

Mon Jul 1, 2019 UTC

UTC	+Aldebaran		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	5°46.3'	2715	99°16.1'	2600
1	6°18.4'	2656	99°49.0'	2595
2	6°51.0'	2610	100°22.1'	2591
3	7°23.9'	2572	100°55.1'	2587
4	7°57.1'	2541	101°28.2'	2583
5	8°30.5'	2515	102°01.3'	2578
6	9°04.1'	2492	102°34.4'	2574
7	9°37.9'	2473	103°07.6'	2571
8	10°11.9'	2456	103°40.8'	2567
9	10°45.9'	2441	104°14.0'	2563
10	11°20.1'	2427	104°47.3'	2559
11	11°54.5'	2414	105°20.5'	2556
12	12°28.9'	2403	105°53.8'	2552
13	13°03.4'	2393	106°27.2'	2549
14	13°38.0'	2383	107°00.5'	2546
15	14°12.6'	2374	107°33.9'	2542
16	14°47.4'	2365	108°07.3'	2539
17	15°22.2'	2357	108°40.8'	2536
18	15°57.0'	2349	109°14.2'	2534
19	16°32.0'	2342	109°47.7'	2531
20	17°07.0'	2335	110°21.2'	2528
21	17°42.0'	2328	110°54.7'	2526
22	18°17.1'	2322	111°28.3'	2523
23	18°52.3'	2316	112°01.8'	2521

Tue Jul 2, 2019 UTC

UTC	+Aldebaran		+Formalhaut		+Rigel	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	19°27.5'	2310	112°35.4'	2519	31°35.1'	5948
1	20°02.7'	2304	113°09.0'	2516	31°50.4'	5810
2	20°38.0'	2298	113°42.6'	2515	32°06.1'	5679
3	21°13.3'	2293	114°16.3'	2513	32°22.3'	5554
4	21°48.7'	2288	114°49.9'	2511	32°39.0'	5436
5	22°24.2'	2283	115°23.6'	2509	32°56.2'	5323
6	22°59.6'	2277	115°57.2'	2508	33°13.8'	5216
7	23°35.2'	2273	116°30.9'	2507	33°31.9'	5114
8	24°10.7'	2268	117°04.6'	2506	33°50.4'	5017
9	24°46.3'	2263	117°38.3'	2505	34°09.3'	4924
10	25°21.9'	2259	118°12.0'	2504	34°28.6'	4835
11	25°57.6'	2254	118°45.7'	2503	34°48.3'	4750
12	26°33.3'	2250	119°19.4'	2503	35°08.4'	4669
13	27°09.0'	2246	119°53.1'	2502	35°28.8'	4592
14	27°44.8'	2241	120°26.9'	2502	35°49.7'	4518
15	28°20.6'	2237	121°00.6'	2502	36°10.9'	4447
16	28°56.5'	2233	121°34.3'	2502	36°32.4'	4379
17	29°32.4'	2230	122°08.0'	2503	36°54.3'	4314
18	30°08.3'	2226	122°41.8'	2503	37°16.6'	4251
19	30°44.2'	2222	123°15.5'	2504	37°39.1'	4191
20	31°20.2'	2218	123°49.2'	2505	38°02.0'	4134
21	31°56.2'	2215	124°22.9'	2506	38°25.1'	4079
22	32°32.2'	2211	124°56.6'	2507	38°48.6'	4026
23	33°08.3'	2208	125°30.3'	2509	39°12.3'	3975

Thu Jul 4, 2019 UTC

UTC	-Mars		-Regulus		-Spica		-Arcturus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	3°19.1'	2334	32°06.9'	2164	86°10.2'	2176	86°31.6'	2587
1	2°44.1'	2334	31°30.5'	2163	85°33.8'	2175	85°58.5'	2586
2	2°09.0'	2334	30°54.0'	2162	84°57.4'	2173	85°25.4'	2586
3	1°34.0'	2339	30°17.5'	2162	84°21.1'	2172	84°52.3'	2585
4	59.0'	2369	29°41.1'	2162	83°44.7'	2171	84°19.2'	2585
5	-	-	29°04.6'	2162	83°08.3'	2170	83°46.2'	2585
6	-	-	28°28.1'	2162	82°31.9'	2169	83°13.1'	2585
7	46.9'	2339	27°51.6'	2162	81°55.5'	2168	82°40.0'	2585
8	1°22.0'	2328	27°15.2'	2162	81°19.0'	2167	82°06.9'	2585
9	1°57.1'	2324	26°38.7'	2162	80°42.6'	2166	81°33.8'	2586
10	2°32.2'	2322	26°02.2'	2163	80°06.2'	2165	81°00.7'	2587
11	3°07.3'	2321	25°25.8'	2164	79°29.7'	2165	80°27.7'	2587
12	3°42.5'	2320	24°49.3'	2165	78°53.3'	2164	79°54.6'	2588
13	4°17.7'	2319	24°12.9'	2166	78°16.8'	2164	79°21.5'	2590
14	4°52.9'	2318	23°36.4'	2167	77°40.4'	2163	78°48.5'	2591
15	5°28.0'	2317	22°60.0'	2169	77°03.9'	2163	78°15.4'	2592
16	6°03.2'	2316	22°23.6'	2170	76°27.5'	2163	77°42.4'	2594
17	6°38.4'	2316	21°47.2'	2172	75°51.0'	2162	77°09.4'	2596
18	7°13.6'	2315	21°10.8'	2175	75°14.5'	2162	76°36.4'	2598
19	7°48.8'	2315	20°34.4'	2177	74°38.1'	2162	76°03.4'	2600
20	8°24.1'	2315	19°58.1'	2180	74°01.6'	2162	75°30.4'	2602
21	8°59.3'	2314	19°21.8'	2184	73°25.1'	2162	74°57.5'	2605
22	9°34.5'	2314	18°45.5'	2188	72°48.6'	2162	74°24.5'	2608
23	10°09.7'	2314	18°09.2'	2192	72°12.2'	2162	73°51.6'	2611

Fri Jul 5, 2019 UTC

UTC	-Regulus		+Mars		-Spica		-Arcturus		-Antares	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	17°33.0'	2197	10°44.9'	2314	71°35.7'	2163	73°18.7'	2614	117°29.5'	2174
1	16°56.8'	2202	11°20.1'	2314	70°59.2'	2163	72°45.9'	2617	116°53.2'	2173
2	16°20.7'	2208	11°55.3'	2314	70°22.8'	2163	72°13.0'	2621	116°16.8'	2173
3	15°44.6'	2215	12°30.6'	2314	69°46.3'	2164	71°40.2'	2624	115°40.4'	2173
4	15°08.6'	2223	13°05.8'	2315	69°09.8'	2164	71°07.4'	2628	115°04.0'	2172
5	14°32.6'	2232	13°41.0'	2315	68°33.4'	2165	70°34.7'	2632	114°27.6'	2172
6	13°56.7'	2242	14°16.2'	2315	67°57.0'	2166	70°01.9'	2637	113°51.2'	2172
7	13°20.9'	2253	14°51.4'	2316	67°20.5'	2166	69°29.2'	2641	113°14.9'	2172
8	12°45.2'	2266	15°26.6'	2316	66°44.1'	2167	68°56.6'	2646	112°38.5'	2172
9	12°09.6'	2282	16°01.8'	2317	66°07.6'	2168	68°23.9'	2651	112°02.1'	2172
10	11°34.1'	2299	16°37.0'	2317	65°31.2'	2169	67°51.4'	2656	111°25.7'	2172
11	10°58.8'	2320	17°12.2'	2318	64°54.8'	2170	67°18.8'	2661	110°49.3'	2173
12	10°23.6'	2345	17°47.4'	2319	64°18.4'	2171	66°46.3'	2667	110°12.9'	2173
13	9°48.6'	2374	18°22.6'	2319	63°42.0'	2172	66°13.8'	2673	109°36.6'	2173
14	9°13.9'	2410	18°57.7'	2320	63°05.6'	2174	65°41.4'	2679	109°00.2'	2174
15	8°39.4'	2453	19°32.9'	2321	62°29.3'	2175	65°09.0'	2685	108°23.8'	2174
16	8°05.3'	2506	20°08.1'	2322	61°52.9'	2176	64°36.7'	2692	107°47.4'	2175
17	7°31.6'	2574	20°43.2'	2323	61°16.6'	2178	64°04.4'	2699	107°11.1'	2175
18	6°58.5'	2659	21°18.4'	2324	60°40.2'	2180	63°32.2'	2706	106°34.7'	2176
19	-	-	21°53.5'	2325	60°03.9'	2181	63°00.0'	2713	105°58.4'	2177
20	-	-	22°28.6'	2326	59°27.6'	2183	62°27.9'	2721	105°22.0'	2178
21	-	-	23°03.7'	2327	58°51.3'	2185	61°55.8'	2729	104°45.7'	2179
22	-	-	23°38.8'	2329	58°15.0'	2186	61°23.8'	2737	104°09.3'	2180
23	-	-	24°13.9'	2330	57°38.7'	2188	60°51.9'	2745	103°33.0'	2181

Sat Jul 6, 2019 UTC

UTC	+Sun		+Mars		-Spica		-Antares		-Jupiter	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	43°43.9'	2431	24°49.0'	2331	57°02.5'	2190	102°56.7'	2182	109°06.0'	2114
1	44°18.2'	2432	25°24.1'	2333	56°26.3'	2193	102°20.4'	2183	108°29.2'	2115
2	44°52.5'	2434	25°59.2'	2334	55°50.0'	2195	101°44.1'	2184	107°52.3'	2116
3	45°26.7'	2435	26°34.2'	2336	55°13.8'	2197	101°07.8'	2185	107°15.4'	2118
4	46°01.0'	2437	27°09.3'	2337	54°37.7'	2199	100°31.5'	2187	106°38.6'	2119
5	46°35.2'	2438	27°44.3'	2339	54°01.5'	2202	99°55.3'	2188	106°01.8'	2121
6	47°09.5'	2440	28°19.3'	2341	53°25.4'	2204	99°19.0'	2190	105°24.9'	2122
7	47°43.7'	2442	28°54.3'	2342	52°49.2'	2207	98°42.8'	2191	104°48.1'	2124
8	48°17.9'	2444	29°29.3'	2344	52°13.1'	2209	98°06.6'	2193	104°11.3'	2126
9	48°52.0'	2445	30°04.3'	2346	51°37.1'	2212	97°30.3'	2194	103°34.6'	2127
10	49°26.2'	2447	30°39.2'	2348	51°01.0'	2215	96°54.1'	2196	102°57.8'	2129
11	50°00.4'	2449	31°14.2'	2350	50°25.0'	2218	96°18.0'	2198	102°21.1'	2131
12	50°34.5'	2451	31°49.1'	2352	49°49.0'	2221	95°41.8'	2200	101°44.3'	2133
13	51°08.6'	2453	32°24.0'	2354	49°13.0'	2224	95°05.6'	2201	101°07.6'	2135
14	51°42.7'	2455	32°58.9'	2356	48°37.0'	2227	94°29.5'	2203	100°30.9'	2137
15	52°16.8'	2458	33°33.8'	2358	48°01.1'	2230	93°53.4'	2205	99°54.2'	2139
16	52°50.9'	2460	34°08.7'	2360	47°25.2'	2233	93°17.2'	2207	99°17.6'	2141
17	53°24.9'	2462	34°43.5'	2362	46°49.3'	2237	92°41.2'	2209	98°40.9'	2143
18	53°59.0'	2464	35°18.3'	2364	46°13.5'	2240	92°05.1'	2211	98°04.3'	2145
19	54°33.0'	2466	35°53.2'	2366	45°37.6'	2244	91°29.0'	2213	97°27.7'	2147
20	55°07.0'	2469	36°28.0'	2369	45°01.9'	2248	90°53.0'	2216	96°51.1'	2149
21	55°41.0'	2471	37°02.7'	2371	44°26.1'	2251	90°17.0'	2218	96°14.5'	2152
22	56°14.9'	2474	37°37.5'	2373	43°50.4'	2255	89°40.9'	2220	95°37.9'	2154
23	56°48.9'	2476	38°12.2'	2376	43°14.7'	2259	89°05.0'	2222	95°01.4'	2156

