

Sat Dec 1, 2018 UTC

UTC	−Sun		+Regulus		−Spica		−Venus		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	77°16.7′	2732	21°40.9′	2416	33°10.7′	2510	37°41.0′	2573	57°46.2′	2438
1	76°44.7′	2735	22°15.3′	2417	32°37.0′	2516	37°07.8′	2576	58°20.5′	2440
2	76°12.8′	2738	22°49.7′	2419	32°03.4′	2523	36°34.7′	2580	58°54.7′	2442
3	75°40.8′	2741	23°24.1′	2420	31°29.8′	2529	36°01.6′	2583	59°28.9′	2444
4	75°08.9′	2743	23°58.4′	2422	30°56.3′	2536	35°28.5′	2587	60°03.1′	2446
5	74°37.0′	2746	24°32.8′	2423	30°22.8′	2544	34°55.4′	2591	60°37.2′	2448
6	74°05.1′	2749	25°07.1′	2425	29°49.4′	2551	34°22.3′	2594	61°11.4′	2450
7	73°33.2′	2752	25°41.5′	2427	29°16.1′	2559	33°49.3′	2598	61°45.5′	2452
8	73°01.4′	2754	26°15.8′	2429	28°42.8′	2567	33°16.3′	2601	62°19.6′	2454
9	72°29.6′	2757	26°50.1′	2431	28°09.6′	2575	32°43.4′	2605	62°53.7′	2456
10	71°57.8′	2760	27°24.4′	2432	27°36.4′	2584	32°10.4′	2609	63°27.8′	2458
11	71°26.0′	2763	27°58.6′	2434	27°03.3′	2593	31°37.5′	2613	64°01.9′	2460
12	70°54.2′	2765	28°32.9′	2436	26°30.3′	2603	31°04.7′	2617	64°35.9′	2462
13	70°22.5′	2768	29°07.1′	2438	25°57.3′	2613	30°31.8′	2621	65°10.0′	2464
14	69°50.8′	2771	29°41.4′	2440	25°24.5′	2624	29°59.0′	2624	65°44.0′	2466
15	69°19.1′	2774	30°15.6′	2442	24°51.7′	2635	29°26.2′	2629	66°18.0′	2469
16	68°47.4′	2776	30°49.8′	2444	24°19.0′	2647	28°53.5′	2633	66°52.0′	2471
17	68°15.7′	2779	31°23.9′	2447	23°46.4′	2659	28°20.7′	2637	67°25.9′	2473
18	67°44.1′	2782	31°58.1′	2449	23°13.8′	2672	27°48.0′	2641	67°59.9′	2475
19	67°12.5′	2785	32°32.2′	2451	22°41.4′	2686	27°15.4′	2645	68°33.8′	2477
20	66°40.9′	2787	33°06.4′	2453	22°09.1′	2701	26°42.7′	2650	69°07.7′	2480
21	66°09.3′	2790	33°40.5′	2455	21°36.9′	2717	26°10.1′	2654	69°41.6′	2482
22	65°37.7′	2793	34°14.5′	2457	21°04.8′	2734	25°37.6′	2659	70°15.5′	2484
23	65°06.2′	2796	34°48.6′	2460	20°32.8′	2752	25°05.1′	2663	70°49.4′	2486

Sun Dec 2, 2018 UTC

UTC	−Sun		+Regulus		−Venus		−Spica		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	64°34.7′	2799	35°22.7′	2462	24°32.6′	2668	20°01.0′	2772	71°23.2′	2489
1	64°03.2′	2802	35°56.7′	2464	24°00.1′	2673	19°29.3′	2793	71°57.1′	2491
2	63°31.7′	2804	36°30.7′	2467	23°27.7′	2678	18°57.7′	2815	72°30.9′	2493
3	63°00.2′	2807	37°04.7′	2469	22°55.3′	2684	18°26.3′	2840	73°04.7′	2496
4	62°28.8′	2810	37°38.7′	2471	22°23.0′	2689	17°55.1′	2866	73°38.4′	2498
5	61°57.4′	2813	38°12.7′	2473	21°50.6′	2695	17°24.1′	2895	74°12.2′	2500
6	61°26.0′	2816	38°46.6′	2476	21°18.4′	2700	16°53.3′	2927	74°45.9′	2503
7	60°54.6′	2818	39°20.6′	2478	20°46.2′	2706	16°22.7′	2961	75°19.7′	2505
8	60°23.3′	2821	39°54.5′	2480	20°14.0′	2713	15°52.4′	2999	75°53.4′	2507
9	59°51.9′	2824	40°28.4′	2483	19°41.9′	2719	15°22.3′	3041	76°27.0′	2510
10	59°20.6′	2827	41°02.2′	2485	19°09.8′	2726	14°52.5′	3088	77°00.7′	2512
11	58°49.3′	2830	41°36.1′	2488	18°37.8′	2733	14°23.1′	3139	77°34.4′	2514
12	58°18.0′	2833	42°09.9′	2490	18°05.8′	2741	13°53.9′	3197	78°08.0′	2517
13	57°46.8′	2836	42°43.8′	2492	17°33.9′	2749	13°25.2′	3261	78°41.6′	2519
14	57°15.6′	2838	43°17.6′	2495	17°02.0′	2758	12°56.9′	3333	79°15.2′	2522
15	56°44.4′	2841	43°51.3′	2497	16°30.2′	2767	12°29.0′	3415	79°48.8′	2524
16	56°13.2′	2844	44°25.1′	2500	15°58.5′	2776	12°01.7′	3508	80°22.3′	2527
17	55°42.0′	2847	44°58.8′	2502	15°26.8′	2787	11°35.0′	3614	80°55.8′	2529
18	55°10.8′	2850	45°32.6′	2504	14°55.2′	2798	11°08.8′	3735	81°29.4′	2531
19	54°39.7′	2853	46°06.3′	2507	14°23.7′	2810	–	–	82°02.9′	2534
20	54°08.6′	2856	46°40.0′	2509	13°52.3′	2824	–	–	82°36.3′	2536
21	53°37.5′	2859	47°13.6′	2512	13°21.0′	2838	–	–	83°09.8′	2539
22	53°06.5′	2862	47°47.3′	2514	12°49.8′	2855	–	–	83°43.2′	2541
23	52°35.4′	2865	48°20.9′	2517	12°18.7′	2873	–	–	84°16.7′	2544

Mon Dec 3, 2018 UTC

UTC	−Sun		−Venus		+Regulus		+Pollux		+Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	52°04.4′	2868	11°47.7′	2893	48°54.5′	2519	84°50.1′	2546	84°31.3′	2682
1	51°33.4′	2871	11°16.9′	2915	49°28.1′	2522	85°23.4′	2549	85°03.6′	2684
2	51°02.4′	2874	10°46.2′	2941	50°01.7′	2524	85°56.8′	2551	85°36.0′	2686
3	50°31.5′	2877	10°15.8′	2970	50°35.2′	2527	86°30.1′	2554	86°08.3′	2689
4	50°00.5′	2880	9°45.5′	3004	51°08.8′	2529	87°03.5′	2557	86°40.6′	2691
5	49°29.6′	2883	9°15.4′	3043	51°42.3′	2532	87°36.8′	2559	87°12.9′	2693
6	48°58.7′	2886	8°45.7′	3089	52°15.8′	2534	88°10.1′	2562	87°45.2′	2696
7	48°27.8′	2889	8°16.2′	3144	52°49.3′	2537	88°43.3′	2564	88°17.4′	2698
8	47°57.0′	2892	7°47.1′	3210	53°22.7′	2539	89°16.6′	2567	88°49.7′	2701
9	47°26.1′	2895	7°18.4′	3290	53°56.2′	2542	89°49.8′	2569	89°21.9′	2703
10	46°55.3′	2898	6°50.3′	3389	54°29.6′	2544	90°23.0′	2572	89°54.1′	2706
11	46°24.6′	2901	6°22.8′	3513	55°03.0′	2547	90°56.2′	2575	90°26.3′	2709
12	45°53.8′	2904	–	–	55°36.4′	2549	91°29.3′	2577	90°58.4′	2711
13	45°23.0′	2907	–	–	56°09.7′	2552	92°02.5′	2580	91°30.5′	2714
14	44°52.3′	2910	–	–	56°43.1′	2554	92°35.6′	2582	92°02.7′	2717
15	44°21.6′	2913	–	–	57°16.4′	2557	93°08.7′	2585	92°34.8′	2720
16	43°50.9′	2916	–	–	57°49.7′	2559	93°41.8′	2588	93°06.8′	2722
17	43°20.3′	2919	–	–	58°23.0′	2562	94°14.9′	2590	93°38.9′	2725
18	42°49.6′	2923	–	–	58°56.2′	2565	94°47.9′	2593	94°10.9′	2728
19	42°19.0′	2926	–	–	59°29.5′	2567	95°20.9′	2596	94°42.9′	2731
20	41°48.4′	2929	–	–	60°02.7′	2570	95°53.9′	2599	95°14.9′	2734
21	41°17.9′	2932	–	–	60°35.9′	2572	96°26.9′	2601	95°46.9′	2737
22	40°47.3′	2936	–	–	61°09.1′	2575	96°59.9′	2604	96°18.9′	2740
23	40°16.8′	2939	–	–	61°42.2′	2578	97°32.8′	2607	96°50.8′	2743

Tue Dec 4, 2018 UTC

UTC	+Regulus		+Spica		+Pollux		+Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	62°15.4′	2580	10°52.2′	3771	98°05.8′	2609	97°22.7′	2746
1	62°48.5′	2583	11°17.4′	3662	98°38.7′	2612	97°54.6′	2749
2	63°21.6′	2585	11°43.2′	3568	99°11.5′	2615	98°26.4′	2752
3	63°54.7′	2588	12°09.6′	3486	99°44.4′	2618	98°58.3′	2756
4	64°27.8′	2591	12°36.5′	3413	100°17.2′	2620	99°30.1′	2759
5	65°00.8′	2593	13°03.9′	3350	100°50.1′	2623	100°01.9′	2762
6	65°33.8′	2596	13°31.6′	3294	101°22.9′	2626	100°33.6′	2765
7	66°06.8′	2599	13°59.7′	3244	101°55.6′	2629	101°05.4′	2769
8	66°39.8′	2601	14°28.1′	3200	102°28.4′	2632	101°37.1′	2772
9	67°12.8′	2604	14°56.9′	3161	103°01.1′	2635	102°08.8′	2776
10	67°45.7′	2607	15°25.8′	3126	103°33.8′	2637	102°40.4′	2779
11	68°18.6′	2609	15°55.0′	3095	104°06.5′	2640	103°12.1′	2783
12	68°51.5′	2612	16°24.5′	3066	104°39.2′	2643	103°43.7′	2786
13	69°24.4′	2615	16°54.1′	3041	105°11.8′	2646	104°15.3′	2790
14	69°57.3′	2617	17°23.9′	3018	105°44.4′	2649	104°46.8′	2793
15	70°30.1′	2620	17°53.8′	2998	106°17.1′	2652	105°18.4′	2797
16	71°02.9′	2623	18°23.9′	2979	106°49.6′	2655	105°49.9′	2801
17	71°35.7′	2626	18°54.1′	2962	107°22.2′	2658	106°21.4′	2805
18	72°08.5′	2628	19°24.4′	2947	107°54.7′	2661	106°52.8′	2808
19	72°41.3′	2631	19°54.9′	2933	108°27.2′	2664	107°24.3′	2812
20	73°14.0′	2634	20°25.4′	2921	108°59.7′	2667	107°55.7′	2816
21	73°46.7′	2636	20°56.0′	2910	109°32.2′	2670	108°27.0′	2820
22	74°19.4′	2639	21°26.7′	2899	110°04.6′	2673	108°58.4′	2824
23	74°52.1′	2642	21°57.5′	2890	110°37.1′	2676	109°29.7′	2828

