9*	13*
10 3	13 38.15	− 1 22.1	3.625	2.676	5.8	20.3	16 E	7*	7*
10 13	13 52.43	− 3 20.8	3.622	2.649	4.1	20.2	11 E	4*	1*
10 23	14 7.15	− 5 17.4	3.604	2.621	2.8	20.1	7 E	1*	—
11 2	14 22.32	− 7 11.4	3.572	2.591	2.9	20.0	8 W	—	—
11 12	14 37.91	− 9 2.4	3.525	2.561	4.3	20.1	11 W	5*	—
11 22	14 53.90	−10 50.1	3.464	2.531	6.3	20.1	16 W	10*	2*
12 2	15 10.29	−12 34.1	3.389	2.499	8.4	20.1	22 W	14*	7*
12 12	15 27.06	−14 14.2	3.301	2.466	10.5	20.1	27 W	17*	13*
12 22	15 44.17	−15 50.0	3.200	2.433	12.7	20.1	33 W	19*	19*
1 1	16 1.61	−17 21.6	3.089	2.399	14.8	20.1	39 W	20*	26*
1 11	16 19.33	−18 49.0	2.967	2.364	16.9	20.0	44 W	21*	33*
1 21	16 37.30	−20 12.3	2.836	2.329	18.9	20.0	50 W	21*	40*
39741 Komm									
12 27	12 43.40	−10 4.4	2.923	2.944	19.3	21.4	82 W	35	62*
1 6	12 49.93	−10 54.8	2.774	2.941	19.5	21.2	90 W	34	69*
1 16	12 54.83	−11 35.6	2.624	2.938	19.3	21.1	99 W	33	75*
1 26	12 57.83	−12 4.9	2.476	2.933	18.6	21.0	108 W	33	76
2 5	12 58.66	−12 20.7	2.335	2.927	17.4	20.8	118 W	33	76
2 15	12 57.11	−12 21.0	2.205	2.919	15.4	20.6	128 W	33	76
2 25	12 53.10	−12 3.8	2.090	2.911	12.9	20.4	139 W	33	76
3 7	12 46.77	−11 28.4	1.996	2.901	9.7	20.1	151 W	34	75
3 17	12 38.49	−10 35.1	1.927	2.891	6.0	19.9	162 W	34	75
3 27	12 29.00	− 9 27.2	1.886	2.879	2.5	19.6	173 W	36	73
4 1	12 24.09	− 8 49.4	1.877	2.872	2.1	19.6	174 E	36	73
4 6	12 19.23	− 8 10.1	1.875	2.865	3.5	19.7	170 E	37	72
4 11	12 14.54	− 7 30.3	1.881	2.858	5.4	19.8	164 E	37	72
4 16	12 10.14	− 6 50.9	1.894	2.851	7.4	19.9	158 E	38	71
4 21	12 6.14	− 6 12.8	1.913	2.843	9.4	20.0	153 E	39	70
4 26	12 2.62	− 5 37.0	1.939	2.835	11.2	20.1	147 E	39	70
5 6	11 57.23	− 4 34.2	2.008	2.819	14.5	20.3	136 E	40	69
5 16	11 54.25	− 3 46.3	2.095	2.801	17.2	20.5	125 E	41	68
5 26	11 53.75	− 3 15.0	2.196	2.782	19.3	20.6	115 E	41*	67
6 5	11 55.58	− 3 0.2	2.305	2.761	20.7	20.7	106 E	39*	67
6 15	11 59.54	− 3 1.0	2.420	2.740	21.6	20.9	97 E	35*	67
6 25	12 5.38	− 3 16.0	2.535	2.717	22.0	21.0	89 E	31*	67
7 5	12 12.88	− 3 43.6	2.648	2.693	21.9	21.0	82 E	26*	67*
7 15	12 21.82	− 4 22.0	2.757	2.668	21.5	21.1	74 E	22*	64*
7 25	12 32.03	− 5 9.9	2.860	2.642	20.8	21.1	67 E	18*	59*
8 4	12 43.36	− 6 5.5	2.955	2.614	19.8	21.1	61 E	15*	54*
8 14	12 55.70	− 7 7.7	3.040	2.586	18.6	21.1	54 E	13*	48*
8 24	13 8.97	− 8 15.0	3.115	2.556	17.2	21.1	48 E	11*	42*
9 3	13 23.08	− 9 26.3	3.178	2.525	15.6	21.1	42 E	9*	36*
9 13	13 38.02	−10 40.4	3.230	2.493	13.9	21.0	36 E	7*	30*
9 23	13 53.74	−11 55.9	3.268	2.460	12.0	21.0	31 E	5*	25*
10 3	14 10.23	−13 11.7	3.294	2.426	10.1	20.9	25 E	4*	19*
10 13	14 27.49	−14 26.7	3.307	2.391	8.1	20.8	20 E	2*	14*
10 23	14 45.51	−15 39.4	3.306	2.355	6.0	20.6	14 E	—	8*
11 2	15 4.29	−16 48.7	3.293	2.317	3.8	20.5	9 E	—	3*
11 12	15 23.84	−17 53.1	3.266	2.279	1.6	20.3	4 E	—	—
11 22	15 44.14	−18 51.3	3.227	2.240	0.8	20.1	2 W	—	—
12 2	16 5.20	−19 41.8	3.176	2.200	3.0	20.2	7 W	—	—
12 12	16 27.00	−20 23.2	3.114	2.159	5.3	20.3	12 W	3*	3*
12 22	16 49.50	−20 54.0	3.042	2.118	7.6	20.3	17 W	6*	7*
1 1	17 12.67	−21 12.9	2.961	2.076	9.9	20.3	21 W	9*	12*
1 11	17 36.45	−21 18.5	2.871	2.033	12.2	20.3	26 W	11*	17*
1 21	18 0.77	−21 9.5	2.774	1.990	14.5	20.2	30 W	12*	22*
1943 Anteros									
12 27	12 44.28	−16 27.8	1.014	1.270	49.5	18.0	79 W	29	65*
1 1	13 1.68	−18 36.5	0.978	1.251	50.5	17.9	79 W	26	67*
1 6	13 19.91	−20 43.1	0.944	1.233	51.6	17.8	80 W	24	69*
1 11	13 39.05	−22 46.3	0.913	1.215	52.7	17.8	80 W	22	71*
1 16	13 59.15	−24 44.0	0.883	1.198	53.9	17.7	80 W	20	72*
1 21	14 20.26	−26 34.1	0.857	1.182	55.0	17.6	80 W	18	73*
1 26	14 42.41	−28 14.4	0.833	1.166	56.1	17.6	79 W	17	73*
1 31	15 5.59	−29 42.7	0.811	1.150	57.2	17.5	79 W	15	73*
2 5	15 29.73	−30 56.4	0.792	1.136	58.3	17.5	79 W	14	73*
2 10	15 54.68	−31 53.5	0.775	1.123	59.3	17.4	78 W	13	72*
2 15	16 20.25	−32 31.9	0.761	1.111	60.3	17.4	78 W	12*	72*
2 20	16 46.20	−32 50.2	0.749	1.100	61.2	17.4	77 W	12*	71*
2 25	17 12.24	−32 47.8	0.739	1.090	62.1	17.3	77 W	12*	70*
3 2	17 38.10	−32 24.7	0.731	1.082	62.8	17.3	76 W	12*	70*
3 7	18 3.50	−31 41.5	0.725	1.075	63.4	17.3	76 W	12*	69*
3 12	18 28.19	−30 39.5	0.721	1.070	63.9	17.3	75 W	12*	69*

1943 Anteros *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
3 17	18 51.97	−29 20.7	0.719	1.067	64.3	17.3	75 W	13*	69*
3 22	19 14.70	−27 47.0	0.718	1.065	64.6	17.3	75 W	13*	69*
3 27	19 36.32	−26 0.9	0.718	1.065	64.7	17.3	75 W	14*	69*
4 1	19 56.82	−24 4.5	0.719	1.066	64.7	17.3	75 W	15*	69*
4 6	20 16.21	−22 0.2	0.720	1.069	64.6	17.3	75 W	16*	69*
4 11	20 34.50	−19 49.8	0.722	1.074	64.4	17.3	75 W	17*	69*
4 16	20 51.75	−17 35.2	0.725	1.080	64.1	17.3	75 W	19*	69*
4 21	21 8.02	−15 18.1	0.727	1.088	63.6	17.3	76 W	20*	69*
4 26	21 23.36	−12 59.7	0.729	1.097	63.1	17.4	77 W	21*	69*
5 1	21 37.86	−10 41.1	0.731	1.108	62.6	17.4	77 W	23*	69*
5 6	21 51.55	− 8 23.3	0.732	1.119	61.9	17.4	78 W	25*	68*
5 16	22 16.67	− 3 53.0	0.732	1.146	60.4	17.4	80 W	29*	66*
5 26	22 38.96	+ 0 26.3	0.729	1.177	58.7	17.4	83 W	33*	63*
6 5	22 58.55	+ 4 31.7	0.721	1.211	56.8	17.4	87 W	38*	59
6 15	23 15.35	+ 8 20.7	0.709	1.246	54.6	17.3	91 W	44*	56
6 25	23 29.10	+11 50.7	0.692	1.283	52.0	17.3	96 W	51*	52
7 5	23 39.46	+14 59.5	0.671	1.321	49.0	17.2	101 W	57*	49
7 10	23 43.17	+16 24.7	0.659	1.340	47.3	17.1	104 W	60*	48
7 15	23 45.78	+17 42.8	0.647	1.359	45.5	17.1	108 W	62*	46
7 20	23 47.23	+18 52.9	0.634	1.378	43.4	17.0	111 W	64	45
7 25	23 47.45	+19 54.0	0.622	1.397	41.2	16.9	115 W	65	44
7 30	23 46.36	+20 45.1	0.609	1.416	38.8	16.8	119 W	66	43
8 4	23 43.91	+21 24.4	0.598	1.434	36.1	16.7	124 W	66	43
8 9	23 40.09	+21 50.3	0.588	1.453	33.3	16.7	128 W	67	42
8 14	23 34.97	+22 1.2	0.579	1.470	30.2	16.6	133 W	67	42
8 19	23 28.72	+21 55.8	0.573	1.488	27.1	16.5	138 W	67	42
8 24	23 21.54	+21 33.2	0.570	1.505	23.9	16.4	143 W	67	42
8 29	23 13.72	+20 53.4	0.570	1.522	20.7	16.3	148 W	66	43
9 3	23 5.62	+19 57.1	0.573	1.539	17.9	16.3	152 W	65	44
9 8	22 57.61	+18 46.2	0.581	1.555	15.7	16.2	155 E	64	45
9 13	22 50.07	+17 23.7	0.594	1.571	14.4	16.3	157 E	62	47
9 18	22 43.34	+15 53.6	0.611	1.586	14.3	16.3	157 E	61	48
9 23	22 37.65	+14 19.8	0.634	1.601	15.3	16.5	155 E	59	50
9 28	22 33.12	+12 45.8	0.660	1.615	17.0	16.6	152 E	58	51
10 3	22 29.85	+11 14.8	0.692	1.629	19.0	16.8	148 E	56	53
10 8	22 27.86	+ 9 49.3	0.727	1.642	21.2	17.0	144 E	55	54
10 13	22 27.11	+ 8 31.1	0.766	1.655	23.2	17.2	139 E	54	55
10 18	22 27.53	+ 7 21.5	0.809	1.667	25.2	17.4	135 E	52	57
10 23	22 29.02	+ 6 20.9	0.855	1.679	26.9	17.6	130 E	51	58
11 2	22 34.80	+ 4 46.9	0.955	1.701	29.7	17.9	122 E	50	59
11 12	22 43.73	+ 3 47.2	1.063	1.721	31.7	18.3	114 E	49	60
11 22	22 55.10	+ 3 18.2	1.177	1.738	33.0	18.5	107 E	48	61*
12 2	23 8.36	+ 3 15.2	1.295	1.754	33.7	18.8	100 E	48	59*
12 12	23 23.12	+ 3 34.1	1.415	1.767	33.8	19.0	93 E	49	56*
12 22	23 39.05	+ 4 11.1	1.536	1.777	33.5	19.2	87 E	49	51*
1 1	23 55.91	+ 5 2.7	1.654	1.786	32.9	19.3	81 E	50	46*
1 11	0 13.57	+ 6 6.0	1.771	1.792	32.0	19.5	75 E	51*	42*
1 21	0 31.91	+ 7 18.2	1.882	1.795	30.9	19.6	70 E	51*	37*

100952 1998 QR_5

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 45.02	−16 35.9	2.417	2.425	23.4	20.7	79 W	28	65*
1 6	12 52.47	−18 45.6	2.317	2.457	23.5	20.7	86 W	26	74*
1 16	12 57.88	−20 49.2	2.215	2.488	23.2	20.6	94 W	24	83*
1 26	13 0.90	−22 45.1	2.114	2.519	22.4	20.5	103 W	22	87
2 5	13 1.21	−24 30.7	2.018	2.549	21.1	20.4	111 W	20	89
2 15	12 58.52	−26 2.4	1.930	2.578	19.2	20.3	121 W	19	90
2 25	12 52.73	−27 15.2	1.856	2.606	16.9	20.1	130 W	18	89
3 2	12 48.73	−27 43.0	1.825	2.620	15.5	20.1	135 W	17	88
3 7	12 44.07	−28 4.1	1.799	2.634	14.2	20.0	140 W	17	88
3 12	12 38.85	−28 18.2	1.778	2.647	12.7	19.9	144 W	17	88
3 17	12 33.18	−28 24.6	1.763	2.660	11.4	19.9	148 W	17	88
3 22	12 27.22	−28 23.4	1.754	2.673	10.2	19.8	152 W	17	88
3 27	12 21.13	−28 14.8	1.752	2.686	9.3	19.8	154 E	17	88
4 1	12 15.09	−27 59.3	1.756	2.698	8.8	19.8	156 E	17	88
4 6	12 9.24	−27 37.5	1.767	2.711	8.8	19.8	156 E	17	88
4 11	12 3.75	−27 10.4	1.785	2.723	9.2	19.8	154 E	18	89
4 16	11 58.74	−26 39.2	1.810	2.734	10.0	19.9	152 E	18	89
4 21	11 54.32	−26 5.1	1.840	2.746	11.1	20.0	148 E	19	90
4 26	11 50.57	−25 29.5	1.877	2.757	12.3	20.1	144 E	20	89
5 1	11 47.53	−24 53.4	1.919	2.768	13.5	20.2	140 E	20	89
5 6	11 45.21	−24 17.9	1.966	2.779	14.7	20.3	136 E	21	88
5 11	11 43.63	−23 43.8	2.017	2.790	15.8	20.4	131 E	21	88
5 16	11 42.76	−23 12.0	2.073	2.800	16.8	20.5	127 E	22	87
5 21	11 42.59	−22 43.0	2.133	2.810	17.7	20.6	123 E	22*	87
5 26	11 43.07	−22 17.2	2.195	2.820	18.4	20.7	118 E	22*	86
5 31	11 44.16	−21 54.9	2.261	2.830	19.1	20.8	114 E	22*	86
6 5	11 45.83	−21 36.1	2.328	2.840	19.6	20.9	110 E	21*	86
6 10	11 48.02	−21 21.1	2.397	2.849	20.0	21.0	106 E	19*	85
6 15	11 50.71	−21 9.8	2.468	2.858	20.3	21.1	102 E	18*	85

100952 1998 QR_5 *(continuation)*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
6 20	11 53.85	−21 2.1	2.540	2.866	20.5	21.1	98 E	16*	85
6 25	11 57.41	−20 58.0	2.612	2.875	20.6	21.2	94 E	14*	85
6 30	12 1.33	−20 57.2	2.684	2.883	20.6	21.3	91 E	13*	84*
7 5	12 5.61	−20 59.6	2.757	2.891	20.6	21.3	87 E	11*	81*
7 10	12 10.20	−21 5.1	2.830	2.899	20.4	21.4	84 E	9*	78*
7 15	12 15.09	−21 13.6	2.901	2.906	20.2	21.4	80 E	7*	74*
7 20	12 20.25	−21 24.7	2.972	2.914	19.8	21.5	77 E	6*	70*

120482 1992 *TA*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 46.55	+20 10.9	1.056	1.479	41.6	19.4	93 W	65	38*
1 6	12 55.08	+17 48.7	0.998	1.513	39.9	19.3	100 W	63	44*
1 16	12 59.27	+15 36.2	0.938	1.548	37.3	19.1	107 W	61	48*
1 26	12 58.39	+13 30.9	0.878	1.585	33.8	18.9	116 W	59	50
2 5	12 51.73	+11 29.4	0.824	1.622	29.0	18.7	127 W	56	53
2 15	12 38.86	+ 9 27.8	0.781	1.660	22.8	18.4	139 W	54	55
2 25	12 20.26	+ 7 23.0	0.755	1.698	15.2	18.2	153 W	52	57
3 2	12 9.37	+ 6 19.1	0.751	1.717	11.1	18.0	161 W	51	58
3 7	11 57.89	+ 5 14.9	0.754	1.737	6.8	17.9	168 W	50	59
3 12	11 46.23	+ 4 11.2	0.763	1.756	2.6	17.7	175 W	49	60
3 17	11 34.86	+ 3 8.7	0.780	1.774	1.9	17.7	177 E	48	61
3 22	11 24.19	+ 2 8.1	0.804	1.793	5.8	18.1	170 E	47	62
3 27	11 14.54	+ 1 10.1	0.835	1.812	9.5	18.3	163 E	46	63
4 6	10 59.08	− 0 37.2	0.916	1.849	16.0	18.8	149 E	44	65
4 16	10 49.15	− 2 13.5	1.017	1.885	21.0	19.2	138 E	43	66
4 26	10 44.45	− 3 42.3	1.134	1.921	24.6	19.6	128 E	41	68
5 6	10 44.13	− 5 6.8	1.263	1.955	27.0	20.0	118 E	40	69
5 16	10 47.36	− 6 30.1	1.399	1.988	28.5	20.3	110 E	38*	71
5 26	10 53.40	− 7 54.6	1.540	2.021	29.3	20.5	103 E	33*	72
6 5	11 1.62	− 9 21.3	1.684	2.052	29.5	20.8	96 E	28*	73
6 15	11 11.59	−10 51.2	1.828	2.082	29.2	21.0	89 E	23*	75*
6 25	11 22.95	−12 24.5	1.971	2.110	28.6	21.2	83 E	17*	74*
7 5	11 35.44	−14 1.3	2.111	2.138	27.7	21.3	78 E	12*	71*
7 15	11 48.89	−15 41.4	2.248	2.164	26.6	21.4	72 E	8*	66*

404958 1998 DF_{11}

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 47.59	− 3 40.8	1.116	1.395	44.4	20.1	83 W	41	57*
1 6	13 0.64	− 9 52.1	1.051	1.412	44.1	20.0	88 W	35	67*
1 16	13 11.45	−16 22.4	0.990	1.432	43.3	19.8	93 W	29	78*
1 26	13 19.38	−23 9.8	0.935	1.455	42.0	19.7	99 W	22	87
1 31	13 22.03	−26 38.6	0.910	1.468	41.1	19.6	101 W	18	89
2 5	13 23.60	−30 9.3	0.888	1.481	40.2	19.6	104 W	15	86
2 10	13 23.92	−33 40.3	0.868	1.495	39.1	19.5	107 W	11	82
2 15	13 22.78	−37 9.4	0.852	1.509	37.9	19.5	110 W	8	79
2 20	13 19.97	−40 33.6	0.838	1.524	36.7	19.4	113 W	4	75
2 25	13 15.28	−43 49.9	0.828	1.539	35.5	19.4	115 W	1	72
3 2	13 8.51	−46 54.3	0.822	1.555	34.3	19.4	118 W	—	69
3 7	12 59.53	−49 42.9	0.819	1.571	33.2	19.3	120 W	—	66
3 12	12 48.29	−52 11.3	0.820	1.587	32.1	19.3	122 W	—	64
3 17	12 35.01	−54 15.5	0.824	1.604	31.2	19.3	123 W	—	62
3 19	12 29.21	−54 57.7	0.827	1.610	30.9	19.3	124 W	—	61
3 21	12 23.19	−55 35.5	0.830	1.617	30.6	19.4	124 W	—	60
3 23	12 17.01	−56 8.7	0.834	1.624	30.3	19.4	125 W	—	60
3 25	12 10.70	−56 37.3	0.839	1.631	30.0	19.4	125 E	—	59
3 27	12 4.34	−57 1.4	0.844	1.637	29.8	19.4	125 E	—	59
3 29	11 57.96	−57 21.0	0.849	1.644	29.6	19.4	126 E	—	59
3 31	11 51.64	−57 36.1	0.855	1.651	29.4	19.4	126 E	—	58
4 2	11 45.42	−57 47.0	0.862	1.658	29.3	19.5	126 E	—	58
4 4	11 39.36	−57 53.8	0.869	1.665	29.2	19.5	126 E	—	58
4 6	11 33.52	−57 56.8	0.876	1.672	29.1	19.5	126 E	—	58
4 8	11 27.94	−57 56.1	0.884	1.679	29.0	19.5	126 E	—	58
4 10	11 22.66	−57 52.0	0.893	1.685	28.9	19.6	126 E	—	58
4 12	11 17.71	−57 44.8	0.902	1.692	28.9	19.6	125 E	—	58
4 14	11 13.12	−57 34.8	0.911	1.699	28.9	19.6	125 E	—	58
4 16	11 8.92	−57 22.4	0.921	1.706	28.9	19.6	125 E	—	59
4 21	11 0.14	−56 42.4	0.947	1.724	28.9	19.7	124 E	—	59
4 26	10 53.84	−55 53.2	0.976	1.741	29.0	19.8	123 E	—	60
5 1	10 49.91	−54 58.4	1.007	1.759	29.2	19.9	122 E	—	61
5 6	10 48.14	−54 0.8	1.040	1.776	29.4	20.0	120 E	—	62
5 11	10 48.33	−53 2.7	1.075	1.793	29.6	20.1	119 E	—	63
5 16	10 50.23	−52 5.8	1.111	1.810	29.8	20.2	117 E	—	64
5 21	10 53.64	−51 11.5	1.149	1.828	30.0	20.3	115 E	—	65
5 26	10 58.34	−50 20.7	1.189	1.845	30.2	20.4	114 E	—	66
5 31	11 4.15	−49 33.8	1.231	1.861	30.4	20.5	112 E	—	66
6 5	11 10.92	−48 50.8	1.274	1.878	30.5	20.6	110 E	—	67
6 10	11 18.53	−48 12.1	1.318	1.895	30.7	20.7	108 E	—	68
6 15	11 26.88	−47 37.7	1.363	1.911	30.7	20.8	106 E	—	68
6 20	11 35.86	−47 7.4	1.410	1.927	30.8	20.9	104 E	—	69
6 25	11 45.38	−46 41.1	1.458	1.943	30.8	21.0	102 E	—	69*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
						(continuation)			
		404958 1998 DF_{11}							
	h m	° ′			°	m	°	°	°
6 30	11 55.38	−46 18.4	1.507	1.959	30.7	21.1	100 E	—	69*
7 5	12 5.81	−45 59.1	1.557	1.975	30.7	21.2	98 E	—	69*
7 10	12 16.61	−45 42.8	1.608	1.990	30.5	21.2	96 E	—	68*
7 15	12 27.75	−45 29.4	1.660	2.005	30.4	21.3	94 E	—	68*
7 20	12 39.18	−45 18.5	1.713	2.020	30.2	21.4	92 E	—	67*
7 25	12 50.87	−45 9.7	1.767	2.034	30.0	21.5	90 E	—	66*
		32122 2000 LD_{10}							
12 27	12 48.05	+10 51.2	2.962	3.101	18.5	20.2	89 W	56	45*
1 6	12 54.61	+11 3.5	2.809	3.090	18.4	20.0	97 W	56	50*
1 16	12 59.55	+11 30.6	2.659	3.079	17.9	19.9	106 W	57	52*
1 26	13 2.57	+12 13.3	2.516	3.067	16.9	19.7	115 W	57	52
2 5	13 3.44	+13 10.7	2.383	3.053	15.4	19.6	125 W	58	51
2 15	13 1.92	+14 21.3	2.265	3.039	13.4	19.4	134 W	59	50
2 25	12 57.95	+15 41.1	2.167	3.024	11.1	19.2	144 W	61	48
3 2	12 55.07	+16 22.6	2.126	3.016	9.9	19.1	148 W	61	48
3 7	12 51.64	+17 4.0	2.092	3.007	8.8	19.0	152 W	62	47
3 12	12 47.72	+17 44.4	2.064	2.999	7.8	18.9	156 W	63	46
3 17	12 43.38	+18 22.6	2.044	2.990	7.1	18.9	158 W	63	46
3 22	12 38.73	+18 57.5	2.030	2.981	6.9	18.8	159 W	64	45
3 27	12 33.88	+19 28.4	2.023	2.972	7.3	18.8	158 W	64	45
4 1	12 28.95	+19 54.3	2.024	2.962	8.0	18.9	155 E	65	44
4 6	12 24.05	+20 14.7	2.031	2.952	9.1	18.9	152 E	65	44
4 11	12 19.31	+20 29.1	2.045	2.942	10.4	19.0	148 E	65	44
4 16	12 14.85	+20 37.3	2.065	2.932	11.8	19.0	143 E	66	43
4 26	12 7.14	+20 35.1	2.121	2.911	14.4	19.2	134 E	66	43
5 6	12 1.49	+20 9.9	2.196	2.889	16.7	19.3	124 E	65	44
5 16	11 58.20	+19 24.8	2.285	2.866	18.6	19.4	115 E	64	45
5 26	11 57.33	+18 23.3	2.383	2.841	20.0	19.6	106 E	63*	46
6 5	11 58.73	+17 8.9	2.488	2.816	20.9	19.7	98 E	58*	47
6 15	12 2.23	+15 44.3	2.594	2.790	21.3	19.7	90 E	52*	48
6 25	12 7.59	+14 11.7	2.700	2.764	21.4	19.8	83 E	45*	50
7 5	12 14.55	+12 32.9	2.803	2.736	21.1	19.9	76 E	39*	51*
7 15	12 22.94	+10 49.0	2.900	2.707	20.5	19.9	69 E	34*	51*
7 25	12 32.55	+ 9 1.3	2.991	2.677	19.7	19.9	62 E	29*	48*
8 4	12 43.26	+ 7 10.4	3.073	2.647	18.6	19.9	56 E	25*	45*
8 14	12 54.94	+ 5 17.2	3.145	2.615	17.3	19.9	50 E	22*	41*
8 24	13 7.50	+ 3 22.3	3.208	2.583	15.9	19.9	44 E	19*	36*
9 3	13 20.88	+ 1 26.4	3.259	2.550	14.3	19.8	39 E	16*	31*
9 13	13 35.04	− 0 29.8	3.298	2.516	12.6	19.7	33 E	14*	25*
9 23	13 49.93	− 2 25.6	3.326	2.482	10.8	19.7	28 E	12*	20*
10 3	14 5.55	− 4 20.4	3.341	2.446	9.0	19.6	22 E	9*	14*
10 13	14 21.89	− 6 13.5	3.344	2.410	7.1	19.5	17 E	7*	9*
10 23	14 38.93	− 8 3.9	3.335	2.373	5.2	19.3	13 E	5*	3*
11 2	14 56.70	− 9 50.8	3.313	2.336	3.6	19.2	8 E	2*	—
11 12	15 15.20	−11 33.5	3.280	2.298	2.7	19.1	6 E	—	—
11 22	15 34.43	−13 10.9	3.235	2.260	3.4	19.0	8 W	1*	—
12 2	15 54.40	−14 42.1	3.179	2.221	5.1	19.1	12 W	5*	—
12 12	16 15.11	−16 6.2	3.113	2.182	7.1	19.1	16 W	9*	3*
12 22	16 36.55	−17 22.2	3.037	2.143	9.2	19.1	20 W	11*	9*
1 1	16 58.72	−18 29.3	2.952	2.104	11.4	19.1	25 W	13*	14*
1 11	17 21.58	−19 26.7	2.860	2.064	13.7	19.0	30 W	14*	20*
1 21	17 45.11	−20 13.5	2.762	2.025	15.9	19.0	34 W	15*	25*
		27351 2000 DO_{73}							
12 27	12 48.23	− 4 38.2	2.859	2.900	19.6	20.2	83 W	40	57*
1 6	12 55.21	− 5 27.7	2.708	2.893	19.9	20.1	91 W	40	64*
1 16	13 0.60	− 6 7.7	2.556	2.886	19.6	19.9	99 W	39	69*
1 26	13 4.12	− 6 36.7	2.407	2.878	18.9	19.8	109 W	38	71
2 5	13 5.49	− 6 53.3	2.265	2.868	17.6	19.6	118 W	38	71
2 15	13 4.47	− 6 56.3	2.134	2.858	15.6	19.4	129 W	38	71
2 25	13 0.93	− 6 44.9	2.019	2.847	13.0	19.2	140 W	38	71
3 7	12 54.96	− 6 19.1	1.924	2.835	9.7	18.9	151 W	39	70
3 17	12 46.88	− 5 40.4	1.854	2.822	5.8	18.7	163 W	39	70
3 27	12 37.39	− 4 52.3	1.812	2.808	1.5	18.3	176 W	40	69
4 1	12 32.40	− 4 26.3	1.802	2.801	0.8	18.2	178 E	41	68
4 6	12 27.41	− 3 59.9	1.799	2.793	3.0	18.4	172 E	41	68
4 11	12 22.54	− 3 34.0	1.804	2.785	5.2	18.5	166 E	41	68
4 16	12 17.94	− 3 9.4	1.815	2.777	7.3	18.6	159 E	42	67
4 26	12 9.94	− 2 26.5	1.858	2.760	11.3	18.8	148 E	43	66
5 6	12 4.05	− 1 55.7	1.924	2.743	14.7	19.0	136 E	43	66
5 16	12 0.61	− 1 39.3	2.007	2.724	17.5	19.2	126 E	43	66
5 26	11 59.71	− 1 38.2	2.104	2.705	19.7	19.4	116 E	43*	66
6 5	12 1.24	− 1 51.9	2.210	2.685	21.2	19.5	107 E	41*	66
6 15	12 4.99	− 2 19.3	2.321	2.663	22.2	19.6	98 E	36*	66
6 25	12 10.72	− 2 59.0	2.433	2.641	22.6	19.7	90 E	32*	67
7 5	12 18.18	− 3 49.6	2.544	2.619	22.7	19.8	83 E	27*	67*
7 15	12 27.17	− 4 49.5	2.652	2.595	22.3	19.9	76 E	23*	65*
7 25	12 37.50	− 5 57.5	2.754	2.570	21.6	19.9	69 E	19*	61*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
						(continuation)			
		27351 2000 DO_{73}							
	h m	° ′			°	m	°	°	°
8 4	12 49.01	− 7 12.1	2.848	2.545	20.7	19.9	63 E	15*	56*
8 14	13 1.60	− 8 32.3	2.935	2.519	19.6	19.9	56 E	13*	50*
8 24	13 15.18	− 9 56.9	3.012	2.492	18.2	19.9	50 E	10*	44*
9 3	13 29.67	−11 24.5	3.080	2.465	16.7	19.9	45 E	8*	39*
9 13	13 45.05	−12 54.3	3.136	2.436	15.0	19.9	39 E	6*	33*
9 23	14 1.28	−14 25.0	3.181	2.407	13.3	19.8	33 E	5*	27*
10 3	14 18.35	−15 55.3	3.215	2.378	11.4	19.7	28 E	3*	22*
10 13	14 36.25	−17 24.2	3.237	2.348	9.4	19.6	23 E	1*	17*
10 23	14 54.99	−18 50.2	3.247	2.317	7.4	19.5	17 E	—	11*
11 2	15 14.55	−20 12.2	3.246	2.286	5.3	19.4	12 E	—	6*
11 12	15 34.96	−21 28.6	3.233	2.255	3.2	19.2	7 E	—	1*
11 22	15 56.18	−22 38.2	3.208	2.223	1.3	19.1	3 E	—	—
12 2	16 18.20	−23 39.4	3.174	2.191	1.7	19.0	4 W	—	—
12 12	16 40.99	−24 30.9	3.128	2.158	3.7	19.1	8 W	—	2*
12 22	17 4.49	−25 11.2	3.074	2.126	5.9	19.1	13 W	1*	6*
1 1	17 28.63	−25 39.2	3.010	2.093	8.1	19.2	17 W	3*	10*
1 11	17 53.32	−25 53.6	2.939	2.061	10.3	19.2	22 W	5*	15*
1 21	18 18.45	−25 53.6	2.860	2.028	12.5	19.2	27 W	6*	20*
		231700 1998 SU_{12}							
12 27	12 48.38	− 0 9.7	2.398	2.498	23.1	21.4	84 W	45	54*
1 6	12 57.40	+ 0 7.8	2.288	2.529	22.9	21.3	92 W	45	59*
1 16	13 4.52	+ 0 44.5	2.179	2.558	22.2	21.2	101 W	46	63*
1 26	13 9.48	+ 1 41.9	2.074	2.587	20.9	21.1	110 W	47	62
2 5	13 12.00	+ 3 0.7	1.976	2.615	19.0	20.9	120 W	48	61
2 15	13 11.88	+ 4 40.3	1.891	2.642	16.5	20.8	130 W	50	59
2 25	13 9.06	+ 6 37.2	1.824	2.668	13.5	20.6	141 W	52	57
3 7	13 3.72	+ 8 45.3	1.779	2.693	10.1	20.5	152 W	54	55
3 12	13 0.23	+ 9 50.7	1.766	2.705	8.5	20.4	156 W	55	54
3 17	12 56.31	+10 55.4	1.760	2.717	7.1	20.3	160 W	56	53
3 22	12 52.07	+11 57.8	1.761	2.729	6.2	20.3	163 W	57	52
3 27	12 47.63	+12 56.8	1.770	2.741	6.0	20.3	163 W	58	51
4 1	12 43.13	+13 51.0	1.786	2.752	6.5	20.4	162 W	59	50
4 6	12 38.67	+14 39.6	1.808	2.763	7.7	20.4	158 E	60	49
4 11	12 34.39	+15 21.8	1.838	2.774	9.1	20.5	154 E	60	49
4 16	12 30.40	+15 57.1	1.874	2.785	10.6	20.7	149 E	61	48
4 21	12 26.81	+16 25.4	1.917	2.796	12.1	20.8	144 E	61	48
4 26	12 23.67	+16 46.6	1.964	2.806	13.5	20.9	139 E	62	47
5 1	12 21.06	+17 1.1	2.017	2.816	14.8	21.0	134 E	62	47
5 6	12 18.99	+17 9.2	2.074	2.826	16.0	21.1	130 E	62	47
5 11	12 17.50	+17 11.2	2.135	2.835	17.0	21.2	125 E	62	47
5 16	12 16.59	+17 7.7	2.199	2.844	17.9	21.3	120 E	62	47
5 21	12 16.25	+16 59.2	2.267	2.854	18.7	21.4	116 E	62	47
		217251 2003 UM_{25}							
12 27	12 48.68	−12 18.9	2.445	2.463	23.1	21.5	79 W	33	62*
1 6	12 59.29	−13 41.1	2.291	2.440	23.7	21.4	87 W	31	70*
1 16	13 8.65	−14 56.1	2.136	2.416	24.0	21.2	94 W	30	77*
1 26	13 16.45	−16 2.2	1.982	2.391	23.7	21.0	102 W	29	80
2 5	13 22.33	−16 57.4	1.832	2.365	23.0	20.8	111 W	28	81
2 15	13 25.87	−17 39.0	1.689	2.339	21.6	20.5	119 W	27	82
2 25	13 26.69	−18 3.7	1.556	2.311	19.4	20.3	129 W	27	82
3 7	13 24.50	−18 8.1	1.437	2.283	16.5	20.0	139 W	27	82
3 17	13 19.20	−17 48.1	1.336	2.254	12.7	19.6	150 W	27	82
3 27	13 11.12	−17 1.6	1.256	2.224	8.3	19.3	161 W	28	81
4 1	13 6.29	−16 28.5	1.225	2.209	6.1	19.1	166 W	29	80
4 6	13 1.12	−15 49.4	1.200	2.193	4.3	19.0	171 W	29	80
4 11	12 55.78	−15 5.2	1.182	2.178	4.0	18.9	171 E	30	79
4 16	12 50.48	−14 17.0	1.171	2.162	5.5	19.0	168 E	31	78
4 21	12 45.40	−13 26.4	1.166	2.147	7.9	19.0	163 E	32	77
4 26	12 40.73	−12 35.0	1.167	2.131	10.5	19.1	157 E	32	77
5 1	12 36.62	−11 44.3	1.174	2.115	13.1	19.2	152 E	33	76
5 6	12 33.20	−10 55.6	1.186	2.099	15.6	19.3	146 E	34	75
5 11	12 30.55	−10 10.4	1.203	2.083	18.0	19.4	140 E	35	74
5 16	12 28.75	− 9 29.7	1.224	2.067	20.2	19.5	135 E	36	73
5 26	12 27.79	− 8 24.5	1.277	2.034	24.1	19.7	125 E	37	72
6 5	12 30.26	− 7 42.8	1.341	2.001	27.2	19.9	116 E	36*	72
6 15	12 35.92	− 7 24.9	1.410	1.968	29.5	20.0	107 E	34*	71
6 25	12 44.44	− 7 28.9	1.484	1.935	31.2	20.1	100 E	31*	71
7 5	12 55.46	− 7 52.0	1.558	1.902	32.3	20.2	93 E	28*	72
7 15	13 8.69	− 8 31.5	1.631	1.870	32.9	20.3	87 E	25*	72*
7 25	13 23.87	− 9 24.2	1.701	1.838	33.1	20.4	81 E	23*	71*
8 4	13 40.82	−10 27.0	1.769	1.807	32.9	20.4	76 E	20*	68*
8 14	13 59.40	−11 37.3	1.833	1.777	32.6	20.4	71 E	19*	64*
8 24	14 19.50	−12 52.1	1.892	1.748	31.9	20.5	66 E	17*	60*
9 3	14 41.06	−14 8.3	1.948	1.720	31.1	20.5	62 E	17*	56*
9 13	15 4.02	−15 23.3	2.000	1.693	30.2	20.5	58 E	16*	52*
9 23	15 28.33	−16 33.8	2.047	1.669	29.1	20.4	54 E	15*	48*
10 3	15 53.91	−17 37.0	2.092	1.646	27.9	20.4	50 E	15*	44*
10 13	16 20.72	−18 29.8	2.133	1.626	26.7	20.4	47 E	15*	40*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
217251 2003 UM_{25} *(continuation)*									
	h m	° ′			°	m	°	°	°
10 23	16 48.63	−19 9.3	2.172	1.608	25.3	20.4	44 E	15*	37*
11 2	17 17.48	−19 32.9	2.209	1.592	23.9	20.4	41 E	15*	33*
11 12	17 47.10	−19 38.5	2.244	1.580	22.5	20.3	38 E	15*	29*
11 22	18 17.26	−19 24.3	2.278	1.570	21.0	20.3	35 E	16*	25*
12 2	18 47.74	−18 49.5	2.313	1.564	19.4	20.3	32 E	16*	21*
12 12	19 18.28	−17 53.9	2.346	1.561	17.8	20.2	29 E	15*	17*
12 22	19 48.66	−16 38.1	2.381	1.561	16.2	20.2	26 E	15*	14*
1 1	20 18.69	−15 3.6	2.415	1.564	14.6	20.2	24 E	14*	10*
1 11	20 48.22	−13 12.3	2.450	1.571	12.9	20.2	21 E	13*	7*
1 21	21 17.13	−11 6.7	2.486	1.581	11.2	20.2	18 E	11*	4*
306866 2001 SN_{268}									
12 27	12 48.80	− 9 13.7	1.929	2.017	28.7	19.8	81 W	36	60*
1 6	12 59.58	−11 9.2	1.858	2.065	28.4	19.8	88 W	34	68*
1 16	13 8.06	−12 52.9	1.783	2.113	27.6	19.7	95 W	32	75*
1 26	13 13.91	−14 23.3	1.709	2.161	26.3	19.6	103 W	31	78
2 5	13 16.81	−15 38.8	1.638	2.209	24.4	19.5	112 W	29	80
2 15	13 16.46	−16 37.0	1.574	2.258	21.8	19.4	122 W	28	81
2 25	13 12.78	−17 15.1	1.521	2.307	18.5	19.3	132 W	28	81
3 7	13 6.01	−17 30.9	1.484	2.355	14.6	19.1	143 W	27	82
3 17	12 56.77	−17 23.1	1.467	2.403	10.3	19.0	154 W	28	81
3 22	12 51.55	−17 10.8	1.467	2.427	8.2	18.9	160 W	28	81
3 27	12 46.15	−16 53.5	1.475	2.451	6.2	18.9	165 W	28	81
4 1	12 40.74	−16 32.0	1.488	2.474	4.9	18.8	168 E	28	81
4 6	12 35.47	−16 7.1	1.509	2.498	4.5	18.9	169 E	29	80
4 11	12 30.49	−15 40.0	1.537	2.521	5.4	19.0	166 E	29	80
4 16	12 25.94	−15 11.6	1.571	2.545	7.0	19.1	162 E	30	79
4 21	12 21.93	−14 43.1	1.612	2.568	8.7	19.3	157 E	30	79
4 26	12 18.53	−14 15.5	1.659	2.591	10.5	19.4	152 E	31	78
5 1	12 15.78	−13 49.6	1.711	2.614	12.2	19.6	147 E	31	78
5 6	12 13.71	−13 26.0	1.769	2.636	13.7	19.7	142 E	32	77
5 16	12 11.58	−12 47.6	1.899	2.681	16.3	20.0	132 E	32	77
5 26	12 12.02	−12 22.9	2.045	2.726	18.3	20.3	122 E	33*	76
6 5	12 14.74	−12 12.1	2.202	2.769	19.6	20.5	114 E	31*	76
6 15	12 19.42	−12 14.6	2.368	2.812	20.4	20.7	105 E	29*	76
6 25	12 25.76	−12 29.3	2.539	2.854	20.7	20.9	97 E	25*	76
7 5	12 33.46	−12 54.5	2.713	2.895	20.6	21.1	90 E	21*	77*
7 15	12 42.31	−13 28.7	2.887	2.936	20.1	21.2	83 E	18*	74*
7 25	12 52.12	−14 10.4	3.059	2.975	19.3	21.4	76 E	14*	69*
8 4	13 2.72	−14 58.2	3.228	3.014	18.3	21.5	69 E	11*	63*
310379 1994 NZ									
12 27	12 49.97	−14 56.6	1.549	1.657	35.5	20.1	78 W	30	63*
1 1	13 2.47	−16 47.7	1.488	1.631	36.4	20.0	80 W	28	66*
1 6	13 15.36	−18 40.1	1.429	1.607	37.2	19.9	81 W	26	69*
1 11	13 28.69	−20 33.3	1.372	1.583	38.0	19.8	83 W	24	72*
1 16	13 42.49	−22 26.6	1.318	1.560	38.8	19.7	84 W	23	75*
1 21	13 56.79	−24 19.2	1.266	1.538	39.6	19.6	85 W	21	78*
1 26	14 11.64	−26 10.4	1.216	1.517	40.4	19.5	86 W	19	80*
1 31	14 27.06	−27 59.3	1.170	1.497	41.1	19.4	88 W	17	82*
2 5	14 43.09	−29 44.7	1.126	1.479	41.8	19.3	89 W	15	83*
2 10	14 59.73	−31 25.5	1.084	1.462	42.5	19.2	90 W	14	83*
2 15	15 16.95	−33 0.4	1.045	1.446	43.1	19.2	91 W	12	82*
2 20	15 34.73	−34 28.1	1.009	1.431	43.7	19.1	92 W	11	81*
2 25	15 53.02	−35 47.4	0.975	1.419	44.2	19.0	92 W	9	80*
3 2	16 11.74	−36 57.0	0.943	1.408	44.6	18.9	93 W	8	79*
3 7	16 30.76	−37 56.0	0.914	1.399	45.0	18.9	94 W	7	78
3 12	16 49.91	−38 43.5	0.886	1.391	45.3	18.8	95 W	6	77
3 17	17 9.01	−39 19.0	0.861	1.385	45.5	18.7	96 W	6	77
3 22	17 27.85	−39 42.3	0.837	1.382	45.7	18.7	97 W	5	76
3 27	17 46.24	−39 53.5	0.815	1.380	45.6	18.6	99 W	5*	76
4 1	18 3.98	−39 53.1	0.794	1.380	45.5	18.5	100 W	5*	76
4 6	18 20.84	−39 42.0	0.775	1.382	45.2	18.5	101 W	5*	76
4 11	18 36.66	−39 21.0	0.756	1.386	44.8	18.4	103 W	5*	77
4 16	18 51.25	−38 51.4	0.739	1.392	44.2	18.4	105 W	6*	77
4 21	19 4.49	−38 14.2	0.722	1.399	43.4	18.3	107 W	6*	78
4 26	19 16.28	−37 30.9	0.706	1.409	42.4	18.2	109 W	7*	78
5 1	19 26.56	−36 42.5	0.692	1.420	41.2	18.2	112 W	8*	79
5 6	19 35.24	−35 50.3	0.678	1.432	39.7	18.1	115 W	9*	80
5 16	19 47.58	−33 57.6	0.653	1.463	36.1	18.0	122 W	11*	82
5 26	19 53.17	−31 58.3	0.633	1.499	31.4	17.8	130 W	13	84
6 5	19 52.32	−29 55.3	0.622	1.539	25.6	17.7	139 W	15	86
6 10	19 49.71	−28 53.0	0.620	1.561	22.3	17.6	144 W	16	87
6 15	19 45.87	−27 50.3	0.622	1.584	18.8	17.5	150 W	17	88
6 20	19 41.08	−26 47.5	0.627	1.608	15.2	17.5	156 W	18	89
6 25	19 35.61	−25 45.2	0.637	1.633	11.4	17.4	161 W	19	90
6 30	19 29.77	−24 43.8	0.651	1.659	7.6	17.3	168 W	20	89
7 5	19 23.86	−23 44.2	0.670	1.685	3.9	17.2	174 W	21	88
7 10	19 18.17	−22 47.2	0.695	1.711	0.4	17.1	179 W	22	87

