ANTISUN AND MOON

Date 2021	Antisun α_{2000}	Antisun δ_{2000}	Moon α_{2000}	Moon δ_{2000}	Moon Elon.
	h m	°	h m	°	°
1 1	6 45	+23.0	8 22	+23.1	158 W
1 2	6 50	+22.9	9 18	+20.3	146 W
1 3	6 54	+22.8	10 12	+16.4	133 W
1 4	6 58	+22.7	11 4	+11.6	121 W
1 5	7 3	+22.6	11 55	+ 6.2	108 W
1 6	7 7	+22.5	12 46	+ 0.4	95 W
1 7	7 11	+22.4	13 37	− 5.5	82 W
1 8	7 16	+22.3	14 30	−11.1	69 W
1 9	7 20	+22.1	15 25	−16.3	56 W
1 10	7 25	+22.0	16 23	−20.4	42 W
1 11	7 29	+21.9	17 24	−23.4	29 W
1 12	7 34	+21.7	18 26	−24.8	16 W
1 13	7 38	+21.5	19 28	−24.6	4 W
1 14	7 43	+21.4	20 28	−22.8	11 E
1 15	7 47	+21.2	21 25	−19.8	23 E
1 16	7 51	+21.0	22 18	−15.8	35 E
1 17	7 56	+20.8	23 7	−11.2	47 E
1 18	8 0	+20.6	23 54	− 6.3	58 E
1 19	8 4	+20.4	0 38	− 1.2	69 E
1 20	8 9	+20.2	1 22	+ 3.8	80 E
1 21	8 13	+19.9	2 5	+ 8.7	91 E
1 22	8 17	+19.7	2 50	+13.2	102 E
1 23	8 21	+19.5	3 36	+17.3	113 E
1 24	8 26	+19.2	4 25	+20.6	124 E
1 25	8 30	+19.0	5 16	+23.2	135 E
1 26	8 34	+18.8	6 10	+24.6	146 E
1 27	8 38	+18.5	7 7	+24.8	158 E
1 28	8 42	+18.3	8 4	+23.7	170 E
1 29	8 46	+18.0	9 0	+21.3	175 W
1 30	8 50	+17.7	9 56	+17.6	164 W
1 31	8 54	+17.5	10 50	+12.9	152 W
2 1	8 58	+17.2	11 42	+ 7.4	139 W
2 2	9 2	+16.9	12 34	+ 1.6	126 W
2 3	9 6	+16.6	13 25	− 4.3	113 W
2 4	9 10	+16.3	14 17	−10.1	99 W
2 5	9 14	+16.0	15 11	−15.3	86 W
2 6	9 18	+15.7	16 7	−19.6	73 W
2 7	9 22	+15.4	17 6	−22.8	60 W
2 8	9 26	+15.1	18 7	−24.6	48 W
2 9	9 30	+14.8	19 8	−24.9	35 W
2 10	9 34	+14.5	20 7	−23.6	22 W
2 11	9 38	+14.1	21 4	−21.0	11 W
2 12	9 42	+13.8	21 58	−17.4	5 E
2 13	9 46	+13.4	22 49	−12.9	15 E
2 14	9 50	+13.1	23 36	− 8.0	27 E
2 15	9 54	+12.8	0 22	− 2.9	38 E
2 16	9 58	+12.4	1 6	+ 2.3	49 E
2 17	10 2	+12.0	1 50	+ 7.3	60 E
2 18	10 6	+11.7	2 34	+11.9	71 E
2 19	10 10	+11.3	3 20	+16.2	81 E
2 20	10 14	+11.0	4 7	+19.8	92 E
2 21	10 18	+10.6	4 57	+22.6	103 E
2 22	10 21	+10.2	5 50	+24.4	114 E
2 23	10 25	+ 9.9	6 45	+25.1	126 E
2 24	10 29	+ 9.5	7 41	+24.4	137 E
2 25	10 33	+ 9.2	8 38	+22.5	150 E
2 26	10 36	+ 8.8	9 35	+19.2	162 E
2 27	10 40	+ 8.4	10 30	+14.7	173 E
2 28	10 44	+ 8.1	11 24	+ 9.3	170 W
3 1	10 47	+ 7.7	12 17	+ 3.4	157 W
3 2	10 51	+ 7.3	13 10	− 2.8	144 W
