

Fri Dec 1, 2017 UTC

UTC	−Aldebaran		−Betelgeuse		−Pollux		+Formalhaut		−Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	37°52.2'	2224	56°58.0'	2367	82°06.5'	2275	58°22.7'	2588	82°55.4'	2358
1	37°16.2'	2218	56°23.2'	2363	81°31.0'	2269	58°55.8'	2578	82°20.5'	2353
2	36°40.2'	2213	55°48.4'	2359	80°55.4'	2264	59°28.9'	2568	81°45.6'	2348
3	36°04.2'	2207	55°13.5'	2356	80°19.8'	2258	60°02.2'	2558	81°10.7'	2343
4	35°28.1'	2202	54°38.7'	2353	79°44.1'	2253	60°35.5'	2548	80°35.7'	2337
5	34°51.9'	2196	54°03.7'	2350	79°08.4'	2248	61°08.8'	2539	80°00.7'	2332
6	34°15.7'	2191	53°28.8'	2347	78°32.6'	2242	61°42.3'	2529	79°25.6'	2328
7	33°39.5'	2185	52°53.9'	2344	77°56.8'	2237	62°15.8'	2520	78°50.5'	2323
8	33°03.2'	2180	52°18.9'	2341	77°21.0'	2232	62°49.4'	2511	78°15.3'	2318
9	32°26.9'	2175	51°43.9'	2338	76°45.1'	2227	63°23.0'	2502	77°40.1'	2313
10	31°50.5'	2170	51°08.9'	2336	76°09.2'	2222	63°56.8'	2493	77°04.9'	2309
11	31°14.1'	2164	50°33.8'	2334	75°33.2'	2217	64°30.5'	2485	76°29.7'	2304
12	30°37.7'	2159	49°58.8'	2331	74°57.2'	2212	65°04.4'	2476	75°54.4'	2300
13	30°01.2'	2154	49°23.7'	2330	74°21.1'	2207	65°38.3'	2468	75°19.0'	2295
14	29°24.7'	2149	48°48.6'	2328	73°45.0'	2202	66°12.3'	2460	74°43.7'	2291
15	28°48.1'	2144	48°13.5'	2326	73°08.9'	2198	66°46.4'	2452	74°08.3'	2287
16	28°11.5'	2139	47°38.4'	2325	72°32.7'	2193	67°20.5'	2445	73°32.8'	2283
17	27°34.8'	2134	47°03.3'	2324	71°56.5'	2189	67°54.7'	2437	72°57.4'	2279
18	26°58.1'	2130	46°28.1'	2323	71°20.3'	2184	68°28.9'	2429	72°21.9'	2275
19	26°21.3'	2125	45°53.0'	2322	70°44.0'	2180	69°03.2'	2422	71°46.3'	2271
20	25°44.6'	2120	45°17.8'	2322	70°07.7'	2175	69°37.5'	2415	71°10.8'	2268
21	25°07.7'	2116	44°42.7'	2322	69°31.3'	2171	70°11.9'	2408	70°35.2'	2264
22	24°30.9'	2111	44°07.5'	2322	68°54.9'	2167	70°46.4'	2401	69°59.5'	2261
23	23°54.0'	2107	43°32.4'	2322	68°18.5'	2163	71°20.9'	2395	69°23.9'	2257

Sat Dec 2, 2017 UTC

UTC	−Aldebaran		−Betelgeuse		−Pollux		−Procyon		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	23°17.0'	2102	42°57.2'	2322	67°42.0'	2159	68°48.2'	2254	71°55.5'	2388
1	22°40.1'	2098	42°22.1'	2323	67°05.5'	2155	68°12.5'	2251	72°30.1'	2382
2	22°03.0'	2094	41°46.9'	2325	66°29.0'	2151	67°36.8'	2248	73°04.8'	2375
3	21°26.0'	2090	41°11.8'	2326	65°52.4'	2148	67°01.0'	2245	73°39.5'	2369
4	20°48.9'	2086	40°36.7'	2328	65°15.8'	2144	66°25.2'	2243	74°14.3'	2363
5	20°11.8'	2082	40°01.6'	2330	64°39.2'	2140	65°49.4'	2240	74°49.1'	2357
6	19°34.7'	2078	39°26.5'	2333	64°02.6'	2137	65°13.6'	2238	75°24.0'	2352
7	18°57.5'	2074	38°51.4'	2336	63°25.9'	2134	64°37.8'	2235	75°58.9'	2346
8	18°20.2'	2070	38°16.4'	2339	62°49.2'	2130	64°01.9'	2233	76°33.8'	2341
9	17°43.0'	2067	37°41.4'	2343	62°12.4'	2127	63°26.0'	2231	77°08.8'	2335
10	17°05.7'	2063	37°06.4'	2348	61°35.7'	2124	62°50.1'	2229	77°43.9'	2330
11	16°28.4'	2060	36°31.4'	2353	60°58.9'	2121	62°14.2'	2227	78°19.0'	2325
12	15°51.1'	2057	35°56.5'	2358	60°22.0'	2118	61°38.3'	2226	78°54.1'	2320
13	15°13.7'	2054	35°21.7'	2364	59°45.2'	2115	61°02.4'	2224	79°29.3'	2316
14	14°36.3'	2051	34°46.9'	2371	59°08.3'	2113	60°26.4'	2223	80°04.5'	2311
15	13°58.9'	2048	34°12.1'	2378	58°31.5'	2110	59°50.4'	2222	80°39.7'	2307
16	13°21.5'	2045	33°37.4'	2386	57°54.5'	2108	59°14.5'	2221	81°15.0'	2302
17	12°44.0'	2043	33°02.8'	2395	57°17.6'	2106	58°38.5'	2220	81°50.3'	2298
18	12°06.5'	2041	32°28.2'	2404	56°40.7'	2103	58°02.5'	2219	82°25.6'	2294
19	11°29.0'	2039	31°53.7'	2414	56°03.7'	2101	57°26.5'	2219	83°01.0'	2290
20	10°51.5'	2037	31°19.3'	2425	55°26.7'	2099	56°50.5'	2219	83°36.4'	2287
21	10°13.9'	2036	30°45.0'	2438	54°49.7'	2098	56°14.5'	2218	84°11.9'	2283
22	9°36.4'	2035	30°10.7'	2451	54°12.7'	2096	55°38.5'	2219	84°47.3'	2280
23	8°58.8'	2034	29°36.6'	2465	53°35.7'	2094	55°02.5'	2219	85°22.8'	2276

Sun Dec 3, 2017 UTC

UTC	−Aldebaran		−Pollux		−Betelgeuse		−Procyon		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	8°21.3′	2035	52°58.6′	2093	29°02.6′	2480	54°26.5′	2219	85°58.3′	2273
1	7°43.7′	2036	52°21.6′	2091	28°28.7′	2497	53°50.5′	2220	86°33.9′	2270
2	7°06.2′	2038	51°44.5′	2090	27°54.9′	2515	53°14.5′	2221	87°09.5′	2267
3	6°28.7′	2043	51°07.4′	2089	27°21.3′	2535	52°38.6′	2222	87°45.1′	2265
4	5°51.2′	2049	50°30.3′	2088	26°47.8′	2556	52°02.6′	2223	88°20.7′	2262
5	5°13.7′	2060	49°53.2′	2088	26°14.5′	2579	51°26.6′	2225	88°56.3′	2260
6	4°36.4′	2076	49°16.1′	2087	25°41.4′	2604	50°50.7′	2227	89°32.0′	2257
7	3°59.2′	2104	48°39.0′	2087	25°08.5′	2631	50°14.7′	2229	90°07.7′	2255
8	3°22.2′	2151	48°01.9′	2086	24°35.7′	2661	49°38.8′	2231	90°43.4′	2253
9	2°45.7′	2243	47°24.8′	2086	24°03.2′	2693	49°02.9′	2234	91°19.1′	2251
10	–	–	46°47.7′	2086	23°30.9′	2728	48°27.1′	2237	91°54.8′	2249
11	–	–	46°10.6′	2087	22°58.9′	2765	47°51.2′	2240	92°30.6′	2248
12	–	–	45°33.5′	2087	22°27.2′	2807	47°15.4′	2243	93°06.3′	2246
13	–	–	44°56.4′	2088	21°55.7′	2852	46°39.6′	2247	93°42.1′	2245
14	–	–	44°19.3′	2088	21°24.6′	2901	46°03.8′	2251	94°17.9′	2244
15	–	–	43°42.2′	2089	20°53.9′	2955	45°28.1′	2256	94°53.6′	2243
16	–	–	43°05.1′	2091	20°23.5′	3013	44°52.4′	2261	95°29.4′	2242
17	–	–	42°28.0′	2092	19°53.5′	3078	44°16.8′	2266	96°05.3′	2241
18	3°09.7′	2099	41°50.9′	2094	19°24.0′	3149	43°41.2′	2271	96°41.1′	2241
19	3°46.7′	2063	41°13.9′	2095	18°54.9′	3227	43°05.6′	2277	97°16.9′	2240
20	4°24.0′	2040	40°36.9′	2098	18°26.4′	3313	42°30.1′	2284	97°52.7′	2240
21	5°01.5′	2025	39°59.8′	2100	17°58.4′	3409	41°54.6′	2290	98°28.5′	2240
22	5°39.2′	2014	39°22.9′	2102	17°31.0′	3514	41°19.2′	2298	99°04.3′	2240
23	6°16.9′	2006	38°45.9′	2105	17°04.3′	3632	40°43.9′	2305	99°40.2′	2240