Sun Jul 7, 2019 UTC

UTC	+Sun		+Regulus		-Spica		+Mars		-Antares	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	57°22.8'	2479	12°24.4'	2320	42°39.0'	2263	38°46.9'	2378	88°29.0'	2225
1	57°56.7'	2481	12°59.6'	2311	42°03.4'	2268	39°21.6'	2381	87°53.0'	2227
2	58°30.6'	2484	13°34.8'	2303	41°27.8'	2272	39°56.3'	2383	87°17.1'	2230
3	59°04.5'	2486	14°10.1'	2296	40°52.2'	2276	40°31.0'	2386	86°41.2'	2232
4	59°38.3'	2489	14°45.5'	2291	40°16.7'	2281	41°05.6'	2388	86°05.3'	2235
5	60°12.2'	2492	15°20.9'	2286	39°41.2'	2286	41°40.2'	2391	85°29.5'	2237
6	60°46.0'	2494	15°56.3'	2282	39°05.8'	2291	42°14.8'	2394	84°53.6'	2240
7	61°19.7'	2497	16°31.8'	2279	38°30.4'	2296	42°49.4'	2396	84°17.8'	2243
8	61°53.5'	2500	17°07.3'	2277	37°55.0'	2301	43°24.0'	2399	83°42.0'	2245
9	62°27.3'	2503	17°42.8'	2275	37°19.7'	2306	43°58.5'	2402	83°06.2'	2248
10	63°01.0'	2506	18°18.4'	2273	36°44.4'	2312	44°33.0'	2405	82°30.4'	2251
11	63°34.7'	2508	18°53.9'	2272	36°09.2'	2317	45°07.5'	2407	81°54.7'	2254
12	64°08.3'	2511	19°29.5'	2271	35°34.0'	2323	45°42.0'	2410	81°19.0'	2256
13	64°42.0'	2514	20°05.0'	2271	34°58.8'	2329	46°16.4'	2413	80°43.3'	2259
14	65°15.6'	2517	20°40.6'	2271	34°23.7'	2336	46°50.8'	2416	80°07.7'	2262
15	65°49.2'	2520	21°16.2'	2271	33°48.7'	2342	47°25.2'	2419	79°32.0'	2265
16	66°22.8'	2523	21°51.7'	2272	33°13.7'	2349	47°59.6'	2422	78°56.4'	2268
17	66°56.4'	2526	22°27.3'	2272	32°38.8'	2356	48°34.0'	2425	78°20.8'	2271
18	67°29.9'	2529	23°02.9'	2273	32°03.9'	2363	49°08.3'	2428	77°45.2'	2274
19	68°03.4'	2533	23°38.4'	2274	31°29.1'	2370	49°42.6'	2431	77°09.7'	2277
20	68°36.9'	2536	24°13.9'	2275	30°54.3'	2378	50°16.9'	2434	76°34.2'	2281
21	69°10.4'	2539	24°49.5'	2277	30°19.6'	2386	50°51.1'	2437	75°58.7'	2284
22	69°43.8'	2542	25°25.0'	2278	29°45.0'	2394	51°25.4'	2440	75°23.2'	2287
23	70°17.2'	2545	26°00.5'	2280	29°10.4'	2403	51°59.6'	2443	74°47.8'	2290

Mon Jul 8, 2019 UTC

UTC	+Sun		+Regulus		-Spica		+Mars		-Antares	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	70°50.6'	2548	26°36.0'	2281	28°35.9'	2412	52°33.8'	2447	74°12.4'	2294
1	71°24.0'	2552	27°11.5'	2283	28°01.5'	2422	53°07.9'	2450	73°37.0'	2297
2	71°57.3'	2555	27°47.0'	2285	27°27.1'	2432	53°42.1'	2453	73°01.7'	2300
3	72°30.6'	2558	28°22.4'	2287	26°52.8'	2442	54°16.2'	2456	72°26.3'	2304
4	73°03.9'	2562	28°57.8'	2289	26°18.6'	2453	54°50.2'	2460	71°51.0'	2307
5	73°37.2'	2565	29°33.3'	2291	25°44.5'	2464	55°24.3'	2463	71°15.8'	2310
6	74°10.4'	2568	30°08.7'	2293	25°10.5'	2477	55°58.3'	2466	70°40.5'	2314
7	74°43.7'	2572	30°44.1'	2296	24°36.6'	2489	56°32.3'	2469	70°05.3'	2317
8	75°16.8'	2575	31°19.4'	2298	24°02.8'	2503	57°06.3'	2473	69°30.1'	2321
9	75°50.0'	2579	31°54.8'	2301	23°29.0'	2517	57°40.3'	2476	68°54.9'	2324
10	76°23.1'	2582	32°30.1'	2303	22°55.4'	2532	58°14.2'	2479	68°19.8'	2328
11	76°56.2'	2585	33°05.4'	2306	22°21.9'	2549	58°48.1'	2483	67°44.7'	2332
12	77°29.3'	2589	33°40.7'	2308	21°48.6'	2566	59°22.0'	2486	67°09.6'	2335
13	78°02.4'	2592	34°15.9'	2311	21°15.3'	2584	59°55.8'	2490	66°34.6'	2339
14	78°35.4'	2596	34°51.2'	2314	20°42.2'	2604	60°29.6'	2493	65°59.6'	2343
15	79°08.4'	2599	35°26.4'	2316	20°09.3'	2625	61°03.4'	2496	65°24.6'	2346
16	79°41.4'	2603	36°01.6'	2319	19°36.5'	2648	61°37.2'	2500	64°49.6'	2350
17	80°14.3'	2606	36°36.8'	2322	19°03.9'	2672	62°10.9'	2503	64°14.7'	2354
18	80°47.3'	2610	37°11.9'	2325	18°31.5'	2699	62°44.7'	2507	63°39.8'	2358
19	81°20.2'	2614	37°47.1'	2328	17°59.3'	2728	63°18.3'	2510	63°04.9'	2362
20	81°53.0'	2617	38°22.2'	2330	17°27.2'	2759	63°52.0'	2514	62°30.1'	2366
21	82°25.9'	2621	38°57.3'	2333	16°55.5'	2794	64°25.6'	2517	61°55.3'	2370
22	82°58.7'	2624	39°32.3'	2336	16°23.9'	2832	64°59.2'	2521	61°20.5'	2373
23	83°31.5'	2628	40°07.4'	2339	15°52.7'	2873	65°32.8'	2524	60°45.8'	2377

Tue Jul 9, 2019 UTC

UTC	+Sun		+Regulus		-Spica		-Jupiter		-Antares	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	84°04.2'	2632	40°42.4'	2342	15°21.7'	2919	65°39.3'	2303	60°11.1'	2381
1	84°37.0'	2635	41°17.4'	2345	14°51.1'	2970	65°04.0'	2306	59°36.4'	2385
2	85°09.7'	2639	41°52.3'	2349	14°20.8'	3027	64°28.7'	2310	59°01.8'	2390
3	85°42.4'	2643	42°27.3'	2352	13°50.9'	3090	63°53.5'	2313	58°27.2'	2394
4	86°15.0'	2646	43°02.2'	2355	13°21.4'	3161	63°18.3'	2316	57°52.6'	2398
5	86°47.6'	2650	43°37.1'	2358	12°52.5'	3241	62°43.1'	2320	57°18.1'	2402
6	87°20.2'	2654	44°11.9'	2361	12°24.0'	3333	62°07.9'	2323	56°43.5'	2406
7	87°52.8'	2657	44°46.8'	2364	11°56.2'	3436	61°32.7'	2327	56°09.1'	2410
8	88°25.3'	2661	45°21.6'	2367	11°29.0'	3555	60°57.6'	2330	55°34.6'	2415
9	88°57.9'	2665	45°56.4'	2371	-	-	60°22.5'	2334	55°00.2'	2419
10	89°30.3'	2668	46°31.1'	2374	-	-	59°47.5'	2337	54°25.8'	2423
11	90°02.8'	2672	47°05.9'	2377	-	-	59°12.5'	2341	53°51.5'	2428
12	90°35.2'	2676	47°40.6'	2380	-	-	58°37.5'	2344	53°17.2'	2432
13	91°07.6'	2679	48°15.2'	2383	-	-	58°02.5'	2348	52°42.9'	2436
14	91°40.0'	2683	48°49.9'	2387	-	-	57°27.6'	2351	52°08.7'	2441
15	92°12.4'	2687	49°24.5'	2390	-	-	56°52.6'	2355	51°34.5'	2445
16	92°44.7'	2690	49°59.1'	2393	-	-	56°17.8'	2359	51°00.3'	2450
17	93°17.0'	2694	50°33.7'	2397	-	-	55°42.9'	2362	50°26.2'	2455
18	93°49.2'	2698	51°08.3'	2400	-	-	55°08.1'	2366	49°52.1'	2459
19	94°21.5'	2702	51°42.8'	2403	-	-	54°33.3'	2369	49°18.0'	2464
20	94°53.7'	2705	52°17.3'	2406	-	-	53°58.5'	2373	48°44.0'	2469
21	95°25.9'	2709	52°51.8'	2410	-	-	53°23.7'	2376	48°10.0'	2473
22	95°58.0'	2713	53°26.2'	2413	-	-	52°49.0'	2380	47°36.1'	2478
23	96°30.1'	2717	54°00.7'	2416	-	-	52°14.3'	2383	47°02.2'	2483

