

Thu Nov 1, 2018 UTC

UTC	−Sun		−Regulus		+Pollux		+Aldebaran		+Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	86°00.2'	2633	17°35.4'	2327	19°47.9'	2616	62°42.2'	2299	46°11.6'	2529
1	85°27.5'	2633	17°00.3'	2330	20°20.8'	2599	63°17.5'	2299	46°45.1'	2524
2	84°54.8'	2633	16°25.2'	2332	20°53.8'	2583	63°52.8'	2299	47°18.7'	2520
3	84°22.0'	2633	15°50.1'	2335	21°26.9'	2568	64°28.2'	2299	47°52.3'	2516
4	83°49.3'	2634	15°15.1'	2338	22°00.1'	2555	65°03.5'	2299	48°25.9'	2512
5	83°16.6'	2634	14°40.0'	2341	22°33.4'	2543	65°38.9'	2299	48°59.5'	2508
6	82°43.9'	2634	14°05.0'	2345	23°06.8'	2531	66°14.2'	2299	49°33.2'	2505
7	82°11.2'	2634	13°30.1'	2349	23°40.3'	2520	66°49.5'	2299	50°06.9'	2501
8	81°38.5'	2634	12°55.1'	2354	24°13.9'	2511	67°24.9'	2299	50°40.7'	2498
9	81°05.7'	2634	12°20.3'	2360	24°47.6'	2501	68°00.2'	2299	51°14.4'	2495
10	80°33.0'	2635	11°45.4'	2367	25°21.3'	2493	68°35.5'	2300	51°48.2'	2492
11	80°00.3'	2635	11°10.6'	2375	25°55.1'	2485	69°10.9'	2300	52°22.0'	2489
12	79°27.6'	2635	10°35.9'	2384	26°28.9'	2478	69°46.2'	2300	52°55.8'	2486
13	78°54.9'	2635	10°01.2'	2394	27°02.9'	2471	70°21.5'	2300	53°29.7'	2484
14	78°22.2'	2636	9°26.7'	2407	27°36.8'	2464	70°56.9'	2300	54°03.5'	2481
15	77°49.5'	2636	8°52.2'	2423	28°10.8'	2458	71°32.2'	2301	54°37.4'	2479
16	77°16.8'	2636	8°17.9'	2442	28°44.9'	2453	72°07.5'	2301	55°11.3'	2476
17	76°44.1'	2637	7°43.7'	2466	29°19.0'	2447	72°42.9'	2301	55°45.3'	2474
18	76°11.4'	2637	7°09.6'	2496	29°53.2'	2442	73°18.2'	2301	56°19.2'	2472
19	75°38.7'	2637	6°35.9'	2534	30°27.4'	2438	73°53.5'	2302	56°53.2'	2470
20	75°06.0'	2638	6°02.4'	2585	31°01.6'	2433	74°28.8'	2302	57°27.1'	2468
21	74°33.3'	2638	5°29.3'	2653	31°35.9'	2429	75°04.1'	2302	58°01.1'	2466
22	74°00.7'	2639	4°56.7'	2749	32°10.1'	2426	75°39.4'	2302	58°35.1'	2464
23	73°28.0'	2639	–	–	32°44.5'	2422	76°14.8'	2303	59°09.2'	2463

Fri Nov 2, 2018 UTC

UTC	−Sun		+Pollux		−Spica		+Betelgeuse		+Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	72°55.3'	2640	33°18.8'	2419	57°38.5'	2348	59°43.2'	2461	35°16.3'	2821
1	72°22.6'	2640	33°53.2'	2415	57°03.5'	2349	60°17.2'	2460	35°47.6'	2807
2	71°50.0'	2641	34°27.6'	2412	56°28.6'	2350	60°51.3'	2458	36°19.1'	2794
3	71°17.3'	2641	35°02.0'	2410	55°53.7'	2351	61°25.3'	2457	36°50.6'	2781
4	70°44.6'	2642	35°36.5'	2407	55°18.7'	2352	61°59.4'	2456	37°22.2'	2768
5	70°12.0'	2642	36°11.0'	2405	54°43.8'	2354	62°33.5'	2455	37°53.9'	2757
6	69°39.3'	2643	36°45.4'	2402	54°08.9'	2355	63°07.6'	2453	38°25.7'	2745
7	69°06.7'	2644	37°20.0'	2400	53°34.1'	2356	63°41.7'	2452	38°57.6'	2735
8	68°34.0'	2644	37°54.5'	2398	52°59.2'	2357	64°15.8'	2451	39°29.6'	2725
9	68°01.4'	2645	38°29.0'	2396	52°24.3'	2359	64°49.9'	2451	40°01.6'	2715
10	67°28.8'	2646	39°03.6'	2394	51°49.5'	2360	65°24.1'	2450	40°33.7'	2706
11	66°56.1'	2646	39°38.1'	2393	51°14.6'	2361	65°58.2'	2449	41°05.9'	2697
12	66°23.5'	2647	40°12.7'	2391	50°39.8'	2363	66°32.3'	2448	41°38.2'	2689
13	65°50.9'	2648	40°47.3'	2390	50°05.0'	2365	67°06.5'	2448	42°10.5'	2681
14	65°18.3'	2649	41°21.9'	2389	49°30.1'	2366	67°40.6'	2447	42°42.8'	2673
15	64°45.7'	2650	41°56.6'	2387	48°55.3'	2368	68°14.8'	2446	43°15.3'	2666
16	64°13.1'	2650	42°31.2'	2386	48°20.6'	2369	68°49.0'	2446	43°47.7'	2659
17	63°40.5'	2651	43°05.8'	2385	47°45.8'	2371	69°23.1'	2446	44°20.3'	2652
18	63°07.9'	2652	43°40.5'	2384	47°11.0'	2373	69°57.3'	2445	44°52.8'	2646
19	62°35.3'	2653	44°15.1'	2383	46°36.3'	2375	70°31.4'	2445	45°25.5'	2640
20	62°02.8'	2654	44°49.8'	2383	46°01.6'	2377	71°05.6'	2445	45°58.1'	2634
21	61°30.2'	2655	45°24.4'	2382	45°26.9'	2379	71°39.8'	2445	46°30.8'	2629
22	60°57.6'	2656	45°59.1'	2381	44°52.2'	2381	72°14.0'	2444	47°03.6'	2624
23	60°25.1'	2657	46°33.8'	2381	44°17.5'	2383	72°48.1'	2444	47°36.4'	2619

Sat Nov 3, 2018 UTC

UTC	−Sun		+Regulus		−Spica		+Pollux		+Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	59°52.5′	2658	10°57.2′	2387	43°42.8′	2385	47°08.5′	2380	48°09.2′	2614
1	59°20.0′	2659	11°31.8′	2381	43°08.2′	2388	47°43.1′	2380	48°42.1′	2609
2	58°47.5′	2660	12°06.5′	2376	42°33.6′	2390	48°17.8′	2379	49°15.0′	2605
3	58°15.0′	2661	12°41.2′	2371	41°59.0′	2393	48°52.5′	2379	49°47.9′	2601
4	57°42.4′	2663	13°16.0′	2368	41°24.4′	2395	49°27.2′	2379	50°20.9′	2597
5	57°09.9′	2664	13°50.8′	2365	40°49.8′	2398	50°01.9′	2379	50°53.9′	2593
6	56°37.5′	2665	14°25.6′	2362	40°15.3′	2401	50°36.6′	2379	51°26.9′	2590
7	56°05.0′	2666	15°00.4′	2360	39°40.7′	2404	51°11.3′	2379	51°60.0′	2586
8	55°32.5′	2668	15°35.3′	2358	39°06.3′	2407	51°46.0′	2379	52°33.0′	2583
9	55°00.0′	2669	16°10.1′	2357	38°31.8′	2410	52°20.7′	2379	53°06.1′	2580
10	54°27.6′	2670	16°45.0′	2355	37°57.3′	2413	52°55.4′	2379	53°39.3′	2577
11	53°55.1′	2672	17°19.9′	2354	37°22.9′	2417	53°30.1′	2379	54°12.4′	2575
12	53°22.7′	2673	17°54.8′	2354	36°48.5′	2420	54°04.8′	2379	54°45.6′	2572
13	52°50.3′	2675	18°29.7′	2353	36°14.2′	2424	54°39.5′	2379	55°18.8′	2570
14	52°17.9′	2676	19°04.6′	2353	35°39.8′	2428	55°14.2′	2380	55°52.0′	2567
15	51°45.5′	2678	19°39.5′	2352	35°05.5′	2432	55°48.8′	2380	56°25.2′	2565
16	51°13.1′	2679	20°14.4′	2352	34°31.2′	2436	56°23.5′	2381	56°58.4′	2563
17	50°40.7′	2681	20°49.3′	2352	33°57.0′	2441	56°58.2′	2381	57°31.7′	2561
18	50°08.4′	2683	21°24.2′	2352	33°22.8′	2445	57°32.9′	2382	58°05.0′	2560
19	49°36.0′	2684	21°59.1′	2352	32°48.6′	2450	58°07.6′	2382	58°38.2′	2558
20	49°03.7′	2686	22°34.0′	2353	32°14.5′	2455	58°42.2′	2383	59°11.5′	2557
21	48°31.4′	2688	23°08.9′	2353	31°40.4′	2460	59°16.9′	2383	59°44.8′	2555
22	47°59.0′	2690	23°43.8′	2354	31°06.4′	2466	59°51.6′	2384	60°18.1′	2554
23	47°26.7′	2692	24°18.7′	2354	30°32.3′	2472	60°26.2′	2385	60°51.5′	2553