Wed Dec 5, 2018 UTC

UTC	+Venus		+Spica		+Regulus		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	14°28.3'	2964	22°28.4'	2881	75°24.8'	2645	111°09.5'	2679
1	14°58.6'	2960	22°59.3'	2874	75°57.4'	2648	111°41.9'	2682
2	15°29.0'	2956	23°30.2'	2867	76°30.0'	2650	112°14.2'	2685
3	15°59.3'	2953	24°01.2'	2860	77°02.6'	2653	112°46.5'	2688
4	16°29.7'	2950	24°32.3'	2854	77°35.2'	2656	113°18.8'	2691
5	17°00.2'	2948	25°03.4'	2849	78°07.7'	2659	113°51.1'	2694
6	17°30.6'	2946	25°34.5'	2845	78°40.3'	2661	114°23.4'	2698
7	18°01.0'	2945	26°05.7'	2840	79°12.8'	2664	114°55.6'	2701
8	18°31.5'	2944	26°36.9'	2837	79°45.3'	2667	115°27.9'	2704
9	19°02.0'	2944	27°08.1'	2833	80°17.7'	2670	116°00.0'	2707
10	19°32.4'	2944	27°39.4'	2830	80°50.2'	2673	116°32.2'	2710
11	20°02.9'	2944	28°10.6'	2827	81°22.6'	2676	117°04.4'	2714
12	20°33.3'	2944	28°41.9'	2825	81°55.0'	2678	117°36.5'	2717
13	21°03.8'	2945	29°13.2'	2823	82°27.4'	2681	118°08.6'	2720
14	21°34.3'	2945	29°44.6'	2821	82°59.7'	2684	118°40.7'	2723
15	22°04.7'	2946	30°15.9'	2819	83°32.1'	2687	119°12.7'	2727
16	22°35.2'	2947	30°47.2'	2818	84°04.4'	2690	119°44.7'	2730
17	23°05.6'	2949	31°18.6'	2817	84°36.7'	2693	120°16.7'	2734
18	23°36.0'	2950	31°50.0'	2816	85°09.0'	2696	120°48.7'	2737
19	24°06.5'	2951	32°21.3'	2815	85°41.2'	2699	121°20.6'	2740
20	24°36.9'	2953	32°52.7'	2815	86°13.5'	2702	121°52.6'	2744
21	25°07.3'	2955	33°24.1'	2815	86°45.7'	2704	122°24.5'	2747
22	25°37.6'	2957	33°55.5'	2814	87°17.9'	2707	122°56.3'	2751
23	26°08.0'	2959	34°26.9'	2814	87°50.0'	2710	123°28.2'	2754

Thu Dec 6, 2018 UTC

UTC	+Spica		+Venus		+Regulus		+Arcturus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	34°58.2'	2814	26°38.4'	2961	88°22.2'	2713	41°25.3'	3903
1	35°29.6'	2815	27°08.7'	2963	88°54.3'	2716	41°49.7'	3881
2	36°01.0'	2815	27°39.1'	2965	89°26.4'	2719	42°14.3'	3860
3	36°32.4'	2815	28°09.4'	2967	89°58.5'	2722	42°39.0'	3839
4	37°03.8'	2816	28°39.7'	2970	90°30.5'	2725	43°03.8'	3820
5	37°35.1'	2817	29°09.9'	2972	91°02.6'	2728	43°28.7'	3801
6	38°06.5'	2818	29°40.2'	2974	91°34.6'	2731	43°53.7'	3783
7	38°37.9'	2818	30°10.5'	2977	92°06.6'	2734	44°18.8'	3766
8	39°09.2'	2819	30°40.7'	2980	92°38.6'	2737	44°44.0'	3750
9	39°40.6'	2820	31°10.9'	2982	93°10.5'	2740	45°09.3'	3734
10	40°11.9'	2822	31°41.1'	2985	93°42.4'	2743	45°34.7'	3719
11	40°43.2'	2823	32°11.3'	2987	94°14.3'	2746	46°00.2'	3704
12	41°14.6'	2824	32°41.4'	2990	94°46.2'	2749	46°25.7'	3690
13	41°45.9'	2826	33°11.6'	2993	95°18.1'	2752	46°51.4'	3676
14	42°17.2'	2827	33°41.7'	2996	95°49.9'	2755	47°17.1'	3664
15	42°48.5'	2828	34°11.8'	2999	96°21.7'	2758	47°42.9'	3651
16	43°19.8'	2830	34°41.9'	3001	96°53.5'	2761	48°08.8'	3639
17	43°51.0'	2832	35°11.9'	3004	97°25.3'	2764	48°34.8'	3628
18	44°22.3'	2833	35°42.0'	3007	97°57.1'	2767	49°00.8'	3617
19	44°53.5'	2835	36°12.0'	3010	98°28.8'	2770	49°26.9'	3606
20	45°24.8'	2837	36°42.0'	3013	99°00.5'	2773	49°53.0'	3596
21	45°56.0'	2839	37°12.0'	3016	99°32.2'	2776	50°19.2'	3587
22	46°27.2'	2841	37°41.9'	3019	100°03.9'	2779	50°45.5'	3578
23	46°58.4'	2842	38°11.9'	3022	100°35.5'	2782	51°11.8'	3569

Sun Dec 9, 2018 UTC

UTC	−Formalhaut		−Mars		−Altair	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	61°10.3′	3214	68°35.2′	3169	36°52.9′	5414
1	60°41.6′	3219	68°06.3′	3172	36°35.6′	5481
2	60°13.1′	3225	67°37.4′	3175	36°18.7′	5550
3	59°44.5′	3231	67°08.5′	3178	36°01.9′	5622
4	59°16.0′	3237	66°39.7′	3181	35°45.5′	5696
5	58°47.5′	3243	66°10.8′	3184	35°29.3′	5774
6	58°19.1′	3249	65°42.0′	3187	35°13.5′	5854
7	57°50.7′	3255	65°13.2′	3190	34°57.9′	5938
8	57°22.3′	3261	64°44.4′	3193	34°42.6′	6025
9	56°54.0′	3268	64°15.7′	3196	34°27.6′	6115
10	56°25.7′	3274	63°46.9′	3199	34°12.9′	6209
11	55°57.5′	3281	63°18.2′	3202	33°58.6′	6307
12	55°29.3′	3287	62°49.5′	3205	33°44.5′	6409
13	55°01.2′	3294	62°20.8′	3208	33°30.8′	6516
14	54°33.1′	3301	61°52.1′	3211	33°17.4′	6627
15	54°05.0′	3308	61°23.5′	3214	33°04.4′	6744
16	53°37.0′	3315	60°54.9′	3217	32°51.7′	6865
17	53°09.0′	3322	60°26.3′	3219	32°39.3′	6993
18	52°41.1′	3329	59°57.7′	3222	32°27.3′	7126
19	52°13.2′	3337	59°29.1′	3225	32°15.7′	7266
20	51°45.4′	3344	59°00.5′	3228	32°04.4′	7412
21	51°17.6′	3352	58°32.0′	3231	31°53.5′	7566
22	50°49.9′	3360	58°03.5′	3233	31°43.0′	7729
23	50°22.2′	3368	57°35.0′	3236	31°32.9′	7900

Mon Dec 10, 2018 UTC

UTC	+Saturn		−Mars		−Formalhaut		−Achernar	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	9°24.8′	3059	57°06.5′	3239	49°54.6′	3376	74°46.6′	5813
1	9°54.5′	3058	56°38.0′	3241	49°27.0′	3384	74°30.9′	5830
2	10°24.1′	3058	56°09.6′	3244	48°59.5′	3393	74°15.2′	5847
3	10°53.8′	3059	55°41.2′	3247	48°32.0′	3401	73°59.6′	5865
4	11°23.5′	3059	55°12.8′	3249	48°04.6′	3410	73°44.1′	5883
5	11°53.1′	3060	54°44.4′	3252	47°37.2′	3419	73°28.6′	5902
6	12°22.8′	3061	54°16.0′	3255	47°09.9′	3428	73°13.2′	5920
7	12°52.5′	3062	53°47.6′	3257	46°42.7′	3437	72°57.8′	5939
8	13°22.1′	3063	53°19.3′	3260	46°15.5′	3447	72°42.5′	5959
9	13°51.7′	3064	52°51.0′	3262	45°48.4′	3457	72°27.3′	5979
10	14°21.4′	3065	52°22.7′	3265	45°21.3′	3467	72°12.2′	5999
11	14°51.0′	3067	51°54.4′	3267	44°54.3′	3477	71°57.1′	6019
12	15°20.6′	3068	51°26.1′	3270	44°27.3′	3487	71°42.1′	6040
13	15°50.2′	3069	50°57.8′	3272	44°00.5′	3498	71°27.1′	6062
14	16°19.8′	3071	50°29.6′	3274	43°33.6′	3509	71°12.3′	6083
15	16°49.4′	3072	50°01.4′	3277	43°06.9′	3520	70°57.5′	6105
16	17°19.0′	3074	49°33.1′	3279	42°40.2′	3532	70°42.8′	6128
17	17°48.5′	3075	49°04.9′	3282	42°13.6′	3544	70°28.2′	6151
18	18°18.1′	3077	48°36.8′	3284	41°47.1′	3556	70°13.6′	6174
19	18°47.6′	3078	48°08.6′	3286	41°20.6′	3568	69°59.1′	6197
20	19°17.2′	3080	47°40.4′	3288	40°54.2′	3581	69°44.7′	6222
21	19°46.7′	3082	47°12.3′	3291	40°27.9′	3594	69°30.4′	6246
22	20°16.2′	3083	46°44.2′	3293	40°01.7′	3608	69°16.2′	6271
23	20°45.7′	3085	46°16.1′	3295	39°35.6′	3622	69°02.0′	6296