Mon Dec 4, 2017 UTC

UTC	+Aldebaran		−Pollux		−Procyon		−Regulus		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	6°54.7′	2000	38°08.9′	2108	40°08.6′	2314	73°16.2′	1973	100°16.0′	2241
1	7°32.6′	1995	37°32.0′	2112	39°33.3′	2322	72°38.1′	1972	100°51.8′	2241
2	8°10.5′	1991	36°55.1′	2115	38°58.2′	2332	71°60.0′	1972	101°27.6′	2242
3	8°48.4′	1988	36°18.2′	2119	38°23.1′	2341	71°21.9′	1971	102°03.4′	2243
4	9°26.4′	1986	35°41.4′	2124	37°48.1′	2352	70°43.8′	1971	102°39.2′	2244
5	10°04.4′	1984	35°04.6′	2128	37°13.2′	2363	70°05.7′	1971	103°15.0′	2245
6	10°42.4′	1982	34°27.9′	2133	36°38.4′	2375	69°27.6′	1970	103°50.8′	2247
7	11°20.4′	1981	33°51.1′	2139	36°03.7′	2387	68°49.4′	1970	104°26.5′	2248
8	11°58.4′	1980	33°14.5′	2145	35°29.0′	2401	68°11.3′	1970	105°02.3′	2250
9	12°36.4′	1979	32°37.9′	2151	34°54.5′	2415	67°33.2′	1971	105°38.0′	2252
10	13°14.5′	1978	32°01.3′	2158	34°20.1′	2430	66°55.1′	1971	106°13.8′	2254
11	13°52.5′	1978	31°24.8′	2165	33°45.8′	2445	66°17.0′	1971	106°49.5′	2256
12	14°30.6′	1978	30°48.3′	2173	33°11.6′	2462	65°38.9′	1972	107°25.2′	2258
13	15°08.6′	1978	30°12.0′	2181	32°37.6′	2480	65°00.8′	1972	108°00.8′	2261
14	15°46.7′	1978	29°35.6′	2190	32°03.7′	2499	64°22.7′	1973	108°36.5′	2263
15	16°24.7′	1978	28°59.4′	2199	31°30.0′	2519	63°44.6′	1973	109°12.1′	2266
16	17°02.8′	1978	28°23.3′	2210	30°56.4′	2541	63°06.5′	1974	109°47.7′	2269
17	17°40.8′	1979	27°47.2′	2220	30°22.9′	2563	62°28.4′	1975	110°23.3′	2273
18	18°18.9′	1980	27°11.2′	2232	29°49.7′	2588	61°50.3′	1976	110°58.9′	2276
19	18°56.9′	1980	26°35.3′	2245	29°16.6′	2613	61°12.2′	1977	111°34.4′	2280
20	19°34.9′	1981	25°59.5′	2258	28°43.8′	2641	60°34.2′	1978	112°09.9′	2283
21	20°13.0′	1982	25°23.9′	2273	28°11.1′	2670	59°56.1′	1979	112°45.4′	2288
22	20°51.0′	1983	24°48.3′	2289	27°38.7′	2701	59°18.1′	1980	113°20.8′	2292
23	21°29.0′	1984	24°12.9′	2306	27°06.4′	2735	58°40.1′	1982	113°56.2′	2296

Tue Dec 5, 2017 UTC

UTC	+Aldebaran		-Pollux		-Regulus		-Procyon		-Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	22°07.0'	1986	23°37.6'	2324	58°02.0'	1983	26°34.5'	2771	111°44.3'	2017
1	22°45.0'	1987	23°02.5'	2344	57°24.0'	1985	26°02.8'	2809	111°06.6'	2018
2	23°22.9'	1988	22°27.5'	2365	56°46.0'	1986	25°31.3'	2850	110°28.9'	2020
3	24°00.9'	1990	21°52.7'	2388	56°08.1'	1988	25°00.2'	2894	109°51.2'	2021
4	24°38.8'	1992	21°18.0'	2413	55°30.1'	1990	24°29.4'	2941	109°13.5'	2023
5	25°16.8'	1993	20°43.6'	2440	54°52.2'	1991	23°58.9'	2991	108°35.9'	2024
6	25°54.7'	1995	20°09.4'	2470	54°14.2'	1993	23°28.8'	3046	107°58.2'	2026
7	26°32.6'	1997	19°35.4'	2503	53°36.3'	1995	22°59.0'	3105	107°20.6'	2028
8	27°10.5'	1999	19°01.7'	2539	52°58.4'	1998	22°29.7'	3168	106°43.0'	2030
9	27°48.3'	2001	18°28.3'	2578	52°20.5'	2000	22°00.8'	3237	106°05.4'	2032
10	28°26.2'	2003	17°55.1'	2621	51°42.7'	2002	21°32.3'	3312	105°27.8'	2034
11	29°04.0'	2005	17°22.3'	2668	51°04.8'	2004	21°04.3'	3392	104°50.2'	2036
12	29°41.8'	2008	16°49.9'	2721	50°27.0'	2007	20°36.8'	3480	104°12.7'	2038
13	30°19.6'	2010	16°17.8'	2780	49°49.2'	2009	20°09.9'	3575	103°35.1'	2040
14	30°57.4'	2013	15°46.2'	2845	49°11.4'	2012	19°43.5'	3679	102°57.6'	2043
15	31°35.1'	2015	15°15.0'	2918	48°33.7'	2014	19°17.8'	3793	102°20.1'	2045
16	32°12.9'	2018	14°44.4'	3000	47°55.9'	2017	18°52.8'	3917	101°42.7'	2048
17	32°50.6'	2021	14°14.3'	3093	47°18.2'	2020	18°28.4'	4054	101°05.2'	2050
18	33°28.2'	2023	13°44.9'	3197	46°40.6'	2023	–	–	100°27.8'	2053
19	34°05.9'	2026	13°16.1'	3316	46°02.9'	2026	–	–	99°50.4'	2056
20	34°43.5'	2029	–	–	45°25.3'	2029	–	–	99°13.0'	2059
21	35°21.1'	2032	–	–	44°47.6'	2032	–	–	98°35.7'	2062
22	35°58.7'	2035	–	–	44°10.1'	2035	–	–	97°58.4'	2065
23	36°36.3'	2039	–	–	43°32.5'	2038	–	–	97°21.1'	2068

Wed Dec 6, 2017 UTC

UTC	+Aldebaran		-Regulus		+Betelgeuse		-Spica		-Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	37°13.8'	2042	42°55.0'	2041	22°28.3'	2817	96°43.8'	2071	100°39.7'	2236
1	37°51.3'	2045	42°17.5'	2045	22°59.6'	2781	96°06.6'	2074	100°03.8'	2240
2	38°28.7'	2048	41°40.0'	2048	23°31.3'	2748	95°29.3'	2078	99°28.0'	2243
3	39°06.2'	2052	41°02.6'	2052	24°03.1'	2718	94°52.2'	2081	98°52.2'	2247
4	39°43.6'	2055	40°25.2'	2055	24°35.2'	2691	94°15.0'	2085	98°16.4'	2251
5	40°21.0'	2059	39°47.8'	2059	25°07.5'	2665	93°37.9'	2088	97°40.7'	2254
6	40°58.3'	2063	39°10.4'	2062	25°40.0'	2642	93°00.8'	2092	97°05.0'	2258
7	41°35.6'	2066	38°33.1'	2066	26°12.6'	2621	92°23.7'	2096	96°29.3'	2262
8	42°12.9'	2070	37°55.8'	2070	26°45.5'	2601	91°46.7'	2099	95°53.7'	2266
9	42°50.2'	2074	37°18.6'	2074	27°18.4'	2583	91°09.7'	2103	95°18.1'	2270
10	43°27.4'	2078	36°41.4'	2078	27°51.5'	2566	90°32.7'	2107	94°42.5'	2274
11	44°04.6'	2082	36°04.2'	2082	28°24.8'	2551	89°55.8'	2111	94°07.0'	2278
12	44°41.7'	2086	35°27.0'	2086	28°58.1'	2537	89°18.9'	2115	93°31.5'	2282
13	45°18.8'	2090	34°49.9'	2090	29°31.6'	2524	88°42.0'	2119	92°56.0'	2287
14	45°55.9'	2094	34°12.8'	2094	30°05.1'	2512	88°05.2'	2123	92°20.5'	2291
15	46°33.0'	2098	33°35.8'	2098	30°38.8'	2501	87°28.4'	2127	91°45.1'	2295
16	47°10.0'	2102	32°58.8'	2103	31°12.5'	2492	86°51.6'	2132	91°09.8'	2300
17	47°46.9'	2107	32°21.8'	2107	31°46.3'	2483	86°14.9'	2136	90°34.4'	2304
18	48°23.9'	2111	31°44.9'	2111	32°20.2'	2474	85°38.2'	2141	89°59.1'	2309
19	49°00.8'	2115	31°08.0'	2116	32°54.1'	2467	85°01.5'	2145	89°23.9'	2313
20	49°37.7'	2120	30°31.1'	2120	33°28.1'	2460	84°24.9'	2149	88°48.7'	2318
21	50°14.5'	2124	29°54.3'	2125	34°02.2'	2454	83°48.4'	2154	88°13.5'	2323
22	50°51.3'	2129	29°17.5'	2129	34°36.3'	2448	83°11.8'	2159	87°38.3'	2328
23	51°28.0'	2133	28°40.8'	2134	35°10.4'	2443	82°35.3'	2163	87°03.2'	2332

Thu Dec 7, 2017 UTC

UTC	−Regulus		+Aldebaran		+Betelgeuse		−Spica		−Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	28°04.1′	2139	52°04.7′	2138	35°44.6′	2439	81°58.9′	2168	86°28.2′	2337
1	27°27.4′	2144	52°41.4′	2143	36°18.8′	2435	81°22.4′	2173	85°53.1′	2342
2	26°50.8′	2148	53°18.0′	2147	36°53.1′	2431	80°46.1′	2178	85°18.1′	2347
3	26°14.2′	2153	53°54.6′	2152	37°27.3′	2428	80°09.7′	2183	84°43.2′	2352
4	25°37.6′	2158	54°31.2′	2157	38°01.6′	2426	79°33.4′	2188	84°08.3′	2357
5	25°01.1′	2163	55°07.7′	2162	38°36.0′	2423	78°57.2′	2193	83°33.4′	2362
6	24°24.7′	2168	55°44.2′	2167	39°10.3′	2422	78°20.9′	2198	82°58.6′	2367
7	23°48.2′	2173	56°20.6′	2172	39°44.7′	2420	77°44.8′	2203	82°23.8′	2373
8	23°11.9′	2178	56°57.0′	2176	40°19.0′	2419	77°08.6′	2208	81°49.1′	2378
9	22°35.5′	2183	57°33.4′	2181	40°53.4′	2418	76°32.5′	2213	81°14.4′	2383
10	21°59.2′	2188	58°09.7′	2186	41°27.8′	2417	75°56.5′	2218	80°39.7′	2388
11	21°23.0′	2194	58°45.9′	2192	42°02.2′	2417	75°20.5′	2223	80°05.1′	2394
12	20°46.8′	2199	59°22.2′	2197	42°36.6′	2417	74°44.5′	2229	79°30.5′	2399
13	20°10.6′	2204	59°58.3′	2202	43°11.0′	2417	74°08.6′	2234	78°56.0′	2405
14	19°34.5′	2209	60°34.5′	2207	43°45.3′	2418	73°32.8′	2239	78°21.5′	2410
15	18°58.4′	2215	61°10.6′	2212	44°19.7′	2418	72°56.9′	2245	77°47.0′	2416
16	18°22.4′	2220	61°46.6′	2217	44°54.1′	2419	72°21.1′	2250	77°12.6′	2421
17	17°46.4′	2226	62°22.6′	2223	45°28.5′	2420	71°45.4′	2256	76°38.3′	2427
18	17°10.5′	2231	62°58.6′	2228	46°02.9′	2422	71°09.7′	2261	76°04.0′	2432
19	16°34.6′	2237	63°34.5′	2233	46°37.2′	2423	70°34.1′	2267	75°29.7′	2438
20	15°58.7′	2242	64°10.4′	2239	47°11.5′	2425	69°58.5′	2272	74°55.5′	2443
21	15°22.9′	2248	64°46.2′	2244	47°45.9′	2427	69°22.9′	2278	74°21.3′	2449
22	14°47.2′	2254	65°22.0′	2249	48°20.2′	2429	68°47.4′	2284	73°47.1′	2455
23	14°11.4′	2260	65°57.8′	2255	48°54.5′	2431	68°11.9′	2289	73°13.0′	2461