Sun Nov 4, 2018 UTC

UTC	−Sun		+Regulus		−Spica		+Pollux		+Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	46°54.5′	2694	24°53.6′	2355	29°58.4′	2478	61°00.9′	2386	61°24.8′	2552
1	46°22.2′	2696	25°28.5′	2356	29°24.5′	2484	61°35.5′	2386	61°58.1′	2551
2	45°49.9′	2698	26°03.4′	2356	28°50.6′	2491	62°10.1′	2387	62°31.5′	2550
3	45°17.7′	2700	26°38.3′	2357	28°16.8′	2498	62°44.8′	2388	63°04.8′	2549
4	44°45.5′	2702	27°13.1′	2358	27°43.0′	2505	63°19.4′	2389	63°38.2′	2549
5	44°13.3′	2704	27°48.0′	2359	27°09.3′	2513	63°54.0′	2390	64°11.6′	2548
6	43°41.1′	2706	28°22.8′	2360	26°35.7′	2522	64°28.6′	2391	64°44.9′	2548
7	43°08.9′	2709	28°57.7′	2361	26°02.1′	2530	65°03.2′	2392	65°18.3′	2547
8	42°36.7′	2711	29°32.5′	2362	25°28.6′	2540	65°37.8′	2393	65°51.7′	2547
9	42°04.6′	2713	30°07.4′	2363	24°55.2′	2550	66°12.4′	2395	66°25.1′	2547
10	41°32.5′	2716	30°42.2′	2365	24°21.8′	2560	66°46.9′	2396	66°58.4′	2547
11	41°00.4′	2718	31°17.0′	2366	23°48.6′	2572	67°21.5′	2397	67°31.8′	2547
12	40°28.3′	2721	31°51.8′	2367	23°15.4′	2584	67°56.0′	2398	68°05.2′	2547
13	39°56.2′	2723	32°26.6′	2369	22°42.3′	2597	68°30.6′	2400	68°38.6′	2547
14	39°24.2′	2726	33°01.4′	2370	22°09.3′	2610	69°05.1′	2401	69°12.0′	2547
15	38°52.1′	2729	33°36.1′	2371	21°36.4′	2625	69°39.6′	2402	69°45.3′	2547
16	38°20.1′	2732	34°10.9′	2373	21°03.6′	2641	70°14.1′	2404	70°18.7′	2548
17	37°48.1′	2735	34°45.6′	2374	20°30.9′	2658	70°48.6′	2405	70°52.1′	2548
18	37°16.2′	2738	35°20.3′	2376	19°58.4′	2677	71°23.1′	2407	71°25.4′	2549
19	36°44.2′	2741	35°55.1′	2377	19°26.0′	2697	71°57.6′	2408	71°58.8′	2550
20	36°12.3′	2744	36°29.8′	2379	18°53.8′	2718	72°32.1′	2410	72°32.2′	2550
21	35°40.4′	2747	37°04.5′	2381	18°21.7′	2742	73°06.5′	2411	73°05.5′	2551
22	35°08.5′	2750	37°39.1′	2382	17°49.8′	2768	73°40.9′	2413	73°38.9′	2552
23	34°36.7′	2754	38°13.8′	2384	17°18.0′	2796	74°15.4′	2415	74°12.2′	2553

Mon Nov 5, 2018 UTC

UTC	+Regulus		-Venus		-Spica		+Pollux		+Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	38°48.5'	2386	21°05.5'	2694	16°46.5'	2827	74°49.8'	2417	74°45.5'	2554
1	39°23.1'	2388	20°33.2'	2722	16°15.2'	2861	75°24.2'	2418	75°18.9'	2555
2	39°57.7'	2390	20°01.1'	2752	15°44.2'	2899	75°58.5'	2420	75°52.2'	2556
3	40°32.3'	2392	19°29.3'	2785	15°13.4'	2941	76°32.9'	2422	76°25.5'	2557
4	41°06.9'	2393	18°57.7'	2821	14°42.9'	2987	77°07.3'	2424	76°58.8'	2559
5	41°41.5'	2395	18°26.4'	2859	14°12.8'	3039	77°41.6'	2426	77°32.1'	2560
6	42°16.1'	2397	17°55.3'	2902	13°43.0'	3097	78°15.9'	2428	78°05.4'	2561
7	42°50.6'	2399	17°24.5'	2949	13°13.6'	3163	78°50.2'	2430	78°38.6'	2563
8	43°25.2'	2401	16°54.1'	3000	12°44.6'	3237	79°24.5'	2432	79°11.9'	2564
9	43°59.7'	2404	16°24.0'	3057	12°16.1'	3321	79°58.8'	2434	79°45.1'	2566
10	44°34.2'	2406	15°54.4'	3119	11°48.2'	3418	80°33.1'	2436	80°18.4'	2568
11	45°08.6'	2408	15°25.1'	3189	11°20.9'	3528	81°07.3'	2438	80°51.6'	2569
12	45°43.1'	2410	14°56.3'	3266	10°54.3'	3656	81°41.5'	2440	81°24.8'	2571
13	46°17.6'	2412	14°28.0'	3352	-	-	82°15.7'	2443	81°58.0'	2573
14	46°52.0'	2415	14°00.3'	3449	-	-	82°49.9'	2445	82°31.1'	2575
15	47°26.4'	2417	13°33.2'	3558	-	-	83°24.1'	2447	83°04.3'	2577
16	48°00.8'	2419	13°06.7'	3681	-	-	83°58.2'	2449	83°37.5'	2579
17	48°35.2'	2421	-	-	-	-	84°32.4'	2452	84°10.6'	2581
18	49°09.5'	2424	-	-	-	-	85°06.5'	2454	84°43.7'	2583
19	49°43.9'	2426	-	-	-	-	85°40.6'	2457	85°16.8'	2586
20	50°18.2'	2429	-	-	-	-	86°14.7'	2459	85°49.9'	2588
21	50°52.5'	2431	-	-	-	-	86°48.7'	2462	86°23.0'	2590
22	51°26.8'	2434	-	-	-	-	87°22.8'	2464	86°56.0'	2593
23	52°01.0'	2436	-	-	-	-	87°56.8'	2467	87°29.0'	2595

Tue Nov 6, 2018 UTC

UTC	+Regulus		+Pollux		+Procyon		+Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	52°35.3'	2439	88°30.8'	2469	88°02.0'	2598	113°58.6'	2579
1	53°09.5'	2441	89°04.8'	2472	88°35.0'	2600	114°31.7'	2583
2	53°43.7'	2444	89°38.7'	2475	89°08.0'	2603	115°04.8'	2587
3	54°17.8'	2447	90°12.7'	2477	89°41.0'	2606	115°37.9'	2591
4	54°52.0'	2449	90°46.6'	2480	90°13.9'	2608	116°10.9'	2596
5	55°26.1'	2452	91°20.5'	2483	90°46.8'	2611	116°43.9'	2600
6	56°00.3'	2455	91°54.3'	2486	91°19.7'	2614	117°16.9'	2604
7	56°34.3'	2458	92°28.2'	2489	91°52.5'	2617	117°49.8'	2609
8	57°08.4'	2461	93°02.0'	2492	92°25.4'	2620	118°22.7'	2613
9	57°42.5'	2463	93°35.8'	2494	92°58.2'	2623	118°55.6'	2618
10	58°16.5'	2466	94°09.6'	2497	93°31.0'	2626	119°28.4'	2623
11	58°50.5'	2469	94°43.4'	2500	94°03.8'	2630	120°01.2'	2628
12	59°24.5'	2472	95°17.1'	2504	94°36.5'	2633	120°34.0'	2633
13	59°58.4'	2475	95°50.8'	2507	95°09.2'	2636	121°06.7'	2638
14	60°32.4'	2478	96°24.5'	2510	95°41.9'	2640	121°39.4'	2643
15	61°06.3'	2481	96°58.2'	2513	96°14.6'	2643	122°12.1'	2648
16	61°40.2'	2484	97°31.8'	2516	96°47.3'	2646	122°44.7'	2653
17	62°14.0'	2487	98°05.4'	2519	97°19.9'	2650	123°17.2'	2658
18	62°47.9'	2490	98°39.0'	2522	97°52.5'	2654	123°49.8'	2664
19	63°21.7'	2494	99°12.6'	2526	98°25.1'	2657	124°22.3'	2670
20	63°55.5'	2497	99°46.1'	2529	98°57.6'	2661	124°54.7'	2675
21	64°29.2'	2500	100°19.7'	2532	99°30.1'	2665	125°27.1'	2681
22	65°03.0'	2503	100°53.1'	2536	100°02.6'	2669	125°59.5'	2687
23	65°36.7'	2506	101°26.6'	2539	100°35.0'	2673	126°31.8'	2693

Fri Nov 9, 2018 UTC

UTC	–Saturn		–Mars		–Formalhaut		–Altair	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	33°04.8′	2723	83°16.2′	2890	92°50.0′	2912	61°20.2′	3507
1	32°32.8′	2727	82°45.4′	2895	92°19.3′	2916	60°53.4′	3520
2	32°00.8′	2732	82°14.6′	2899	91°48.6′	2920	60°26.7′	3533
3	31°28.8′	2736	81°43.8′	2904	91°18.0′	2924	60°00.1′	3547
4	30°56.8′	2740	81°13.1′	2908	90°47.4′	2928	59°33.6′	3560
5	30°24.9′	2745	80°42.4′	2912	90°16.8′	2932	59°07.2′	3574
6	29°53.0′	2749	80°11.7′	2917	89°46.3′	2936	58°40.8′	3588
7	29°21.2′	2753	79°41.0′	2921	89°15.8′	2940	58°14.6′	3603
8	28°49.3′	2758	79°10.4′	2925	88°45.3′	2945	57°48.4′	3617
9	28°17.5′	2762	78°39.8′	2930	88°14.8′	2949	57°22.3′	3632
10	27°45.8′	2767	78°09.2′	2934	87°44.4′	2953	56°56.3′	3648
11	27°14.0′	2771	77°38.7′	2939	87°14.0′	2957	56°30.4′	3663
12	26°42.3′	2775	77°08.2′	2943	86°43.6′	2962	56°04.6′	3679
13	26°10.7′	2780	76°37.7′	2947	86°13.3′	2966	55°38.9′	3696
14	25°39.0′	2784	76°07.3′	2952	85°43.0′	2971	55°13.3′	3712
15	25°07.4′	2789	75°36.9′	2956	85°12.7′	2975	54°47.8′	3729
16	24°35.9′	2793	75°06.5′	2960	84°42.5′	2979	54°22.3′	3747
17	24°04.3′	2798	74°36.2′	2965	84°12.2′	2984	53°57.0′	3764
18	23°32.8′	2802	74°05.9′	2969	83°42.1′	2989	53°31.8′	3783
19	23°01.3′	2807	73°35.6′	2974	83°11.9′	2993	53°06.7′	3801
20	22°29.9′	2812	73°05.3′	2978	82°41.8′	2998	52°41.7′	3820
21	21°58.5′	2816	72°35.1′	2982	82°11.7′	3002	52°16.8′	3839
22	21°27.1′	2821	72°04.9′	2987	81°41.6′	3007	51°52.0′	3859
23	20°55.8′	2825	71°34.7′	2991	81°11.6′	3012	51°27.3′	3879