Wed Jul 10, 2019 UTC

UTC	+Sun		-Jupiter		-Antares		+Regulus		-Saturn	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	97°02.2'	2720	51°39.7'	2387	46°28.3'	2488	54°35.1'	2420	82°38.4'	2387
1	97°34.3'	2724	51°05.1'	2391	45°54.5'	2493	55°09.4'	2423	82°03.8'	2391
2	98°06.4'	2728	50°30.5'	2394	45°20.7'	2498	55°43.8'	2426	81°29.2'	2394
3	98°38.4'	2731	49°55.9'	2398	44°46.9'	2503	56°18.1'	2430	80°54.6'	2398
4	99°10.4'	2735	49°21.3'	2401	44°13.2'	2508	56°52.4'	2433	80°20.1'	2401
5	99°42.3'	2739	48°46.8'	2405	43°39.5'	2514	57°26.6'	2436	79°45.6'	2404
6	100°14.3'	2743	48°12.3'	2408	43°05.9'	2519	58°00.9'	2440	79°11.1'	2408
7	100°46.2'	2746	47°37.9'	2412	42°32.3'	2524	58°35.1'	2443	78°36.6'	2411
8	101°18.1'	2750	47°03.4'	2416	41°58.7'	2530	59°09.3'	2447	78°02.2'	2415
9	101°49.9'	2754	46°29.0'	2419	41°25.2'	2535	59°43.4'	2450	77°27.8'	2418
10	102°21.7'	2757	45°54.7'	2423	40°51.8'	2541	60°17.6'	2453	76°53.4'	2422
11	102°53.5'	2761	45°20.3'	2426	40°18.3'	2547	60°51.7'	2457	76°19.0'	2425
12	103°25.3'	2765	44°46.0'	2430	39°45.0'	2553	61°25.7'	2460	75°44.7'	2429
13	103°57.0'	2769	44°11.7'	2434	39°11.6'	2559	61°59.8'	2463	75°10.4'	2432
14	104°28.8'	2772	43°37.5'	2437	38°38.3'	2565	62°33.8'	2467	74°36.1'	2435
15	105°00.4'	2776	43°03.2'	2441	38°05.1'	2571	63°07.8'	2470	74°01.9'	2439
16	105°32.1'	2780	42°29.0'	2444	37°31.9'	2577	63°41.8'	2473	73°27.7'	2442
17	106°03.7'	2783	41°54.8'	2448	36°58.7'	2583	64°15.7'	2477	72°53.5'	2446
18	106°35.4'	2787	41°20.7'	2452	36°25.6'	2590	64°49.7'	2480	72°19.3'	2449
19	107°06.9'	2791	40°46.6'	2455	35°52.6'	2597	65°23.6'	2483	71°45.2'	2452
20	107°38.5'	2794	40°12.5'	2459	35°19.6'	2603	65°57.4'	2487	71°11.1'	2456
21	108°10.0'	2798	39°38.4'	2463	34°46.7'	2610	66°31.3'	2490	70°37.0'	2459
22	108°41.5'	2802	39°04.4'	2466	34°13.8'	2618	67°05.1'	2493	70°02.9'	2463
23	109°13.0'	2805	38°30.4'	2470	33°40.9'	2625	67°38.9'	2497	69°28.9'	2466

Thu Jul 11, 2019 UTC

UTC	+Sun		-Jupiter		-Antares		+Spica		-Saturn	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	109°44.5'	2809	37°56.4'	2473	33°08.1'	2632	15°46.7'	3011	68°54.9'	2469
1	110°15.9'	2813	37°22.5'	2477	32°35.4'	2640	16°16.7'	2981	68°20.9'	2473
2	110°47.3'	2816	36°48.6'	2481	32°02.7'	2648	16°46.9'	2954	67°46.9'	2476
3	111°18.6'	2820	36°14.7'	2484	31°30.1'	2656	17°17.3'	2929	67°13.0'	2479
4	111°50.0'	2824	35°40.8'	2488	30°57.6'	2665	17°47.8'	2907	66°39.1'	2483
5	112°21.3'	2827	35°07.0'	2492	30°25.1'	2674	18°18.6'	2887	66°05.2'	2486
6	112°52.6'	2831	34°33.2'	2495	29°52.7'	2683	18°49.4'	2870	65°31.4'	2490
7	113°23.9'	2834	33°59.4'	2499	29°20.3'	2692	19°20.4'	2854	64°57.6'	2493
8	113°55.1'	2838	33°25.6'	2503	28°48.1'	2702	19°51.5'	2839	64°23.8'	2496
9	114°26.3'	2842	32°51.9'	2506	28°15.8'	2712	20°22.7'	2826	63°50.0'	2499
10	114°57.5'	2845	32°18.2'	2510	27°43.7'	2722	20°54.0'	2814	63°16.3'	2503
11	115°28.7'	2849	31°44.6'	2514	27°11.7'	2733	21°25.4'	2804	62°42.5'	2506
12	115°59.8'	2852	31°10.9'	2518	26°39.7'	2745	21°56.9'	2794	62°08.8'	2509
13	116°30.9'	2856	30°37.3'	2521	26°07.8'	2756	22°28.4'	2785	61°35.2'	2513
14	117°02.0'	2859	30°03.8'	2525	25°36.0'	2769	22°60.0'	2778	61°01.5'	2516
15	117°33.1'	2863	29°30.2'	2529	25°04.3'	2782	23°31.6'	2770	60°27.9'	2519
16	118°04.1'	2867	28°56.7'	2533	24°32.6'	2796	24°03.3'	2764	59°54.3'	2523
17	118°35.1'	2870	28°23.2'	2537	24°01.1'	2810	24°35.1'	2758	59°20.8'	2526
18	119°06.1'	2874	27°49.8'	2541	23°29.7'	2825	25°06.9'	2753	58°47.2'	2529
19	119°37.1'	2877	27°16.3'	2545	22°58.4'	2841	25°38.7'	2748	58°13.7'	2532
20	120°08.0'	2881	26°42.9'	2549	22°27.2'	2858	26°10.6'	2744	57°40.2'	2536
21	120°38.9'	2884	26°09.6'	2552	21°56.1'	2876	26°42.5'	2741	57°06.8'	2539
22	121°09.8'	2888	25°36.2'	2557	21°25.2'	2895	27°14.4'	2737	56°33.3'	2542
23	121°40.6'	2891	25°02.9'	2561	20°54.4'	2916	27°46.3'	2734	55°59.9'	2545

Fri Jul 12, 2019 UTC

UTC	−Jupiter		+Spica		−Antares		−Saturn		+Regulus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	24°29.7'	2565	28°18.3'	2732	20°23.7'	2937	55°26.5'	2549	81°35.4'	2579
1	23°56.4'	2569	28°50.3'	2729	19°53.2'	2961	54°53.1'	2552	82°08.5'	2582
2	23°23.2'	2573	29°22.3'	2728	19°22.9'	2986	54°19.8'	2555	82°41.6'	2585
3	22°50.0'	2577	29°54.3'	2726	18°52.7'	3012	53°46.5'	2558	83°14.7'	2588
4	22°16.9'	2582	30°26.3'	2724	18°22.7'	3041	53°13.2'	2561	83°47.7'	2592
5	21°43.8'	2586	30°58.4'	2723	17°52.9'	3073	52°39.9'	2565	84°20.8'	2595
6	21°10.7'	2591	31°30.4'	2722	17°23.4'	3107	52°06.7'	2568	84°53.8'	2598
7	20°37.7'	2595	32°02.5'	2721	16°54.0'	3143	51°33.5'	2571	85°26.8'	2601
8	20°04.6'	2600	32°34.6'	2721	16°24.9'	3184	51°00.3'	2574	85°59.7'	2604
9	19°31.7'	2605	33°06.6'	2721	15°56.1'	3228	50°27.1'	2577	86°32.7'	2608
10	18°58.7'	2610	33°38.7'	2720	15°27.6'	3276	49°54.0'	2580	87°05.6'	2611
11	18°25.8'	2615	34°10.8'	2720	14°59.3'	3329	49°20.8'	2584	87°38.5'	2614
12	17°53.0'	2621	34°42.8'	2720	14°31.5'	3388	48°47.7'	2587	88°11.4'	2617
13	17°20.2'	2626	35°14.9'	2721	14°04.0'	3453	48°14.7'	2590	88°44.2'	2620
14	16°47.4'	2632	35°47.0'	2721	13°36.9'	3526	47°41.6'	2593	89°17.0'	2623
15	16°14.7'	2638	36°19.0'	2721	13°10.2'	3607	47°08.6'	2596	89°49.8'	2626
16	15°42.0'	2645	36°51.1'	2722	12°44.1'	3698	46°35.6'	2599	90°22.6'	2630
17	15°09.4'	2652	37°23.2'	2723	12°18.5'	3800	46°02.6'	2602	90°55.3'	2633
18	14°36.8'	2659	37°55.2'	2723	11°53.5'	3916	45°29.6'	2605	91°28.1'	2636
19	14°04.2'	2667	38°27.3'	2724	11°29.1'	4048	44°56.7'	2608	92°00.8'	2639
20	13°31.8'	2675	38°59.3'	2725	–	–	44°23.8'	2612	92°33.4'	2642
21	12°59.4'	2684	39°31.3'	2726	–	–	43°50.9'	2615	93°06.1'	2645
22	12°27.0'	2693	40°03.4'	2727	–	–	43°18.1'	2618	93°38.7'	2648
23	11°54.8'	2704	40°35.4'	2729	–	–	42°45.2'	2621	94°11.3'	2651

Sat Jul 13, 2019 UTC

UTC	−Jupiter		−Saturn		+Spica		+Regulus		−Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	11°22.6'	2716	42°12.4'	2624	41°07.4'	2730	94°43.9'	2654	90°37.0'	2848
1	10°50.5'	2729	41°39.6'	2627	41°39.4'	2731	95°16.5'	2657	90°05.9'	2851
2	10°18.5'	2744	41°06.8'	2630	42°11.4'	2733	95°49.0'	2661	89°34.8'	2854
3	9°46.6'	2761	40°34.1'	2633	42°43.4'	2734	96°21.5'	2664	89°03.7'	2857
4	9°14.8'	2780	40°01.4'	2636	43°15.3'	2736	96°54.0'	2667	88°32.6'	2861
5	8°43.1'	2803	39°28.7'	2639	43°47.3'	2737	97°26.5'	2670	88°01.6'	2864
6	8°11.7'	2830	38°56.0'	2642	44°19.3'	2739	97°59.0'	2673	87°30.5'	2867
7	7°40.4'	2862	38°23.3'	2645	44°51.2'	2740	98°31.4'	2676	86°59.5'	2870
8	7°09.4'	2901	37°50.7'	2648	45°23.1'	2742	99°03.8'	2679	86°28.5'	2873
9	6°38.6'	2950	37°18.1'	2651	45°55.0'	2744	99°36.2'	2682	85°57.6'	2877
10	6°08.2'	3011	36°45.5'	2654	46°26.9'	2746	100°08.5'	2685	85°26.6'	2880
11	5°38.2'	3091	36°13.0'	2657	46°58.8'	2748	100°40.8'	2688	84°55.7'	2883
12	5°08.7'	3197	35°40.4'	2660	47°30.7'	2749	101°13.2'	2691	84°24.8'	2887
13	–	–	35°07.9'	2663	48°02.5'	2751	101°45.4'	2694	83°54.0'	2890
14	–	–	34°35.4'	2666	48°34.4'	2753	102°17.7'	2697	83°23.1'	2894
15	–	–	34°02.9'	2669	49°06.2'	2755	102°50.0'	2700	82°52.3'	2897
16	–	–	33°30.5'	2672	49°38.0'	2757	103°22.2'	2703	82°21.5'	2900
17	–	–	32°58.0'	2675	50°09.8'	2759	103°54.4'	2706	81°50.7'	2904
18	–	–	32°25.6'	2678	50°41.6'	2761	104°26.6'	2709	81°20.0'	2908
19	–	–	31°53.2'	2681	51°13.4'	2763	104°58.7'	2712	80°49.3'	2911
20	–	–	31°20.9'	2684	51°45.1'	2765	105°30.8'	2715	80°18.6'	2915
21	–	–	30°48.5'	2687	52°16.9'	2768	106°03.0'	2718	79°47.9'	2918
22	–	–	30°16.2'	2690	52°48.6'	2770	106°35.0'	2721	79°17.3'	2922
23	–	–	29°43.9'	2692	53°20.3'	2772	107°07.1'	2724	78°46.7'	2926