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
310379 1994 NZ *(continuation)*									
	h m	° ′			°	m	°	°	°
7 15	19 12.96	−21 53.4	0.724	1.739	3.3	17.4	174 E	23	86
7 20	19 8.44	−21 3.6	0.759	1.766	6.5	17.7	169 E	24	85
7 25	19 4.74	−20 18.1	0.798	1.794	9.5	18.0	163 E	25	84
8 4	19 0.03	−19 0.4	0.891	1.851	14.7	18.5	152 E	26	83
8 14	18 59.00	−17 59.1	1.002	1.909	18.8	19.0	143 E	27	82
8 24	19 1.36	−17 11.0	1.129	1.968	21.8	19.4	134 E	28	81
9 3	19 6.61	−16 31.9	1.269	2.027	23.9	19.8	125 E	28	81
9 13	19 14.23	−15 58.2	1.420	2.086	25.3	20.1	118 E	29	80
9 23	19 23.77	−15 26.4	1.581	2.146	26.0	20.4	110 E	30	79
10 3	19 34.80	−14 54.0	1.749	2.204	26.2	20.7	103 E	30	79
10 13	19 47.00	−14 19.1	1.923	2.263	26.0	21.0	96 E	31	78*
10 23	20 0.09	−13 40.4	2.100	2.321	25.4	21.2	90 E	31	75*
11 2	20 13.83	−12 57.0	2.280	2.378	24.5	21.4	83 E	32	69*
152895 2000 CQ_{101}									
12 27	12 51.18	− 1 51.2	1.083	1.371	45.4	20.7	83 W	43	55*
1 1	13 8.52	− 3 41.9	1.039	1.344	46.6	20.6	83 W	41	57*
1 6	13 26.47	− 5 34.8	0.997	1.319	47.8	20.5	84 W	39	59*
1 11	13 45.03	− 7 28.7	0.959	1.296	49.0	20.4	84 W	38	62*
1 16	14 4.21	− 9 22.6	0.925	1.273	50.2	20.3	84 W	36	64*
1 21	14 23.98	−11 15.0	0.895	1.253	51.3	20.2	83 W	34	66*
1 26	14 44.31	−13 4.6	0.868	1.234	52.4	20.2	83 W	32	68*
1 31	15 5.17	−14 49.7	0.845	1.218	53.4	20.1	83 W	30	69*
2 5	15 26.46	−16 28.7	0.826	1.203	54.4	20.1	83 W	29	71*
2 10	15 48.07	−18 0.0	0.810	1.191	55.2	20.0	82 W	27	72*
2 15	16 9.86	−19 22.3	0.797	1.181	55.9	20.0	82 W	26	73*
2 20	16 31.70	−20 34.6	0.787	1.173	56.5	20.0	82 W	24*	74*
2 25	16 53.41	−21 36.2	0.779	1.169	57.0	20.0	82 W	23*	74*
3 2	17 14.85	−22 26.8	0.774	1.167	57.2	19.9	82 W	22*	75*
3 7	17 35.86	−23 6.5	0.770	1.167	57.3	19.9	82 W	21*	75*
3 12	17 56.27	−23 35.8	0.768	1.170	57.3	19.9	82 W	21*	76*
3 17	18 15.96	−23 55.5	0.766	1.176	57.0	19.9	83 W	20*	76*
3 22	18 34.80	−24 6.6	0.766	1.184	56.7	19.9	83 W	19*	77*
3 27	18 52.70	−24 10.3	0.766	1.195	56.2	19.9	84 W	19*	78*
4 6	19 25.49	−24 0.6	0.765	1.224	54.7	20.0	87 W	18*	81*
4 16	19 53.88	−23 36.8	0.763	1.261	52.7	20.0	90 W	18*	84*
4 26	20 17.60	−23 8.8	0.758	1.305	50.3	19.9	94 W	18*	87*
5 6	20 36.53	−22 45.1	0.750	1.355	47.2	19.9	100 W	19*	87
5 16	20 50.36	−22 33.0	0.739	1.409	43.6	19.9	106 W	20*	87
5 26	20 58.83	−22 37.9	0.727	1.467	39.2	19.8	114 W	21*	87
6 5	21 1.69	−23 2.2	0.717	1.527	33.9	19.7	123 W	22*	87
6 15	20 58.77	−23 45.1	0.712	1.589	27.8	19.6	133 W	21	88
6 20	20 55.24	−24 11.7	0.712	1.621	24.4	19.5	139 W	21	88
6 25	20 50.48	−24 40.3	0.716	1.653	20.9	19.5	145 W	20	89
6 30	20 44.66	−25 9.3	0.724	1.685	17.3	19.4	151 W	20	89
7 5	20 37.99	−25 37.4	0.735	1.717	13.6	19.4	157 W	19	90
7 10	20 30.74	−26 2.9	0.752	1.749	10.0	19.3	163 W	19	90
7 15	20 23.25	−26 24.6	0.773	1.781	6.6	19.3	168 W	19	90
7 20	20 15.83	−26 41.7	0.800	1.813	4.1	19.3	173 W	18	89
7 25	20 8.78	−26 53.7	0.833	1.845	4.1	19.4	173 E	18	89
7 30	20 2.35	−27 0.7	0.871	1.876	6.2	19.6	168 E	18	89
8 4	19 56.70	−27 3.0	0.914	1.908	8.8	19.9	163 E	18	89
8 9	19 51.99	−27 0.9	0.963	1.939	11.4	20.2	158 E	18	89
8 14	19 48.30	−26 55.2	1.016	1.971	13.8	20.4	152 E	18	89
8 24	19 44.02	−26 35.2	1.137	2.032	17.8	20.8	142 E	18	89
9 3	19 43.59	−26 7.0	1.274	2.093	20.8	21.3	133 E	19	90
9 13	19 46.53	−25 32.9	1.425	2.153	22.9	21.6	124 E	19	90
9 23	19 52.26	−24 54.3	1.586	2.211	24.2	22.0	115 E	20	89
388468 2007 DB_{83}									
12 27	12 51.42	+ 9 58.5	1.125	1.463	42.2	21.0	88 W	55	46*
1 6	13 20.09	+ 7 53.9	1.028	1.425	43.6	20.8	90 W	53	50*
1 16	13 49.45	+ 5 45.4	0.939	1.388	45.1	20.6	92 W	51	54*
1 26	14 19.48	+ 3 33.0	0.857	1.354	46.5	20.4	94 W	49	58*
2 5	14 50.18	+ 1 16.0	0.782	1.323	47.8	20.2	96 W	46	61*
2 15	15 21.43	− 1 6.1	0.715	1.294	49.1	20.0	98 W	44	65*
2 25	15 53.07	− 3 34.6	0.655	1.270	50.3	19.8	99 W	41	68*
3 7	16 24.95	− 6 11.1	0.602	1.251	51.3	19.6	100 W	39	70
3 17	16 56.78	− 8 57.0	0.556	1.237	51.9	19.4	102 W	36	73
3 27	17 28.17	−11 54.4	0.515	1.228	52.0	19.2	104 W	33	76
4 6	17 58.74	−15 5.4	0.481	1.225	51.6	19.1	106 W	30	79
4 16	18 27.82	−18 31.7	0.451	1.228	50.5	18.9	109 W	26*	83
4 21	18 41.57	−20 21.4	0.438	1.232	49.6	18.8	111 W	25*	84
4 26	18 54.66	−22 15.6	0.427	1.237	48.4	18.7	113 W	23*	86
5 1	19 6.99	−24 14.5	0.416	1.244	47.1	18.7	115 W	21*	88
5 6	19 18.39	−26 18.2	0.407	1.252	45.5	18.6	118 W	19*	90
5 11	19 28.70	−28 26.4	0.400	1.261	43.6	18.5	121 W	17*	88
5 16	19 37.76	−30 38.7	0.394	1.271	41.6	18.4	123 W	14*	85

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
388468 2007 DB_{83}									*(continuation)*
	h m	° ′			°	m	°	°	°
5 21	19 45.40	−32 54.3	0.389	1.283	39.3	18.4	127 W	12*	83
5 26	19 51.48	−35 11.8	0.386	1.295	36.8	18.3	130 W	10	81
5 31	19 55.85	−37 29.4	0.385	1.309	34.2	18.2	134 W	8	79
6 5	19 58.33	−39 44.6	0.386	1.324	31.5	18.2	137 W	5	76
6 10	19 58.84	−41 54.5	0.389	1.339	28.7	18.1	141 W	3	74
6 15	19 57.35	−43 55.4	0.395	1.355	26.1	18.1	144 W	1	72
6 20	19 54.00	−45 43.6	0.403	1.372	23.7	18.1	147 W	—	70
6 25	19 49.06	−47 15.8	0.414	1.390	21.7	18.2	150 W	—	69
6 30	19 42.88	−48 29.5	0.429	1.408	20.2	18.2	151 W	—	68
7 5	19 35.94	−49 23.1	0.446	1.427	19.4	18.3	152 W	—	67
7 10	19 28.79	−49 56.0	0.466	1.446	19.1	18.4	152 W	—	66
7 15	19 22.00	−50 9.3	0.490	1.465	19.5	18.6	151 E	—	66
7 20	19 16.09	−50 4.8	0.517	1.485	20.3	18.7	150 E	—	66
7 25	19 11.38	−49 45.4	0.546	1.505	21.4	18.9	147 E	—	66
7 30	19 8.04	−49 13.7	0.579	1.525	22.7	19.1	145 E	—	67
8 4	19 6.14	−48 32.5	0.615	1.545	24.1	19.3	142 E	—	67
8 9	19 5.69	−47 44.1	0.654	1.565	25.4	19.5	139 E	—	68
8 14	19 6.61	−46 50.4	0.696	1.586	26.7	19.7	135 E	—	69
8 19	19 8.78	−45 53.2	0.741	1.606	27.8	19.9	132 E	—	70
8 24	19 12.07	−44 53.6	0.788	1.627	28.9	20.1	129 E	—	71
8 29	19 16.30	−43 52.4	0.837	1.647	29.8	20.3	126 E	1	72
9 3	19 21.36	−42 50.3	0.889	1.667	30.6	20.5	123 E	2	73
9 8	19 27.14	−41 47.6	0.943	1.687	31.2	20.6	120 E	3	74
9 13	19 33.54	−40 44.5	0.999	1.707	31.8	20.8	117 E	4	75
9 18	19 40.45	−39 41.3	1.057	1.727	32.2	21.0	114 E	5	76
9 23	19 47.78	−38 38.0	1.117	1.747	32.5	21.1	111 E	6	77
9 28	19 55.46	−37 34.6	1.178	1.766	32.7	21.3	108 E	7	78
10 3	20 3.43	−36 31.1	1.242	1.786	32.8	21.4	105 E	8	79
228267 1999 TC_{200}									
12 27	12 51.89	−26 39.7	1.542	1.581	36.7	19.6	74 W	18	66*
1 1	13 3.70	−28 0.3	1.514	1.588	36.9	19.6	76 W	17	69*
1 6	13 15.32	−29 16.0	1.485	1.596	37.0	19.6	78 W	16	71*
1 11	13 26.71	−30 26.7	1.456	1.604	37.1	19.5	80 W	15	74*
1 16	13 37.81	−31 31.9	1.426	1.614	37.1	19.5	82 W	13	76*
1 21	13 48.58	−32 31.5	1.395	1.624	37.1	19.5	84 W	12	78*
1 26	13 58.95	−33 25.2	1.364	1.635	37.0	19.4	87 W	12	80*
1 31	14 8.86	−34 13.0	1.333	1.646	36.8	19.4	89 W	11	81*
2 5	14 18.24	−34 54.6	1.301	1.658	36.5	19.4	92 W	10	81*
2 10	14 27.01	−35 29.9	1.269	1.671	36.0	19.3	95 W	10	81
2 15	14 35.07	−35 58.7	1.236	1.684	35.5	19.2	98 W	9	80
2 20	14 42.34	−36 20.6	1.204	1.698	34.8	19.2	101 W	9	80
2 25	14 48.74	−36 35.5	1.171	1.713	34.0	19.1	105 W	8	79
3 2	14 54.19	−36 43.1	1.139	1.728	33.0	19.1	108 W	8	79
3 7	14 58.59	−36 42.9	1.108	1.743	31.8	19.0	112 W	8	79
3 12	15 1.88	−36 34.4	1.077	1.759	30.4	18.9	116 W	8	79
3 17	15 3.99	−36 17.1	1.048	1.775	28.8	18.8	121 W	9	80
3 22	15 4.91	−35 50.2	1.021	1.792	27.0	18.7	125 W	9	80
3 27	15 4.64	−35 13.3	0.996	1.809	24.9	18.6	130 W	10	81
4 1	15 3.22	−34 25.8	0.973	1.826	22.6	18.5	135 W	11	82
4 6	15 0.75	−33 27.4	0.955	1.843	20.0	18.4	141 W	12	83
4 11	14 57.34	−32 18.0	0.940	1.861	17.2	18.3	147 W	13	84
4 16	14 53.19	−30 58.1	0.931	1.879	14.3	18.2	152 W	14	85
4 21	14 48.52	−29 28.7	0.926	1.897	11.3	18.1	158 W	16	87
4 26	14 43.60	−27 51.7	0.928	1.915	8.4	18.0	164 W	17	88
5 1	14 38.65	−26 9.4	0.935	1.933	5.8	17.9	169 W	19	90
5 6	14 33.91	−24 24.4	0.949	1.952	4.6	17.9	171 E	21	88
5 11	14 29.57	−22 39.5	0.969	1.970	5.6	18.1	169 E	22	87
5 16	14 25.81	−20 57.5	0.996	1.989	7.8	18.2	165 E	24	85
5 21	14 22.74	−19 20.7	1.029	2.007	10.3	18.4	159 E	26	83
5 26	14 20.44	−17 51.0	1.067	2.026	12.8	18.6	154 E	27	82
5 31	14 18.92	−16 29.6	1.111	2.045	15.1	18.8	148 E	29	80
6 5	14 18.19	−15 17.3	1.160	2.063	17.2	19.0	143 E	30	79
6 15	14 19.03	−13 20.4	1.272	2.101	20.7	19.4	133 E	32	77
6 25	14 22.66	−11 58.6	1.397	2.138	23.2	19.7	124 E	33*	76
7 5	14 28.65	−11 6.9	1.534	2.175	25.0	20.0	115 E	33*	75
7 15	14 36.64	−10 39.6	1.680	2.211	26.0	20.2	108 E	32*	75
7 25	14 46.28	−10 31.2	1.830	2.247	26.4	20.5	100 E	30*	75
8 4	14 57.27	−10 36.8	1.985	2.283	26.3	20.7	93 E	29*	75
8 14	15 9.41	−10 52.5	2.141	2.317	25.9	20.9	87 E	28*	74*
8 24	15 22.51	−11 14.6	2.297	2.352	25.1	21.0	80 E	27*	71*
9 3	15 36.42	−11 40.3	2.451	2.385	24.0	21.2	74 E	25*	66*
9 13	15 51.02	−12 7.4	2.602	2.418	22.7	21.3	68 E	24*	60*
9 23	16 6.21	−12 33.7	2.748	2.450	21.3	21.4	62 E	23*	54*
10 3	16 21.89	−12 57.7	2.888	2.481	19.7	21.5	57 E	23*	48*
6444 Ryuzin									
12 27	12 52.87	+ 0 47.7	2.803	2.865	19.9	19.7	84 W	46	53*
1 6	12 59.92	+ 0 27.6	2.667	2.874	20.0	19.6	92 W	45	59*
1 16	13 5.27	+ 0 20.6	2.531	2.882	19.6	19.5	101 W	45	63*
1 26	13 8.66	+ 0 27.9	2.398	2.889	18.7	19.4	110 W	45	64

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
6444 Ryuzin									*(continuation)*
	h m	° ′			°	m	°	°	°
2 5	13 9.84	+ 0 50.0	2.273	2.895	17.1	19.2	120 W	46	63
2 15	13 8.60	+ 1 27.0	2.160	2.900	15.0	19.0	130 W	46	63
2 25	13 4.86	+ 2 17.8	2.064	2.904	12.3	18.8	141 W	47	62
3 7	12 58.76	+ 3 19.2	1.989	2.907	9.0	18.6	153 W	48	61
3 12	12 54.94	+ 3 52.5	1.961	2.908	7.2	18.5	158 W	49	60
3 17	12 50.70	+ 4 26.5	1.940	2.909	5.5	18.4	164 W	49	60
3 22	12 46.14	+ 5 0.4	1.926	2.909	4.0	18.3	168 W	50	59
3 27	12 41.37	+ 5 33.3	1.920	2.909	3.2	18.3	171 W	51	58
4 1	12 36.52	+ 6 4.4	1.921	2.909	3.6	18.3	169 E	51	58
4 6	12 31.70	+ 6 32.9	1.930	2.909	5.0	18.4	165 E	52	57
4 16	12 22.61	+ 7 19.4	1.968	2.907	8.5	18.6	155 E	52	57
4 26	12 14.96	+ 7 49.1	2.032	2.905	11.8	18.8	144 E	53	56
5 6	12 9.31	+ 8 0.7	2.118	2.901	14.7	19.0	133 E	53	56
5 16	12 5.95	+ 7 54.7	2.222	2.897	17.1	19.1	123 E	53	56
5 26	12 4.92	+ 7 32.7	2.338	2.891	18.8	19.3	113 E	52*	56
6 5	12 6.11	+ 6 57.0	2.462	2.884	19.9	19.5	104 E	49*	57
6 15	12 9.32	+ 6 9.6	2.590	2.876	20.6	19.6	96 E	45*	58
6 25	12 14.32	+ 5 12.3	2.720	2.867	20.7	19.7	88 E	39*	59
7 5	12 20.86	+ 4 7.1	2.847	2.857	20.5	19.8	80 E	34*	60*
7 15	12 28.76	+ 2 55.2	2.971	2.846	20.0	19.8	73 E	29*	58*
7 25	12 37.84	+ 1 38.0	3.088	2.834	19.1	19.9	66 E	25*	55*
8 4	12 47.92	+ 0 16.6	3.197	2.821	18.0	19.9	59 E	21*	51*
8 14	12 58.91	− 1 8.2	3.297	2.807	16.8	19.9	53 E	18*	45*
8 24	13 10.70	− 2 35.4	3.386	2.792	15.3	19.9	47 E	15*	40*
9 3	13 23.20	− 4 4.0	3.464	2.775	13.7	19.9	41 E	13*	34*
9 13	13 36.38	− 5 33.4	3.528	2.758	11.9	19.9	34 E	10*	28*
9 23	13 50.16	− 7 2.8	3.580	2.740	10.1	19.8	28 E	8*	22*
10 3	14 4.53	− 8 31.3	3.617	2.720	8.1	19.7	23 E	6*	16*
10 13	14 19.44	− 9 58.1	3.640	2.700	6.1	19.6	17 E	4*	10*
10 23	14 34.87	−11 22.5	3.648	2.678	4.1	19.5	11 E	2*	4*
11 2	14 50.80	−12 43.8	3.641	2.656	2.2	19.4	6 E	—	—
11 12	15 7.20	−14 1.0	3.620	2.632	1.4	19.3	4 W	—	—
11 22	15 24.03	−15 13.5	3.583	2.608	2.9	19.4	8 W	2*	—
12 2	15 41.27	−16 20.5	3.532	2.582	5.0	19.4	13 W	6*	2*
12 12	15 58.88	−17 21.4	3.467	2.556	7.2	19.5	19 W	10*	7*
12 22	16 16.79	−18 15.5	3.389	2.529	9.3	19.5	25 W	13*	13*
1 1	16 34.97	−19 2.4	3.298	2.500	11.5	19.5	30 W	15*	19*
1 11	16 53.34	−19 41.5	3.195	2.471	13.6	19.5	36 W	17*	26*
1 21	17 11.82	−20 12.6	3.082	2.441	15.6	19.4	42 W	18*	33*
98943 2001 CC_{21}									
12 27	12 52.91	+ 1 42.0	0.652	1.121	60.7	20.0	84 W	47	52*
1 6	13 35.21	− 1 33.8	0.601	1.088	63.7	19.8	83 W	43	55*
1 16	14 21.76	− 4 59.7	0.559	1.053	67.3	19.7	81 W	40	58*
1 26	15 12.86	− 8 26.1	0.530	1.016	71.4	19.7	78 W	37	59*
1 31	15 40.08	−10 4.8	0.520	0.997	73.5	19.6	76 W	35*	59*
2 5	16 8.28	−11 37.2	0.515	0.978	75.6	19.7	74 W	33*	59*
2 10	16 37.26	−13 0.5	0.513	0.960	77.7	19.7	72 W	31*	59*
2 15	17 6.78	−14 12.2	0.515	0.941	79.6	19.7	70 W	29*	58*
2 20	17 36.55	−15 10.2	0.522	0.922	81.3	19.8	67 W	28*	57*
2 25	18 6.29	−15 52.9	0.533	0.905	82.7	19.8	65 W	26*	56*
3 2	18 35.75	−16 19.6	0.547	0.887	83.8	19.9	63 W	24*	55*
3 7	19 4.69	−16 30.2	0.566	0.871	84.5	19.9	61 W	22*	53*
3 12	19 32.93	−16 24.9	0.588	0.857	84.7	20.0	59 W	20*	52*
3 17	20 0.32	−16 4.8	0.613	0.843	84.6	20.0	58 W	19*	51*
3 22	20 26.80	−15 31.0	0.641	0.832	84.1	20.1	56 W	17*	50*
3 27	20 52.34	−14 44.8	0.672	0.822	83.2	20.1	55 W	16*	49*
4 1	21 16.96	−13 47.5	0.704	0.815	81.9	20.2	54 W	15*	48*
4 6	21 40.70	−12 40.4	0.739	0.809	80.4	20.2	53 W	14*	47*
4 11	22 3.60	−11 24.8	0.774	0.807	78.6	20.2	52 W	13*	46*
4 16	22 25.71	−10 2.1	0.810	0.806	76.7	20.3	51 W	12*	45*
4 21	22 47.07	− 8 33.6	0.847	0.808	74.7	20.3	51 W	12*	45*
4 26	23 7.76	− 7 0.6	0.884	0.813	72.6	20.3	50 W	11*	44*
5 1	23 27.83	− 5 24.1	0.920	0.820	70.5	20.4	50 W	11*	44*
5 6	23 47.34	− 3 45.4	0.956	0.829	68.4	20.4	50 W	11*	44*
5 11	0 6.34	− 2 5.5	0.990	0.840	66.4	20.4	50 W	11*	43*
5 16	0 24.88	− 0 25.5	1.023	0.853	64.5	20.5	50 W	11*	43*
5 21	0 42.98	+ 1 13.8	1.054	0.868	62.7	20.5	50 W	12*	43*
5 26	1 0.71	+ 2 51.5	1.083	0.883	61.0	20.6	50 W	12*	43*
5 31	1 18.11	+ 4 26.9	1.111	0.900	59.5	20.6	50 W	13*	42*
6 5	1 35.22	+ 5 59.6	1.136	0.918	58.1	20.7	50 W	14*	42*
6 10	1 52.06	+ 7 28.9	1.159	0.936	56.8	20.7	50 W	15*	42*
6 15	2 8.67	+ 8 54.3	1.179	0.955	55.7	20.8	51 W	17*	42*
6 20	2 25.06	+10 15.6	1.197	0.974	54.7	20.8	51 W	18*	42*
6 25	2 41.27	+11 32.5	1.213	0.993	53.8	20.9	52 W	20*	41*
6 30	2 57.33	+12 44.7	1.226	1.011	53.0	20.9	53 W	22*	41*
7 5	3 13.24	+13 52.1	1.236	1.030	52.4	21.0	53 W	24*	41*
7 10	3 29.03	+14 54.5	1.244	1.049	51.8	21.0	54 W	26*	40*
7 15	3 44.70	+15 51.8	1.249	1.067	51.3	21.0	55 W	28*	40*
7 20	4 0.25	+16 43.9	1.252	1.084	50.9	21.1	56 W	31*	40*

98943 2001 CC_{21} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
7 25	4 15.70	+17 30.9	1.253	1.101	50.6	21.1	57 W	33*	39*
7 30	4 31.05	+18 12.8	1.251	1.117	50.4	21.1	58 W	35*	39*
8 4	4 46.32	+18 49.5	1.247	1.133	50.2	21.1	59 W	37*	39*
8 9	5 1.49	+19 21.0	1.240	1.147	50.1	21.1	60 W	40*	38*
8 14	5 16.56	+19 47.6	1.231	1.161	50.0	21.1	61 W	42*	38*
8 19	5 31.52	+20 9.2	1.220	1.175	50.0	21.1	63 W	44*	38*
8 24	5 46.39	+20 26.0	1.207	1.187	50.0	21.1	64 W	46*	38*
8 29	6 1.16	+20 38.1	1.191	1.198	50.0	21.1	65 W	48*	37*
9 3	6 15.83	+20 45.6	1.174	1.208	50.1	21.1	67 W	50*	37*
9 8	6 30.40	+20 48.7	1.154	1.218	50.2	21.1	68 W	52*	37*
9 13	6 44.85	+20 47.6	1.133	1.226	50.3	21.1	70 W	54*	37*
9 18	6 59.18	+20 42.4	1.110	1.234	50.4	21.1	71 W	55*	37*
9 23	7 13.41	+20 33.5	1.085	1.240	50.6	21.0	73 W	57*	37*
9 28	7 27.54	+20 20.9	1.059	1.246	50.7	21.0	74 W	58*	38*
10 3	7 41.58	+20 4.8	1.031	1.251	50.9	20.9	76 W	60*	38*
10 8	7 55.51	+19 45.6	1.002	1.254	51.1	20.9	78 W	61*	38*
10 13	8 9.35	+19 23.5	0.972	1.257	51.3	20.8	79 W	61*	39*
10 18	8 23.11	+18 58.7	0.940	1.258	51.5	20.8	81 W	62*	39*
10 23	8 36.81	+18 31.5	0.908	1.258	51.6	20.7	83 W	62*	40*
10 28	8 50.47	+18 2.0	0.874	1.258	51.8	20.6	84 W	63*	40*
11 2	9 4.11	+17 30.6	0.840	1.256	52.0	20.5	86 W	62*	41*
11 7	9 17.73	+16 57.6	0.805	1.254	52.2	20.4	88 W	62	42*
11 12	9 31.38	+16 23.2	0.770	1.250	52.4	20.3	90 W	61	43*
11 22	9 58.89	+15 11.1	0.699	1.240	52.7	20.1	93 W	60	44*
12 2	10 27.04	+13 56.1	0.627	1.225	53.1	19.9	96 W	59	47*
12 12	10 56.26	+12 40.1	0.556	1.207	53.6	19.6	99 W	58	49*
12 22	11 27.32	+11 23.6	0.488	1.185	54.3	19.3	102 W	56	51*
12 27	11 43.87	+10 45.1	0.455	1.173	54.8	19.1	103 W	56	52*
1 1	12 1.30	+10 6.2	0.423	1.160	55.4	19.0	104 W	55	53*
1 6	12 19.81	+ 9 26.6	0.393	1.146	56.3	18.8	104 W	54	54*
1 11	12 39.62	+ 8 45.6	0.364	1.131	57.4	18.6	104 W	54	55*
1 16	13 1.05	+ 8 2.2	0.337	1.115	58.8	18.5	104 W	53	55*
1 21	13 24.42	+ 7 15.1	0.311	1.099	60.6	18.3	103 W	52	56*

118569 2000 GF_1

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 53.46	+28 34.1	1.339	1.727	34.6	18.7	95 W	74	30*
1 6	13 16.14	+28 23.4	1.252	1.705	34.7	18.5	99 W	73	32*
1 16	13 36.97	+28 22.9	1.170	1.686	34.7	18.3	103 W	73	34*
1 26	13 55.41	+28 33.1	1.093	1.670	34.3	18.1	107 W	74	35*
1 31	14 3.55	+28 41.8	1.056	1.663	34.0	18.0	109 W	74	35*
2 5	14 10.85	+28 52.9	1.021	1.657	33.7	17.9	111 W	74	35
2 10	14 17.23	+29 5.8	0.986	1.651	33.2	17.9	114 W	74	35
2 15	14 22.57	+29 20.1	0.953	1.646	32.6	17.8	116 W	74	35
2 20	14 26.78	+29 34.8	0.922	1.642	32.0	17.7	118 W	75	34
2 25	14 29.77	+29 48.9	0.892	1.639	31.2	17.6	121 W	75	34
3 2	14 31.46	+30 1.1	0.863	1.636	30.3	17.5	124 W	75	34
3 7	14 31.76	+30 10.0	0.836	1.634	29.2	17.4	126 W	75	34
3 12	14 30.60	+30 13.6	0.812	1.633	28.1	17.3	129 W	75	34
3 17	14 27.98	+30 9.8	0.789	1.633	26.8	17.2	132 W	75	34
3 22	14 23.94	+29 56.1	0.770	1.634	25.5	17.1	135 W	75	34
3 27	14 18.59	+29 30.0	0.753	1.635	24.2	17.0	138 W	74	35
4 1	14 12.12	+28 49.3	0.740	1.638	23.0	16.9	140 W	74	35
4 6	14 4.76	+27 52.4	0.731	1.641	21.9	16.9	142 W	73	36
4 11	13 56.83	+26 38.2	0.725	1.645	21.0	16.8	144 W	72	37
4 16	13 48.69	+25 6.3	0.725	1.649	20.6	16.8	145 W	70	39
4 21	13 40.70	+23 17.7	0.729	1.655	20.5	16.8	145 E	68	41
4 26	13 33.22	+21 14.5	0.738	1.661	20.9	16.9	144 E	66	43
5 1	13 26.48	+18 59.4	0.753	1.668	21.7	16.9	142 E	64	45
5 6	13 20.69	+16 35.8	0.772	1.675	22.7	17.0	140 E	62	47
5 11	13 15.97	+14 6.7	0.796	1.684	24.0	17.2	137 E	59	50
5 16	13 12.39	+11 35.0	0.825	1.693	25.4	17.3	134 E	57	52
5 21	13 9.97	+ 9 3.3	0.859	1.702	26.7	17.4	131 E	54	55
5 26	13 8.66	+ 6 33.7	0.896	1.713	28.0	17.6	127 E	52	57
5 31	13 8.41	+ 4 7.7	0.937	1.723	29.2	17.7	124 E	49	60
6 5	13 9.13	+ 1 46.3	0.982	1.735	30.2	17.9	121 E	47*	62
6 15	13 13.22	− 2 41.0	1.081	1.759	31.8	18.1	114 E	41*	67
6 25	13 20.36	− 6 46.7	1.191	1.785	32.8	18.4	108 E	35*	71
7 5	13 30.00	−10 31.5	1.308	1.813	33.3	18.7	102 E	29*	75
7 15	13 41.76	−13 57.3	1.431	1.842	33.3	18.9	96 E	24*	78
7 25	13 55.30	−17 6.1	1.560	1.873	32.8	19.1	91 E	20*	81*
8 4	14 10.38	−19 59.4	1.691	1.905	32.1	19.3	86 E	16*	79*
8 14	14 26.85	−22 38.5	1.824	1.937	31.1	19.5	81 E	13*	75*
8 24	14 44.56	−25 4.2	1.959	1.971	29.8	19.6	76 E	10*	69*
9 3	15 3.39	−27 16.8	2.092	2.005	28.4	19.8	71 E	8*	64*
9 13	15 23.28	−29 16.6	2.225	2.039	26.8	19.9	66 E	6*	59*
9 23	15 44.13	−31 3.5	2.355	2.073	25.2	20.0	62 E	5*	54*
10 3	16 5.85	−32 37.1	2.482	2.108	23.4	20.1	57 E	3*	50*
10 13	16 28.36	−33 57.4	2.605	2.143	21.6	20.2	52 E	2*	45*
10 23	16 51.53	−35 4.0	2.722	2.177	19.7	20.3	47 E	1*	41*

118569 2000 GF_1 *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
11 2	17 15.24	−35 56.6	2.834	2.212	17.8	20.3	43 E	1*	36*
11 12	17 39.35	−36 35.3	2.938	2.246	15.8	20.4	38 E	—	32*
11 22	18 3.69	−37 0.0	3.034	2.280	13.9	20.4	34 E	—	27*
12 2	18 28.10	−37 11.1	3.122	2.313	12.0	20.4	29 E	—	23*
12 12	18 52.44	−37 9.3	3.200	2.346	10.2	20.4	25 E	—	19*
12 22	19 16.53	−36 55.2	3.268	2.378	8.6	20.4	21 E	—	15*
1 1	19 40.25	−36 30.0	3.325	2.410	7.3	20.4	18 E	—	11*
1 11	20 3.48	−35 54.9	3.371	2.441	6.4	20.5	16 E	—	8*
1 21	20 26.11	−35 11.2	3.405	2.471	6.1	20.5	16 E	—	4*

341816 2007 YK

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 53.54	+10 26.2	1.568	1.812	32.8	21.1	87 W	55	45*
1 6	13 9.09	+12 29.7	1.497	1.853	31.9	21.1	94 W	57	47*
1 16	13 22.49	+15 5.6	1.429	1.894	30.6	21.0	102 W	60	48*
1 26	13 33.26	+18 14.6	1.367	1.933	28.7	20.9	109 W	63	46*
2 5	13 40.91	+21 53.7	1.316	1.971	26.4	20.8	117 W	67	42
2 15	13 44.87	+25 55.6	1.278	2.009	23.9	20.7	124 W	71	38
2 25	13 44.68	+30 6.3	1.258	2.045	21.6	20.6	131 W	75	34
3 7	13 40.16	+34 6.7	1.257	2.079	19.8	20.6	135 W	79	30
3 17	13 31.61	+37 36.1	1.277	2.113	18.9	20.6	137 W	83	26
3 27	13 20.07	+40 15.7	1.318	2.145	19.1	20.7	135 W	85	24
4 6	13 7.22	+41 55.2	1.378	2.176	20.1	20.9	132 W	87	22
4 16	12 54.95	+42 33.5	1.454	2.205	21.4	21.1	127 E	88	21
4 26	12 44.89	+42 17.4	1.545	2.233	22.8	21.3	121 E	87	22
5 6	12 37.98	+41 18.1	1.646	2.259	24.0	21.5	114 E	86	23