Sat Nov 10, 2018 UTC

UTC	–Saturn		–Mars		–Formalhaut		–Altair	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	20°24.5′	2830	71°04.6′	2995	80°41.6′	3017	51°02.8′	3900
1	19°53.2′	2835	70°34.5′	3000	80°11.7′	3021	50°38.3′	3921
2	19°22.0′	2840	70°04.4′	3004	79°41.8′	3026	50°14.0′	3943
3	18°50.8′	2844	69°34.4′	3008	79°11.9′	3031	49°49.8′	3965
4	18°19.6′	2849	69°04.4′	3013	78°42.0′	3036	49°25.7′	3988
5	17°48.5′	2854	68°34.4′	3017	78°12.2′	3041	49°01.8′	4011
6	17°17.4′	2859	68°04.4′	3021	77°42.4′	3046	48°37.9′	4035
7	16°46.3′	2864	67°34.5′	3025	77°12.6′	3051	48°14.2′	4060
8	16°15.3′	2869	67°04.6′	3030	76°42.9′	3056	47°50.7′	4085
9	15°44.3′	2875	66°34.8′	3034	76°13.2′	3061	47°27.3′	4111
10	15°13.4′	2880	66°04.9′	3038	75°43.6′	3066	47°04.0′	4137
11	14°42.4′	2886	65°35.1′	3042	75°14.0′	3071	46°40.8′	4164
12	14°11.6′	2891	65°05.3′	3047	74°44.4′	3076	46°17.8′	4192
13	13°40.7′	2897	64°35.6′	3051	74°14.8′	3081	45°55.0′	4220
14	13°09.9′	2903	64°05.9′	3055	73°45.3′	3087	45°32.3′	4249
15	12°39.2′	2909	63°36.2′	3059	73°15.8′	3092	45°09.7′	4279
16	12°08.5′	2916	63°06.5′	3063	72°46.4′	3097	44°47.3′	4310
17	11°37.8′	2923	62°36.9′	3067	72°17.0′	3102	44°25.1′	4342
18	11°07.2′	2930	62°07.3′	3072	71°47.6′	3108	44°03.0′	4375
19	10°36.7′	2938	61°37.7′	3076	71°18.3′	3113	43°41.1′	4408
20	10°06.2′	2947	61°08.1′	3080	70°49.0′	3118	43°19.3′	4442
21	9°35.7′	2956	60°38.6′	3084	70°19.7′	3124	42°57.8′	4478
22	9°05.3′	2966	60°09.1′	3088	69°50.5′	3129	42°36.4′	4514
23	8°35.0′	2977	59°39.6′	3092	69°21.3′	3135	42°15.1′	4552

Sun Nov 11, 2018 UTC

UTC	−Saturn		+Antares		−Mars		−Formalhaut		−Altair	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	8°04.8′	2990	19°21.2′	3338	59°10.2′	3096	68°52.2′	3140	41°54.1′	4590
1	7°34.7′	3005	19°49.0′	3320	58°40.8′	3100	68°23.0′	3146	41°33.3′	4630
2	7°04.6′	3022	20°16.9′	3303	58°11.4′	3104	67°54.0′	3151	41°12.6′	4671
3	6°34.7′	3043	20°45.0′	3287	57°42.0′	3108	67°24.9′	3157	40°52.1′	4713
4	6°04.9′	3068	21°13.1′	3273	57°12.7′	3112	66°55.9′	3163	40°31.9′	4756
5	5°35.3′	3099	21°41.4′	3260	56°43.4′	3115	66°27.0′	3168	40°11.8′	4801
6	5°05.9′	3140	22°09.7′	3248	56°14.1′	3119	65°58.0′	3174	39°51.9′	4847
7	4°36.8′	3194	22°38.1′	3237	55°44.9′	3123	65°29.1′	3180	39°32.3′	4895
8	4°08.0′	3268	23°06.6′	3227	55°15.6′	3127	65°00.3′	3186	39°12.8′	4944
9	3°39.8′	3376	23°35.1′	3218	54°46.4′	3131	64°31.5′	3192	38°53.6′	4995
10	–	–	24°03.7′	3210	54°17.2′	3134	64°02.7′	3198	38°34.6′	5048
11	–	–	24°32.4′	3202	53°48.1′	3138	63°34.0′	3204	38°15.9′	5102
12	–	–	25°01.1′	3195	53°19.0′	3142	63°05.3′	3210	37°57.3′	5158
13	–	–	25°29.8′	3189	52°49.8′	3146	62°36.6′	3216	37°39.0′	5216
14	–	–	25°58.6′	3183	52°20.8′	3149	62°08.0′	3222	37°21.0′	5276
15	–	–	26°27.4′	3177	51°51.7′	3153	61°39.4′	3228	37°03.2′	5338
16	–	–	26°56.3′	3172	51°22.7′	3156	61°10.9′	3234	36°45.6′	5403
17	–	–	27°25.2′	3168	50°53.7′	3160	60°42.4′	3240	36°28.3′	5469
18	–	–	27°54.1′	3163	50°24.7′	3163	60°14.0′	3247	36°11.3′	5538
19	–	–	28°23.1′	3160	49°55.7′	3167	59°45.5′	3253	35°54.5′	5610
20	–	–	28°52.1′	3156	49°26.8′	3170	59°17.2′	3259	35°38.1′	5684
21	–	–	29°21.1′	3153	48°57.9′	3174	58°48.8′	3266	35°21.8′	5761
22	3°30.7′	3346	29°50.1′	3150	48°29.0′	3177	58°20.6′	3273	35°05.9′	5841
23	3°58.5′	3269	30°19.2′	3148	48°00.1′	3180	57°52.3′	3279	34°50.3′	5924

Mon Nov 12, 2018 UTC

UTC	+Sun		+Saturn		+Antares		−Mars		−Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	50°41.2′	3366	4°26.8′	3217	30°48.2′	3145	47°31.3′	3184	57°24.1′	3286
1	51°08.8′	3369	4°55.4′	3179	31°17.3′	3143	47°02.4′	3187	56°56.0′	3293
2	51°36.5′	3372	5°24.2′	3152	31°46.4′	3141	46°33.6′	3190	56°27.9′	3299
3	52°04.1′	3375	5°53.3′	3132	32°15.5′	3139	46°04.9′	3193	55°59.8′	3306
4	52°31.6′	3378	6°22.4′	3117	32°44.7′	3138	45°36.1′	3197	55°31.8′	3313
5	52°59.2′	3381	6°51.7′	3105	33°13.8′	3136	45°07.4′	3200	55°03.8′	3320
6	53°26.7′	3384	7°21.1′	3096	33°42.9′	3135	44°38.6′	3203	54°35.9′	3328
7	53°54.3′	3387	7°50.5′	3089	34°12.1′	3134	44°09.9′	3206	54°08.0′	3335
8	54°21.8′	3390	8°19.9′	3084	34°41.2′	3133	43°41.3′	3209	53°40.1′	3342
9	54°49.3′	3392	8°49.4′	3080	35°10.4′	3132	43°12.6′	3212	53°12.3′	3350
10	55°16.7′	3395	9°19.0′	3077	35°39.6′	3132	42°44.0′	3215	52°44.6′	3357
11	55°44.2′	3398	9°48.5′	3075	36°08.7′	3131	42°15.3′	3218	52°16.9′	3365
12	56°11.6′	3400	10°18.1′	3074	36°37.9′	3131	41°46.7′	3221	51°49.2′	3373
13	56°39.1′	3403	10°47.6′	3073	37°07.1′	3130	41°18.2′	3223	51°21.6′	3380
14	57°06.5′	3406	11°17.2′	3072	37°36.3′	3130	40°49.6′	3226	50°54.1′	3388
15	57°33.9′	3408	11°46.8′	3072	38°05.5′	3130	40°21.0′	3229	50°26.6′	3397
16	58°01.2′	3411	12°16.4′	3072	38°34.7′	3129	39°52.5′	3232	49°59.1′	3405
17	58°28.6′	3413	12°45.9′	3072	39°03.8′	3129	39°24.0′	3234	49°31.8′	3413
18	58°55.9′	3415	13°15.5′	3073	39°33.0′	3129	38°55.5′	3237	49°04.4′	3422
19	59°23.3′	3418	13°45.1′	3073	40°02.2′	3129	38°27.0′	3239	48°37.1′	3430
20	59°50.6′	3420	14°14.6′	3074	40°31.4′	3129	37°58.6′	3242	48°09.9′	3439
21	60°17.9′	3422	14°44.2′	3075	41°00.6′	3129	37°30.1′	3244	47°42.7′	3448
22	60°45.2′	3425	15°13.8′	3076	41°29.8′	3129	37°01.7′	3247	47°15.6′	3457
23	61°12.4′	3427	15°43.3′	3077	41°59.0′	3129	36°33.3′	3249	46°48.5′	3467

Tue Nov 13, 2018 UTC

UTC	+Sun		+Saturn		+Antares		-Mars		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	61°39.7'	3429	16°12.9'	3078	42°28.2'	3130	36°04.9'	3252	46°21.5'	3476
1	62°06.9'	3431	16°42.4'	3079	42°57.4'	3130	35°36.5'	3254	45°54.6'	3486
2	62°34.2'	3433	17°11.9'	3080	43°26.5'	3130	35°08.2'	3256	45°27.7'	3496
3	63°01.4'	3435	17°41.4'	3082	43°55.7'	3130	34°39.8'	3258	45°00.9'	3506
4	63°28.6'	3437	18°11.0'	3083	44°24.9'	3131	34°11.5'	3261	44°34.1'	3517
5	63°55.8'	3439	18°40.5'	3084	44°54.1'	3131	33°43.2'	3263	44°07.4'	3527
6	64°23.0'	3441	19°09.9'	3085	45°23.3'	3131	33°14.9'	3265	43°40.8'	3538
7	64°50.1'	3443	19°39.4'	3087	45°52.4'	3131	32°46.6'	3267	43°14.2'	3549
8	65°17.3'	3445	20°08.9'	3088	46°21.6'	3132	32°18.3'	3269	42°47.7'	3561
9	65°44.4'	3446	20°38.4'	3089	46°50.8'	3132	31°50.0'	3271	42°21.3'	3572
10	66°11.6'	3448	21°07.8'	3090	47°20.0'	3132	31°21.8'	3273	41°54.9'	3584
11	66°38.7'	3450	21°37.3'	3092	47°49.1'	3133	30°53.5'	3274	41°28.6'	3597
12	67°05.8'	3451	22°06.7'	3093	48°18.3'	3133	30°25.3'	3276	41°02.4'	3609
13	67°32.9'	3453	22°36.2'	3094	48°47.5'	3133	29°57.1'	3278	40°36.3'	3622
14	67°60.0'	3455	23°05.6'	3095	49°16.6'	3133	29°28.9'	3280	40°10.2'	3636
15	68°27.1'	3456	23°35.0'	3096	49°45.8'	3134	29°00.7'	3281	39°44.2'	3649
16	68°54.1'	3457	24°04.4'	3097	50°14.9'	3134	28°32.5'	3283	39°18.3'	3663
17	69°21.2'	3459	24°33.8'	3098	50°44.1'	3134	28°04.3'	3284	38°52.5'	3678
18	69°48.3'	3460	25°03.2'	3099	51°13.3'	3134	27°36.1'	3286	38°26.8'	3693
19	70°15.3'	3461	25°32.6'	3100	51°42.4'	3135	27°08.0'	3287	38°01.2'	3709
20	70°42.4'	3462	26°02.0'	3101	52°11.6'	3135	26°39.8'	3289	37°35.6'	3724
21	71°09.4'	3464	26°31.4'	3102	52°40.7'	3135	26°11.7'	3290	37°10.2'	3741
22	71°36.4'	3465	27°00.8'	3103	53°09.9'	3135	25°43.6'	3291	36°44.8'	3758
23	72°03.4'	3466	27°30.1'	3104	53°39.0'	3135	25°15.5'	3293	36°19.6'	3776