Sun Jul 14, 2019 UTC

UTC	−Saturn		+Spica		−Formalhaut		+Arcturus		+Regulus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	29°11.6′	2695	53°52.0′	2774	78°16.1′	2929	57°31.8′	3370	107°39.2′	2727
1	28°39.4′	2698	54°23.7′	2776	77°45.5′	2933	57°59.4′	3365	108°11.2′	2730
2	28°07.1′	2701	54°55.3′	2778	77°15.0′	2937	58°27.1′	3361	108°43.2′	2733
3	27°34.9′	2704	55°27.0′	2781	76°44.5′	2941	58°54.8′	3357	109°15.2′	2736
4	27°02.7′	2707	55°58.6′	2783	76°14.0′	2945	59°22.5′	3353	109°47.1′	2739
5	26°30.6′	2710	56°30.2′	2785	75°43.5′	2949	59°50.2′	3349	110°19.1′	2742
6	25°58.4′	2713	57°01.8′	2787	75°13.1′	2953	60°17.9′	3345	110°51.0′	2745
7	25°26.3′	2716	57°33.4′	2790	74°42.7′	2957	60°45.7′	3342	111°22.9′	2748
8	24°54.2′	2719	58°05.0′	2792	74°12.3′	2961	61°13.5′	3339	111°54.7′	2750
9	24°22.1′	2721	58°36.5′	2794	73°42.0′	2965	61°41.3′	3335	112°26.6′	2753
10	23°50.0′	2724	59°08.0′	2797	73°11.7′	2969	62°09.2′	3333	112°58.4′	2756
11	23°18.0′	2727	59°39.6′	2799	72°41.4′	2973	62°37.0′	3330	113°30.2′	2759
12	22°46.0′	2730	60°11.1′	2801	72°11.1′	2977	63°04.9′	3327	114°02.0′	2762
13	22°14.0′	2733	60°42.5′	2804	71°40.9′	2981	63°32.8′	3325	114°33.8′	2765
14	21°42.0′	2736	61°14.0′	2806	71°10.7′	2986	64°00.7′	3323	115°05.5′	2768
15	21°10.0′	2739	61°45.4′	2809	70°40.5′	2990	64°28.6′	3321	115°37.2′	2771
16	20°38.1′	2741	62°16.9′	2811	70°10.4′	2994	64°56.5′	3319	116°08.9′	2774
17	20°06.2′	2744	62°48.3′	2813	69°40.3′	2999	65°24.5′	3317	116°40.6′	2777
18	19°34.3′	2747	63°19.7′	2816	69°10.2′	3003	65°52.4′	3315	117°12.3′	2780
19	19°02.4′	2750	63°51.0′	2818	68°40.1′	3008	66°20.4′	3314	117°43.9′	2783
20	18°30.6′	2753	64°22.4′	2821	68°10.1′	3012	66°48.4′	3312	118°15.5′	2786
21	17°58.7′	2756	64°53.7′	2823	67°40.1′	3017	67°16.4′	3311	118°47.1′	2788
22	17°26.9′	2758	65°25.0′	2826	67°10.2′	3022	67°44.3′	3310	119°18.7′	2791
23	16°55.1′	2761	65°56.4′	2828	66°40.3′	3026	68°12.3′	3309	119°50.2′	2794

Mon Jul 15, 2019 UTC

UTC	−Saturn		+Jupiter		+Antares		+Spica		−Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	16°23.3′	2764	14°52.1′	2813	21°20.0′	3105	66°27.6′	2831	66°10.4′	3031
1	15°51.6′	2767	15°23.5′	2812	21°49.4′	3094	66°58.9′	2833	65°40.5′	3036
2	15°19.9′	2770	15°54.9′	2812	22°18.8′	3083	67°30.2′	2835	65°10.7′	3041
3	14°48.2′	2772	16°26.3′	2812	22°48.3′	3074	68°01.4′	2838	64°40.9′	3046
4	14°16.5′	2775	16°57.7′	2813	23°17.9′	3065	68°32.6′	2840	64°11.1′	3051
5	13°44.8′	2778	17°29.1′	2813	23°47.5′	3057	69°03.8′	2843	63°41.4′	3056
6	13°13.2′	2781	18°00.4′	2814	24°17.2′	3049	69°35.0′	2845	63°11.7′	3061
7	12°41.5′	2784	18°31.8′	2815	24°46.9′	3043	70°06.1′	2848	62°42.1′	3066
8	12°09.9′	2786	19°03.2′	2816	25°16.7′	3037	70°37.3′	2850	62°12.5′	3071
9	11°38.3′	2789	19°34.6′	2817	25°46.5′	3031	71°08.4′	2853	61°42.9′	3077
10	11°06.8′	2792	20°06.0′	2818	26°16.3′	3026	71°39.5′	2855	61°13.3′	3082
11	10°35.2′	2795	20°37.3′	2819	26°46.2′	3021	72°10.6′	2858	60°43.8′	3088
12	10°03.7′	2798	21°08.7′	2821	27°16.2′	3017	72°41.7′	2861	60°14.3′	3093
13	9°32.2′	2801	21°40.0′	2823	27°46.1′	3013	73°12.7′	2863	59°44.9′	3099
14	9°00.7′	2804	22°11.3′	2824	28°16.1′	3009	73°43.8′	2866	59°15.5′	3104
15	8°29.2′	2806	22°42.6′	2826	28°46.1′	3006	74°14.8′	2868	58°46.2′	3110
16	7°57.8′	2809	23°13.9′	2828	29°16.1′	3003	74°45.8′	2871	58°16.8′	3116
17	7°26.4′	2812	23°45.2′	2830	29°46.2′	3001	75°16.8′	2873	57°47.6′	3122
18	6°55.0′	2815	24°16.5′	2831	30°16.3′	2998	75°47.7′	2876	57°18.3′	3128
19	6°23.6′	2818	24°47.8′	2833	30°46.3′	2996	76°18.7′	2878	56°49.1′	3134
20	5°52.2′	2822	25°19.0′	2835	31°16.4′	2994	76°49.6′	2881	56°20.0′	3141
21	5°20.9′	2825	25°50.2′	2837	31°46.5′	2993	77°20.5′	2883	55°50.9′	3147
22	4°49.6′	2829	26°21.5′	2839	32°16.7′	2991	77°51.4′	2886	55°21.8′	3153
23	4°18.3′	2833	26°52.7′	2841	32°46.8′	2990	78°22.3′	2888	54°52.8′	3160

Tue Jul 16, 2019 UTC

UTC	−Saturn		+Jupiter		+Antares		−Formalhaut		+Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	3°47.1′	2838	27°23.9′	2844	33°16.9′	2989	54°23.8′	3167	78°53.1′	2891
1	3°15.9′	2844	27°55.0′	2846	33°47.1′	2988	53°54.8′	3174	79°23.9′	2893
2	2°44.7′	2852	28°26.2′	2848	34°17.2′	2987	53°26.0′	3181	79°54.8′	2896
3	2°13.6′	2865	28°57.3′	2850	34°47.4′	2986	52°57.1′	3188	80°25.6′	2899
4	1°42.6′	2893	29°28.5′	2852	35°17.6′	2986	52°28.3′	3195	80°56.3′	2901
5	1°11.7′	2976	29°59.6′	2854	35°47.7′	2986	51°59.6′	3202	81°27.1′	2904
6	–	–	30°30.7′	2857	36°17.9′	2985	51°30.9′	3210	81°57.9′	2906
7	–	–	31°01.7′	2859	36°48.1′	2985	51°02.2′	3217	82°28.6′	2909
8	–	–	31°32.8′	2861	37°18.3′	2985	50°33.6′	3225	82°59.3′	2911
9	–	–	32°03.9′	2864	37°48.4′	2985	50°05.0′	3233	83°30.0′	2914
10	1°26.3′	2894	32°34.9′	2866	38°18.6′	2986	49°36.5′	3241	84°00.7′	2916
11	1°57.1′	2880	33°05.9′	2868	38°48.8′	2986	49°08.1′	3249	84°31.3′	2919
12	2°28.0′	2875	33°36.9′	2870	39°18.9′	2986	48°39.7′	3258	85°02.0′	2921
13	2°59.0′	2873	34°07.9′	2873	39°49.1′	2987	48°11.4′	3266	85°32.6′	2924
14	3°29.9′	2873	34°38.9′	2875	40°19.3′	2987	47°43.1′	3275	86°03.2′	2926
15	4°00.9′	2874	35°09.8′	2877	40°49.4′	2988	47°14.9′	3284	86°33.8′	2929
16	4°31.8′	2875	35°40.7′	2880	41°19.6′	2988	46°46.7′	3293	87°04.3′	2932
17	5°02.8′	2877	36°11.7′	2882	41°49.7′	2989	46°18.6′	3303	87°34.9′	2934
18	5°33.7′	2879	36°42.6′	2884	42°19.9′	2990	45°50.5′	3312	88°05.4′	2937
19	6°04.6′	2881	37°13.4′	2887	42°50.0′	2991	45°22.5′	3322	88°35.9′	2939
20	6°35.5′	2883	37°44.3′	2889	43°20.2′	2992	44°54.6′	3332	89°06.4′	2942
21	7°06.4′	2885	38°15.1′	2891	43°50.3′	2993	44°26.8′	3343	89°36.9′	2944
22	7°37.3′	2888	38°46.0′	2894	44°20.4′	2994	43°59.0′	3353	90°07.4′	2947
23	8°08.2′	2890	39°16.8′	2896	44°50.5′	2995	43°31.3′	3364	90°37.8′	2949