3 3	10 54	+ 7.0	14 3	− 8.8	130 W
3 4	10 58	+ 6.6	14 58	−14.3	117 W
3 5	11 2	+ 6.2	15 54	−19.0	104 W
3 6	11 6	+ 5.8	16 53	−22.5	91 W
3 7	11 9	+ 5.4	17 53	−24.6	78 W
3 8	11 13	+ 5.1	18 53	−25.2	65 W
3 9	11 17	+ 4.7	19 52	−24.3	53 W
3 10	11 20	+ 4.3	20 49	−22.0	41 W
3 11	11 24	+ 3.9	21 43	−18.6	29 W
3 12	11 28	+ 3.5	22 33	−14.4	17 W
3 13	11 32	+ 3.1	23 21	− 9.6	7 W
3 14	11 36	+ 2.6	0 7	− 4.5	8 E
3 15	11 39	+ 2.2	0 52	+ 0.7	18 E
3 16	11 43	+ 1.8	1 35	+ 5.8	29 E
3 17	11 47	+ 1.4	2 20	+10.7	40 E
3 18	11 51	+ 1.0	3 5	+15.1	51 E
3 19	11 54	+ 0.6	3 52	+18.9	61 E
3 20	11 58	+ 0.2	4 40	+22.0	72 E
3 21	12 2	− 0.2	5 32	+24.2	83 E
3 22	12 5	− 0.6	6 25	+25.2	94 E
3 23	12 9	− 1.0	7 20	+25.1	106 E
3 24	12 13	− 1.4	8 16	+23.6	117 E
3 25	12 16	− 1.8	9 11	+20.8	129 E
3 26	12 20	− 2.1	10 7	+16.8	142 E
3 27	12 23	− 2.5	11 1	+11.8	155 E
3 28	12 27	− 2.9	11 55	+ 5.9	168 E
3 29	12 30	− 3.3	12 48	− 0.4	175 W
3 30	12 34	− 3.6	13 43	− 6.7	163 W
3 31	12 37	− 4.0	14 38	−12.7	149 W
4 1	12 41	− 4.4	15 36	−17.9	135 W
4 2	12 44	− 4.8	16 36	−21.9	121 W
4 3	12 48	− 5.1	17 38	−24.5	108 W
4 4	12 52	− 5.5	18 39	−25.4	95 W
4 5	12 55	− 5.9	19 39	−24.8	83 W
4 6	12 59	− 6.3	20 37	−22.8	70 W
4 7	13 3	− 6.7	21 31	−19.6	58 W
4 8	13 6	− 7.0	22 22	−15.6	47 W
4 9	13 10	− 7.4	23 10	−10.9	35 W
4 10	13 14	− 7.8	23 55	− 5.9	24 W
4 11	13 18	− 8.2	0 39	− 0.7	13 W
4 12	13 21	− 8.6	1 23	+ 4.5	4 E
4 13	13 25	− 8.9	2 7	+ 9.4	10 E
4 14	13 29	− 9.3	2 52	+14.0	21 E
4 15	13 33	− 9.7	3 38	+18.1	31 E
4 16	13 37	−10.1	4 26	+21.4	42 E
4 17	13 40	−10.4	5 16	+23.9	53 E
4 18	13 44	−10.8	6 9	+25.3	64 E
4 19	13 48	−11.1	7 3	+25.5	75 E
4 20	13 52	−11.5	7 57	+24.5	86 E
4 21	13 55	−11.8	8 51	+22.2	98 E
4 22	13 59	−12.2	9 45	+18.7	110 E
4 23	14 3	−12.5	10 39	+14.1	123 E
4 24	14 6	−12.8	11 31	+ 8.7	136 E
4 25	14 10	−13.1	12 24	+ 2.6	149 E
4 26	14 14	−13.4	13 18	− 3.8	163 E
4 27	14 17	−13.8	14 13	−10.1	176 E
4 28	14 21	−14.1	15 11	−15.9	168 W
4 29	14 25	−14.4	16 12	−20.6	154 W
4 30	14 28	−14.7	17 15	−23.9	140 W
5 1	14 32	−14.9	18 19	−25.5	126 W
5 2	14 36	−15.2	19 22	−25.3	113 W
5 3	14 40	−15.5	20 22	−23.7	100 W
5 4	14 44	−15.8	21 18	−20.7	88 W