Wed Nov 14, 2018 UTC

UTC	+Sun		+Saturn		-Mars		+Antares		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	72°30.4'	3467	27°59.5'	3105	24°47.3'	3294	54°08.2'	3135	35°54.4'	3794
1	72°57.5'	3468	28°28.8'	3106	24°19.2'	3295	54°37.3'	3135	35°29.4'	3813
2	73°24.5'	3469	28°58.2'	3106	23°51.1'	3296	55°06.5'	3135	35°04.4'	3832
3	73°51.5'	3469	29°27.5'	3107	23°23.1'	3297	55°35.6'	3135	34°39.6'	3853
4	74°18.4'	3470	29°56.9'	3108	22°55.0'	3298	56°04.8'	3135	34°14.9'	3874
5	74°45.4'	3471	30°26.2'	3108	22°26.9'	3299	56°33.9'	3135	33°50.3'	3895
6	75°12.4'	3472	30°55.5'	3109	21°58.8'	3300	57°03.1'	3135	33°25.8'	3918
7	75°39.4'	3472	31°24.9'	3109	21°30.8'	3301	57°32.2'	3135	33°01.5'	3942
8	76°06.4'	3473	31°54.2'	3110	21°02.7'	3302	58°01.4'	3135	32°37.3'	3966
9	76°33.3'	3473	32°23.5'	3110	20°34.6'	3303	58°30.5'	3135	32°13.2'	3992
10	77°00.3'	3474	32°52.8'	3110	20°06.6'	3303	58°59.7'	3135	31°49.3'	4018
11	77°27.3'	3474	33°22.1'	3111	19°38.6'	3304	59°28.8'	3134	31°25.5'	4046
12	77°54.2'	3474	33°51.4'	3111	19°10.5'	3305	59°58.0'	3134	31°01.9'	4075
13	78°21.2'	3475	34°20.8'	3111	18°42.5'	3305	60°27.1'	3134	30°38.4'	4105
14	78°48.1'	3475	34°50.1'	3111	18°14.5'	3306	60°56.3'	3133	30°15.1'	4137
15	79°15.1'	3475	35°19.4'	3112	17°46.4'	3307	61°25.5'	3133	29°51.9'	4169
16	79°42.1'	3475	35°48.7'	3112	17°18.4'	3307	61°54.6'	3133	29°28.9'	4204
17	80°09.0'	3475	36°18.0'	3112	16°50.4'	3308	62°23.8'	3132	29°06.1'	4240
18	80°36.0'	3475	36°47.3'	3112	16°22.4'	3308	62°53.0'	3132	28°43.5'	4278
19	81°02.9'	3475	37°16.6'	3111	15°54.4'	3309	63°22.1'	3131	28°21.1'	4317
20	81°29.9'	3475	37°45.9'	3111	15°26.4'	3309	63°51.3'	3131	27°58.9'	4359
21	81°56.8'	3475	38°15.2'	3111	14°58.3'	3309	64°20.5'	3130	27°36.9'	4402
22	82°23.8'	3474	38°44.5'	3111	14°30.3'	3310	64°49.7'	3129	27°15.2'	4448
23	82°50.8'	3474	39°13.9'	3111	14°02.3'	3310	65°18.9'	3129	26°53.6'	4496

Thu Nov 15, 2018 UTC

UTC	+Sun		-Mars		+Saturn		+Antares		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	83°17.7'	3474	13°34.3'	3311	39°43.2'	3110	65°48.1'	3128	26°32.3'	4547
1	83°44.7'	3473	13°06.4'	3311	40°12.5'	3110	66°17.3'	3127	26°11.3'	4600
2	84°11.6'	3473	12°38.4'	3312	40°41.8'	3109	66°46.5'	3126	25°50.4'	4656
3	84°38.6'	3472	12°10.4'	3312	41°11.1'	3109	67°15.7'	3125	25°29.9'	4715
4	85°05.6'	3472	11°42.4'	3313	41°40.5'	3108	67°44.9'	3125	25°09.6'	4777
5	85°32.6'	3471	11°14.4'	3314	42°09.8'	3108	68°14.1'	3124	24°49.7'	4843
6	85°59.5'	3470	10°46.4'	3315	42°39.1'	3107	68°43.3'	3123	24°30.0'	4913
7	86°26.5'	3469	10°18.5'	3316	43°08.5'	3106	69°12.6'	3122	24°10.6'	4987
8	86°53.5'	3469	9°50.5'	3317	43°37.8'	3105	69°41.8'	3120	23°51.6'	5065
9	87°20.5'	3468	9°22.5'	3318	44°07.2'	3105	70°11.1'	3119	23°32.9'	5148
10	87°47.5'	3467	8°54.6'	3320	44°36.5'	3104	70°40.3'	3118	23°14.6'	5236
11	88°14.5'	3466	8°26.7'	3322	45°05.9'	3103	71°09.6'	3117	22°56.6'	5329
12	88°41.5'	3465	7°58.7'	3325	45°35.3'	3102	71°38.9'	3116	22°39.0'	5428
13	89°08.6'	3464	7°30.8'	3328	46°04.6'	3101	72°08.1'	3114	22°21.8'	5534
14	89°35.6'	3462	7°03.0'	3333	46°34.0'	3099	72°37.4'	3113	22°05.1'	5646
15	90°02.6'	3461	6°35.1'	3338	47°03.4'	3098	73°06.7'	3112	21°48.7'	5767
16	90°29.7'	3460	6°07.3'	3345	47°32.8'	3097	73°36.0'	3110	21°32.8'	5895
17	90°56.7'	3458	5°39.5'	3354	48°02.2'	3096	74°05.3'	3109	21°17.4'	6032
18	91°23.8'	3457	5°11.8'	3366	48°31.6'	3095	74°34.7'	3107	21°02.4'	6179
19	91°50.8'	3456	4°44.2'	3383	49°01.1'	3093	75°04.0'	3106	20°47.9'	6337
20	92°17.9'	3454	4°16.6'	3406	49°30.5'	3092	75°33.4'	3104	20°34.0'	6506
21	92°45.0'	3452	3°49.2'	3439	49°59.9'	3090	76°02.7'	3102	20°20.6'	6689
22	93°12.1'	3451	3°22.0'	3489	50°29.4'	3089	76°32.1'	3101	20°07.7'	6886
23	93°39.2'	3449	2°55.2'	3567	50°58.8'	3087	77°01.5'	3099	19°55.4'	7100

Fri Nov 16, 2018 UTC

UTC	+Sun		+Saturn		+Antares		-Aldebaran		-Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	94°06.3'	3447	51°28.3'	3085	77°30.9'	3097	102°04.2'	3050	119°11.5'	3206
1	94°33.5'	3445	51°57.8'	3084	78°00.3'	3095	101°34.5'	3048	118°42.8'	3203
2	95°00.6'	3444	52°27.3'	3082	78°29.7'	3093	101°04.7'	3046	118°14.1'	3200
3	95°27.7'	3442	52°56.8'	3080	78°59.1'	3091	100°35.0'	3044	117°45.4'	3197
4	95°54.9'	3440	53°26.3'	3078	79°28.6'	3089	100°05.2'	3042	117°16.7'	3193
5	96°22.1'	3438	53°55.9'	3076	79°58.0'	3087	99°35.4'	3041	116°47.9'	3190
6	96°49.3'	3435	54°25.4'	3074	80°27.5'	3085	99°05.7'	3039	116°19.1'	3187
7	97°16.5'	3433	54°55.0'	3072	80°57.0'	3083	98°35.9'	3037	115°50.3'	3184
8	97°43.7'	3431	55°24.5'	3070	81°26.5'	3081	98°06.0'	3035	115°21.5'	3180
9	98°10.9'	3429	55°54.1'	3068	81°56.0'	3079	97°36.2'	3032	114°52.7'	3177
10	98°38.2'	3426	56°23.7'	3066	82°25.5'	3076	97°06.4'	3030	114°23.8'	3174
11	99°05.4'	3424	56°53.4'	3064	82°55.1'	3074	96°36.5'	3028	113°54.9'	3171
12	99°32.7'	3422	57°23.0'	3061	83°24.7'	3072	96°06.6'	3026	113°26.0'	3167
13	99°60.0'	3419	57°52.6'	3059	83°54.2'	3069	95°36.7'	3024	112°57.1'	3164
14	100°27.3'	3417	58°22.3'	3057	84°23.8'	3067	95°06.8'	3021	112°28.1'	3160
15	100°54.6'	3414	58°52.0'	3054	84°53.4'	3064	94°36.9'	3019	111°59.1'	3157
16	101°21.9'	3411	59°21.7'	3052	85°23.1'	3062	94°06.9'	3016	111°30.1'	3154
17	101°49.3'	3409	59°51.4'	3049	85°52.7'	3059	93°37.0'	3014	111°01.1'	3150
18	102°16.7'	3406	60°21.1'	3047	86°22.4'	3057	93°07.0'	3011	110°32.0'	3147
19	102°44.1'	3403	60°50.9'	3044	86°52.1'	3054	92°37.0'	3009	110°03.0'	3143
20	103°11.5'	3400	61°20.7'	3041	87°21.8'	3051	92°07.0'	3006	109°33.9'	3140
21	103°38.9'	3397	61°50.4'	3039	87°51.5'	3049	91°37.0'	3003	109°04.7'	3136
22	104°06.3'	3394	62°20.2'	3036	88°21.2'	3046	91°06.9'	3000	108°35.6'	3133
23	104°33.8'	3391	62°50.1'	3033	88°51.0'	3043	90°36.9'	2998	108°06.4'	3129