Wed Jul 17, 2019 UTC

UTC	+Saturn		+Jupiter		+Antares		−Formalhaut		+Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	8°39.0′	2892	39°47.6′	2898	45°20.6′	2996	43°03.6′	3375	91°08.2′	2952
1	9°09.8′	2894	40°18.4′	2901	45°50.7′	2997	42°36.0′	3387	91°38.6′	2954
2	9°40.7′	2897	40°49.1′	2903	46°20.8′	2998	42°08.5′	3399	92°09.0′	2957
3	10°11.5′	2899	41°19.9′	2905	46°50.9′	2999	41°41.1′	3411	92°39.4′	2959
4	10°42.2′	2901	41°50.6′	2908	47°21.0′	3000	41°13.7′	3423	93°09.8′	2962
5	11°13.0′	2904	42°21.4′	2910	47°51.1′	3002	40°46.5′	3436	93°40.1′	2964
6	11°43.7′	2906	42°52.1′	2912	48°21.1′	3003	40°19.3′	3449	94°10.4′	2967
7	12°14.5′	2909	43°22.7′	2915	48°51.2′	3004	39°52.1′	3463	94°40.7′	2969
8	12°45.2′	2911	43°53.4′	2917	49°21.2′	3006	39°25.1′	3477	95°11.0′	2972
9	13°15.9′	2913	44°24.1′	2919	49°51.3′	3007	38°58.2′	3491	95°41.3′	2974
10	13°46.6′	2916	44°54.7′	2921	50°21.3′	3008	38°31.3′	3506	96°11.5′	2976
11	14°17.2′	2918	45°25.3′	2924	50°51.3′	3010	38°04.6′	3522	96°41.8′	2979
12	14°47.9′	2920	45°55.9′	2926	51°21.3′	3011	37°37.9′	3538	97°12.0′	2981
13	15°18.5′	2923	46°26.5′	2928	51°51.3′	3013	37°11.3′	3554	97°42.2′	2984
14	15°49.1′	2925	46°57.1′	2931	52°21.3′	3014	36°44.8′	3571	98°12.4′	2986
15	16°19.7′	2927	47°27.6′	2933	52°51.2′	3015	36°18.5′	3588	98°42.5′	2989
16	16°50.3′	2929	47°58.2′	2935	53°21.2′	3017	35°52.2′	3607	99°12.7′	2991
17	17°20.8′	2932	48°28.7′	2937	53°51.2′	3018	35°26.1′	3625	99°42.8′	2993
18	17°51.4′	2934	48°59.2′	2939	54°21.1′	3020	35°00.0′	3645	100°12.9′	2996
19	18°21.9′	2936	49°29.7′	2942	54°51.0′	3022	34°34.1′	3665	100°43.0′	2998
20	18°52.4′	2938	50°00.2′	2944	55°21.0′	3023	34°08.3′	3686	101°13.1′	3001
21	19°22.9′	2941	50°30.6′	2946	55°50.9′	3025	33°42.6′	3708	101°43.2′	3003
22	19°53.4′	2943	51°01.1′	2948	56°20.8′	3026	33°17.1′	3730	102°13.2′	3005
23	20°23.9′	2945	51°31.5′	2950	56°50.7′	3028	32°51.7′	3753	102°43.3′	3008

Thu Jul 18, 2019 UTC

UTC	+Saturn		+Jupiter		+Antares		-Formalhaut		+Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	20°54.3'	2947	52°01.9'	2953	57°20.5'	3029	32°26.4'	3778	103°13.3'	3010
1	21°24.8'	2949	52°32.3'	2955	57°50.4'	3031	32°01.2'	3803	103°43.3'	3012
2	21°55.2'	2952	53°02.7'	2957	58°20.3'	3032	31°36.2'	3829	104°13.3'	3015
3	22°25.6'	2954	53°33.1'	2959	58°50.1'	3034	31°11.4'	3857	104°43.2'	3017
4	22°56.0'	2956	54°03.5'	2961	59°20.0'	3036	30°46.7'	3886	105°13.2'	3019
5	23°26.4'	2958	54°33.8'	2963	59°49.8'	3037	30°22.2'	3915	105°43.1'	3022
6	23°56.8'	2960	55°04.1'	2965	60°19.6'	3039	29°57.8'	3947	106°13.0'	3024
7	24°27.1'	2962	55°34.4'	2967	60°49.4'	3040	29°33.6'	3979	106°43.0'	3026
8	24°57.4'	2964	56°04.7'	2969	61°19.2'	3042	29°09.6'	4013	107°12.8'	3029
9	25°27.8'	2966	56°35.0'	2971	61°49.0'	3043	28°45.8'	4049	107°42.7'	3031
10	25°58.1'	2968	57°05.3'	2973	62°18.8'	3045	28°22.2'	4086	108°12.6'	3033
11	26°28.4'	2970	57°35.5'	2975	62°48.5'	3047	27°58.8'	4125	108°42.4'	3036
12	26°58.6'	2972	58°05.8'	2977	63°18.3'	3048	27°35.6'	4166	109°12.2'	3038
13	27°28.9'	2974	58°36.0'	2979	63°48.0'	3050	27°12.6'	4209	109°42.1'	3040
14	27°59.1'	2976	59°06.2'	2981	64°17.7'	3051	26°49.8'	4254	110°11.8'	3042
15	28°29.4'	2978	59°36.4'	2983	64°47.5'	3053	26°27.3'	4301	110°41.6'	3044
16	28°59.6'	2980	60°06.6'	2985	65°17.2'	3054	26°05.0'	4351	111°11.4'	3047
17	29°29.8'	2982	60°36.8'	2987	65°46.9'	3056	25°43.0'	4404	111°41.1'	3049
18	30°00.0'	2984	61°07.0'	2989	66°16.5'	3057	25°21.2'	4459	112°10.9'	3051
19	30°30.2'	2986	61°37.1'	2991	66°46.2'	3059	24°59.7'	4517	112°40.6'	3053
20	31°00.4'	2988	62°07.2'	2993	67°15.9'	3060	24°38.5'	4579	113°10.3'	3055
21	31°30.5'	2989	62°37.4'	2994	67°45.5'	3062	24°17.6'	4644	113°40.0'	3058
22	32°00.7'	2991	63°07.5'	2996	68°15.2'	3063	23°57.0'	4712	114°09.7'	3060
23	32°30.8'	2993	63°37.6'	2998	68°44.8'	3065	23°36.8'	4785	114°39.3'	3062

Fri Jul 19, 2019 UTC

UTC	+Saturn		+Jupiter		+Antares		-Aldebaran		+Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	33°00.9'	2995	64°07.7'	3000	69°14.4'	3066	110°13.7'	3024	115°09.0'	3064
1	33°31.0'	2997	64°37.7'	3002	69°44.1'	3068	109°43.8'	3026	115°38.6'	3066
2	34°01.1'	2998	65°07.8'	3003	70°13.7'	3069	109°13.9'	3028	116°08.2'	3068
3	34°31.2'	3000	65°37.8'	3005	70°43.3'	3071	108°44.1'	3030	116°37.8'	3070
4	35°01.3'	3002	66°07.9'	3007	71°12.8'	3072	108°14.2'	3031	117°07.4'	3072
5	35°31.3'	3003	66°37.9'	3008	71°42.4'	3074	107°44.3'	3033	117°37.0'	3074
6	36°01.4'	3005	67°07.9'	3010	72°12.0'	3075	107°14.5'	3034	118°06.5'	3077
7	36°31.4'	3007	67°37.9'	3012	72°41.5'	3076	106°44.7'	3036	118°36.1'	3079
8	37°01.4'	3008	68°07.9'	3013	73°11.1'	3078	106°14.8'	3038	119°05.6'	3081
9	37°31.5'	3010	68°37.9'	3015	73°40.6'	3079	105°45.0'	3039	119°35.1'	3083
10	38°01.5'	3011	69°07.8'	3016	74°10.2'	3080	105°15.2'	3041	120°04.6'	3085
11	38°31.5'	3013	69°37.8'	3018	74°39.7'	3082	104°45.4'	3042	120°34.1'	3087
12	39°01.4'	3014	70°07.8'	3019	75°09.2'	3083	104°15.7'	3044	121°03.6'	3089
13	39°31.4'	3016	70°37.7'	3021	75°38.7'	3084	103°45.9'	3045	121°33.1'	3091
14	40°01.4'	3017	71°07.6'	3022	76°08.2'	3086	103°16.1'	3047	122°02.5'	3093
15	40°31.3'	3019	71°37.5'	3024	76°37.7'	3087	102°46.4'	3048	122°32.0'	3095
16	41°01.3'	3020	72°07.4'	3025	77°07.1'	3088	102°16.6'	3049	123°01.4'	3097
17	41°31.2'	3021	72°37.3'	3027	77°36.6'	3089	101°46.9'	3051	123°30.8'	3098
18	42°01.1'	3023	73°07.2'	3028	78°06.1'	3090	101°17.2'	3052	124°00.2'	3100
19	42°31.0'	3024	73°37.1'	3029	78°35.5'	3092	100°47.5'	3053	124°29.6'	3102
20	43°00.9'	3025	74°07.0'	3031	79°05.0'	3093	100°17.8'	3055	124°58.9'	3104
21	43°30.8'	3026	74°36.8'	3032	79°34.4'	3094	99°48.1'	3056	125°28.3'	3106
22	44°00.7'	3028	75°06.7'	3033	80°03.8'	3095	99°18.4'	3057	125°57.7'	3108
23	44°30.6'	3029	75°36.5'	3034	80°33.2'	3096	98°48.7'	3058	126°27.0'	3110

Sat Jul 20, 2019 UTC

UTC	+Saturn		+Jupiter		+Antares		-Aldebaran		-Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	45°00.5'	3030	76°06.4'	3035	81°02.7'	3097	98°19.0'	3059	115°21.0'	3224
1	45°30.3'	3031	76°36.2'	3037	81°32.1'	3098	97°49.4'	3061	114°52.5'	3223
2	46°00.2'	3032	77°06.0'	3038	82°01.5'	3099	97°19.7'	3062	114°23.9'	3223
3	46°30.0'	3033	77°35.8'	3039	82°30.9'	3100	96°50.1'	3063	113°55.3'	3223
4	46°59.9'	3034	78°05.6'	3040	83°00.2'	3101	96°20.4'	3064	113°26.8'	3223
5	47°29.7'	3035	78°35.4'	3041	83°29.6'	3102	95°50.8'	3065	112°58.2'	3223
6	47°59.6'	3036	79°05.2'	3042	83°59.0'	3103	95°21.2'	3066	112°29.6'	3222
7	48°29.4'	3037	79°35.0'	3043	84°28.4'	3104	94°51.6'	3067	112°01.1'	3222
8	48°59.2'	3038	80°04.8'	3044	84°57.7'	3105	94°21.9'	3068	111°32.5'	3222
9	49°29.0'	3039	80°34.5'	3045	85°27.1'	3105	93°52.3'	3069	111°03.9'	3222
10	49°58.8'	3040	81°04.3'	3046	85°56.4'	3106	93°22.7'	3069	110°35.4'	3222
11	50°28.6'	3041	81°34.1'	3047	86°25.8'	3107	92°53.1'	3070	110°06.8'	3222
12	50°58.4'	3042	82°03.8'	3047	86°55.1'	3108	92°23.5'	3071	109°38.2'	3222
13	51°28.2'	3042	82°33.6'	3048	87°24.5'	3108	91°54.0'	3072	109°09.6'	3221
14	51°57.9'	3043	83°03.3'	3049	87°53.8'	3109	91°24.4'	3072	108°41.1'	3221
15	52°27.7'	3044	83°33.0'	3050	88°23.1'	3110	90°54.8'	3073	108°12.5'	3221
16	52°57.5'	3044	84°02.8'	3050	88°52.4'	3111	90°25.2'	3074	107°43.9'	3221
17	53°27.2'	3045	84°32.5'	3051	89°21.7'	3111	89°55.7'	3074	107°15.3'	3221
18	53°57.0'	3046	85°02.2'	3052	89°51.1'	3112	89°26.1'	3075	106°46.7'	3220
19	54°26.8'	3046	85°31.9'	3052	90°20.4'	3112	88°56.6'	3076	106°18.2'	3220
20	54°56.5'	3047	86°01.6'	3053	90°49.7'	3113	88°27.0'	3076	105°49.6'	3220
21	55°26.3'	3047	86°31.3'	3053	91°19.0'	3113	87°57.5'	3077	105°21.0'	3220
22	55°56.0'	3048	87°01.0'	3054	91°48.3'	3114	87°27.9'	3077	104°52.4'	3220
23	56°25.8'	3048	87°30.7'	3054	92°17.6'	3114	86°58.4'	3077	104°23.8'	3219

