

Fri Nov 1, 2019 UTC

UTC	+Sun		-Saturn		+Jupiter		+Antares		+Venus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	50°17.7'	2942	16°54.3'	2602	5°15.9'	2763	19°20.2'	2896	29°38.2'	3043
1	50°48.2'	2948	16°21.4'	2608	5°47.7'	2748	19°51.0'	2886	30°07.9'	3048
2	51°18.6'	2954	15°48.4'	2615	6°19.6'	2738	20°21.9'	2876	30°37.7'	3054
3	51°49.0'	2960	15°15.6'	2621	6°51.5'	2732	20°52.8'	2868	31°07.4'	3060
4	52°19.4'	2967	14°42.8'	2627	7°23.5'	2728	21°23.8'	2861	31°37.0'	3065
5	52°49.7'	2973	14°10.0'	2633	7°55.5'	2726	21°54.9'	2855	32°06.7'	3071
6	53°19.9'	2979	13°37.3'	2640	8°27.5'	2725	22°26.0'	2850	32°36.2'	3076
7	53°50.2'	2985	13°04.6'	2646	8°59.6'	2726	22°57.1'	2845	33°05.8'	3082
8	54°20.3'	2991	12°32.0'	2652	9°31.6'	2727	23°28.3'	2841	33°35.3'	3088
9	54°50.5'	2997	11°59.4'	2659	10°03.6'	2729	23°59.5'	2838	34°04.8'	3094
10	55°20.6'	3003	11°26.9'	2665	10°35.6'	2732	24°30.7'	2835	34°34.2'	3099
11	55°50.6'	3009	10°54.4'	2672	11°07.6'	2735	25°01.9'	2833	35°03.6'	3105
12	56°20.6'	3015	10°22.0'	2678	11°39.6'	2739	25°33.1'	2832	35°32.9'	3111
13	56°50.6'	3021	9°49.6'	2685	12°11.5'	2742	26°04.4'	2831	36°02.3'	3117
14	57°20.5'	3027	9°17.2'	2692	12°43.4'	2746	26°35.7'	2830	36°31.5'	3123
15	57°50.4'	3034	8°45.0'	2699	13°15.3'	2751	27°06.9'	2830	37°00.8'	3128
16	58°20.2'	3040	8°12.7'	2706	13°47.1'	2755	27°38.2'	2829	37°30.0'	3134
17	58°50.0'	3046	7°40.6'	2714	14°18.9'	2760	28°09.5'	2830	37°59.1'	3140
18	59°19.8'	3052	7°08.4'	2722	14°50.7'	2764	28°40.8'	2830	38°28.2'	3146
19	59°49.5'	3058	6°36.4'	2731	15°22.5'	2769	29°12.0'	2831	38°57.3'	3152
20	60°19.2'	3064	6°04.4'	2740	15°54.2'	2774	29°43.3'	2832	39°26.4'	3157
21	60°48.8'	3070	5°32.5'	2751	16°25.9'	2779	30°14.6'	2834	39°55.4'	3163
22	61°18.4'	3075	5°00.6'	2763	16°57.5'	2784	30°45.8'	2835	40°24.3'	3169
23	61°48.0'	3081	4°28.9'	2778	17°29.1'	2789	31°17.0'	2837	40°53.2'	3175

Sat Nov 2, 2019 UTC

UTC	+Sun		-Saturn		+Jupiter		+Antares		+Venus	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	62°17.5'	3087	3°57.2'	2797	18°00.7'	2794	31°48.3'	2839	41°22.1'	3181
1	62°46.9'	3093	3°25.7'	2824	18°32.2'	2799	32°19.5'	2841	41°51.0'	3186
2	63°16.4'	3099	2°54.4'	2864	19°03.7'	2804	32°50.7'	2843	42°19.8'	3192
3	63°45.8'	3105	2°23.4'	2934	19°35.2'	2809	33°21.8'	2845	42°48.5'	3198
4	64°15.1'	3111	–	–	20°06.6'	2814	33°53.0'	2848	43°17.3'	3203
5	64°44.4'	3116	–	–	20°38.0'	2819	34°24.2'	2850	43°46.0'	3209
6	65°13.7'	3122	–	–	21°09.3'	2824	34°55.3'	2853	44°14.6'	3215
7	65°42.9'	3128	–	–	21°40.7'	2829	35°26.4'	2855	44°43.3'	3221
8	66°12.1'	3134	–	–	22°11.9'	2835	35°57.5'	2858	45°11.8'	3226
9	66°41.3'	3139	–	–	22°43.2'	2840	36°28.5'	2861	45°40.4'	3232
10	67°10.4'	3145	–	–	23°14.4'	2845	36°59.6'	2864	46°08.9'	3237
11	67°39.5'	3150	1°59.8'	2959	23°45.5'	2850	37°30.6'	2867	46°37.4'	3243
12	68°08.6'	3156	2°30.2'	2909	24°16.7'	2855	38°01.6'	2870	47°05.8'	3248
13	68°37.6'	3162	3°00.9'	2884	24°47.8'	2860	38°32.6'	2874	47°34.2'	3254
14	69°06.5'	3167	3°31.8'	2870	25°18.8'	2865	39°03.6'	2877	48°02.6'	3259
15	69°35.5'	3172	4°02.8'	2863	25°49.8'	2870	39°34.5'	2880	48°30.9'	3265
16	70°04.4'	3178	4°33.8'	2859	26°20.8'	2875	40°05.4'	2883	48°59.2'	3270
17	70°33.3'	3183	5°04.9'	2858	26°51.8'	2880	40°36.3'	2887	49°27.4'	3276
18	71°02.1'	3189	5°35.9'	2859	27°22.7'	2885	41°07.2'	2890	49°55.7'	3281
19	71°30.9'	3194	6°07.0'	2860	27°53.6'	2890	41°38.0'	2894	50°23.8'	3286
20	71°59.6'	3199	6°38.0'	2863	28°24.4'	2895	42°08.8'	2897	50°52.0'	3292
21	72°28.4'	3205	7°09.1'	2865	28°55.2'	2900	42°39.6'	2900	51°20.1'	3297
22	72°57.0'	3210	7°40.1'	2869	29°26.0'	2904	43°10.4'	2904	51°48.2'	3302
23	73°25.7'	3215	8°11.1'	2872	29°56.7'	2909	43°41.1'	2907	52°16.3'	3307