334631 2002 VU_{99}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 53.60	−11 32.3	2.187	2.214	25.8	20.7	79 W	33	61*
1 6	13 1.70	−13 58.5	2.091	2.249	25.9	20.6	86 W	31	70*
1 16	13 7.67	−16 19.8	1.994	2.283	25.5	20.6	94 W	29	78*
1 26	13 11.12	−18 35.0	1.898	2.317	24.5	20.5	102 W	26	83
2 5	13 11.67	−20 42.1	1.807	2.350	23.0	20.3	111 W	24	85
2 15	13 8.92	−22 37.9	1.724	2.383	20.9	20.2	121 W	22	87
2 25	13 2.71	−24 17.4	1.654	2.415	18.2	20.0	130 W	21	88
3 2	12 58.34	−24 59.2	1.625	2.431	16.7	20.0	135 W	20	89
3 7	12 53.20	−25 34.8	1.601	2.447	15.1	19.9	140 W	19	90
3 12	12 47.37	−26 3.4	1.582	2.462	13.4	19.8	145 W	19	90
3 17	12 41.00	−26 24.4	1.570	2.477	11.9	19.8	149 W	19	90
3 22	12 34.25	−26 37.5	1.564	2.492	10.5	19.7	153 W	18	89
3 27	12 27.31	−26 42.7	1.564	2.507	9.4	19.7	156 W	18	89
4 1	12 20.39	−26 40.5	1.571	2.522	8.8	19.7	157 E	18	89
4 6	12 13.67	−26 31.4	1.585	2.537	8.8	19.7	157 E	18	89
4 11	12 7.33	−26 16.4	1.606	2.551	9.4	19.8	155 E	19	90
4 16	12 1.52	−25 56.6	1.633	2.565	10.4	19.9	153 E	19	90
4 21	11 56.39	−25 33.4	1.666	2.579	11.6	20.0	149 E	19	90
4 26	11 52.00	−25 8.1	1.705	2.593	12.9	20.1	145 E	20	89
5 1	11 48.41	−24 41.9	1.750	2.606	14.3	20.2	140 E	20	89
5 6	11 45.63	−24 16.0	1.800	2.620	15.6	20.3	136 E	21	88
5 11	11 43.67	−23 51.1	1.854	2.633	16.7	20.4	131 E	21	88
5 16	11 42.51	−23 28.2	1.912	2.646	17.8	20.5	127 E	22	87
5 21	11 42.11	−23 7.7	1.973	2.658	18.7	20.7	123 E	22*	87
5 26	11 42.43	−22 50.2	2.037	2.671	19.5	20.8	118 E	22*	87
5 31	11 43.42	−22 36.0	2.104	2.683	20.2	20.9	114 E	21*	87
6 5	11 45.02	−22 25.0	2.173	2.695	20.7	21.0	110 E	20*	86
6 10	11 47.20	−22 17.5	2.244	2.707	21.1	21.1	106 E	18*	86
6 15	11 49.91	−22 13.4	2.315	2.718	21.4	21.1	102 E	17*	86
6 20	11 53.09	−22 12.7	2.388	2.729	21.6	21.2	98 E	15*	86
6 25	11 56.72	−22 15.3	2.462	2.741	21.7	21.3	95 E	13*	86
6 30	12 0.74	−22 21.1	2.535	2.751	21.7	21.4	91 E	11*	85*
7 5	12 5.12	−22 29.8	2.609	2.762	21.6	21.4	88 E	9*	82*

57878 2001 YZ_{148}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 53.63	− 9 16.8	3.012	2.993	18.8	20.9	79 W	36	59*
1 6	13 0.57	− 9 57.1	2.876	3.004	19.1	20.9	88 W	35	67*
1 16	13 5.92	−10 26.9	2.738	3.014	18.9	20.7	97 W	35	73*
1 26	13 9.43	−10 44.5	2.602	3.023	18.3	20.6	106 W	34	75
2 5	13 10.88	−10 48.5	2.472	3.032	17.1	20.5	116 W	34	75
2 15	13 10.08	−10 37.3	2.352	3.039	15.2	20.3	126 W	34	75
2 25	13 6.96	−10 9.9	2.246	3.045	12.8	20.1	137 W	35	74
3 7	13 1.66	− 9 26.4	2.161	3.051	9.8	19.9	148 W	36	73
3 17	12 54.52	− 8 28.1	2.100	3.055	6.3	19.7	160 W	37	72
3 27	12 46.15	− 7 18.6	2.067	3.059	2.4	19.5	172 W	38	71
4 1	12 41.76	− 6 41.3	2.062	3.060	0.7	19.3	178 W	38	71
4 6	12 37.36	− 6 3.4	2.064	3.061	1.8	19.4	175 E	39	70
4 11	12 33.08	− 5 25.5	2.074	3.062	3.7	19.6	169 E	40	69
4 16	12 29.01	− 4 48.7	2.091	3.063	5.6	19.7	163 E	40	69
4 21	12 25.25	− 4 13.5	2.115	3.064	7.5	19.8	157 E	41	68
4 26	12 21.87	− 3 40.8	2.146	3.064	9.2	19.9	151 E	41	68

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
57878 2001 YZ_{148} *(continuation)*									
	h m	° ′			°	m	°	°	°
5 6	12 16.50	− 2 44.6	2.226	3.064	12.4	20.1	139 E	42	67
5 16	12 13.21	− 2 2.9	2.326	3.063	14.9	20.3	129 E	43	66
5 26	12 12.10	− 1 36.8	2.442	3.061	16.9	20.5	119 E	43*	66
6 5	12 13.07	− 1 25.9	2.569	3.058	18.3	20.6	109 E	42*	65
6 15	12 15.99	− 1 29.3	2.702	3.054	19.1	20.8	100 E	38*	65
6 25	12 20.64	− 1 45.4	2.838	3.049	19.5	20.9	92 E	34*	66
7 5	12 26.81	− 2 12.5	2.975	3.043	19.4	21.0	84 E	29*	66*
7 15	12 34.31	− 2 49.1	3.108	3.036	19.0	21.0	77 E	25*	64*
7 25	12 42.96	− 3 33.7	3.236	3.029	18.3	21.1	69 E	21*	60*
8 4	12 52.61	− 4 24.7	3.356	3.020	17.3	21.1	62 E	18*	55*
8 14	13 3.14	− 5 21.0	3.467	3.011	16.1	21.2	55 E	15*	49*
8 24	13 14.45	− 6 21.4	3.568	3.000	14.7	21.2	49 E	13*	42*
9 3	13 26.45	− 7 24.7	3.657	2.989	13.1	21.2	42 E	11*	36*
9 13	13 39.08	− 8 29.9	3.732	2.977	11.4	21.1	36 E	9*	30*
9 23	13 52.27	− 9 35.9	3.794	2.964	9.6	21.1	30 E	7*	23*
10 3	14 5.98	−10 41.9	3.841	2.949	7.7	21.0	23 E	5*	17*
10 13	14 20.17	−11 46.9	3.873	2.934	5.8	20.9	17 E	3*	11*
10 23	14 34.78	−12 50.0	3.888	2.918	3.8	20.8	11 E	1*	5*
11 2	14 49.79	−13 50.3	3.888	2.902	1.8	20.7	5 E	—	—
11 12	15 5.16	−14 47.0	3.872	2.884	1.0	20.6	3 W	—	—
11 22	15 20.82	−15 39.2	3.840	2.865	2.8	20.7	8 W	2*	—
12 2	15 36.74	−16 26.1	3.791	2.846	4.9	20.8	14 W	7*	3*
12 12	15 52.84	−17 7.1	3.727	2.825	7.0	20.8	20 W	11*	9*
12 22	16 9.05	−17 41.5	3.649	2.804	9.0	20.9	27 W	14*	15*
1 1	16 25.29	−18 8.7	3.556	2.782	11.1	20.9	33 W	17*	21*
1 11	16 41.48	−18 28.2	3.450	2.759	13.0	20.9	39 W	19*	28*
1 21	16 57.49	−18 39.7	3.332	2.735	14.9	20.8	46 W	21*	35*
154658 2004 FA_{18}									
12 27	12 54.50	+33 41.0	0.722	1.286	49.4	20.9	97 W	79	25*
1 1	12 57.77	+34 57.8	0.711	1.315	47.3	20.8	101 W	80	25*
1 6	12 59.62	+36 24.7	0.698	1.342	45.1	20.8	105 W	81	26*
1 11	12 59.80	+38 1.7	0.685	1.368	42.9	20.7	109 W	83	25*
1 16	12 58.01	+39 47.9	0.672	1.392	40.5	20.6	113 W	85	24*
1 21	12 53.96	+41 41.4	0.659	1.415	38.1	20.6	118 W	87	22
1 26	12 47.31	+43 38.9	0.649	1.437	35.6	20.5	122 W	89	20
1 31	12 37.79	+45 36.0	0.641	1.457	33.2	20.4	126 W	89	18
2 5	12 25.17	+47 26.7	0.635	1.476	30.9	20.4	130 W	88	17
2 10	12 9.43	+49 3.7	0.634	1.493	28.9	20.3	133 W	86	15
2 15	11 50.91	+50 19.2	0.636	1.509	27.3	20.3	136 W	85	14
2 17	11 42.89	+50 41.7	0.639	1.515	26.8	20.3	136 W	84	13
2 19	11 34.62	+50 59.3	0.642	1.521	26.5	20.3	137 W	84	13
2 21	11 26.17	+51 11.7	0.646	1.526	26.2	20.4	137 W	84	13
2 23	11 17.63	+51 18.8	0.650	1.532	26.0	20.4	137 W	84	13
2 25	11 9.09	+51 20.5	0.656	1.537	26.0	20.4	137 W	84	13
2 27	11 0.63	+51 16.9	0.662	1.542	26.0	20.4	137 W	84	13
3 1	10 52.33	+51 8.0	0.669	1.546	26.1	20.5	137 W	84	13
3 3	10 44.27	+50 54.2	0.677	1.551	26.4	20.5	136 E	84	13
3 5	10 36.51	+50 35.6	0.685	1.555	26.7	20.5	135 E	84	13
3 7	10 29.10	+50 12.6	0.694	1.559	27.1	20.6	134 E	85	14
3 9	10 22.10	+49 45.5	0.704	1.563	27.5	20.6	133 E	85	14
3 11	10 15.54	+49 14.9	0.715	1.567	28.0	20.7	132 E	86	15
3 13	10 9.44	+48 41.0	0.727	1.570	28.5	20.7	131 E	86	15
3 15	10 3.82	+48 4.3	0.739	1.573	29.1	20.8	130 E	87	16
3 17	9 58.68	+47 25.2	0.751	1.576	29.6	20.9	128 E	88	17
3 22	9 47.89	+45 39.3	0.786	1.582	31.1	21.0	125 E	89	18
3 27	9 39.89	+43 45.9	0.823	1.588	32.6	21.2	121 E	89	20
4 1	9 34.36	+41 49.0	0.863	1.591	33.9	21.3	117 E	87	22
4 6	9 30.94	+39 51.2	0.905	1.594	35.2	21.4	113 E	85	24
5869 Tanith									
12 27	12 54.58	−25 34.5	1.298	1.389	42.8	20.1	74 W	19	65*
1 6	13 17.55	−27 56.8	1.267	1.427	42.3	20.1	78 W	17	71*
1 16	13 38.70	−29 55.1	1.229	1.467	41.6	20.1	82 W	15	76*
1 26	13 57.58	−31 28.7	1.186	1.509	40.7	20.1	88 W	14	81*
1 31	14 6.01	−32 6.1	1.162	1.530	40.1	20.0	90 W	13	83*
2 5	14 13.68	−32 37.2	1.137	1.551	39.4	20.0	94 W	12	83
2 10	14 20.49	−33 1.7	1.111	1.573	38.5	20.0	97 W	12	83
2 15	14 26.34	−33 19.3	1.084	1.594	37.5	19.9	101 W	12	83
2 20	14 31.17	−33 29.6	1.057	1.616	36.4	19.8	104 W	12	83
2 25	14 34.90	−33 32.2	1.030	1.638	35.0	19.8	108 W	11	82
3 2	14 37.44	−33 26.7	1.003	1.659	33.4	19.7	113 W	12	83
3 7	14 38.74	−33 12.2	0.976	1.681	31.6	19.6	117 W	12	83
3 12	14 38.76	−32 48.1	0.951	1.703	29.6	19.5	122 W	12	83
3 17	14 37.47	−32 13.4	0.928	1.724	27.3	19.4	127 W	13	84
3 22	14 34.92	−31 27.3	0.907	1.745	24.7	19.3	133 W	14	85
3 27	14 31.22	−30 29.5	0.889	1.766	21.9	19.2	139 W	15	86
4 1	14 26.50	−29 19.9	0.876	1.787	18.8	19.1	145 W	16	87
4 6	14 20.97	−27 58.6	0.866	1.808	15.6	19.0	151 W	17	88
4 11	14 14.86	−26 26.9	0.863	1.828	12.2	18.9	157 W	19	90

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
5869 Tanith *(continuation)*									
	h m	° ′			°	m	°	°	°
4 16	14 8.46	−24 46.6	0.865	1.849	8.9	18.8	163 W	20	89
4 21	14 2.08	−23 0.3	0.873	1.869	6.1	18.7	169 W	22	87
4 26	13 55.97	−21 11.4	0.888	1.888	4.7	18.7	171 E	24	85
5 1	13 50.38	−19 22.8	0.909	1.908	5.8	18.9	169 E	26	83
5 6	13 45.47	−17 37.8	0.937	1.927	8.2	19.1	164 E	27	82
5 11	13 41.37	−15 58.8	0.970	1.946	11.0	19.3	158 E	29	80
5 16	13 38.16	−14 27.9	1.010	1.964	13.7	19.5	153 E	31	78
5 21	13 35.87	−13 6.4	1.055	1.982	16.2	19.7	147 E	32	77
5 26	13 34.50	−11 54.9	1.105	2.000	18.4	19.9	142 E	33	76
6 5	13 34.32	−10 2.2	1.217	2.034	22.0	20.2	131 E	35	74
6 15	13 37.21	− 8 46.8	1.343	2.068	24.7	20.6	122 E	36*	73
6 25	13 42.70	− 8 3.4	1.478	2.099	26.4	20.9	113 E	35*	72
7 5	13 50.31	− 7 45.4	1.620	2.129	27.4	21.1	105 E	34*	72
7 15	13 59.67	− 7 47.4	1.766	2.158	27.8	21.3	98 E	32*	72
6172 Prokofeana									
12 27	12 54.68	−16 50.2	2.828	2.769	20.2	20.7	76 W	28	63*
1 6	13 1.97	−17 43.4	2.728	2.811	20.4	20.6	85 W	27	72*
1 16	13 7.41	−18 25.8	2.625	2.853	20.1	20.6	93 W	27	80*
1 26	13 10.75	−18 55.5	2.520	2.893	19.4	20.5	102 W	26	83
2 5	13 11.81	−19 10.3	2.420	2.933	18.2	20.4	112 W	26	83
2 15	13 10.43	−19 8.3	2.327	2.971	16.4	20.3	122 W	26	83
2 25	13 6.63	−18 47.2	2.247	3.009	14.0	20.1	133 W	26	83
3 7	13 0.64	−18 6.1	2.186	3.045	11.1	20.0	144 W	27	82
3 17	12 52.94	−17 5.2	2.149	3.081	7.8	19.9	155 W	28	81
3 22	12 48.66	−16 28.2	2.140	3.098	6.1	19.8	161 W	29	80
3 27	12 44.24	−15 47.6	2.139	3.115	4.5	19.7	166 W	29	80
4 1	12 39.79	−15 4.1	2.145	3.132	3.4	19.7	169 E	30	79
4 6	12 35.41	−14 18.6	2.158	3.149	3.1	19.7	170 E	31	78
4 11	12 31.21	−13 31.9	2.179	3.165	4.0	19.8	167 E	31	78
4 16	12 27.28	−12 45.1	2.208	3.181	5.3	19.9	163 E	32	77
4 21	12 23.71	−11 59.0	2.244	3.197	6.8	20.0	158 E	33	76
4 26	12 20.56	−11 14.6	2.287	3.212	8.4	20.1	152 E	34	75
5 6	12 15.68	− 9 53.0	2.392	3.243	11.2	20.3	142 E	35	74
5 16	12 12.84	− 8 44.6	2.518	3.272	13.5	20.6	131 E	36	73
5 26	12 12.06	− 7 51.4	2.662	3.301	15.2	20.8	121 E	37*	72
6 5	12 13.20	− 7 13.8	2.819	3.328	16.5	20.9	112 E	36*	71
6 15	12 16.09	− 6 51.0	2.984	3.354	17.2	21.1	103 E	33*	71
6 25	12 20.51	− 6 41.9	3.153	3.380	17.5	21.3	94 E	30*	71
7 5	12 26.24	− 6 44.8	3.324	3.404	17.3	21.4	86 E	26*	71*
7 15	12 33.10	− 6 58.0	3.493	3.427	16.9	21.5	78 E	22*	68*
80366 1999 XA_{142}									
12 27	12 54.93	+27 56.2	1.228	1.629	37.0	17.8	94 W	73	30*
1 6	13 17.90	+27 56.5	1.168	1.631	36.6	17.7	98 W	73	32*
1 16	13 38.17	+28 9.8	1.112	1.636	36.0	17.6	102 W	73	34*
1 26	13 55.13	+28 36.9	1.059	1.643	35.0	17.4	107 W	74	35*
1 31	14 2.20	+28 55.4	1.034	1.649	34.3	17.4	109 W	74	35*
2 5	14 8.22	+29 16.7	1.011	1.654	33.6	17.3	112 W	74	35
2 10	14 13.09	+29 40.6	0.988	1.661	32.7	17.3	115 W	75	34
2 15	14 16.72	+30 6.1	0.966	1.668	31.8	17.2	117 W	75	34
2 20	14 19.04	+30 32.3	0.946	1.676	30.7	17.1	120 W	76	33
2 25	14 19.99	+30 57.7	0.927	1.685	29.5	17.1	123 W	76	33
3 2	14 19.53	+31 20.8	0.910	1.694	28.3	17.0	126 W	76	33
3 7	14 17.63	+31 40.0	0.896	1.704	27.0	16.9	129 W	77	32
3 12	14 14.32	+31 53.2	0.884	1.714	25.6	16.9	132 W	77	32
3 17	14 9.68	+31 58.0	0.874	1.725	24.3	16.8	135 W	77	32
3 22	14 3.86	+31 52.3	0.869	1.736	23.0	16.8	137 W	77	32
3 27	13 57.09	+31 34.1	0.867	1.748	21.9	16.8	139 W	77	32
4 1	13 49.65	+31 2.1	0.869	1.761	20.9	16.8	141 W	76	33
4 6	13 41.83	+30 15.5	0.875	1.774	20.3	16.8	142 W	75	34
4 11	13 33.96	+29 14.4	0.886	1.787	20.0	16.8	142 W	74	35
4 16	13 26.37	+27 59.3	0.901	1.801	20.1	16.9	142 E	73	36
4 21	13 19.33	+26 31.7	0.922	1.815	20.5	16.9	141 E	72	37
4 26	13 13.07	+24 53.7	0.947	1.830	21.2	17.0	139 E	70	39
5 1	13 7.71	+23 7.5	0.977	1.844	22.0	17.1	137 E	68	41
5 6	13 3.34	+21 15.4	1.012	1.859	23.0	17.3	134 E	66	43
5 11	13 0.00	+19 19.4	1.051	1.875	24.0	17.4	131 E	64	45
5 16	12 57.67	+17 21.3	1.095	1.890	25.1	17.5	128 E	62	47
5 21	12 56.33	+15 22.7	1.142	1.906	26.0	17.7	124 E	60	49
5 26	12 55.91	+13 24.8	1.193	1.922	26.9	17.8	121 E	58	51
5 31	12 56.33	+11 28.6	1.248	1.938	27.6	17.9	118 E	56	53
6 5	12 57.53	+ 9 34.6	1.305	1.955	28.2	18.1	114 E	54*	54
6 15	13 2.00	+ 5 54.7	1.427	1.988	29.1	18.3	108 E	49*	58
6 25	13 8.81	+ 2 26.9	1.558	2.022	29.5	18.6	101 E	43*	62
7 5	13 17.50	− 0 48.6	1.696	2.055	29.5	18.8	95 E	37*	65
7 15	13 27.77	− 3 52.4	1.838	2.089	29.1	19.0	89 E	32*	68
7 25	13 39.35	− 6 45.3	1.983	2.123	28.4	19.2	83 E	27*	70*

80366 1999 XA_{142} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
8 4	13 52.04	− 9 28.0	2.129	2.157	27.4	19.3	78 E	23*	69*
8 14	14 5.70	−12 1.2	2.275	2.191	26.1	19.5	72 E	19*	65*
8 24	14 20.22	−14 25.3	2.420	2.224	24.7	19.6	67 E	16*	61*
9 3	14 35.52	−16 40.5	2.560	2.257	23.1	19.7	61 E	14*	55*
9 13	14 51.54	−18 47.3	2.697	2.290	21.3	19.8	56 E	11*	50*
9 23	15 8.22	−20 45.5	2.827	2.322	19.5	19.9	51 E	9*	45*
10 3	15 25.51	−22 35.1	2.951	2.354	17.5	19.9	45 E	7*	39*
10 13	15 43.38	−24 16.1	3.065	2.385	15.5	20.0	40 E	6*	34*
10 23	16 1.77	−25 48.2	3.171	2.415	13.4	20.0	34 E	4*	28*
11 2	16 20.63	−27 11.4	3.266	2.445	11.3	20.0	29 E	2*	23*
11 12	16 39.91	−28 25.4	3.349	2.474	9.2	20.0	24 E	—	18*
11 22	16 59.52	−29 30.3	3.420	2.503	7.2	20.0	18 E	—	12*
12 2	17 19.40	−30 26.1	3.478	2.530	5.2	20.0	14 E	—	7*
12 12	17 39.46	−31 12.8	3.522	2.557	3.7	19.9	10 E	—	3*
12 22	17 59.60	−31 50.9	3.552	2.583	3.2	19.9	8 W	—	—
1 1	18 19.72	−32 20.7	3.567	2.608	4.0	20.0	11 W	—	3*
1 11	18 39.73	−32 42.9	3.568	2.632	5.6	20.1	15 W	—	9*
1 21	18 59.52	−32 58.3	3.554	2.656	7.5	20.2	21 W	—	14*

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12 27	12 55.55	+ 4 47.9	1.785	1.955	30.0	20.8	85 W	50	49*
1 6	13 9.87	+ 5 41.0	1.710	1.998	29.5	20.8	92 W	51	53*
1 16	13 22.05	+ 6 59.2	1.637	2.040	28.4	20.7	99 W	52	55*
1 26	13 31.71	+ 8 43.9	1.567	2.084	26.8	20.6	107 W	54	55*
2 5	13 38.50	+10 54.6	1.503	2.127	24.7	20.5	116 W	56	53
2 10	13 40.70	+12 8.8	1.475	2.148	23.4	20.4	120 W	57	52
2 15	13 42.05	+13 28.2	1.451	2.169	22.0	20.4	125 W	58	51
2 20	13 42.52	+14 51.5	1.430	2.191	20.5	20.3	129 W	60	49
2 25	13 42.11	+16 17.6	1.413	2.212	19.0	20.2	133 W	61	48
3 2	13 40.83	+17 44.8	1.401	2.233	17.5	20.2	137 W	63	46
3 7	13 38.72	+19 11.4	1.394	2.254	16.0	20.2	141 W	64	45
3 12	13 35.82	+20 35.7	1.392	2.275	14.7	20.1	145 W	66	43
3 17	13 32.23	+21 55.4	1.396	2.296	13.6	20.1	147 W	67	42
3 22	13 28.07	+23 8.8	1.406	2.317	12.9	20.1	149 W	68	41
3 27	13 23.49	+24 14.0	1.422	2.338	12.5	20.2	150 W	69	40
4 1	13 18.66	+25 9.9	1.445	2.358	12.6	20.2	149 W	70	39
4 6	13 13.73	+25 55.6	1.473	2.378	13.0	20.3	148 W	71	38
4 11	13 8.86	+26 30.5	1.506	2.399	13.8	20.4	145 E	72	37
4 16	13 4.23	+26 54.6	1.546	2.419	14.7	20.5	142 E	72	37
4 21	12 59.98	+27 8.0	1.590	2.438	15.7	20.6	139 E	72	37
4 26	12 56.21	+27 11.4	1.639	2.458	16.7	20.7	135 E	72	37
5 1	12 53.00	+27 5.7	1.692	2.477	17.7	20.8	131 E	72	37
5 6	12 50.41	+26 51.8	1.749	2.497	18.7	21.0	128 E	72	37
5 11	12 48.45	+26 30.6	1.810	2.516	19.5	21.1	124 E	72	37
5 16	12 47.16	+26 3.0	1.874	2.534	20.2	21.2	120 E	71	38
5 21	12 46.52	+25 29.9	1.941	2.553	20.9	21.3	116 E	70	39
5 26	12 46.50	+24 52.2	2.010	2.572	21.4	21.4	112 E	70	39

301962 2000 ET_{26}

12 27	12 55.57	+12 6.4	1.611	1.852	32.0	19.2	88 W	57	43*
1 6	13 3.39	+10 26.4	1.545	1.902	31.0	19.2	95 W	55	50*
1 16	13 8.02	+ 8 59.7	1.477	1.952	29.4	19.1	103 W	54	54*
1 26	13 9.04	+ 7 45.7	1.410	2.004	27.0	19.0	112 W	53	56
2 5	13 6.11	+ 6 43.3	1.349	2.055	23.8	18.8	123 W	52	57
2 15	12 59.03	+ 5 50.7	1.299	2.107	19.8	18.7	134 W	51	58
2 25	12 48.02	+ 5 5.1	1.266	2.159	14.8	18.5	146 W	50	59
3 7	12 33.93	+ 4 23.5	1.255	2.211	9.3	18.3	159 W	49	60
3 17	12 18.16	+ 3 42.7	1.273	2.262	3.6	18.1	172 W	49	60
3 27	12 2.54	+ 3 0.1	1.320	2.313	3.2	18.2	173 E	48	61
4 6	11 48.73	+ 2 14.2	1.397	2.363	8.2	18.7	160 E	47	62
4 16	11 37.84	+ 1 24.3	1.501	2.413	12.6	19.0	148 E	46	63
4 26	11 30.38	+ 0 30.1	1.627	2.463	16.1	19.4	137 E	45	64
5 6	11 26.29	− 0 28.4	1.772	2.511	18.7	19.7	127 E	45	64
5 16	11 25.25	− 1 31.1	1.931	2.559	20.5	20.0	117 E	43*	66
5 26	11 26.84	− 2 38.0	2.099	2.606	21.6	20.2	109 E	41*	67
6 5	11 30.60	− 3 48.8	2.274	2.652	22.1	20.5	100 E	36*	68
6 15	11 36.14	− 5 3.5	2.452	2.698	22.1	20.7	93 E	31*	69
6 25	11 43.14	− 6 21.8	2.631	2.742	21.7	20.8	85 E	25*	70*
7 5	11 51.30	− 7 43.3	2.808	2.786	20.9	21.0	78 E	20*	69*
7 15	12 0.43	− 9 7.7	2.982	2.828	19.9	21.1	72 E	15*	64*
7 25	12 10.35	−10 34.7	3.149	2.870	18.7	21.2	65 E	11*	59*
8 4	12 20.91	−12 3.9	3.310	2.911	17.3	21.3	58 E	7*	52*
8 14	12 32.04	−13 34.9	3.461	2.951	15.7	21.4	52 E	4*	46*
8 24	12 43.63	−15 7.3	3.602	2.990	14.1	21.5	46 E	1*	39*

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12 27	12 56.05	−11 31.4	2.740	2.713	20.8	20.9	78 W	33	60*
1 6	13 4.80	−12 44.6	2.591	2.703	21.3	20.8	86 W	32	68*
1 16	13 12.12	−13 50.5	2.439	2.691	21.4	20.6	94 W	31	76*
1 26	13 17.70	−14 47.5	2.289	2.678	21.0	20.5	102 W	30	79
2 5	13 21.24	−15 34.0	2.143	2.665	20.2	20.3	111 W	29	80

45074 1999 XA_{38} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
2 15	13 22.40	−16 7.7	2.004	2.650	18.6	20.1	121 W	29	80
2 25	13 20.91	−16 26.3	1.877	2.635	16.5	19.9	131 W	29	80
3 7	13 16.67	−16 27.3	1.766	2.619	13.6	19.6	142 W	29	80
3 17	13 9.81	−16 8.5	1.676	2.602	10.0	19.3	153 W	29	80
3 27	13 0.83	−15 29.7	1.610	2.584	6.1	19.1	164 W	30	79
4 1	12 55.82	−15 3.4	1.587	2.574	4.3	18.9	169 W	30	79
4 6	12 50.64	−14 33.2	1.571	2.565	3.3	18.9	172 E	30	79
4 11	12 45.44	−13 59.8	1.562	2.555	3.8	18.9	170 E	31	78
4 16	12 40.37	−13 24.3	1.560	2.545	5.5	18.9	166 E	32	77
4 21	12 35.58	−12 47.8	1.565	2.535	7.6	19.0	161 E	32	77
4 26	12 31.22	−12 11.2	1.576	2.524	9.7	19.1	155 E	33	76
5 1	12 27.36	−11 35.8	1.594	2.513	11.8	19.2	149 E	33	76
5 6	12 24.12	−11 2.3	1.617	2.503	13.8	19.3	144 E	34	75
5 11	12 21.53	−10 31.5	1.645	2.492	15.6	19.4	138 E	34	75
5 16	12 19.66	−10 4.3	1.678	2.480	17.3	19.5	133 E	35	74
5 26	12 18.07	− 9 21.9	1.755	2.457	20.2	19.7	123 E	36*	73
6 5	12 19.30	− 8 56.9	1.843	2.433	22.5	19.8	114 E	35*	73
6 15	12 23.14	− 8 49.5	1.939	2.409	24.1	20.0	105 E	32*	73
6 25	12 29.32	− 8 58.8	2.038	2.383	25.0	20.1	97 E	28*	73
7 5	12 37.55	− 9 22.8	2.138	2.357	25.5	20.2	89 E	25*	73*
7 15	12 47.59	− 9 59.8	2.236	2.331	25.6	20.3	82 E	21*	72*
7 25	12 59.22	−10 47.8	2.331	2.303	25.3	20.3	76 E	18*	68*
8 4	13 12.27	−11 44.8	2.421	2.276	24.7	20.4	70 E	15*	63*
8 14	13 26.62	−12 49.0	2.505	2.247	23.8	20.4	64 E	13*	58*
8 24	13 42.16	−13 58.5	2.582	2.219	22.7	20.4	58 E	11*	52*
9 3	13 58.83	−15 11.6	2.651	2.189	21.5	20.4	53 E	10*	47*
9 13	14 16.58	−16 26.4	2.712	2.160	20.0	20.3	47 E	8*	41*
9 23	14 35.38	−17 41.2	2.764	2.130	18.5	20.3	42 E	7*	36*
10 3	14 55.22	−18 54.1	2.807	2.100	16.8	20.2	37 E	6*	31*
10 13	15 16.09	−20 3.3	2.842	2.070	15.0	20.2	32 E	5*	26*
10 23	15 37.95	−21 6.6	2.868	2.040	13.1	20.1	28 E	4*	22*
11 2	16 0.79	−22 2.3	2.885	2.010	11.2	20.0	23 E	3*	17*
11 12	16 24.57	−22 48.3	2.893	1.980	9.2	19.9	19 E	2*	12*
11 22	16 49.22	−23 22.7	2.893	1.951	7.2	19.8	14 E	1*	8*
12 2	17 14.67	−23 43.5	2.886	1.922	5.1	19.6	10 E	—	3*
12 12	17 40.79	−23 49.3	2.871	1.894	3.0	19.5	6 E	—	—
12 22	18 7.46	−23 38.5	2.849	1.866	0.9	19.3	2 E	—	—
1 1	18 34.53	−23 10.2	2.822	1.840	1.2	19.3	2 W	—	—
1 11	19 1.84	−22 23.6	2.789	1.814	3.3	19.3	6 W	—	—
1 21	19 29.22	−21 18.6	2.751	1.790	5.4	19.4	10 W	—	3*

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12 27	12 56.08	+21 7.8	2.745	2.936	19.6	20.9	91 W	66	36*
1 6	13 3.97	+21 54.4	2.617	2.936	19.3	20.8	99 W	67	39*
1 16	13 10.06	+22 58.8	2.493	2.936	18.7	20.7	107 W	68	40*
1 26	13 14.03	+24 20.2	2.377	2.934	17.7	20.5	115 W	69	40
2 5	13 15.57	+25 56.4	2.273	2.932	16.3	20.4	123 W	71	38
2 10	13 15.34	+26 48.7	2.226	2.930	15.6	20.3	127 W	72	37
2 15	13 14.40	+27 42.9	2.184	2.929	14.7	20.3	131 W	73	36
2 20	13 12.74	+28 37.9	2.147	2.927	13.9	20.2	135 W	74	35
2 25	13 10.38	+29 32.6	2.114	2.924	13.1	20.1	138 W	75	34
3 2	13 7.33	+30 25.9	2.087	2.922	12.4	20.1	141 W	75	34
3 7	13 3.63	+31 16.4	2.066	2.919	11.9	20.0	143 W	76	33
3 12	12 59.35	+32 2.8	2.051	2.916	11.5	20.0	144 W	77	32
3 17	12 54.57	+32 43.8	2.042	2.913	11.3	20.0	145 W	78	31
3 22	12 49.41	+33 18.3	2.040	2.909	11.4	20.0	145 W	78	31
3 27	12 44.01	+33 45.4	2.043	2.906	11.8	20.0	143 W	79	30
4 1	12 38.52	+34 4.4	2.052	2.902	12.4	20.0	141 E	79	30
4 6	12 33.06	+34 15.0	2.067	2.897	13.1	20.1	139 E	79	30
4 11	12 27.79	+34 17.0	2.088	2.893	14.0	20.1	136 E	79	30
4 16	12 22.83	+34 10.5	2.114	2.888	14.8	20.2	133 E	79	30
4 21	12 18.31	+33 55.9	2.144	2.883	15.7	20.2	129 E	79	30
4 26	12 14.32	+33 33.9	2.179	2.878	16.6	20.3	125 E	79	30
5 1	12 10.91	+33 5.0	2.218	2.873	17.5	20.3	121 E	78	31
5 6	12 8.13	+32 30.1	2.260	2.867	18.2	20.4	117 E	78	31
5 16	12 4.52	+31 4.8	2.353	2.855	19.5	20.5	110 E	76	33
5 26	12 3.51	+29 23.5	2.454	2.842	20.4	20.6	102 E	74*	35
6 5	12 4.89	+27 30.8	2.560	2.828	21.0	20.7	95 E	68*	36
6 15	12 8.39	+25 30.3	2.667	2.813	21.1	20.8	88 E	61*	38
6 25	12 13.75	+23 24.5	2.775	2.797	21.0	20.9	81 E	53*	41
7 5	12 20.68	+21 15.3	2.880	2.780	20.6	20.9	74 E	47*	43*
7 15	12 28.96	+19 4.0	2.980	2.762	19.9	21.0	68 E	41*	43*
7 25	12 38.40	+16 51.7	3.075	2.744	19.0	21.0	62 E	36*	42*
8 4	12 48.83	+14 39.0	3.162	2.724	17.9	21.0	56 E	32*	40*
8 14	13 0.13	+12 26.6	3.240	2.703	16.7	21.0	50 E	28*	37*
8 24	13 12.20	+10 15.1	3.309	2.682	15.3	21.0	44 E	25*	32*
9 3	13 24.97	+ 8 4.9	3.368	2.660	13.8	21.0	39 E	22*	28*
9 13	13 38.37	+ 5 56.5	3.415	2.636	12.2	20.9	34 E	19*	23*
9 23	13 52.36	+ 3 50.5	3.451	2.612	10.5	20.8	28 E	17*	17*

108376 2001 KB_{20} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
10 3	14 6.90	+ 1 47.3	3.474	2.587	8.9	20.8	23 E	14*	12*
10 13	14 21.98	− 0 12.5	3.485	2.561	7.2	20.7	19 E	11*	6*
10 23	14 37.57	− 2 8.3	3.483	2.535	5.8	20.6	15 E	9*	—
11 2	14 53.66	− 3 59.6	3.468	2.507	4.9	20.5	12 E	6*	—
11 12	15 10.22	− 5 46.0	3.440	2.479	4.7	20.5	12 E	3*	—
11 22	15 27.23	− 7 26.7	3.398	2.450	5.5	20.4	14 W	7*	—
12 2	15 44.68	− 9 1.5	3.345	2.421	6.9	20.5	17 W	11*	—
12 12	16 2.53	−10 29.7	3.278	2.390	8.7	20.5	22 W	15*	4*
12 22	16 20.76	−11 51.2	3.200	2.359	10.6	20.5	26 W	18*	10*
1 1	16 39.32	−13 5.7	3.111	2.328	12.7	20.4	31 W	20*	16*
1 11	16 58.19	−14 13.1	3.012	2.296	14.7	20.4	36 W	21*	23*
1 21	17 17.29	−15 13.5	2.902	2.263	16.8	20.4	42 W	22*	30*

5642 Bobbywilliams

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 56.46	−27 33.1	3.157	3.012	18.1	19.9	73 W	17	65*
1 6	13 3.79	−29 40.4	3.012	2.999	18.8	19.8	80 W	15	74*
1 16	13 9.65	−31 47.4	2.864	2.986	19.2	19.7	87 W	13	81*
1 26	13 13.70	−33 52.7	2.717	2.971	19.3	19.6	95 W	11	82
2 5	13 15.56	−35 54.3	2.573	2.955	19.0	19.5	103 W	9	80
2 10	13 15.55	−36 52.8	2.504	2.946	18.7	19.4	107 W	8	79
2 15	13 14.84	−37 49.2	2.436	2.938	18.3	19.3	111 W	7	78
2 20	13 13.39	−38 42.7	2.371	2.929	17.8	19.2	115 W	6	77
2 25	13 11.18	−39 32.8	2.309	2.920	17.3	19.2	119 W	5	76
3 2	13 8.19	−40 18.6	2.251	2.910	16.6	19.1	123 W	5	76
3 7	13 4.42	−40 59.4	2.196	2.901	15.9	19.0	127 W	4	75
3 12	12 59.89	−41 34.1	2.146	2.891	15.2	18.9	130 W	3	74
3 17	12 54.66	−42 1.8	2.100	2.880	14.4	18.8	134 W	3	74
3 22	12 48.84	−42 21.8	2.060	2.870	13.7	18.7	137 W	3	74
3 27	12 42.54	−42 33.4	2.025	2.859	13.0	18.7	140 W	2	73
4 1	12 35.92	−42 36.2	1.995	2.848	12.5	18.6	142 E	2	73
4 6	12 29.15	−42 30.0	1.972	2.837	12.2	18.6	143 E	2	73
4 11	12 22.41	−42 14.8	1.954	2.826	12.1	18.5	144 E	3	74
4 16	12 15.91	−41 51.3	1.943	2.814	12.2	18.5	144 E	3	74
4 21	12 9.82	−41 20.1	1.937	2.802	12.6	18.5	143 E	4	75
4 26	12 4.30	−40 42.5	1.937	2.790	13.2	18.5	141 E	4	75
5 1	11 59.46	−39 59.7	1.943	2.778	14.0	18.6	138 E	5	76
5 6	11 55.39	−39 13.1	1.954	2.765	14.8	18.6	135 E	6	77
5 11	11 52.14	−38 24.1	1.970	2.752	15.8	18.6	132 E	7	78
5 16	11 49.76	−37 34.0	1.990	2.739	16.7	18.7	129 E	7	78
5 21	11 48.25	−36 44.1	2.015	2.725	17.7	18.7	125 E	8*	79
5 26	11 47.58	−35 55.5	2.043	2.712	18.6	18.8	121 E	9*	80
5 31	11 47.72	−35 9.0	2.074	2.698	19.5	18.8	118 E	9*	81
6 5	11 48.65	−34 25.4	2.108	2.684	20.2	18.9	114 E	8*	82
6 10	11 50.31	−33 45.2	2.145	2.669	20.9	18.9	110 E	8*	82
6 15	11 52.66	−33 8.8	2.183	2.655	21.5	19.0	106 E	7*	83
6 25	11 59.27	−32 8.4	2.264	2.625	22.5	19.0	99 E	5*	84
7 5	12 8.10	−31 25.1	2.347	2.594	23.1	19.1	92 E	2*	81*
7 15	12 18.90	−30 58.3	2.432	2.562	23.3	19.2	86 E	—	75*
7 25	12 31.40	−30 46.9	2.514	2.529	23.2	19.2	79 E	—	69*
8 4	12 45.43	−30 49.1	2.593	2.496	22.9	19.2	73 E	—	62*
8 14	13 0.85	−31 3.0	2.668	2.461	22.3	19.3	67 E	—	56*
8 24	13 17.56	−31 26.6	2.736	2.426	21.5	19.3	62 E	—	51*
9 3	13 35.49	−31 57.5	2.798	2.390	20.6	19.2	56 E	—	45*
9 13	13 54.60	−32 33.5	2.852	2.353	19.4	19.2	51 E	—	40*
9 23	14 14.87	−33 12.4	2.898	2.316	18.2	19.2	46 E	—	36*
10 3	14 36.26	−33 51.6	2.936	2.278	16.8	19.1	41 E	—	31*
10 13	14 58.77	−34 28.9	2.964	2.240	15.3	19.1	36 E	—	27*
10 23	15 22.34	−35 1.7	2.984	2.201	13.7	19.0	32 E	—	23*
11 2	15 46.94	−35 27.4	2.995	2.161	12.1	18.9	27 E	—	19*
11 12	16 12.49	−35 43.7	2.997	2.122	10.5	18.8	23 E	—	15*
11 22	16 38.86	−35 48.0	2.990	2.082	8.9	18.7	19 E	—	11*
12 2	17 5.92	−35 38.2	2.974	2.042	7.5	18.6	16 E	—	7*
12 12	17 33.50	−35 12.3	2.950	2.002	6.2	18.4	13 E	—	4*
12 22	18 1.38	−34 28.5	2.919	1.962	5.5	18.3	11 E	—	—
1 1	18 29.36	−33 25.5	2.879	1.923	5.6	18.3	11 W	—	2*
1 11	18 57.25	−32 2.6	2.833	1.884	6.4	18.2	12 W	—	5*
1 21	19 24.84	−30 19.3	2.781	1.846	7.8	18.2	15 W	—	8*