Sun Jul 21, 2019 UTC

UTC	+Saturn		+Jupiter		-Aldebaran		+Antares		-Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	56°55.5'	3048	88°00.4'	3055	86°28.8'	3078	92°46.9'	3115	103°55.2'	3219
1	57°25.2'	3049	88°30.1'	3055	85°59.3'	3078	93°16.1'	3115	103°26.6'	3219
2	57°55.0'	3049	88°59.8'	3055	85°29.8'	3078	93°45.4'	3115	102°58.0'	3219
3	58°24.7'	3049	89°29.5'	3056	85°00.2'	3079	94°14.7'	3116	102°29.4'	3218
4	58°54.4'	3050	89°59.2'	3056	84°30.7'	3079	94°44.0'	3116	102°00.9'	3218
5	59°24.2'	3050	90°28.9'	3056	84°01.2'	3079	95°13.3'	3116	101°32.3'	3218
6	59°53.9'	3050	90°58.6'	3056	83°31.6'	3079	95°42.5'	3116	101°03.7'	3217
7	60°23.6'	3050	91°28.3'	3056	83°02.1'	3079	96°11.8'	3116	100°35.0'	3217
8	60°53.3'	3050	91°58.0'	3056	82°32.6'	3079	96°41.1'	3117	100°06.4'	3217
9	61°23.1'	3050	92°27.6'	3057	82°03.1'	3079	97°10.4'	3117	99°37.8'	3216
10	61°52.8'	3050	92°57.3'	3057	81°33.5'	3079	97°39.6'	3117	99°09.2'	3216
11	62°22.5'	3050	93°27.0'	3057	81°04.0'	3079	98°08.9'	3117	98°40.6'	3215
12	62°52.3'	3050	93°56.7'	3057	80°34.5'	3079	98°38.2'	3117	98°12.0'	3215
13	63°22.0'	3050	94°26.4'	3056	80°04.9'	3079	99°07.5'	3117	97°43.4'	3215
14	63°51.7'	3050	94°56.1'	3056	79°35.4'	3079	99°36.7'	3117	97°14.8'	3214
15	64°21.4'	3049	95°25.7'	3056	79°05.9'	3079	100°06.0'	3117	96°46.1'	3214
16	64°51.2'	3049	95°55.4'	3056	78°36.4'	3079	100°35.3'	3117	96°17.5'	3213
17	65°20.9'	3049	96°25.1'	3056	78°06.8'	3078	101°04.6'	3116	95°48.9'	3213
18	65°50.6'	3049	96°54.8'	3055	77°37.3'	3078	101°33.8'	3116	95°20.2'	3212
19	66°20.4'	3048	97°24.5'	3055	77°07.8'	3078	102°03.1'	3116	94°51.6'	3211
20	66°50.1'	3048	97°54.2'	3055	76°38.2'	3077	102°32.4'	3116	94°23.0'	3211
21	67°19.9'	3047	98°23.9'	3054	76°08.7'	3077	103°01.7'	3115	93°54.3'	3210
22	67°49.6'	3047	98°53.6'	3054	75°39.1'	3076	103°31.0'	3115	93°25.7'	3209
23	68°19.3'	3046	99°23.3'	3053	75°09.6'	3076	104°00.2'	3115	92°57.0'	3209

Mon Jul 22, 2019 UTC

UTC	+Saturn		-Aldebaran		+Jupiter		-Betelgeuse		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	68°49.1'	3046	74°40.0'	3075	99°53.0'	3053	92°28.3'	3208	25°59.6'	4381
1	69°18.9'	3045	74°10.5'	3074	100°22.7'	3052	91°59.7'	3207	26°21.5'	4335
2	69°48.6'	3044	73°40.9'	3074	100°52.4'	3052	91°31.0'	3207	26°43.6'	4291
3	70°18.4'	3044	73°11.4'	3073	101°22.1'	3051	91°02.3'	3206	27°05.9'	4249
4	70°48.2'	3043	72°41.8'	3072	101°51.8'	3050	90°33.7'	3205	27°28.5'	4210
5	71°17.9'	3042	72°12.2'	3071	102°21.6'	3049	90°05.0'	3204	27°51.2'	4172
6	71°47.7'	3041	71°42.6'	3071	102°51.3'	3049	89°36.3'	3203	28°14.2'	4136
7	72°17.5'	3040	71°13.0'	3070	103°21.0'	3048	89°07.6'	3203	28°37.3'	4101
8	72°47.3'	3039	70°43.4'	3069	103°50.8'	3047	88°38.9'	3202	29°00.7'	4069
9	73°17.1'	3038	70°13.8'	3068	104°20.5'	3046	88°10.2'	3201	29°24.2'	4037
10	73°46.9'	3037	69°44.2'	3067	104°50.3'	3045	87°41.5'	3200	29°47.9'	4007
11	74°16.7'	3036	69°14.6'	3066	105°20.0'	3044	87°12.7'	3199	30°11.7'	3978
12	74°46.5'	3035	68°45.0'	3065	105°49.8'	3043	86°44.0'	3198	30°35.7'	3950
13	75°16.4'	3034	68°15.4'	3063	106°19.6'	3042	86°15.3'	3197	30°59.9'	3924
14	75°46.2'	3033	67°45.8'	3062	106°49.4'	3041	85°46.5'	3196	31°24.2'	3898
15	76°16.0'	3031	67°16.1'	3061	107°19.2'	3039	85°17.8'	3195	31°48.6'	3874
16	76°45.9'	3030	66°46.5'	3060	107°49.0'	3038	84°49.0'	3193	32°13.2'	3850
17	77°15.8'	3029	66°16.8'	3058	108°18.8'	3037	84°20.3'	3192	32°38.0'	3828
18	77°45.6'	3027	65°47.1'	3057	108°48.6'	3035	83°51.5'	3191	33°02.8'	3806
19	78°15.5'	3026	65°17.4'	3056	109°18.4'	3034	83°22.7'	3190	33°27.8'	3785
20	78°45.4'	3024	64°47.8'	3054	109°48.2'	3033	82°54.0'	3189	33°52.9'	3765
21	79°15.3'	3023	64°18.1'	3053	110°18.1'	3031	82°25.2'	3188	34°18.1'	3745
22	79°45.2'	3021	63°48.3'	3051	110°48.0'	3030	81°56.4'	3186	34°43.4'	3726
23	80°15.2'	3020	63°18.6'	3049	111°17.8'	3028	81°27.6'	3185	35°08.9'	3708

Tue Jul 23, 2019 UTC

UTC	-Sun		-Aldebaran		+Formalhaut		+Saturn		-Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	112°51.1'	3406	62°48.9'	3048	35°34.4'	3690	80°45.1'	3018	80°58.7'	3184
1	112°23.7'	3404	62°19.2'	3046	36°00.1'	3673	81°15.0'	3016	80°29.9'	3182
2	111°56.3'	3402	61°49.4'	3044	36°25.8'	3657	81°45.0'	3014	80°01.1'	3181
3	111°28.8'	3400	61°19.6'	3042	36°51.7'	3641	82°15.0'	3013	79°32.2'	3180
4	111°01.4'	3398	60°49.9'	3041	37°17.6'	3625	82°45.0'	3011	79°03.4'	3178
5	110°34.0'	3395	60°20.1'	3039	37°43.7'	3610	83°14.9'	3009	78°34.5'	3177
6	110°06.5'	3393	59°50.3'	3037	38°09.8'	3596	83°45.0'	3007	78°05.6'	3175
7	109°39.1'	3391	59°20.4'	3035	38°36.0'	3581	84°15.0'	3005	77°36.8'	3174
8	109°11.6'	3389	58°50.6'	3033	39°02.3'	3568	84°45.0'	3003	77°07.9'	3172
9	108°44.1'	3387	58°20.8'	3031	39°28.7'	3554	85°15.1'	3001	76°39.0'	3171
10	108°16.6'	3384	57°50.9'	3028	39°55.2'	3541	85°45.1'	2998	76°10.1'	3169
11	107°49.0'	3382	57°21.0'	3026	40°21.7'	3528	86°15.2'	2996	75°41.1'	3167
12	107°21.5'	3379	56°51.1'	3024	40°48.3'	3516	86°45.3'	2994	75°12.2'	3166
13	106°53.9'	3377	56°21.2'	3022	41°15.1'	3504	87°15.4'	2992	74°43.3'	3164
14	106°26.4'	3374	55°51.3'	3019	41°41.8'	3492	87°45.6'	2989	74°14.3'	3163
15	105°58.8'	3372	55°21.4'	3017	42°08.7'	3480	88°15.7'	2987	73°45.3'	3161
16	105°31.2'	3369	54°51.4'	3015	42°35.6'	3469	88°45.9'	2984	73°16.4'	3159
17	105°03.6'	3366	54°21.4'	3012	43°02.6'	3458	89°16.1'	2982	72°47.4'	3157
18	104°35.9'	3363	53°51.5'	3010	43°29.7'	3447	89°46.2'	2979	72°18.4'	3156
19	104°08.3'	3360	53°21.5'	3007	43°56.8'	3437	90°16.5'	2977	71°49.4'	3154
20	103°40.6'	3358	52°51.4'	3004	44°24.0'	3426	90°46.7'	2974	71°20.3'	3152
21	103°12.9'	3355	52°21.4'	3002	44°51.2'	3416	91°16.9'	2971	70°51.3'	3150
22	102°45.2'	3352	51°51.3'	2999	45°18.6'	3406	91°47.2'	2969	70°22.2'	3149
23	102°17.4'	3349	51°21.3'	2996	45°46.0'	3396	92°17.5'	2966	69°53.2'	3147