Tue Dec 11, 2018 UTC

UTC	+Sun		+Saturn		-Mars		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	41°17.6'	3443	21°15.2'	3086	45°48.0'	3297	39°09.5'	3636
1	41°44.7'	3444	21°44.7'	3088	45°19.9'	3299	38°43.5'	3651
2	42°11.9'	3446	22°14.1'	3089	44°51.8'	3301	38°17.7'	3666
3	42°39.0'	3447	22°43.6'	3091	44°23.8'	3303	37°51.9'	3682
4	43°06.2'	3449	23°13.1'	3092	43°55.7'	3305	37°26.2'	3698
5	43°33.3'	3450	23°42.5'	3094	43°27.7'	3307	37°00.6'	3715
6	44°00.4'	3452	24°11.9'	3095	42°59.7'	3309	36°35.1'	3733
7	44°27.5'	3453	24°41.3'	3096	42°31.7'	3311	36°09.7'	3751
8	44°54.6'	3455	25°10.8'	3098	42°03.7'	3313	35°44.4'	3769
9	45°21.7'	3456	25°40.2'	3099	41°35.7'	3315	35°19.2'	3789
10	45°48.7'	3457	26°09.6'	3100	41°07.7'	3317	34°54.1'	3809
11	46°15.8'	3459	26°38.9'	3102	40°39.8'	3319	34°29.1'	3829
12	46°42.9'	3460	27°08.3'	3103	40°11.8'	3321	34°04.3'	3851
13	47°09.9'	3461	27°37.7'	3104	39°43.9'	3323	33°39.6'	3873
14	47°37.0'	3462	28°07.0'	3105	39°16.0'	3324	33°15.0'	3896
15	48°04.0'	3463	28°36.4'	3107	38°48.1'	3326	32°50.5'	3920
16	48°31.0'	3465	29°05.7'	3108	38°20.2'	3328	32°26.2'	3945
17	48°58.0'	3466	29°35.1'	3109	37°52.3'	3330	32°02.0'	3971
18	49°25.1'	3467	30°04.4'	3110	37°24.4'	3331	31°37.9'	3998
19	49°52.1'	3468	30°33.7'	3111	36°56.6'	3333	31°14.0'	4026
20	50°19.1'	3469	31°03.0'	3112	36°28.7'	3335	30°50.3'	4056
21	50°46.1'	3470	31°32.3'	3113	36°00.9'	3336	30°26.7'	4087
22	51°13.0'	3471	32°01.6'	3114	35°33.0'	3338	30°03.3'	4119
23	51°40.0'	3471	32°30.9'	3115	35°05.2'	3339	29°40.1'	4152

Wed Dec 12, 2018 UTC

UTC	+Sun		+Saturn		-Mars		-Formalhaut		-Aldebaran	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	52°07.0'	3472	33°00.2'	3115	34°37.4'	3341	29°17.0'	4187	117°45.9'	3073
1	52°34.0'	3473	33°29.5'	3116	34°09.6'	3342	28°54.1'	4224	117°16.4'	3074
2	53°00.9'	3474	33°58.8'	3117	33°41.8'	3344	28°31.4'	4262	116°46.8'	3075
3	53°27.9'	3474	34°28.1'	3118	33°14.0'	3345	28°08.9'	4302	116°17.3'	3075
4	53°54.9'	3475	34°57.3'	3118	32°46.3'	3347	27°46.7'	4344	115°47.7'	3076
5	54°21.8'	3476	35°26.6'	3119	32°18.5'	3348	27°24.6'	4388	115°18.2'	3077
6	54°48.8'	3476	35°55.8'	3120	31°50.7'	3350	27°02.7'	4435	114°48.6'	3077
7	55°15.7'	3477	36°25.1'	3120	31°23.0'	3351	26°41.1'	4483	114°19.1'	3078
8	55°42.7'	3477	36°54.3'	3121	30°55.3'	3352	26°19.8'	4535	113°49.5'	3079
9	56°09.6'	3478	37°23.6'	3121	30°27.5'	3354	25°58.6'	4589	113°20.0'	3079
10	56°36.6'	3478	37°52.8'	3122	29°59.8'	3355	25°37.8'	4645	112°50.5'	3080
11	57°03.5'	3478	38°22.1'	3122	29°32.1'	3357	25°17.2'	4705	112°20.9'	3080
12	57°30.4'	3479	38°51.3'	3122	29°04.4'	3358	24°56.9'	4768	111°51.4'	3080
13	57°57.4'	3479	39°20.5'	3123	28°36.7'	3359	24°36.9'	4835	111°21.9'	3081
14	58°24.3'	3479	39°49.8'	3123	28°09.0'	3361	24°17.2'	4905	110°52.4'	3081
15	58°51.2'	3479	40°19.0'	3123	27°41.4'	3362	23°57.8'	4980	110°22.9'	3081
16	59°18.1'	3479	40°48.2'	3123	27°13.7'	3363	23°38.7'	5059	109°53.4'	3081
17	59°45.1'	3480	41°17.5'	3123	26°46.0'	3365	23°20.0'	5142	109°23.8'	3081
18	60°12.0'	3480	41°46.7'	3124	26°18.4'	3366	23°01.6'	5231	108°54.3'	3082
19	60°38.9'	3479	42°15.9'	3124	25°50.7'	3368	22°43.6'	5325	108°24.8'	3082
20	61°05.9'	3479	42°45.2'	3124	25°23.1'	3369	22°26.0'	5425	107°55.3'	3082
21	61°32.8'	3479	43°14.4'	3124	24°55.5'	3371	22°08.8'	5531	107°25.8'	3082
22	61°59.7'	3479	43°43.6'	3123	24°27.9'	3372	21°52.0'	5644	106°56.3'	3082
23	62°26.6'	3479	44°12.8'	3123	24°00.3'	3374	21°35.7'	5765	106°26.8'	3081

Thu Dec 13, 2018 UTC

UTC	+Sun		-Mars		+Saturn		-Aldebaran		-Rigel	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	62°53.6'	3479	23°32.7'	3375	44°42.1'	3123	105°57.3'	3081	108°30.7'	3673
1	63°20.5'	3478	23°05.1'	3377	45°11.3'	3123	105°27.7'	3081	108°04.9'	3670
2	63°47.4'	3478	22°37.5'	3379	45°40.5'	3123	104°58.2'	3081	107°39.2'	3666
3	64°14.4'	3477	22°10.0'	3380	46°09.8'	3122	104°28.7'	3080	107°13.4'	3663
4	64°41.3'	3477	21°42.4'	3382	46°39.0'	3122	103°59.2'	3080	106°47.6'	3660
5	65°08.3'	3476	21°14.9'	3384	47°08.2'	3121	103°29.7'	3080	106°21.7'	3656
6	65°35.2'	3476	20°47.4'	3386	47°37.5'	3121	103°00.1'	3079	105°55.9'	3653
7	66°02.2'	3475	20°19.8'	3389	48°06.7'	3120	102°30.6'	3079	105°30.0'	3650
8	66°29.1'	3474	19°52.3'	3391	48°36.0'	3120	102°01.1'	3078	105°04.1'	3646
9	66°56.1'	3474	19°24.9'	3393	49°05.2'	3119	101°31.5'	3077	104°38.2'	3643
10	67°23.0'	3473	18°57.4'	3396	49°34.5'	3118	101°02.0'	3077	104°12.3'	3640
11	67°50.0'	3472	18°29.9'	3399	50°03.8'	3118	100°32.5'	3076	103°46.3'	3637
12	68°17.0'	3471	18°02.5'	3402	50°33.0'	3117	100°02.9'	3075	103°20.3'	3634
13	68°44.0'	3470	17°35.1'	3406	51°02.3'	3116	99°33.4'	3074	102°54.3'	3631
14	69°11.0'	3469	17°07.7'	3409	51°31.6'	3115	99°03.8'	3073	102°28.3'	3628
15	69°37.9'	3468	16°40.3'	3413	52°00.9'	3114	98°34.2'	3073	102°02.3'	3625
16	70°04.9'	3467	16°13.0'	3418	52°30.1'	3113	98°04.7'	3072	101°36.3'	3622
17	70°32.0'	3466	15°45.7'	3423	52°59.4'	3112	97°35.1'	3071	101°10.2'	3619
18	70°59.0'	3464	15°18.4'	3428	53°28.7'	3111	97°05.5'	3069	100°44.1'	3616
19	71°26.0'	3463	14°51.2'	3434	53°58.1'	3110	96°35.9'	3068	100°18.0'	3613
20	71°53.0'	3462	14°23.9'	3441	54°27.4'	3109	96°06.3'	3067	99°51.9'	3610
21	72°20.1'	3460	13°56.8'	3448	54°56.7'	3107	95°36.7'	3066	99°25.8'	3608
22	72°47.1'	3459	13°29.7'	3456	55°26.0'	3106	95°07.1'	3065	98°59.7'	3605
23	73°14.2'	3457	13°02.6'	3466	55°55.4'	3105	94°37.4'	3063	98°33.5'	3602

Fri Dec 14, 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	73°41.2'	3456	12°35.6'	3476	56°24.7'	3103	94°07.8'	3062	111°28.1'	3201
1	74°08.3'	3454	12°08.6'	3488	56°54.1'	3102	93°38.2'	3060	110°59.4'	3198
2	74°35.4'	3452	11°41.7'	3501	57°23.5'	3100	93°08.5'	3059	110°30.7'	3196
3	75°02.5'	3451	11°14.9'	3516	57°52.9'	3099	92°38.8'	3057	110°01.9'	3194
4	75°29.6'	3449	10°48.2'	3534	58°22.3'	3097	92°09.2'	3056	109°33.2'	3191
5	75°56.7'	3447	10°21.7'	3554	58°51.7'	3095	91°39.5'	3054	109°04.4'	3189
6	76°23.8'	3445	9°55.2'	3577	59°21.1'	3094	91°09.8'	3052	108°35.6'	3186
7	76°51.0'	3443	9°28.8'	3604	59°50.5'	3092	90°40.1'	3051	108°06.8'	3184
8	77°18.1'	3441	9°02.7'	3635	60°20.0'	3090	90°10.3'	3049	107°37.9'	3181
9	77°45.3'	3439	8°36.7'	3672	60°49.4'	3088	89°40.6'	3047	107°09.1'	3179
10	78°12.5'	3437	8°10.9'	3716	61°18.9'	3086	89°10.8'	3045	106°40.2'	3176
11	78°39.7'	3435	7°45.4'	3769	61°48.4'	3084	88°41.1'	3043	106°11.4'	3173
12	79°06.9'	3432	7°20.2'	3832	62°17.9'	3082	88°11.3'	3041	105°42.5'	3171
13	79°34.1'	3430	6°55.4'	3909	62°47.4'	3080	87°41.5'	3039	105°13.6'	3168
14	80°01.3'	3428	6°31.0'	4004	63°16.9'	3078	87°11.7'	3037	104°44.6'	3165
15	80°28.6'	3425	6°07.2'	4122	63°46.4'	3076	86°41.9'	3035	104°15.7'	3162
16	80°55.9'	3423	5°43.9'	4270	64°16.0'	3073	86°12.1'	3032	103°46.7'	3160
17	81°23.1'	3420	-	-	64°45.5'	3071	85°42.2'	3030	103°17.7'	3157
18	81°50.4'	3418	-	-	65°15.1'	3069	85°12.4'	3028	102°48.7'	3154
19	82°17.7'	3415	-	-	65°44.7'	3066	84°42.5'	3025	102°19.7'	3151
20	82°45.1'	3412	-	-	66°14.3'	3064	84°12.6'	3023	101°50.7'	3148
21	83°12.4'	3409	-	-	66°44.0'	3061	83°42.7'	3020	101°21.6'	3145
22	83°39.8'	3407	-	-	67°13.6'	3059	83°12.7'	3018	100°52.5'	3142
23	84°07.2'	3404	-	-	67°43.3'	3056	82°42.8'	3015	100°23.4'	3139