5 5	14 47	−16.1	22 10	−16.8	76 W
5 6	14 51	−16.4	22 59	−12.2	64 W
5 7	14 55	−16.7	23 45	− 7.2	53 W
5 8	14 59	−17.0	0 29	− 2.0	42 W
5 9	15 3	−17.2	1 12	+ 3.2	31 W
5 10	15 7	−17.5	1 56	+ 8.2	20 W
5 11	15 11	−17.8	2 40	+12.9	9 W
5 12	15 15	−18.1	3 26	+17.1	3 E
5 13	15 19	−18.3	4 14	+20.7	13 E
5 14	15 23	−18.6	5 3	+23.4	24 E
5 15	15 27	−18.8	5 55	+25.1	35 E
5 16	15 31	−19.1	6 49	+25.7	46 E
5 17	15 35	−19.3	7 43	+25.0	57 E
5 18	15 39	−19.5	8 36	+23.1	68 E
5 19	15 43	−19.7	9 29	+20.0	80 E
5 20	15 47	−20.0	10 21	+15.9	92 E
5 21	15 51	−20.2	11 12	+10.8	105 E
5 22	15 55	−20.4	12 3	+ 5.1	118 E
5 23	15 59	−20.6	12 55	− 1.1	131 E
5 24	16 3	−20.7	13 49	− 7.3	145 E
5 25	16 7	−20.9	14 45	−13.3	159 E
5 26	16 11	−21.1	15 44	−18.6	173 E
5 27	16 15	−21.2	16 47	−22.6	172 W
5 28	16 19	−21.4	17 52	−25.0	158 W
5 29	16 23	−21.6	18 57	−25.6	144 W
5 30	16 27	−21.7	20 1	−24.5	131 W
5 31	16 31	−21.8	21 0	−21.9	118 W
6 1	16 35	−22.0	21 55	−18.1	106 W
6 2	16 39	−22.1	22 46	−13.6	94 W
6 3	16 43	−22.2	23 33	− 8.6	82 W
6 4	16 47	−22.4	0 18	− 3.4	70 W
6 5	16 51	−22.5	1 2	+ 1.8	59 W
6 6	16 55	−22.6	1 45	+ 6.9	48 W
6 7	17 0	−22.7	2 29	+11.7	38 W
6 8	17 4	−22.8	3 14	+16.1	27 W
6 9	17 8	−22.9	4 1	+19.9	16 W
6 10	17 12	−23.0	4 51	+22.8	5 W
6 11	17 17	−23.1	5 42	+24.8	6 E
6 12	17 21	−23.1	6 36	+25.6	17 E
6 13	17 25	−23.2	7 30	+25.3	28 E
6 14	17 29	−23.3	8 24	+23.6	40 E
6 15	17 34	−23.3	9 17	+20.8	51 E
6 16	17 38	−23.4	10 8	+17.0	63 E
6 17	17 42	−23.4	10 59	+12.2	75 E
6 18	17 46	−23.4	11 48	+ 6.8	88 E
6 19	17 50	−23.4	12 38	+ 0.9	101 E
6 20	17 55	−23.4	13 29	− 5.1	114 E
6 21	17 59	−23.4	14 22	−11.1	127 E
6 22	18 3	−23.4	15 19	−16.5	141 E
6 23	18 7	−23.4	16 19	−21.1	155 E
6 24	18 11	−23.4	17 23	−24.2	169 E
6 25	18 15	−23.4	18 29	−25.6	176 W
6 26	18 19	−23.4	19 34	−25.2	163 W
6 27	18 23	−23.3	20 36	−23.1	149 W
6 28	18 27	−23.3	21 34	−19.6	136 W
6 29	18 31	−23.2	22 28	−15.2	124 W
6 30	18 35	−23.2	23 18	−10.2	112 W
7 1	18 39	−23.1	0 4	− 4.9	100 W
7 2	18 43	−23.1	0 49	+ 0.4	89 W
7 3	18 47	−23.0	1 33	+ 5.6	77 W

Date 2021	Antisun α_{2000}	Antisun δ_{2000}	Moon α_{2000}	Moon δ_{2000}	Moon Elon.