Wed Jul 24, 2019 UTC

UTC	-Sun		-Aldebaran		+Formalhaut		-Betelgeuse		+Saturn	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	101°49.7'	3345	50°51.2'	2993	46°13.4'	3386	69°24.1'	3145	92°47.8'	2963
1	101°21.9'	3342	50°21.0'	2991	46°40.9'	3377	68°55.0'	3143	93°18.1'	2960
2	100°54.1'	3339	49°50.9'	2988	47°08.5'	3368	68°25.9'	3141	93°48.5'	2957
3	100°26.3'	3336	49°20.7'	2985	47°36.1'	3358	67°56.8'	3139	94°18.9'	2954
4	99°58.5'	3332	48°50.6'	2982	48°03.8'	3349	67°27.7'	3137	94°49.3'	2951
5	99°30.6'	3329	48°20.4'	2979	48°31.6'	3341	66°58.6'	3135	95°19.7'	2948
6	99°02.8'	3326	47°50.2'	2976	48°59.4'	3332	66°29.4'	3134	95°50.1'	2945
7	98°34.9'	3322	47°19.9'	2973	49°27.2'	3323	66°00.3'	3132	96°20.6'	2942
8	98°06.9'	3319	46°49.7'	2969	49°55.1'	3315	65°31.1'	3130	96°51.0'	2938
9	97°39.0'	3315	46°19.4'	2966	50°23.1'	3306	65°01.9'	3128	97°21.5'	2935
10	97°11.0'	3311	45°49.1'	2963	50°51.1'	3298	64°32.7'	3126	97°52.1'	2932
11	96°43.0'	3308	45°18.7'	2960	51°19.2'	3290	64°03.5'	3124	98°22.6'	2928
12	96°15.0'	3304	44°48.4'	2956	51°47.3'	3282	63°34.3'	3122	98°53.2'	2925
13	95°47.0'	3300	44°18.0'	2953	52°15.5'	3273	63°05.0'	3120	99°23.8'	2921
14	95°18.9'	3296	43°47.6'	2950	52°43.8'	3266	62°35.8'	3118	99°54.4'	2918
15	94°50.8'	3292	43°17.2'	2946	53°12.0'	3258	62°06.5'	3116	100°25.0'	2914
16	94°22.7'	3289	42°46.7'	2943	53°40.4'	3250	61°37.2'	3114	100°55.7'	2911
17	93°54.6'	3285	42°16.3'	2939	54°08.8'	3242	61°07.9'	3112	101°26.4'	2907
18	93°26.4'	3280	41°45.8'	2935	54°37.2'	3235	60°38.6'	3110	101°57.1'	2903
19	92°58.2'	3276	41°15.2'	2932	55°05.7'	3227	60°09.3'	3108	102°27.9'	2900
20	92°30.0'	3272	40°44.7'	2928	55°34.2'	3219	59°40.0'	3106	102°58.7'	2896
21	92°01.8'	3268	40°14.1'	2924	56°02.8'	3212	59°10.6'	3105	103°29.5'	2892
22	91°33.5'	3264	39°43.5'	2921	56°31.5'	3205	58°41.3'	3103	104°00.3'	2888
23	91°05.2'	3259	39°12.9'	2917	57°00.2'	3197	58°11.9'	3101	104°31.1'	2884

Thu Jul 25, 2019 UTC

UTC	-Sun		-Aldebaran		-Betelgeuse		+Formalhaut		-Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	90°36.9'	3255	38°42.2'	2913	57°42.5'	3099	57°28.9'	3190	57°04.3'	3545
1	90°08.5'	3251	38°11.6'	2909	57°13.1'	3097	57°57.7'	3183	56°37.8'	3549
2	89°40.1'	3246	37°40.9'	2905	56°43.7'	3095	58°26.5'	3175	56°11.3'	3552
3	89°11.7'	3242	37°10.1'	2901	56°14.3'	3094	58°55.4'	3168	55°44.8'	3556
4	88°43.3'	3237	36°39.4'	2897	55°44.9'	3092	59°24.3'	3161	55°18.4'	3560
5	88°14.8'	3233	36°08.6'	2893	55°15.4'	3090	59°53.3'	3154	54°51.9'	3565
6	87°46.3'	3228	35°37.8'	2889	54°46.0'	3088	60°22.3'	3147	54°25.5'	3569
7	87°17.8'	3223	35°06.9'	2885	54°16.5'	3087	60°51.4'	3140	53°59.2'	3574
8	86°49.2'	3219	34°36.0'	2881	53°47.1'	3085	61°20.5'	3133	53°32.8'	3579
9	86°20.6'	3214	34°05.1'	2877	53°17.6'	3084	61°49.7'	3126	53°06.5'	3584
10	85°52.0'	3209	33°34.2'	2873	52°48.1'	3082	62°18.9'	3119	52°40.2'	3590
11	85°23.3'	3204	33°03.2'	2868	52°18.6'	3081	62°48.1'	3112	52°13.9'	3596
12	84°54.6'	3199	32°32.2'	2864	51°49.0'	3080	63°17.4'	3105	51°47.7'	3602
13	84°25.9'	3194	32°01.2'	2860	51°19.5'	3078	63°46.8'	3099	51°21.6'	3608
14	83°57.1'	3189	31°30.1'	2856	50°50.0'	3077	64°16.2'	3092	50°55.4'	3615
15	83°28.4'	3184	30°59.1'	2851	50°20.4'	3076	64°45.6'	3085	50°29.3'	3622
16	82°59.5'	3179	30°27.9'	2847	49°50.9'	3075	65°15.1'	3078	50°03.2'	3629
17	82°30.7'	3174	29°56.8'	2843	49°21.3'	3074	65°44.7'	3071	49°37.2'	3637
18	82°01.8'	3169	29°25.6'	2838	48°51.8'	3073	66°14.2'	3065	49°11.3'	3645
19	81°32.9'	3164	28°54.4'	2834	48°22.2'	3072	66°43.9'	3058	48°45.3'	3653
20	81°03.9'	3158	28°23.2'	2830	47°52.6'	3072	67°13.5'	3051	48°19.5'	3662
21	80°34.9'	3153	27°51.9'	2825	47°23.0'	3071	67°43.3'	3045	47°53.7'	3672
22	80°05.9'	3148	27°20.6'	2821	46°53.5'	3071	68°13.0'	3038	47°27.9'	3681
23	79°36.8'	3142	26°49.2'	2816	46°23.9'	3070	68°42.8'	3031	47°02.2'	3691

Fri Jul 26, 2019 UTC

UTC	-Sun		-Aldebaran		-Betelgeuse		+Formalhaut		-Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	79°07.7'	3137	26°17.9'	2812	45°54.3'	3070	69°12.7'	3025	46°36.5'	3702
1	78°38.6'	3131	25°46.5'	2808	45°24.7'	3070	69°42.6'	3018	46°11.0'	3713
2	78°09.4'	3126	25°15.0'	2803	44°55.1'	3070	70°12.5'	3011	45°45.4'	3725
3	77°40.2'	3120	24°43.6'	2799	44°25.5'	3070	70°42.5'	3005	45°20.0'	3737
4	77°10.9'	3115	24°12.1'	2794	43°55.9'	3071	71°12.6'	2998	44°54.6'	3750
5	76°41.7'	3109	23°40.5'	2790	43°26.3'	3071	71°42.7'	2992	44°29.3'	3764
6	76°12.3'	3103	23°09.0'	2786	42°56.8'	3072	72°12.8'	2985	44°04.1'	3778
7	75°43.0'	3098	22°37.4'	2782	42°27.2'	3073	72°43.0'	2978	43°39.0'	3792
8	75°13.6'	3092	22°05.8'	2777	41°57.6'	3074	73°13.2'	2972	43°13.9'	3808
9	74°44.1'	3086	21°34.1'	2773	41°28.1'	3076	73°43.5'	2965	42°48.9'	3824
10	74°14.6'	3081	21°02.4'	2769	40°58.5'	3078	74°13.8'	2959	42°24.1'	3841
11	73°45.1'	3075	20°30.7'	2765	40°29.0'	3080	74°44.1'	2952	41°59.3'	3859
12	73°15.6'	3069	19°59.0'	2761	39°59.5'	3082	75°14.5'	2946	41°34.6'	3877
13	72°46.0'	3063	19°27.2'	2757	39°29.9'	3084	75°45.0'	2939	41°10.0'	3897
14	72°16.3'	3057	18°55.4'	2753	39°00.4'	3087	76°15.5'	2933	40°45.6'	3917
15	71°46.6'	3051	18°23.6'	2750	38°31.0'	3090	76°46.0'	2926	40°21.2'	3939
16	71°16.9'	3045	17°51.7'	2746	38°01.5'	3094	77°16.6'	2920	39°57.0'	3961
17	70°47.2'	3039	17°19.8'	2743	37°32.1'	3098	77°47.2'	2913	39°32.9'	3985
18	70°17.4'	3033	16°47.9'	2740	37°02.7'	3102	78°17.9'	2907	39°08.9'	4009
19	69°47.5'	3027	16°16.0'	2737	36°33.3'	3107	78°48.6'	2901	38°45.1'	4035
20	69°17.6'	3021	15°44.0'	2734	36°04.0'	3112	79°19.4'	2894	38°21.4'	4062
21	68°47.7'	3015	15°12.1'	2732	35°34.7'	3118	79°50.2'	2888	37°57.8'	4091
22	68°17.7'	3008	14°40.1'	2730	35°05.4'	3124	80°21.1'	2881	37°34.5'	4120
23	67°47.7'	3002	14°08.1'	2728	34°36.2'	3130	80°52.0'	2875	37°11.2'	4152

Sat Jul 27, 2019 UTC

UTC	-Sun		-Aldebaran		-Betelgeuse		+Formalhaut		-Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	67°17.7'	2996	13°36.1'	2727	34°07.0'	3138	81°22.9'	2869	36°48.2'	4185
1	66°47.6'	2990	13°04.1'	2727	33°37.9'	3146	81°53.9'	2862	36°25.3'	4219
2	66°17.4'	2984	12°32.0'	2727	33°08.8'	3154	82°25.0'	2856	36°02.6'	4256
3	65°47.2'	2977	12°00.0'	2728	32°39.8'	3163	82°56.0'	2850	35°40.0'	4294
4	65°17.0'	2971	11°28.0'	2731	32°10.8'	3173	83°27.2'	2843	35°17.7'	4334
5	64°46.7'	2965	10°56.0'	2734	31°41.9'	3184	83°58.4'	2837	34°55.6'	4376
6	64°16.4'	2958	10°24.0'	2739	31°13.1'	3196	84°29.6'	2831	34°33.7'	4420
7	63°46.1'	2952	9°52.1'	2746	30°44.3'	3209	85°00.8'	2824	34°12.0'	4467
8	63°15.7'	2946	9°20.2'	2755	30°15.7'	3222	85°32.2'	2818	33°50.5'	4516
9	62°45.2'	2939	8°48.4'	2768	29°47.1'	3237	86°03.5'	2812	33°29.3'	4567
10	62°14.7'	2933	8°16.7'	2784	29°18.6'	3253	86°34.9'	2806	33°08.4'	4622
11	61°44.2'	2926	7°45.1'	2805	28°50.3'	3270	87°06.4'	2799	32°47.7'	4679
12	61°13.6'	2920	7°13.6'	2833	28°22.0'	3288	87°37.9'	2793	32°27.2'	4739
13	60°43.0'	2913	6°42.4'	2869	27°53.9'	3308	88°09.4'	2787	32°07.1'	4803
14	60°12.3'	2907	6°11.4'	2918	27°25.9'	3329	88°41.0'	2781	31°47.2'	4870
15	59°41.6'	2901	5°40.7'	2985	26°58.0'	3352	89°12.6'	2775	31°27.7'	4941
16	59°10.8'	2894	5°10.6'	3077	26°30.2'	3377	89°44.3'	2769	31°08.4'	5016
17	58°40.0'	2888	-	-	26°02.7'	3404	90°16.0'	2763	30°49.5'	5095
18	58°09.1'	2881	-	-	25°35.3'	3433	90°47.8'	2757	30°31.0'	5178
19	57°38.2'	2874	-	-	25°08.1'	3464	91°19.6'	2751	30°12.8'	5267
20	57°07.3'	2868	-	-	24°41.0'	3497	91°51.4'	2745	29°54.9'	5361
21	56°36.3'	2861	-	-	24°14.2'	3534	92°23.3'	2739	29°37.5'	5460
22	56°05.2'	2855	-	-	23°47.6'	3573	92°55.2'	2733	29°20.4'	5565
23	55°34.1'	2848	-	-	23°21.3'	3615	93°27.2'	2727	29°03.7'	5677