Sun Nov 3, 2019 UTC

UTC	+Sun		+Saturn		+Jupiter		+Antares		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	73°54.3'	3220	8°42.1'	2876	30°27.4'	2914	44°11.9'	2911	43°45.1'	3273
1	74°22.9'	3225	9°13.0'	2879	30°58.1'	2919	44°42.5'	2914	43°16.9'	3286
2	74°51.4'	3230	9°43.9'	2883	31°28.7'	2923	45°13.2'	2918	42°48.7'	3300
3	75°20.0'	3235	10°14.8'	2887	31°59.4'	2928	45°43.9'	2921	42°20.6'	3313
4	75°48.5'	3240	10°45.7'	2891	32°29.9'	2933	46°14.5'	2925	41°52.7'	3327
5	76°16.9'	3245	11°16.5'	2895	33°00.5'	2937	46°45.1'	2928	41°24.8'	3342
6	76°45.3'	3250	11°47.3'	2900	33°31.0'	2942	47°15.6'	2932	40°57.0'	3356
7	77°13.7'	3255	12°18.1'	2904	34°01.5'	2946	47°46.2'	2935	40°29.3'	3371
8	77°42.1'	3260	12°48.8'	2908	34°31.9'	2951	48°16.7'	2939	40°01.7'	3386
9	78°10.4'	3264	13°19.6'	2912	35°02.3'	2955	48°47.2'	2942	39°34.2'	3402
10	78°38.7'	3269	13°50.2'	2916	35°32.7'	2960	49°17.7'	2946	39°06.7'	3418
11	79°07.0'	3274	14°20.9'	2920	36°03.0'	2964	49°48.1'	2949	38°39.4'	3434
12	79°35.2'	3278	14°51.5'	2924	36°33.4'	2968	50°18.6'	2953	38°12.2'	3451
13	80°03.4'	3283	15°22.1'	2928	37°03.7'	2972	50°49.0'	2956	37°45.1'	3468
14	80°31.6'	3287	15°52.7'	2932	37°33.9'	2977	51°19.3'	2960	37°18.1'	3486
15	80°59.7'	3292	16°23.2'	2936	38°04.2'	2981	51°49.7'	2963	36°51.2'	3504
16	81°27.8'	3296	16°53.8'	2940	38°34.4'	2985	52°20.0'	2966	36°24.5'	3523
17	81°55.9'	3301	17°24.2'	2944	39°04.5'	2989	52°50.3'	2970	35°57.8'	3542
18	82°24.0'	3305	17°54.7'	2948	39°34.7'	2993	53°20.6'	2973	35°31.3'	3562
19	82°52.0'	3309	18°25.1'	2952	40°04.8'	2997	53°50.9'	2976	35°04.8'	3583
20	83°20.0'	3314	18°55.5'	2956	40°34.9'	3001	54°21.1'	2980	34°38.5'	3604
21	83°48.0'	3318	19°25.9'	2960	41°05.0'	3005	54°51.3'	2983	34°12.4'	3626
22	84°15.9'	3322	19°56.3'	2964	41°35.0'	3009	55°21.5'	2986	33°46.3'	3648
23	84°43.9'	3326	20°26.6'	2967	42°05.0'	3013	55°51.7'	2989	33°20.4'	3672