Sat Dec 15, 2018 UTC

UTC	+Sun		+Saturn		-Aldebaran		-Betelgeuse		+Altair	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	84°34.6'	3401	68°13.0'	3053	82°12.8'	3013	99°54.3'	3136	54°51.2'	3991
1	85°02.0'	3398	68°42.7'	3051	81°42.8'	3010	99°25.1'	3133	55°15.1'	3976
2	85°29.4'	3395	69°12.4'	3048	81°12.8'	3007	98°56.0'	3130	55°39.2'	3962
3	85°56.9'	3392	69°42.1'	3045	80°42.8'	3004	98°26.8'	3127	56°03.3'	3948
4	86°24.4'	3388	70°11.9'	3042	80°12.8'	3001	97°57.6'	3124	56°27.4'	3934
5	86°51.9'	3385	70°41.7'	3039	79°42.7'	2998	97°28.4'	3120	56°51.7'	3920
6	87°19.4'	3382	71°11.5'	3036	79°12.6'	2995	96°59.1'	3117	57°16.0'	3907
7	87°46.9'	3379	71°41.3'	3033	78°42.5'	2992	96°29.8'	3114	57°40.4'	3894
8	88°14.5'	3375	72°11.1'	3030	78°12.4'	2989	96°00.5'	3110	58°04.9'	3881
9	88°42.1'	3372	72°41.0'	3027	77°42.3'	2986	95°31.2'	3107	58°29.4'	3868
10	89°09.7'	3368	73°10.9'	3023	77°12.1'	2983	95°01.9'	3104	58°54.1'	3855
11	89°37.3'	3365	73°40.8'	3020	76°41.9'	2980	94°32.5'	3100	59°18.8'	3843
12	90°05.0'	3361	74°10.7'	3017	76°11.7'	2976	94°03.1'	3097	59°43.5'	3831
13	90°32.6'	3357	74°40.7'	3014	75°41.5'	2973	93°33.7'	3093	60°08.4'	3819
14	91°00.3'	3354	75°10.7'	3010	75°11.2'	2970	93°04.3'	3090	60°33.3'	3807
15	91°28.0'	3350	75°40.7'	3007	74°40.9'	2966	92°34.8'	3086	60°58.2'	3795
16	91°55.8'	3346	76°10.7'	3003	74°10.6'	2963	92°05.4'	3083	61°23.3'	3784
17	92°23.6'	3342	76°40.7'	2999	73°40.3'	2959	91°35.9'	3079	61°48.4'	3772
18	92°51.4'	3338	77°10.8'	2996	73°09.9'	2956	91°06.3'	3076	62°13.6'	3761
19	93°19.2'	3334	77°40.9'	2992	72°39.5'	2952	90°36.8'	3072	62°38.8'	3750
20	93°47.0'	3330	78°11.1'	2988	72°09.1'	2948	90°07.2'	3068	63°04.1'	3739
21	94°14.9'	3326	78°41.2'	2985	71°38.7'	2945	89°37.6'	3064	63°29.5'	3728
22	94°42.8'	3322	79°11.4'	2981	71°08.2'	2941	89°08.0'	3061	63°54.9'	3718
23	95°10.7'	3318	79°41.6'	2977	70°37.8'	2937	88°38.3'	3057	64°20.4'	3707

Sun Dec 16, 2018 UTC

UTC	+Sun		+Mars		-Aldebaran		+Saturn		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	95°38.7'	3313	11°04.2'	3375	70°07.3'	2933	80°11.8'	2973	29°45.2'	3973
1	96°06.6'	3309	11°31.8'	3355	69°36.7'	2929	80°42.1'	2969	30°09.2'	3937
2	96°34.6'	3305	11°59.5'	3337	69°06.1'	2925	81°12.4'	2965	30°33.4'	3903
3	97°02.7'	3300	12°27.4'	3320	68°35.6'	2921	81°42.7'	2961	30°57.9'	3870
4	97°30.7'	3296	12°55.3'	3304	68°04.9'	2917	82°13.0'	2957	31°22.5'	3838
5	97°58.8'	3291	13°23.3'	3289	67°34.3'	2913	82°43.4'	2953	31°47.3'	3808
6	98°27.0'	3287	13°51.5'	3276	67°03.6'	2909	83°13.8'	2948	32°12.2'	3778
7	98°55.1'	3282	14°19.7'	3263	66°32.9'	2905	83°44.2'	2944	32°37.4'	3750
8	99°23.3'	3277	14°48.0'	3251	66°02.2'	2900	84°14.7'	2940	33°02.7'	3723
9	99°51.5'	3273	15°16.4'	3240	65°31.4'	2896	84°45.2'	2935	33°28.1'	3696
10	100°19.7'	3268	15°44.8'	3229	65°00.6'	2892	85°15.7'	2931	33°53.8'	3670
11	100°48.0'	3263	16°13.4'	3219	64°29.8'	2887	85°46.2'	2927	34°19.5'	3646
12	101°16.3'	3258	16°42.0'	3209	63°58.9'	2883	86°16.8'	2922	34°45.4'	3622
13	101°44.7'	3253	17°10.6'	3199	63°28.0'	2878	86°47.4'	2918	35°11.5'	3598
14	102°13.0'	3248	17°39.3'	3190	62°57.1'	2874	87°18.1'	2913	35°37.7'	3576
15	102°41.4'	3243	18°08.1'	3181	62°26.1'	2869	87°48.8'	2908	36°04.0'	3554
16	103°09.9'	3238	18°37.0'	3173	61°55.1'	2865	88°19.5'	2904	36°30.5'	3533
17	103°38.3'	3233	19°05.9'	3164	61°24.1'	2860	88°50.2'	2899	36°57.1'	3512
18	104°06.8'	3228	19°34.8'	3156	60°53.0'	2855	89°21.0'	2894	37°23.8'	3492
19	104°35.4'	3223	20°03.8'	3148	60°22.0'	2851	89°51.8'	2889	37°50.7'	3472
20	105°03.9'	3218	20°32.9'	3140	59°50.8'	2846	90°22.7'	2885	38°17.7'	3453
21	105°32.5'	3212	21°02.0'	3132	59°19.7'	2841	90°53.6'	2880	38°44.7'	3435
22	106°01.2'	3207	21°31.2'	3125	58°48.5'	2836	91°24.5'	2875	39°12.0'	3417
23	106°29.8'	3202	22°00.4'	3117	58°17.3'	2831	91°55.4'	2870	39°39.3'	3399

Mon Dec 17, 2018 UTC

UTC	+Sun		+Mars		-Aldebaran		+Formalhaut		-Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	106°58.5'	3196	22°29.7'	3110	57°46.0'	2826	40°06.7'	3382	76°08.0'	2954
1	107°27.3'	3191	22°59.0'	3103	57°14.7'	2821	40°34.2'	3365	75°37.6'	2949
2	107°56.1'	3185	23°28.4'	3096	56°43.4'	2816	41°01.9'	3349	75°07.2'	2945
3	108°24.9'	3180	23°57.8'	3089	56°12.0'	2811	41°29.6'	3333	74°36.7'	2940
4	108°53.7'	3174	24°27.2'	3081	55°40.6'	2806	41°57.5'	3317	74°06.2'	2936
5	109°22.6'	3169	24°56.8'	3075	55°09.1'	2801	42°25.4'	3302	73°35.7'	2932
6	109°51.5'	3163	25°26.3'	3068	54°37.7'	2796	42°53.5'	3287	73°05.2'	2927
7	110°20.5'	3157	25°55.9'	3061	54°06.1'	2791	43°21.6'	3272	72°34.6'	2923
8	110°49.5'	3152	26°25.6'	3054	53°34.6'	2786	43°49.9'	3258	72°04.0'	2918
9	111°18.5'	3146	26°55.3'	3047	53°03.0'	2780	44°18.2'	3243	71°33.3'	2914
10	111°47.6'	3140	27°25.0'	3040	52°31.4'	2775	44°46.7'	3229	71°02.7'	2909
11	112°16.7'	3134	27°54.8'	3034	51°59.7'	2770	45°15.2'	3216	70°31.9'	2905
12	112°45.9'	3129	28°24.7'	3027	51°28.0'	2764	45°43.8'	3202	70°01.2'	2900
13	113°15.1'	3123	28°54.5'	3020	50°56.2'	2759	46°12.5'	3189	69°30.4'	2896
14	113°44.3'	3117	29°24.5'	3013	50°24.5'	2754	46°41.3'	3176	68°59.6'	2892
15	114°13.6'	3111	29°54.4'	3007	49°52.6'	2748	47°10.2'	3163	68°28.8'	2887
16	114°42.9'	3105	30°24.5'	3000	49°20.8'	2743	47°39.1'	3151	67°57.9'	2883
17	115°12.3'	3099	30°54.5'	2993	48°48.9'	2737	48°08.2'	3139	67°27.1'	2878
18	115°41.6'	3093	31°24.7'	2987	48°16.9'	2732	48°37.3'	3126	66°56.1'	2874
19	116°11.1'	3087	31°54.8'	2980	47°44.9'	2726	49°06.5'	3114	66°25.2'	2869
20	116°40.6'	3081	32°25.0'	2974	47°12.9'	2721	49°35.8'	3103	65°54.2'	2865
21	117°10.1'	3075	32°55.3'	2967	46°40.8'	2715	50°05.2'	3091	65°23.2'	2861
22	117°39.6'	3069	33°25.6'	2960	46°08.7'	2709	50°34.6'	3080	64°52.1'	2856
23	118°09.2'	3062	33°55.9'	2954	45°36.6'	2704	51°04.1'	3068	64°21.0'	2852