Sun Jul 28, 2019 UTC

UTC	-Sun		-Betelgeuse		+Formalhaut		-Capella		-Sirius	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	55°03.0'	2842	22°55.2'	3661	93°59.2'	2721	28°47.5'	5796	48°01.9'	5309
1	54°31.8'	2835	22°29.3'	3711	94°31.3'	2715	28°31.7'	5922	47°44.2'	5356
2	54°00.6'	2829	22°03.8'	3765	95°03.4'	2709	28°16.4'	6057	47°26.8'	5405
3	53°29.3'	2822	21°38.6'	3824	95°35.6'	2704	28°01.5'	6200	47°09.5'	5457
4	52°58.0'	2816	21°13.7'	3887	96°07.8'	2698	27°47.1'	6353	46°52.4'	5510
5	52°26.6'	2809	20°49.2'	3956	96°40.0'	2692	27°33.2'	6517	46°35.5'	5565
6	51°55.2'	2802	20°25.1'	4032	97°12.3'	2687	27°19.8'	6692	46°18.9'	5622
7	51°23.7'	2796	20°01.4'	4114	97°44.6'	2681	27°07.0'	6881	46°02.4'	5682
8	50°52.2'	2789	19°38.1'	4203	98°17.0'	2675	26°54.7'	7083	45°46.2'	5744
9	50°20.6'	2783	19°15.3'	4301	98°49.4'	2670	26°42.9'	7301	45°30.2'	5809
10	49°49.0'	2776	18°53.0'	4408	99°21.8'	2665	26°31.8'	7538	45°14.5'	5876
11	49°17.3'	2770	18°31.3'	4525	99°54.3'	2659	26°21.2'	7794	44°59.0'	5946
12	48°45.6'	2763	18°10.1'	4653	100°26.8'	2654	26°11.2'	8073	44°43.7'	6019
13	48°13.9'	2757	17°49.5'	4795	100°59.4'	2648	26°01.9'	8378	44°28.7'	6094
14	47°42.1'	2750	17°29.7'	4951	101°32.0'	2643	25°53.1'	8714	44°14.0'	6173
15	47°10.2'	2744	17°10.5'	5123	102°04.6'	2638	25°45.1'	9086	43°59.5'	6256
16	46°38.3'	2737	16°52.0'	5314	102°37.3'	2633	25°37.7'	9501	43°45.3'	6342
17	46°06.4'	2731	-	-	103°10.0'	2628	25°30.9'	9968	43°31.3'	6431
18	45°34.4'	2724	-	-	103°42.8'	2623	25°24.9'	10501	43°17.7'	6525
19	45°02.3'	2718	-	-	104°15.6'	2618	25°19.5'	11118	43°04.3'	6622
20	44°30.2'	2712	-	-	104°48.5'	2613	25°14.9'	11848	42°51.3'	6724
21	43°58.1'	2705	-	-	105°21.3'	2608	25°11.0'	12739	42°38.5'	6831
22	43°25.9'	2699	-	-	105°54.2'	2603	25°07.8'	13874	42°26.1'	6943
23	42°53.7'	2693	-	-	106°27.2'	2598	25°05.3'	15431	42°13.9'	7060

Mon Jul 29, 2019 UTC

UTC	-Sun		+Aldebaran		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	42°21.4'	2686	13°37.5'	2432	107°00.2'	2594
1	41°49.1'	2680	14°11.8'	2421	107°33.2'	2589
2	41°16.7'	2674	14°46.1'	2411	108°06.2'	2585
3	40°44.3'	2667	15°20.6'	2402	108°39.3'	2580
4	40°11.8'	2661	15°55.1'	2393	109°12.5'	2576
5	39°39.3'	2655	16°29.7'	2384	109°45.6'	2572
6	39°06.8'	2649	17°04.3'	2375	110°18.8'	2568
7	38°34.2'	2643	17°39.0'	2367	110°52.0'	2564
8	38°01.5'	2637	18°13.8'	2359	111°25.3'	2560
9	37°28.8'	2631	18°48.7'	2351	111°58.5'	2556
10	36°56.1'	2625	19°23.6'	2344	112°31.8'	2552
11	36°23.3'	2619	19°58.6'	2337	113°05.2'	2549
12	35°50.5'	2613	20°33.6'	2329	113°38.5'	2545
13	35°17.6'	2607	21°08.7'	2322	114°11.9'	2542
14	34°44.7'	2601	21°43.8'	2315	114°45.4'	2538
15	34°11.7'	2595	22°19.1'	2309	115°18.8'	2535
16	33°38.7'	2590	22°54.3'	2302	115°52.3'	2532
17	33°05.6'	2584	23°29.6'	2295	116°25.8'	2529
18	32°32.6'	2578	24°05.0'	2289	116°59.3'	2526
19	31°59.4'	2573	24°40.4'	2283	117°32.8'	2524
20	31°26.2'	2567	25°15.9'	2276	118°06.4'	2521
21	30°53.0'	2562	25°51.4'	2270	118°39.9'	2519
22	30°19.7'	2556	26°27.0'	2264	119°13.5'	2517
23	29°46.4'	2551	27°02.6'	2258	119°47.2'	2515

Tue Jul 30, 2019 UTC

UTC	+Aldebaran		+Rigel		+Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	27°38.3'	2252	35°46.0'	4544	28°03.1'	5766
1	28°14.0'	2247	36°07.1'	4471	28°19.0'	5612
2	28°49.8'	2241	36°28.6'	4400	28°35.5'	5468
3	29°25.6'	2235	36°50.3'	4333	28°52.5'	5331
4	30°01.4'	2230	37°12.5'	4268	29°10.1'	5202
5	30°37.3'	2224	37°34.9'	4206	29°28.2'	5080
6	31°13.3'	2219	37°57.7'	4146	29°46.8'	4964
7	31°49.3'	2213	38°20.8'	4089	30°06.0'	4855
8	32°25.3'	2208	38°44.2'	4034	30°25.6'	4751
9	33°01.4'	2203	39°07.9'	3981	30°45.7'	4652
10	33°37.6'	2198	39°31.9'	3929	31°06.2'	4559
11	34°13.7'	2193	39°56.2'	3880	31°27.2'	4470
12	34°49.9'	2188	40°20.7'	3833	31°48.7'	4385
13	35°26.2'	2183	40°45.5'	3787	32°10.5'	4304
14	36°02.5'	2178	41°10.6'	3743	32°32.8'	4227
15	36°38.8'	2173	41°36.0'	3700	32°55.5'	4154
16	37°15.2'	2168	42°01.6'	3660	33°18.5'	4084
17	37°51.6'	2164	42°27.4'	3620	33°42.0'	4017
18	38°28.1'	2159	42°53.5'	3582	34°05.8'	3954
19	39°04.6'	2154	43°19.8'	3545	34°29.9'	3893
20	39°41.1'	2150	43°46.3'	3510	34°54.4'	3835
21	40°17.7'	2146	44°13.0'	3475	35°19.2'	3779
22	40°54.3'	2141	44°40.0'	3442	35°44.3'	3726
23	41°31.0'	2137	45°07.2'	3410	36°09.8'	3675

Wed Jul 31, 2019 UTC

UTC	+Aldebaran		+Betelgeuse		+Rigel		+Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	42°07.6'	2133	27°51.9'	2821	45°34.5'	3379	36°35.5'	3626
1	42°44.4'	2129	28°23.3'	2790	46°02.1'	3349	37°01.5'	3579
2	43°21.1'	2125	28°54.8'	2761	46°29.8'	3320	37°27.9'	3535
3	43°57.9'	2121	29°26.6'	2733	46°57.8'	3292	37°54.4'	3492
4	44°34.7'	2117	29°58.6'	2706	47°25.9'	3265	38°21.3'	3450
5	45°11.6'	2113	30°30.7'	2681	47°54.2'	3239	38°48.4'	3411
6	45°48.4'	2109	31°03.1'	2658	48°22.6'	3214	39°15.8'	3373
7	46°25.4'	2106	31°35.6'	2635	48°51.2'	3190	39°43.4'	3336
8	47°02.3'	2102	32°08.4'	2613	49°20.0'	3166	40°11.2'	3301
9	47°39.3'	2098	32°41.2'	2593	49°49.0'	3143	40°39.2'	3268
10	48°16.3'	2095	33°14.3'	2573	50°18.1'	3121	41°07.5'	3235
11	48°53.3'	2092	33°47.4'	2555	50°47.3'	3099	41°36.0'	3204
12	49°30.4'	2088	34°20.7'	2537	51°16.7'	3079	42°04.7'	3174
13	50°07.5'	2085	34°54.2'	2520	51°46.2'	3059	42°33.6'	3145
14	50°44.6'	2082	35°27.8'	2503	52°15.9'	3039	43°02.7'	3118
15	51°21.8'	2079	36°01.5'	2488	52°45.7'	3020	43°31.9'	3091
16	51°59.0'	2076	36°35.3'	2473	53°15.6'	3002	44°01.4'	3065
17	52°36.2'	2073	37°09.3'	2459	53°45.7'	2984	44°31.0'	3040
18	53°13.4'	2070	37°43.4'	2445	54°15.9'	2967	45°00.8'	3017
19	53°50.6'	2067	38°17.5'	2432	54°46.2'	2951	45°30.8'	2994
20	54°27.9'	2065	38°51.8'	2420	55°16.6'	2935	46°00.9'	2972
21	55°05.2'	2062	39°26.2'	2408	55°47.1'	2919	46°31.1'	2950
22	55°42.5'	2059	40°00.6'	2396	56°17.7'	2905	47°01.6'	2930
23	56°19.9'	2057	40°35.2'	2385	56°48.5'	2890	47°32.1'	2910