	h m	°	h m	°	°
7 4	18 51	−22.9	2 16	+10.5	66 W
7 5	18 56	−22.8	3 1	+15.0	56 W
7 6	19 0	−22.7	3 48	+18.9	45 W
7 7	19 4	−22.6	4 37	+22.1	34 W
7 8	19 8	−22.5	5 28	+24.4	23 W
7 9	19 12	−22.4	6 21	+25.5	12 W
7 10	19 17	−22.3	7 16	+25.4	3 W
7 11	19 21	−22.1	8 10	+24.1	12 E
7 12	19 25	−22.0	9 4	+21.5	23 E
7 13	19 29	−21.9	9 56	+17.9	35 E
7 14	19 33	−21.7	10 47	+13.3	47 E
7 15	19 38	−21.6	11 37	+ 8.0	59 E
7 16	19 42	−21.4	12 26	+ 2.3	72 E
7 17	19 46	−21.2	13 16	− 3.7	84 E
7 18	19 50	−21.1	14 7	− 9.6	97 E
7 19	19 54	−20.9	15 1	−15.0	111 E
7 20	19 58	−20.7	15 58	−19.7	124 E
7 21	20 2	−20.5	16 59	−23.3	138 E
7 22	20 5	−20.3	18 2	−25.3	151 E
7 23	20 9	−20.1	19 7	−25.6	165 E
7 24	20 13	−19.9	20 11	−24.1	176 E
7 25	20 17	−19.7	21 11	−21.1	167 W
7 26	20 21	−19.5	22 7	−17.0	155 W
7 27	20 25	−19.3	22 59	−12.1	142 W
7 28	20 28	−19.1	23 47	− 6.8	130 W
7 29	20 32	−18.8	0 33	− 1.3	118 W
7 30	20 36	−18.6	1 18	+ 4.0	107 W
7 31	20 40	−18.4	2 2	+ 9.1	96 W
8 1	20 44	−18.1	2 47	+13.8	85 W
8 2	20 48	−17.9	3 33	+18.0	74 W
8 3	20 52	−17.6	4 22	+21.4	63 W
8 4	20 56	−17.4	5 12	+23.9	52 W
8 5	21 0	−17.1	6 5	+25.4	41 W
8 6	21 3	−16.8	6 59	+25.7	30 W
8 7	21 7	−16.5	7 54	+24.7	19 W
8 8	21 11	−16.2	8 48	+22.4	8 W
8 9	21 15	−15.9	9 42	+18.9	7 E
8 10	21 19	−15.6	10 34	+14.4	18 E
8 11	21 23	−15.3	11 25	+ 9.2	30 E
8 12	21 27	−15.0	12 14	+ 3.5	43 E
8 13	21 31	−14.7	13 4	− 2.5	56 E
8 14	21 35	−14.4	13 55	− 8.5	68 E
8 15	21 38	−14.1	14 48	−14.0	81 E
8 16	21 42	−13.8	15 43	−18.9	95 E
8 17	21 46	−13.5	16 42	−22.6	108 E
8 18	21 50	−13.1	17 43	−25.0	121 E
8 19	21 53	−12.8	18 46	−25.8	134 E
8 20	21 57	−12.5	19 49	−24.9	147 E
8 21	22 0	−12.2	20 49	−22.4	160 E
8 22	22 4	−11.9	21 46	−18.6	172 E
8 23	22 8	−11.5	22 39	−13.9	172 W
8 24	22 11	−11.2	23 29	− 8.7	161 W
8 25	22 15	−10.9	0 16	− 3.2	149 W
8 26	22 18	−10.5	1 2	+ 2.3	137 W
8 27	22 22	−10.2	1 46	+ 7.6	126 W
8 28	22 25	− 9.9	2 31	+12.5	115 W
8 29	22 29	− 9.5	3 18	+16.9	104 W
8 30	22 33	− 9.2	4 5	+20.6	93 W
8 31	22 36	− 8.8	4 55	+23.4	82 W
9 1	22 40	− 8.4	5 47	+25.2	71 W
9 2	22 44	− 8.1	6 40	+25.9	60 W