Mon Nov 4, 2019 UTC

UTC	+Sun		+Saturn		+Jupiter		+Antares		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	85°11.8'	3330	20°56.9'	2971	42°35.0'	3016	56°21.8'	2992	32°54.7'	3696
1	85°39.6'	3334	21°27.2'	2975	43°04.9'	3020	56°51.9'	2995	32°29.1'	3721
2	86°07.5'	3338	21°57.4'	2978	43°34.9'	3024	57°22.0'	2999	32°03.6'	3747
3	86°35.3'	3342	22°27.6'	2982	44°04.8'	3027	57°52.1'	3002	31°38.3'	3774
4	87°03.1'	3346	22°57.8'	2985	44°34.7'	3031	58°22.2'	3005	31°13.1'	3801
5	87°30.9'	3349	23°28.0'	2989	45°04.5'	3034	58°52.2'	3008	30°48.1'	3830
6	87°58.6'	3353	23°58.1'	2992	45°34.4'	3038	59°22.2'	3011	30°23.3'	3861
7	88°26.3'	3357	24°28.3'	2996	46°04.2'	3041	59°52.2'	3014	29°58.6'	3892
8	88°54.0'	3360	24°58.4'	2999	46°34.0'	3045	60°22.2'	3016	29°34.1'	3925
9	89°21.7'	3364	25°28.4'	3002	47°03.7'	3048	60°52.2'	3019	29°09.8'	3959
10	89°49.4'	3367	25°58.5'	3005	47°33.5'	3051	61°22.1'	3022	28°45.7'	3994
11	90°17.0'	3371	26°28.5'	3009	48°03.2'	3055	61°52.0'	3025	28°21.8'	4031
12	90°44.6'	3374	26°58.6'	3012	48°32.9'	3058	62°21.9'	3028	27°58.0'	4070
13	91°12.2'	3378	27°28.5'	3015	49°02.5'	3061	62°51.8'	3030	27°34.5'	4111
14	91°39.8'	3381	27°58.5'	3018	49°32.2'	3064	63°21.7'	3033	27°11.3'	4153
15	92°07.3'	3384	28°28.5'	3021	50°01.8'	3067	63°51.5'	3035	26°48.2'	4198
16	92°34.8'	3387	28°58.4'	3024	50°31.4'	3070	64°21.3'	3038	26°25.4'	4245
17	93°02.4'	3390	29°28.3'	3027	51°01.0'	3073	64°51.2'	3041	26°02.8'	4294
18	93°29.8'	3393	29°58.2'	3029	51°30.6'	3076	65°20.9'	3043	25°40.5'	4345
19	93°57.3'	3396	30°28.0'	3032	52°00.2'	3078	65°50.7'	3046	25°18.4'	4399
20	94°24.8'	3399	30°57.9'	3035	52°29.7'	3081	66°20.5'	3048	24°56.6'	4456
21	94°52.2'	3402	31°27.7'	3038	52°59.2'	3084	66°50.2'	3050	24°35.1'	4516
22	95°19.6'	3405	31°57.5'	3040	53°28.7'	3086	67°19.9'	3053	24°13.9'	4580
23	95°47.0'	3408	32°27.3'	3043	53°58.2'	3089	67°49.7'	3055	23°53.0'	4647

Tue Nov 5, 2019 UTC

UTC	+Sun		+Saturn		+Jupiter		+Antares		-Aldebaran	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	96°14.4'	3411	32°57.1'	3045	54°27.6'	3092	68°19.3'	3057	111°05.4'	3024
1	96°41.7'	3413	33°26.9'	3048	54°57.1'	3094	68°49.0'	3059	110°35.5'	3027
2	97°09.1'	3416	33°56.6'	3050	55°26.5'	3097	69°18.7'	3061	110°05.6'	3029
3	97°36.4'	3419	34°26.3'	3053	55°55.9'	3099	69°48.3'	3064	109°35.8'	3032
4	98°03.7'	3421	34°56.0'	3055	56°25.3'	3101	70°18.0'	3066	109°05.9'	3034
5	98°31.0'	3423	35°25.7'	3057	56°54.7'	3104	70°47.6'	3068	108°36.1'	3036
6	98°58.3'	3426	35°55.4'	3059	57°24.1'	3106	71°17.2'	3070	108°06.2'	3038
7	99°25.5'	3428	36°25.1'	3061	57°53.4'	3108	71°46.8'	3071	107°36.4'	3040
8	99°52.8'	3431	36°54.7'	3064	58°22.7'	3110	72°16.4'	3073	107°06.6'	3042
9	100°20.0'	3433	37°24.4'	3066	58°52.1'	3112	72°45.9'	3075	106°36.9'	3044
10	100°47.2'	3435	37°54.0'	3068	59°21.4'	3114	73°15.5'	3077	106°07.1'	3046
11	101°14.4'	3437	38°23.6'	3070	59°50.7'	3116	73°45.0'	3079	105°37.3'	3048
12	101°41.6'	3439	38°53.2'	3071	60°19.9'	3118	74°14.6'	3080	105°07.6'	3050
13	102°08.8'	3441	39°22.8'	3073	60°49.2'	3120	74°44.1'	3082	104°37.9'	3052
14	102°36.0'	3443	39°52.3'	3075	61°18.5'	3122	75°13.6'	3084	104°08.2'	3054
15	103°03.1'	3445	40°21.9'	3077	61°47.7'	3123	75°43.1'	3085	103°38.5'	3055
16	103°30.3'	3447	40°51.4'	3078	62°16.9'	3125	76°12.6'	3087	103°08.8'	3057
17	103°57.4'	3449	41°21.0'	3080	62°46.1'	3127	76°42.1'	3088	102°39.1'	3058
18	104°24.5'	3450	41°50.5'	3082	63°15.3'	3128	77°11.5'	3090	102°09.4'	3060
19	104°51.6'	3452	42°20.0'	3083	63°44.5'	3130	77°41.0'	3091	101°39.8'	3061
20	105°18.7'	3454	42°49.5'	3085	64°13.7'	3131	78°10.4'	3092	101°10.1'	3063
21	105°45.8'	3455	43°19.0'	3086	64°42.9'	3133	78°39.9'	3094	100°40.5'	3064
22	106°12.9'	3457	43°48.5'	3087	65°12.1'	3134	79°09.3'	3095	100°10.8'	3066
23	106°40.0'	3458	44°17.9'	3089	65°41.2'	3135	79°38.7'	3096	99°41.2'	3067