Tue Dec 18, 2018 UTC

UTC	+Sun		-Aldebaran		+Mars		-Betelgeuse		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	118°38.9'	3056	45°04.4'	2698	34°26.3'	2947	63°49.9'	2848	51°33.7'	3057
1	119°08.6'	3050	44°32.1'	2693	34°56.8'	2940	63°18.8'	2843	52°03.4'	3046
2	119°38.3'	3044	43°59.9'	2687	35°27.3'	2934	62°47.6'	2839	52°33.2'	3035
3	120°08.1'	3038	43°27.5'	2681	35°57.8'	2927	62°16.4'	2835	53°03.0'	3024
4	120°37.9'	3031	42°55.2'	2675	36°28.4'	2921	61°45.2'	2831	53°32.9'	3014
5	121°07.7'	3025	42°22.8'	2670	36°59.0'	2914	61°13.9'	2827	54°02.9'	3003
6	121°37.6'	3019	41°50.3'	2664	37°29.7'	2907	60°42.6'	2822	54°32.9'	2993
7	122°07.6'	3012	41°17.8'	2658	38°00.4'	2901	60°11.3'	2818	55°03.1'	2983
8	122°37.5'	3006	40°45.3'	2652	38°31.1'	2894	59°39.9'	2814	55°33.2'	2972
9	123°07.6'	3000	40°12.7'	2647	39°02.0'	2888	59°08.5'	2810	56°03.5'	2962
10	123°37.7'	2993	39°40.1'	2641	39°32.8'	2881	58°37.1'	2806	56°33.8'	2953
11	124°07.8'	2987	39°07.4'	2635	40°03.7'	2874	58°05.7'	2802	57°04.2'	2943
12	124°37.9'	2980	38°34.7'	2629	40°34.7'	2868	57°34.2'	2799	57°34.7'	2933
13	125°08.1'	2974	38°02.0'	2623	41°05.7'	2861	57°02.7'	2795	58°05.3'	2923
14	125°38.4'	2968	37°29.2'	2617	41°36.7'	2855	56°31.2'	2791	58°35.9'	2914
15	126°08.7'	2961	36°56.3'	2611	42°07.8'	2848	55°59.6'	2787	59°06.5'	2904
16	126°39.0'	2955	36°23.4'	2606	42°39.0'	2841	55°28.0'	2784	59°37.3'	2895
17	127°09.4'	2948	35°50.5'	2600	43°10.2'	2835	54°56.4'	2780	60°08.1'	2886
18	127°39.8'	2942	35°17.5'	2594	43°41.4'	2828	54°24.8'	2777	60°38.9'	2877
19	128°10.3'	2935	34°44.5'	2588	44°12.7'	2821	53°53.1'	2774	61°09.9'	2868
20	128°40.8'	2929	34°11.5'	2582	44°44.0'	2815	53°21.5'	2770	61°40.9'	2859
21	129°11.4'	2922	33°38.3'	2576	45°15.4'	2808	52°49.8'	2767	62°12.0'	2850
22	129°42.0'	2916	33°05.2'	2570	45°46.8'	2802	52°18.0'	2764	62°43.1'	2841
23	130°12.7'	2909	32°32.0'	2564	46°18.3'	2795	51°46.3'	2761	63°14.3'	2832

Wed Dec 19, 2018 UTC

UTC	−Aldebaran		+Mars		−Betelgeuse		−Pollux		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	31°58.8′	2559	46°49.8′	2788	51°14.5′	2758	76°19.0′	2587	63°45.5′	2823
1	31°25.5′	2553	47°21.4′	2782	50°42.7′	2755	75°45.9′	2581	64°16.9′	2815
2	30°52.1′	2547	47°53.0′	2775	50°10.9′	2753	75°12.8′	2575	64°48.2′	2806
3	30°18.8′	2541	48°24.7′	2769	49°39.1′	2750	74°39.7′	2569	65°19.7′	2798
4	29°45.3′	2535	48°56.4′	2762	49°07.2′	2748	74°06.4′	2563	65°51.2′	2789
5	29°11.9′	2529	49°28.2′	2756	48°35.3′	2746	73°33.2′	2557	66°22.7′	2781
6	28°38.3′	2524	49°00.0′	2749	48°03.5′	2743	72°59.9′	2551	66°54.4′	2773
7	28°04.8′	2518	50°31.8′	2742	47°31.6′	2742	72°26.5′	2545	67°26.1′	2765
8	27°31.2′	2512	51°03.8′	2736	46°59.6′	2740	71°53.2′	2540	67°57.8′	2757
9	26°57.5′	2506	51°35.7′	2729	46°27.7′	2738	71°19.7′	2534	68°29.6′	2749
10	26°23.8′	2501	52°07.7′	2723	45°55.8′	2737	70°46.2′	2528	69°01.5′	2741
11	25°50.1′	2495	52°39.8′	2716	45°23.8′	2735	70°12.7′	2522	69°33.4′	2733
12	25°16.3′	2489	53°11.9′	2710	44°51.9′	2734	69°39.2′	2516	70°05.4′	2725
13	24°42.5′	2484	53°44.0′	2703	44°19.9′	2734	69°05.5′	2511	70°37.4′	2717
14	24°08.6′	2478	54°16.2′	2697	43°47.9′	2733	68°31.9′	2505	71°09.5′	2710
15	23°34.7′	2473	54°48.5′	2690	43°15.9′	2733	67°58.2′	2499	71°41.7′	2702
16	23°00.8′	2467	55°20.8′	2684	42°44.0′	2733	67°24.4′	2493	72°13.9′	2694
17	22°26.8′	2462	55°53.1′	2678	42°12.0′	2733	66°50.6′	2488	72°46.1′	2687
18	21°52.7′	2456	56°25.5′	2671	41°40.0′	2733	66°16.8′	2482	73°18.4′	2680
19	21°18.7′	2451	56°57.9′	2665	41°08.0′	2734	65°42.9′	2477	73°50.8′	2672
20	20°44.5′	2446	57°30.4′	2658	40°36.1′	2735	65°09.0′	2471	74°23.3′	2665
21	20°10.4′	2441	58°02.9′	2652	40°04.1′	2736	64°35.0′	2465	74°55.7′	2658
22	19°36.2′	2436	58°35.5′	2646	39°32.1′	2738	64°01.0′	2460	75°28.3′	2651
23	19°01.9′	2431	59°08.1′	2639	39°00.2′	2740	63°27.0′	2454	76°00.9′	2643

Thu Dec 20, 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	18°27.6′	2426	38°28.3′	2742	62°52.9′	2449	59°40.8′	2633	64°12.8′	2619
1	17°53.3′	2421	37°56.4′	2745	62°18.7′	2443	60°13.5′	2627	63°40.0′	2615
2	17°19.0′	2417	37°24.5′	2749	61°44.5′	2438	60°46.3′	2621	63°07.1′	2611
3	16°44.6′	2412	36°52.6′	2752	61°10.3′	2433	61°19.1′	2614	62°34.2′	2608
4	16°10.1′	2408	36°20.8′	2757	60°36.1′	2427	61°52.0′	2608	62°01.3′	2604
5	15°35.7′	2404	35°49.0′	2761	60°01.7′	2422	62°24.9′	2602	61°28.4′	2601
6	15°01.2′	2400	35°17.2′	2767	59°27.4′	2417	62°57.9′	2596	60°55.4′	2598
7	14°26.7′	2397	34°45.5′	2773	58°53.0′	2412	63°30.9′	2590	60°22.4′	2594
8	13°52.1′	2394	34°13.8′	2779	58°18.6′	2406	64°03.9′	2584	59°49.4′	2591
9	13°17.5′	2391	33°42.1′	2787	57°44.1′	2401	64°37.0′	2578	59°16.4′	2589
10	12°42.9′	2389	33°10.6′	2795	57°09.6′	2396	65°10.1′	2572	58°43.3′	2586
11	12°08.3′	2387	32°39.0′	2803	56°35.0′	2391	65°43.3′	2566	58°10.2′	2583
12	11°33.7′	2386	32°07.6′	2813	56°00.4′	2386	66°16.6′	2560	57°37.1′	2581
13	10°59.0′	2385	31°36.2′	2823	55°25.8′	2381	66°49.8′	2554	57°04.0′	2578
14	10°24.4′	2386	31°04.9′	2835	54°51.1′	2376	67°23.2′	2548	56°30.9′	2576
15	9°49.8′	2388	30°33.6′	2847	54°16.4′	2372	67°56.5′	2542	55°57.7′	2574
16	9°15.1′	2391	30°02.5′	2861	53°41.6′	2367	68°29.9′	2537	55°24.5′	2572
17	8°40.5′	2396	29°31.4′	2875	53°06.8′	2362	69°03.4′	2531	54°51.3′	2571
18	8°06.0′	2404	29°00.5′	2891	52°32.0′	2358	69°36.9′	2525	54°18.2′	2569
19	7°31.5′	2415	28°29.6′	2909	51°57.2′	2353	70°10.4′	2520	53°44.9′	2568
20	6°57.1′	2431	27°58.9′	2927	51°22.3′	2349	70°44.0′	2514	53°11.7′	2566
21	6°22.8′	2454	27°28.3′	2948	50°47.3′	2344	71°17.7′	2508	52°38.5′	2565
22	5°48.7′	2485	26°57.9′	2970	50°12.3′	2340	71°51.3′	2503	52°05.3′	2565
23	5°14.9′	2531	26°27.6′	2994	49°37.3′	2336	72°25.1′	2497	51°32.0′	2564

Fri Dec 21, 2018 UTC

UTC	−Aldebaran		−Pollux		−Procyon		−Betelgeuse		+Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	4°41.4′	2598	49°02.3′	2332	50°58.8′	2564	25°57.5′	3020	72°58.8′	2492
1	4°08.4′	2701	48°27.2′	2328	50°25.5′	2564	25°27.6′	3048	73°32.6′	2486
2	–	–	47°52.1′	2324	49°52.3′	2564	24°57.8′	3079	74°06.5′	2481
3	–	–	47°17.0′	2320	49°19.0′	2564	24°28.3′	3112	74°40.4′	2476
4	–	–	46°41.8′	2316	48°45.8′	2565	23°59.0′	3148	75°14.3′	2471
5	–	–	46°06.6′	2312	48°12.5′	2566	23°29.9′	3187	75°48.3′	2465
6	–	–	45°31.4′	2309	47°39.3′	2567	23°01.1′	3230	76°22.3′	2460
7	–	–	44°56.1′	2305	47°06.1′	2568	22°32.6′	3276	76°56.3′	2455
8	–	–	44°20.8′	2302	46°32.9′	2570	22°04.4′	3326	77°30.4′	2450
9	–	–	43°45.5′	2298	45°59.7′	2572	21°36.5′	3381	78°04.5′	2445
10	–	–	43°10.2′	2295	45°26.5′	2575	21°09.0′	3442	78°38.7′	2440
11	–	–	42°34.8′	2292	44°53.3′	2577	20°41.8′	3507	79°12.9′	2435
12	–	–	41°59.4′	2289	44°20.2′	2581	20°15.0′	3579	79°47.2′	2430
13	–	–	41°24.0′	2287	43°47.1′	2584	19°48.7′	3658	80°21.5′	2426
14	4°17.1′	2508	40°48.6′	2284	43°14.0′	2588	19°22.9′	3744	80°55.8′	2421
15	4°50.8′	2437	40°13.1′	2281	42°40.9′	2592	18°57.5′	3839	81°30.1′	2416
16	5°25.0′	2386	39°37.6′	2279	42°07.9′	2597	18°32.7′	3943	82°04.5′	2412
17	5°59.7′	2347	39°02.1′	2277	41°34.9′	2603	18°08.5′	4058	82°39.0′	2407
18	6°34.6′	2317	38°26.6′	2275	41°01.9′	2608	17°45.0′	4185	83°13.4′	2403
19	7°09.8′	2293	37°51.1′	2273	40°29.0′	2615	17°22.1′	4326	83°47.9′	2398
20	7°45.2′	2273	37°15.5′	2271	39°56.1′	2621	16°59.9′	4482	84°22.5′	2394
21	8°20.7′	2257	36°39.9′	2270	39°23.3′	2629	–	–	84°57.1′	2390
22	8°56.4′	2243	36°04.4′	2268	38°50.6′	2637	–	–	85°31.7′	2386
23	9°32.2′	2230	35°28.8′	2267	38°17.9′	2646	–	–	86°06.3′	2381