9 3	22 47	− 7.7	7 35	+25.3	49 W
9 4	22 51	− 7.3	8 29	+23.4	38 W
9 5	22 55	− 7.0	9 24	+20.3	26 W
9 6	22 58	− 6.6	10 16	+16.1	14 W
9 7	23 2	− 6.2	11 8	+10.9	5 E
9 8	23 6	− 5.8	11 59	+ 5.1	13 E
9 9	23 10	− 5.4	12 50	− 1.0	26 E
9 10	23 13	− 5.0	13 41	− 7.1	39 E
9 11	23 17	− 4.6	14 34	−13.0	52 E
9 12	23 21	− 4.2	15 30	−18.1	65 E
9 13	23 24	− 3.9	16 28	−22.1	79 E
9 14	23 28	− 3.5	17 29	−24.9	92 E
9 15	23 31	− 3.1	18 31	−26.0	105 E
9 16	23 35	− 2.7	19 33	−25.4	118 E
9 17	23 38	− 2.3	20 32	−23.4	130 E
9 18	23 42	− 1.9	21 29	−20.0	143 E
9 19	23 45	− 1.6	22 22	−15.6	155 E
9 20	23 49	− 1.2	23 12	−10.5	167 E
9 21	23 52	− 0.8	0 0	− 5.0	175 W
9 22	23 56	− 0.4	0 46	+ 0.5	168 W
9 23	23 59	− 0.1	1 31	+ 6.0	156 W
9 24	0 3	+ 0.3	2 16	+11.1	145 W
9 25	0 6	+ 0.7	3 2	+15.7	134 W
9 26	0 10	+ 1.1	3 49	+19.7	123 W
9 27	0 13	+ 1.5	4 38	+22.8	112 W
9 28	0 17	+ 1.8	5 29	+25.0	102 W
9 29	0 21	+ 2.2	6 22	+26.0	91 W
9 30	0 24	+ 2.6	7 15	+25.9	80 W
10 1	0 28	+ 3.0	8 9	+24.5	68 W
10 2	0 32	+ 3.4	9 3	+21.8	57 W
10 3	0 35	+ 3.8	9 56	+18.0	45 W

Date 2021	Antisun α_{2000}	Antisun δ_{2000}	Moon α_{2000}	Moon δ_{2000}	Moon Elon.
	h m	°	h m	°	°
10 4	0 39	+ 4.2	10 48	+13.2	33 W
10 5	0 43	+ 4.6	11 39	+ 7.5	20 W
10 6	0 47	+ 5.0	12 30	+ 1.4	8 W
10 7	0 50	+ 5.4	13 22	− 5.0	8 E
10 8	0 54	+ 5.8	14 16	−11.2	21 E
10 9	0 58	+ 6.2	15 13	−16.8	35 E
10 10	1 2	+ 6.6	16 12	−21.4	48 E
10 11	1 5	+ 7.0	17 13	−24.5	62 E
10 12	1 9	+ 7.3	18 16	−26.1	75 E
10 13	1 13	+ 7.7	19 19	−25.9	88 E
10 14	1 17	+ 8.1	20 19	−24.2	101 E
10 15	1 20	+ 8.5	21 16	−21.0	113 E
10 16	1 24	+ 8.8	22 10	−16.9	126 E
10 17	1 28	+ 9.2	23 0	−12.0	138 E
10 18	1 31	+ 9.5	23 47	− 6.6	149 E
10 19	1 35	+ 9.9	0 32	− 1.1	161 E
10 20	1 38	+10.2	1 17	+ 4.4	172 E
10 21	1 42	+10.6	2 2	+ 9.6	175 W
10 22	1 46	+10.9	2 47	+14.5	165 W
10 23	1 49	+11.3	3 34	+18.7	154 W
10 24	1 53	+11.6	4 23	+22.1	143 W
10 25	1 57	+11.9	5 13	+24.6	132 W
10 26	2 1	+12.3	6 5	+26.0	121 W
10 27	2 4	+12.6	6 58	+26.3	110 W
10 28	2 8	+13.0	7 51	+25.3	99 W
10 29	2 12	+13.3	8 44	+23.1	88 W
10 30	2 16	+13.6	9 36	+19.7	76 W
10 31	2 20	+14.0	10 27	+15.3	65 W