12008 Kandrup

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 56.61	−37 13.8	1.746	1.683	33.3	16.8	70 W	8	64*
1 1	13 10.29	−39 9.8	1.697	1.663	34.0	16.8	71 W	6	65*
1 6	13 24.57	−41 3.3	1.648	1.644	34.8	16.7	72 W	4	66*
1 11	13 39.51	−42 53.3	1.601	1.624	35.5	16.6	74 W	2	66*
1 16	13 55.16	−44 39.0	1.554	1.605	36.2	16.6	75 W	—	66*
1 21	14 11.56	−46 19.1	1.509	1.587	37.0	16.5	76 W	—	65*
1 26	14 28.75	−47 52.6	1.464	1.569	37.7	16.4	77 W	—	65*
1 31	14 46.76	−49 18.4	1.420	1.551	38.4	16.4	78 W	—	64*
2 5	15 5.58	−50 35.2	1.377	1.534	39.1	16.3	79 W	—	63*
2 10	15 25.17	−51 41.9	1.334	1.517	39.9	16.2	80 W	—	63*
2 15	15 45.43	−52 37.2	1.292	1.501	40.6	16.1	81 W	—	62*
2 20	16 6.25	−53 20.0	1.250	1.485	41.3	16.1	82 W	—	62*

12008 Kandrup *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
2 25	16 27.45	−53 49.2	1.209	1.470	42.0	16.0	83 W	—	61*
3 2	16 48.82	−54 4.1	1.168	1.456	42.6	15.9	84 W	—	61*
3 7	17 10.11	−54 4.1	1.127	1.443	43.3	15.8	86 W	—	61*
3 12	17 31.06	−53 48.9	1.086	1.431	43.9	15.7	87 W	—	61*
3 17	17 51.39	−53 18.3	1.046	1.419	44.5	15.7	88 W	—	62*
3 22	18 10.87	−52 32.2	1.005	1.409	45.0	15.6	89 W	—	63*
3 27	18 29.30	−51 30.8	0.965	1.399	45.5	15.5	91 W	—	64*
4 1	18 46.53	−50 14.2	0.924	1.391	45.9	15.4	93 W	—	65*
4 6	19 2.45	−48 42.7	0.884	1.384	46.1	15.3	94 W	—	67*
4 11	19 16.94	−46 56.3	0.845	1.378	46.3	15.2	96 W	—	69*
4 16	19 29.96	−44 54.7	0.805	1.373	46.3	15.1	98 W	—	71*
4 21	19 41.46	−42 37.6	0.767	1.369	46.2	15.0	100 W	1*	73
4 26	19 51.45	−40 4.5	0.729	1.367	45.9	14.8	103 W	3*	76
5 1	19 59.92	−37 14.4	0.692	1.366	45.3	14.7	105 W	6*	79
5 6	20 6.86	−34 6.6	0.657	1.366	44.5	14.6	108 W	10*	82
5 11	20 12.23	−30 40.1	0.624	1.367	43.5	14.4	111 W	13*	85
5 16	20 16.01	−26 54.2	0.593	1.369	42.1	14.3	115 W	17*	89
5 26	20 18.80	−18 24.0	0.541	1.378	38.6	14.0	122 W	26*	82
6 5	20 15.25	− 8 49.0	0.506	1.392	34.3	13.8	129 W	36	73
6 15	20 5.63	+ 1 9.1	0.492	1.410	30.3	13.6	136 W	46	63
6 20	19 58.88	+ 5 55.7	0.493	1.420	28.8	13.6	138 W	51	58
6 25	19 51.15	+10 21.9	0.501	1.432	27.9	13.6	139 W	55	54
6 30	19 42.74	+14 20.4	0.513	1.444	27.5	13.7	139 W	59	50
7 5	19 33.99	+17 45.8	0.531	1.457	27.6	13.8	138 W	63	46
7 10	19 25.26	+20 35.8	0.554	1.471	28.1	13.9	137 W	66	43
7 15	19 16.93	+22 50.5	0.580	1.486	28.7	14.0	135 E	68	41
7 20	19 9.33	+24 32.0	0.610	1.502	29.5	14.2	133 E	70	39
7 25	19 2.70	+25 44.0	0.643	1.518	30.3	14.4	131 E	71	38
7 30	18 57.21	+26 30.5	0.679	1.535	31.0	14.5	129 E	72	37
8 4	18 52.94	+26 55.2	0.716	1.552	31.6	14.7	127 E	72	37
8 9	18 49.94	+27 2.0	0.756	1.570	32.2	14.8	124 E	72	37
8 14	18 48.22	+26 54.3	0.796	1.588	32.6	15.0	122 E	72	37
8 19	18 47.74	+26 35.3	0.839	1.607	33.0	15.1	120 E	72	37
8 24	18 48.40	+26 7.8	0.883	1.626	33.2	15.3	118 E	71	38
8 29	18 50.14	+25 33.7	0.927	1.645	33.4	15.4	116 E	71	38
9 3	18 52.85	+24 54.9	0.973	1.665	33.5	15.5	114 E	70	39
9 8	18 56.47	+24 12.9	1.020	1.684	33.6	15.7	112 E	69	40
9 13	19 0.92	+23 29.0	1.068	1.704	33.6	15.8	110 E	68	41
9 18	19 6.12	+22 44.4	1.117	1.724	33.5	15.9	109 E	68	41
9 23	19 11.98	+22 0.1	1.167	1.744	33.4	16.0	107 E	67	42
9 28	19 18.44	+21 16.6	1.218	1.765	33.3	16.2	105 E	66	43
10 3	19 25.43	+20 34.5	1.270	1.785	33.1	16.3	103 E	66	43
10 8	19 32.90	+19 54.5	1.323	1.805	32.9	16.4	101 E	65	44
10 13	19 40.80	+19 16.9	1.377	1.825	32.7	16.5	99 E	64	45*
10 18	19 49.09	+18 42.3	1.432	1.846	32.4	16.6	97 E	64	45*
10 23	19 57.70	+18 10.8	1.488	1.866	32.1	16.7	95 E	63	45*
11 2	20 15.75	+17 18.0	1.603	1.906	31.4	16.9	91 E	62	43*
11 12	20 34.69	+16 39.5	1.722	1.946	30.5	17.0	87 E	62	41*
11 22	20 54.28	+16 16.0	1.844	1.985	29.6	17.2	83 E	61*	38*
12 2	21 14.29	+16 7.0	1.968	2.023	28.6	17.4	79 E	61*	34*
12 12	21 34.59	+16 12.1	2.094	2.061	27.4	17.5	74 E	60*	29*
12 22	21 55.04	+16 30.2	2.221	2.097	26.1	17.6	70 E	59*	25*
1 1	22 15.54	+16 59.8	2.348	2.133	24.8	17.7	65 E	57*	20*
1 11	22 36.04	+17 39.7	2.474	2.168	23.3	17.8	61 E	53*	16*
1 21	22 56.46	+18 28.4	2.597	2.201	21.7	17.9	56 E	50*	12*

1685 Toro

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	12 56.63	−16 3.9	1.130	1.311	46.8	16.9	76 W	29	62*
1 6	13 10.32	−18 49.8	1.103	1.376	45.1	16.9	82 W	26	70*
1 16	13 21.17	−21 20.1	1.066	1.438	43.2	16.9	89 W	24	79*
1 26	13 28.56	−23 34.0	1.021	1.497	40.8	16.8	97 W	21	88*
1 31	13 30.74	−24 34.1	0.997	1.525	39.4	16.8	101 W	20	89
2 5	13 31.77	−25 29.1	0.972	1.552	37.9	16.7	105 W	20	89
2 10	13 31.55	−26 18.3	0.947	1.579	36.1	16.6	109 W	19	90
2 15	13 29.98	−27 0.5	0.922	1.604	34.2	16.6	114 W	18	89
2 20	13 26.97	−27 34.7	0.898	1.629	32.0	16.5	119 W	17	88
2 25	13 22.51	−27 59.4	0.876	1.653	29.6	16.4	125 W	17	88
3 2	13 16.61	−28 13.2	0.856	1.675	26.9	16.3	130 W	17	88
3 7	13 9.35	−28 14.5	0.839	1.697	24.1	16.2	136 W	17	88
3 12	13 0.89	−28 1.8	0.826	1.718	21.1	16.1	141 W	17	88
3 17	12 51.49	−27 34.2	0.817	1.739	18.1	16.0	147 W	17	88
3 22	12 41.53	−26 51.6	0.814	1.758	15.3	15.9	152 W	18	89
3 27	12 31.40	−25 55.1	0.816	1.776	13.0	15.9	156 W	19	90
4 1	12 21.52	−24 46.8	0.825	1.794	11.5	15.9	159 E	20	89
4 6	12 12.23	−23 29.4	0.839	1.811	11.2	15.9	159 E	22	87
4 11	12 3.86	−22 6.2	0.860	1.826	12.2	16.0	157 E	23	86
4 16	11 56.63	−20 40.8	0.887	1.841	13.9	16.2	154 E	24	85
4 21	11 50.66	−19 16.5	0.919	1.855	16.1	16.3	149 E	26	83
4 26	11 46.02	−17 56.0	0.957	1.868	18.3	16.5	144 E	27	82

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		1685 Toro			*(continuation)*				
	h m	° ′			°	m	°	°	°
5 1	11 42.67	−16 41.3	0.999	1.881	20.5	16.7	139 E	28	81
5 6	11 40.54	−15 33.7	1.046	1.892	22.5	16.9	134 E	29	80
5 16	11 39.66	−13 42.1	1.149	1.912	25.8	17.2	125 E	31	78
5 26	11 42.62	−12 22.9	1.262	1.929	28.3	17.5	116 E	32*	76
6 5	11 48.62	−11 33.4	1.381	1.943	29.9	17.7	107 E	30*	76
6 15	11 57.06	−11 9.8	1.504	1.953	30.8	18.0	100 E	28*	75
6 25	12 7.44	−11 7.9	1.627	1.960	31.2	18.2	93 E	24*	75
7 5	12 19.38	−11 23.9	1.750	1.963	31.1	18.3	86 E	21*	75*
7 15	12 32.62	−11 54.4	1.868	1.963	30.6	18.4	80 E	18*	72*
7 25	12 46.97	−12 36.6	1.982	1.960	29.9	18.5	74 E	15*	67*
8 4	13 2.28	−13 27.9	2.090	1.953	28.8	18.6	68 E	13*	62*
8 14	13 18.50	−14 26.2	2.190	1.943	27.6	18.7	63 E	11*	57*
8 24	13 35.56	−15 29.4	2.281	1.930	26.1	18.7	57 E	9*	51*
9 3	13 53.45	−16 35.6	2.363	1.913	24.5	18.7	52 E	8*	46*
9 13	14 12.18	−17 43.1	2.434	1.893	22.8	18.7	47 E	7*	41*
9 23	14 31.76	−18 50.2	2.494	1.870	21.0	18.7	42 E	6*	36*
10 3	14 52.21	−19 55.2	2.542	1.843	19.1	18.6	37 E	5*	31*
10 13	15 13.60	−20 56.2	2.577	1.812	17.0	18.5	32 E	4*	26*
10 23	15 35.95	−21 51.5	2.600	1.778	15.0	18.5	27 E	3*	21*
11 2	15 59.30	−22 38.9	2.611	1.741	12.8	18.3	23 E	3*	17*
11 12	16 23.71	−23 16.5	2.609	1.699	10.7	18.2	19 E	2*	12*
11 22	16 49.17	−23 42.1	2.594	1.655	8.5	18.0	14 E	—	8*
12 2	17 15.74	−23 53.2	2.567	1.607	6.2	17.9	10 E	—	4*
12 12	17 43.42	−23 47.5	2.530	1.555	4.0	17.6	6 E	—	—
12 22	18 12.19	−23 22.3	2.481	1.500	1.8	17.4	3 E	—	—
1 1	18 42.06	−22 35.1	2.424	1.441	0.5	17.1	1 W	—	—
1 11	19 13.03	−21 23.1	2.359	1.379	2.6	17.1	4 W	—	—
1 21	19 45.07	−19 43.9	2.288	1.314	4.6	17.1	6 W	—	—
		114326 2002 XO_{59}							
12 27	12 57.05	+ 8 15.1	2.156	2.301	25.2	19.8	86 W	53	46*
1 6	13 7.95	+ 9 0.3	2.065	2.339	24.8	19.8	93 W	54	50*
1 16	13 16.83	+10 7.3	1.974	2.375	23.9	19.7	102 W	55	53*
1 26	13 23.37	+11 36.8	1.888	2.411	22.6	19.6	110 W	57	52
2 5	13 27.27	+13 27.8	1.811	2.446	20.6	19.5	119 W	58	51
2 15	13 28.23	+15 37.2	1.746	2.481	18.3	19.3	128 W	61	48
2 20	13 27.55	+16 46.8	1.720	2.498	16.9	19.3	133 W	62	47
2 25	13 26.11	+17 58.3	1.698	2.514	15.6	19.2	137 W	63	46
3 2	13 23.93	+19 10.3	1.682	2.531	14.2	19.2	141 W	64	45
3 7	13 21.05	+20 21.4	1.671	2.547	13.0	19.1	145 W	65	44
3 12	13 17.53	+21 30.1	1.666	2.563	11.9	19.1	148 W	67	42
3 17	13 13.46	+22 34.6	1.668	2.579	11.1	19.1	150 W	68	41
3 22	13 8.96	+23 33.5	1.676	2.595	10.6	19.1	151 W	69	40
3 27	13 4.18	+24 25.4	1.690	2.610	10.6	19.1	151 W	69	40
4 1	12 59.26	+25 9.5	1.711	2.625	10.9	19.1	150 W	70	39
4 6	12 54.33	+25 44.9	1.738	2.640	11.6	19.2	148 E	71	38
4 11	12 49.55	+26 11.4	1.771	2.655	12.5	19.3	145 E	71	38
4 16	12 45.05	+26 28.8	1.810	2.669	13.6	19.4	141 E	71	38
4 21	12 40.95	+26 37.4	1.854	2.683	14.6	19.5	138 E	72	37
4 26	12 37.33	+26 37.7	1.903	2.698	15.7	19.6	134 E	72	37
5 1	12 34.27	+26 30.4	1.956	2.711	16.7	19.7	130 E	72	37
5 6	12 31.80	+26 16.1	2.013	2.725	17.6	19.8	125 E	71	38
5 11	12 29.94	+25 55.7	2.074	2.738	18.4	19.9	121 E	71	38
5 16	12 28.71	+25 29.8	2.138	2.751	19.1	20.0	117 E	70	39
5 21	12 28.09	+24 59.1	2.204	2.764	19.7	20.1	113 E	70	39
5 26	12 28.07	+24 24.5	2.272	2.777	20.1	20.2	109 E	69	40
6 5	12 29.69	+23 5.5	2.414	2.801	20.8	20.4	102 E	66*	41
6 15	12 33.31	+21 36.6	2.559	2.824	21.0	20.5	94 E	61*	42
6 25	12 38.66	+20 1.2	2.706	2.847	20.9	20.7	87 E	55*	44
7 5	12 45.46	+18 21.5	2.853	2.868	20.5	20.8	81 E	49*	46
7 15	12 53.50	+16 39.2	2.996	2.889	19.8	20.9	74 E	43*	47*
7 25	13 2.57	+14 55.8	3.135	2.908	18.9	21.0	68 E	39*	46*
8 4	13 12.52	+13 12.5	3.267	2.926	17.8	21.0	62 E	35*	44*
8 14	13 23.21	+11 30.0	3.392	2.944	16.5	21.1	56 E	31*	41*
8 24	13 34.54	+ 9 49.4	3.508	2.960	15.2	21.1	50 E	28*	37*
9 3	13 46.42	+ 8 11.2	3.614	2.975	13.7	21.1	44 E	26*	32*
9 13	13 58.78	+ 6 36.1	3.708	2.990	12.1	21.2	39 E	23*	27*
9 23	14 11.55	+ 5 4.9	3.791	3.003	10.6	21.2	33 E	21*	21*
10 3	14 24.68	+ 3 38.2	3.860	3.015	9.0	21.1	28 E	18*	15*
10 13	14 38.12	+ 2 16.6	3.914	3.027	7.6	21.1	24 E	16*	9*
10 23	14 51.80	+ 1 0.7	3.955	3.037	6.4	21.1	20 E	14*	2*
11 2	15 5.69	− 0 8.9	3.980	3.046	5.5	21.1	17 E	11*	—
11 12	15 19.72	− 1 11.6	3.989	3.054	5.3	21.1	17 E	8*	—
11 22	15 33.82	− 2 6.9	3.983	3.061	5.8	21.1	18 W	10*	—
12 2	15 47.94	− 2 54.3	3.961	3.067	6.9	21.1	22 W	15*	—
12 12	16 1.98	− 3 33.4	3.923	3.073	8.2	21.2	26 W	20*	1*
12 22	16 15.86	− 4 3.7	3.869	3.077	9.7	21.2	32 W	25*	7*
1 1	16 29.48	− 4 25.2	3.801	3.080	11.2	21.2	38 W	29*	15*
1 11	16 42.73	− 4 37.5	3.718	3.082	12.7	21.2	44 W	32*	22*
1 21	16 55.49	− 4 40.7	3.622	3.083	14.1	21.2	50 W	34*	30*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		8037 1993 HO_1							
	h m	° ′			°	m	°	°	°
12 27	12 57.38	+ 3 22.8	0.728	1.156	57.7	18.1	84 W	48	50*
1 1	13 13.39	+ 1 27.6	0.723	1.160	57.5	18.1	84 W	46	53*
1 6	13 28.70	− 0 23.9	0.719	1.166	57.1	18.1	85 W	45	55*
1 11	13 43.29	− 2 10.9	0.715	1.175	56.6	18.1	86 W	43	58*
1 16	13 57.13	− 3 53.0	0.710	1.185	56.0	18.1	87 W	41	61*
1 26	14 22.43	− 7 1.1	0.701	1.212	54.3	18.0	90 W	38	67*
2 5	14 44.33	− 9 47.8	0.690	1.246	52.1	18.0	94 W	35	72*
2 15	15 2.35	−12 13.5	0.675	1.286	49.3	17.9	100 W	33	76*
2 25	15 15.88	−14 19.9	0.658	1.330	45.7	17.9	106 W	31	78
3 7	15 24.28	−16 9.1	0.641	1.379	41.3	17.7	113 W	29	80
3 17	15 26.81	−17 41.4	0.624	1.431	35.9	17.6	123 W	27	82
3 27	15 23.09	−18 55.8	0.612	1.484	29.4	17.5	133 W	26	83
4 6	15 13.45	−19 49.2	0.610	1.539	22.0	17.3	145 W	25	84
4 11	15 6.77	−20 6.7	0.613	1.567	18.0	17.2	151 W	25	84
4 16	14 59.22	−20 17.6	0.621	1.595	13.9	17.2	158 W	25	84
4 21	14 51.16	−20 22.3	0.634	1.623	9.8	17.1	164 W	25	84
4 26	14 42.98	−20 21.4	0.651	1.652	6.0	17.0	170 W	25	84
5 1	14 35.05	−20 15.8	0.674	1.680	3.2	17.0	175 W	25	84
5 6	14 27.66	−20 6.8	0.702	1.708	4.0	17.2	173 E	25	84
5 11	14 21.09	−19 55.8	0.735	1.736	7.0	17.4	168 E	25	84
5 16	14 15.53	−19 44.3	0.773	1.763	10.1	17.7	162 E	25	84
5 21	14 11.07	−19 33.7	0.817	1.791	13.0	18.0	157 E	25	84
5 26	14 7.76	−19 24.8	0.865	1.819	15.6	18.2	151 E	26	83
6 5	14 4.42	−19 14.8	0.973	1.873	20.0	18.7	141 E	26	83
6 15	14 5.08	−19 16.9	1.095	1.926	23.2	19.1	132 E	26	83
6 25	14 9.11	−19 31.3	1.230	1.978	25.5	19.5	123 E	25*	84
7 5	14 15.86	−19 56.1	1.373	2.028	26.9	19.8	115 E	24*	84
7 15	14 24.81	−20 29.4	1.525	2.078	27.7	20.1	108 E	22*	84
7 25	14 35.54	−21 9.0	1.682	2.125	28.0	20.4	101 E	20*	85
8 4	14 47.71	−21 52.6	1.842	2.172	27.8	20.6	95 E	18*	86*
8 14	15 1.07	−22 38.7	2.005	2.216	27.2	20.9	88 E	16*	82*
8 24	15 15.44	−23 25.4	2.167	2.260	26.3	21.0	82 E	15*	76*
9 3	15 30.65	−24 11.2	2.329	2.301	25.2	21.2	76 E	14*	70*
9 13	15 46.59	−24 55.0	2.488	2.341	23.8	21.3	70 E	12*	64*
9 23	16 3.14	−25 35.6	2.642	2.380	22.3	21.5	64 E	12*	58*
		517103 2013 EM_{20}							
12 27	12 57.84	+14 22.2	0.270	1.011	76.5	19.8	88 W	59	41*
1 1	13 6.26	+15 32.9	0.281	1.029	72.7	19.7	91 W	61	42*
1 6	13 13.46	+16 42.2	0.290	1.049	69.0	19.7	95 W	62	43*
1 11	13 19.33	+17 52.6	0.298	1.070	65.2	19.7	99 W	63	43*
1 16	13 23.70	+19 6.1	0.305	1.093	61.4	19.7	103 W	64	44*
1 21	13 26.44	+20 23.3	0.310	1.115	57.5	19.7	107 W	65	43*
1 26	13 27.41	+21 44.3	0.315	1.139	53.5	19.6	112 W	67	42*
1 31	13 26.49	+23 8.4	0.319	1.163	49.4	19.6	116 W	68	41
2 5	13 23.54	+24 34.5	0.324	1.187	45.1	19.6	121 W	70	39
2 10	13 18.45	+26 0.1	0.329	1.212	40.9	19.5	127 W	71	38
2 15	13 11.23	+27 21.5	0.335	1.236	36.6	19.5	132 W	72	37
2 20	13 2.04	+28 34.1	0.343	1.261	32.4	19.4	137 W	74	35
2 25	12 51.23	+29 33.2	0.353	1.286	28.5	19.4	142 W	75	34
3 2	12 39.27	+30 15.0	0.366	1.310	25.2	19.5	146 W	75	34
3 7	12 26.75	+30 36.8	0.382	1.334	22.6	19.5	149 W	76	33
3 12	12 14.30	+30 37.5	0.401	1.358	21.0	19.6	151 W	76	33
3 17	12 2.55	+30 17.5	0.424	1.381	20.5	19.8	151 W	75	34
3 22	11 52.02	+29 39.2	0.451	1.404	21.0	19.9	150 E	75	34
3 27	11 43.04	+28 45.6	0.481	1.427	22.2	20.2	147 E	74	35
4 1	11 35.76	+27 40.4	0.515	1.449	23.8	20.4	144 E	73	36
4 6	11 30.18	+26 26.8	0.552	1.470	25.5	20.6	141 E	71	38
4 11	11 26.23	+25 7.3	0.592	1.491	27.3	20.9	137 E	70	39
4 16	11 23.82	+23 44.1	0.635	1.511	28.9	21.1	133 E	69	40
4 21	11 22.79	+22 18.6	0.681	1.531	30.4	21.3	130 E	67	42
		1310 Villigera							
12 27	12 57.96	+ 0 20.2	1.779	1.913	30.6	15.5	82 W	45	52*
1 6	13 7.61	− 1 52.9	1.702	1.955	30.2	15.4	89 W	43	60*
1 16	13 14.75	− 3 57.2	1.621	1.997	29.3	15.3	97 W	41	66*
1 26	13 18.95	− 5 52.2	1.542	2.039	27.7	15.2	106 W	39	70
2 5	13 19.82	− 7 37.2	1.466	2.082	25.5	15.1	115 W	37	72
2 15	13 16.97	− 9 10.6	1.397	2.124	22.4	14.9	125 W	36	73
2 25	13 10.27	−10 30.2	1.342	2.166	18.5	14.8	136 W	34	75
3 7	12 59.98	−11 33.5	1.305	2.209	13.9	14.6	148 W	33	76
3 17	12 46.91	−12 17.8	1.291	2.250	8.8	14.4	160 W	33	76
3 22	12 39.77	−12 32.7	1.294	2.271	6.4	14.3	165 W	32	77
3 27	12 32.50	−12 43.0	1.304	2.292	4.6	14.3	169 W	32	77
4 1	12 25.33	−12 49.3	1.321	2.312	4.0	14.3	171 E	32	77
4 6	12 18.44	−12 52.2	1.345	2.333	5.1	14.4	168 E	32	77
4 11	12 12.04	−12 52.5	1.376	2.353	7.1	14.6	163 E	32	77
4 16	12 6.26	−12 51.0	1.414	2.373	9.2	14.7	158 E	32	77
4 21	12 1.22	−12 48.6	1.458	2.393	11.3	14.9	152 E	32	77
4 26	11 57.00	−12 46.3	1.507	2.413	13.2	15.1	147 E	32	77

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		1310 Villigera				*(continuation)*			
	h m	° ′			°	m	°	°	°
5 6	11 51.07	−12 44.3	1.622	2.452	16.5	15.4	136 E	32	77
5 16	11 48.42	−12 48.9	1.754	2.490	19.1	15.7	126 E	32	77
5 26	11 48.77	−13 2.6	1.898	2.528	20.9	15.9	117 E	31*	77
6 5	11 51.69	−13 26.1	2.052	2.564	22.0	16.2	109 E	29*	77
6 15	11 56.78	−13 59.3	2.211	2.600	22.6	16.4	101 E	25*	78
6 25	12 3.66	−14 41.6	2.373	2.635	22.6	16.6	93 E	21*	79
7 5	12 12.00	−15 31.9	2.536	2.669	22.3	16.7	86 E	16*	78*
7 15	12 21.58	−16 29.3	2.698	2.702	21.7	16.9	79 E	12*	73*
7 25	12 32.18	−17 32.9	2.856	2.735	20.8	17.0	73 E	9*	67*
8 4	12 43.64	−18 41.6	3.009	2.766	19.7	17.1	67 E	6*	60*
8 14	12 55.84	−19 54.4	3.156	2.796	18.3	17.2	60 E	3*	53*
8 24	13 8.70	−21 10.5	3.294	2.826	16.9	17.2	54 E	1*	47*
9 3	13 22.12	−22 29.0	3.424	2.854	15.3	17.3	48 E	—	41*
9 13	13 36.06	−23 49.1	3.542	2.882	13.6	17.3	43 E	—	35*
9 23	13 50.47	−25 10.1	3.649	2.908	11.9	17.4	37 E	—	29*
10 3	14 5.30	−26 31.2	3.743	2.934	10.2	17.4	31 E	—	23*
10 13	14 20.52	−27 51.8	3.824	2.958	8.5	17.4	26 E	—	17*
10 23	14 36.09	−29 11.2	3.890	2.982	6.8	17.3	21 E	—	12*
11 2	14 51.97	−30 29.0	3.941	3.004	5.5	17.3	17 E	—	6*
11 12	15 8.13	−31 44.6	3.976	3.026	4.6	17.3	14 W	—	1*
11 22	15 24.48	−32 57.5	3.995	3.046	4.5	17.3	14 W	—	5*
12 2	15 40.99	−34 7.6	3.998	3.066	5.3	17.4	17 W	—	10*
12 12	15 57.57	−35 14.6	3.984	3.084	6.6	17.4	21 W	—	15*
12 22	16 14.14	−36 18.3	3.954	3.102	8.1	17.5	26 W	—	20*
1 1	16 30.59	−37 19.1	3.908	3.118	9.6	17.6	32 W	—	26*
1 11	16 46.81	−38 17.1	3.847	3.134	11.2	17.6	38 W	1*	32*
1 21	17 2.66	−39 12.7	3.771	3.148	12.7	17.6	45 W	1*	38*
		317638 2003 EQ_{11}							
12 27	12 58.15	− 8 21.3	1.982	2.034	28.3	21.1	79 W	37	58*
1 6	13 16.76	− 9 35.4	1.833	1.991	29.4	20.9	84 W	35	64*
1 16	13 35.35	−10 38.1	1.686	1.950	30.3	20.7	90 W	34	70*
1 26	13 53.79	−11 26.4	1.544	1.909	30.9	20.5	95 W	34	74*
2 5	14 11.90	−11 57.5	1.408	1.870	31.1	20.2	101 W	33	76
2 10	14 20.76	−12 5.4	1.342	1.851	31.1	20.1	104 W	33	76
2 15	14 29.44	−12 7.7	1.278	1.833	31.0	20.0	107 W	33	76
2 20	14 37.88	−12 4.0	1.216	1.815	30.7	19.8	110 W	33	76
2 25	14 46.05	−11 53.8	1.157	1.798	30.3	19.7	114 W	33	76
3 7	15 1.36	−11 12.7	1.045	1.765	29.1	19.4	120 W	34	75
3 17	15 14.85	−10 1.9	0.945	1.735	27.3	19.1	127 W	35	74
3 27	15 25.99	− 8 20.7	0.857	1.709	24.8	18.8	134 W	37	72
4 6	15 34.33	− 6 11.5	0.783	1.685	21.7	18.5	142 W	39	70
4 11	15 37.31	− 4 58.2	0.751	1.675	20.0	18.3	145 W	40	69
4 16	15 39.48	− 3 40.9	0.724	1.665	18.2	18.1	149 W	41	68
4 21	15 40.86	− 2 21.5	0.701	1.657	16.5	18.0	152 W	43	66
4 26	15 41.49	− 1 2.0	0.682	1.650	15.0	17.9	155 W	44	65
5 1	15 41.45	+ 0 15.2	0.668	1.643	13.8	17.8	157 W	45	64
5 6	15 40.84	+ 1 27.7	0.657	1.638	13.1	17.7	158 W	46	63
5 11	15 39.81	+ 2 32.9	0.652	1.634	13.1	17.7	158 W	48	61
5 16	15 38.53	+ 3 28.7	0.650	1.631	13.8	17.7	157 W	48	61
5 21	15 37.20	+ 4 13.2	0.653	1.628	15.0	17.8	155 E	49	60
5 26	15 36.00	+ 4 45.2	0.659	1.628	16.5	17.8	153 E	50	59
6 5	15 34.62	+ 5 10.5	0.684	1.629	20.1	18.0	147 E	50	59
6 15	15 35.46	+ 4 45.9	0.721	1.635	23.6	18.3	140 E	50	59
6 25	15 39.15	+ 3 39.2	0.771	1.645	26.7	18.5	133 E	49	60
6 30	15 42.11	+ 2 53.6	0.800	1.652	28.0	18.6	130 E	48	61
7 5	15 45.79	+ 2 1.7	0.832	1.659	29.1	18.8	127 E	47	62
7 10	15 50.18	+ 1 4.6	0.866	1.668	30.1	18.9	125 E	46	63
7 15	15 55.25	+ 0 3.7	0.902	1.678	31.0	19.0	122 E	45	64
7 20	16 0.96	− 0 59.8	0.941	1.688	31.7	19.2	119 E	44*	65
7 25	16 7.26	− 2 4.8	0.982	1.700	32.3	19.3	117 E	43*	66
7 30	16 14.10	− 3 10.5	1.026	1.712	32.8	19.4	114 E	42*	67
8 4	16 21.43	− 4 15.9	1.071	1.726	33.1	19.5	112 E	40*	68
8 14	16 37.43	− 6 23.4	1.168	1.754	33.5	19.8	107 E	38*	70
8 24	16 54.95	− 8 22.4	1.273	1.786	33.6	20.0	102 E	36*	72
9 3	17 13.67	−10 9.5	1.386	1.820	33.3	20.2	98 E	34*	74
9 13	17 33.36	−11 42.3	1.506	1.857	32.8	20.4	93 E	33*	76*
9 23	17 53.79	−12 59.2	1.632	1.895	32.0	20.6	89 E	31*	75*
10 3	18 14.71	−13 59.5	1.764	1.935	31.0	20.8	84 E	30*	72*
10 13	18 35.98	−14 43.0	1.901	1.976	29.7	21.0	79 E	30*	68*
10 23	18 57.41	−15 9.8	2.041	2.019	28.4	21.1	75 E	29*	64*
11 2	19 18.84	−15 20.7	2.183	2.062	26.8	21.3	70 E	29*	59*
11 12	19 40.18	−15 16.4	2.327	2.107	25.2	21.4	65 E	29*	53*
		240292 2003 EB_{54}							
12 27	12 59.68	−22 31.7	1.626	1.643	35.0	20.5	73 W	22	64*
1 1	13 11.27	−23 11.5	1.589	1.648	35.3	20.4	76 W	22	66*
1 6	13 22.64	−23 45.7	1.552	1.654	35.5	20.4	78 W	21	69*
1 11	13 33.76	−24 14.0	1.513	1.660	35.7	20.4	80 W	21	72*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
		240292 2003 EB_{54}				*(continuation)*			
	h m	° ′			°	m	°	°	°
1 16	13 44.57	−24 36.1	1.475	1.667	35.8	20.3	83 W	20	75*
1 21	13 55.03	−24 51.6	1.435	1.675	35.8	20.3	85 W	20	78*
1 26	14 5.07	−25 0.2	1.396	1.683	35.8	20.2	88 W	20	81*
1 31	14 14.65	−25 1.5	1.356	1.693	35.6	20.2	91 W	20	84*
2 5	14 23.70	−24 55.2	1.316	1.703	35.3	20.1	94 W	20	88*
2 10	14 32.16	−24 41.0	1.277	1.713	34.8	20.0	98 W	20	89
2 15	14 39.94	−24 18.4	1.237	1.724	34.2	20.0	101 W	21	88
2 20	14 46.98	−23 47.2	1.198	1.736	33.4	19.9	105 W	21	88
2 25	14 53.20	−23 6.8	1.160	1.748	32.5	19.8	109 W	22	87
3 2	14 58.56	−22 17.2	1.123	1.761	31.3	19.7	113 W	23	86
3 7	15 2.98	−21 17.9	1.088	1.774	29.9	19.6	117 W	24	85
3 17	15 8.78	−18 49.9	1.024	1.802	26.4	19.4	126 W	26	83
3 27	15 10.37	−15 43.6	0.972	1.831	21.9	19.2	137 W	29	80
4 6	15 7.93	−12 5.6	0.937	1.862	16.6	19.0	148 W	33	76
4 11	15 5.38	−10 8.5	0.927	1.878	13.8	18.9	153 W	35	74
4 16	15 2.11	− 8 9.2	0.924	1.894	11.1	18.8	159 W	37	72
4 21	14 58.31	− 6 10.6	0.926	1.910	8.7	18.7	163 W	39	70
4 26	14 54.18	− 4 15.7	0.934	1.927	7.0	18.7	166 W	41	68
5 1	14 49.92	− 2 27.2	0.949	1.944	6.8	18.7	167 W	43	66
5 6	14 45.71	− 0 47.4	0.971	1.961	8.0	18.9	164 E	44	65
5 11	14 41.74	+ 0 41.7	0.998	1.978	10.0	19.0	160 E	46	63
5 16	14 38.17	+ 1 58.9	1.031	1.995	12.2	19.2	155 E	47	62
5 26	14 32.72	+ 3 55.8	1.114	2.030	16.5	19.6	145 E	49	60
6 5	14 29.92	+ 5 5.4	1.214	2.065	20.1	19.9	136 E	50	59
6 15	14 29.91	+ 5 34.4	1.329	2.101	22.8	20.2	127 E	51	58
6 20	14 30.92	+ 5 36.3	1.390	2.119	23.8	20.4	123 E	51	58
6 25	14 32.56	+ 5 31.2	1.455	2.136	24.7	20.5	119 E	50*	58
6 30	14 34.79	+ 5 20.1	1.521	2.154	25.4	20.6	115 E	50*	59
7 5	14 37.56	+ 5 3.9	1.589	2.172	25.9	20.8	111 E	49*	59
7 10	14 40.84	+ 4 43.4	1.658	2.190	26.3	20.9	107 E	48*	59
7 15	14 44.60	+ 4 19.3	1.729	2.207	26.5	21.0	104 E	47*	60
7 20	14 48.79	+ 3 52.2	1.800	2.225	26.7	21.1	101 E	45*	60
7 25	14 53.37	+ 3 22.8	1.873	2.242	26.7	21.2	97 E	44*	61
7 30	14 58.32	+ 2 51.6	1.946	2.260	26.6	21.3	94 E	43*	61
8 4	15 3.61	+ 2 18.9	2.019	2.277	26.5	21.4	91 E	42*	62
8 9	15 9.20	+ 1 45.2	2.093	2.294	26.2	21.5	88 E	40*	62*
		283887 2004 BZ_{68}							
12 27	13 0.11	−14 9.4	1.866	1.891	30.3	20.2	76 W	31	61*
1 6	13 15.67	−14 6.8	1.790	1.932	30.3	20.2	83 W	31	67*
1 16	13 29.24	−13 41.1	1.710	1.974	29.9	20.1	90 W	31	73*
1 26	13 40.48	−12 49.6	1.629	2.018	28.9	20.1	98 W	32	76*
2 5	13 49.05	−11 29.6	1.549	2.062	27.3	19.9	107 W	34	75
2 15	13 54.58	− 9 39.1	1.475	2.106	24.9	19.8	116 W	35	74
2 25	13 56.83	− 7 17.6	1.410	2.151	21.7	19.7	126 W	38	71
3 7	13 55.72	− 4 27.9	1.360	2.196	17.8	19.5	137 W	41	68
3 12	13 53.95	− 2 54.5	1.342	2.218	15.6	19.4	143 W	42	67
3 17	13 51.45	− 1 17.2	1.330	2.241	13.4	19.3	149 W	44	65
3 22	13 48.30	+ 0 22.2	1.325	2.263	11.1	19.3	154 W	45	64
3 27	13 44.63	+ 2 1.6	1.326	2.285	9.0	19.2	159 W	47	62
4 1	13 40.58	+ 3 39.0	1.333	2.308	7.2	19.2	163 W	49	60
4 6	13 36.28	+ 5 12.3	1.349	2.330	6.3	19.2	165 W	50	59
4 11	13 31.89	+ 6 39.6	1.371	2.352	6.4	19.2	165 W	52	57
4 16	13 27.57	+ 7 59.2	1.400	2.375	7.6	19.4	162 E	53	56
4 21	13 23.46	+ 9 9.9	1.437	2.397	9.2	19.5	158 E	54	55
4 26	13 19.70	+10 11.1	1.479	2.419	10.9	19.7	153 E	55	54
5 6	13 13.57	+11 44.2	1.582	2.462	14.3	20.0	143 E	57	52
5 16	13 9.67	+12 39.9	1.705	2.505	17.2	20.3	133 E	58	51
5 26	13 8.20	+13 2.9	1.843	2.548	19.3	20.5	124 E	58	51
6 5	13 9.06	+12 59.6	1.993	2.590	20.8	20.8	115 E	58*	51
6 15	13 12.04	+12 35.6	2.152	2.631	21.7	21.0	107 E	56*	51
6 25	13 16.87	+11 55.8	2.315	2.672	22.1	21.2	99 E	52*	52
7 5	13 23.28	+11 4.5	2.481	2.712	22.0	21.4	92 E	48*	53
		3199 Nefertiti							
12 27	13 0.14	−10 23.7	1.729	1.796	32.3	18.6	78 W	35	59*
1 6	13 8.59	−13 54.9	1.634	1.825	32.4	18.5	85 W	31	68*
1 16	13 14.67	−17 30.3	1.537	1.852	32.1	18.4	92 W	27	78*
1 26	13 17.76	−21 10.4	1.440	1.877	31.1	18.3	100 W	24	85
1 31	13 17.96	−23 2.0	1.392	1.889	30.4	18.2	104 W	22	87
2 5	13 17.11	−24 54.2	1.347	1.900	29.6	18.1	108 W	20	89
2 10	13 15.09	−26 46.3	1.303	1.911	28.5	18.0	112 W	18	89
2 15	13 11.79	−28 37.3	1.262	1.921	27.3	17.9	117 W	16	87
2 20	13 7.08	−30 25.8	1.224	1.931	26.0	17.9	121 W	15	86
2 25	13 0.91	−32 10.0	1.190	1.940	24.5	17.8	126 W	13	84
3 2	12 53.24	−33 47.7	1.160	1.949	23.0	17.7	130 W	11	82
3 7	12 44.09	−35 16.5	1.136	1.957	21.5	17.6	134 W	10	81