Sat Nov 17, 2018 UTC

UTC	+Sun		+Mars		+Saturn		-Aldebaran		+Antares	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	105°01.3'	3388	9°06.7'	3242	63°19.9'	3030	90°06.8'	2995	89°20.8'	3040
1	105°28.8'	3385	9°35.1'	3237	63°49.8'	3027	89°36.7'	2992	89°50.5'	3037
2	105°56.3'	3382	10°03.6'	3232	64°19.7'	3024	89°06.5'	2989	90°20.4'	3034
3	106°23.8'	3379	10°32.1'	3227	64°49.6'	3021	88°36.4'	2986	90°50.2'	3031
4	106°51.4'	3375	11°00.7'	3222	65°19.5'	3018	88°06.2'	2983	91°20.1'	3028
5	107°19.0'	3372	11°29.2'	3218	65°49.4'	3015	87°36.0'	2980	91°49.9'	3025
6	107°46.6'	3369	11°57.8'	3214	66°19.4'	3012	87°05.8'	2977	92°19.8'	3022
7	108°14.2'	3365	12°26.5'	3209	66°49.4'	3008	86°35.6'	2973	92°49.8'	3019
8	108°41.9'	3362	12°55.1'	3205	67°19.4'	3005	86°05.3'	2970	93°19.7'	3016
9	109°09.5'	3358	13°23.8'	3201	67°49.4'	3002	85°35.0'	2967	93°49.7'	3012
10	109°37.2'	3355	13°52.5'	3197	68°19.5'	2998	85°04.7'	2963	94°19.6'	3009
11	110°04.9'	3351	14°21.3'	3192	68°49.6'	2995	84°34.4'	2960	94°49.7'	3006
12	110°32.7'	3347	14°50.0'	3188	69°19.7'	2992	84°04.1'	2957	95°19.7'	3002
13	111°00.4'	3344	15°18.8'	3184	69°49.8'	2988	83°33.7'	2953	95°49.7'	2999
14	111°28.2'	3340	15°47.6'	3180	70°20.0'	2985	83°03.3'	2950	96°19.8'	2996
15	111°56.0'	3336	16°16.5'	3176	70°50.2'	2981	82°32.9'	2946	96°49.9'	2992
16	112°23.9'	3332	16°45.4'	3172	71°20.4'	2977	82°02.4'	2943	97°20.0'	2989
17	112°51.7'	3328	17°14.3'	3168	71°50.6'	2974	81°32.0'	2939	97°50.2'	2985
18	113°19.6'	3324	17°43.2'	3163	72°20.8'	2970	81°01.5'	2935	98°20.4'	2981
19	113°47.5'	3320	18°12.2'	3159	72°51.1'	2966	80°30.9'	2932	98°50.6'	2978
20	114°15.4'	3316	18°41.2'	3155	73°21.4'	2962	80°00.4'	2928	99°20.8'	2974
21	114°43.4'	3312	19°10.2'	3151	73°51.8'	2959	79°29.8'	2924	99°51.0'	2971
22	115°11.4'	3308	19°39.2'	3146	74°22.1'	2955	78°59.2'	2920	100°21.3'	2967
23	115°39.4'	3304	20°08.3'	3142	74°52.5'	2951	78°28.6'	2916	100°51.6'	2963

Sun Nov 18, 2018 UTC

UTC	+Sun		+Mars		+Saturn		-Aldebaran		-Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	116°07.4'	3300	20°37.4'	3138	75°22.9'	2947	77°57.9'	2912	95°49.0'	3032
1	116°35.5'	3296	21°06.5'	3133	75°53.4'	2943	77°27.2'	2908	95°19.1'	3028
2	117°03.6'	3291	21°35.7'	3129	76°23.8'	2939	76°56.5'	2904	94°49.3'	3024
3	117°31.7'	3287	22°04.9'	3125	76°54.3'	2935	76°25.8'	2900	94°19.4'	3020
4	117°59.8'	3283	22°34.1'	3120	77°24.9'	2931	75°55.0'	2896	93°49.4'	3015
5	118°28.0'	3279	23°03.4'	3116	77°55.4'	2926	75°24.2'	2892	93°19.5'	3011
6	118°56.2'	3274	23°32.6'	3111	78°26.0'	2922	74°53.4'	2888	92°49.5'	3007
7	119°24.5'	3270	24°02.0'	3107	78°56.6'	2918	74°22.5'	2884	92°19.4'	3003
8	119°52.7'	3265	24°31.3'	3102	79°27.3'	2914	73°51.6'	2880	91°49.4'	2998
9	120°21.0'	3261	25°00.7'	3098	79°57.9'	2909	73°20.7'	2875	91°19.3'	2994
10	120°49.3'	3256	25°30.1'	3093	80°28.6'	2905	72°49.8'	2871	90°49.2'	2990
11	121°17.7'	3252	25°59.5'	3088	80°59.4'	2901	72°18.8'	2867	90°19.0'	2985
12	121°46.0'	3247	26°29.0'	3084	81°30.1'	2896	71°47.8'	2862	89°48.9'	2981
13	122°14.5'	3242	26°58.5'	3079	82°00.9'	2892	71°16.8'	2858	89°18.7'	2977
14	122°42.9'	3238	27°28.0'	3074	82°31.8'	2888	70°45.7'	2854	88°48.4'	2972
15	123°11.4'	3233	27°57.5'	3070	83°02.6'	2883	70°14.6'	2849	88°18.2'	2968
16	123°39.9'	3228	28°27.1'	3065	83°33.5'	2879	69°43.4'	2845	87°47.9'	2963
17	124°08.4'	3224	28°56.8'	3060	84°04.4'	2874	69°12.3'	2840	87°17.5'	2959
18	124°37.0'	3219	29°26.4'	3055	84°35.4'	2869	68°41.1'	2836	86°47.2'	2955
19	125°05.5'	3214	29°56.1'	3050	85°06.4'	2865	68°09.8'	2831	86°16.8'	2950
20	125°34.2'	3209	30°25.8'	3046	85°37.4'	2860	67°38.6'	2826	85°46.4'	2946
21	126°02.8'	3205	30°55.6'	3041	86°08.5'	2855	67°07.3'	2822	85°15.9'	2941
22	126°31.5'	3200	31°25.4'	3036	86°39.5'	2851	66°36.0'	2817	84°45.4'	2937
23	127°00.2'	3195	31°55.2'	3031	87°10.7'	2846	66°04.6'	2812	84°14.9'	2932

Mon Nov 19, 2018 UTC

UTC	+Mars		-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	32°25.1'	3026	65°33.2'	2808	33°33.3'	3625	87°41.8'	2841	83°44.4'	2928
1	32°55.0'	3021	65°01.8'	2803	33°59.4'	3598	88°13.0'	2837	83°13.8'	2923
2	33°24.9'	3016	64°30.3'	2798	34°25.6'	3573	88°44.2'	2832	82°43.2'	2919
3	33°54.9'	3011	63°58.8'	2794	34°51.9'	3547	89°15.5'	2827	82°12.6'	2914
4	34°24.8'	3006	63°27.3'	2789	35°18.4'	3523	89°46.8'	2822	81°41.9'	2910
5	34°54.9'	3001	62°55.7'	2784	35°45.1'	3500	90°18.1'	2817	81°11.2'	2906
6	35°24.9'	2996	62°24.1'	2779	36°11.9'	3477	90°49.5'	2812	80°40.5'	2901
7	35°55.0'	2990	61°52.4'	2774	36°38.8'	3455	91°20.9'	2807	80°09.7'	2897
8	36°25.2'	2985	61°20.8'	2769	37°05.9'	3433	91°52.3'	2803	79°38.9'	2892
9	36°55.4'	2980	60°49.1'	2765	37°33.1'	3413	92°23.8'	2798	79°08.1'	2888
10	37°25.6'	2975	60°17.3'	2760	38°00.5'	3392	92°55.3'	2793	78°37.2'	2883
11	37°55.8'	2970	59°45.5'	2755	38°27.9'	3373	93°26.8'	2788	78°06.3'	2879
12	38°26.1'	2964	59°13.7'	2750	38°55.5'	3354	93°58.4'	2783	77°35.4'	2874
13	38°56.4'	2959	58°41.9'	2745	39°23.3'	3335	94°30.0'	2778	77°04.5'	2870
14	39°26.8'	2954	58°10.0'	2740	39°51.1'	3317	95°01.7'	2773	76°33.5'	2865
15	39°57.2'	2949	57°38.0'	2735	40°19.1'	3299	95°33.4'	2768	76°02.5'	2861
16	40°27.6'	2943	57°06.1'	2730	40°47.1'	3282	96°05.1'	2763	75°31.4'	2857
17	40°58.1'	2938	56°34.1'	2725	41°15.3'	3265	96°36.9'	2757	75°00.3'	2852
18	41°28.6'	2933	56°02.0'	2720	41°43.6'	3249	97°08.7'	2752	74°29.2'	2848
19	41°59.1'	2928	55°30.0'	2715	42°12.0'	3233	97°40.5'	2747	73°58.1'	2844
20	42°29.7'	2922	54°57.8'	2710	42°40.5'	3217	98°12.4'	2742	73°26.9'	2839
21	43°00.3'	2917	54°25.7'	2705	43°09.1'	3202	98°44.3'	2737	72°55.7'	2835
22	43°30.9'	2912	53°53.5'	2700	43°37.8'	3187	99°16.2'	2732	72°24.5'	2831
23	44°01.6'	2906	53°21.3'	2694	44°06.6'	3173	99°48.2'	2727	71°53.2'	2826

Tue Nov 20, 2018 UTC

UTC	-Aldebaran		+Mars		+Formalhaut		-Betelgeuse		-Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	52°49.0'	2689	44°32.4'	2901	44°35.5'	3158	71°21.9'	2822	96°59.2'	2721
1	52°16.7'	2684	45°03.1'	2895	45°04.5'	3144	70°50.6'	2818	96°27.2'	2716
2	51°44.4'	2679	45°33.9'	2890	45°33.6'	3131	70°19.2'	2814	95°55.1'	2710
3	51°12.0'	2674	46°04.8'	2885	46°02.8'	3117	69°47.8'	2809	95°22.9'	2705
4	50°39.6'	2669	46°35.6'	2879	46°32.0'	3104	69°16.4'	2805	94°50.7'	2700
5	50°07.1'	2664	47°06.6'	2874	47°01.4'	3091	68°44.9'	2801	94°18.5'	2695
6	49°34.6'	2659	47°37.5'	2868	47°30.8'	3079	68°13.5'	2797	93°46.3'	2690
7	49°02.1'	2654	48°08.5'	2863	48°00.4'	3066	67°41.9'	2793	93°14.0'	2684
8	48°29.5'	2649	48°39.6'	2858	48°30.0'	3054	67°10.4'	2789	92°41.6'	2679
9	47°56.9'	2643	49°10.6'	2852	48°59.7'	3042	66°38.8'	2785	92°09.2'	2674
10	47°24.3'	2638	49°41.7'	2847	49°29.5'	3031	66°07.2'	2781	91°36.8'	2669
11	46°51.6'	2633	50°12.9'	2841	49°59.3'	3019	65°35.6'	2777	91°04.4'	2664
12	46°18.9'	2628	50°44.1'	2836	50°29.3'	3008	65°04.0'	2773	90°31.9'	2658
13	45°46.1'	2623	51°15.3'	2831	50°59.3'	2997	64°32.3'	2769	89°59.3'	2653
14	45°13.3'	2618	51°46.6'	2825	51°29.4'	2986	64°00.6'	2766	89°26.8'	2648
15	44°40.5'	2613	52°17.9'	2820	51°59.5'	2975	63°28.8'	2762	88°54.2'	2643
16	44°07.6'	2608	52°49.2'	2814	52°29.8'	2965	62°57.1'	2758	88°21.5'	2638
17	43°34.7'	2603	53°20.6'	2809	53°00.1'	2954	62°25.3'	2755	87°48.8'	2633
18	43°01.8'	2597	53°52.0'	2804	53°30.5'	2944	61°53.5'	2751	87°16.1'	2627
19	42°28.8'	2592	54°23.5'	2798	54°00.9'	2934	61°21.6'	2748	86°43.3'	2622
20	41°55.7'	2587	54°55.0'	2793	54°31.5'	2924	60°49.7'	2744	86°10.5'	2617
21	41°22.7'	2582	55°26.5'	2787	55°02.1'	2915	60°17.8'	2741	85°37.7'	2612
22	40°49.6'	2577	55°58.1'	2782	55°32.7'	2905	59°45.9'	2738	85°04.8'	2607
23	40°16.4'	2572	56°29.7'	2777	56°03.5'	2896	59°14.0'	2734	84°31.9'	2602