Wed Nov 6, 2019 UTC

UTC	+Sun		+Saturn		+Jupiter		+Antares		-Aldebaran	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	107°07.0'	3460	44°47.4'	3090	66°10.4'	3137	80°08.1'	3097	99°11.6'	3068
1	107°34.1'	3461	45°16.9'	3091	66°39.5'	3138	80°37.5'	3098	98°42.0'	3069
2	108°01.1'	3462	45°46.3'	3092	67°08.6'	3139	81°06.9'	3099	98°12.4'	3070
3	108°28.2'	3463	46°15.8'	3093	67°37.8'	3140	81°36.3'	3100	97°42.8'	3071
4	108°55.2'	3465	46°45.2'	3094	68°06.9'	3141	82°05.7'	3101	97°13.2'	3072
5	109°22.2'	3466	47°14.6'	3095	68°36.0'	3142	82°35.1'	3102	96°43.7'	3073
6	109°49.2'	3467	47°44.0'	3096	69°05.1'	3143	83°04.5'	3103	96°14.1'	3074
7	110°16.2'	3468	48°13.4'	3097	69°34.2'	3144	83°33.8'	3104	95°44.5'	3075
8	110°43.2'	3469	48°42.8'	3098	70°03.3'	3145	84°03.2'	3104	95°15.0'	3076
9	111°10.2'	3470	49°12.2'	3099	70°32.4'	3146	84°32.6'	3105	94°45.4'	3077
10	111°37.2'	3471	49°41.6'	3100	71°01.4'	3147	85°01.9'	3106	94°15.9'	3078
11	112°04.2'	3471	50°11.0'	3100	71°30.5'	3147	85°31.3'	3106	93°46.4'	3078
12	112°31.2'	3472	50°40.4'	3101	71°59.6'	3148	86°00.6'	3107	93°16.8'	3079
13	112°58.1'	3473	51°09.8'	3102	72°28.6'	3148	86°29.9'	3108	92°47.3'	3079
14	113°25.1'	3473	51°39.2'	3102	72°57.7'	3149	86°59.3'	3108	92°17.8'	3080
15	113°52.1'	3474	52°08.5'	3103	73°26.8'	3150	87°28.6'	3109	91°48.2'	3080
16	114°19.0'	3475	52°37.9'	3103	73°55.8'	3150	87°57.9'	3109	91°18.7'	3081
17	114°46.0'	3475	53°07.3'	3104	74°24.9'	3150	88°27.3'	3109	90°49.2'	3081
18	115°13.0'	3476	53°36.6'	3104	74°53.9'	3151	88°56.6'	3110	90°19.7'	3082
19	115°39.9'	3476	54°06.0'	3104	75°23.0'	3151	89°25.9'	3110	89°50.2'	3082
20	116°06.9'	3476	54°35.3'	3104	75°52.0'	3151	89°55.2'	3110	89°20.7'	3082
21	116°33.8'	3477	55°04.7'	3105	76°21.1'	3151	90°24.5'	3110	88°51.2'	3082
22	117°00.8'	3477	55°34.1'	3105	76°50.1'	3152	90°53.9'	3110	88°21.7'	3082
23	117°27.7'	3477	56°03.4'	3105	77°19.1'	3152	91°23.2'	3111	87°52.1'	3082