3199 Nefertiti *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
3 12	12 33.57	−36 33.6	1.117	1.965	20.1	17.5	137 W	8	79
3 17	12 21.93	−37 36.4	1.103	1.973	18.9	17.5	140 W	7	78
3 22	12 9.52	−38 22.9	1.096	1.979	18.0	17.4	142 W	7	78
3 27	11 56.76	−38 52.3	1.095	1.986	17.5	17.4	143 E	6	77
4 1	11 44.13	−39 4.6	1.101	1.992	17.6	17.4	143 E	6	77
4 6	11 32.09	−39 0.8	1.112	1.997	18.0	17.5	142 E	6	77
4 11	11 21.02	−38 43.1	1.129	2.002	18.9	17.5	140 E	6	77
4 16	11 11.23	−38 14.3	1.152	2.006	19.9	17.6	137 E	7	78
4 21	11 2.93	−37 37.5	1.179	2.010	21.2	17.7	134 E	7	78
4 26	10 56.19	−36 55.9	1.211	2.013	22.4	17.8	130 E	8	79
5 1	10 51.00	−36 11.9	1.246	2.016	23.7	17.9	127 E	9	80
5 6	10 47.30	−35 27.9	1.285	2.018	24.8	18.0	123 E	10	81
5 11	10 45.01	−34 45.6	1.326	2.020	25.9	18.1	119 E	10*	81
5 16	10 44.02	−34 6.3	1.370	2.021	26.9	18.2	115 E	10*	82
5 21	10 44.22	−33 31.1	1.415	2.022	27.7	18.3	112 E	10*	82
5 26	10 45.48	−33 0.7	1.461	2.022	28.4	18.4	108 E	9*	83
5 31	10 47.69	−32 35.2	1.508	2.022	29.0	18.5	105 E	8*	83
6 5	10 50.75	−32 14.9	1.556	2.021	29.5	18.6	102 E	6*	84
6 10	10 54.60	−31 59.8	1.603	2.019	29.8	18.6	98 E	5*	84
6 15	10 59.15	−31 49.9	1.651	2.017	30.1	18.7	95 E	3*	83*
6 25	11 10.11	−31 45.1	1.745	2.012	30.3	18.8	90 E	—	79*
7 5	11 23.20	−31 58.6	1.836	2.005	30.3	18.9	84 E	—	73*
7 15	11 38.15	−32 28.5	1.923	1.995	30.0	19.0	79 E	—	67*
7 25	11 54.78	−33 12.5	2.004	1.984	29.5	19.1	74 E	—	61*
8 4	12 12.97	−34 8.1	2.080	1.971	28.9	19.1	70 E	—	55*
8 14	12 32.70	−35 13.1	2.150	1.955	28.1	19.2	65 E	—	51*
8 24	12 53.94	−36 24.8	2.212	1.938	27.2	19.2	61 E	—	46*
9 3	13 16.73	−37 40.3	2.269	1.918	26.2	19.2	57 E	—	42*
9 13	13 41.16	−38 56.8	2.318	1.897	25.2	19.2	53 E	—	38*
9 23	14 7.25	−40 10.9	2.360	1.873	24.1	19.2	50 E	—	35*
10 3	14 35.06	−41 19.0	2.396	1.848	22.9	19.1	46 E	—	32*
10 13	15 4.61	−42 17.2	2.426	1.821	21.8	19.1	43 E	—	30*
10 23	15 35.79	−43 1.5	2.449	1.792	20.5	19.0	39 E	—	27*
11 2	16 8.45	−43 27.6	2.466	1.761	19.3	19.0	36 E	—	25*
11 12	16 42.31	−43 31.8	2.477	1.728	18.0	18.9	33 E	—	23*
11 17	16 59.57	−43 24.6	2.481	1.711	17.3	18.9	31 E	—	22*
11 22	17 16.96	−43 10.7	2.483	1.694	16.7	18.8	29 E	—	20*
11 27	17 34.45	−42 49.7	2.483	1.676	16.0	18.8	28 E	—	19*
12 2	17 51.95	−42 21.5	2.483	1.658	15.3	18.7	26 E	—	18*
12 7	18 9.42	−41 45.9	2.481	1.640	14.6	18.7	25 E	—	17*
12 12	18 26.79	−41 2.8	2.478	1.621	13.9	18.6	23 E	—	15*
12 17	18 43.99	−40 12.2	2.473	1.603	13.2	18.6	22 E	—	14*
12 22	19 1.00	−39 14.1	2.468	1.583	12.5	18.5	20 E	—	13*
12 27	19 17.76	−38 8.5	2.461	1.564	11.8	18.4	19 E	—	11*
1 1	19 34.26	−36 55.7	2.453	1.544	11.1	18.4	18 E	—	10*
1 6	19 50.45	−35 35.7	2.444	1.524	10.3	18.3	16 E	—	9*
1 11	20 6.33	−34 8.8	2.434	1.504	9.6	18.2	15 E	—	7*
1 16	20 21.88	−32 35.2	2.422	1.484	8.9	18.2	14 E	—	6*
1 21	20 37.11	−30 55.1	2.410	1.464	8.3	18.1	12 E	—	4*

23183 2000 OY_{21}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 0.24	+20 5.0	1.132	1.498	41.0	18.8	90 W	65	36*
1 1	13 11.80	+22 16.9	1.118	1.526	40.0	18.7	93 W	67	36*
1 6	13 22.86	+24 35.9	1.106	1.554	39.0	18.7	96 W	70	35*
1 11	13 33.35	+27 1.6	1.096	1.582	37.9	18.7	99 W	72	34*
1 16	13 43.17	+29 33.1	1.089	1.610	36.7	18.7	102 W	75	32*
1 21	13 52.24	+32 9.3	1.084	1.637	35.6	18.7	105 W	77	31*
1 26	14 0.45	+34 48.6	1.083	1.665	34.4	18.7	107 W	80	29*
1 31	14 7.71	+37 29.5	1.085	1.692	33.3	18.7	110 W	82	26*
2 5	14 13.89	+40 10.2	1.090	1.719	32.2	18.7	112 W	85	24*
2 10	14 18.86	+42 49.0	1.099	1.745	31.2	18.7	114 W	88	21
2 15	14 22.49	+45 23.6	1.111	1.772	30.3	18.8	115 W	90	19
2 20	14 24.64	+47 51.8	1.127	1.798	29.6	18.8	116 W	87	16
2 25	14 25.21	+50 11.6	1.146	1.823	28.9	18.9	117 W	85	14
3 2	14 24.12	+52 20.8	1.168	1.849	28.4	18.9	118 W	83	12
3 7	14 21.30	+54 17.6	1.193	1.874	27.9	19.0	118 W	81	10
3 12	14 16.77	+56 0.2	1.221	1.898	27.6	19.1	118 W	79	8
3 17	14 10.62	+57 26.8	1.252	1.923	27.4	19.1	117 W	78	7
3 22	14 3.05	+58 36.1	1.286	1.946	27.3	19.2	116 W	76	5
3 27	13 54.39	+59 27.3	1.322	1.970	27.2	19.3	116 W	76	5
3 29	13 50.70	+59 42.6	1.337	1.979	27.2	19.3	115 W	75	4
3 31	13 46.93	+59 55.1	1.353	1.988	27.2	19.4	115 W	75	4
4 2	13 43.10	+60 4.6	1.368	1.997	27.2	19.4	114 W	75	4
4 4	13 39.24	+60 11.2	1.385	2.006	27.2	19.4	114 W	75	4
4 6	13 35.37	+60 15.0	1.401	2.015	27.2	19.5	113 W	75	4
4 8	13 31.54	+60 16.0	1.418	2.024	27.2	19.5	112 W	75	4
4 10	13 27.75	+60 14.2	1.435	2.033	27.2	19.5	112 W	75	4
4 12	13 24.05	+60 9.9	1.452	2.042	27.2	19.6	111 W	75	4
4 14	13 20.45	+60 3.0	1.469	2.050	27.2	19.6	111 E	75	4
4 16	13 16.98	+59 53.7	1.487	2.059	27.3	19.7	110 E	75	4

23183 2000 OY_{21} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 21	13 8.97	+59 20.4	1.533	2.080	27.3	19.7	108 E	76	5
4 26	13 2.08	+58 34.3	1.580	2.101	27.3	19.8	107 E	76	5
5 1	12 56.41	+57 37.4	1.628	2.121	27.3	19.9	105 E	77	6
5 6	12 51.98	+56 31.4	1.678	2.141	27.3	20.0	103 E	78	7
5 11	12 48.79	+55 17.7	1.728	2.160	27.3	20.1	101 E	80	9
5 16	12 46.75	+53 57.8	1.779	2.179	27.3	20.2	99 E	81	10
5 21	12 45.79	+52 32.9	1.831	2.198	27.2	20.2	97 E	82	11
5 26	12 45.80	+51 4.1	1.884	2.216	27.1	20.3	95 E	84	13
5 31	12 46.67	+49 32.4	1.938	2.233	27.0	20.4	93 E	85*	14
6 5	12 48.30	+47 58.4	1.992	2.250	26.8	20.5	91 E	85*	16
6 10	12 50.61	+46 22.8	2.046	2.267	26.6	20.5	89 E	82*	18
6 15	12 53.51	+44 46.0	2.101	2.283	26.4	20.6	87 E	79*	19
6 20	12 56.95	+43 8.6	2.155	2.299	26.1	20.7	85 E	75*	21
6 25	13 0.84	+41 30.9	2.210	2.314	25.8	20.7	83 E	72*	22
6 30	13 5.14	+39 53.3	2.265	2.328	25.5	20.8	81 E	68*	24
7 5	13 9.79	+38 16.0	2.320	2.343	25.2	20.8	79 E	65*	26
7 10	13 14.76	+36 39.2	2.375	2.356	24.8	20.9	77 E	62*	27
7 15	13 20.02	+35 3.2	2.430	2.370	24.4	20.9	74 E	60*	29*
7 20	13 25.53	+33 28.1	2.484	2.383	24.0	21.0	72 E	57*	30*
7 25	13 31.27	+31 54.2	2.538	2.395	23.5	21.0	70 E	55*	32*
7 30	13 37.22	+30 21.5	2.591	2.407	23.1	21.1	68 E	53*	32*
8 4	13 43.35	+28 50.2	2.644	2.418	22.6	21.1	66 E	50*	33*
8 9	13 49.65	+27 20.4	2.695	2.429	22.0	21.1	64 E	49*	33*
8 14	13 56.11	+25 52.2	2.746	2.440	21.5	21.2	62 E	47*	33*
8 19	14 2.72	+24 25.7	2.797	2.450	20.9	21.2	60 E	45*	33*
8 24	14 9.46	+23 1.0	2.845	2.459	20.3	21.2	58 E	43*	32*
8 29	14 16.33	+21 38.2	2.893	2.469	19.7	21.3	56 E	42*	31*
9 3	14 23.31	+20 17.3	2.940	2.477	19.1	21.3	54 E	40*	30*
9 8	14 30.41	+18 58.5	2.985	2.485	18.5	21.3	51 E	39*	29*
9 13	14 37.61	+17 41.8	3.028	2.493	17.8	21.3	49 E	38*	27*
9 18	14 44.91	+16 27.3	3.070	2.500	17.2	21.3	47 E	36*	26*
9 23	14 52.30	+15 15.1	3.110	2.507	16.5	21.3	45 E	35*	24*
9 28	14 59.78	+14 5.2	3.148	2.514	15.8	21.4	43 E	34*	22*
10 3	15 7.35	+12 57.6	3.184	2.520	15.2	21.4	41 E	32*	19*
10 8	15 14.99	+11 52.5	3.218	2.525	14.5	21.4	39 E	31*	17*
10 13	15 22.71	+10 49.9	3.250	2.530	13.8	21.4	37 E	30*	14*
10 18	15 30.50	+ 9 49.8	3.279	2.535	13.2	21.4	35 E	29*	12*
10 23	15 38.35	+ 8 52.4	3.306	2.539	12.6	21.4	34 E	27*	9*
10 28	15 46.26	+ 7 57.6	3.330	2.542	12.0	21.4	32 E	26*	6*
11 2	15 54.22	+ 7 5.4	3.351	2.545	11.4	21.4	30 E	24*	3*
11 7	16 2.24	+ 6 15.9	3.370	2.548	10.9	21.4	29 E	23*	—
11 12	16 10.29	+ 5 29.3	3.385	2.550	10.4	21.3	28 E	21*	—
11 17	16 18.38	+ 4 45.4	3.397	2.552	10.0	21.3	27 E	20*	—
11 22	16 26.50	+ 4 4.3	3.407	2.554	9.7	21.3	26 E	18*	—
11 27	16 34.64	+ 3 26.0	3.413	2.555	9.5	21.3	25 E	16*	—
12 2	16 42.80	+ 2 50.5	3.416	2.555	9.3	21.3	25 E	14*	—
12 7	16 50.97	+ 2 17.8	3.415	2.555	9.3	21.3	25 W	13*	—
12 12	16 59.14	+ 1 48.0	3.411	2.555	9.4	21.3	25 W	15*	—
12 17	17 7.29	+ 1 21.0	3.403	2.554	9.7	21.3	26 W	17*	—
12 22	17 15.42	+ 0 56.8	3.392	2.552	10.0	21.3	27 W	19*	—
12 27	17 23.53	+ 0 35.3	3.378	2.550	10.4	21.3	28 W	21*	—
1 1	17 31.61	+ 0 16.6	3.360	2.548	10.9	21.3	29 W	23*	—
1 6	17 39.63	+ 0 0.6	3.338	2.545	11.5	21.4	31 W	25*	2*
1 11	17 47.60	− 0 12.8	3.313	2.542	12.1	21.4	33 W	26*	6*
1 16	17 55.50	− 0 23.6	3.284	2.539	12.8	21.4	35 W	28*	10*
1 21	18 3.32	− 0 31.9	3.252	2.534	13.5	21.4	37 W	29*	13*

108522 2001 LQ

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 1.03	+25 41.6	3.236	3.417	16.7	20.0	92 W	71	31*
1 6	13 7.30	+26 43.0	3.125	3.435	16.4	19.9	100 W	72	34*
1 16	13 11.80	+27 59.7	3.019	3.452	15.7	19.8	108 W	73	35*
1 26	13 14.25	+29 29.7	2.922	3.468	14.8	19.8	116 W	74	35
2 5	13 14.45	+31 9.7	2.839	3.483	13.6	19.7	124 W	76	33
2 10	13 13.64	+32 1.9	2.804	3.490	13.0	19.6	127 W	77	32
2 15	13 12.23	+32 54.6	2.773	3.498	12.4	19.6	131 W	78	31
2 20	13 10.20	+33 46.8	2.748	3.504	11.8	19.5	134 W	79	30
2 25	13 7.58	+34 37.5	2.728	3.511	11.2	19.5	136 W	80	29
3 2	13 4.40	+35 25.7	2.713	3.517	10.8	19.5	139 W	80	29
3 7	13 0.71	+36 10.5	2.705	3.524	10.4	19.5	140 W	81	28
3 12	12 56.58	+36 50.9	2.702	3.530	10.2	19.5	141 W	82	27
3 17	12 52.09	+37 25.9	2.706	3.535	10.2	19.5	141 W	82	27
3 22	12 47.33	+37 54.8	2.716	3.541	10.3	19.5	140 W	83	26
3 27	12 42.43	+38 17.1	2.732	3.546	10.6	19.5	139 W	83	26
4 1	12 37.49	+38 32.5	2.754	3.551	11.1	19.5	137 E	84	25
4 6	12 32.62	+38 40.7	2.782	3.556	11.6	19.6	135 E	84	25
4 11	12 27.92	+38 41.9	2.815	3.561	12.1	19.6	132 E	84	25
4 16	12 23.51	+38 36.1	2.853	3.565	12.7	19.7	129 E	84	25
4 21	12 19.46	+38 23.8	2.896	3.570	13.3	19.7	125 E	83	26
4 26	12 15.85	+38 5.4	2.942	3.573	13.9	19.8	122 E	83	26
5 1	12 12.72	+37 41.5	2.993	3.577	14.4	19.9	118 E	83	26
5 6	12 10.10	+37 12.6	3.047	3.581	14.9	19.9	114 E	82	27

108522 2001 *LQ* *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
5 16	12 6.46	+36 2.3	3.163	3.587	15.7	20.0	107 E	81	28
5 26	12 4.97	+34 38.7	3.287	3.593	16.2	20.1	99 E	79*	29
6 5	12 5.48	+33 5.7	3.415	3.597	16.4	20.2	92 E	72*	31
6 15	12 7.79	+31 26.4	3.546	3.601	16.3	20.3	85 E	65*	33
6 25	12 11.69	+29 43.1	3.675	3.604	16.0	20.4	78 E	57*	34
7 5	12 16.96	+27 57.5	3.801	3.606	15.5	20.4	71 E	50*	36*
7 15	12 23.39	+26 11.1	3.921	3.607	14.8	20.5	65 E	45*	36*
7 25	12 30.80	+24 24.8	4.033	3.607	13.9	20.5	58 E	40*	35*
8 4	12 39.05	+22 39.4	4.136	3.607	12.9	20.5	52 E	35*	32*
8 14	12 48.02	+20 55.7	4.227	3.605	11.8	20.5	46 E	32*	28*
8 24	12 57.57	+19 14.2	4.307	3.603	10.6	20.5	41 E	28*	24*
9 3	13 7.64	+17 35.4	4.373	3.600	9.4	20.5	35 E	25*	19*
9 13	13 18.13	+15 59.9	4.425	3.595	8.2	20.5	31 E	23*	13*
9 23	13 28.97	+14 28.2	4.461	3.590	7.1	20.4	26 E	20*	7*
10 3	13 40.11	+13 0.8	4.482	3.584	6.3	20.4	23 E	17*	1*
10 13	13 51.48	+11 38.4	4.486	3.577	5.9	20.4	22 E	15*	—
10 23	14 3.01	+10 21.4	4.474	3.570	6.0	20.4	22 E	12*	—
11 2	14 14.64	+ 9 10.4	4.444	3.561	6.5	20.4	24 W	13*	—
11 12	14 26.32	+ 8 6.0	4.398	3.552	7.4	20.4	28 W	20*	—
11 22	14 37.94	+ 7 8.9	4.335	3.541	8.6	20.4	32 W	26*	—
12 2	14 49.45	+ 6 19.5	4.257	3.530	9.9	20.4	38 W	32*	3*
12 12	15 0.74	+ 5 38.6	4.163	3.518	11.2	20.4	44 W	37*	10*
12 22	15 11.69	+ 5 6.5	4.055	3.505	12.4	20.4	50 W	41*	18*
1 1	15 22.20	+ 4 43.7	3.934	3.491	13.6	20.4	57 W	45*	25*
1 11	15 32.11	+ 4 30.7	3.802	3.476	14.7	20.3	63 W	47*	33*
1 21	15 41.26	+ 4 27.6	3.660	3.460	15.6	20.3	71 W	48*	41*

62042 2000 RF_{65}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 1.09	+ 0 22.6	2.052	2.141	27.0	19.9	82 W	45	51*
1 6	13 13.15	− 1 56.8	1.897	2.106	27.8	19.7	88 W	43	59*
1 16	13 24.03	− 4 19.8	1.744	2.071	28.2	19.5	95 W	41	66*
1 26	13 33.41	− 6 48.1	1.593	2.037	28.2	19.3	102 W	38	71*
2 5	13 40.88	− 9 23.8	1.448	2.003	27.7	19.0	109 W	36	73
2 15	13 45.87	−12 9.1	1.310	1.969	26.5	18.8	117 W	33	76
2 25	13 47.72	−15 6.2	1.183	1.937	24.5	18.4	126 W	30	79
3 7	13 45.69	−18 15.8	1.070	1.905	21.7	18.1	135 W	27	82
3 17	13 39.03	−21 35.5	0.974	1.874	18.1	17.7	144 W	23	86
3 22	13 33.82	−23 16.8	0.934	1.859	16.2	17.6	149 W	22	87
3 27	13 27.38	−24 57.1	0.900	1.844	14.4	17.4	153 W	20	89
4 1	13 19.77	−26 34.4	0.871	1.829	12.8	17.3	156 W	18	89
4 6	13 11.16	−28 6.5	0.848	1.815	11.9	17.2	158 W	17	88
4 11	13 1.79	−29 31.2	0.832	1.802	11.8	17.1	158 E	15	86
4 16	12 51.99	−30 46.7	0.822	1.789	12.8	17.1	157 E	14	85
4 21	12 42.16	−31 51.9	0.818	1.776	14.4	17.1	154 E	13	84
4 26	12 32.70	−32 46.7	0.819	1.764	16.6	17.2	150 E	12	83
5 1	12 23.98	−33 31.6	0.826	1.752	19.0	17.3	146 E	11	82
5 6	12 16.30	−34 7.8	0.837	1.741	21.4	17.4	141 E	11	82
5 11	12 9.91	−34 36.9	0.852	1.730	23.7	17.5	136 E	10	81
5 16	12 4.97	−35 0.9	0.871	1.720	25.9	17.6	132 E	10	81
5 21	12 1.56	−35 21.7	0.892	1.711	27.9	17.7	128 E	10	81
5 26	11 59.69	−35 41.2	0.916	1.702	29.6	17.8	124 E	9*	80
5 31	11 59.31	−36 0.5	0.942	1.694	31.2	17.8	120 E	8*	80
6 5	12 0.37	−36 20.5	0.969	1.687	32.6	17.9	117 E	7*	80
6 10	12 2.80	−36 42.1	0.997	1.680	33.7	18.0	113 E	6*	79
6 15	12 6.54	−37 5.9	1.026	1.674	34.7	18.1	110 E	4*	79
6 20	12 11.50	−37 32.1	1.055	1.669	35.5	18.2	107 E	3*	78
6 25	12 17.60	−38 0.7	1.085	1.664	36.2	18.3	105 E	1*	78
6 30	12 24.77	−38 31.6	1.115	1.661	36.8	18.3	102 E	—	77
7 5	12 32.97	−39 4.4	1.146	1.658	37.2	18.4	100 E	—	77*
7 15	12 52.26	−40 14.8	1.207	1.654	37.7	18.5	96 E	—	75*
7 25	13 15.15	−41 28.3	1.270	1.654	37.9	18.6	92 E	—	71*
8 4	13 41.32	−42 39.7	1.333	1.657	37.8	18.7	89 E	—	68*
8 14	14 10.51	−43 43.6	1.399	1.663	37.4	18.8	86 E	—	66*
8 19	14 26.13	−44 11.1	1.433	1.667	37.2	18.9	84 E	—	65*
8 24	14 42.35	−44 34.6	1.467	1.672	36.9	18.9	83 E	—	63*
8 29	14 59.10	−44 53.4	1.503	1.678	36.5	19.0	81 E	—	63*
9 3	15 16.30	−45 6.9	1.539	1.684	36.1	19.0	80 E	—	62*
9 8	15 33.89	−45 14.7	1.576	1.691	35.7	19.1	78 E	—	61*
9 13	15 51.77	−45 16.3	1.615	1.699	35.2	19.1	77 E	—	61*
9 18	16 9.83	−45 11.4	1.655	1.707	34.7	19.2	76 E	—	60*
9 23	16 27.97	−44 59.9	1.696	1.717	34.2	19.2	74 E	—	60*
9 28	16 46.09	−44 41.6	1.738	1.726	33.6	19.3	73 E	—	59*
10 3	17 4.11	−44 16.6	1.781	1.737	33.0	19.3	71 E	—	59*
10 8	17 21.95	−43 45.0	1.826	1.748	32.4	19.4	70 E	—	58*
10 13	17 39.53	−43 7.1	1.872	1.759	31.7	19.4	68 E	—	58*
10 18	17 56.78	−42 23.3	1.919	1.771	31.0	19.5	66 E	—	57*
10 23	18 13.65	−41 33.9	1.967	1.784	30.3	19.5	65 E	1*	56*
10 28	18 30.11	−40 39.3	2.016	1.797	29.5	19.6	63 E	2*	55*
11 2	18 46.13	−39 39.9	2.067	1.810	28.7	19.6	61 E	4*	54*
11 7	19 1.70	−38 36.3	2.118	1.824	27.9	19.7	59 E	5*	53*

62042 2000 RF_{65} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
11 12	19 16.80	−37 29.0	2.170	1.838	27.0	19.7	57 E	6*	51*
11 17	19 31.45	−36 18.2	2.222	1.853	26.1	19.8	56 E	7*	50*
11 22	19 45.64	−35 4.6	2.275	1.868	25.2	19.8	54 E	8*	48*
11 27	19 59.39	−33 48.4	2.329	1.883	24.3	19.8	52 E	9*	46*
12 2	20 12.71	−32 30.1	2.382	1.898	23.3	19.9	50 E	10*	43*
12 7	20 25.63	−31 9.9	2.436	1.914	22.3	19.9	48 E	11*	41*
12 12	20 38.16	−29 48.3	2.489	1.930	21.3	19.9	45 E	12*	38*
12 22	21 2.14	−27 1.5	2.595	1.963	19.2	20.0	41 E	13*	33*
1 1	21 24.81	−24 11.7	2.698	1.996	17.1	20.1	37 E	14*	28*
1 11	21 46.33	−21 20.3	2.796	2.030	14.9	20.1	32 E	14*	23*
1 21	22 6.84	−18 28.7	2.889	2.065	12.6	20.1	27 E	12*	18*

361754 2007 YV_{29}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 1.68	+29 21.3	0.911	1.381	45.3	21.2	94 W	74	28*
1 6	13 17.21	+31 14.5	0.891	1.432	42.6	21.2	100 W	76	29*
1 16	13 28.23	+33 36.3	0.868	1.481	39.7	21.1	106 W	79	29*
1 26	13 33.79	+36 24.6	0.847	1.527	36.5	21.0	113 W	81	28*
2 5	13 32.82	+39 30.7	0.829	1.570	33.1	21.0	120 W	85	24
2 15	13 24.16	+42 37.6	0.819	1.611	29.8	20.9	126 W	88	21
2 25	13 7.39	+45 17.2	0.820	1.648	27.0	20.9	131 W	90	19
3 7	12 43.84	+46 57.8	0.836	1.683	25.2	20.9	134 W	88	17
3 17	12 17.05	+47 15.7	0.869	1.714	24.8	21.0	134 W	88	17
3 27	11 51.90	+46 6.7	0.918	1.743	25.6	21.2	131 E	89	18
4 6	11 32.08	+43 47.8	0.983	1.769	27.2	21.4	126 E	89	20
4 16	11 18.94	+40 43.2	1.062	1.791	29.0	21.7	120 E	86	23

5275 Zdislava

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 1.72	−12 1.6	2.788	2.733	20.5	19.2	77 W	33	59*
1 6	13 10.74	−13 6.2	2.641	2.726	21.0	19.1	84 W	32	67*
1 16	13 18.36	−14 2.5	2.492	2.717	21.2	19.0	92 W	31	75*
1 26	13 24.29	−14 49.0	2.343	2.707	20.9	18.8	101 W	30	79
2 5	13 28.23	−15 24.0	2.197	2.697	20.1	18.7	110 W	30	79
2 15	13 29.86	−15 45.3	2.058	2.685	18.7	18.5	119 W	29	80
2 25	13 28.92	−15 50.6	1.931	2.673	16.6	18.3	130 W	29	80
3 7	13 25.29	−15 37.8	1.819	2.660	13.8	18.0	140 W	29	80
3 17	13 19.06	−15 5.3	1.727	2.645	10.3	17.8	152 W	30	79
3 27	13 10.70	−14 13.2	1.658	2.630	6.2	17.5	163 W	31	78
4 1	13 5.96	−13 40.7	1.634	2.622	4.2	17.3	169 W	31	78
4 6	13 1.01	−13 4.6	1.617	2.614	2.6	17.2	173 W	32	77
4 11	12 56.00	−12 25.8	1.608	2.605	2.6	17.2	173 E	33	76
4 16	12 51.06	−11 45.2	1.605	2.597	4.3	17.3	169 E	33	76
4 21	12 46.35	−11 4.0	1.609	2.588	6.4	17.4	163 E	34	75
4 26	12 42.00	−10 23.3	1.621	2.579	8.6	17.5	157 E	35	74
5 1	12 38.11	− 9 44.0	1.638	2.569	10.8	17.6	152 E	35	74
5 6	12 34.77	− 9 7.1	1.661	2.560	12.8	17.7	146 E	36	73
5 11	12 32.04	− 8 33.4	1.690	2.550	14.7	17.8	140 E	36	73
5 16	12 29.98	− 8 3.5	1.724	2.540	16.4	17.9	135 E	37	72
5 26	12 27.93	− 7 16.6	1.803	2.519	19.4	18.1	125 E	38	71
6 5	12 28.59	− 6 48.1	1.894	2.498	21.6	18.2	115 E	37*	71
6 15	12 31.79	− 6 37.7	1.994	2.475	23.2	18.4	106 E	35*	71
6 25	12 37.29	− 6 44.2	2.097	2.452	24.2	18.5	98 E	31*	71
7 5	12 44.81	− 7 5.6	2.202	2.428	24.8	18.6	90 E	28*	71
7 15	12 54.11	− 7 39.9	2.306	2.403	24.8	18.7	83 E	24*	71*
7 25	13 4.99	− 8 25.2	2.406	2.378	24.5	18.7	76 E	21*	67*
8 4	13 17.24	− 9 19.2	2.501	2.351	23.9	18.8	70 E	18*	63*
8 14	13 30.76	−10 20.3	2.589	2.325	23.0	18.8	64 E	16*	57*
8 24	13 45.42	−11 26.7	2.670	2.297	21.9	18.8	58 E	14*	52*
9 3	14 1.16	−12 36.6	2.743	2.269	20.6	18.8	52 E	12*	46*
9 13	14 17.92	−13 48.4	2.808	2.240	19.1	18.8	47 E	11*	41*
9 23	14 35.66	−15 0.3	2.862	2.211	17.5	18.7	41 E	9*	35*
10 3	14 54.35	−16 10.8	2.907	2.182	15.7	18.7	36 E	8*	30*
10 13	15 14.00	−17 18.1	2.942	2.152	13.9	18.6	31 E	7*	25*
10 23	15 34.55	−18 20.5	2.968	2.121	12.0	18.5	26 E	6*	20*
11 2	15 56.01	−19 16.4	2.983	2.091	10.0	18.4	21 E	5*	15*
11 12	16 18.33	−20 3.8	2.989	2.060	8.0	18.3	17 E	3*	10*
11 22	16 41.47	−20 41.2	2.985	2.030	5.9	18.2	12 E	2*	5*
12 2	17 5.37	−21 6.9	2.972	2.000	3.8	18.0	8 E	—	—
12 12	17 29.95	−21 19.3	2.951	1.969	1.8	17.8	4 E	—	—
12 22	17 55.11	−21 17.2	2.922	1.939	1.2	17.7	2 W	—	—
1 1	18 20.73	−20 59.4	2.886	1.910	3.0	17.8	6 W	—	—
1 11	18 46.71	−20 25.1	2.843	1.881	5.1	17.9	10 W	2*	2*
1 21	19 12.90	−19 34.0	2.794	1.853	7.2	17.9	14 W	3*	6*

3858 Dorchester

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 2.88	− 7 49.5	2.612	2.591	21.8	19.0	78 W	37	57*
1 6	13 12.40	− 9 10.5	2.460	2.575	22.4	18.9	85 W	36	64*
1 16	13 20.59	−10 25.3	2.306	2.558	22.6	18.7	93 W	35	72*
1 26	13 27.11	−11 32.8	2.153	2.540	22.3	18.6	102 W	33	76*
2 5	13 31.63	−12 31.9	2.004	2.521	21.5	18.4	110 W	32	77
2 15	13 33.75	−13 21.1	1.862	2.502	20.1	18.1	120 W	32	77

3858 Dorchester *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
2 25	13 33.13	−13 58.5	1.731	2.481	17.9	17.9	130 W	31	78
3 7	13 29.53	−14 22.2	1.615	2.460	15.0	17.6	140 W	31	78
3 17	13 22.91	−14 30.1	1.518	2.438	11.3	17.3	151 W	30	79
3 27	13 13.65	−14 21.1	1.444	2.415	7.0	17.0	163 W	31	78
4 6	13 2.58	−13 56.1	1.396	2.392	3.2	16.7	172 W	31	78
4 11	12 56.75	−13 38.6	1.382	2.379	3.1	16.7	173 E	31	78
4 16	12 50.94	−13 18.7	1.376	2.367	4.9	16.8	168 E	32	77
4 21	12 45.35	−12 57.4	1.375	2.355	7.2	16.9	163 E	32	77
4 26	12 40.15	−12 35.6	1.382	2.342	9.6	17.0	157 E	32	77
5 1	12 35.46	−12 14.3	1.394	2.330	11.9	17.1	151 E	33	76
5 6	12 31.41	−11 54.4	1.412	2.317	14.2	17.2	146 E	33	76
5 11	12 28.07	−11 36.7	1.435	2.304	16.3	17.3	140 E	33	76
5 16	12 25.52	−11 21.9	1.463	2.290	18.3	17.4	135 E	34	75
5 26	12 22.88	−11 3.0	1.529	2.264	21.6	17.5	125 E	34	75
6 5	12 23.44	−11 0.1	1.607	2.236	24.2	17.7	115 E	33*	75
6 15	12 27.00	−11 13.5	1.691	2.208	26.1	17.8	107 E	30*	75
6 25	12 33.27	−11 42.7	1.779	2.180	27.4	18.0	99 E	26*	76
7 5	12 41.91	−12 26.0	1.869	2.152	28.2	18.1	92 E	23*	76
7 15	12 52.65	−13 21.6	1.956	2.123	28.5	18.1	85 E	19*	76*
7 25	13 5.27	−14 27.7	2.041	2.094	28.4	18.2	79 E	16*	72*
8 4	13 19.56	−15 42.2	2.122	2.065	28.0	18.3	73 E	13*	67*
8 14	13 35.41	−17 3.2	2.199	2.036	27.3	18.3	67 E	11*	61*
8 24	13 52.73	−18 28.5	2.269	2.007	26.5	18.3	62 E	9*	56*
9 3	14 11.44	−19 56.0	2.333	1.978	25.4	18.3	57 E	8*	51*
9 13	14 31.53	−21 23.7	2.392	1.949	24.2	18.3	52 E	7*	46*
9 23	14 52.97	−22 49.0	2.443	1.921	22.8	18.2	48 E	6*	42*
10 3	15 15.73	−24 9.5	2.489	1.894	21.4	18.2	44 E	5*	37*
10 13	15 39.80	−25 22.8	2.528	1.867	19.8	18.2	39 E	4*	33*
10 23	16 5.13	−26 26.1	2.561	1.841	18.2	18.1	35 E	4*	29*
11 2	16 31.64	−27 16.9	2.589	1.816	16.5	18.0	31 E	3*	25*
11 12	16 59.24	−27 52.5	2.611	1.792	14.8	18.0	27 E	3*	21*
11 22	17 27.74	−28 10.6	2.629	1.770	13.0	17.9	24 E	2*	18*
12 2	17 56.94	−28 9.2	2.642	1.749	11.2	17.8	20 E	1*	14*
12 12	18 26.63	−27 46.8	2.650	1.730	9.4	17.7	17 E	1*	10*
12 22	18 56.53	−27 2.7	2.656	1.713	7.6	17.6	13 E	—	7*
1 1	19 26.40	−25 56.7	2.658	1.698	5.8	17.5	10 E	—	4*
1 11	19 56.02	−24 29.3	2.657	1.685	4.0	17.4	7 E	—	1*
1 21	20 25.16	−22 41.8	2.654	1.674	2.5	17.3	4 E	—	—