Sat Dec 22, 2018 UTC

UTC	+Aldebaran		−Pollux		−Regulus		−Procyon		+Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	10°08.1′	2220	34°53.2′	2266	70°12.0′	2169	37°45.3′	2655	86°41.0′	2377
1	10°44.1′	2210	34°17.6′	2266	69°35.5′	2165	37°12.7′	2665	87°15.7′	2373
2	11°20.2′	2201	33°42.0′	2265	68°59.1′	2162	36°40.2′	2676	87°50.4′	2369
3	11°56.3′	2193	33°06.3′	2265	68°22.6′	2158	36°07.8′	2687	88°25.2′	2365
4	12°32.5′	2186	32°30.7′	2265	67°46.1′	2154	35°35.5′	2700	88°60.0′	2362
5	13°08.8′	2179	31°55.1′	2266	67°09.6′	2151	35°03.3′	2713	89°34.8′	2358
6	13°45.1′	2173	31°19.5′	2266	66°33.0′	2147	34°31.2′	2728	90°09.7′	2354
7	14°21.5′	2167	30°43.9′	2268	65°56.4′	2144	33°59.1′	2743	90°44.6′	2351
8	14°57.9′	2161	30°08.3′	2269	65°19.8′	2140	33°27.2′	2760	91°19.5′	2347
9	15°34.4′	2156	29°32.7′	2271	64°43.2′	2137	32°55.5′	2777	91°54.5′	2344
10	16°10.9′	2151	28°57.2′	2273	64°06.5′	2134	32°23.8′	2796	92°29.4′	2340
11	16°47.5′	2147	28°21.6′	2275	63°29.8′	2131	31°52.3′	2816	93°04.4′	2337
12	17°24.1′	2142	27°46.1′	2278	62°53.0′	2128	31°20.9′	2838	93°39.5′	2334
13	18°00.7′	2138	27°10.6′	2282	62°16.3′	2125	30°49.7′	2861	94°14.5′	2331
14	18°37.4′	2134	26°35.1′	2286	61°39.5′	2122	30°18.7′	2886	94°49.6′	2327
15	19°14.1′	2130	25°59.6′	2291	61°02.7′	2119	29°47.8′	2913	95°24.7′	2324
16	19°50.9′	2126	25°24.2′	2296	60°25.8′	2116	29°17.1′	2941	95°59.8′	2321
17	20°27.6′	2122	24°48.9′	2302	59°49.0′	2113	28°46.6′	2972	96°35.0′	2319
18	21°04.4′	2119	24°13.6′	2309	59°12.1′	2111	28°16.4′	3005	97°10.2′	2316
19	21°41.3′	2115	23°38.3′	2316	58°35.2′	2108	27°46.3′	3040	97°45.4′	2313
20	22°18.2′	2112	23°03.1′	2325	57°58.3′	2106	27°16.5′	3077	98°20.6′	2310
21	22°55.0′	2109	22°28.0′	2334	57°21.3′	2103	26°47.0′	3118	98°55.9′	2308
22	23°32.0′	2106	21°52.9′	2345	56°44.3′	2101	26°17.7′	3161	99°31.1′	2305
23	24°08.9′	2103	21°18.0′	2357	56°07.4′	2098	25°48.7′	3208	100°06.4′	2303

Sun Dec 23, 2018 UTC

UTC	+Aldebaran		-Pollux		-Regulus		-Spica		-Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	24°45.9'	2100	20°43.1'	2370	55°30.3'	2096	109°22.1'	2130	25°20.1'	3258
1	25°22.9'	2098	20°08.3'	2385	54°53.3'	2094	108°45.3'	2128	24°51.7'	3313
2	25°59.9'	2095	19°33.7'	2401	54°16.3'	2092	108°08.6'	2125	24°23.8'	3371
3	26°36.9'	2093	18°59.2'	2420	53°39.2'	2090	107°31.8'	2123	23°56.2'	3434
4	27°14.0'	2090	18°24.8'	2440	53°02.1'	2088	106°55.0'	2121	23°28.9'	3502
5	27°51.1'	2088	17°50.6'	2463	52°25.0'	2086	106°18.1'	2118	23°02.2'	3576
6	28°28.2'	2086	17°16.6'	2489	51°47.9'	2085	105°41.3'	2116	22°35.8'	3655
7	29°05.3'	2084	16°42.7'	2518	51°10.8'	2083	105°04.4'	2114	22°10.0'	3742
8	29°42.4'	2082	16°09.1'	2550	50°33.6'	2081	104°27.6'	2112	21°44.6'	3835
9	30°19.6'	2080	15°35.8'	2587	49°56.5'	2080	103°50.7'	2111	21°19.8'	3937
10	30°56.7'	2078	15°02.7'	2629	49°19.3'	2078	103°13.8'	2109	20°55.6'	4048
11	31°33.9'	2076	14°30.0'	2676	48°42.1'	2077	102°36.9'	2107	20°31.9'	4169
12	32°11.1'	2075	13°57.6'	2730	48°05.0'	2076	101°59.9'	2106	20°09.0'	4301
13	32°48.3'	2073	13°25.6'	2792	47°27.7'	2075	101°23.0'	2104	19°46.7'	4445
14	33°25.5'	2072	12°54.0'	2863	46°50.5'	2073	100°46.0'	2103	19°25.1'	4603
15	34°02.8'	2071	12°23.0'	2946	46°13.3'	2072	100°09.0'	2101	–	–
16	34°40.0'	2069	11°52.5'	3041	45°36.1'	2072	99°32.1'	2100	–	–
17	35°17.3'	2068	11°22.7'	3152	44°58.8'	2071	98°55.1'	2099	–	–
18	35°54.5'	2067	–	–	44°21.6'	2070	98°18.1'	2098	–	–
19	36°31.8'	2066	–	–	43°44.3'	2069	97°41.0'	2097	–	–
20	37°09.1'	2065	–	–	43°07.1'	2069	97°04.0'	2096	–	–
21	37°46.4'	2064	–	–	42°29.8'	2068	96°27.0'	2095	–	–
22	38°23.7'	2063	–	–	41°52.6'	2068	95°50.0'	2095	–	–
23	39°01.0'	2063	–	–	41°15.3'	2067	95°12.9'	2094	–	–

Mon Dec 24, 2018 UTC

UTC	+Aldebaran		-Regulus		+Betelgeuse		-Spica		-Arcturus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	39°38.3'	2062	40°38.0'	2067	25°20.7'	2810	94°35.9'	2093	94°39.5'	2505
1	40°15.6'	2062	40°00.7'	2067	25°52.1'	2776	93°58.8'	2093	94°05.8'	2504
2	40°53.0'	2061	39°23.4'	2067	26°23.8'	2745	93°21.8'	2093	93°32.1'	2503
3	41°30.3'	2061	38°46.2'	2067	26°55.7'	2716	92°44.7'	2092	92°58.4'	2502
4	42°07.6'	2060	38°08.9'	2067	27°27.8'	2689	92°07.6'	2092	92°24.6'	2502
5	42°45.0'	2060	37°31.6'	2067	28°00.1'	2663	91°30.6'	2092	91°50.9'	2501
6	43°22.3'	2060	36°54.3'	2067	28°32.6'	2639	90°53.5'	2092	91°17.2'	2501
7	43°59.6'	2060	36°17.1'	2068	29°05.3'	2617	90°16.4'	2092	90°43.4'	2501
8	44°37.0'	2060	35°39.8'	2068	29°38.1'	2596	89°39.4'	2092	90°09.7'	2501
9	45°14.3'	2060	35°02.5'	2069	30°11.1'	2576	89°02.3'	2092	89°36.0'	2501
10	45°51.7'	2060	34°25.3'	2069	30°44.3'	2558	88°25.3'	2092	89°02.2'	2501
11	46°29.0'	2061	33°48.0'	2070	31°17.6'	2540	87°48.2'	2093	88°28.5'	2502
12	47°06.3'	2061	33°10.7'	2071	31°51.0'	2524	87°11.1'	2093	87°54.8'	2503
13	47°43.7'	2061	32°33.5'	2072	32°24.6'	2509	86°34.1'	2094	87°21.1'	2504
14	48°21.0'	2062	31°56.3'	2073	32°58.2'	2494	85°57.0'	2094	86°47.4'	2505
15	48°58.3'	2062	31°19.0'	2074	33°32.0'	2481	85°20.0'	2095	86°13.6'	2506
16	49°35.6'	2063	30°41.8'	2075	34°05.9'	2468	84°42.9'	2096	85°40.0'	2507
17	50°12.9'	2064	30°04.6'	2076	34°39.9'	2456	84°05.9'	2097	85°06.3'	2509
18	50°50.2'	2064	29°27.4'	2078	35°14.0'	2445	83°28.9'	2097	84°32.6'	2511
19	51°27.5'	2065	28°50.2'	2079	35°48.1'	2435	82°51.9'	2098	83°58.9'	2513
20	52°04.8'	2066	28°13.0'	2081	36°22.4'	2425	82°14.9'	2099	83°25.3'	2515
21	52°42.1'	2067	27°35.9'	2083	36°56.7'	2416	81°37.9'	2101	82°51.7'	2517
22	53°19.4'	2068	26°58.7'	2085	37°31.1'	2407	81°00.9'	2102	82°18.1'	2519
23	53°56.7'	2069	26°21.6'	2087	38°05.6'	2399	80°23.9'	2103	81°44.5'	2522