Fri Dec 8, 2017 UTC

UTC	−Sun		−Regulus		+Pollux		+Betelgeuse		+Aldebaran	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	119°35.2′	2599	13°35.8′	2266	23°56.0′	2576	49°28.8′	2433	66°33.5′	2260
1	119°02.2′	2605	13°00.2′	2272	24°29.2′	2567	50°03.0′	2436	67°09.1′	2266
2	118°29.3′	2610	12°24.6′	2278	25°02.4′	2560	50°37.3′	2438	67°44.7′	2271
3	117°56.4′	2616	11°49.1′	2284	25°35.7′	2553	51°11.5′	2441	68°20.3′	2276
4	117°23.5′	2622	11°13.6′	2291	26°09.0′	2547	51°45.7′	2444	68°55.8′	2282
5	116°50.7′	2627	10°38.2′	2297	26°42.4′	2542	52°19.9′	2447	69°31.3′	2287
6	116°18.0′	2633	10°02.9′	2304	27°15.8′	2538	52°54.0′	2450	70°06.7′	2293
7	115°45.2′	2639	9°27.6′	2311	27°49.3′	2534	53°28.2′	2453	70°42.1′	2299
8	115°12.6′	2645	8°52.3′	2318	28°22.7′	2531	54°02.3′	2456	71°17.5′	2304
9	114°39.9′	2651	8°17.2′	2326	28°56.3′	2528	54°36.4′	2460	71°52.8′	2310
10	114°07.3′	2657	7°42.0′	2334	29°29.8′	2526	55°10.4′	2463	72°28.0′	2315
11	113°34.8′	2662	7°07.0′	2344	30°03.3′	2524	55°44.4′	2467	73°03.2′	2321
12	113°02.3′	2668	6°32.0′	2354	30°36.9′	2523	56°18.4′	2470	73°38.4′	2326
13	112°29.8′	2674	5°57.1′	2365	31°10.4′	2522	56°52.4′	2474	74°13.5′	2332
14	111°57.4′	2680	5°22.3′	2379	31°44.0′	2521	57°26.4′	2478	74°48.6′	2338
15	111°25.1′	2686	4°47.6′	2396	32°17.6′	2521	58°00.3′	2482	75°23.6′	2343
16	110°52.7′	2692	4°13.1′	2419	32°51.2′	2521	58°34.2′	2486	75°58.6′	2349
17	110°20.5′	2698	3°38.7′	2451	33°24.7′	2522	59°08.0′	2490	76°33.5′	2355
18	109°48.2′	2704	3°04.6′	2502	33°58.3′	2522	59°41.8′	2494	77°08.4′	2360
19	109°16.0′	2710	2°30.8′	2593	34°31.9′	2523	60°15.6′	2498	77°43.2′	2366
20	108°43.9′	2716	–	–	35°05.4′	2524	60°49.4′	2502	78°18.0′	2372
21	108°11.8′	2722	–	–	35°39.0′	2526	61°23.1′	2506	78°52.8′	2377
22	107°39.7′	2728	–	–	36°12.5′	2527	61°56.8′	2510	79°27.5′	2383
23	107°07.7′	2734	–	–	36°46.1′	2529	62°30.5′	2515	80°02.2′	2389

Sat Dec 9, 2017 UTC

UTC	−Sun		+Pollux		−Spica		+Procyon		+Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	106°35.7′	2740	37°19.6′	2531	53°40.9′	2441	38°08.1′	2759	63°04.1′	2519
1	106°03.8′	2746	37°53.1′	2533	53°06.7′	2447	38°39.9′	2756	63°37.7′	2524
2	105°31.9′	2752	38°26.6′	2536	52°32.6′	2454	39°11.7′	2753	64°11.2′	2528
3	105°00.1′	2758	39°00.0′	2538	51°58.5′	2460	39°43.6′	2750	64°44.8′	2532
4	104°28.3′	2764	39°33.5′	2541	51°24.4′	2467	40°15.4′	2748	65°18.2′	2537
5	103°56.5′	2770	40°06.9′	2544	50°50.4′	2473	40°47.3′	2746	65°51.7′	2542
6	103°24.8′	2776	40°40.3′	2546	50°16.5′	2480	41°19.2′	2744	66°25.1′	2546
7	102°53.2′	2782	41°13.7′	2549	49°42.6′	2486	41°51.0′	2743	66°58.5′	2551
8	102°21.6′	2788	41°47.0′	2552	49°08.7′	2493	42°23.0′	2742	67°31.8′	2555
9	101°50.0′	2794	42°20.4′	2556	48°34.9′	2499	42°54.9′	2741	68°05.2′	2560
10	101°18.5′	2800	42°53.7′	2559	48°01.2′	2506	43°26.8′	2741	68°38.4′	2565
11	100°47.0′	2806	43°27.0′	2562	47°27.5′	2513	43°58.7′	2740	69°11.7′	2570
12	100°15.5′	2812	44°00.2′	2566	46°53.8′	2519	44°30.6′	2740	69°44.9′	2574
13	99°44.1′	2818	44°33.5′	2569	46°20.2′	2526	45°02.6′	2740	70°18.0′	2579
14	99°12.8′	2824	45°06.7′	2573	45°46.7′	2533	45°34.5′	2741	70°51.2′	2584
15	98°41.5′	2830	45°39.9′	2576	45°13.2′	2539	46°06.4′	2741	71°24.3′	2589
16	98°10.2′	2836	46°13.0′	2580	44°39.8′	2546	46°38.3′	2742	71°57.3′	2594
17	97°39.0′	2842	46°46.1′	2584	44°06.4′	2553	47°10.2′	2743	72°30.4′	2599
18	97°07.8′	2848	47°19.2′	2588	43°33.1′	2560	47°42.1′	2744	73°03.3′	2603
19	96°36.6′	2854	47°52.3′	2592	42°59.8′	2567	48°14.0′	2745	73°36.3′	2608
20	96°05.5′	2860	48°25.3′	2596	42°26.6′	2574	48°45.9′	2746	74°09.2′	2613
21	95°34.5′	2866	48°58.3′	2600	41°53.4′	2581	49°17.8′	2748	74°42.1′	2618
22	95°03.5′	2872	49°31.3′	2604	41°20.3′	2588	49°49.7′	2749	75°14.9′	2623
23	94°32.5′	2877	50°04.3′	2608	40°47.2′	2595	50°21.5′	2751	75°47.7′	2628

Sun Dec 10, 2017 UTC

UTC	−Sun		+Regulus		−Spica		+Pollux		−Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	94°01.6′	2883	14°07.3′	2533	40°14.2′	2602	50°37.2′	2612	46°18.6′	2756
1	93°30.7′	2889	14°40.7′	2538	39°41.2′	2609	51°10.1′	2616	45°46.8′	2762
2	92°59.8′	2895	15°14.2′	2543	39°08.3′	2616	51°42.9′	2620	45°15.1′	2768
3	92°29.0′	2901	15°47.6′	2548	38°35.5′	2624	52°15.7′	2624	44°43.4′	2774
4	91°58.2′	2907	16°21.0′	2553	38°02.7′	2631	52°48.5′	2628	44°11.7′	2780
5	91°27.5′	2912	16°54.3′	2558	37°30.0′	2639	53°21.3′	2633	43°40.0′	2786
6	90°56.8′	2918	17°27.6′	2564	36°57.3′	2646	53°54.0′	2637	43°08.5′	2792
7	90°26.2′	2924	18°00.8′	2569	36°24.7′	2654	54°26.7′	2641	42°36.9′	2798
8	89°55.6′	2930	18°34.0′	2574	35°52.1′	2661	54°59.4′	2645	42°05.4′	2804
9	89°25.0′	2935	19°07.2′	2579	35°19.6′	2669	55°32.0′	2650	41°34.0′	2810
10	88°54.5′	2941	19°40.3′	2584	34°47.1′	2677	56°04.6′	2654	41°02.5′	2816
11	88°24.0′	2947	20°13.4′	2589	34°14.7′	2685	56°37.1′	2658	40°31.2′	2822
12	87°53.6′	2952	20°46.5′	2594	33°42.4′	2693	57°09.7′	2663	39°59.9′	2829
13	87°23.2′	2958	21°19.5′	2599	33°10.1′	2701	57°42.2′	2667	39°28.6′	2835
14	86°52.8′	2963	21°52.5′	2604	32°37.9′	2710	58°14.7′	2671	38°57.3′	2841
15	86°22.5′	2969	22°25.4′	2609	32°05.8′	2718	58°47.1′	2675	38°26.1′	2847
16	85°52.2′	2974	22°58.3′	2614	31°33.7′	2727	59°19.5′	2680	37°55.0′	2853
17	85°21.9′	2980	23°31.2′	2619	31°01.6′	2735	59°51.9′	2684	37°23.9′	2859
18	84°51.7′	2985	24°04.0′	2624	30°29.7′	2744	60°24.2′	2688	36°52.8′	2865
19	84°21.6′	2991	24°36.8′	2629	29°57.8′	2753	60°56.5′	2693	36°21.8′	2871
20	83°51.4′	2996	25°09.6′	2634	29°26.0′	2763	61°28.8′	2697	35°50.8′	2877
21	83°21.3′	3002	25°42.3′	2639	28°54.2′	2772	62°01.0′	2701	35°19.9′	2883
22	82°51.3′	3007	26°15.0′	2644	28°22.5′	2782	62°33.2′	2706	34°49.0′	2889
23	82°21.2′	3012	26°47.6′	2649	27°50.9′	2792	63°05.4′	2710	34°18.1′	2895