2044 Wirt

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 4.08	+27 31.2	1.284	1.648	36.6	16.3	92 W	73	29*
1 6	13 22.62	+27 27.7	1.240	1.675	35.6	16.2	97 W	72	32*
1 16	13 37.69	+27 41.8	1.196	1.704	34.3	16.2	102 W	73	34*
1 26	13 48.81	+28 13.4	1.154	1.736	32.6	16.1	108 W	73	36*
1 31	13 52.73	+28 35.1	1.134	1.753	31.6	16.0	111 W	74	35*
2 5	13 55.46	+28 59.9	1.115	1.770	30.4	16.0	115 W	74	35
2 10	13 56.95	+29 27.2	1.097	1.787	29.2	15.9	118 W	74	35
2 15	13 57.13	+29 55.8	1.081	1.805	27.8	15.9	122 W	75	34
2 20	13 55.96	+30 24.2	1.066	1.824	26.4	15.8	125 W	75	34
2 25	13 53.46	+30 50.7	1.055	1.842	24.8	15.8	129 W	76	33
3 2	13 49.65	+31 13.5	1.046	1.861	23.3	15.7	132 W	76	33
3 7	13 44.61	+31 30.7	1.040	1.880	21.8	15.7	135 W	77	32
3 12	13 38.48	+31 40.2	1.039	1.900	20.3	15.7	138 W	77	32
3 17	13 31.44	+31 40.2	1.042	1.920	19.1	15.7	141 W	77	32
3 22	13 23.75	+31 29.1	1.049	1.939	18.0	15.7	143 W	76	33
3 27	13 15.72	+31 5.9	1.062	1.959	17.4	15.7	144 W	76	33
4 1	13 7.63	+30 30.5	1.079	1.980	17.0	15.8	144 W	76	33
4 6	12 59.77	+29 43.2	1.102	2.000	17.1	15.8	144 W	75	34
4 11	12 52.39	+28 44.9	1.131	2.020	17.6	15.9	143 E	74	35
4 16	12 45.69	+27 36.9	1.164	2.041	18.3	16.0	140 E	73	36
4 21	12 39.84	+26 20.9	1.203	2.061	19.1	16.1	138 E	71	38
4 26	12 34.92	+24 58.6	1.247	2.082	20.1	16.3	135 E	70	39
5 1	12 30.96	+23 31.7	1.296	2.102	21.1	16.4	131 E	69	40
5 6	12 27.95	+22 1.7	1.349	2.123	22.0	16.5	128 E	67	42
5 11	12 25.87	+20 29.7	1.405	2.143	22.9	16.7	124 E	65	44
5 16	12 24.67	+18 56.9	1.466	2.163	23.7	16.8	121 E	64	45
5 21	12 24.29	+17 24.0	1.530	2.184	24.4	17.0	117 E	62	47
5 26	12 24.67	+15 51.7	1.597	2.204	25.0	17.1	113 E	61	48
6 5	12 27.39	+12 50.6	1.738	2.245	25.7	17.3	106 E	56*	51
6 15	12 32.35	+ 9 55.4	1.888	2.285	26.0	17.6	99 E	50*	54
6 25	12 39.13	+ 7 7.1	2.043	2.324	25.9	17.8	93 E	44*	57
7 5	12 47.36	+ 4 25.7	2.201	2.363	25.4	17.9	86 E	38*	60
7 15	12 56.78	+ 1 50.9	2.360	2.402	24.6	18.1	80 E	32*	62*
7 25	13 7.20	− 0 37.6	2.519	2.440	23.6	18.3	74 E	27*	61*
8 4	13 18.44	− 3 0.0	2.676	2.477	22.3	18.4	68 E	23*	58*
8 14	13 30.39	− 5 16.9	2.828	2.513	20.8	18.5	62 E	20*	54*
8 24	13 42.94	− 7 28.2	2.975	2.549	19.2	18.6	56 E	17*	49*
9 3	13 56.04	− 9 34.2	3.114	2.583	17.4	18.6	50 E	14*	44*
9 13	14 9.62	−11 34.9	3.245	2.617	15.5	18.7	44 E	11*	38*

2044 Wirt *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
9 23	14 23.64	−13 30.3	3.366	2.650	13.5	18.7	38 E	9*	32*
10 3	14 38.04	−15 20.3	3.476	2.683	11.5	18.8	32 E	6*	26*
10 13	14 52.81	−17 4.9	3.573	2.714	9.4	18.8	26 E	4*	20*
10 23	15 7.88	−18 44.0	3.656	2.744	7.2	18.7	20 E	2*	14*
11 2	15 23.23	−20 17.4	3.725	2.774	5.1	18.7	14 E	—	8*
11 12	15 38.80	−21 45.1	3.778	2.802	2.9	18.6	8 E	—	2*
11 22	15 54.54	−23 7.0	3.815	2.830	1.1	18.5	3 E	—	—
12 2	16 10.39	−24 23.3	3.836	2.856	1.9	18.6	6 W	—	—
12 12	16 26.28	−25 33.9	3.840	2.882	3.9	18.8	12 W	—	5*
12 22	16 42.11	−26 39.2	3.826	2.907	6.0	18.9	18 W	3*	11*
1 1	16 57.82	−27 39.6	3.797	2.930	8.0	19.0	24 W	5*	18*
1 11	17 13.29	−28 35.6	3.750	2.953	9.9	19.1	31 W	7*	24*
1 21	17 28.39	−29 27.7	3.688	2.975	11.7	19.1	38 W	8*	32*

63583 2001 QP_{31}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 4.58	− 3 14.4	2.946	2.927	19.3	20.9	79 W	42	53*
1 6	13 12.90	− 3 34.3	2.794	2.920	19.7	20.7	87 W	41	60*
1 16	13 19.82	− 3 41.6	2.640	2.911	19.6	20.6	96 W	41	66*
1 26	13 25.09	− 3 34.7	2.488	2.902	19.1	20.5	105 W	41	68
2 5	13 28.43	− 3 12.5	2.342	2.891	18.1	20.3	114 W	42	67
2 15	13 29.59	− 2 33.7	2.205	2.880	16.5	20.1	124 W	42	67
2 25	13 28.36	− 1 38.2	2.082	2.867	14.2	19.9	135 W	43	66
3 7	13 24.71	− 0 27.4	1.978	2.854	11.3	19.7	146 W	45	64
3 17	13 18.78	+ 0 55.6	1.898	2.840	7.9	19.4	157 W	46	63
3 22	13 15.09	+ 1 40.0	1.867	2.832	6.1	19.3	162 W	47	62
3 27	13 11.02	+ 2 25.2	1.843	2.825	4.5	19.2	167 W	47	62
4 1	13 6.67	+ 3 10.2	1.827	2.817	3.5	19.1	170 W	48	61
4 6	13 2.16	+ 3 53.9	1.818	2.809	3.6	19.1	170 W	49	60
4 11	12 57.60	+ 4 35.5	1.817	2.800	4.9	19.1	166 E	50	59
4 16	12 53.11	+ 5 14.0	1.822	2.791	6.6	19.2	161 E	50	59
4 21	12 48.83	+ 5 48.5	1.835	2.783	8.5	19.3	156 E	51	58
4 26	12 44.86	+ 6 18.4	1.854	2.774	10.3	19.4	150 E	51	58
5 6	12 38.18	+ 7 3.1	1.909	2.755	13.8	19.6	139 E	52	57
5 16	12 33.61	+ 7 26.5	1.984	2.735	16.7	19.8	129 E	52	57
5 26	12 31.44	+ 7 29.2	2.074	2.714	19.0	19.9	119 E	52	57
6 5	12 31.65	+ 7 13.4	2.174	2.693	20.8	20.1	110 E	51*	57
6 15	12 34.15	+ 6 41.3	2.280	2.670	21.9	20.2	101 E	48*	57
6 25	12 38.74	+ 5 55.7	2.389	2.647	22.5	20.3	93 E	43*	58
7 5	12 45.17	+ 4 58.8	2.498	2.623	22.7	20.4	86 E	38*	59
7 15	12 53.24	+ 3 52.7	2.604	2.598	22.5	20.4	78 E	33*	59*
7 25	13 2.76	+ 2 39.3	2.705	2.572	22.0	20.5	72 E	29*	58*
8 4	13 13.56	+ 1 20.0	2.799	2.546	21.2	20.5	65 E	26*	54*
8 14	13 25.51	− 0 3.8	2.886	2.518	20.2	20.5	59 E	23*	50*
8 24	13 38.50	− 1 30.7	2.963	2.490	18.9	20.5	53 E	20*	45*
9 3	13 52.46	− 2 59.4	3.031	2.461	17.5	20.5	47 E	18*	40*
9 13	14 7.33	− 4 29.0	3.089	2.432	16.0	20.4	42 E	16*	34*
9 23	14 23.06	− 5 58.2	3.136	2.402	14.3	20.4	36 E	14*	29*
10 3	14 39.62	− 7 25.8	3.172	2.371	12.6	20.3	31 E	13*	23*
10 13	14 57.01	− 8 50.7	3.196	2.340	10.7	20.2	26 E	11*	18*
10 23	15 15.18	−10 11.6	3.209	2.308	8.9	20.1	21 E	9*	12*
11 2	15 34.13	−11 27.3	3.211	2.276	7.0	20.0	16 E	7*	7*
11 12	15 53.85	−12 36.5	3.201	2.243	5.3	19.9	12 E	5*	1*
11 22	16 14.31	−13 38.0	3.181	2.210	3.9	19.8	9 E	3*	—
12 2	16 35.47	−14 30.5	3.151	2.177	3.4	19.7	7 E	—	—
12 12	16 57.30	−15 12.9	3.110	2.143	4.1	19.7	9 W	3*	—
12 22	17 19.74	−15 44.1	3.061	2.110	5.7	19.7	12 W	6*	—
1 1	17 42.73	−16 3.1	3.003	2.076	7.6	19.7	16 W	9*	3*
1 11	18 6.19	−16 9.2	2.937	2.043	9.6	19.7	20 W	11*	9*
1 21	18 30.05	−16 1.7	2.865	2.010	11.6	19.7	24 W	12*	14*

103732 2000 CO_{103}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 4.87	−27 47.6	2.951	2.786	19.5	20.7	71 W	17	63*
1 6	13 13.31	−29 55.4	2.838	2.800	20.1	20.6	78 W	15	71*
1 16	13 20.19	−32 0.5	2.720	2.814	20.4	20.5	85 W	13	79*
1 26	13 25.17	−34 1.5	2.601	2.827	20.4	20.4	93 W	11	82
2 5	13 27.87	−35 56.4	2.484	2.838	20.0	20.3	101 W	9	80
2 10	13 28.25	−36 50.7	2.427	2.844	19.6	20.3	105 W	8	79
2 15	13 27.92	−37 42.3	2.371	2.849	19.2	20.2	109 W	7	78
2 20	13 26.84	−38 30.6	2.318	2.854	18.6	20.2	113 W	6	77
2 25	13 25.00	−39 14.8	2.268	2.858	17.9	20.1	117 W	6	77
3 7	13 19.01	−40 28.6	2.176	2.867	16.4	20.0	125 W	5	76
3 17	13 10.10	−41 17.2	2.100	2.875	14.6	19.8	133 W	4	75
3 27	12 58.94	−41 35.0	2.044	2.881	12.8	19.7	140 W	3	74
4 1	12 52.84	−41 31.3	2.024	2.884	12.1	19.7	143 W	3	74
4 6	12 46.60	−41 18.9	2.010	2.887	11.5	19.6	145 E	4	75
4 11	12 40.40	−40 58.1	2.003	2.890	11.1	19.6	146 E	4	75
4 16	12 34.42	−40 29.6	2.001	2.892	11.0	19.6	147 E	5	76
4 21	12 28.82	−39 54.1	2.005	2.894	11.2	19.6	146 E	5	76

103732 2000 CO_{103} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
	h m	° ′			°	m	°	°	°
4 26	12 23.74	−39 12.9	2.016	2.896	11.6	19.6	145 E	6	77
5 1	12 19.28	−38 27.3	2.032	2.897	12.2	19.7	142 E	7	78
5 6	12 15.52	−37 38.4	2.055	2.898	13.0	19.7	140 E	7	78
5 11	12 12.50	−36 47.7	2.082	2.899	13.9	19.8	136 E	8	79
5 16	12 10.25	−35 56.4	2.115	2.900	14.8	19.9	133 E	9	80
5 21	12 8.79	−35 5.6	2.152	2.900	15.7	19.9	129 E	10	81
5 26	12 8.08	−34 16.4	2.194	2.901	16.5	20.0	125 E	11*	82
5 31	12 8.10	−33 29.5	2.239	2.901	17.3	20.1	122 E	11*	83
6 5	12 8.81	−32 45.5	2.287	2.900	18.1	20.1	118 E	11*	83
6 15	12 12.14	−31 28.2	2.393	2.899	19.2	20.3	110 E	10*	85
6 25	12 17.75	−30 26.7	2.506	2.897	20.1	20.4	102 E	8*	86
7 5	12 25.28	−29 41.5	2.624	2.893	20.5	20.5	95 E	6*	85*
7 15	12 34.46	−29 11.8	2.745	2.889	20.6	20.6	88 E	3*	79*
7 25	12 45.05	−28 56.6	2.865	2.884	20.3	20.7	81 E	1*	72*
8 4	12 56.85	−28 54.1	2.982	2.878	19.8	20.8	74 E	—	65*
8 14	13 9.71	−29 2.7	3.095	2.870	19.1	20.8	68 E	—	58*
8 24	13 23.51	−29 20.5	3.202	2.862	18.1	20.8	62 E	—	52*
9 3	13 38.14	−29 45.8	3.301	2.853	16.9	20.9	55 E	—	46*
9 13	13 53.56	−30 17.0	3.391	2.843	15.6	20.9	49 E	—	40*
9 23	14 9.68	−30 52.3	3.471	2.831	14.2	20.9	44 E	—	34*
10 3	14 26.47	−31 30.3	3.540	2.819	12.6	20.8	38 E	—	29*
10 13	14 43.89	−32 9.5	3.597	2.806	11.0	20.8	32 E	—	23*
10 23	15 1.89	−32 48.5	3.640	2.792	9.4	20.8	27 E	—	18*
11 2	15 20.43	−33 25.9	3.670	2.777	7.8	20.7	22 E	—	13*
11 12	15 39.47	−34 0.5	3.686	2.761	6.3	20.6	18 E	—	8*
11 22	15 58.93	−34 31.1	3.688	2.744	5.2	20.6	15 E	—	3*
12 2	16 18.76	−34 56.8	3.675	2.726	4.8	20.5	13 W	—	3*
12 12	16 38.87	−35 16.5	3.648	2.707	5.3	20.5	15 W	—	7*
12 22	16 59.17	−35 29.6	3.606	2.687	6.5	20.5	18 W	—	11*
1 1	17 19.56	−35 35.3	3.550	2.666	8.0	20.5	22 W	—	16*
1 11	17 39.93	−35 33.4	3.479	2.644	9.8	20.6	27 W	—	21*
1 21	18 0.14	−35 23.5	3.396	2.621	11.7	20.6	33 W	—	27*

483533 2003 UQ_{24}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
12 27	13 6.76	+39 39.3	1.028	1.505	40.4	18.6	97 W	85	18*
1 1	13 21.45	+39 41.6	1.015	1.509	40.2	18.6	98 W	85	19*
1 6	13 35.02	+39 44.9	1.004	1.514	39.9	18.6	99 W	85	20*
1 11	13 47.40	+39 49.9	0.993	1.520	39.5	18.6	101 W	85	21*
1 16	13 58.51	+39 57.0	0.982	1.527	39.1	18.5	102 W	85	21*
1 21	14 8.28	+40 6.5	0.972	1.536	38.5	18.5	103 W	85	22*
1 26	14 16.65	+40 18.4	0.963	1.546	37.9	18.5	105 W	85	23*
1 31	14 23.56	+40 32.7	0.953	1.557	37.3	18.5	107 W	86	23*
2 5	14 28.95	+40 49.1	0.943	1.569	36.5	18.4	109 W	86	23*
2 10	14 32.74	+41 7.0	0.934	1.583	35.6	18.4	111 W	86	23
2 15	14 34.85	+41 25.3	0.925	1.597	34.6	18.4	113 W	86	23
2 20	14 35.23	+41 42.8	0.917	1.613	33.6	18.4	116 W	87	22
2 25	14 33.87	+41 57.5	0.910	1.629	32.4	18.3	118 W	87	22
3 2	14 30.78	+42 7.7	0.904	1.647	31.2	18.3	121 W	87	22
3 7	14 26.01	+42 11.1	0.900	1.665	30.0	18.3	123 W	87	22
3 12	14 19.66	+42 5.2	0.898	1.683	28.7	18.3	126 W	87	22
3 17	14 11.94	+41 47.5	0.898	1.703	27.4	18.2	128 W	87	22
3 22	14 3.16	+41 15.7	0.902	1.723	26.1	18.2	130 W	86	23
3 27	13 53.68	+40 28.4	0.909	1.744	25.0	18.3	132 W	85	24
4 1	13 43.89	+39 24.8	0.920	1.766	24.1	18.3	134 W	84	25
4 6	13 34.19	+38 5.2	0.935	1.787	23.4	18.3	135 W	83	26
4 11	13 24.92	+36 30.5	0.955	1.810	22.9	18.4	135 W	82	27
4 16	13 16.39	+34 42.6	0.980	1.833	22.8	18.5	135 E	80	29
4 21	13 8.84	+32 43.9	1.010	1.856	22.9	18.6	134 E	78	31
4 26	13 2.38	+30 37.2	1.045	1.879	23.1	18.7	133 E	76	33
5 1	12 57.08	+28 25.2	1.085	1.903	23.6	18.8	131 E	73	36
5 6	12 52.91	+26 10.4	1.130	1.927	24.2	18.9	129 E	71	38
5 11	12 49.85	+23 54.7	1.180	1.951	24.8	19.1	126 E	69	40
5 16	12 47.84	+21 40.0	1.234	1.976	25.4	19.2	123 E	67	42
5 21	12 46.79	+19 27.4	1.292	2.001	26.0	19.3	120 E	64	45
5 26	12 46.61	+17 17.9	1.354	2.025	26.5	19.5	117 E	62	47
6 5	12 48.52	+13 10.7	1.488	2.075	27.2	19.8	111 E	58*	51
6 15	12 52.95	+ 9 20.3	1.634	2.125	27.6	20.0	104 E	52*	55
6 25	12 59.40	+ 5 46.7	1.789	2.175	27.6	20.3	98 E	45*	58
7 5	13 7.44	+ 2 28.8	1.950	2.225	27.2	20.5	92 E	39*	62
7 15	13 16.79	− 0 35.1	2.116	2.275	26.5	20.7	86 E	33*	65*
7 25	13 27.21	− 3 26.5	2.284	2.324	25.4	20.9	79 E	28*	66*
8 4	13 38.51	− 6 6.7	2.452	2.373	24.2	21.1	74 E	24*	64*
8 14	13 50.57	− 8 37.0	2.619	2.422	22.8	21.2	68 E	20*	60*
8 24	14 3.29	−10 58.3	2.782	2.470	21.1	21.3	62 E	17*	55*
9 3	14 16.59	−13 11.3	2.940	2.517	19.4	21.4	56 E	14*	50*

137925 2000 BJ_{19}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
12 27	13 6.85	+ 8 57.3	1.375	1.601	37.6	19.2	84 W	54	44*
1 1	13 19.90	+ 9 14.9	1.279	1.556	39.1	19.0	86 W	54	45*
1 6	13 34.07	+ 9 39.9	1.184	1.508	40.6	18.9	88 W	55	46*
1 11	13 49.64	+10 13.6	1.092	1.459	42.4	18.7	89 W	55	47*

137925 2000 BJ_{19} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
	h m	° ′			°	m	°	°	°
1 16	14 6.96	+10 57.0	1.002	1.407	44.3	18.4	90 W	56	47*
1 21	14 26.52	+11 51.0	0.916	1.354	46.6	18.2	91 W	57	47*
1 26	14 48.91	+12 56.2	0.836	1.297	49.4	18.0	91 W	58	46*
1 31	15 14.89	+14 11.9	0.761	1.238	52.7	17.8	89 W	59	45*
2 5	15 45.31	+15 35.2	0.695	1.177	56.8	17.6	87 W	61*	43*
2 7	15 58.91	+16 9.4	0.671	1.151	58.7	17.5	86 W	61*	42*
2 9	16 13.39	+16 43.1	0.649	1.125	60.7	17.5	84 W	61*	41*
2 11	16 28.78	+17 15.6	0.629	1.099	62.9	17.4	83 W	62*	40*
2 13	16 45.08	+17 45.9	0.611	1.072	65.3	17.4	81 W	62*	38*
2 15	17 2.29	+18 12.8	0.596	1.045	67.8	17.4	78 W	61*	37*
2 17	17 20.33	+18 35.2	0.583	1.017	70.4	17.3	76 W	60*	35*
2 19	17 39.13	+18 51.9	0.573	0.988	73.2	17.3	73 W	59*	34*
2 21	17 58.55	+19 1.6	0.566	0.959	76.0	17.3	70 W	58*	32*
2 23	18 18.43	+19 3.4	0.562	0.930	78.9	17.3	67 W	56*	30*
2 25	18 38.58	+18 56.5	0.561	0.900	81.8	17.4	64 W	53*	29*
2 27	18 58.79	+18 40.7	0.563	0.869	84.7	17.4	61 W	51*	27*
3 1	19 18.87	+18 16.0	0.568	0.837	87.4	17.5	58 W	48*	25*
3 3	19 38.61	+17 42.7	0.577	0.805	90.1	17.5	54 W	45*	24*
3 5	19 57.87	+17 1.6	0.588	0.773	92.5	17.6	51 W	42*	22*
3 7	20 16.52	+16 13.6	0.603	0.740	94.7	17.6	48 W	39*	21*
3 9	20 34.48	+15 19.6	0.621	0.706	96.7	17.7	45 W	37*	20*
3 11	20 51.73	+14 20.7	0.642	0.672	98.3	17.7	42 W	34*	19*
3 13	21 8.25	+13 17.9	0.666	0.637	99.5	17.7	39 W	31*	18*
3 15	21 24.11	+12 12.0	0.692	0.601	100.2	17.7	37 W	28*	17*
3 17	21 39.36	+11 3.9	0.722	0.566	100.5	17.7	34 W	25*	16*
3 19	21 54.10	+ 9 54.1	0.755	0.530	100.1	17.6	32 W	23*	16*
3 21	22 8.46	+ 8 43.5	0.790	0.494	99.1	17.5	29 W	20*	15*
3 23	22 22.59	+ 7 32.6	0.829	0.459	97.2	17.4	27 W	17*	15*
3 25	22 36.64	+ 6 22.3	0.870	0.425	94.4	17.2	25 W	15*	14*
3 27	22 50.81	+ 5 13.4	0.915	0.392	90.3	17.0	23 W	12*	13*
3 29	23 5.30	+ 4 7.5	0.963	0.363	84.9	16.7	21 W	10*	13*
3 31	23 20.28	+ 3 6.1	1.012	0.337	78.1	16.4	19 W	7*	12*
4 2	23 35.92	+ 2 11.8	1.064	0.318	69.8	16.1	17 W	4*	11*
4 4	23 52.22	+ 1 27.1	1.115	0.307	60.4	15.8	15 W	2*	9*
4 6	0 9.08	+ 0 54.4	1.166	0.306	50.7	15.6	14 W	—	8*
4 11	0 51.67	+ 0 28.6	1.278	0.341	31.0	15.5	10 W	—	3*
4 16	1 31.52	+ 1 4.4	1.373	0.413	22.4	15.8	9 W	—	—
4 21	2 7.02	+ 2 10.8	1.457	0.499	20.5	16.3	10 E	—	1*
4 26	2 38.43	+ 3 27.5	1.538	0.589	20.3	16.8	12 E	—	4*
5 1	3 6.39	+ 4 44.4	1.617	0.677	19.9	17.2	13 E	—	6*
5 6	3 31.49	+ 5 56.7	1.697	0.761	19.1	17.5	14 E	—	7*
5 11	3 54.25	+ 7 2.5	1.776	0.842	18.1	17.8	15 E	—	8*
5 16	4 15.05	+ 8 0.9	1.854	0.919	17.0	18.1	15 E	—	9*
5 26	4 51.96	+ 9 36.2	2.007	1.062	14.4	18.5	15 E	—	8*
6 5	5 24.07	+10 45.4	2.151	1.193	11.9	18.8	14 E	—	6*
6 15	5 52.60	+11 32.6	2.284	1.312	9.7	19.0	13 E	—	3*
6 25	6 18.36	+12 1.5	2.403	1.421	8.1	19.2	11 E	—	—
7 5	6 41.92	+12 15.3	2.506	1.521	7.4	19.4	11 W	—	2*
7 15	7 3.69	+12 16.5	2.591	1.612	7.7	19.7	12 W	—	5*
7 25	7 23.94	+12 7.3	2.658	1.696	8.8	19.9	15 W	—	9*
8 4	7 42.89	+11 49.5	2.706	1.773	10.5	20.1	19 W	2*	12*
8 14	8 0.67	+11 24.8	2.733	1.843	12.4	20.3	23 W	7*	15*
8 24	8 17.36	+10 54.5	2.741	1.907	14.4	20.4	28 W	13*	19*
9 3	8 33.05	+10 20.2	2.729	1.966	16.4	20.5	33 W	19*	22*
9 13	8 47.75	+ 9 43.1	2.697	2.019	18.3	20.6	39 W	25*	25*
9 23	9 1.43	+ 9 4.9	2.645	2.066	20.2	20.7	45 W	31*	28*
10 3	9 14.08	+ 8 26.8	2.576	2.108	21.9	20.7	52 W	37*	32*
10 13	9 25.59	+ 7 50.7	2.489	2.146	23.4	20.7	59 W	43*	36*
10 23	9 35.83	+ 7 18.7	2.387	2.178	24.6	20.7	66 W	47*	40*
11 2	9 44.63	+ 6 52.9	2.271	2.206	25.6	20.7	74 W	50*	44*
11 12	9 51.73	+ 6 36.3	2.144	2.229	26.1	20.6	82 W	52*	48*
11 22	9 56.79	+ 6 32.4	2.010	2.248	26.1	20.5	91 W	52	52*
12 2	9 59.40	+ 6 45.2	1.870	2.262	25.4	20.3	100 W	52	56*
12 12	9 59.01	+ 7 19.7	1.731	2.272	23.9	20.1	111 W	52	57*
12 17	9 57.51	+ 7 46.7	1.664	2.275	22.9	20.0	116 W	53	56
12 22	9 55.04	+ 8 21.0	1.598	2.277	21.5	19.9	122 W	53	56
12 27	9 51.52	+ 9 3.2	1.536	2.278	19.9	19.7	128 W	54	55
1 1	9 46.90	+ 9 53.6	1.478	2.278	17.9	19.6	135 W	55	54
1 6	9 41.12	+10 52.3	1.425	2.277	15.7	19.4	141 W	56	53
1 11	9 34.20	+11 58.9	1.378	2.275	13.1	19.2	148 W	57	52
1 16	9 26.17	+13 12.7	1.339	2.272	10.2	19.1	156 W	58	51
1 21	9 17.13	+14 32.2	1.307	2.268	7.1	18.9	163 W	60	49

481358 2006 ES_{69}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
12 27	13 7.34	+26 41.2	1.297	1.645	36.7	20.2	91 W	72	30*
1 6	13 28.08	+26 10.5	1.240	1.655	36.3	20.1	95 W	71	33*
1 16	13 45.84	+25 53.5	1.185	1.668	35.5	20.0	100 W	71	36*
1 26	14 0.13	+25 50.9	1.132	1.685	34.3	19.9	105 W	71	38*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	–26°
481358 2006 ES_{69} *(continuation)*									
	h m	° ′			°	m	°	°	°
1 31	14 5.82	+25 54.6	1.106	1.694	33.6	19.9	108 W	71	38*
2 5	14 10.45	+26 1.4	1.081	1.704	32.7	19.8	111 W	71	38
2 10	14 13.93	+26 10.7	1.056	1.715	31.7	19.7	114 W	71	38
2 15	14 16.20	+26 21.9	1.033	1.726	30.5	19.7	117 W	71	38
2 20	14 17.18	+26 33.8	1.011	1.738	29.3	19.6	121 W	72	37
2 25	14 16.85	+26 45.3	0.991	1.751	27.8	19.5	124 W	72	37
3 2	14 15.16	+26 54.8	0.973	1.764	26.3	19.5	128 W	72	37
3 7	14 12.14	+27 0.9	0.957	1.778	24.7	19.4	132 W	72	37
3 12	14 7.81	+27 1.5	0.945	1.792	23.0	19.3	135 W	72	37
3 17	14 2.29	+26 54.9	0.936	1.807	21.3	19.3	139 W	72	37
3 22	13 55.75	+26 38.9	0.931	1.822	19.7	19.2	142 W	72	37
3 27	13 48.43	+26 12.2	0.931	1.838	18.3	19.2	145 W	71	38
4 1	13 40.60	+25 33.9	0.936	1.854	17.2	19.2	147 W	71	38
4 6	13 32.55	+24 43.6	0.945	1.870	16.5	19.2	148 W	70	39
4 11	13 24.58	+23 41.7	0.961	1.887	16.3	19.3	148 W	69	40
4 16	13 16.99	+22 28.9	0.982	1.904	16.6	19.3	147 E	67	42
4 21	13 10.02	+21 6.9	1.008	1.921	17.3	19.4	145 E	66	43
4 26	13 3.85	+19 37.3	1.040	1.939	18.3	19.6	143 E	65	44
5 1	12 58.59	+18 2.3	1.077	1.957	19.5	19.7	140 E	63	46
5 6	12 54.31	+16 23.5	1.119	1.975	20.7	19.8	136 E	61	48
5 11	12 51.01	+14 42.6	1.166	1.993	21.9	20.0	133 E	60	49
5 16	12 48.70	+13 0.9	1.217	2.011	23.1	20.1	129 E	58	51
5 21	12 47.33	+11 19.4	1.272	2.029	24.1	20.3	125 E	56	53
5 26	12 46.83	+ 9 39.0	1.331	2.048	25.0	20.4	121 E	55	54
6 5	12 48.20	+ 6 23.5	1.458	2.085	26.4	20.7	114 E	51*	58
6 15	12 52.27	+ 3 16.7	1.595	2.123	27.3	21.0	107 E	46*	61
6 25	12 58.57	+ 0 19.3	1.740	2.161	27.6	21.2	100 E	40*	64
7 5	13 6.67	− 2 28.8	1.890	2.199	27.5	21.4	93 E	34*	66
505667 2014 UV_{33}									
12 27	13 7.65	− 0 31.0	1.173	1.389	44.1	20.6	80 W	44	51*
1 6	13 28.68	− 1 12.9	1.146	1.439	42.9	20.5	85 W	44	56*
1 16	13 46.93	− 1 32.1	1.113	1.491	41.3	20.5	90 W	43	61*
1 26	14 2.02	− 1 27.0	1.076	1.544	39.3	20.5	97 W	44	64*
2 5	14 13.53	− 0 57.2	1.038	1.598	36.7	20.4	104 W	44	65
2 15	14 20.99	− 0 2.6	1.000	1.653	33.5	20.3	113 W	45	64
2 25	14 23.93	+ 1 15.0	0.965	1.708	29.5	20.2	122 W	46	63
3 2	14 23.63	+ 2 1.0	0.950	1.736	27.2	20.1	127 W	47	62
3 7	14 22.14	+ 2 50.7	0.938	1.763	24.7	20.0	132 W	48	61
3 12	14 19.47	+ 3 43.0	0.929	1.791	22.1	20.0	137 W	49	60
3 17	14 15.69	+ 4 36.3	0.924	1.818	19.4	19.9	143 W	50	59
3 22	14 10.94	+ 5 29.0	0.923	1.845	16.7	19.8	148 W	50	59
3 27	14 5.39	+ 6 19.2	0.927	1.871	14.0	19.8	153 W	51	58
4 1	13 59.23	+ 7 5.1	0.936	1.898	11.7	19.8	157 W	52	57
4 6	13 52.69	+ 7 45.1	0.951	1.924	9.9	19.8	161 W	53	56
4 11	13 46.03	+ 8 18.0	0.972	1.950	9.1	19.8	162 W	53	56
4 16	13 39.48	+ 8 42.7	0.999	1.976	9.4	19.9	161 W	54	55
4 26	13 27.63	+ 9 6.0	1.070	2.026	12.2	20.2	155 E	54	55
5 6	13 18.44	+ 8 56.4	1.163	2.075	15.9	20.6	146 E	54	55
5 16	13 12.49	+ 8 18.9	1.274	2.123	19.2	20.9	136 E	53	56
5 26	13 9.88	+ 7 20.0	1.401	2.170	21.8	21.3	127 E	52	57
138859 2000 WN_{63}									
12 27	13 9.09	+25 57.7	0.416	1.072	66.6	19.5	91 W	71	30*
12 29	13 25.90	+24 50.6	0.409	1.055	68.7	19.5	88 W	70	30*
12 31	13 42.78	+23 35.1	0.404	1.038	71.0	19.5	86 W	69	30*
1 2	13 59.62	+22 11.6	0.400	1.021	73.3	19.5	84 W	67*	30*
1 4	14 16.30	+20 40.8	0.397	1.004	75.6	19.5	81 W	65*	30*
1 6	14 32.73	+19 3.7	0.397	0.987	77.8	19.6	79 W	63*	30*
1 8	14 48.82	+17 21.4	0.398	0.971	80.0	19.6	76 W	61*	30*
1 10	15 4.49	+15 35.2	0.400	0.955	82.2	19.7	74 W	59*	31*
1 12	15 19.68	+13 46.3	0.404	0.939	84.2	19.7	72 W	57*	31*
1 14	15 34.37	+11 56.0	0.410	0.923	86.0	19.8	69 W	55*	31*
1 16	15 48.54	+10 5.5	0.417	0.907	87.8	19.9	67 W	52*	31*
1 18	16 2.18	+ 8 15.7	0.426	0.892	89.3	19.9	65 W	50*	32*
1 20	16 15.30	+ 6 27.4	0.435	0.877	90.6	20.0	63 W	48*	32*
1 22	16 27.92	+ 4 41.6	0.446	0.863	91.8	20.1	61 W	46*	33*
1 24	16 40.07	+ 2 58.6	0.459	0.849	92.7	20.1	60 W	44*	33*
1 26	16 51.79	+ 1 18.9	0.472	0.836	93.4	20.2	58 W	41*	33*
1 31	17 19.44	− 2 33.9	0.510	0.806	94.3	20.3	55 W	37*	35*
2 5	17 45.20	− 6 1.5	0.553	0.780	93.9	20.4	52 W	32*	36*
2 10	18 9.61	− 9 3.0	0.600	0.760	92.3	20.5	50 W	28*	37*
2 15	18 33.09	−11 38.9	0.651	0.745	89.8	20.5	49 W	25*	38*
2 20	18 55.94	−13 49.6	0.704	0.738	86.5	20.5	48 W	22*	39*
2 25	19 18.32	−15 36.1	0.759	0.738	82.8	20.5	48 W	19*	40*
3 2	19 40.29	−16 59.5	0.814	0.745	78.8	20.6	48 W	16*	41*
3 7	20 1.81	−18 1.3	0.869	0.759	74.8	20.6	48 W	14*	41*
3 12	20 22.78	−18 43.6	0.922	0.779	70.9	20.7	48 W	12*	42*
3 17	20 43.07	−19 8.7	0.973	0.804	67.3	20.7	48 W	11*	42*
138859 2000 WN_{63} *(continuation)*									
3 22	21 2.59	−19 19.2	1.021	0.835	64.0	20.8	49 W	9*	43*
3 27	21 21.28	−19 17.6	1.066	0.868	61.1	20.9	50 W	8*	44*
4 1	21 39.08	−19 6.4	1.107	0.905	58.5	21.0	51 W	7*	44*
4 6	21 56.00	−18 47.7	1.145	0.944	56.3	21.1	52 W	7*	46*
4 11	22 12.03	−18 23.6	1.179	0.985	54.3	21.2	53 W	6*	47*
4 16	22 27.20	−17 55.7	1.208	1.027	52.6	21.3	54 W	6*	48*
4 21	22 41.52	−17 25.5	1.234	1.070	51.1	21.4	56 W	6*	50*
4 26	22 55.05	−16 54.3	1.256	1.113	49.8	21.5	58 W	6*	51*
195009 2002 CK_{13}									
12 27	13 9.23	−10 58.6	1.689	1.725	33.5	19.5	75 W	34	57*
1 6	13 29.19	−10 57.7	1.614	1.753	33.6	19.5	81 W	34	62*
1 16	13 47.57	−10 31.7	1.537	1.782	33.5	19.4	87 W	34	67*
1 26	14 4.02	− 9 37.9	1.460	1.813	32.8	19.3	94 W	35	71*
2 5	14 18.16	− 8 14.2	1.384	1.846	31.6	19.2	101 W	37	72*
2 15	14 29.54	− 6 18.6	1.312	1.881	29.8	19.1	109 W	39	70
2 25	14 37.73	− 3 51.2	1.247	1.917	27.3	18.9	117 W	41	68
3 7	14 42.37	− 0 54.5	1.193	1.954	24.1	18.8	127 W	44	65
3 12	14 43.29	+ 0 43.0	1.171	1.972	22.3	18.7	131 W	46	63
3 17	14 43.25	+ 2 24.9	1.153	1.991	20.4	18.6	136 W	47	62
3 22	14 42.29	+ 4 9.4	1.140	2.010	18.4	18.5	140 W	49	60
3 27	14 40.47	+ 5 54.5	1.132	2.029	16.5	18.5	145 W	51	58
4 1	14 37.88	+ 7 38.1	1.129	2.049	14.8	18.4	148 W	53	56
4 6	14 34.61	+ 9 17.7	1.132	2.068	13.3	18.4	152 W	54	55
4 11	14 30.80	+10 51.1	1.141	2.087	12.3	18.4	154 W	56	53
4 16	14 26.62	+12 16.2	1.157	2.107	11.9	18.5	154 W	57	52
4 21	14 22.25	+13 31.1	1.178	2.126	12.0	18.5	154 W	59	50
4 26	14 17.87	+14 34.9	1.205	2.146	12.7	18.6	152 W	60	49
5 1	14 13.64	+15 26.7	1.238	2.165	13.8	18.7	149 E	60	49
5 6	14 9.71	+16 6.5	1.276	2.185	15.0	18.9	146 E	61	48
5 16	14 3.23	+16 51.4	1.366	2.224	17.7	19.1	138 E	62	47
5 26	13 59.10	+16 55.0	1.473	2.263	20.0	19.4	130 E	62	47
6 5	13 57.56	+16 25.8	1.594	2.301	21.9	19.7	122 E	61	48
6 10	13 57.75	+16 1.4	1.658	2.320	22.6	19.8	118 E	61	48
6 15	13 58.55	+15 31.7	1.725	2.339	23.2	19.9	115 E	61	48
6 20	13 59.94	+14 57.6	1.793	2.358	23.7	20.0	111 E	60*	49
6 25	14 1.87	+14 19.8	1.863	2.377	24.1	20.2	108 E	58*	50
6 30	14 4.30	+13 39.0	1.935	2.396	24.3	20.3	104 E	57*	50
7 5	14 7.20	+12 55.8	2.008	2.414	24.4	20.4	101 E	55*	51
7 15	14 14.28	+11 24.0	2.156	2.451	24.4	20.6	94 E	50*	53
7 25	14 22.84	+ 9 47.9	2.305	2.487	24.1	20.7	88 E	47*	54
8 4	14 32.64	+ 8 10.1	2.455	2.523	23.5	20.9	82 E	43*	56*
8 14	14 43.52	+ 6 32.6	2.603	2.558	22.6	21.0	76 E	40*	55*
8 24	14 55.30	+ 4 57.0	2.749	2.592	21.6	21.1	70 E	37*	53*
9 3	15 7.86	+ 3 24.9	2.890	2.625	20.4	21.2	65 E	35*	50*
9 13	15 21.10	+ 1 57.2	3.027	2.658	19.0	21.3	59 E	33*	46*
9 23	15 34.92	+ 0 35.0	3.157	2.689	17.5	21.4	54 E	31*	41*
10 3	15 49.23	− 0 40.9	3.279	2.720	16.0	21.4	48 E	29*	35*
10 13	16 3.98	− 1 49.6	3.393	2.750	14.4	21.5	43 E	27*	30*
10 23	16 19.07	− 2 50.6	3.496	2.780	12.7	21.5	38 E	25*	24*
162063 1997 EH_{29}									
12 27	13 9.58	−21 49.7	0.656	0.994	69.8	20.4	72 W	23	61*
1 1	13 7.21	−21 17.2	0.657	1.054	65.4	20.4	77 W	24	67*
1 6	13 4.37	−20 41.9	0.653	1.111	61.4	20.4	83 W	24	72*
1 11	13 0.70	−20 1.3	0.646	1.167	57.4	20.4	89 W	25	78*
1 16	12 55.88	−19 12.8	0.636	1.220	53.4	20.3	95 W	26	82*
1 21	12 49.66	−18 13.6	0.624	1.270	49.3	20.2	102 W	27	82
1 26	12 41.88	−17 1.2	0.611	1.319	44.8	20.1	109 W	28	81
1 31	12 32.43	−15 33.4	0.600	1.365	40.1	20.0	117 W	29	80
2 5	12 21.31	−13 48.6	0.590	1.410	35.0	19.9	125 W	31	78
2 10	12 8.65	−11 46.2	0.584	1.452	29.5	19.8	134 W	33	76
2 15	11 54.76	− 9 27.4	0.582	1.493	23.7	19.7	143 W	36	73
2 20	11 40.09	− 6 56.0	0.587	1.532	17.7	19.6	152 W	38	71
2 25	11 25.24	− 4 17.7	0.599	1.569	11.8	19.5	161 W	41	68
3 2	11 10.79	− 1 39.4	0.619	1.604	6.3	19.4	170 W	43	66
3 7	10 57.27	+ 0 52.1	0.647	1.638	3.3	19.4	175 E	46	63
3 12	10 45.11	+ 3 11.7	0.683	1.670	6.4	19.7	169 E	48	61
3 17	10 34.58	+ 5 15.8	0.727	1.700	10.6	20.0	162 E	50	59
3 22	10 25.82	+ 7 2.6	0.777	1.729	14.5	20.4	154 E	52	57
3 27	10 18.83	+ 8 32.4	0.833	1.757	17.9	20.7	147 E	54	55
4 1	10 13.53	+ 9 46.1	0.894	1.783	20.8	20.9	141 E	55	54
4 6	10 9.77	+10 45.3	0.959	1.807	23.3	21.2	134 E	56	53
4 11	10 7.42	+11 31.7	1.028	1.830	25.3	21.4	129 E	57	52
161989 Cacus									
12 27	13 9.61	−15 16.3	0.991	1.184	52.9	19.5	74 W	30	59*
1 1	13 29.39	−15 18.9	0.951	1.167	54.2	19.4	74 W	30	60*
1 6	13 50.15	−15 10.7	0.912	1.151	55.5	19.3	75 W	30	60*
1 11	14 11.93	−14 50.5	0.876	1.134	56.9	19.2	75 W	30	60*