Tue Dec 25, 2018 UTC

UTC	−Regulus		+Aldebaran		+Betelgeuse		+Pollux		−Spica	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	25°44.5′	2089	54°33.9′	2070	38°40.1′	2391	12°23.4′	2864	79°46.9′	2104
1	25°07.4′	2091	55°11.2′	2072	39°14.7′	2384	12°54.5′	2793	79°10.0′	2106
2	24°30.3′	2094	55°48.4′	2073	39°49.4′	2377	13°26.0′	2731	78°33.0′	2107
3	23°53.3′	2096	56°25.6′	2074	40°24.1′	2371	13°58.0′	2677	77°56.1′	2109
4	23°16.3′	2099	57°02.9′	2076	40°58.9′	2365	14°30.4′	2630	77°19.2′	2111
5	22°39.3′	2102	57°40.1′	2077	41°33.7′	2359	15°03.1′	2588	76°42.3′	2113
6	22°02.3′	2105	58°17.2′	2079	42°08.5′	2354	15°36.2′	2552	76°05.4′	2114
7	21°25.3′	2108	58°54.4′	2081	42°43.4′	2350	16°09.5′	2519	75°28.5′	2116
8	20°48.4′	2112	59°31.6′	2082	43°18.3′	2345	16°43.1′	2490	74°51.6′	2118
9	20°11.5′	2115	60°08.7′	2084	43°53.3′	2341	17°16.9′	2464	74°14.8′	2120
10	19°34.6′	2119	60°45.9′	2086	44°28.3′	2337	17°51.0′	2441	73°38.0′	2122
11	18°57.8′	2124	61°23.0′	2088	45°03.3′	2334	18°25.2′	2421	73°01.2′	2125
12	18°21.0′	2128	62°00.1′	2090	45°38.4′	2331	18°59.5′	2403	72°24.4′	2127
13	17°44.3′	2133	62°37.2′	2092	46°13.5′	2328	19°34.0′	2386	71°47.6′	2129
14	17°07.5′	2138	63°14.2′	2094	46°48.6′	2325	20°08.7′	2371	71°10.9′	2132
15	16°30.9′	2144	63°51.3′	2096	47°23.7′	2323	20°43.4′	2358	70°34.1′	2134
16	15°54.3′	2150	64°28.3′	2098	47°58.8′	2320	21°18.3′	2346	69°57.4′	2137
17	15°17.7′	2157	65°05.3′	2101	48°34.0′	2318	21°53.2′	2335	69°20.8′	2139
18	14°41.2′	2164	65°42.3′	2103	49°09.2′	2317	22°28.3′	2325	68°44.1′	2142
19	14°04.7′	2172	66°19.3′	2105	49°44.4′	2315	23°03.4′	2317	68°07.4′	2145
20	13°28.3′	2181	66°56.2′	2108	50°19.6′	2314	23°38.6′	2309	67°30.8′	2147
21	12°52.0′	2191	67°33.2′	2110	50°54.8′	2313	24°13.9′	2302	66°54.2′	2150
22	12°15.8′	2203	68°10.1′	2113	51°30.0′	2312	24°49.2′	2296	66°17.7′	2153
23	11°39.7′	2215	68°46.9′	2115	52°05.3′	2311	25°24.5′	2290	65°41.1′	2156

Wed Dec 26, 2018 UTC

UTC	−Regulus		+Pollux		−Spica		+Betelgeuse		+Aldebaran	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	11°03.6′	2230	25°60.0′	2285	65°04.6′	2159	52°40.5′	2311	69°23.8′	2118
1	10°27.7′	2247	26°35.4′	2281	64°28.1′	2163	53°15.8′	2310	70°00.7′	2121
2	9°52.0′	2266	27°10.9′	2277	63°51.6′	2166	53°51.0′	2310	70°37.5′	2123
3	9°16.4′	2289	27°46.4′	2274	63°15.2′	2169	54°26.3′	2310	71°14.3′	2126
4	8°40.9′	2317	28°22.0′	2271	62°38.8′	2172	55°01.5′	2310	71°51.0′	2129
5	8°05.7′	2351	28°57.5′	2268	62°02.4′	2176	55°36.8′	2310	72°27.8′	2132
6	7°30.8′	2392	29°33.1′	2266	61°26.1′	2179	56°12.0′	2311	73°04.5′	2135
7	6°56.2′	2445	30°08.7′	2264	60°49.7′	2183	56°47.2′	2311	73°41.2′	2138
8	6°22.1′	2514	30°44.3′	2263	60°13.4′	2187	57°22.5′	2312	74°17.9′	2141
9	5°48.4′	2605	31°20.0′	2262	59°37.2′	2190	57°57.7′	2313	74°54.5′	2144
10	–	–	31°55.6′	2261	59°00.9′	2194	58°33.0′	2314	75°31.2′	2147
11	–	–	32°31.3′	2260	58°24.7′	2198	59°08.2′	2315	76°07.8′	2150
12	–	–	33°06.9′	2260	57°48.6′	2202	59°43.4′	2316	76°44.3′	2154
13	–	–	33°42.6′	2260	57°12.4′	2206	60°18.6′	2317	77°20.9′	2157
14	–	–	34°18.2′	2260	56°36.3′	2210	60°53.8′	2319	77°57.4′	2160
15	–	–	34°53.9′	2260	56°00.2′	2214	61°29.0′	2320	78°33.9′	2163
16	–	–	35°29.6′	2261	55°24.2′	2218	62°04.1′	2322	79°10.3′	2167
17	–	–	36°05.2′	2261	54°48.2′	2222	62°39.3′	2323	79°46.8′	2170
18	–	–	36°40.9′	2262	54°12.2′	2227	63°14.4′	2325	80°23.2′	2174
19	–	–	37°16.5′	2263	53°36.3′	2231	63°49.5′	2327	80°59.5′	2177
20	–	–	37°52.1′	2264	53°00.4′	2235	64°24.7′	2329	81°35.9′	2181
21	–	–	38°27.8′	2266	52°24.5′	2240	64°59.8′	2331	82°12.2′	2184
22	–	–	39°03.4′	2267	51°48.7′	2244	65°34.8′	2333	82°48.5′	2188
23	–	–	39°39.0′	2269	51°12.9′	2249	66°09.9′	2336	83°24.7′	2192

Thu Dec 27, 2018 UTC

UTC	+Pollux		-Spica		+Procyon		+Betelgeuse		+Aldebaran	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	40°14.6'	2271	50°37.2'	2254	41°54.0'	2588	66°44.9'	2338	84°01.0'	2195
1	40°50.1'	2272	50°01.5'	2259	42°27.1'	2582	67°20.0'	2340	84°37.2'	2199
2	41°25.7'	2274	49°25.8'	2263	43°00.2'	2577	67°55.0'	2343	85°13.3'	2203
3	42°01.2'	2276	48°50.2'	2268	43°33.3'	2573	68°29.9'	2346	85°49.5'	2206
4	42°36.7'	2279	48°14.6'	2273	44°06.5'	2569	69°04.9'	2348	86°25.6'	2210
5	43°12.2'	2281	47°39.0'	2278	44°39.7'	2565	69°39.8'	2351	87°01.6'	2214
6	43°47.7'	2283	47°03.5'	2284	45°13.0'	2562	70°14.8'	2354	87°37.7'	2218
7	44°23.2'	2286	46°28.1'	2289	45°46.2'	2559	70°49.7'	2357	88°13.7'	2222
8	44°58.6'	2288	45°52.6'	2294	46°19.5'	2556	71°24.5'	2360	88°49.6'	2226
9	45°34.1'	2291	45°17.3'	2300	46°52.8'	2553	71°59.4'	2363	89°25.6'	2230
10	46°09.5'	2294	44°41.9'	2305	47°26.1'	2551	72°34.2'	2366	90°01.5'	2234
11	46°44.9'	2296	44°06.6'	2311	47°59.5'	2549	73°09.0'	2369	90°37.4'	2238
12	47°20.2'	2299	43°31.4'	2316	48°32.9'	2547	73°43.8'	2372	91°13.2'	2242
13	47°55.6'	2302	42°56.2'	2322	49°06.2'	2546	74°18.5'	2375	91°49.0'	2246
14	48°30.9'	2305	42°21.0'	2328	49°39.6'	2545	74°53.3'	2379	92°24.8'	2250
15	49°06.2'	2308	41°45.9'	2334	50°13.0'	2544	75°28.0'	2382	93°00.5'	2254
16	49°41.4'	2311	41°10.9'	2340	50°46.4'	2543	76°02.6'	2385	93°36.2'	2258
17	50°16.7'	2314	40°35.9'	2346	51°19.8'	2542	76°37.3'	2389	94°11.9'	2262
18	50°51.9'	2318	40°00.9'	2352	51°53.2'	2542	77°11.9'	2392	94°47.6'	2266
19	51°27.1'	2321	39°26.0'	2359	52°26.7'	2541	77°46.5'	2396	95°23.2'	2270
20	52°02.2'	2324	38°51.2'	2365	53°00.1'	2541	78°21.0'	2400	95°58.7'	2274
21	52°37.4'	2328	38°16.4'	2372	53°33.5'	2541	78°55.6'	2403	96°34.3'	2279
22	53°12.5'	2331	37°41.6'	2379	54°06.9'	2542	79°30.1'	2407	97°09.8'	2283
23	53°47.5'	2335	37°06.9'	2386	54°40.3'	2542	80°04.5'	2411	97°45.3'	2287

Fri Dec 28, 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	108°04.1'	2615	18°19.1'	2328	36°32.3'	2393	54°22.6'	2338	55°13.8'	2543
1	107°31.3'	2620	18°54.2'	2330	35°57.7'	2400	54°57.6'	2342	55°47.2'	2543
2	106°58.4'	2624	19°29.3'	2332	35°23.2'	2407	55°32.6'	2345	56°20.6'	2544
3	106°25.7'	2629	20°04.3'	2334	34°48.7'	2415	56°07.6'	2349	56°54.0'	2545
4	105°52.9'	2634	20°39.4'	2337	34°14.3'	2422	56°42.5'	2352	57°27.4'	2546
5	105°20.2'	2638	21°14.4'	2340	33°39.9'	2430	57°17.4'	2356	58°00.7'	2548
6	104°47.5'	2643	21°49.4'	2342	33°05.6'	2438	57°52.3'	2360	58°34.1'	2549
7	104°14.9'	2647	22°24.4'	2345	32°31.4'	2447	58°27.1'	2364	59°07.5'	2550
8	103°42.2'	2652	22°59.4'	2348	31°57.3'	2455	59°02.0'	2367	59°40.8'	2552
9	103°09.7'	2657	23°34.3'	2352	31°23.2'	2464	59°36.7'	2371	60°14.2'	2554
10	102°37.1'	2661	24°09.2'	2355	30°49.2'	2473	60°11.5'	2375	60°47.5'	2555
11	102°04.6'	2666	24°44.1'	2358	30°15.2'	2483	60°46.2'	2379	61°20.8'	2557
12	101°32.1'	2670	25°19.0'	2362	29°41.3'	2492	61°20.9'	2383	61°54.1'	2559
13	100°59.7'	2675	25°53.8'	2365	29°07.5'	2502	61°55.6'	2387	62°27.4'	2561
14	100°27.3'	2680	26°28.6'	2369	28°33.8'	2513	62°30.2'	2390	63°00.7'	2563
15	99°54.9'	2684	27°03.4'	2372	28°00.2'	2523	63°04.8'	2394	63°33.9'	2566
16	99°22.6'	2689	27°38.2'	2376	27°26.6'	2534	63°39.4'	2398	64°07.1'	2568
17	98°50.3'	2694	28°12.9'	2380	26°53.1'	2546	64°13.9'	2402	64°40.4'	2570
18	98°18.0'	2699	28°47.6'	2383	26°19.7'	2558	64°48.4'	2406	65°13.6'	2573
19	97°45.8'	2703	29°22.2'	2387	25°46.4'	2570	65°22.9'	2410	65°46.7'	2575
20	97°13.6'	2708	29°56.8'	2391	25°13.2'	2584	65°57.4'	2414	66°19.9'	2578
21	96°41.4'	2713	30°31.4'	2395	24°40.1'	2597	66°31.8'	2418	66°53.0'	2580
22	96°09.3'	2717	31°06.0'	2399	24°07.2'	2612	67°06.2'	2422	67°26.2'	2583
23	95°37.2'	2722	31°40.5'	2403	23°34.3'	2627	67°40.5'	2426	67°59.3'	2586