Wed Nov 21, 2018 UTC

UTC	−Aldebaran		−Betelgeuse		+Mars		+Formalhaut		−Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	39°43.2'	2567	58°42.0'	2731	57°01.4'	2771	56°34.3'	2886	83°58.9'	2597
1	39°10.0'	2562	58°10.0'	2728	57°33.1'	2766	57°05.1'	2877	83°25.9'	2592
2	38°36.7'	2557	57°38.0'	2725	58°04.8'	2761	57°36.1'	2868	82°52.9'	2587
3	38°03.4'	2552	57°06.0'	2722	58°36.6'	2755	58°07.1'	2859	82°19.8'	2582
4	37°30.1'	2547	56°33.9'	2720	59°08.4'	2750	58°38.1'	2850	81°46.7'	2577
5	36°56.7'	2542	56°01.8'	2717	59°40.3'	2745	59°09.3'	2842	81°13.6'	2572
6	36°23.3'	2538	55°29.7'	2714	60°12.2'	2740	59°40.5'	2833	80°40.4'	2567
7	35°49.9'	2533	54°57.6'	2712	60°44.1'	2734	60°11.7'	2825	80°07.2'	2562
8	35°16.4'	2528	54°25.5'	2709	61°16.1'	2729	60°43.0'	2817	79°33.9'	2557
9	34°42.9'	2523	53°53.3'	2707	61°48.1'	2724	61°14.4'	2808	79°00.6'	2552
10	34°09.3'	2518	53°21.2'	2705	62°20.1'	2719	61°45.8'	2800	78°27.3'	2547
11	33°35.7'	2513	52°49.0'	2703	62°52.2'	2714	62°17.3'	2792	77°53.9'	2543
12	33°02.1'	2509	52°16.8'	2701	63°24.3'	2708	62°48.8'	2785	77°20.5'	2538
13	32°28.4'	2504	51°44.6'	2699	63°56.5'	2703	63°20.4'	2777	76°47.0'	2533
14	31°54.7'	2499	51°12.3'	2697	64°28.7'	2698	63°52.1'	2769	76°13.5'	2528
15	31°20.9'	2494	50°40.1'	2696	65°00.9'	2693	64°23.8'	2762	75°40.0'	2524
16	30°47.1'	2490	50°07.9'	2695	65°33.2'	2688	64°55.6'	2754	75°06.5'	2519
17	30°13.3'	2485	49°35.6'	2693	66°05.5'	2683	65°27.4'	2747	74°32.9'	2514
18	29°39.5'	2481	49°03.3'	2692	66°37.8'	2678	65°59.3'	2740	73°59.2'	2510
19	29°05.6'	2476	48°31.0'	2691	67°10.2'	2673	66°31.2'	2733	73°25.6'	2505
20	28°31.7'	2472	47°58.8'	2691	67°42.6'	2668	67°03.2'	2726	72°51.9'	2500
21	27°57.7'	2467	47°26.5'	2690	68°15.1'	2663	67°35.2'	2719	72°18.1'	2496
22	27°23.7'	2463	46°54.2'	2690	68°47.6'	2658	68°07.3'	2712	71°44.4'	2491
23	26°49.7'	2459	46°21.9'	2689	69°20.1'	2653	68°39.4'	2705	71°10.6'	2487

Thu Nov 22, 2018 UTC

UTC	−Aldebaran		−Betelgeuse		−Pollux		+Mars		−Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	26°15.6'	2454	45°49.6'	2689	70°36.7'	2483	69°52.7'	2648	71°42.5'	2630
1	25°41.5'	2450	45°17.3'	2690	70°02.8'	2478	70°25.3'	2644	71°09.8'	2627
2	25°07.4'	2446	44°45.0'	2690	69°28.9'	2474	70°57.9'	2639	70°37.0'	2624
3	24°33.2'	2442	44°12.7'	2691	68°55.0'	2470	71°30.6'	2634	70°04.2'	2620
4	23°59.0'	2438	43°40.4'	2692	68°21.0'	2465	72°03.3'	2629	69°31.4'	2617
5	23°24.8'	2434	43°08.1'	2693	67°47.0'	2461	72°36.1'	2625	68°58.5'	2614
6	22°50.5'	2430	42°35.8'	2695	67°12.9'	2457	73°08.9'	2620	68°25.7'	2611
7	22°16.2'	2426	42°03.6'	2696	66°38.9'	2453	73°41.7'	2615	67°52.8'	2608
8	21°41.9'	2422	41°31.3'	2698	66°04.8'	2449	74°14.6'	2611	67°19.9'	2606
9	21°07.6'	2418	40°59.1'	2701	65°30.6'	2445	74°47.4'	2606	66°46.9'	2603
10	20°33.2'	2415	40°26.9'	2704	64°56.4'	2441	75°20.4'	2602	66°14.0'	2600
11	19°58.8'	2411	39°54.7'	2707	64°22.2'	2437	75°53.3'	2597	65°41.0'	2598
12	19°24.3'	2408	39°22.5'	2710	63°48.0'	2433	76°26.3'	2593	65°08.0'	2596
13	18°49.9'	2405	38°50.3'	2714	63°13.7'	2429	76°59.4'	2588	64°35.0'	2593
14	18°15.4'	2402	38°18.2'	2718	62°39.4'	2425	77°32.4'	2584	64°02.0'	2591
15	17°40.9'	2399	37°46.1'	2723	62°05.1'	2422	78°05.5'	2580	63°29.0'	2589
16	17°06.3'	2396	37°14.1'	2728	61°30.8'	2418	78°38.6'	2575	62°55.9'	2587
17	16°31.8'	2394	36°42.1'	2734	60°56.4'	2414	79°11.8'	2571	62°22.8'	2585
18	15°57.2'	2391	36°10.1'	2740	60°22.0'	2411	79°45.0'	2567	61°49.8'	2584
19	15°22.6'	2389	35°38.2'	2747	59°47.5'	2407	80°18.2'	2563	61°16.7'	2582
20	14°48.0'	2387	35°06.3'	2754	59°13.1'	2404	80°51.5'	2558	60°43.5'	2580
21	14°13.4'	2386	34°34.5'	2762	58°38.6'	2400	81°24.8'	2554	60°10.4'	2579
22	13°38.7'	2385	34°02.7'	2770	58°04.0'	2397	81°58.1'	2550	59°37.3'	2578
23	13°04.1'	2384	33°31.0'	2780	57°29.5'	2394	82°31.4'	2546	59°04.2'	2577

Fri Nov 23, 2018 UTC

UTC	−Aldebaran		−Pollux		−Betelgeuse		−Procyon		+Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	12°29.4'	2384	56°54.9'	2390	32°59.4'	2790	58°31.0'	2576	83°04.8'	2542
1	11°54.8'	2384	56°20.3'	2387	32°27.8'	2800	57°57.9'	2575	83°38.2'	2538
2	11°20.1'	2385	55°45.7'	2384	31°56.3'	2812	57°24.7'	2575	84°11.7'	2534
3	10°45.5'	2387	55°11.0'	2381	31°24.9'	2825	56°51.5'	2574	84°45.2'	2531
4	10°10.9'	2390	54°36.3'	2378	30°53.6'	2838	56°18.4'	2574	85°18.7'	2527
5	9°36.3'	2395	54°01.6'	2375	30°22.4'	2853	55°45.2'	2574	85°52.2'	2523
6	9°01.7'	2401	53°26.9'	2373	29°51.3'	2869	55°12.0'	2574	86°25.8'	2519
7	8°27.2'	2410	52°52.2'	2370	29°20.3'	2885	54°38.8'	2574	86°59.4'	2516
8	7°52.7'	2421	52°17.4'	2367	28°49.4'	2904	54°05.7'	2574	87°33.0'	2512
9	7°18.4'	2436	51°42.6'	2365	28°18.7'	2923	53°32.5'	2575	88°06.6'	2509
10	6°44.1'	2457	51°07.8'	2362	27°48.1'	2944	52°59.3'	2576	88°40.3'	2505
11	6°10.0'	2485	50°33.0'	2360	27°17.6'	2967	52°26.2'	2576	89°14.0'	2502
12	5°36.2'	2524	49°58.1'	2358	26°47.3'	2991	51°53.0'	2578	89°47.7'	2498
13	5°02.6'	2580	49°23.3'	2355	26°17.2'	3018	51°19.9'	2579	90°21.5'	2495
14	4°29.5'	2663	48°48.4'	2353	25°47.2'	3046	50°46.7'	2581	90°55.3'	2492
15	–	–	48°13.5'	2351	25°17.5'	3077	50°13.6'	2582	91°29.1'	2488
16	–	–	47°38.6'	2349	24°47.9'	3110	49°40.5'	2585	92°02.9'	2485
17	–	–	47°03.6'	2347	24°18.6'	3145	49°07.4'	2587	92°36.7'	2482
18	–	–	46°28.7'	2346	23°49.5'	3184	48°34.4'	2589	93°10.6'	2479
19	–	–	45°53.7'	2344	23°20.7'	3225	48°01.3'	2592	93°44.5'	2476
20	–	–	45°18.8'	2342	22°52.1'	3270	47°28.3'	2595	94°18.5'	2473
21	–	–	44°43.8'	2341	22°23.9'	3319	46°55.3'	2599	94°52.4'	2470
22	–	–	44°08.8'	2339	21°55.9'	3372	46°22.3'	2603	95°26.4'	2467
23	–	–	43°33.8'	2338	21°28.3'	3430	45°49.3'	2607	96°00.4'	2464