Mon Dec 11, 2017 UTC

UTC	−Sun		+Regulus		−Spica		−Mars		−Jupiter	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	81°51.3′	3018	27°20.2′	2654	27°19.3′	2802	33°47.3′	2901	45°48.9′	2740
1	81°21.3′	3023	27°52.8′	2658	26°47.9′	2813	33°16.5′	2907	45°17.0′	2745
2	80°51.4′	3028	28°25.3′	2663	26°16.5′	2824	32°45.8′	2913	44°45.1′	2750
3	80°21.5′	3033	28°57.8′	2668	25°45.2′	2835	32°15.1′	2919	44°13.2′	2756
4	79°51.7′	3039	29°30.3′	2673	25°13.9′	2847	31°44.5′	2925	43°41.4′	2761
5	79°21.9′	3044	30°02.7′	2677	24°42.8′	2859	31°13.9′	2931	43°09.7′	2766
6	78°52.1′	3049	30°35.1′	2682	24°11.7′	2872	30°43.3′	2937	42°37.9′	2771
7	78°22.4′	3054	31°07.4′	2687	23°40.7′	2885	30°12.8′	2944	42°06.2′	2777
8	77°52.7′	3059	31°39.8′	2691	23°09.9′	2898	29°42.4′	2950	41°34.6′	2782
9	77°23.0′	3064	32°12.0′	2696	22°39.1′	2913	29°12.0′	2956	41°02.9′	2787
10	76°53.4′	3069	32°44.3′	2701	22°08.4′	2927	28°41.6′	2962	40°31.4′	2792
11	76°23.8′	3074	33°16.5′	2705	21°37.8′	2943	28°11.2′	2969	39°59.8′	2798
12	75°54.2′	3079	33°48.7′	2710	21°07.4′	2959	27°41.0′	2975	39°28.3′	2803
13	75°24.7′	3084	34°20.9′	2714	20°37.0′	2977	27°10.7′	2982	38°56.8′	2808
14	74°55.2′	3089	34°53.0′	2719	20°06.8′	2995	26°40.5′	2988	38°25.4′	2813
15	74°25.7′	3094	35°25.1′	2723	19°36.7′	3014	26°10.4′	2995	37°54.0′	2818
16	73°56.3′	3099	35°57.1′	2727	19°06.7′	3035	25°40.3′	3002	37°22.7′	2824
17	73°26.9′	3104	36°29.1′	2732	18°36.9′	3057	25°10.2′	3008	36°51.4′	2829
18	72°57.6′	3108	37°01.1′	2736	18°07.2′	3080	24°40.2′	3015	36°20.1′	2834
19	72°28.2′	3113	37°33.1′	2740	17°37.7′	3106	24°10.2′	3022	35°48.8′	2839
20	71°58.9′	3118	38°05.0′	2745	17°08.3′	3133	23°40.3′	3029	35°17.6′	2844
21	71°29.7′	3123	38°36.9′	2749	16°39.2′	3162	23°10.4′	3037	34°46.5′	2850
22	71°00.4′	3127	39°08.7′	2753	16°10.2′	3193	22°40.6′	3044	34°15.3′	2855
23	70°31.2′	3132	39°40.6′	2757	15°41.4′	3228	22°10.8′	3052	33°44.2′	2860

Tue Dec 12, 2017 UTC

UTC	−Sun		+Regulus		−Jupiter		−Mars		−Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	70°02.1′	3136	40°12.4′	2761	33°13.2′	2865	21°41.1′	3059	15°12.9′	3265
1	69°32.9′	3141	40°44.1′	2766	32°42.2′	2871	21°11.5′	3067	14°44.6′	3306
2	69°03.8′	3146	41°15.9′	2770	32°11.2′	2876	20°41.9′	3076	14°16.6′	3351
3	68°34.7′	3150	41°47.6′	2774	31°40.2′	2881	20°12.3′	3084	13°48.8′	3401
4	68°05.7′	3155	42°19.3′	2778	31°09.3′	2886	19°42.8′	3093	13°21.4′	3456
5	67°36.7′	3159	42°50.9′	2782	30°38.5′	2892	19°13.4′	3102	12°54.3′	3517
6	67°07.7′	3163	43°22.5′	2786	30°07.6′	2897	18°44.0′	3111	12°27.6′	3585
7	66°38.7′	3168	43°54.1′	2790	29°36.8′	2903	18°14.7′	3121	12°01.4′	3661
8	66°09.8′	3172	44°25.7′	2794	29°06.1′	2908	17°45.4′	3132	11°35.5′	3747
9	65°40.9′	3176	44°57.2′	2797	28°35.4′	2914	17°16.3′	3142	11°10.2′	3845
10	65°12.0′	3181	45°28.7′	2801	28°04.7′	2919	16°47.2′	3154	10°45.5′	3956
11	64°43.1′	3185	46°00.2′	2805	27°34.1′	2925	16°18.1′	3166	10°21.3′	4084
12	64°14.3′	3189	46°31.7′	2809	27°03.5′	2931	15°49.2′	3179	9°57.9′	4230
13	63°45.5′	3193	47°03.1′	2813	26°32.9′	2936	15°20.3′	3192	–	–
14	63°16.8′	3197	47°34.5′	2816	26°02.4′	2942	14°51.6′	3207	–	–
15	62°48.0′	3201	48°05.9′	2820	25°31.9′	2948	14°22.9′	3222	–	–
16	62°19.3′	3206	48°37.2′	2824	25°01.5′	2954	13°54.3′	3239	–	–
17	61°50.6′	3210	49°08.5′	2827	24°31.1′	2960	13°25.9′	3257	–	–
18	61°22.0′	3214	49°39.8′	2831	24°00.7′	2967	12°57.5′	3277	–	–
19	60°53.4′	3218	50°11.1′	2834	23°30.4′	2973	12°29.3′	3299	–	–
20	60°24.8′	3222	50°42.3′	2838	23°00.2′	2980	12°01.3′	3323	–	–
21	59°56.2′	3225	51°13.5′	2841	22°30.0′	2987	11°33.3′	3350	–	–
22	59°27.6′	3229	51°44.7′	2845	21°59.8′	2994	11°05.6′	3380	–	–
23	58°59.1′	3233	52°15.9′	2848	21°29.7′	3001	10°38.0′	3413	–	–

Wed Dec 13, 2017 UTC

UTC	−Sun		−Jupiter		−Mars		+Regulus		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	58°30.6′	3237	20°59.6′	3008	10°10.7′	3451	52°47.0′	2852	88°45.8′	2901
1	58°02.1′	3241	20°29.6′	3016	9°43.6′	3494	53°18.2′	2855	89°16.5′	2904
2	57°33.7′	3245	19°59.7′	3024	9°16.8′	3544	53°49.2′	2858	89°47.3′	2908
3	57°05.3′	3248	19°29.7′	3032	8°50.2′	3601	54°20.3′	2862	90°18.0′	2911
4	56°36.9′	3252	18°59.9′	3041	8°24.0′	3668	54°51.4′	2865	90°48.7′	2914
5	56°08.5′	3256	18°30.1′	3050	7°58.3′	3747	55°22.4′	2868	91°19.3′	2918
6	55°40.1′	3259	18°00.4′	3060	7°33.0′	3841	55°53.4′	2871	91°50.0′	2921
7	55°11.8′	3263	17°30.7′	3070	7°08.2′	3954	56°24.4′	2874	92°20.6′	2924
8	54°43.5′	3267	17°01.1′	3081	6°44.0′	4092	56°55.3′	2878	92°51.2′	2927
9	54°15.2′	3270	16°31.6′	3092	–	–	57°26.2′	2881	93°21.8′	2930
10	53°47.0′	3274	16°02.2′	3104	–	–	57°57.1′	2884	93°52.4′	2933
11	53°18.7′	3277	15°32.8′	3117	–	–	58°28.0′	2887	94°22.9′	2937
12	52°50.5′	3281	15°03.6′	3132	–	–	58°58.9′	2890	94°53.4′	2940
13	52°22.3′	3284	14°34.4′	3147	–	–	59°29.7′	2893	95°23.9′	2943
14	51°54.2′	3287	14°05.3′	3163	–	–	60°00.6′	2896	95°54.4′	2946
15	51°26.0′	3291	13°36.3′	3181	–	–	60°31.4′	2899	96°24.8′	2949
16	50°57.9′	3294	13°07.5′	3201	–	–	61°02.2′	2901	96°55.2′	2952
17	50°29.8′	3298	12°38.8′	3223	–	–	61°32.9′	2904	97°25.7′	2955
18	50°01.7′	3301	12°10.2′	3247	–	–	62°03.7′	2907	97°56.0′	2958
19	49°33.7′	3304	11°41.8′	3274	–	–	62°34.4′	2910	98°26.4′	2961
20	49°05.6′	3307	11°13.6′	3304	–	–	63°05.1′	2913	98°56.8′	2963
21	48°37.6′	3311	10°45.5′	3338	–	–	63°35.8′	2915	99°27.1′	2966
22	48°09.6′	3314	10°17.7′	3377	–	–	64°06.4′	2918	99°57.4′	2969
23	47°41.6′	3317	9°50.1′	3421	–	–	64°37.1′	2921	100°27.7′	2972