Sat Dec 29, 2018 UTC

UTC	−Sun		+Regulus		−Spica		+Pollux		−Venus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	95°05.1′	2727	32°15.0′	2407	23°01.5′	2643	68°14.8′	2431	48°22.8′	2705
1	94°33.1′	2731	32°49.5′	2411	22°28.9′	2659	68°49.1′	2435	47°50.6′	2710
2	94°01.1′	2736	33°24.0′	2415	21°56.3′	2677	69°23.4′	2439	47°18.5′	2715
3	93°29.1′	2741	33°58.4′	2419	21°23.9′	2696	69°57.6′	2443	46°46.4′	2720
4	92°57.2′	2745	34°32.8′	2423	20°51.7′	2716	70°31.8′	2447	46°14.3′	2725
5	92°25.3′	2750	35°07.1′	2427	20°19.6′	2737	71°05.9′	2451	45°42.3′	2729
6	91°53.5′	2755	35°41.4′	2431	19°47.6′	2760	71°40.1′	2455	45°10.3′	2734
7	91°21.7′	2759	36°15.7′	2435	19°15.9′	2785	72°14.1′	2459	44°38.3′	2739
8	90°49.9′	2764	36°50.0′	2439	18°44.3′	2811	72°48.2′	2463	44°06.3′	2744
9	90°18.1′	2769	37°24.2′	2443	18°12.8′	2839	73°22.2′	2467	43°34.5′	2749
10	89°46.4′	2773	37°58.4′	2447	17°41.6′	2870	73°56.2′	2472	43°02.6′	2754
11	89°14.7′	2778	38°32.5′	2451	17°10.7′	2903	74°30.2′	2476	42°30.8′	2758
12	88°43.1′	2783	39°06.6′	2455	16°39.9′	2939	75°04.1′	2480	41°59.0′	2763
13	88°11.5′	2787	39°40.7′	2459	16°09.4′	2978	75°38.0′	2484	41°27.2′	2768
14	87°39.9′	2792	40°14.8′	2463	15°39.2′	3022	76°11.9′	2488	40°55.5′	2773
15	87°08.3′	2797	40°48.8′	2467	15°09.3′	3069	76°45.7′	2492	40°23.8′	2778
16	86°36.8′	2801	41°22.8′	2471	14°39.7′	3122	77°19.5′	2496	39°52.2′	2782
17	86°05.3′	2806	41°56.8′	2475	14°10.4′	3180	77°53.3′	2500	39°20.5′	2787
18	85°33.9′	2810	42°30.7′	2479	13°41.6′	3245	78°27.0′	2505	38°49.0′	2792
19	85°02.5′	2815	43°04.6′	2483	13°13.1′	3317	79°00.7′	2509	38°17.4′	2797
20	84°31.1′	2819	43°38.5′	2488	12°45.2′	3399	79°34.4′	2513	37°45.9′	2801
21	83°59.8′	2824	44°12.3′	2492	12°17.8′	3491	80°08.0′	2517	37°14.4′	2806
22	83°28.4′	2829	44°46.1′	2496	11°50.9′	3595	80°41.7′	2521	36°43.0′	2811
23	82°57.2′	2833	45°19.9′	2500	11°24.7′	3714	81°15.2′	2525	36°11.6′	2816

Sun Dec 30, 2018 UTC

UTC	−Sun		+Regulus		−Venus		−Antares		−Jupiter	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	82°25.9′	2838	45°53.7′	2504	35°40.2′	2820	55°00.2′	2567	55°37.5′	2574
1	81°54.7′	2842	46°27.4′	2508	35°08.8′	2825	54°27.0′	2572	55°04.3′	2579
2	81°23.5′	2847	47°01.0′	2512	34°37.5′	2830	53°53.8′	2577	54°31.1′	2583
3	80°52.4′	2851	47°34.7′	2516	34°06.3′	2834	53°20.7′	2583	53°58.0′	2587
4	80°21.2′	2856	48°08.3′	2520	33°35.0′	2839	52°47.6′	2588	53°25.0′	2592
5	79°50.1′	2860	48°41.9′	2524	33°03.8′	2844	52°14.5′	2593	52°51.9′	2596
6	79°19.1′	2864	49°15.5′	2528	32°32.6′	2848	51°41.5′	2599	52°18.9′	2600
7	78°48.1′	2869	49°49.0′	2532	32°01.5′	2853	51°08.5′	2604	51°46.0′	2605
8	78°17.1′	2873	50°22.5′	2536	31°30.4′	2858	50°35.6′	2609	51°13.0′	2609
9	77°46.1′	2878	50°55.9′	2540	30°59.3′	2862	50°02.7′	2615	50°40.1′	2613
10	77°15.2′	2882	51°29.4′	2544	30°28.3′	2867	49°29.8′	2620	50°07.3′	2617
11	76°44.3′	2886	52°02.8′	2548	29°57.3′	2871	48°57.0′	2626	49°34.4′	2622
12	76°13.4′	2891	52°36.1′	2552	29°26.3′	2876	48°24.2′	2631	49°01.6′	2626
13	75°42.6′	2895	53°09.5′	2556	28°55.4′	2881	47°51.5′	2637	48°28.8′	2630
14	75°11.8′	2900	53°42.8′	2560	28°24.4′	2885	47°18.8′	2642	47°56.1′	2635
15	74°41.0′	2904	54°16.1′	2563	27°53.6′	2890	46°46.1′	2648	47°23.4′	2639
16	74°10.3′	2908	54°49.3′	2567	27°22.7′	2894	46°13.5′	2653	46°50.7′	2643
17	73°39.5′	2912	55°22.5′	2571	26°51.9′	2899	45°40.9′	2659	46°18.1′	2647
18	73°08.9′	2917	55°55.7′	2575	26°21.1′	2904	45°08.4′	2665	45°45.4′	2651
19	72°38.2′	2921	56°28.9′	2579	25°50.4′	2908	44°35.9′	2671	45°12.9′	2656
20	72°07.6′	2925	57°02.0′	2583	25°19.7′	2913	44°03.5′	2677	44°40.3′	2660
21	71°37.0′	2929	57°35.1′	2587	24°49.0′	2917	43°31.1′	2682	44°07.8′	2664
22	71°06.4′	2934	58°08.2′	2590	24°18.3′	2922	42°58.7′	2688	43°35.3′	2668
23	70°35.9′	2938	58°41.3′	2594	23°47.7′	2926	42°26.4′	2694	43°02.8′	2672

Mon Dec 31, 2018 UTC

UTC	-Sun		-Venus		-Jupiter		-Antares		+Regulus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	70°05.4'	2942	23°17.1'	2931	42°30.4'	2677	41°54.2'	2701	59°14.3'	2598
1	69°34.9'	2946	22°46.6'	2935	41°58.0'	2681	41°21.9'	2707	59°47.3'	2602
2	69°04.5'	2950	22°16.1'	2940	41°25.6'	2685	40°49.8'	2713	60°20.2'	2606
3	68°34.0'	2954	21°45.6'	2944	40°53.3'	2689	40°17.6'	2719	60°53.1'	2609
4	68°03.6'	2958	21°15.1'	2949	40°21.0'	2693	39°45.6'	2726	61°26.0'	2613
5	67°33.3'	2962	20°44.7'	2953	39°48.7'	2697	39°13.5'	2732	61°58.9'	2617
6	67°03.0'	2966	20°14.3'	2958	39°16.5'	2702	38°41.6'	2739	62°31.8'	2620
7	66°32.6'	2970	19°43.9'	2963	38°44.3'	2706	38°09.6'	2746	63°04.6'	2624
8	66°02.4'	2974	19°13.6'	2967	38°12.1'	2710	37°37.7'	2753	63°37.4'	2628
9	65°32.1'	2978	18°43.3'	2972	37°40.0'	2714	37°05.9'	2760	64°10.1'	2631
10	65°01.9'	2982	18°13.0'	2976	37°07.8'	2718	36°34.1'	2767	64°42.9'	2635
11	64°31.7'	2986	17°42.8'	2981	36°35.7'	2722	36°02.4'	2774	65°15.6'	2639
12	64°01.5'	2990	17°12.6'	2986	36°03.7'	2726	35°30.7'	2782	65°48.3'	2642
13	63°31.4'	2994	16°42.4'	2990	35°31.7'	2731	34°59.1'	2789	66°20.9'	2646
14	63°01.3'	2998	16°12.3'	2995	34°59.7'	2735	34°27.5'	2797	66°53.5'	2649
15	62°31.2'	3002	15°42.2'	3000	34°27.7'	2739	33°56.0'	2805	67°26.1'	2653
16	62°01.2'	3006	15°12.1'	3005	33°55.8'	2743	33°24.6'	2813	67°58.7'	2656
17	61°31.1'	3010	14°42.1'	3010	33°23.9'	2747	32°53.2'	2821	68°31.3'	2660
18	61°01.1'	3014	14°12.1'	3015	32°52.0'	2751	32°21.8'	2830	69°03.8'	2663
19	60°31.1'	3017	13°42.1'	3020	32°20.1'	2756	31°50.6'	2839	69°36.3'	2667
20	60°01.2'	3021	13°12.2'	3026	31°48.3'	2760	31°19.4'	2848	70°08.7'	2670
21	59°31.3'	3025	12°42.3'	3031	31°16.6'	2764	30°48.2'	2857	70°41.2'	2674
22	59°01.4'	3029	12°12.4'	3037	30°44.8'	2768	30°17.1'	2867	71°13.6'	2677
23	58°31.5'	3032	11°42.6'	3043	30°13.1'	2773	29°46.1'	2877	71°46.0'	2681