Sat Nov 24, 2018 UTC

UTC	−Pollux		−Procyon		−Regulus		−Betelgeuse		+Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	42°58.7'	2337	45°16.4'	2611	78°26.7'	2268	21°01.1'	3493	96°34.4'	2461
1	42°23.7'	2336	44°43.5'	2616	77°51.1'	2265	20°34.3'	3561	97°08.5'	2459
2	41°48.7'	2335	44°10.7'	2621	77°15.5'	2262	20°07.8'	3635	97°42.5'	2456
3	41°13.6'	2335	43°37.9'	2626	76°39.8'	2260	19°41.8'	3716	98°16.6'	2453
4	40°38.6'	2334	43°05.1'	2632	76°04.2'	2257	19°16.3'	3805	98°50.7'	2451
5	40°03.5'	2333	42°32.3'	2638	75°28.5'	2255	18°51.4'	3902	99°24.8'	2448
6	39°28.5'	2333	41°59.7'	2645	74°52.8'	2253	18°26.9'	4009	99°59.0'	2446
7	38°53.4'	2333	41°27.0'	2652	74°17.1'	2250	18°03.1'	4126	100°33.1'	2443
8	38°18.3'	2333	40°54.4'	2660	73°41.3'	2248	17°39.9'	4255	101°07.3'	2441
9	37°43.3'	2333	40°21.9'	2668	73°05.6'	2246	17°17.4'	4398	101°41.5'	2439
10	37°08.2'	2334	39°49.5'	2676	72°29.8'	2244	16°55.6'	4555	102°15.8'	2436
11	36°33.2'	2334	39°17.1'	2685	71°54.0'	2241	–	–	102°50.0'	2434
12	35°58.1'	2335	38°44.7'	2695	71°18.2'	2239	–	–	103°24.2'	2432
13	35°23.1'	2336	38°12.5'	2706	70°42.4'	2237	–	–	103°58.5'	2430
14	34°48.0'	2337	37°40.3'	2717	70°06.5'	2235	–	–	104°32.8'	2428
15	34°13.0'	2338	37°08.2'	2728	69°30.7'	2234	–	–	105°07.1'	2426
16	33°38.0'	2340	36°36.2'	2741	68°54.8'	2232	–	–	105°41.4'	2424
17	33°02.9'	2342	36°04.3'	2754	68°18.9'	2230	–	–	106°15.8'	2422
18	32°28.0'	2344	35°32.4'	2768	67°43.0'	2228	–	–	106°50.1'	2420
19	31°53.0'	2346	35°00.7'	2783	67°07.1'	2226	–	–	107°24.5'	2419
20	31°18.0'	2349	34°29.1'	2798	66°31.1'	2225	–	–	107°58.9'	2417
21	30°43.1'	2352	33°57.6'	2815	65°55.2'	2223	–	–	108°33.3'	2415
22	30°08.2'	2355	33°26.2'	2833	65°19.2'	2222	–	–	109°07.7'	2414
23	29°33.3'	2358	32°55.0'	2852	64°43.3'	2220	–	–	109°42.1'	2412

Sun Nov 25, 2018 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	16°09.7'	2238	28°58.4'	2363	64°07.3'	2219	32°23.9'	2872	117°54.5'	2258
1	16°45.6'	2235	28°23.6'	2367	63°31.3'	2218	31°52.9'	2893	117°18.8'	2256
2	17°21.4'	2232	27°48.8'	2372	62°55.3'	2216	31°22.1'	2915	116°43.1'	2254
3	17°57.3'	2229	27°14.1'	2377	62°19.3'	2215	30°51.4'	2939	116°07.4'	2253
4	18°33.2'	2227	26°39.3'	2383	61°43.2'	2214	30°20.9'	2965	115°31.7'	2251
5	19°09.2'	2225	26°04.7'	2389	61°07.2'	2213	29°50.6'	2992	114°56.0'	2249
6	19°45.1'	2223	25°30.1'	2396	60°31.1'	2212	29°20.5'	3021	114°20.2'	2248
7	20°21.1'	2221	24°55.5'	2404	59°55.1'	2211	28°50.5'	3052	113°44.5'	2246
8	20°57.1'	2219	24°21.0'	2412	59°19.0'	2210	28°20.8'	3085	113°08.7'	2245
9	21°33.1'	2217	23°46.6'	2422	58°42.9'	2209	27°51.3'	3120	112°32.9'	2244
10	22°09.1'	2216	23°12.2'	2432	58°06.9'	2208	27°22.1'	3157	111°57.1'	2242
11	22°45.1'	2214	22°38.0'	2442	57°30.8'	2207	26°53.1'	3197	111°21.3'	2241
12	23°21.1'	2213	22°03.8'	2454	56°54.7'	2206	26°24.3'	3239	110°45.5'	2240
13	23°57.2'	2211	21°29.7'	2468	56°18.6'	2205	25°55.9'	3285	110°09.7'	2239
14	24°33.2'	2210	20°55.7'	2482	55°42.5'	2205	25°27.7'	3334	109°33.9'	2238
15	25°09.3'	2209	20°21.8'	2498	55°06.4'	2204	24°59.9'	3386	108°58.0'	2237
16	25°45.4'	2208	19°48.0'	2515	54°30.2'	2204	24°32.4'	3442	108°22.2'	2236
17	26°21.5'	2207	19°14.4'	2534	53°54.1'	2203	24°05.2'	3503	107°46.3'	2235
18	26°57.6'	2206	18°40.9'	2555	53°18.0'	2203	23°38.4'	3567	107°10.5'	2235
19	27°33.7'	2205	18°07.6'	2578	52°41.9'	2202	23°12.0'	3637	106°34.6'	2234
20	28°09.8'	2205	17°34.5'	2604	52°05.7'	2202	22°46.1'	3712	105°58.7'	2233
21	28°45.9'	2204	17°01.6'	2633	51°29.6'	2202	22°20.5'	3793	105°22.8'	2233
22	29°22.0'	2203	16°28.8'	2665	50°53.4'	2201	21°55.5'	3881	104°47.0'	2232
23	29°58.2'	2203	15°56.3'	2701	50°17.3'	2201	21°30.9'	3976	104°11.1'	2232

Mon Nov 26, 2018 UTC

UTC	+Aldebaran		-Regulus		-Pollux		-Spica		-Venus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	30°34.3'	2202	49°41.2'	2201	15°24.1'	2741	103°35.2'	2231	106°32.9'	2318
1	31°10.4'	2202	49°05.0'	2201	14°52.2'	2785	102°59.3'	2231	105°57.7'	2318
2	31°46.6'	2201	48°28.9'	2201	14°20.6'	2836	102°23.4'	2231	105°22.5'	2318
3	32°22.7'	2201	47°52.7'	2201	13°49.4'	2894	101°47.5'	2230	104°47.3'	2319
4	32°58.8'	2201	47°16.6'	2201	13°18.6'	2959	101°11.6'	2230	104°12.2'	2319
5	33°35.0'	2201	46°40.4'	2201	12°48.2'	3034	100°35.7'	2230	103°37.0'	2319
6	34°11.1'	2201	46°04.3'	2201	12°18.4'	3119	99°59.8'	2230	103°01.8'	2319
7	34°47.3'	2200	45°28.1'	2202	11°49.1'	3218	99°23.9'	2230	102°26.6'	2320
8	35°23.4'	2200	44°52.0'	2202	11°20.5'	3333	98°48.0'	2230	101°51.5'	2320
9	35°59.6'	2200	44°15.9'	2202	–	–	98°12.1'	2230	101°16.3'	2321
10	36°35.7'	2201	43°39.7'	2203	–	–	97°36.2'	2230	100°41.1'	2321
11	37°11.9'	2201	43°03.6'	2203	–	–	97°00.3'	2230	100°06.0'	2322
12	37°48.0'	2201	42°27.5'	2204	–	–	96°24.4'	2231	99°30.8'	2322
13	38°24.2'	2201	41°51.4'	2204	–	–	95°48.5'	2231	98°55.7'	2323
14	39°00.3'	2201	41°15.2'	2205	–	–	95°12.6'	2231	98°20.5'	2324
15	39°36.5'	2202	40°39.1'	2205	–	–	94°36.7'	2232	97°45.4'	2324
16	40°12.6'	2202	40°03.0'	2206	–	–	94°00.8'	2232	97°10.3'	2325
17	40°48.7'	2203	39°26.9'	2207	–	–	93°24.9'	2233	96°35.1'	2326
18	41°24.9'	2203	38°50.8'	2208	–	–	92°49.0'	2233	96°00.0'	2327
19	42°01.0'	2204	38°14.7'	2208	–	–	92°13.1'	2234	95°24.9'	2328
20	42°37.1'	2204	37°38.6'	2209	–	–	91°37.2'	2234	94°49.8'	2329
21	43°13.2'	2205	37°02.6'	2210	–	–	91°01.4'	2235	94°14.7'	2330
22	43°49.4'	2205	36°26.5'	2211	–	–	90°25.5'	2236	93°39.6'	2331
23	44°25.5'	2206	35°50.4'	2212	–	–	89°49.7'	2237	93°04.5'	2332

Tue Nov 27, 2018 UTC

UTC	−Regulus		+Aldebaran		+Betelgeuse		−Spica		−Venus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	35°14.4′	2214	45°01.6′	2207	29°57.2′	2728	89°13.8′	2237	92°29.4′	2333
1	34°38.3′	2215	45°37.7′	2208	30°29.2′	2711	88°38.0′	2238	91°54.4′	2334
2	34°02.3′	2216	46°13.8′	2208	31°01.4′	2694	88°02.1′	2239	91°19.3′	2335
3	33°26.3′	2217	46°49.8′	2209	31°33.7′	2679	87°26.3′	2240	90°44.3′	2337
4	32°50.3′	2219	47°25.9′	2210	32°06.0′	2664	86°50.5′	2241	90°09.3′	2338
5	32°14.3′	2220	48°02.0′	2211	32°38.5′	2650	86°14.7′	2242	89°34.2′	2339
6	31°38.3′	2221	48°38.0′	2212	33°11.1′	2637	85°38.9′	2243	88°59.2′	2341
7	31°02.3′	2223	49°14.1′	2213	33°43.8′	2625	85°03.1′	2244	88°24.2′	2342
8	30°26.4′	2225	49°50.1′	2214	34°16.6′	2614	84°27.3′	2246	87°49.2′	2344
9	29°50.4′	2226	50°26.2′	2215	34°49.5′	2603	83°51.5′	2247	87°14.3′	2345
10	29°14.5′	2228	51°02.2′	2216	35°22.4′	2592	83°15.7′	2248	86°39.3′	2347
11	28°38.5′	2230	51°38.2′	2218	35°55.4′	2583	82°40.0′	2249	86°04.3′	2348
12	28°02.6′	2231	52°14.2′	2219	36°28.5′	2574	82°04.2′	2251	85°29.4′	2350
13	27°26.7′	2233	52°50.2′	2220	37°01.7′	2565	81°28.5′	2252	84°54.5′	2352
14	26°50.9′	2235	53°26.2′	2221	37°35.0′	2557	80°52.8′	2254	84°19.6′	2353
15	26°15.0′	2237	54°02.2′	2223	38°08.3′	2550	80°17.1′	2255	83°44.7′	2355
16	25°39.2′	2240	54°38.2′	2224	38°41.6′	2542	79°41.4′	2257	83°09.8′	2357
17	25°03.3′	2242	55°14.1′	2225	39°15.0′	2536	79°05.7′	2258	82°34.9′	2359
18	24°27.5′	2244	55°50.1′	2227	39°48.5′	2529	78°30.0′	2260	82°00.0′	2360
19	23°51.8′	2247	56°26.0′	2228	40°22.0′	2523	77°54.4′	2261	81°25.2′	2362
20	23°16.0′	2249	57°01.9′	2229	40°55.6′	2518	77°18.7′	2263	80°50.4′	2364
21	22°40.2′	2252	57°37.8′	2231	41°29.2′	2512	76°43.1′	2265	80°15.6′	2366
22	22°04.5′	2255	58°13.7′	2232	42°02.8′	2507	76°07.5′	2266	79°40.8′	2368
23	21°28.8′	2258	58°49.6′	2234	42°36.5′	2503	75°31.8′	2268	79°06.0′	2370