Thu Nov 7, 2019 UTC

UTC	+Sun		+Saturn		+Jupiter		-Aldebaran		+Antares	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	117°54.6'	3477	56°32.8'	3105	77°48.2'	3152	87°22.6'	3083	91°52.5'	3111
1	118°21.6'	3477	57°02.1'	3105	78°17.2'	3152	86°53.1'	3083	92°21.8'	3111
2	118°48.5'	3477	57°31.5'	3105	78°46.2'	3152	86°23.6'	3082	92°51.1'	3111
3	119°15.5'	3477	58°00.8'	3105	79°15.3'	3152	85°54.1'	3082	93°20.4'	3111
4	119°42.4'	3477	58°30.2'	3105	79°44.3'	3151	85°24.6'	3082	93°49.8'	3110
5	120°09.3'	3477	58°59.5'	3105	80°13.4'	3151	84°55.1'	3082	94°19.1'	3110
6	120°36.3'	3477	59°28.9'	3104	80°42.4'	3151	84°25.6'	3082	94°48.4'	3110
7	121°03.2'	3477	59°58.2'	3104	81°11.4'	3151	83°56.1'	3082	95°17.7'	3110
8	121°30.2'	3477	60°27.6'	3104	81°40.5'	3150	83°26.6'	3081	95°47.0'	3110
9	121°57.1'	3476	60°57.0'	3103	82°09.5'	3150	82°57.1'	3081	96°16.3'	3109
10	122°24.1'	3476	61°26.3'	3103	82°38.6'	3150	82°27.6'	3081	96°45.7'	3109
11	122°51.0'	3476	61°55.7'	3103	83°07.6'	3149	81°58.0'	3080	97°15.0'	3109
12	123°18.0'	3475	62°25.1'	3102	83°36.7'	3149	81°28.5'	3080	97°44.3'	3108
13	123°44.9'	3475	62°54.4'	3101	84°05.8'	3148	80°59.0'	3079	98°13.7'	3108
14	124°11.9'	3474	63°23.8'	3101	84°34.8'	3148	80°29.5'	3078	98°43.0'	3107
15	124°38.8'	3474	63°53.2'	3100	85°03.9'	3147	79°59.9'	3078	99°12.3'	3107
16	125°05.8'	3473	64°22.6'	3100	85°33.0'	3146	79°30.4'	3077	99°41.7'	3106
17	125°32.8'	3472	64°52.0'	3099	86°02.0'	3146	79°00.8'	3076	100°11.0'	3105
18	125°59.8'	3472	65°21.4'	3098	86°31.1'	3145	78°31.3'	3076	100°40.4'	3105
19	126°26.7'	3471	65°50.8'	3097	87°00.2'	3144	78°01.7'	3075	101°09.7'	3104
20	126°53.7'	3470	66°20.2'	3097	87°29.3'	3143	77°32.2'	3074	101°39.1'	3103
21	127°20.7'	3470	66°49.6'	3096	87°58.4'	3142	77°02.6'	3073	102°08.5'	3103
22	127°47.7'	3469	67°19.0'	3095	88°27.5'	3141	76°33.1'	3072	102°37.8'	3102
23	128°14.7'	3468	67°48.4'	3094	88°56.6'	3140	76°03.5'	3071	103°07.2'	3101

Fri Nov 8, 2019 UTC

UTC	+Saturn		-Aldebaran		+Jupiter		-Betelgeuse		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	68°17.8'	3093	75°33.9'	3070	89°25.7'	3139	93°19.9'	3215	25°18.4'	4407
1	68°47.3'	3092	75°04.3'	3069	89°54.8'	3138	92°51.3'	3214	25°40.2'	4358
2	69°16.7'	3091	74°34.7'	3068	90°24.0'	3137	92°22.6'	3213	26°02.2'	4311
3	69°46.2'	3090	74°05.1'	3067	90°53.1'	3136	91°54.0'	3212	26°24.4'	4267
4	70°15.6'	3088	73°35.5'	3066	91°22.2'	3135	91°25.4'	3210	26°46.9'	4225
5	70°45.1'	3087	73°05.9'	3065	91°51.4'	3134	90°56.7'	3209	27°09.6'	4185
6	71°14.6'	3086	72°36.3'	3064	92°20.6'	3132	90°28.1'	3208	27°32.5'	4146
7	71°44.1'	3085	72°06.6'	3062	92°49.7'	3131	89°59.4'	3207	27°55.6'	4110
8	72°13.5'	3083	71°37.0'	3061	93°18.9'	3130	89°30.7'	3205	28°18.8'	4075
9	72°43.0'	3082	71°07.3'	3060	93°48.1'	3128	89°02.0'	3204	28°42.3'	4041
10	73°12.6'	3081	70°37.7'	3058	94°17.3'	3127	88°33.4'	3203	29°06.0'	4009
11	73°42.1'	3079	70°08.0'	3057	94°46.5'	3126	88°04.7'	3201	29°29.8'	3979
12	74°11.6'	3078	69°38.3'	3056	95°15.7'	3124	87°35.9'	3200	29°53.8'	3950
13	74°41.1'	3076	69°08.6'	3054	95°44.9'	3123	87°07.2'	3199	30°18.0'	3922
14	75°10.7'	3075	68°39.0'	3053	96°14.2'	3121	86°38.5'	3197	30°42.3'	3895
15	75°40.2'	3073	68°09.2'	3051	96°43.4'	3119	86°09.8'	3196	31°06.8'	3869
16	76°09.8'	3072	67°39.5'	3050	97°12.7'	3118	85°41.0'	3194	31°31.4'	3845
17	76°39.4'	3070	67°09.8'	3048	97°41.9'	3116	85°12.3'	3193	31°56.2'	3821
18	77°09.0'	3068	66°40.1'	3046	98°11.2'	3114	84°43.5'	3192	32°21.0'	3798
19	77°38.6'	3067	66°10.3'	3045	98°40.5'	3113	84°14.7'	3190	32°46.1'	3776
20	78°08.2'	3065	65°40.5'	3043	99°09.8'	3111	83°45.9'	3189	33°11.2'	3755
21	78°37.8'	3063	65°10.8'	3041	99°39.1'	3109	83°17.1'	3187	33°36.5'	3734
22	79°07.5'	3061	64°41.0'	3040	100°08.4'	3107	82°48.3'	3186	34°01.9'	3715
23	79°37.1'	3059	64°11.2'	3038	100°37.8'	3106	82°19.5'	3184	34°27.4'	3696