Thu Dec 14, 2017 UTC

UTC	−Sun		−Jupiter		+Spica		+Regulus		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	47°13.7′	3320	9°22.9′	3472	13°06.5′	3579	65°07.7′	2923	100°57.9′	2975
1	46°45.7′	3323	8°55.9′	3531	13°32.9′	3535	65°38.3′	2926	101°28.2′	2978
2	46°17.8′	3326	8°29.3′	3601	13°59.4′	3495	66°08.9′	2929	101°58.4′	2980
3	45°49.9′	3329	8°03.1′	3683	14°26.3′	3460	66°39.5′	2931	102°28.6′	2983
4	45°22.1′	3333	7°37.4′	3782	14°53.3′	3428	67°10.0′	2934	102°58.8′	2986
5	44°54.2′	3336	7°12.3′	3901	15°20.6′	3399	67°40.5′	2936	103°29.0′	2989
6	44°26.4′	3339	–	–	15°48.0′	3374	68°11.1′	2939	103°59.1′	2991
7	43°58.6′	3342	–	–	16°15.6′	3350	68°41.6′	2941	104°29.2′	2994
8	43°30.8′	3345	–	–	16°43.3′	3329	69°12.0′	2944	104°59.4′	2997
9	43°03.0′	3348	–	–	17°11.2′	3310	69°42.5′	2946	105°29.5′	2999
10	42°35.2′	3351	–	–	17°39.2′	3293	70°12.9′	2948	105°59.5′	3002
11	42°07.5′	3354	–	–	18°07.3′	3277	70°43.4′	2951	106°29.6′	3005
12	41°39.8′	3356	–	–	18°35.5′	3263	71°13.8′	2953	106°59.6′	3007
13	41°12.1′	3359	–	–	19°03.8′	3249	71°44.2′	2955	107°29.6′	3010
14	40°44.4′	3362	–	–	19°32.2′	3237	72°14.6′	2958	107°59.6′	3012
15	40°16.7′	3365	–	–	20°00.7′	3226	72°44.9′	2960	108°29.6′	3015
16	39°49.1′	3368	–	–	20°29.3′	3216	73°15.3′	2962	108°59.6′	3017
17	39°21.4′	3371	–	–	20°57.9′	3207	73°45.6′	2964	109°29.6′	3020
18	38°53.8′	3374	–	–	21°26.5′	3198	74°15.9′	2966	109°59.5′	3022
19	38°26.2′	3376	–	–	21°55.3′	3191	74°46.3′	2968	110°29.4′	3025
20	37°58.7′	3379	–	–	22°24.0′	3183	75°16.5′	2970	110°59.3′	3027
21	37°31.1′	3382	–	–	22°52.9′	3177	75°46.8′	2973	111°29.2′	3030
22	37°03.6′	3385	–	–	23°21.7′	3171	76°17.1′	2975	111°59.0′	3032
23	36°36.0′	3388	–	–	23°50.7′	3165	76°47.3′	2977	112°28.9′	3035

Fri Dec 15, 2017 UTC

UTC	+Spica		+Mars		+Regulus		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	24°19.6'	3160	14°24.2'	3378	77°17.6'	2979	112°58.7'	3037
1	24°48.6'	3155	14°51.8'	3370	77°47.8'	2981	113°28.5'	3040
2	25°17.6'	3150	15°19.4'	3362	78°18.0'	2982	113°58.3'	3042
3	25°46.7'	3146	15°47.0'	3356	78°48.2'	2984	114°28.1'	3044
4	26°15.7'	3143	16°14.7'	3350	79°18.4'	2986	114°57.9'	3047
5	26°44.8'	3139	16°42.5'	3345	79°48.5'	2988	115°27.6'	3049
6	27°14.0'	3136	17°10.3'	3341	80°18.7'	2990	115°57.4'	3051
7	27°43.1'	3133	17°38.1'	3336	80°48.8'	2992	116°27.1'	3054
8	28°12.3'	3130	18°05.9'	3333	81°19.0'	2994	116°56.8'	3056
9	28°41.4'	3128	18°33.7'	3329	81°49.1'	2995	117°26.5'	3059
10	29°10.6'	3125	19°01.6'	3327	82°19.2'	2997	117°56.1'	3061
11	29°39.9'	3123	19°29.5'	3324	82°49.3'	2999	118°25.8'	3063
12	30°09.1'	3121	19°57.4'	3322	83°19.3'	3001	118°55.4'	3066
13	30°38.3'	3119	20°25.4'	3320	83°49.4'	3002	119°25.0'	3068
14	31°07.6'	3118	20°53.3'	3318	84°19.5'	3004	119°54.7'	3070
15	31°36.9'	3116	21°21.2'	3316	84°49.5'	3005	120°24.2'	3072
16	32°06.1'	3115	21°49.2'	3315	85°19.5'	3007	120°53.8'	3075
17	32°35.4'	3113	22°17.2'	3313	85°49.6'	3009	121°23.4'	3077
18	33°04.7'	3112	22°45.1'	3312	86°19.6'	3010	121°52.9'	3079
19	33°34.0'	3111	23°13.1'	3311	86°49.6'	3012	122°22.4'	3082
20	34°03.3'	3110	23°41.1'	3311	87°19.6'	3013	122°52.0'	3084
21	34°32.7'	3109	24°09.1'	3310	87°49.5'	3015	123°21.5'	3086
22	35°02.0'	3108	24°37.1'	3309	88°19.5'	3016	123°50.9'	3089
23	35°31.3'	3108	25°05.1'	3309	88°49.5'	3018	124°20.4'	3091

Sat Dec 16, 2017 UTC

UTC	+Jupiter		+Spica		+Mars		-Antares		+Regulus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	15°51.8'	3235	36°00.6'	3107	25°33.1'	3308	14°13.3'	4270	89°19.4'	3019
1	16°20.3'	3228	36°30.0'	3106	26°01.1'	3308	13°50.9'	4365	89°49.4'	3021
2	16°48.8'	3222	36°59.3'	3106	26°29.2'	3308	13°28.9'	4469	90°19.3'	3022
3	17°17.4'	3217	37°28.7'	3105	26°57.2'	3307	13°07.5'	4585	90°49.2'	3023
4	17°46.0'	3212	37°58.0'	3105	27°25.2'	3307	12°46.6'	4714	91°19.1'	3025
5	18°14.6'	3207	38°27.4'	3104	27°53.2'	3307	12°26.3'	4858	91°49.0'	3026
6	18°43.3'	3203	38°56.7'	3104	28°21.2'	3307	12°06.7'	5019	92°18.9'	3027
7	19°12.0'	3199	39°26.1'	3104	28°49.2'	3307	11°47.8'	5200	92°48.8'	3029
8	19°40.7'	3196	39°55.5'	3103	29°17.3'	3307	–	–	93°18.7'	3030
9	20°09.5'	3192	40°24.8'	3103	29°45.3'	3307	–	–	93°48.5'	3031
10	20°38.2'	3190	40°54.2'	3103	30°13.3'	3308	–	–	94°18.4'	3032
11	21°07.0'	3187	41°23.6'	3103	30°41.3'	3308	–	–	94°48.2'	3034
12	21°35.8'	3185	41°52.9'	3103	31°09.3'	3308	–	–	95°18.1'	3035
13	22°04.6'	3183	42°22.3'	3103	31°37.3'	3308	–	–	95°47.9'	3036
14	22°33.5'	3181	42°51.7'	3102	32°05.3'	3308	–	–	96°17.7'	3037
15	23°02.3'	3179	43°21.0'	3102	32°33.4'	3309	–	–	96°47.5'	3038
16	23°31.2'	3177	43°50.4'	3102	33°01.4'	3309	–	–	97°17.4'	3039
17	24°00.0'	3176	44°19.8'	3102	33°29.4'	3309	–	–	97°47.2'	3041
18	24°28.9'	3175	44°49.2'	3102	33°57.4'	3310	–	–	98°16.9'	3042
19	24°57.8'	3173	45°18.5'	3102	34°25.4'	3310	–	–	98°46.7'	3043
20	25°26.7'	3172	45°47.9'	3102	34°53.4'	3310	–	–	99°16.5'	3044
21	25°55.6'	3171	46°17.3'	3103	35°21.4'	3311	–	–	99°46.3'	3045
22	26°24.5'	3170	46°46.6'	3103	35°49.4'	3311	–	–	100°16.0'	3046
23	26°53.4'	3169	47°16.0'	3103	36°17.4'	3312	–	–	100°45.8'	3047

Sun Dec 17, 2017 UTC

UTC	+Jupiter		+Spica		+Mars		+Regulus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	27°22.4'	3169	47°45.4'	3103	36°45.3'	3312	101°15.5'	3048
1	27°51.3'	3168	48°14.7'	3103	37°13.3'	3312	101°45.3'	3049
2	28°20.2'	3167	48°44.1'	3103	37°41.3'	3313	102°15.0'	3050
3	28°49.1'	3167	49°13.5'	3103	38°09.3'	3313	102°44.8'	3050
4	29°18.1'	3166	49°42.8'	3103	38°37.3'	3314	103°14.5'	3051
5	29°47.0'	3166	50°12.2'	3103	39°05.3'	3314	103°44.2'	3052
6	30°16.0'	3166	50°41.6'	3104	39°33.2'	3314	104°13.9'	3053
7	30°44.9'	3165	51°10.9'	3104	40°01.2'	3315	104°43.6'	3054
8	31°13.9'	3165	51°40.3'	3104	40°29.2'	3315	105°13.3'	3055
9	31°42.8'	3165	52°09.7'	3104	40°57.1'	3316	105°43.0'	3056
10	32°11.8'	3164	52°39.0'	3104	41°25.1'	3316	106°12.7'	3056
11	32°40.7'	3164	53°08.4'	3104	41°53.1'	3316	106°42.4'	3057
12	33°09.7'	3164	53°37.7'	3105	42°21.0'	3317	107°12.1'	3058
13	33°38.6'	3164	54°07.1'	3105	42°49.0'	3317	107°41.7'	3059
14	34°07.6'	3164	54°36.4'	3105	43°16.9'	3317	108°11.4'	3059
15	34°36.6'	3163	55°05.8'	3105	43°44.9'	3318	108°41.1'	3060
16	35°05.5'	3163	55°35.1'	3105	44°12.8'	3318	109°10.7'	3061
17	35°34.5'	3163	56°04.5'	3105	44°40.8'	3319	109°40.4'	3062
18	36°03.4'	3163	56°33.8'	3106	45°08.7'	3319	110°10.0'	3062
19	36°32.4'	3163	57°03.2'	3106	45°36.7'	3319	110°39.7'	3063
20	37°01.4'	3163	57°32.5'	3106	46°04.6'	3320	111°09.3'	3063
21	37°30.3'	3163	58°01.9'	3106	46°32.5'	3320	111°38.9'	3064
22	37°59.3'	3163	58°31.2'	3106	47°00.5'	3320	112°08.6'	3065
23	38°28.3'	3163	59°00.6'	3106	47°28.4'	3321	112°38.2'	3065