Wed Nov 28, 2018 UTC

UTC	−Sun		−Regulus		+Pollux		+Aldebaran		+Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	116°28.4′	2565	20°53.1′	2261	16°41.3′	2659	59°25.5′	2236	43°10.2′	2498
1	115°55.2′	2567	20°17.5′	2264	17°13.8′	2633	60°01.3′	2237	43°44.0′	2494
2	115°21.9′	2569	19°41.9′	2267	17°46.5′	2609	60°37.2′	2239	44°17.7′	2490
3	114°48.7′	2570	19°06.3′	2271	18°19.4′	2588	61°13.0′	2240	44°51.6′	2487
4	114°15.5′	2572	18°30.7′	2275	18°52.5′	2569	61°48.8′	2242	45°25.4′	2484
5	113°42.3′	2574	17°55.2′	2279	19°25.7′	2552	62°24.6′	2244	45°59.3′	2480
6	113°09.2′	2575	17°19.6′	2283	19°59.0′	2536	63°00.4′	2246	46°33.2′	2477
7	112°36.0′	2577	16°44.2′	2288	20°32.5′	2522	63°36.2′	2247	47°07.1′	2475
8	112°02.9′	2579	16°08.8′	2293	21°06.1′	2509	64°12.0′	2249	47°41.0′	2472
9	111°29.7′	2581	15°33.4′	2298	21°39.7′	2498	64°47.7′	2251	48°15.0′	2470
10	110°56.6′	2583	14°58.0′	2304	22°13.5′	2487	65°23.4′	2253	48°49.0′	2468
11	110°23.5′	2585	14°22.7′	2310	22°47.3′	2478	65°59.2′	2255	49°22.9′	2466
12	109°50.4′	2587	13°47.5′	2317	23°21.2′	2469	66°34.9′	2256	49°57.0′	2464
13	109°17.3′	2589	13°12.3′	2325	23°55.2′	2461	67°10.6′	2258	50°31.0′	2462
14	108°44.3′	2591	12°37.1′	2334	24°29.3′	2454	67°46.2′	2260	51°05.0′	2461
15	108°11.2′	2593	12°02.1′	2343	25°03.4′	2447	68°21.9′	2262	51°39.1′	2459
16	107°38.2′	2595	11°27.1′	2354	25°37.5′	2442	68°57.5′	2264	52°13.1′	2458
17	107°05.2′	2597	10°52.2′	2367	26°11.7′	2436	69°33.1′	2266	52°47.2′	2457
18	106°32.2′	2599	10°17.4′	2381	26°45.9′	2431	70°08.8′	2268	53°21.3′	2456
19	105°59.2′	2601	9°42.7′	2398	27°20.2′	2427	70°44.3′	2270	53°55.3′	2455
20	105°26.3′	2603	9°08.2′	2418	27°54.5′	2423	71°19.9′	2272	54°29.4′	2455
21	104°53.3′	2605	8°33.8′	2442	28°28.9′	2419	71°55.5′	2274	55°03.5′	2454
22	104°20.4′	2607	7°59.6′	2471	29°03.3′	2416	72°31.0′	2276	55°37.6′	2454
23	103°47.5′	2609	7°25.7′	2507	29°37.7′	2413	73°06.5′	2278	56°11.7′	2453

Thu Nov 29, 2018 UTC

UTC	-Sun		-Regulus		+Pollux		-Spica		+Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	103°14.5'	2612	6°52.0'	2552	30°12.1'	2410	60°47.2'	2324	56°45.8'	2453
1	102°41.7'	2614	6°18.6'	2611	30°46.5'	2408	60°12.0'	2326	57°19.9'	2453
2	102°08.8'	2616	5°45.7'	2688	31°21.0'	2406	59°36.9'	2329	57°54.0'	2453
3	101°35.9'	2618	5°13.4'	2793	31°55.5'	2404	59°01.8'	2332	58°28.2'	2453
4	101°03.1'	2621	-	-	32°30.0'	2402	58°26.8'	2335	59°02.3'	2453
5	100°30.3'	2623	-	-	33°04.5'	2401	57°51.7'	2337	59°36.4'	2453
6	99°57.5'	2625	-	-	33°39.0'	2400	57°16.7'	2340	60°10.5'	2453
7	99°24.7'	2627	-	-	34°13.5'	2399	56°41.7'	2343	60°44.6'	2454
8	98°51.9'	2630	-	-	34°48.1'	2398	56°06.7'	2346	61°18.7'	2454
9	98°19.2'	2632	-	-	35°22.6'	2397	55°31.7'	2349	61°52.8'	2455
10	97°46.5'	2635	-	-	35°57.2'	2397	54°56.8'	2352	62°26.9'	2455
11	97°13.8'	2637	-	-	36°31.7'	2396	54°21.9'	2355	63°01.0'	2456
12	96°41.1'	2639	-	-	37°06.3'	2396	53°47.0'	2358	63°35.1'	2457
13	96°08.4'	2642	-	-	37°40.8'	2396	53°12.1'	2361	64°09.1'	2457
14	95°35.7'	2644	-	-	38°15.4'	2396	52°37.3'	2364	64°43.2'	2458
15	95°03.1'	2647	-	-	38°50.0'	2396	52°02.5'	2368	65°17.3'	2459
16	94°30.5'	2649	-	-	39°24.5'	2396	51°27.7'	2371	65°51.3'	2460
17	93°57.9'	2652	-	-	39°59.1'	2397	50°53.0'	2374	66°25.4'	2461
18	93°25.3'	2654	-	-	40°33.6'	2397	50°18.2'	2377	66°59.4'	2462
19	92°52.7'	2656	5°13.2'	2727	41°08.2'	2398	49°43.5'	2381	67°33.5'	2463
20	92°20.2'	2659	5°45.2'	2655	41°42.7'	2398	49°08.8'	2384	68°07.5'	2464
21	91°47.7'	2662	6°17.8'	2601	42°17.3'	2399	48°34.2'	2388	68°41.5'	2466
22	91°15.1'	2664	6°50.8'	2560	42°51.8'	2400	47°59.6'	2391	69°15.5'	2467
23	90°42.7'	2667	7°24.0'	2529	43°26.3'	2401	47°25.0'	2395	69°49.5'	2468

Fri Nov 30, 2018 UTC

UTC	-Sun		+Regulus		+Pollux		-Spica		-Venus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	90°10.2'	2669	7°57.6'	2504	44°00.8'	2401	46°50.4'	2398	51°04.9'	2496
1	89°37.7'	2672	8°31.3'	2485	44°35.4'	2402	46°15.9'	2402	50°31.1'	2499
2	89°05.3'	2674	9°05.1'	2469	45°09.9'	2403	45°41.3'	2406	49°57.3'	2502
3	88°32.9'	2677	9°39.1'	2457	45°44.4'	2405	45°06.9'	2410	49°23.6'	2505
4	88°00.5'	2679	10°13.2'	2447	46°18.9'	2406	44°32.4'	2413	48°49.9'	2508
5	87°28.1'	2682	10°47.4'	2439	46°53.3'	2407	43°58.0'	2417	48°16.2'	2511
6	86°55.8'	2685	11°21.6'	2432	47°27.8'	2408	43°23.6'	2421	47°42.6'	2514
7	86°23.4'	2687	11°55.8'	2427	48°02.3'	2410	42°49.2'	2425	47°08.9'	2517
8	85°51.1'	2690	12°30.2'	2422	48°36.7'	2411	42°14.9'	2430	46°35.3'	2521
9	85°18.8'	2692	13°04.5'	2419	49°11.2'	2412	41°40.6'	2434	46°01.8'	2524
10	84°46.5'	2695	13°38.9'	2416	49°45.6'	2414	41°06.4'	2438	45°28.2'	2527
11	84°14.3'	2698	14°13.3'	2414	50°20.0'	2415	40°32.1'	2442	44°54.7'	2530
12	83°42.0'	2700	14°47.7'	2412	50°54.4'	2417	39°58.0'	2447	44°21.2'	2533
13	83°09.8'	2703	15°22.1'	2411	51°28.8'	2418	39°23.8'	2452	43°47.7'	2536
14	82°37.6'	2706	15°56.6'	2411	52°03.2'	2420	38°49.7'	2456	43°14.2'	2540
15	82°05.4'	2708	16°31.0'	2410	52°37.6'	2422	38°15.6'	2461	42°40.8'	2543
16	81°33.3'	2711	17°05.5'	2410	53°11.9'	2423	37°41.6'	2466	42°07.4'	2546
17	81°01.1'	2714	17°39.9'	2410	53°46.2'	2425	37°07.5'	2471	41°34.0'	2549
18	80°29.0'	2716	18°14.3'	2410	54°20.6'	2427	36°33.6'	2476	41°00.6'	2553
19	79°56.9'	2719	18°48.8'	2411	54°54.9'	2429	35°59.7'	2481	40°27.3'	2556
20	79°24.8'	2722	19°23.2'	2412	55°29.2'	2430	35°25.8'	2487	39°54.0'	2559
21	78°52.8'	2724	19°57.7'	2413	56°03.5'	2432	34°51.9'	2492	39°20.7'	2563
22	78°20.7'	2727	20°32.1'	2414	56°37.7'	2434	34°18.1'	2498	38°47.5'	2566
23	77°48.7'	2730	21°06.5'	2415	57°12.0'	2436	33°44.4'	2504	38°14.2'	2569