161989 Cacus *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
1 16	14 34.75	−14 16.8	0.842	1.116	58.3	19.2	75 W	31	60*
1 21	14 58.58	−13 28.4	0.811	1.099	59.8	19.1	75 W	32	60*
1 26	15 23.36	−12 24.7	0.785	1.081	61.3	19.0	74 W	33*	59*
2 5	16 15.28	− 9 32.0	0.745	1.046	64.3	18.9	73 W	35*	57*
2 15	17 9.03	− 5 48.9	0.725	1.011	67.0	18.9	70 W	38*	53*
2 25	18 2.70	− 1 39.4	0.727	0.978	69.2	18.9	67 W	39*	49*
3 2	18 28.98	+ 0 25.7	0.736	0.962	70.0	18.9	66 W	40*	47*
3 7	18 54.70	+ 2 26.3	0.749	0.948	70.5	18.9	64 W	40*	45*
3 12	19 19.75	+ 4 19.8	0.767	0.934	70.7	19.0	63 W	40*	44*
3 17	19 44.07	+ 6 4.2	0.787	0.922	70.7	19.0	61 W	40*	42*
3 27	20 30.60	+ 9 2.2	0.836	0.902	69.9	19.0	58 W	38*	40*
4 6	21 14.63	+11 18.4	0.891	0.889	68.4	19.1	56 W	36*	38*
4 16	21 56.65	+12 57.2	0.946	0.883	66.5	19.2	54 W	34*	37*
4 21	22 17.06	+13 34.4	0.972	0.883	65.4	19.2	53 W	33*	37*
4 26	22 37.14	+14 4.4	0.998	0.885	64.3	19.2	52 W	32*	37*
5 1	22 56.95	+14 27.9	1.022	0.890	63.2	19.2	52 W	31*	37*
5 6	23 16.52	+14 45.6	1.044	0.896	62.1	19.3	52 W	29*	37*
5 11	23 35.87	+14 57.9	1.065	0.904	61.1	19.3	52 W	28*	37*
5 16	23 55.03	+15 5.2	1.084	0.913	60.1	19.3	52 W	27*	38*
5 26	0 32.77	+15 5.6	1.116	0.937	58.3	19.4	52 W	26*	39*
6 5	1 9.81	+14 48.2	1.140	0.966	56.9	19.5	53 W	25*	40*
6 15	1 46.11	+14 13.3	1.157	0.998	55.6	19.5	54 W	24*	41*
6 25	2 21.57	+13 20.4	1.168	1.032	54.6	19.6	56 W	25*	43*
7 5	2 56.11	+12 9.4	1.172	1.067	53.8	19.7	58 W	26*	45*
7 15	3 29.59	+10 39.7	1.171	1.103	53.0	19.7	60 W	27*	46*
7 25	4 1.88	+ 8 51.5	1.165	1.138	52.3	19.7	62 W	29*	48*
8 4	4 32.88	+ 6 45.3	1.156	1.171	51.7	19.8	65 W	31*	51*
8 14	5 2.47	+ 4 21.8	1.142	1.203	51.1	19.8	68 W	33*	53*
8 24	5 30.53	+ 1 42.4	1.125	1.232	50.6	19.8	70 W	34*	56*
9 3	5 57.03	− 1 11.3	1.104	1.259	50.0	19.8	73 W	35*	58*
9 13	6 21.86	− 4 17.8	1.079	1.283	49.5	19.8	76 W	35*	61*
9 23	6 44.93	− 7 34.9	1.051	1.304	49.0	19.7	79 W	34*	65*
10 3	7 6.18	−11 0.8	1.019	1.322	48.5	19.7	82 W	33*	69*
10 13	7 25.46	−14 33.4	0.983	1.337	48.0	19.6	85 W	30*	73*
10 23	7 42.59	−18 10.1	0.943	1.349	47.5	19.5	88 W	27	77*
10 28	7 50.29	−19 59.3	0.922	1.353	47.2	19.5	90 W	25	80*
11 2	7 57.34	−21 48.7	0.899	1.357	47.0	19.4	92 W	23	83*
11 7	8 3.69	−23 37.6	0.876	1.360	46.7	19.3	93 W	21	86*
11 12	8 9.29	−25 25.6	0.851	1.362	46.4	19.3	95 W	20	89*
11 17	8 14.07	−27 11.9	0.826	1.363	46.1	19.2	97 W	18	89
11 22	8 17.95	−28 56.0	0.800	1.363	45.7	19.1	99 W	16	87
11 27	8 20.85	−30 37.0	0.773	1.363	45.3	19.0	101 W	14	85
12 2	8 22.65	−32 13.9	0.745	1.361	44.9	19.0	103 W	13	84
12 7	8 23.22	−33 45.0	0.717	1.359	44.5	18.9	105 W	11	82
12 12	8 22.45	−35 8.6	0.689	1.356	44.0	18.7	107 W	10	81
12 17	8 20.24	−36 22.5	0.660	1.352	43.5	18.6	109 W	9	80
12 22	8 16.49	−37 24.2	0.631	1.347	42.9	18.5	111 W	8	79
12 27	8 11.13	−38 10.6	0.602	1.342	42.3	18.4	113 W	7	78
1 1	8 4.11	−38 37.8	0.574	1.335	41.6	18.2	116 W	6	77
1 6	7 55.53	−38 41.1	0.546	1.328	41.0	18.1	118 W	6	77
1 11	7 45.60	−38 15.7	0.519	1.320	40.3	18.0	120 W	7	78
1 16	7 34.66	−37 17.0	0.493	1.311	39.7	17.8	122 E	8	79
1 21	7 23.14	−35 40.6	0.469	1.302	39.3	17.7	123 E	9	80

7002 Bronshten

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 9.75	− 8 26.2	3.097	3.016	18.5	20.6	76 W	37	56*
1 6	13 17.93	− 9 10.4	2.936	3.000	19.0	20.5	84 W	36	63*
1 16	13 24.82	− 9 45.7	2.772	2.983	19.2	20.4	93 W	35	70*
1 26	13 30.16	−10 10.5	2.609	2.964	19.0	20.2	101 W	35	74*
2 5	13 33.68	−10 23.5	2.450	2.945	18.3	20.0	111 W	35	74
2 15	13 35.10	−10 23.1	2.298	2.925	16.9	19.8	120 W	35	74
2 25	13 34.19	−10 7.8	2.159	2.904	15.0	19.6	131 W	35	74
3 7	13 30.85	− 9 37.0	2.036	2.882	12.3	19.4	142 W	35	74
3 17	13 25.14	− 8 50.5	1.934	2.858	9.0	19.1	153 W	36	73
3 27	13 17.43	− 7 50.5	1.858	2.834	5.1	18.8	165 W	37	72
4 1	13 13.02	− 7 16.5	1.830	2.822	3.0	18.7	172 W	38	71
4 6	13 8.38	− 6 40.8	1.809	2.809	0.8	18.5	178 W	38	71
4 11	13 3.63	− 6 4.2	1.796	2.796	1.5	18.5	176 E	39	70
4 16	12 58.89	− 5 27.5	1.790	2.783	3.7	18.6	170 E	40	69
4 21	12 54.29	− 4 51.7	1.792	2.770	5.9	18.7	164 E	40	69
4 26	12 49.96	− 4 17.6	1.800	2.756	8.0	18.8	157 E	41	68
5 1	12 46.00	− 3 46.1	1.815	2.742	10.1	18.9	151 E	41	68
5 6	12 42.48	− 3 17.6	1.836	2.728	12.0	19.0	146 E	42	67
5 16	12 37.09	− 2 32.2	1.893	2.700	15.5	19.2	134 E	42	67
5 26	12 34.15	− 2 4.0	1.968	2.670	18.3	19.3	124 E	43	66
6 5	12 33.73	− 1 53.4	2.056	2.639	20.5	19.5	114 E	42*	66

7002 Bronshten *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
6 15	12 35.75	− 1 59.7	2.151	2.608	22.1	19.6	105 E	40*	66
6 25	12 40.03	− 2 21.3	2.250	2.575	23.1	19.7	97 E	36*	66
7 5	12 46.34	− 2 56.4	2.350	2.542	23.6	19.8	89 E	31*	67
7 15	12 54.45	− 3 43.1	2.448	2.508	23.6	19.9	82 E	27*	67*
7 25	13 4.18	− 4 39.6	2.541	2.474	23.3	19.9	75 E	24*	64*
8 4	13 15.34	− 5 44.1	2.629	2.438	22.7	19.9	68 E	21*	60*
8 14	13 27.83	− 6 55.2	2.709	2.402	21.8	19.9	62 E	18*	55*
8 24	13 41.51	− 8 11.2	2.781	2.365	20.7	19.9	56 E	16*	49*
9 3	13 56.33	− 9 30.7	2.844	2.328	19.4	19.9	50 E	14*	44*
9 13	14 12.24	−10 52.3	2.897	2.290	17.9	19.8	44 E	12*	38*
9 23	14 29.20	−12 14.4	2.939	2.251	16.3	19.8	39 E	11*	33*
10 3	14 47.18	−13 35.5	2.972	2.212	14.6	19.7	34 E	9*	28*
10 13	15 6.20	−14 54.2	2.993	2.173	12.8	19.6	29 E	8*	22*
10 23	15 26.24	−16 8.7	3.005	2.134	10.9	19.5	24 E	6*	17*
11 2	15 47.29	−17 17.5	3.006	2.094	8.9	19.4	19 E	5*	12*
11 12	16 9.35	−18 18.6	2.998	2.055	6.9	19.3	15 E	3*	7*
11 22	16 32.39	−19 10.4	2.980	2.015	4.9	19.1	10 E	1*	2*
12 2	16 56.38	−19 50.9	2.954	1.976	3.0	18.9	6 E	—	—
12 12	17 21.26	−20 18.6	2.920	1.938	1.5	18.8	3 E	—	—
12 22	17 46.94	−20 31.6	2.879	1.900	2.2	18.7	4 W	—	—
1 1	18 13.34	−20 28.6	2.832	1.862	4.0	18.8	8 W	1*	—
1 11	18 40.32	−20 8.4	2.780	1.826	6.1	18.8	11 W	3*	3*
1 21	19 7.76	−19 30.3	2.724	1.792	8.1	18.8	15 W	4*	7*

434380 2004 UX_5

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 11.16	+22 40.2	1.319	1.627	37.2	20.7	89 W	68	33*
1 6	13 27.87	+21 35.2	1.259	1.648	36.5	20.6	94 W	67	37*
1 16	13 41.48	+20 44.9	1.199	1.670	35.5	20.5	99 W	66	41*
1 26	13 51.53	+20 9.4	1.137	1.695	34.0	20.3	106 W	65	43*
2 5	13 57.51	+19 47.1	1.077	1.721	31.8	20.2	113 W	65	44
2 10	13 58.78	+19 40.1	1.048	1.735	30.5	20.1	117 W	65	44
2 15	13 58.81	+19 34.8	1.021	1.749	28.9	20.0	121 W	65	44
2 20	13 57.54	+19 30.2	0.995	1.763	27.2	19.9	125 W	65	44
2 25	13 54.94	+19 25.3	0.972	1.778	25.2	19.8	130 W	64	45
3 2	13 51.02	+19 18.5	0.951	1.793	23.1	19.8	135 W	64	45
3 7	13 45.80	+19 8.5	0.934	1.808	20.8	19.7	140 W	64	45
3 12	13 39.40	+18 53.7	0.921	1.823	18.5	19.6	144 W	64	45
3 17	13 31.96	+18 32.5	0.913	1.839	16.2	19.5	149 W	64	45
3 22	13 23.73	+18 3.6	0.911	1.855	14.1	19.4	153 W	63	46
3 27	13 15.01	+17 26.1	0.914	1.871	12.4	19.4	156 W	62	47
4 1	13 6.11	+16 39.9	0.923	1.887	11.4	19.4	158 W	62	47
4 6	12 57.34	+15 45.3	0.938	1.903	11.4	19.5	158 E	61	48
4 11	12 49.00	+14 43.2	0.960	1.919	12.3	19.6	156 E	60	49
4 16	12 41.34	+13 34.6	0.988	1.936	13.7	19.7	153 E	59	50
4 21	12 34.56	+12 21.1	1.022	1.952	15.5	19.9	149 E	57	52
4 26	12 28.78	+11 3.9	1.062	1.968	17.4	20.0	144 E	56	53
5 1	12 24.06	+ 9 44.6	1.107	1.985	19.2	20.2	140 E	55	54
5 6	12 20.41	+ 8 24.2	1.156	2.001	20.9	20.3	135 E	53	56
5 11	12 17.80	+ 7 3.6	1.210	2.018	22.4	20.5	131 E	52	57
5 16	12 16.19	+ 5 43.3	1.267	2.034	23.7	20.7	126 E	51	58
5 21	12 15.51	+ 4 23.8	1.328	2.050	24.8	20.8	122 E	49	60
5 26	12 15.69	+ 3 5.3	1.392	2.067	25.7	21.0	118 E	48*	61
5 31	12 16.65	+ 1 48.1	1.459	2.083	26.5	21.1	114 E	46*	62
6 5	12 18.31	+ 0 32.3	1.527	2.099	27.1	21.2	110 E	44*	63
6 10	12 20.61	− 0 42.3	1.597	2.115	27.5	21.4	106 E	41*	65
6 15	12 23.50	− 1 55.6	1.669	2.131	27.8	21.5	102 E	39*	66

74558 1999 LT_{13}

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 11.92	+ 0 2.0	2.594	2.592	21.9	21.0	79 W	45	50*
1 6	13 22.58	− 0 26.2	2.444	2.576	22.4	20.9	86 W	45	56*
1 16	13 31.99	− 0 41.6	2.292	2.559	22.5	20.7	94 W	44	62*
1 26	13 39.85	− 0 42.4	2.141	2.542	22.2	20.5	102 W	44	64*
2 5	13 45.86	− 0 27.4	1.995	2.523	21.4	20.4	111 W	45	64
2 15	13 49.65	+ 0 4.8	1.857	2.504	19.9	20.1	120 W	45	64
2 25	13 50.86	+ 0 54.3	1.730	2.484	17.8	19.9	130 W	46	63
3 7	13 49.26	+ 2 0.0	1.618	2.463	15.0	19.6	140 W	47	62
3 17	13 44.74	+ 3 18.9	1.525	2.441	11.6	19.4	150 W	48	61
3 22	13 41.45	+ 4 1.4	1.488	2.429	9.8	19.2	155 W	49	60
3 27	13 37.54	+ 4 44.7	1.456	2.418	8.1	19.1	160 W	50	59
4 1	13 33.13	+ 5 27.6	1.431	2.406	6.7	19.0	164 W	50	59
4 6	13 28.31	+ 6 8.8	1.412	2.394	6.0	18.9	166 W	51	58
4 11	13 23.22	+ 6 47.2	1.400	2.382	6.3	18.9	165 W	52	57
4 16	13 18.03	+ 7 21.6	1.395	2.370	7.5	18.9	162 E	52	57
4 21	13 12.91	+ 7 50.8	1.396	2.358	9.3	19.0	158 E	53	56
4 26	13 8.01	+ 8 14.0	1.404	2.345	11.3	19.1	153 E	53	56
5 6	12 59.43	+ 8 40.8	1.436	2.319	15.3	19.3	143 E	54	55
5 16	12 53.18	+ 8 40.6	1.487	2.293	19.0	19.4	132 E	54	55
5 26	12 49.79	+ 8 14.8	1.553	2.266	22.1	19.6	123 E	53	56
6 5	12 49.36	+ 7 26.9	1.630	2.238	24.6	19.7	114 E	52*	57
6 15	12 51.79	+ 6 20.5	1.713	2.210	26.3	19.9	105 E	49*	58

74558 1999 LT_{13} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
6 25	12 56.85	+ 4 59.2	1.800	2.181	27.5	20.0	98 E	44*	59
7 5	13 4.22	+ 3 26.0	1.887	2.152	28.2	20.1	91 E	39*	61
7 15	13 13.67	+ 1 43.4	1.973	2.122	28.4	20.2	84 E	35*	62*
7 25	13 24.95	− 0 6.4	2.057	2.093	28.3	20.2	78 E	30*	62*
8 4	13 37.85	− 2 1.5	2.136	2.063	27.9	20.3	72 E	27*	61*
8 14	13 52.26	− 4 0.4	2.211	2.033	27.2	20.3	67 E	24*	57*
8 24	14 8.06	− 6 1.4	2.280	2.003	26.3	20.3	61 E	21*	53*
9 3	14 25.17	− 8 2.7	2.343	1.973	25.2	20.3	56 E	19*	49*
9 13	14 43.56	−10 3.0	2.400	1.943	24.0	20.3	52 E	17*	45*
9 23	15 3.20	−12 0.2	2.450	1.914	22.6	20.2	47 E	16*	40*
10 3	15 24.07	−13 52.7	2.494	1.885	21.1	20.2	43 E	14*	36*
10 13	15 46.18	−15 38.5	2.532	1.857	19.5	20.1	38 E	13*	32*
10 23	16 9.49	−17 15.4	2.563	1.830	17.9	20.1	34 E	12*	27*
11 2	16 33.97	−18 41.5	2.589	1.803	16.1	20.0	30 E	11*	23*
11 12	16 59.59	−19 54.5	2.609	1.778	14.3	19.9	26 E	9*	19*
11 22	17 26.25	−20 52.3	2.625	1.755	12.5	19.9	23 E	8*	15*
12 2	17 53.83	−21 33.2	2.635	1.732	10.6	19.8	19 E	6*	11*
12 12	18 22.20	−21 55.4	2.641	1.712	8.8	19.7	15 E	5*	7*
12 22	18 51.16	−21 57.9	2.644	1.693	6.9	19.6	12 E	3*	4*
1 1	19 20.51	−21 40.1	2.643	1.677	4.9	19.4	8 E	1*	1*
1 11	19 50.06	−21 1.8	2.640	1.662	3.0	19.3	5 E	—	—
1 21	20 19.58	−20 3.7	2.634	1.650	1.2	19.2	2 E	—	—

322763 2001 FA_7

12 27	13 12.34	− 3 52.4	1.653	1.727	33.7	20.8	77 W	41	52*
1 6	13 20.27	− 6 9.7	1.600	1.799	33.0	20.8	85 W	39	61*
1 16	13 25.32	− 8 15.5	1.539	1.869	31.7	20.7	93 W	37	69*
1 26	13 27.03	−10 9.2	1.476	1.938	29.8	20.7	102 W	35	74*
2 5	13 24.94	−11 49.7	1.413	2.004	27.1	20.6	112 W	33	76
2 15	13 18.69	−13 14.3	1.357	2.068	23.6	20.5	123 W	32	77
2 25	13 8.19	−14 19.0	1.314	2.130	19.3	20.3	135 W	31	78
3 7	12 53.97	−14 59.8	1.289	2.190	14.3	20.2	147 W	30	79
3 12	12 45.81	−15 10.3	1.286	2.219	11.6	20.1	153 W	30	79
3 17	12 37.22	−15 14.1	1.290	2.247	9.1	20.0	159 W	30	79
3 22	12 28.45	−15 11.4	1.301	2.275	6.8	20.0	164 W	30	79
3 27	12 19.76	−15 3.2	1.319	2.303	5.4	20.0	167 E	30	79
4 1	12 11.39	−14 50.3	1.345	2.330	5.4	20.0	167 E	30	79
4 6	12 3.55	−14 33.9	1.378	2.356	6.7	20.2	164 E	30	79
4 11	11 56.41	−14 15.1	1.419	2.382	8.6	20.3	159 E	31	78
4 16	11 50.09	−13 55.4	1.466	2.408	10.6	20.5	154 E	31	78
4 21	11 44.68	−13 35.8	1.520	2.433	12.6	20.7	148 E	31	78
4 26	11 40.20	−13 17.3	1.580	2.457	14.4	20.9	143 E	32	77
5 1	11 36.66	−13 0.8	1.644	2.481	16.0	21.0	137 E	32	77
5 6	11 34.03	−12 46.7	1.713	2.504	17.4	21.2	132 E	32	77
5 11	11 32.25	−12 35.4	1.786	2.527	18.6	21.3	127 E	32	77
5 16	11 31.29	−12 27.2	1.863	2.549	19.6	21.5	122 E	33	76

101027 1998 QL_{71}

12 27	13 12.39	−10 22.9	2.802	2.715	20.5	21.0	75 W	35	56*
1 6	13 21.32	−11 10.3	2.683	2.736	20.9	21.0	83 W	34	64*
1 16	13 28.70	−11 47.2	2.559	2.757	20.9	20.9	91 W	33	71*
1 26	13 34.23	−12 11.9	2.435	2.776	20.5	20.8	100 W	33	76*
2 5	13 37.68	−12 23.2	2.314	2.794	19.5	20.6	109 W	33	76
2 15	13 38.78	−12 19.6	2.199	2.812	17.9	20.5	119 W	33	76
2 25	13 37.37	−11 59.7	2.095	2.828	15.7	20.3	129 W	33	76
3 7	13 33.44	−11 23.2	2.007	2.844	12.8	20.1	141 W	34	75
3 17	13 27.19	−10 30.6	1.940	2.859	9.3	19.9	152 W	34	75
3 27	13 19.15	− 9 24.6	1.899	2.872	5.4	19.7	164 W	36	73
4 1	13 14.69	− 8 47.9	1.888	2.879	3.2	19.6	171 W	36	73
4 6	13 10.08	− 8 9.8	1.885	2.885	1.1	19.4	177 W	37	72
4 11	13 5.45	− 7 31.2	1.890	2.891	1.1	19.4	177 E	37	72
4 16	13 0.92	− 6 52.8	1.902	2.897	3.2	19.6	171 E	38	71
4 21	12 56.60	− 6 15.6	1.921	2.902	5.3	19.8	165 E	39	70
4 26	12 52.60	− 5 40.4	1.947	2.908	7.3	19.9	159 E	39	70
5 6	12 45.87	− 4 38.6	2.019	2.917	10.9	20.1	147 E	40	69
5 16	12 41.20	− 3 51.3	2.114	2.926	13.9	20.4	136 E	41	68
5 26	12 38.79	− 3 20.2	2.227	2.934	16.3	20.6	126 E	42	67
6 5	12 38.63	− 3 5.4	2.354	2.941	18.1	20.7	116 E	41*	67
6 15	12 40.58	− 3 5.8	2.490	2.947	19.3	20.9	107 E	39*	67
6 25	12 44.44	− 3 19.9	2.631	2.952	19.9	21.0	98 E	35*	67
7 5	12 49.95	− 3 45.5	2.775	2.956	20.1	21.2	90 E	31*	68
7 15	12 56.93	− 4 21.1	2.918	2.959	19.9	21.3	82 E	27*	68*
7 25	13 5.17	− 5 4.8	3.057	2.961	19.4	21.4	75 E	24*	65*
8 4	13 14.49	− 5 55.0	3.191	2.962	18.5	21.4	68 E	20*	60*
8 14	13 24.76	− 6 50.3	3.317	2.962	17.4	21.5	61 E	18*	54*

307544 2003 EJ_{16}

12 27	13 12.42	− 7 40.1	1.840	1.861	30.8	20.0	76 W	37	55*
1 6	13 35.04	− 8 10.5	1.689	1.810	32.4	19.8	81 W	37	60*
1 16	13 58.54	− 8 20.8	1.543	1.760	33.8	19.6	85 W	37	64*
1 26	14 22.93	− 8 5.6	1.403	1.712	35.1	19.3	90 W	37	68*

307544 2003 EJ_{16} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
1 31	14 35.48	− 7 46.7	1.336	1.688	35.7	19.2	92 W	37	69*
2 5	14 48.25	− 7 19.3	1.271	1.664	36.2	19.1	94 W	38	70*
2 10	15 1.25	− 6 42.6	1.208	1.641	36.7	19.0	96 W	38	70*
2 15	15 14.44	− 5 55.9	1.148	1.618	37.2	18.8	98 W	39	70*
2 20	15 27.80	− 4 58.6	1.091	1.596	37.6	18.7	100 W	40	69*
2 25	15 41.32	− 3 50.1	1.037	1.575	38.0	18.6	102 W	41	68
3 7	16 8.69	− 0 58.6	0.940	1.534	38.6	18.3	105 W	44	65
3 17	16 36.15	+ 2 38.9	0.857	1.497	39.3	18.1	108 W	48	61
3 27	17 3.20	+ 6 56.7	0.789	1.463	40.0	17.9	109 W	52	57
4 1	17 16.40	+ 9 17.2	0.760	1.448	40.4	17.8	110 W	54	55
4 6	17 29.30	+11 43.0	0.735	1.434	40.8	17.7	111 W	57	52
4 11	17 41.78	+14 11.9	0.714	1.422	41.2	17.6	111 W	59	50
4 16	17 53.77	+16 41.2	0.696	1.411	41.6	17.6	111 W	62	47
4 21	18 5.19	+19 8.5	0.680	1.401	42.0	17.5	111 W	64	45
4 26	18 15.98	+21 31.3	0.667	1.393	42.4	17.5	111 W	67	42
5 1	18 26.06	+23 47.5	0.656	1.386	42.7	17.5	111 W	69	40
5 6	18 35.36	+25 55.3	0.647	1.380	43.0	17.4	111 W	71	38
5 11	18 43.81	+27 52.8	0.639	1.377	43.1	17.4	111 W	73	36
5 16	18 51.34	+29 38.3	0.632	1.375	43.2	17.4	111 W	75	34
5 21	18 57.93	+31 10.5	0.626	1.374	43.1	17.3	112 W	76	33
5 26	19 3.56	+32 28.1	0.621	1.375	42.9	17.3	112 W	77	32
5 31	19 8.21	+33 30.2	0.616	1.378	42.6	17.3	113 W	79	30
6 5	19 11.88	+34 15.7	0.611	1.383	42.0	17.3	114 W	79	30
6 10	19 14.58	+34 43.4	0.607	1.388	41.3	17.2	115 W	80	29
6 15	19 16.38	+34 51.8	0.602	1.396	40.5	17.2	117 W	80	29
6 20	19 17.40	+34 40.0	0.599	1.405	39.4	17.2	119 W	80	29
6 25	19 17.77	+34 7.1	0.595	1.415	38.2	17.2	121 W	79	30
6 30	19 17.61	+33 12.6	0.593	1.427	36.8	17.1	123 W	78	31
7 5	19 17.10	+31 55.9	0.591	1.440	35.3	17.1	125 W	77	32
7 10	19 16.41	+30 17.0	0.592	1.454	33.7	17.1	127 E	75	34
7 15	19 15.75	+28 16.8	0.594	1.470	32.0	17.1	130 E	73	36
7 20	19 15.32	+25 56.9	0.599	1.487	30.4	17.1	132 E	71	38
7 25	19 15.27	+23 20.3	0.607	1.504	28.8	17.1	134 E	68	41
7 30	19 15.70	+20 30.2	0.618	1.523	27.5	17.1	136 E	66	43
8 4	19 16.72	+17 30.6	0.634	1.542	26.4	17.1	137 E	63	46
8 9	19 18.39	+14 25.7	0.653	1.563	25.7	17.2	138 E	59	50
8 14	19 20.76	+11 20.2	0.678	1.584	25.3	17.3	138 E	56	53
8 19	19 23.84	+ 8 18.1	0.707	1.605	25.3	17.4	137 E	53	56
8 24	19 27.62	+ 5 23.2	0.741	1.628	25.5	17.6	136 E	50	59
8 29	19 32.04	+ 2 38.1	0.779	1.650	26.0	17.7	134 E	48	61
9 3	19 37.08	+ 0 4.7	0.822	1.674	26.7	17.9	132 E	45	64
9 8	19 42.68	− 2 15.8	0.870	1.697	27.4	18.1	129 E	43	66
9 13	19 48.81	− 4 22.7	0.922	1.722	28.1	18.2	126 E	41	68
9 23	20 2.41	− 7 55.5	1.037	1.771	29.3	18.6	120 E	37	72
10 3	20 17.42	−10 37.1	1.166	1.821	30.1	18.9	114 E	34	75
10 13	20 33.51	−12 33.5	1.307	1.872	30.5	19.3	108 E	32	77
10 18	20 41.86	−13 16.7	1.381	1.897	30.5	19.4	105 E	32	77
10 23	20 50.35	−13 51.0	1.456	1.923	30.5	19.5	102 E	31	78
10 28	20 58.96	−14 17.2	1.534	1.948	30.3	19.7	99 E	31	78*
11 2	21 7.66	−14 36.0	1.613	1.974	30.0	19.8	96 E	30	78*
11 7	21 16.44	−14 48.1	1.694	1.999	29.7	19.9	92 E	30	76*
11 12	21 25.28	−14 54.0	1.776	2.025	29.3	20.1	89 E	30	74*
11 17	21 34.14	−14 54.4	1.858	2.050	28.8	20.2	86 E	30	72*
11 22	21 43.02	−14 49.7	1.941	2.075	28.2	20.3	83 E	30	69*
11 27	21 51.90	−14 40.4	2.025	2.101	27.6	20.4	80 E	30	66*
12 2	22 0.77	−14 27.1	2.108	2.126	26.9	20.5	78 E	31	63*
12 12	22 18.47	−13 49.5	2.275	2.176	25.4	20.6	72 E	31	56*
12 22	22 36.04	−13 0.0	2.439	2.225	23.8	20.8	66 E	32*	50*
1 1	22 53.46	−12 1.1	2.600	2.273	22.0	20.9	60 E	32*	43*
1 11	23 10.70	−10 54.8	2.755	2.320	20.1	21.0	54 E	31*	38*
1 21	23 27.75	− 9 43.2	2.903	2.367	18.1	21.1	48 E	29*	33*

7480 Norwan

12 27	13 12.52	− 0 33.6	1.844	1.910	30.3	21.0	79 W	44	50*
1 6	13 26.08	− 0 59.7	1.747	1.935	30.4	21.0	85 W	44	56*
1 16	13 37.87	− 1 7.6	1.647	1.957	30.1	20.8	93 W	44	61*
1 26	13 47.50	− 0 55.0	1.545	1.978	29.3	20.7	101 W	44	64*
2 5	13 54.57	− 0 20.0	1.444	1.996	27.8	20.5	109 W	45	64
2 15	13 58.56	+ 0 39.0	1.348	2.013	25.6	20.3	118 W	46	63
2 25	13 58.99	+ 2 2.4	1.260	2.027	22.6	20.1	128 W	47	62
3 7	13 55.50	+ 3 47.8	1.185	2.038	18.8	19.9	139 W	49	60
3 12	13 52.23	+ 4 47.1	1.154	2.044	16.6	19.8	144 W	50	59
3 17	13 47.99	+ 5 49.1	1.128	2.048	14.3	19.6	149 W	51	58
3 22	13 42.86	+ 6 52.3	1.108	2.052	12.1	19.5	154 W	52	57
3 27	13 36.97	+ 7 54.7	1.093	2.056	10.1	19.4	159 W	53	56
4 1	13 30.49	+ 8 54.5	1.085	2.058	8.7	19.3	162 W	54	55
4 6	13 23.62	+ 9 49.7	1.084	2.061	8.3	19.3	163 W	55	54
4 11	13 16.57	+10 38.5	1.089	2.063	9.0	19.4	161 E	56	53

7480 Norwan *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 16	13 9.60	+11 19.4	1.100	2.064	10.7	19.5	158 E	56	53
4 21	13 2.95	+11 51.3	1.118	2.065	12.7	19.6	153 E	57	52
4 26	12 56.81	+12 13.8	1.141	2.065	14.9	19.7	148 E	57	52
5 6	12 46.66	+12 31.0	1.203	2.063	19.2	19.9	138 E	58	51
5 16	12 39.95	+12 14.1	1.281	2.060	22.9	20.2	128 E	57	52
5 26	12 36.89	+11 29.2	1.371	2.054	25.8	20.4	118 E	56	53
5 31	12 36.66	+10 58.3	1.420	2.050	26.9	20.5	114 E	56*	53
6 5	12 37.24	+10 22.7	1.469	2.046	27.9	20.6	110 E	55*	54
6 10	12 38.57	+ 9 43.0	1.520	2.041	28.6	20.7	106 E	53*	54
6 15	12 40.61	+ 8 59.7	1.572	2.036	29.3	20.8	102 E	50*	55
6 20	12 43.31	+ 8 13.3	1.624	2.030	29.7	20.9	98 E	48*	56
6 25	12 46.60	+ 7 24.4	1.675	2.024	30.1	21.0	94 E	45*	57
6 30	12 50.43	+ 6 33.2	1.727	2.017	30.3	21.0	91 E	42*	57
7 5	12 54.78	+ 5 40.0	1.778	2.009	30.4	21.1	87 E	40*	58
7 10	12 59.59	+ 4 45.2	1.828	2.001	30.4	21.1	84 E	37*	59*
7 15	13 4.84	+ 3 48.8	1.878	1.992	30.3	21.2	81 E	35*	60*
7 20	13 10.49	+ 2 51.2	1.926	1.983	30.1	21.2	78 E	33*	60*
7 25	13 16.53	+ 1 52.6	1.973	1.974	29.8	21.2	75 E	31*	60*
7 30	13 22.91	+ 0 53.1	2.018	1.963	29.5	21.3	72 E	29*	59*
8 4	13 29.63	− 0 7.0	2.062	1.952	29.1	21.3	69 E	27*	58*
8 9	13 36.68	− 1 7.8	2.104	1.941	28.7	21.3	67 E	26*	56*
8 14	13 44.05	− 2 8.9	2.144	1.929	28.2	21.3	64 E	24*	55*
8 19	13 51.71	− 3 10.3	2.183	1.917	27.6	21.3	61 E	23*	53*
8 24	13 59.66	− 4 11.8	2.219	1.904	27.0	21.3	59 E	22*	51*
8 29	14 7.90	− 5 13.2	2.253	1.890	26.4	21.3	56 E	21*	49*
9 3	14 16.43	− 6 14.4	2.285	1.876	25.7	21.3	54 E	19*	46*
9 8	14 25.24	− 7 15.3	2.315	1.862	25.0	21.3	51 E	18*	44*
9 13	14 34.34	− 8 15.6	2.343	1.847	24.3	21.3	49 E	18*	42*
9 18	14 43.72	− 9 15.3	2.368	1.831	23.5	21.3	47 E	17*	40*
9 23	14 53.39	−10 14.1	2.391	1.815	22.8	21.3	44 E	16*	37*
9 28	15 3.34	−11 11.9	2.411	1.799	22.0	21.2	42 E	15*	35*
10 3	15 13.59	−12 8.5	2.429	1.782	21.1	21.2	40 E	14*	33*
10 8	15 24.15	−13 3.7	2.445	1.764	20.3	21.2	38 E	14*	31*
10 13	15 35.01	−13 57.3	2.458	1.746	19.4	21.1	36 E	13*	28*
10 18	15 46.18	−14 49.1	2.469	1.728	18.5	21.1	33 E	12*	26*
10 23	15 57.67	−15 38.8	2.478	1.709	17.6	21.1	31 E	11*	24*
10 28	16 9.47	−16 26.1	2.484	1.689	16.7	21.0	29 E	11*	22*
11 2	16 21.61	−17 11.0	2.488	1.669	15.8	21.0	27 E	10*	20*
11 7	16 34.09	−17 53.1	2.489	1.649	14.9	20.9	25 E	9*	18*
11 12	16 46.90	−18 32.0	2.489	1.629	14.0	20.8	23 E	9*	15*
11 17	17 0.04	−19 7.6	2.486	1.608	13.1	20.8	22 E	8*	13*
11 22	17 13.53	−19 39.6	2.481	1.586	12.1	20.7	20 E	7*	11*
11 27	17 27.35	−20 7.6	2.474	1.565	11.2	20.6	18 E	6*	9*
12 2	17 41.52	−20 31.3	2.465	1.543	10.3	20.6	16 E	6*	8*
12 7	17 56.03	−20 50.5	2.454	1.520	9.3	20.5	15 E	5*	6*
12 12	18 10.86	−21 4.9	2.442	1.498	8.4	20.4	13 E	4*	4*
12 22	18 41.48	−21 17.9	2.412	1.452	6.6	20.2	10 E	2*	1*
1 1	19 13.30	−21 8.0	2.378	1.407	4.8	20.0	7 E	—	—
1 11	19 46.21	−20 33.4	2.339	1.361	3.2	19.8	4 E	—	—
1 21	20 20.03	−19 32.6	2.298	1.316	1.6	19.6	2 E	—	—

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 13.03	+11 5.0	2.986	3.032	18.8	20.2	83 W	56	42*
1 6	13 21.38	+10 58.5	2.819	3.003	19.1	20.1	91 W	56	47*
1 16	13 28.40	+11 5.2	2.652	2.972	19.1	20.0	99 W	56	51*
1 26	13 33.78	+11 25.8	2.489	2.941	18.6	19.8	108 W	56	53*
2 5	13 37.23	+12 0.4	2.334	2.909	17.7	19.6	116 W	57	52
2 15	13 38.43	+12 48.3	2.189	2.876	16.3	19.4	125 W	58	51
2 25	13 37.10	+13 47.3	2.059	2.842	14.4	19.1	135 W	59	50
3 7	13 33.10	+14 53.0	1.947	2.807	12.1	18.9	144 W	60	49
3 12	13 30.10	+15 26.5	1.899	2.790	11.0	18.8	148 W	60	49
3 17	13 26.46	+15 59.2	1.857	2.772	9.9	18.7	151 W	61	48
3 22	13 22.26	+16 29.9	1.822	2.754	9.0	18.6	154 W	61	48
3 27	13 17.58	+16 57.6	1.793	2.736	8.4	18.5	156 W	62	47
4 1	13 12.51	+17 21.3	1.771	2.718	8.3	18.5	157 W	62	47
4 6	13 7.18	+17 39.9	1.755	2.700	8.7	18.5	156 W	63	46
4 11	13 1.72	+17 52.6	1.746	2.681	9.6	18.5	154 E	63	46
4 16	12 56.29	+17 58.7	1.743	2.662	10.8	18.5	150 E	63	46
4 21	12 51.02	+17 58.0	1.747	2.643	12.2	18.6	146 E	63	46
4 26	12 46.05	+17 50.1	1.757	2.624	13.7	18.6	142 E	63	46
5 6	12 37.47	+17 13.9	1.792	2.585	16.6	18.7	133 E	62	47
5 16	12 31.23	+16 12.5	1.844	2.546	19.3	18.8	123 E	61	48
5 26	12 27.71	+14 50.2	1.910	2.506	21.6	18.9	115 E	60	49
6 5	12 26.92	+13 11.2	1.985	2.466	23.3	19.1	106 E	57*	51
6 15	12 28.76	+11 19.3	2.066	2.425	24.5	19.1	98 E	51*	53
6 25	12 33.00	+ 9 17.4	2.148	2.384	25.2	19.2	90 E	45*	55
7 5	12 39.36	+ 7 7.9	2.231	2.343	25.5	19.3	83 E	39*	57
7 15	12 47.63	+ 4 52.3	2.310	2.301	25.5	19.3	77 E	33*	58*
7 25	12 57.60	+ 2 32.0	2.386	2.259	25.1	19.3	70 E	28*	57*