Sat Nov 9, 2019 UTC

UTC	−Aldebaran		+Formalhaut		+Saturn		−Betelgeuse		+Jupiter	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	63°41.4′	3036	34°53.0′	3677	80°06.8′	3058	81°50.7′	3183	101°07.1′	3104
1	63°11.5′	3034	35°18.7′	3660	80°36.5′	3056	81°21.9′	3181	101°36.5′	3102
2	62°41.7′	3032	35°44.6′	3643	81°06.1′	3054	80°53.0′	3180	102°05.8′	3100
3	62°11.9′	3030	36°10.5′	3626	81°35.8′	3052	80°24.2′	3178	102°35.2′	3098
4	61°42.0′	3029	36°36.6′	3610	82°05.6′	3050	79°55.3′	3177	103°04.6′	3096
5	61°12.1′	3027	37°02.7′	3595	82°35.3′	3048	79°26.5′	3175	103°34.1′	3094
6	60°42.2′	3025	37°28.9′	3579	83°05.0′	3046	78°57.6′	3174	104°03.5′	3092
7	60°12.3′	3023	37°55.2′	3565	83°34.8′	3044	78°28.7′	3172	104°32.9′	3090
8	59°42.4′	3021	38°21.6′	3551	84°04.6′	3042	77°59.8′	3171	105°02.4′	3088
9	59°12.5′	3019	38°48.1′	3537	84°34.3′	3039	77°30.9′	3169	105°31.8′	3085
10	58°42.6′	3017	39°14.7′	3524	85°04.1′	3037	77°02.0′	3168	106°01.3′	3083
11	58°12.6′	3014	39°41.3′	3511	85°34.0′	3035	76°33.0′	3166	106°30.8′	3081
12	57°42.6′	3012	40°08.1′	3498	86°03.8′	3033	76°04.1′	3165	107°00.4′	3079
13	57°12.6′	3010	40°34.9′	3486	86°33.6′	3031	75°35.1′	3163	107°29.9′	3077
14	56°42.6′	3008	41°01.8′	3474	87°03.5′	3028	75°06.2′	3162	107°59.4′	3074
15	56°12.6′	3006	41°28.7′	3462	87°33.4′	3026	74°37.2′	3160	108°29.0′	3072
16	55°42.6′	3004	41°55.8′	3451	88°03.3′	3024	74°08.2′	3159	108°58.6′	3070
17	55°12.5′	3001	42°22.9′	3440	88°33.2′	3022	73°39.2′	3158	109°28.2′	3067
18	54°42.5′	2999	42°50.1′	3429	89°03.1′	3019	73°10.2′	3156	109°57.8′	3065
19	54°12.4′	2997	43°17.3′	3419	89°33.0′	3017	72°41.2′	3155	110°27.4′	3063
20	53°42.3′	2995	43°44.6′	3408	90°03.0′	3014	72°12.2′	3153	110°57.0′	3060
21	53°12.2′	2992	44°12.0′	3398	90°33.0′	3012	71°43.2′	3152	111°26.7′	3058
22	52°42.1′	2990	44°39.4′	3389	91°02.9′	3010	71°14.1′	3150	111°56.4′	3055
23	52°11.9′	2988	45°06.9′	3379	91°32.9′	3007	70°45.1′	3149	112°26.1′	3053