Wed Dec 20, 2017 UTC

UTC	-Formalhaut	
	Lunar Dist.	P.L.
0	51°49.2'	3503
1	51°22.4'	3509
2	50°55.6'	3515
3	50°28.9'	3521
4	50°02.3'	3527
5	49°35.6'	3533
6	49°09.0'	3540
7	48°42.5'	3546
8	48°16.0'	3553
9	47°49.5'	3560
10	47°23.0'	3568
11	46°56.7'	3575
12	46°30.3'	3583
13	46°04.0'	3591
14	45°37.8'	3599
15	45°11.6'	3608
16	44°45.4'	3617
17	44°19.3'	3626
18	43°53.3'	3635
19	43°27.3'	3645
20	43°01.4'	3655
21	42°35.6'	3666
22	42°09.8'	3677
23	41°44.0'	3688

Fri Dec 22, 2017 UTC

UTC	+Sun		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	40°19.1'	3437	31°29.8'	4172
1	40°46.3'	3435	31°06.9'	4204
2	41°13.5'	3433	30°44.1'	4238
3	41°40.7'	3431	30°21.5'	4273
4	42°07.9'	3428	29°59.0'	4311
5	42°35.2'	3426	29°36.8'	4350
6	43°02.4'	3424	29°14.8'	4391
7	43°29.7'	3421	28°52.9'	4434
8	43°57.0'	3419	28°31.3'	4479
9	44°24.3'	3417	28°09.9'	4526
10	44°51.6'	3414	27°48.8'	4577
11	45°19.0'	3412	27°27.8'	4629
12	45°46.3'	3409	27°07.2'	4685
13	46°13.7'	3407	26°46.8'	4744
14	46°41.1'	3404	26°26.6'	4806
15	47°08.5'	3402	26°06.8'	4871
16	47°35.9'	3399	25°47.3'	4940
17	48°03.3'	3397	25°28.0'	5013
18	48°30.7'	3394	25°09.1'	5091
19	48°58.2'	3392	24°50.5'	5173
20	49°25.7'	3389	24°32.3'	5260
21	49°53.2'	3386	24°14.4'	5352
22	50°20.7'	3383	23°56.9'	5450
23	50°48.2'	3381	23°39.8'	5555

Sat Dec 23, 2017 UTC

UTC	+Sun		-Aldebaran		-Rigel		+Altair		-Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	51°15.8'	3378	107°17.9'	2980	110°26.0'	3544	35°48.5'	5184	117°16.0'	3633
1	51°43.3'	3375	106°47.7'	2978	109°59.5'	3538	36°06.7'	5127	116°50.0'	3625
2	52°10.9'	3372	106°17.5'	2975	109°32.9'	3532	36°25.1'	5072	116°24.0'	3616
3	52°38.5'	3369	105°47.2'	2973	109°06.3'	3526	36°43.8'	5019	115°57.9'	3608
4	53°06.2'	3366	105°17.0'	2970	108°39.7'	3520	37°02.7'	4967	115°31.8'	3601
5	53°33.8'	3363	104°46.7'	2968	108°13.0'	3515	37°21.8'	4918	115°05.6'	3593
6	54°01.5'	3360	104°16.4'	2965	107°46.3'	3509	37°41.1'	4870	114°39.4'	3585
7	54°29.1'	3357	103°46.1'	2963	107°19.5'	3503	38°00.7'	4823	114°13.1'	3578
8	54°56.8'	3354	103°15.7'	2960	106°52.8'	3498	38°20.4'	4778	113°46.7'	3570
9	55°24.5'	3351	102°45.4'	2957	106°26.0'	3492	38°40.4'	4735	113°20.4'	3563
10	55°52.3'	3348	102°15.0'	2954	105°59.1'	3487	39°00.6'	4692	112°54.0'	3556
11	56°20.0'	3344	101°44.6'	2952	105°32.2'	3481	39°20.9'	4651	112°27.5'	3549
12	56°47.8'	3341	101°14.2'	2949	105°05.3'	3476	39°41.5'	4612	112°01.0'	3541
13	57°15.6'	3338	100°43.8'	2946	104°38.3'	3471	40°02.3'	4573	111°34.4'	3534
14	57°43.4'	3335	100°13.3'	2943	104°11.4'	3465	40°23.2'	4536	111°07.9'	3528
15	58°11.3'	3331	99°42.9'	2940	103°44.3'	3460	40°44.3'	4500	110°41.2'	3521
16	58°39.1'	3328	99°12.4'	2937	103°17.3'	3455	41°05.6'	4465	110°14.6'	3514
17	59°07.0'	3324	98°41.9'	2934	102°50.2'	3450	41°27.0'	4431	109°47.8'	3507
18	59°34.9'	3321	98°11.4'	2931	102°23.1'	3445	41°48.7'	4398	109°21.1'	3501
19	60°02.9'	3317	97°40.8'	2928	101°56.0'	3440	42°10.5'	4366	108°54.3'	3494
20	60°30.8'	3314	97°10.2'	2925	101°28.8'	3435	42°32.4'	4334	108°27.4'	3488
21	60°58.8'	3310	96°39.6'	2922	101°01.6'	3430	42°54.5'	4304	108°00.6'	3481
22	61°26.8'	3307	96°09.0'	2919	100°34.3'	3425	43°16.8'	4274	107°33.7'	3475
23	61°54.8'	3303	95°38.4'	2915	100°07.1'	3420	43°39.2'	4246	107°06.7'	3469

Sun Dec 24, 2017 UTC

UTC	+Sun		-Aldebaran		-Betelgeuse		+Altair		-Rigel	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	62°22.9'	3299	95°07.7'	2912	112°45.8'	3029	44°01.8'	4218	99°39.8'	3415
1	62°50.9'	3295	94°37.0'	2909	112°15.9'	3025	44°24.5'	4190	99°12.4'	3410
2	63°19.0'	3292	94°06.3'	2905	111°46.0'	3021	44°47.4'	4164	98°45.1'	3406
3	63°47.1'	3288	93°35.6'	2902	111°16.1'	3016	45°10.4'	4138	98°17.7'	3401
4	64°15.3'	3284	93°04.8'	2898	110°46.1'	3012	45°33.5'	4113	97°50.3'	3396
5	64°43.4'	3280	92°34.0'	2895	110°16.1'	3008	45°56.8'	4088	97°22.8'	3391
6	65°11.6'	3276	92°03.2'	2891	109°46.1'	3004	46°20.2'	4064	96°55.3'	3387
7	65°39.9'	3272	91°32.4'	2888	109°16.1'	2999	46°43.8'	4040	96°27.8'	3382
8	66°08.1'	3268	91°01.5'	2884	108°46.0'	2995	47°07.4'	4018	96°00.3'	3378
9	66°36.4'	3264	90°30.7'	2881	108°15.9'	2991	47°31.2'	3995	95°32.7'	3373
10	67°04.7'	3260	89°59.7'	2877	107°45.8'	2986	47°55.1'	3973	95°05.1'	3369
11	67°33.0'	3256	89°28.8'	2873	107°15.6'	2982	48°19.2'	3952	94°37.5'	3364
12	68°01.3'	3252	88°57.9'	2870	106°45.4'	2978	48°43.3'	3931	94°09.9'	3360
13	68°29.7'	3247	88°26.9'	2866	106°15.2'	2973	49°07.6'	3911	93°42.2'	3356
14	68°58.1'	3243	87°55.8'	2862	105°44.9'	2969	49°32.0'	3891	93°14.5'	3351
15	69°26.6'	3239	87°24.8'	2858	105°14.6'	2965	49°56.5'	3871	92°46.7'	3347
16	69°55.0'	3234	86°53.7'	2854	104°44.3'	2960	50°21.1'	3852	92°19.0'	3343
17	70°23.5'	3230	86°22.6'	2850	104°14.0'	2956	50°45.8'	3833	91°51.2'	3338
18	70°52.0'	3226	85°51.5'	2846	103°43.6'	2951	51°10.6'	3815	91°23.4'	3334
19	71°20.6'	3221	85°20.4'	2842	103°13.2'	2947	51°35.5'	3797	90°55.5'	3330
20	71°49.2'	3217	84°49.2'	2838	102°42.7'	2942	52°00.6'	3779	90°27.7'	3326
21	72°17.8'	3212	84°18.0'	2834	102°12.3'	2938	52°25.7'	3762	89°59.8'	3322
22	72°46.4'	3207	83°46.7'	2830	101°41.7'	2933	52°50.9'	3745	89°31.8'	3318
23	73°15.1'	3203	83°15.4'	2826	101°11.2'	2929	53°16.3'	3728	89°03.9'	3314