110325 2001 SZ_{285} *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
8 4	13 9.08	+ 0 7.9	2.456	2.217	24.4	19.3	65 E	24*	54*
8 14	13 21.97	− 2 19.1	2.519	2.175	23.5	19.3	59 E	21*	51*
8 24	13 36.18	− 4 48.2	2.576	2.134	22.4	19.3	53 E	18*	46*
9 3	13 51.66	− 7 18.3	2.625	2.092	21.1	19.2	48 E	15*	42*
9 13	14 8.39	− 9 48.6	2.666	2.052	19.6	19.2	43 E	12*	37*
9 23	14 26.39	−12 17.9	2.698	2.012	18.1	19.1	38 E	10*	32*
10 3	14 45.66	−14 44.8	2.723	1.972	16.4	19.0	34 E	8*	28*
10 13	15 6.28	−17 8.0	2.741	1.934	14.7	18.9	29 E	6*	23*
10 23	15 28.28	−19 25.5	2.751	1.897	12.8	18.8	25 E	4*	19*
11 2	15 51.72	−21 35.3	2.754	1.861	11.0	18.7	21 E	2*	15*
11 12	16 16.65	−23 35.2	2.751	1.828	9.1	18.6	17 E	—	11*
11 22	16 43.07	−25 22.5	2.742	1.796	7.3	18.5	13 E	—	7*
12 2	17 10.98	−26 54.5	2.728	1.766	5.6	18.4	10 E	—	4*
12 12	17 40.29	−28 8.4	2.711	1.739	4.2	18.2	7 E	—	1*
12 22	18 10.83	−29 1.5	2.690	1.715	3.5	18.2	6 E	—	—
1 1	18 42.41	−29 31.6	2.667	1.694	3.8	18.1	7 W	—	—
1 11	19 14.71	−29 36.9	2.643	1.676	4.9	18.1	8 W	—	1*
1 21	19 47.39	−29 16.6	2.619	1.662	6.3	18.2	11 W	—	3*

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20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 13.05	−16 11.4	4.079	3.899	13.9	21.3	73 W	29	59*
1 6	13 18.69	−17 6.7	3.898	3.869	14.5	21.2	81 W	28	68*
1 16	13 23.15	−17 57.3	3.713	3.839	14.8	21.1	90 W	27	77*
1 26	13 26.21	−18 41.8	3.528	3.807	14.8	21.0	99 W	26	83*
2 5	13 27.67	−19 19.0	3.346	3.775	14.3	20.8	108 W	26	83
2 15	13 27.33	−19 47.3	3.173	3.742	13.4	20.7	118 W	25	84
2 25	13 25.07	−20 5.0	3.011	3.708	12.1	20.5	128 W	25	84
3 7	13 20.87	−20 10.3	2.868	3.674	10.2	20.3	139 W	25	84
3 17	13 14.85	−20 1.6	2.745	3.638	8.0	20.1	149 W	25	84
3 27	13 7.35	−19 38.2	2.649	3.601	5.5	19.8	160 W	25	84
4 6	12 58.90	−19 0.9	2.581	3.564	3.5	19.7	167 E	26	83
4 16	12 50.17	−18 11.9	2.543	3.526	3.9	19.6	166 E	27	82
4 21	12 45.93	−17 44.3	2.536	3.506	5.0	19.7	162 E	27	82
4 26	12 41.91	−17 15.4	2.535	3.487	6.3	19.7	158 E	28	81
5 1	12 38.16	−16 45.8	2.542	3.467	7.7	19.8	152 E	28	81
5 6	12 34.78	−16 16.3	2.555	3.447	9.1	19.8	147 E	29	80
5 16	12 29.28	−15 19.8	2.600	3.406	11.8	20.0	137 E	30	79
5 26	12 25.75	−14 30.4	2.664	3.364	14.1	20.1	126 E	30	79
6 5	12 24.28	−13 51.0	2.744	3.321	15.9	20.2	116 E	30*	78
6 15	12 24.88	−13 23.7	2.834	3.278	17.2	20.3	107 E	28*	77
6 25	12 27.44	−13 9.0	2.931	3.233	18.1	20.3	98 E	25*	77
7 5	12 31.79	−13 6.8	3.029	3.188	18.6	20.4	90 E	21*	77*
7 15	12 37.79	−13 16.6	3.126	3.142	18.7	20.4	82 E	17*	74*
7 25	12 45.27	−13 37.3	3.218	3.095	18.4	20.4	74 E	14*	68*
8 4	12 54.08	−14 7.8	3.304	3.047	17.8	20.4	67 E	11*	61*
8 14	13 4.10	−14 46.9	3.381	2.998	16.9	20.4	60 E	8*	54*
8 24	13 15.24	−15 33.4	3.447	2.948	15.9	20.4	53 E	6*	47*
9 3	13 27.41	−16 26.0	3.502	2.898	14.6	20.4	46 E	4*	40*
9 13	13 40.57	−17 23.7	3.544	2.847	13.1	20.3	40 E	2*	34*
9 23	13 54.66	−18 25.2	3.573	2.794	11.5	20.2	34 E	—	27*
10 3	14 9.67	−19 29.2	3.587	2.742	9.8	20.1	28 E	—	21*
10 13	14 25.58	−20 34.5	3.588	2.688	8.0	20.0	22 E	—	16*
10 23	14 42.38	−21 39.9	3.574	2.634	6.1	19.8	16 E	—	10*
11 2	15 0.08	−22 44.0	3.546	2.579	4.2	19.7	11 E	—	4*
11 12	15 18.69	−23 45.5	3.504	2.523	2.6	19.5	7 E	—	—
11 22	15 38.20	−24 42.7	3.448	2.467	2.1	19.4	5 W	—	—
12 2	15 58.62	−25 34.3	3.381	2.410	3.5	19.4	9 W	—	2*
12 12	16 19.95	−26 18.6	3.301	2.353	5.4	19.4	13 W	—	7*
12 22	16 42.15	−26 54.0	3.211	2.296	7.6	19.4	18 W	3*	11*
1 1	17 5.21	−27 18.7	3.112	2.238	9.8	19.4	23 W	5*	16*
1 11	17 29.07	−27 31.2	3.004	2.181	12.1	19.3	28 W	6*	21*
1 21	17 53.66	−27 29.5	2.889	2.123	14.3	19.2	32 W	7*	26*

175706 1996 FG_3

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
12 27	13 13.63	− 9 14.4	1.284	1.400	42.7	21.3	75 W	36	55*
1 6	13 37.53	−11 50.8	1.183	1.382	44.2	21.2	79 W	33	61*
1 16	14 2.59	−14 26.6	1.080	1.359	45.8	21.0	82 W	31	67*
1 26	14 29.30	−17 1.2	0.977	1.331	47.5	20.8	86 W	28	73*
2 5	14 58.47	−19 34.1	0.875	1.298	49.4	20.5	88 W	25	78*
2 15	15 31.13	−22 3.3	0.776	1.260	51.6	20.3	90 W	23	82*
2 20	15 49.22	−23 15.0	0.729	1.239	52.9	20.1	91 W	22	84*
2 25	16 8.81	−24 23.5	0.683	1.217	54.4	20.0	91 W	21	85*
3 2	16 30.18	−25 27.1	0.639	1.194	56.1	19.8	92 W	20	85*
3 7	16 53.64	−26 23.3	0.598	1.169	58.0	19.7	91 W	19	85*
3 12	17 19.50	−27 8.5	0.560	1.144	60.3	19.6	90 W	18*	84*
3 17	17 48.02	−27 37.9	0.525	1.117	63.0	19.5	89 W	17*	83*
3 22	18 19.32	−27 45.2	0.495	1.089	66.0	19.4	87 W	16*	81*
3 27	18 53.34	−27 23.5	0.469	1.060	69.5	19.3	84 W	16*	78*
4 1	19 29.68	−26 25.9	0.450	1.031	73.3	19.3	81 W	15*	75*
4 6	20 7.54	−24 47.5	0.436	1.001	77.4	19.3	77 W	14*	71*

175706 1996 FG_3 *(continuation)*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
4 11	20 45.85	−22 27.9	0.431	0.970	81.6	19.4	73 W	14*	67*
4 16	21 23.44	−19 32.0	0.433	0.939	85.7	19.4	69 W	13*	63*
4 18	21 38.05	−18 13.6	0.436	0.926	87.2	19.5	67 W	13*	61*
4 20	21 52.35	−16 51.6	0.440	0.914	88.6	19.5	65 W	13*	59*
4 22	22 6.31	−15 26.9	0.446	0.901	90.0	19.6	64 W	13*	58*
4 24	22 19.88	−14 0.3	0.452	0.889	91.2	19.6	62 W	12*	56*
4 26	22 33.08	−12 32.3	0.460	0.876	92.3	19.7	60 W	12*	54*
4 28	22 45.88	−11 3.8	0.470	0.864	93.3	19.8	59 W	12*	53*
4 30	22 58.29	− 9 35.3	0.480	0.852	94.1	19.8	58 W	12*	51*
5 2	23 10.32	− 8 7.3	0.492	0.840	94.7	19.9	56 W	12*	50*
5 4	23 21.98	− 6 40.3	0.504	0.828	95.3	19.9	55 W	12*	49*
5 6	23 33.30	− 5 14.6	0.518	0.816	95.6	20.0	54 W	12*	47*
5 11	0 0.20	− 1 47.8	0.557	0.788	95.8	20.0	51 W	12*	44*
5 16	0 25.44	+ 1 26.5	0.601	0.762	95.0	20.1	49 W	12*	42*
5 21	0 49.42	+ 4 27.7	0.651	0.739	93.3	20.1	47 W	13*	40*
5 26	1 12.52	+ 7 15.7	0.704	0.719	90.7	20.1	45 W	13*	38*
5 31	1 35.09	+ 9 51.3	0.761	0.703	87.5	20.1	44 W	14*	36*
6 5	1 57.38	+12 14.8	0.821	0.692	83.7	20.1	43 W	15*	34*
6 10	2 19.57	+14 26.2	0.883	0.686	79.6	20.1	42 W	15*	32*
6 15	2 41.77	+16 25.3	0.945	0.686	75.2	20.1	41 W	16*	31*
6 20	3 4.00	+18 11.9	1.007	0.691	70.7	20.1	40 W	17*	29*
6 25	3 26.25	+19 45.5	1.068	0.701	66.4	20.1	39 W	18*	28*
6 30	3 48.48	+21 5.8	1.127	0.716	62.4	20.2	39 W	19*	27*
7 5	4 10.58	+22 12.7	1.183	0.735	58.6	20.2	38 W	20*	26*
7 10	4 32.46	+23 6.4	1.236	0.758	55.2	20.3	38 W	20*	25*
7 15	4 54.02	+23 47.0	1.286	0.784	52.2	20.3	38 W	21*	24*
7 20	5 15.16	+24 15.2	1.332	0.811	49.6	20.4	37 W	22*	23*
7 25	5 35.82	+24 31.7	1.375	0.841	47.4	20.5	38 W	23*	22*
7 30	5 55.94	+24 37.5	1.414	0.871	45.5	20.6	38 W	24*	22*
8 4	6 15.49	+24 33.3	1.449	0.902	43.9	20.7	38 W	26*	21*
8 9	6 34.44	+24 20.2	1.481	0.933	42.6	20.8	39 W	27*	21*
8 14	6 52.76	+23 58.9	1.508	0.965	41.5	20.8	39 W	28*	21*
8 19	7 10.47	+23 30.4	1.532	0.995	40.6	20.9	40 W	29*	21*
8 24	7 27.58	+22 55.6	1.553	1.026	40.0	21.0	41 W	30*	21*
8 29	7 44.10	+22 15.0	1.569	1.055	39.5	21.1	42 W	32*	21*
9 3	8 0.05	+21 29.5	1.583	1.084	39.1	21.1	43 W	33*	21*
9 8	8 15.46	+20 39.6	1.592	1.112	38.9	21.2	44 W	34*	22*
9 13	8 30.35	+19 45.9	1.599	1.139	38.7	21.2	45 W	35*	22*
9 18	8 44.74	+18 49.0	1.601	1.165	38.7	21.3	46 W	37*	23*
9 23	8 58.68	+17 49.3	1.601	1.190	38.7	21.3	48 W	38*	24*
9 28	9 12.18	+16 47.2	1.597	1.213	38.8	21.4	49 W	40*	24*
10 3	9 25.29	+15 43.0	1.590	1.236	39.0	21.4	51 W	41*	25*
10 8	9 38.01	+14 37.1	1.580	1.257	39.2	21.4	53 W	42*	26*
10 13	9 50.38	+13 29.8	1.566	1.277	39.5	21.5	54 W	44*	27*
10 18	10 2.41	+12 21.4	1.550	1.295	39.7	21.5	56 W	45*	29*
10 23	10 14.14	+11 12.1	1.531	1.313	40.0	21.5	58 W	46*	30*

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12 27	13 14.58	−27 58.3	3.023	2.817	19.0	20.3	69 W	17	61*
1 6	13 25.20	−29 31.2	2.881	2.801	19.9	20.2	76 W	15	69*
1 16	13 34.68	−31 0.0	2.733	2.785	20.5	20.1	83 W	14	77*
1 26	13 42.70	−32 23.4	2.583	2.767	20.8	20.0	90 W	13	83*
2 5	13 48.96	−33 39.6	2.433	2.749	20.8	19.9	98 W	11	82
2 15	13 53.05	−34 46.5	2.285	2.729	20.4	19.7	106 W	10	81
2 20	13 54.17	−35 15.4	2.213	2.719	19.9	19.6	110 W	10	81
2 25	13 54.62	−35 40.7	2.143	2.709	19.4	19.5	115 W	9	80
3 2	13 54.35	−36 1.8	2.075	2.698	18.7	19.4	119 W	9	80
3 7	13 53.35	−36 18.1	2.010	2.687	17.9	19.3	123 W	9	80
3 12	13 51.59	−36 28.8	1.948	2.677	17.0	19.2	128 W	9	80
3 17	13 49.08	−36 33.1	1.890	2.665	16.0	19.1	133 W	8	79
3 22	13 45.86	−36 30.4	1.836	2.654	14.8	19.0	137 W	8	79
3 27	13 41.99	−36 19.9	1.787	2.642	13.6	18.9	142 W	9	80
4 1	13 37.55	−36 1.1	1.743	2.631	12.3	18.7	146 W	9	80
4 6	13 32.66	−35 33.5	1.705	2.618	11.1	18.6	150 W	9	80
4 11	13 27.46	−34 57.1	1.672	2.606	10.0	18.5	153 W	10	81
4 16	13 22.11	−34 11.9	1.647	2.594	9.2	18.5	156 E	11	82
4 21	13 16.80	−33 18.7	1.627	2.581	8.8	18.4	157 E	12	83
4 26	13 11.68	−32 18.3	1.614	2.568	9.0	18.4	156 E	13	84
5 1	13 6.93	−31 12.0	1.608	2.555	9.7	18.4	155 E	14	85
5 6	13 2.66	−30 1.3	1.609	2.542	10.9	18.4	152 E	15	86
5 11	12 58.99	−28 47.9	1.616	2.528	12.3	18.5	148 E	16	87
5 16	12 56.01	−27 33.3	1.628	2.515	13.8	18.6	144 E	17	88
5 21	12 53.78	−26 19.2	1.647	2.501	15.4	18.6	139 E	19	90
5 26	12 52.33	−25 7.1	1.671	2.487	16.9	18.7	134 E	20	89
5 31	12 51.64	−23 58.1	1.699	2.473	18.4	18.8	130 E	21	88
6 5	12 51.72	−22 53.2	1.731	2.458	19.7	18.8	125 E	22*	87
6 15	12 54.08	−20 57.9	1.806	2.429	22.1	19.0	116 E	22*	85
6 25	12 59.13	−19 24.5	1.891	2.399	23.9	19.1	107 E	22*	83
7 5	13 6.54	−18 12.9	1.982	2.369	25.1	19.2	99 E	20*	82

31098 Frankhill *(continuation)*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
	h m	° ′			°	m	°	°	°
7 15	13 16.01	−17 21.9	2.076	2.337	25.8	19.3	92 E	18*	81*
7 25	13 27.29	−16 49.0	2.170	2.306	26.0	19.4	84 E	17*	77*
8 4	13 40.12	−16 31.3	2.262	2.274	25.8	19.4	78 E	15*	71*
8 14	13 54.35	−16 26.2	2.351	2.241	25.3	19.5	71 E	14*	65*
8 24	14 9.83	−16 30.8	2.433	2.208	24.5	19.5	65 E	13*	59*
9 3	14 26.46	−16 42.2	2.510	2.175	23.5	19.5	59 E	12*	53*
9 13	14 44.17	−16 58.0	2.578	2.142	22.2	19.5	54 E	12*	48*
9 23	15 2.88	−17 15.8	2.638	2.108	20.8	19.5	48 E	11*	42*
10 3	15 22.54	−17 32.9	2.690	2.075	19.2	19.4	43 E	11*	37*
10 13	15 43.13	−17 47.4	2.732	2.041	17.5	19.4	38 E	11*	32*
10 23	16 4.58	−17 56.8	2.765	2.008	15.8	19.3	33 E	11*	26*
11 2	16 26.85	−17 59.0	2.789	1.976	13.9	19.2	29 E	10*	21*
11 12	16 49.89	−17 52.0	2.804	1.943	12.0	19.1	24 E	10*	16*
11 22	17 13.62	−17 33.8	2.810	1.912	10.2	19.0	20 E	9*	11*
12 2	17 37.96	−17 2.9	2.808	1.881	8.4	18.9	16 E	8*	5*
12 12	18 2.83	−16 17.6	2.798	1.851	6.8	18.8	13 E	6*	—
12 22	18 28.11	−15 16.8	2.781	1.823	5.6	18.7	10 E	4*	—
1 1	18 53.72	−13 59.8	2.759	1.796	5.1	18.6	9 E	2*	—
1 11	19 19.57	−12 26.0	2.732	1.770	5.4	18.6	10 W	2*	—
1 21	19 45.54	−10 35.6	2.701	1.747	6.3	18.6	11 W	5*	—

153953 2002 AD_9

12 27	13 14.59	+ 8 7.3	1.593	1.746	33.9	20.3	82 W	53	44*
1 6	13 15.33	+ 8 4.5	1.544	1.849	32.1	20.3	91 W	53	50*
1 16	13 12.39	+ 8 24.5	1.488	1.947	29.6	20.3	102 W	53	55*
1 26	13 5.25	+ 9 6.9	1.433	2.038	26.3	20.2	114 W	54	55
2 5	12 53.58	+10 8.8	1.386	2.125	21.9	20.1	126 W	55	54
2 10	12 46.04	+10 45.3	1.369	2.167	19.4	20.0	133 W	56	53
2 15	12 37.46	+11 24.0	1.357	2.208	16.7	20.0	140 W	56	53
2 20	12 27.96	+12 3.3	1.352	2.247	13.9	19.9	147 W	57	52
2 25	12 17.74	+12 41.7	1.355	2.285	11.0	19.8	154 W	58	51
3 2	12 7.06	+13 17.5	1.365	2.323	8.2	19.8	160 W	58	51
3 7	11 56.17	+13 49.3	1.385	2.359	5.9	19.7	166 W	59	50
3 12	11 45.37	+14 15.9	1.413	2.395	4.8	19.8	168 W	59	50
3 17	11 34.93	+14 36.5	1.450	2.429	5.5	19.9	167 E	60	49
3 22	11 25.11	+14 50.7	1.496	2.462	7.3	20.1	162 E	60	49
3 27	11 16.10	+14 58.5	1.550	2.495	9.4	20.3	156 E	60	49
4 6	11 0.96	+14 56.8	1.681	2.557	13.4	20.6	144 E	60	49
4 16	10 49.94	+14 35.7	1.836	2.616	16.6	21.0	132 E	60	49
4 26	10 42.91	+14 0.0	2.010	2.672	18.8	21.3	121 E	59	50
5 6	10 39.34	+13 13.9	2.196	2.724	20.2	21.6	111 E	58	51

265187 2003 YS_{117}

12 27	13 15.51	−28 47.3	1.143	1.199	49.6	20.8	68 W	16	61*
1 1	13 35.08	−32 27.7	1.108	1.173	51.0	20.8	68 W	13	62*
1 6	13 56.86	−36 6.3	1.078	1.146	52.4	20.7	67 W	9	61*
1 11	14 21.27	−39 37.6	1.053	1.119	53.7	20.6	67 W	5	60*
1 16	14 48.71	−42 55.0	1.033	1.092	55.1	20.6	66 W	2*	59*
1 21	15 19.49	−45 50.3	1.018	1.066	56.3	20.5	64 W	—	56*
1 26	15 53.67	−48 14.6	1.009	1.039	57.5	20.5	63 W	—	54*
1 28	16 8.24	−49 1.7	1.006	1.029	57.9	20.5	62 W	—	53*
1 30	16 23.24	−49 41.8	1.005	1.018	58.3	20.4	62 W	—	52*
2 1	16 38.64	−50 14.6	1.004	1.008	58.6	20.4	61 W	—	50*
2 3	16 54.33	−50 39.7	1.004	0.998	59.0	20.4	60 W	—	49*
2 5	17 10.24	−50 56.8	1.005	0.988	59.3	20.4	59 W	—	48*
2 7	17 26.27	−51 5.7	1.006	0.978	59.6	20.4	59 W	—	47*
2 9	17 42.30	−51 6.4	1.008	0.968	59.9	20.4	58 W	—	46*
2 11	17 58.23	−50 58.8	1.011	0.959	60.1	20.4	57 W	—	45*
2 13	18 13.97	−50 43.2	1.014	0.949	60.3	20.4	57 W	—	44*
2 15	18 29.41	−50 19.7	1.018	0.940	60.4	20.4	56 W	—	44*
2 17	18 44.49	−49 48.8	1.023	0.931	60.5	20.4	55 W	—	43*
2 19	18 59.13	−49 10.8	1.028	0.923	60.6	20.4	54 W	—	42*
2 21	19 13.29	−48 26.2	1.033	0.915	60.6	20.3	54 W	—	41*
2 23	19 26.93	−47 35.4	1.040	0.907	60.7	20.3	53 W	—	41*
2 25	19 40.04	−46 38.9	1.046	0.899	60.6	20.3	52 W	—	40*
3 2	20 10.43	−43 56.1	1.064	0.881	60.4	20.3	51 W	—	39*
3 7	20 37.59	−40 48.0	1.084	0.866	59.9	20.3	49 W	—	38*
3 12	21 1.87	−37 20.9	1.105	0.854	59.3	20.3	48 W	—	37*
3 17	21 23.70	−33 39.7	1.128	0.845	58.5	20.3	46 W	—	37*
3 22	21 43.52	−29 48.6	1.151	0.839	57.5	20.3	45 W	—	36*
3 27	22 1.74	−25 50.8	1.175	0.837	56.5	20.3	44 W	—	36*
4 1	22 18.71	−21 48.7	1.199	0.838	55.4	20.3	44 W	—	36*
4 6	22 34.70	−17 44.7	1.223	0.842	54.2	20.3	43 W	2*	36*
4 11	22 49.95	−13 40.7	1.247	0.850	53.1	20.4	43 W	4*	37*
4 16	23 4.65	− 9 38.3	1.270	0.861	52.0	20.4	43 W	6*	37*
4 21	23 18.94	− 5 39.0	1.293	0.875	50.9	20.5	42 W	8*	36*
4 26	23 32.95	− 1 44.0	1.316	0.891	49.8	20.5	43 W	11*	36*
5 1	23 46.78	+ 2 5.7	1.338	0.910	48.8	20.6	43 W	13*	36*
5 6	0 0.52	+ 5 49.1	1.359	0.931	47.9	20.6	43 W	15*	35*

20/22	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
265187 2003 YS_{117} *(continuation)*									
	h m	° ′			°	m	°	°	°
5 11	0 14.22	+ 9 25.5	1.380	0.954	47.0	20.7	44 W	18*	35*
5 16	0 27.95	+12 54.3	1.400	0.977	46.2	20.7	44 W	20*	34*
5 21	0 41.76	+16 14.9	1.419	1.002	45.5	20.8	45 W	22*	33*
5 26	0 55.67	+19 26.9	1.438	1.028	44.8	20.9	46 W	25*	32*
5 31	1 9.74	+22 30.1	1.455	1.054	44.1	20.9	46 W	27*	30*
6 5	1 24.00	+25 24.3	1.472	1.081	43.6	21.0	47 W	29*	29*
6 10	1 38.46	+28 9.4	1.487	1.108	43.0	21.1	48 W	32*	28*
6 15	1 53.14	+30 45.2	1.501	1.135	42.6	21.1	49 W	34*	26*
6 20	2 8.06	+33 11.6	1.514	1.162	42.1	21.2	50 W	36*	25*
6 25	2 23.22	+35 28.7	1.525	1.188	41.7	21.2	51 W	38*	23*
6 30	2 38.64	+37 36.6	1.534	1.215	41.4	21.3	52 W	41*	22*
7 5	2 54.31	+39 35.3	1.542	1.240	41.1	21.3	53 W	43*	20*
7 10	3 10.21	+41 25.0	1.548	1.266	40.8	21.4	55 W	45*	19*
7 15	3 26.30	+43 5.7	1.552	1.291	40.6	21.4	56 W	47*	18*
7 20	3 42.57	+44 37.7	1.554	1.315	40.4	21.4	57 W	49*	16*
7 25	3 58.98	+46 1.1	1.553	1.338	40.3	21.5	58 W	51*	15*
14653 1998 YV_{11}									
12 27	13 15.95	+ 1 40.6	2.445	2.449	23.2	19.3	79 W	47	48*
1 6	13 28.36	+ 0 54.7	2.281	2.413	24.0	19.1	86 W	46	54*
1 16	13 39.85	+ 0 19.2	2.117	2.376	24.4	18.9	93 W	45	60*
1 26	13 50.15	− 0 4.3	1.954	2.339	24.5	18.7	100 W	45	63*
2 5	13 58.95	− 0 14.7	1.796	2.300	24.1	18.5	108 W	45	64
2 15	14 5.87	− 0 10.9	1.644	2.261	23.1	18.2	116 W	45	64
2 25	14 10.45	+ 0 7.9	1.501	2.222	21.4	18.0	125 W	45	64
3 7	14 12.27	+ 0 41.3	1.370	2.181	19.0	17.6	134 W	46	63
3 17	14 10.91	+ 1 27.7	1.255	2.141	15.9	17.3	144 W	46	63
3 22	14 8.95	+ 1 54.6	1.204	2.120	14.1	17.1	149 W	47	62
3 27	14 6.16	+ 2 22.9	1.158	2.100	12.1	17.0	154 W	47	62
4 1	14 2.56	+ 2 51.8	1.117	2.079	10.2	16.8	158 W	48	61
4 6	13 58.22	+ 3 20.0	1.082	2.058	8.4	16.6	162 W	48	61
4 11	13 53.24	+ 3 46.4	1.053	2.038	7.3	16.5	165 W	49	60
4 16	13 47.78	+ 4 9.6	1.029	2.017	7.1	16.4	166 W	49	60
4 21	13 42.02	+ 4 28.1	1.012	1.996	8.2	16.4	163 E	49	60
4 26	13 36.18	+ 4 40.9	1.001	1.975	10.2	16.4	160 E	50	59
5 1	13 30.47	+ 4 46.9	0.995	1.955	12.6	16.5	155 E	50	59
5 6	13 25.09	+ 4 45.5	0.994	1.934	15.2	16.6	150 E	50	59
5 16	13 16.08	+ 4 19.4	1.007	1.893	20.3	16.7	139 E	49	60
5 26	13 10.30	+ 3 22.8	1.036	1.853	25.0	16.9	129 E	48	61
6 5	13 8.28	+ 1 59.1	1.075	1.813	28.9	17.0	120 E	47*	62
6 15	13 10.11	+ 0 13.0	1.123	1.774	32.0	17.2	112 E	44*	64
6 25	13 15.60	− 1 51.3	1.174	1.737	34.5	17.3	105 E	39*	66
7 5	13 24.40	− 4 9.6	1.228	1.701	36.3	17.4	98 E	35*	68
7 15	13 36.22	− 6 38.5	1.283	1.668	37.5	17.5	92 E	30*	71
7 25	13 50.77	− 9 15.0	1.336	1.636	38.3	17.5	87 E	26*	73*
8 4	14 7.83	−11 55.7	1.389	1.607	38.7	17.6	82 E	23*	73*
8 14	14 27.28	−14 37.5	1.441	1.581	38.8	17.6	78 E	20*	71*
8 24	14 49.02	−17 16.9	1.491	1.558	38.6	17.7	74 E	17*	68*
9 3	15 12.98	−19 50.0	1.541	1.539	38.2	17.7	71 E	16*	65*
9 13	15 39.11	−22 12.5	1.591	1.524	37.6	17.7	68 E	14*	62*
9 23	16 7.32	−24 19.9	1.640	1.512	36.8	17.8	65 E	13*	59*
10 3	16 37.43	−26 7.6	1.692	1.505	35.9	17.8	62 E	12*	56*
10 13	17 9.24	−27 31.3	1.744	1.503	34.8	17.8	59 E	12*	53*
10 23	17 42.36	−28 27.1	1.800	1.505	33.6	17.9	57 E	12*	51*
11 2	18 16.36	−28 52.4	1.858	1.512	32.2	17.9	54 E	12*	48*
11 7	18 33.53	−28 53.2	1.888	1.516	31.5	17.9	53 E	12*	47*
11 12	18 50.72	−28 46.1	1.919	1.522	30.8	18.0	52 E	13*	45*
11 17	19 7.87	−28 31.1	1.952	1.529	30.0	18.0	51 E	13*	44*
11 22	19 24.92	−28 8.5	1.985	1.537	29.2	18.0	49 E	14*	42*
11 27	19 41.81	−27 38.5	2.019	1.546	28.4	18.0	48 E	14*	41*
12 2	19 58.49	−27 1.6	2.053	1.556	27.6	18.1	47 E	15*	39*
12 7	20 14.92	−26 18.1	2.089	1.567	26.7	18.1	46 E	15*	38*
12 12	20 31.07	−25 28.6	2.126	1.579	25.8	18.1	44 E	16*	36*
12 17	20 46.91	−24 33.5	2.163	1.591	24.9	18.1	43 E	16*	34*
12 22	21 2.41	−23 33.4	2.201	1.605	24.0	18.2	42 E	17*	32*
12 27	21 17.57	−22 28.9	2.240	1.619	23.1	18.2	40 E	17*	30*
1 1	21 32.39	−21 20.4	2.280	1.633	22.1	18.2	39 E	17*	29*
1 6	21 46.87	−20 8.6	2.319	1.649	21.2	18.2	37 E	17*	27*
1 11	22 1.00	−18 54.0	2.360	1.665	20.2	18.3	36 E	17*	25*
1 16	22 14.81	−17 37.0	2.400	1.681	19.2	18.3	34 E	17*	23*
1 21	22 28.28	−16 18.2	2.441	1.698	18.2	18.3	33 E	17*	22*
390546 2000 EK_{50}									
12 27	13 16.50	+ 3 36.2	1.498	1.633	36.3	21.1	79 W	49	46*
1 6	13 43.80	+ 4 2.9	1.404	1.617	37.2	21.0	83 W	49	49*
1 16	14 11.15	+ 4 53.8	1.317	1.603	37.8	20.8	87 W	50	52*
1 26	14 38.17	+ 6 10.8	1.238	1.593	38.2	20.7	91 W	51	53*
2 5	15 4.47	+ 7 54.4	1.168	1.587	38.3	20.6	95 W	53	54*
2 15	15 29.49	+10 3.3	1.107	1.584	38.1	20.4	98 W	55	53*

20/21	α_{2000}	δ_{2000}	Δ	r	β	V	ψ	45°	−26°
390546 2000 EK_{50} *(continuation)*									
	h m	° ′			°	m	°	°	°
2 20	15 41.34	+11 16.2	1.079	1.584	38.0	20.4	100 W	56	52*
2 25	15 52.64	+12 34.0	1.054	1.584	37.7	20.3	102 W	58	51*
3 2	16 3.33	+13 56.0	1.031	1.586	37.4	20.3	103 W	59	50
3 7	16 13.33	+15 21.2	1.010	1.589	37.1	20.2	105 W	60	49
3 12	16 22.55	+16 49.0	0.991	1.592	36.7	20.2	107 W	62	47
3 17	16 30.91	+18 18.2	0.974	1.597	36.2	20.1	108 W	63	46
3 22	16 38.35	+19 47.5	0.958	1.602	35.7	20.1	110 W	65	44
3 27	16 44.79	+21 15.8	0.944	1.608	35.2	20.1	112 W	66	43
4 1	16 50.19	+22 41.8	0.932	1.615	34.6	20.0	113 W	68	41
4 6	16 54.48	+24 4.2	0.921	1.623	33.9	20.0	115 W	69	40
4 11	16 57.62	+25 21.6	0.912	1.632	33.2	20.0	117 W	70	39
4 16	16 59.57	+26 32.2	0.904	1.641	32.5	19.9	119 W	72	37
4 21	17 0.34	+27 34.3	0.898	1.651	31.7	19.9	120 W	73	36
4 26	16 59.98	+28 26.4	0.893	1.662	30.9	19.9	122 W	73	36
5 1	16 58.53	+29 6.8	0.890	1.673	30.1	19.9	124 W	74	35
5 6	16 56.09	+29 34.1	0.889	1.685	29.3	19.9	125 W	75	34
5 11	16 52.79	+29 46.9	0.890	1.698	28.6	19.9	126 W	75	34
5 16	16 48.80	+29 43.9	0.894	1.711	27.9	19.9	128 W	75	34
5 21	16 44.34	+29 24.4	0.899	1.725	27.2	19.9	129 W	74	35
5 26	16 39.64	+28 48.3	0.908	1.739	26.7	19.9	130 W	74	35
5 31	16 34.92	+27 56.0	0.919	1.754	26.2	19.9	130 W	73	36
6 5	16 30.38	+26 48.3	0.933	1.769	25.9	20.0	130 E	72	37
6 10	16 26.21	+25 26.4	0.951	1.784	25.7	20.0	130 E	70	39
6 15	16 22.59	+23 52.0	0.972	1.800	25.7	20.1	130 E	69	40
6 20	16 19.63	+22 7.1	0.996	1.817	25.8	20.2	129 E	67	42
6 25	16 17.41	+20 13.9	1.025	1.833	26.0	20.3	128 E	65	44
6 30	16 15.98	+18 14.6	1.056	1.850	26.3	20.3	126 E	63	46
7 5	16 15.35	+16 11.1	1.092	1.867	26.6	20.4	125 E	61	48
7 10	16 15.51	+14 5.3	1.131	1.885	27.0	20.6	123 E	59	50
7 15	16 16.46	+11 58.9	1.173	1.902	27.4	20.7	120 E	57	52
7 20	16 18.15	+ 9 53.4	1.219	1.920	27.8	20.8	118 E	55	54
7 25	16 20.55	+ 7 50.0	1.269	1.938	28.2	20.9	116 E	53*	56
7 30	16 23.60	+ 5 49.7	1.321	1.956	28.5	21.0	113 E	51*	58
8 4	16 27.26	+ 3 53.2	1.376	1.974	28.8	21.1	110 E	49*	60
8 9	16 31.49	+ 2 1.1	1.434	1.993	29.0	21.3	108 E	47*	62
8 14	16 36.25	+ 0 13.6	1.495	2.011	29.1	21.4	105 E	45*	64
8 19	16 41.50	− 1 28.7	1.558	2.029	29.2	21.5	102 E	43*	65
199145 2005 YY_{128}									
12 27	13 17.76	−10 9.7	0.814	1.086	60.4	20.1	74 W	35	55*
1 1	13 50.28	−13 36.9	0.764	1.019	65.1	20.0	70 W	31*	54*
1 6	14 27.58	−17 8.4	0.728	0.950	70.3	19.9	66 W	28*	53*
1 11	15 9.61	−20 27.7	0.708	0.880	75.6	19.8	60 W	24*	50*
1 16	15 55.51	−23 13.8	0.708	0.809	80.6	19.8	54 W	20*	45*
1 18	16 14.57	−24 6.5	0.713	0.780	82.3	19.8	52 W	18*	43*
1 20	16 33.83	−24 49.9	0.722	0.752	83.8	19.8	49 W	17*	42*
1 22	16 53.14	−25 23.5	0.734	0.723	85.0	19.8	47 W	15*	39*
1 24	17 12.35	−25 47.1	0.749	0.694	85.9	19.8	45 W	14*	37*
1 26	17 31.34	−26 0.7	0.767	0.666	86.4	19.8	42 W	13*	35*
1 28	17 50.01	−26 4.7	0.789	0.638	86.6	19.8	40 W	11*	34*
1 30	18 8.28	−25 59.6	0.814	0.611	86.3	19.7	38 W	10*	32*
2 1	18 26.10	−25 45.9	0.841	0.584	85.4	19.7	36 W	9*	30*
2 3	18 43.45	−25 24.4	0.871	0.559	84.1	19.6	34 W	8*	28*
2 5	19 0.32	−24 55.7	0.904	0.535	82.1	19.5	33 W	7*	26*
2 7	19 16.75	−24 20.3	0.940	0.513	79.6	19.4	31 W	6*	25*
2 9	19 32.75	−23 38.8	0.977	0.493	76.5	19.3	29 W	5*	23*
2 11	19 48.37	−22 51.6	1.017	0.476	72.8	19.2	27 W	5*	21*
2 13	20 3.64	−21 59.3	1.057	0.462	68.6	19.1	26 W	4*	20*
2 15	20 18.57	−21 2.1	1.099	0.451	63.9	18.9	24 W	3*	18*
2 17	20 33.18	−20 0.6	1.142	0.445	58.8	18.8	23 W	3*	17*
2 19	20 47.46	−18 55.4	1.185	0.443	53.6	18.8	21 W	2*	15*
2 21	21 1.39	−17 47.1	1.227	0.445	48.3	18.7	20 W	2*	14*
2 23	21 14.95	−16 36.3	1.269	0.452	43.2	18.7	18 W	1*	12*
2 25	21 28.11	−15 23.8	1.310	0.463	38.3	18.6	17 W	—	11*
2 27	21 40.84	−14 10.3	1.350	0.477	33.8	18.7	16 W	—	9*
3 1	21 53.12	−12 56.5	1.389	0.494	29.7	18.7	14 W	—	8*
3 3	22 4.96	−11 42.8	1.427	0.515	26.1	18.7	13 W	—	7*
3 5	22 16.34	−10 29.8	1.464	0.537	22.9	18.8	12 W	—	6*
3 7	22 27.29	− 9 17.9	1.500	0.561	20.1	18.8	11 W	—	5*
3 12	22 52.83	− 6 24.5	1.586	0.627	14.8	19.0	9 W	—	3*
3 17	23 16.03	− 3 42.0	1.668	0.697	11.4	19.2	8 W	—	2*
3 22	23 37.22	− 1 11.3	1.747	0.768	9.2	19.5	7 W	—	1*
3 27	23 56.72	+ 1 7.7	1.823	0.840	8.0	19.7	7 W	—	—
4 1	0 14.78	+ 3 15.6	1.896	0.911	7.3	19.9	7 W	—	—
4 6	0 31.64	+ 5 13.2	1.966	0.980	7.1	20.1	7 W	—	1*
4 11	0 47.46	+ 7 1.5	2.033	1.048	7.3	20.4	8 W	—	1*
4 16	1 2.39	+ 8 41.1	2.097	1.114	7.6	20.6	8 W	—	2*
4 21	1 16.54	+10 12.9	2.157	1.178	8.1	20.8	10 W	—	3*
4 26	1 30.02	+11 37.6	2.214	1.240	8.7	21.0	11 W	—	4*
5 1	1 42.90	+12 55.8	2.268	1.301	9.4	21.2	12 W	1*	6*
5 6	1 55.26	+14 8.0	2.317	1.359	10.2	21.3	14 W	1*	7*