Sun Nov 10, 2019 UTC

UTC	−Aldebaran		+Formalhaut		−Betelgeuse		+Saturn		−Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	51°41.8′	2985	45°34.5′	3370	70°16.0′	3147	92°03.0′	3005	95°52.9′	2996
1	51°11.6′	2983	46°02.1′	3361	69°47.0′	3146	92°33.0′	3002	95°22.8′	2993
2	50°41.4′	2980	46°29.8′	3352	69°17.9′	3145	93°03.1′	3000	94°52.7′	2991
3	50°11.2′	2978	46°57.5′	3343	68°48.8′	3143	93°33.1′	2997	94°22.6′	2988
4	49°41.0′	2976	47°25.3′	3334	68°19.7′	3142	94°03.2′	2994	93°52.4′	2986
5	49°10.7′	2973	47°53.1′	3326	67°50.6′	3141	94°33.3′	2992	93°22.2′	2983
6	48°40.5′	2971	48°21.0′	3317	67°21.5′	3139	95°03.5′	2989	92°52.1′	2980
7	48°10.2′	2968	48°49.0′	3309	66°52.4′	3138	95°33.6′	2987	92°21.9′	2978
8	47°39.9′	2966	49°17.0′	3301	66°23.2′	3137	96°03.8′	2984	91°51.6′	2975
9	47°09.6′	2963	49°45.0′	3294	65°54.1′	3136	96°34.0′	2981	91°21.4′	2972
10	46°39.3′	2961	50°13.1′	3286	65°25.0′	3135	97°04.2′	2979	90°51.1′	2970
11	46°08.9′	2958	50°41.3′	3278	64°55.8′	3133	97°34.4′	2976	90°20.8′	2967
12	45°38.6′	2956	51°09.5′	3271	64°26.6′	3132	98°04.6′	2973	89°50.5′	2964
13	45°08.2′	2953	51°37.7′	3264	63°57.5′	3131	98°34.9′	2971	89°20.2′	2962
14	44°37.8′	2951	52°06.1′	3256	63°28.3′	3130	99°05.2′	2968	88°49.9′	2959
15	44°07.4′	2948	52°34.4′	3249	62°59.1′	3129	99°35.5′	2965	88°19.5′	2956
16	43°37.0′	2946	53°02.8′	3242	62°29.9′	3128	100°05.8′	2962	87°49.1′	2953
17	43°06.5′	2943	53°31.2′	3236	62°00.7′	3127	100°36.1′	2959	87°18.7′	2951
18	42°36.0′	2941	53°59.7′	3229	61°31.5′	3126	101°06.5′	2957	86°48.3′	2948
19	42°05.6′	2938	54°28.2′	3222	61°02.3′	3126	101°36.8′	2954	86°17.9′	2945
20	41°35.1′	2935	54°56.8′	3216	60°33.1′	3125	102°07.2′	2951	85°47.4′	2942
21	41°04.5′	2933	55°25.4′	3209	60°03.9′	3124	102°37.6′	2948	85°17.0′	2939
22	40°34.0′	2930	55°54.1′	3203	59°34.7′	3123	103°08.1′	2945	84°46.5′	2937
23	40°03.4′	2928	56°22.8′	3197	59°05.4′	3123	103°38.5′	2942	84°16.0′	2934

Mon Nov 11, 2019 UTC

UTC	−Aldebaran		−Betelgeuse		+Formalhaut		−Pollux		−Capella	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	39°32.9′	2925	58°36.2′	3122	56°51.5′	3190	83°45.4′	2931	57°35.8′	3504
1	39°02.3′	2923	58°07.0′	3122	57°20.3′	3184	83°14.9′	2928	57°09.1′	3508
2	38°31.7′	2920	57°37.7′	3121	57°49.1′	3178	82°44.3′	2925	56°42.3′	3512
3	38°01.0′	2918	57°08.5′	3121	58°18.0′	3172	82°13.7′	2922	56°15.6′	3516
4	37°30.4′	2915	56°39.2′	3121	58°46.9′	3167	81°43.1′	2919	55°48.9′	3521
5	36°59.7′	2912	56°10.0′	3120	59°15.8′	3161	81°12.5′	2917	55°22.2′	3526
6	36°29.0′	2910	55°40.7′	3120	59°44.8′	3155	80°41.8′	2914	54°55.6′	3531
7	35°58.3′	2907	55°11.5′	3120	60°13.8′	3149	80°11.1′	2911	54°28.9′	3536
8	35°27.6′	2905	54°42.2′	3120	60°42.9′	3144	79°40.4′	2908	54°02.4′	3541
9	34°56.9′	2902	54°13.0′	3120	61°12.0′	3138	79°09.7′	2905	53°35.8′	3547
10	34°26.1′	2900	53°43.7′	3120	61°41.1′	3133	78°39.0′	2902	53°09.3′	3553
11	33°55.3′	2897	53°14.5′	3121	62°10.3′	3128	78°08.2′	2899	52°42.8′	3560
12	33°24.6′	2895	52°45.2′	3121	62°39.5′	3122	77°37.4′	2896	52°16.4′	3566
13	32°53.7′	2892	52°16.0′	3122	63°08.7′	3117	77°06.6′	2893	51°50.0′	3573
14	32°22.9′	2890	51°46.8′	3122	63°38.0′	3112	76°35.8′	2890	51°23.6′	3580
15	31°52.1′	2888	51°17.5′	3123	64°07.3′	3107	76°05.0′	2888	50°57.3′	3588
16	31°21.2′	2885	50°48.3′	3124	64°36.6′	3102	75°34.1′	2885	50°31.1′	3595
17	30°50.3′	2883	50°19.1′	3125	65°06.0′	3097	75°03.2′	2882	50°04.9′	3604
18	30°19.5′	2881	49°49.8′	3126	65°35.4′	3092	74°32.3′	2879	49°38.7′	3612
19	29°48.5′	2878	49°20.6′	3127	66°04.8′	3087	74°01.4′	2876	49°12.6′	3621
20	29°17.6′	2876	48°51.4′	3128	66°34.3′	3082	73°30.5′	2873	48°46.5′	3630
21	28°46.7′	2874	48°22.2′	3130	67°03.8′	3077	72°59.5′	2870	48°20.5′	3640
22	28°15.7′	2872	47°53.0′	3131	67°33.4′	3072	72°28.5′	2867	47°54.5′	3650
23	27°44.7′	2870	47°23.9′	3133	68°03.0′	3068	71°57.5′	2864	47°28.6′	3660