Mon Dec 25, 2017 UTC

UTC	+Sun		-Aldebaran		-Betelgeuse		+Altair		-Rigel	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	73°43.8'	3198	82°44.1'	2821	100°40.6'	2924	53°41.7'	3712	88°35.9'	3309
1	74°12.5'	3193	82°12.8'	2817	100°10.0'	2919	54°07.2'	3696	88°07.9'	3306
2	74°41.3'	3189	81°41.4'	2813	99°39.4'	2915	54°32.8'	3680	87°39.9'	3302
3	75°10.1'	3184	81°10.0'	2808	99°08.7'	2910	54°58.5'	3665	87°11.8'	3298
4	75°38.9'	3179	80°38.6'	2804	98°38.0'	2905	55°24.3'	3650	86°43.7'	3294
5	76°07.7'	3174	80°07.2'	2800	98°07.3'	2901	55°50.2'	3635	86°15.6'	3290
6	76°36.6'	3169	79°35.7'	2795	97°36.5'	2896	56°16.2'	3620	85°47.5'	3286
7	77°05.6'	3164	79°04.1'	2791	97°05.7'	2891	56°42.3'	3605	85°19.3'	3282
8	77°34.5'	3159	78°32.6'	2786	96°34.9'	2887	57°08.4'	3591	84°51.2'	3279
9	78°03.5'	3154	78°01.0'	2782	96°04.0'	2882	57°34.7'	3577	84°23.0'	3275
10	78°32.5'	3149	77°29.4'	2777	95°33.1'	2877	58°01.0'	3563	83°54.7'	3271
11	79°01.6'	3144	76°57.7'	2772	95°02.2'	2872	58°27.4'	3550	83°26.5'	3268
12	79°30.7'	3139	76°26.0'	2768	94°31.2'	2867	58°53.9'	3537	82°58.2'	3264
13	79°59.8'	3134	75°54.3'	2763	94°00.2'	2862	59°20.5'	3523	82°29.9'	3261
14	80°28.9'	3129	75°22.5'	2758	93°29.2'	2858	59°47.2'	3510	82°01.6'	3257
15	80°58.1'	3123	74°50.7'	2753	92°58.1'	2853	60°13.9'	3498	81°33.3'	3254
16	81°27.4'	3118	74°18.9'	2749	92°27.0'	2848	60°40.7'	3485	81°04.9'	3250
17	81°56.6'	3113	73°47.1'	2744	91°55.9'	2843	61°07.6'	3473	80°36.5'	3247
18	82°25.9'	3107	73°15.2'	2739	91°24.7'	2838	61°34.6'	3461	80°08.1'	3244
19	82°55.3'	3102	72°43.2'	2734	90°53.5'	2833	62°01.6'	3448	79°39.7'	3241
20	83°24.7'	3096	72°11.2'	2729	90°22.2'	2828	62°28.7'	3437	79°11.2'	3237
21	83°54.1'	3091	71°39.2'	2724	89°50.9'	2823	62°55.9'	3425	78°42.7'	3234
22	84°23.5'	3085	71°07.2'	2719	89°19.6'	2818	63°23.2'	3413	78°14.3'	3231
23	84°53.0'	3080	70°35.1'	2714	88°48.3'	2813	63°50.5'	3402	77°45.7'	3228

Tue Dec 26, 2017 UTC

UTC	+Sun		-Aldebaran		-Betelgeuse		+Formalhaut		+Altair	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	85°22.5'	3074	70°03.0'	2709	88°16.9'	2808	30°28.7'	3909	64°18.0'	3390
1	85°52.1'	3069	69°30.8'	2703	87°45.4'	2803	30°53.1'	3866	64°45.4'	3379
2	86°21.7'	3063	68°58.6'	2698	87°14.0'	2798	31°17.7'	3825	65°13.0'	3368
3	86°51.3'	3057	68°26.4'	2693	86°42.5'	2793	31°42.6'	3786	65°40.6'	3357
4	87°21.0'	3052	67°54.1'	2688	86°10.9'	2787	32°07.7'	3748	66°08.3'	3347
5	87°50.7'	3046	67°21.8'	2683	85°39.3'	2782	32°33.0'	3712	66°36.1'	3336
6	88°20.5'	3040	66°49.5'	2677	85°07.7'	2777	32°58.5'	3677	67°03.9'	3325
7	88°50.3'	3034	66°17.1'	2672	84°36.1'	2772	33°24.3'	3643	67°31.8'	3315
8	89°20.1'	3028	65°44.6'	2667	84°04.4'	2767	33°50.2'	3610	67°59.8'	3305
9	89°50.0'	3022	65°12.2'	2661	83°32.6'	2762	34°16.3'	3579	68°27.8'	3295
10	90°19.9'	3017	64°39.7'	2656	83°00.9'	2757	34°42.6'	3549	68°55.9'	3285
11	90°49.8'	3011	64°07.1'	2650	82°29.1'	2751	35°09.1'	3519	69°24.1'	3275
12	91°19.8'	3005	63°34.5'	2645	81°57.2'	2746	35°35.8'	3491	69°52.3'	3265
13	91°49.9'	2999	63°01.9'	2639	81°25.3'	2741	36°02.7'	3463	70°20.6'	3255
14	92°20.0'	2993	62°29.2'	2634	80°53.4'	2736	36°29.7'	3437	70°49.0'	3245
15	92°50.1'	2987	61°56.5'	2628	80°21.5'	2730	36°56.9'	3411	71°17.4'	3236
16	93°20.3'	2980	61°23.7'	2623	79°49.5'	2725	37°24.3'	3386	71°45.9'	3226
17	93°50.5'	2974	60°50.9'	2617	79°17.4'	2720	37°51.8'	3362	72°14.4'	3217
18	94°20.7'	2968	60°18.1'	2611	78°45.4'	2715	38°19.4'	3338	72°43.0'	3208
19	94°51.0'	2962	59°45.2'	2606	78°13.2'	2709	38°47.3'	3315	73°11.7'	3199
20	95°21.3'	2956	59°12.3'	2600	77°41.1'	2704	39°15.2'	3293	73°40.4'	3190
21	95°51.7'	2950	58°39.3'	2594	77°08.9'	2699	39°43.3'	3272	74°09.2'	3181
22	96°22.1'	2943	58°06.3'	2589	76°36.7'	2694	40°11.6'	3250	74°38.0'	3172
23	96°52.6'	2937	57°33.2'	2583	76°04.4'	2688	40°40.0'	3230	75°06.9'	3163

Wed Dec 27, 2017 UTC

UTC	+Sun		-Aldebaran		-Betelgeuse		+Formalhaut		-Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	97°23.1'	2931	57°00.1'	2577	75°32.1'	2683	41°08.5'	3210	101°03.6'	2628
1	97°53.7'	2924	56°27.0'	2571	74°59.7'	2678	41°37.1'	3190	100°30.8'	2622
2	98°24.3'	2918	55°53.8'	2565	74°27.4'	2673	42°05.9'	3171	99°58.0'	2616
3	98°54.9'	2912	55°20.5'	2559	73°54.9'	2667	42°34.8'	3153	99°25.1'	2610
4	99°25.6'	2905	54°47.3'	2554	73°22.5'	2662	43°03.9'	3135	98°52.2'	2604
5	99°56.3'	2899	54°13.9'	2548	72°50.0'	2657	43°33.0'	3117	98°19.3'	2598
6	100°27.1'	2893	53°40.6'	2542	72°17.4'	2652	44°02.3'	3100	97°46.3'	2592
7	100°57.9'	2886	53°07.1'	2536	71°44.8'	2646	44°31.7'	3083	97°13.3'	2585
8	101°28.8'	2880	52°33.7'	2530	71°12.2'	2641	45°01.2'	3066	96°40.2'	2579
9	101°59.7'	2873	52°00.2'	2524	70°39.5'	2636	45°30.8'	3050	96°07.1'	2573
10	102°30.7'	2867	51°26.6'	2518	70°06.8'	2631	46°00.5'	3034	95°33.9'	2567
11	103°01.7'	2860	50°53.0'	2512	69°34.1'	2626	46°30.3'	3019	95°00.7'	2561
12	103°32.7'	2854	50°19.4'	2506	69°01.3'	2620	47°00.3'	3004	94°27.4'	2555
13	104°03.8'	2847	49°45.7'	2500	68°28.5'	2615	47°30.3'	2989	93°54.1'	2549
14	104°35.0'	2841	49°11.9'	2494	67°55.7'	2610	48°00.5'	2974	93°20.7'	2543
15	105°06.2'	2834	48°38.1'	2488	67°22.8'	2605	48°30.7'	2960	92°47.3'	2537
16	105°37.4'	2828	48°04.3'	2482	66°49.8'	2600	49°01.1'	2945	92°13.8'	2531
17	106°08.7'	2821	47°30.4'	2476	66°16.9'	2595	49°31.5'	2932	91°40.3'	2524
18	106°40.1'	2815	46°56.5'	2470	65°43.8'	2590	50°02.1'	2918	91°06.8'	2518
19	107°11.4'	2808	46°22.5'	2464	65°10.8'	2585	50°32.7'	2905	90°33.2'	2512
20	107°42.9'	2801	45°48.5'	2457	64°37.7'	2580	51°03.5'	2892	89°59.5'	2506
21	108°14.3'	2795	45°14.4'	2451	64°04.6'	2575	51°34.3'	2879	89°25.9'	2500
22	108°45.9'	2788	44°40.3'	2445	63°31.4'	2570	52°05.2'	2866	88°52.1'	2494
23	109°17.4'	2782	44°06.1'	2439	62°58.2'	2565	52°36.2'	2853	88°18.3'	2488

Thu Dec 28, 2017 UTC

UTC	+Sun		-Aldebaran		-Betelgeuse		+Formalhaut		-Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	109°49.1'	2775	43°31.9'	2433	62°25.0'	2560	53°07.3'	2841	87°44.5'	2482
1	110°20.7'	2768	42°57.7'	2427	61°51.7'	2556	53°38.5'	2829	87°10.6'	2476
2	110°52.5'	2762	42°23.3'	2421	61°18.4'	2551	54°09.8'	2817	86°36.7'	2470
3	111°24.2'	2755	41°49.0'	2415	60°45.0'	2546	54°41.2'	2805	86°02.7'	2463
4	111°56.0'	2748	41°14.6'	2409	60°11.7'	2542	55°12.6'	2794	85°28.7'	2457
5	112°27.9'	2742	40°40.1'	2402	59°38.2'	2537	55°44.2'	2782	84°54.6'	2451
6	112°59.8'	2735	40°05.6'	2396	59°04.8'	2533	56°15.8'	2771	84°20.5'	2445
7	113°31.8'	2729	39°31.1'	2390	58°31.3'	2528	56°47.5'	2760	83°46.3'	2439
8	114°03.8'	2722	38°56.4'	2384	57°57.8'	2524	57°19.3'	2749	83°12.1'	2433
9	114°35.8'	2715	38°21.8'	2378	57°24.2'	2520	57°51.1'	2738	82°37.8'	2427
10	115°08.0'	2709	37°47.1'	2372	56°50.6'	2515	58°23.1'	2728	82°03.5'	2421
11	115°40.1'	2702	37°12.3'	2366	56°17.0'	2511	58°55.1'	2717	81°29.2'	2415
12	116°12.3'	2696	36°37.5'	2360	55°43.4'	2507	59°27.2'	2707	80°54.8'	2409
13	116°44.6'	2689	36°02.7'	2353	55°09.7'	2503	59°59.3'	2697	80°20.3'	2403
14	117°16.9'	2683	35°27.8'	2347	54°36.0'	2499	60°31.6'	2687	79°45.8'	2397
15	117°49.2'	2676	34°52.8'	2341	54°02.2'	2495	61°03.9'	2677	79°11.3'	2391
16	118°21.6'	2670	34°17.8'	2335	53°28.4'	2492	61°36.3'	2667	78°36.7'	2385
17	118°54.1'	2663	33°42.8'	2329	52°54.6'	2488	62°08.8'	2657	78°02.0'	2380
18	119°26.6'	2657	33°07.7'	2323	52°20.8'	2484	62°41.3'	2648	77°27.3'	2374
19	119°59.1'	2650	32°32.6'	2317	51°46.9'	2481	63°13.9'	2638	76°52.6'	2368
20	120°31.7'	2644	31°57.4'	2311	51°13.0'	2478	63°46.6'	2629	76°17.8'	2362
21	121°04.4'	2637	31°22.1'	2305	50°39.1'	2474	64°19.4'	2620	75°43.0'	2356
22	121°37.0'	2631	30°46.8'	2299	50°05.2'	2471	64°52.2'	2611	75°08.1'	2351
23	122°09.8'	2624	30°11.5'	2293	49°31.2'	2468	65°25.1'	2602	74°33.2'	2345