11 1	2 24	+14.3	11 18	+10.1	52 W
11 2	2 28	+14.6	12 8	+ 4.2	39 W
11 3	2 32	+14.9	12 59	− 2.2	26 W
11 4	2 36	+15.3	13 52	− 8.5	13 W
11 5	2 40	+15.6	14 48	−14.6	2 E
11 6	2 44	+15.9	15 48	−19.8	16 E
11 7	2 48	+16.2	16 51	−23.7	30 E
11 8	2 53	+16.5	17 56	−25.9	43 E
11 9	2 57	+16.8	19 1	−26.3	57 E
11 10	3 1	+17.1	20 4	−24.9	70 E
11 11	3 5	+17.4	21 3	−22.0	83 E
11 12	3 9	+17.7	21 58	−18.0	96 E
11 13	3 13	+17.9	22 49	−13.2	108 E
11 14	3 17	+18.2	23 36	− 8.0	120 E
11 15	3 21	+18.4	0 22	− 2.5	131 E
11 16	3 25	+18.7	1 6	+ 3.0	143 E
11 17	3 29	+18.9	1 50	+ 8.3	154 E
11 18	3 33	+19.2	2 35	+13.2	165 E
11 19	3 37	+19.4	3 21	+17.6	176 E
11 20	3 41	+19.6	4 9	+21.3	173 W
11 21	3 45	+19.8	4 59	+24.1	162 W
11 22	3 49	+20.0	5 51	+25.8	151 W
11 23	3 53	+20.2	6 44	+26.4	141 W
11 24	3 58	+20.4	7 37	+25.7	130 W
11 25	4 2	+20.6	8 29	+23.9	119 W
11 26	4 6	+20.8	9 20	+20.9	107 W
11 27	4 10	+21.0	10 10	+16.9	96 W
11 28	4 14	+21.2	10 59	+12.1	84 W
11 29	4 19	+21.4	11 48	+ 6.6	72 W
11 30	4 23	+21.6	12 37	+ 0.6	59 W
12 1	4 27	+21.7	13 28	− 5.7	46 W
12 2	4 32	+21.9	14 22	−11.8	33 W
12 3	4 36	+22.0	15 19	−17.4	19 W
12 4	4 41	+22.2	16 21	−22.0	5 W
12 5	4 45	+22.3	17 26	−25.1	10 E
12 6	4 50	+22.5	18 34	−26.3	24 E
12 7	4 54	+22.6	19 40	−25.6	38 E
12 8	4 59	+22.7	20 43	−23.2	51 E
12 9	5 3	+22.8	21 41	−19.4	64 E
12 10	5 8	+22.9	22 35	−14.6	77 E
12 11	5 12	+23.0	23 24	− 9.4	89 E
12 12	5 17	+23.1	0 10	− 3.9	101 E
12 13	5 21	+23.1	0 55	+ 1.7	112 E
12 14	5 25	+23.2	1 39	+ 7.0	123 E
12 15	5 30	+23.3	2 24	+12.0	135 E
12 16	5 34	+23.3	3 9	+16.6	145 E
12 17	5 38	+23.3	3 57	+20.4	156 E
12 18	5 43	+23.4	4 46	+23.4	167 E
12 19	5 47	+23.4	5 37	+25.4	177 E
12 20	5 51	+23.4	6 30	+26.3	171 W
12 21	5 56	+23.4	7 23	+25.9	160 W
12 22	6 0	+23.4	8 16	+24.4	149 W
12 23	6 4	+23.4	9 8	+21.7	138 W
12 24	6 9	+23.4	9 58	+18.0	126 W
12 25	6 13	+23.4	10 46	+13.4	115 W
12 26	6 17	+23.4	11 34	+ 8.2	103 W
12 27	6 22	+23.3	12 21	+ 2.5	91 W
12 28	6 26	+23.3	13 10	− 3.5	79 W
12 29	6 31	+23.2	14 0	− 9.5	66 W
12 30	6 35	+23.2	14 54	−15.2	53 W
12 31	6 40	+23.1	15 52	−20.1	39 W