Fri Dec 29, 2017 UTC

UTC	-Aldebaran		-Betelgeuse		-Pollux		-Procyon		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	29°36.1'	2287	48°57.2'	2466	73°58.2'	2339	74°52.7'	2432	65°58.0'	2593
1	29°00.7'	2281	48°23.2'	2463	73°23.2'	2334	74°18.4'	2426	66°31.1'	2584
2	28°25.2'	2275	47°49.2'	2461	72°48.1'	2328	73°44.1'	2421	67°04.2'	2575
3	27°49.7'	2270	47°15.2'	2458	72°13.0'	2322	73°09.8'	2416	67°37.3'	2567
4	27°14.1'	2264	46°41.1'	2456	71°37.9'	2317	72°35.4'	2411	68°10.5'	2559
5	26°38.5'	2258	46°07.0'	2454	71°02.7'	2311	72°00.9'	2407	68°43.8'	2550
6	26°02.8'	2252	45°32.9'	2452	70°27.5'	2306	71°26.5'	2402	69°17.2'	2542
7	25°27.1'	2246	44°58.8'	2451	69°52.2'	2301	70°51.9'	2397	69°50.6'	2534
8	24°51.3'	2241	44°24.7'	2449	69°16.9'	2295	70°17.4'	2392	70°24.1'	2526
9	24°15.5'	2235	43°50.5'	2448	68°41.5'	2290	69°42.8'	2388	70°57.6'	2518
10	23°39.6'	2229	43°16.4'	2447	68°06.1'	2285	69°08.2'	2383	71°31.2'	2510
11	23°03.7'	2224	42°42.2'	2447	67°30.6'	2279	68°33.5'	2379	72°04.9'	2503
12	22°27.7'	2218	42°08.1'	2446	66°55.1'	2274	67°58.8'	2374	72°38.6'	2495
13	21°51.7'	2213	41°33.9'	2446	66°19.6'	2269	67°24.1'	2370	73°12.4'	2488
14	21°15.7'	2207	40°59.8'	2446	65°44.0'	2264	66°49.3'	2366	73°46.2'	2481
15	20°39.6'	2202	40°25.6'	2447	65°08.4'	2259	66°14.5'	2362	74°20.1'	2473
16	20°03.5'	2196	39°51.4'	2448	64°32.7'	2254	65°39.7'	2358	74°54.0'	2466
17	19°27.3'	2191	39°17.3'	2449	63°57.0'	2249	65°04.8'	2354	75°28.1'	2459
18	18°51.0'	2186	38°43.1'	2450	63°21.2'	2244	64°29.9'	2350	76°02.1'	2452
19	18°14.8'	2180	38°09.0'	2452	62°45.5'	2239	63°55.0'	2347	76°36.2'	2445
20	17°38.4'	2175	37°34.9'	2454	62°09.6'	2235	63°20.1'	2343	77°10.4'	2439
21	17°02.1'	2170	37°00.8'	2457	61°33.8'	2230	62°45.1'	2339	77°44.6'	2432
22	16°25.7'	2165	36°26.7'	2460	60°57.9'	2225	62°10.1'	2336	78°18.9'	2426
23	15°49.2'	2160	35°52.7'	2464	60°21.9'	2221	61°35.0'	2333	78°53.2'	2419

Sat Dec 30, 2017 UTC

UTC	−Aldebaran		−Betelgeuse		−Pollux		−Procyon		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	15°12.8′	2155	35°18.6′	2468	59°45.9′	2217	60°60.0′	2330	79°27.6′	2413
1	14°36.2′	2151	34°44.7′	2473	59°09.9′	2212	60°24.9′	2327	80°02.0′	2407
2	13°59.7′	2146	34°10.7′	2478	58°33.9′	2208	59°49.8′	2324	80°36.5′	2401
3	13°23.1′	2142	33°36.8′	2484	57°57.8′	2204	59°14.6′	2321	81°11.0′	2395
4	12°46.4′	2137	33°02.9′	2491	57°21.7′	2200	58°39.5′	2318	81°45.6′	2389
5	12°09.7′	2133	32°29.1′	2498	56°45.5′	2196	58°04.3′	2316	82°20.2′	2383
6	11°33.0′	2129	31°55.4′	2506	56°09.3′	2192	57°29.1′	2314	82°54.9′	2377
7	10°56.3′	2125	31°21.7′	2515	55°33.1′	2188	56°53.9′	2312	83°29.6′	2372
8	10°19.5′	2122	30°48.0′	2525	54°56.8′	2184	56°18.6′	2309	84°04.3′	2366
9	9°42.7′	2119	30°14.5′	2536	54°20.5′	2180	55°43.4′	2308	84°39.1′	2361
10	9°05.8′	2116	29°41.0′	2548	53°44.2′	2177	55°08.1′	2306	85°14.0′	2356
11	8°29.0′	2114	29°07.7′	2561	53°07.9′	2173	54°32.8′	2304	85°48.8′	2351
12	7°52.1′	2112	28°34.4′	2575	52°31.5′	2170	53°57.5′	2303	86°23.8′	2346
13	7°15.2′	2111	28°01.2′	2590	51°55.1′	2167	53°22.2′	2302	86°58.7′	2341
14	6°38.3′	2112	27°28.2′	2607	51°18.7′	2164	52°46.9′	2301	87°33.7′	2336
15	6°01.4′	2114	26°55.3′	2626	50°42.2′	2161	52°11.6′	2300	88°08.8′	2331
16	5°24.5′	2120	26°22.5′	2646	50°05.7′	2158	51°36.3′	2300	88°43.8′	2327
17	4°47.7′	2129	25°49.9′	2668	49°29.2′	2155	51°00.9′	2299	89°18.9′	2322
18	4°11.0′	2146	25°17.4′	2692	48°52.7′	2152	50°25.6′	2299	89°54.1′	2318
19	3°34.4′	2177	24°45.1′	2718	48°16.1′	2150	49°50.3′	2299	90°29.3′	2314
20	2°58.0′	2234	24°13.0′	2747	47°39.6′	2147	49°14.9′	2300	91°04.5′	2310
21	–	–	23°41.1′	2778	47°03.0′	2145	48°39.6′	2301	91°39.8′	2306
22	–	–	23°09.5′	2812	46°26.4′	2143	48°04.3′	2301	92°15.0′	2302
23	–	–	22°38.1′	2849	45°49.7′	2141	47°29.0′	2303	92°50.4′	2298

Sun Dec 31, 2017 UTC

UTC	−Pollux		−Procyon		−Regulus		−Betelgeuse		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	45°13.1′	2139	46°53.6′	2304	80°31.0′	2040	22°07.0′	2890	93°25.7′	2295
1	44°36.4′	2138	46°18.3′	2306	79°53.5′	2036	21°36.1′	2935	94°01.1′	2291
2	43°59.7′	2136	45°43.1′	2308	79°15.9′	2033	21°05.6′	2984	94°36.5′	2288
3	43°23.1′	2135	45°07.8′	2310	78°38.4′	2029	20°35.4′	3038	95°11.9′	2285
4	42°46.4′	2134	44°32.6′	2313	78°00.8′	2025	20°05.6′	3097	95°47.4′	2282
5	42°09.7′	2133	43°57.3′	2316	77°23.1′	2022	19°36.2′	3163	96°22.8′	2279
6	41°32.9′	2133	43°22.1′	2320	76°45.4′	2018	19°07.2′	3235	96°58.3′	2276
7	40°56.2′	2132	42°47.0′	2324	76°07.8′	2015	18°38.7′	3314	97°33.9′	2273
8	40°19.5′	2132	42°11.8′	2328	75°30.0′	2012	18°10.8′	3402	98°09.4′	2271
9	39°42.8′	2132	41°36.7′	2333	74°52.3′	2009	17°43.4′	3500	98°45.0′	2269
10	39°06.0′	2132	41°01.6′	2338	74°14.5′	2005	17°16.6′	3609	99°20.6′	2266
11	38°29.3′	2133	40°26.6′	2343	73°36.7′	2002	16°50.4′	3730	99°56.2′	2264
12	37°52.6′	2133	39°51.6′	2350	72°58.8′	1999	16°25.0′	3865	100°31.8′	2262
13	37°15.9′	2134	39°16.7′	2356	72°21.0′	1996	–	–	101°07.4′	2261
14	36°39.2′	2136	38°41.8′	2363	71°43.1′	1994	–	–	101°43.1′	2259
15	36°02.5′	2137	38°07.0′	2371	71°05.2′	1991	–	–	102°18.8′	2257
16	35°25.8′	2139	37°32.3′	2380	70°27.2′	1988	–	–	102°54.4′	2256
17	34°49.2′	2142	36°57.6′	2389	69°49.3′	1986	–	–	103°30.1′	2255
18	34°12.5′	2144	36°23.0′	2399	69°11.3′	1983	–	–	104°05.8′	2254
19	33°35.9′	2147	35°48.4′	2409	68°33.3′	1981	–	–	104°41.5′	2253
20	32°59.3′	2151	35°14.0′	2421	67°55.3′	1978	–	–	105°17.2′	2252
21	32°22.7′	2155	34°39.6′	2433	67°17.2′	1976	–	–	105°53.0′	2252
22	31°46.2′	2159	34°05.3′	2446	66°39.1′	1974	–	–	106°28.7′	2251
23	31°09.7′	2164	33°31.2′	2460	66°01.1′	1972	–	–	107°04.4′	2251