Tue Nov 12, 2019 UTC

UTC	−Aldebaran		−Betelgeuse		−Pollux		+Formalhaut		−Procyon	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	27°13.8′	2868	46°54.7′	3135	71°26.5′	2861	68°32.6′	3063	72°46.7′	3064
1	26°42.8′	2866	46°25.5′	3137	70°55.5′	2858	69°02.2′	3058	72°17.1′	3063
2	26°11.7′	2864	45°56.4′	3139	70°24.4′	2855	69°31.9′	3054	71°47.5′	3061
3	25°40.7′	2862	45°27.3′	3142	69°53.3′	2853	70°01.6′	3049	71°17.8′	3059
4	25°09.7′	2860	44°58.2′	3145	69°22.2′	2850	70°31.3′	3045	70°48.2′	3058
5	24°38.6′	2858	44°29.1′	3147	68°51.1′	2847	71°01.1′	3040	70°18.5′	3056
6	24°07.5′	2856	44°00.0′	3151	68°19.9′	2844	71°30.9′	3036	69°48.8′	3055
7	23°36.5′	2855	43°31.0′	3154	67°48.7′	2841	72°00.7′	3032	69°19.1′	3053
8	23°05.4′	2854	43°02.0′	3158	67°17.5′	2838	72°30.5′	3027	68°49.4′	3052
9	22°34.3′	2852	42°33.0′	3161	66°46.3′	2835	73°00.4′	3023	68°19.7′	3051
10	22°03.1′	2851	42°04.0′	3166	66°15.1′	2832	73°30.3′	3019	67°50.0′	3049
11	21°32.0′	2850	41°35.0′	3170	65°43.8′	2829	74°00.3′	3015	67°20.2′	3048
12	21°00.9′	2849	41°06.1′	3175	65°12.6′	2827	74°30.2′	3010	66°50.5′	3047
13	20°29.8′	2848	40°37.2′	3180	64°41.3′	2824	75°00.2′	3006	66°20.7′	3046
14	19°58.6′	2848	40°08.4′	3185	64°09.9′	2821	75°30.3′	3002	65°51.0′	3045
15	19°27.5′	2847	39°39.6′	3191	63°38.6′	2818	76°00.3′	2998	65°21.2′	3044
16	18°56.3′	2847	39°10.8′	3197	63°07.2′	2815	76°30.4′	2994	64°51.5′	3043
17	18°25.2′	2847	38°42.0′	3203	62°35.9′	2812	77°00.5′	2990	64°21.7′	3042
18	17°54.0′	2848	38°13.3′	3210	62°04.5′	2809	77°30.7′	2986	63°51.9′	3042
19	17°22.9′	2849	37°44.7′	3217	61°33.1′	2807	78°00.8′	2983	63°22.1′	3041
20	16°51.8′	2850	37°16.1′	3225	61°01.6′	2804	78°31.0′	2979	62°52.3′	3040
21	16°20.6′	2852	36°47.5′	3233	60°30.1′	2801	79°01.2′	2975	62°22.5′	3040
22	15°49.5′	2854	36°19.0′	3241	59°58.7′	2798	79°31.5′	2971	61°52.8′	3040
23	15°18.4′	2856	35°50.6′	3250	59°27.2′	2796	80°01.7′	2968	61°23.0′	3039

Wed Nov 13, 2019 UTC

UTC	−Aldebaran		−Pollux		−Betelgeuse		−Procyon		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	14°47.3′	2860	58°55.6′	2793	35°22.2′	3260	60°53.2′	3039	80°32.0′	2964
1	14°16.3′	2864	58°24.1′	2790	34°53.9′	3270	60°23.4′	3039	81°02.4′	2960
2	13°45.2′	2868	57°52.5′	2787	34°25.6′	3281	59°53.5′	3039	81°32.7′	2957
3	13°14.2′	2874	57°21.0′	2785	33°57.4′	3293	59°23.7′	3039	82°03.1′	2953
4	12°43.3′	2881	56°49.4′	2782	33°29.3′	3305	58°53.9′	3039	82°33.5′	2950
5	12°12.4′	2890	56°17.7′	2779	33°01.3′	3318	58°24.1′	3039	83°03.9′	2946
6	11°41.5′	2900	55°46.1′	2776	32°33.3′	3332	57°54.3′	3040	83°34.4′	2943
7	11°10.8′	2912	55°14.4′	2774	32°05.5′	3346	57°24.5′	3040	84°04.8′	2939
8	10°40.1′	2926	54°42.8′	2771	31°37.7′	3362	56°54.7′	3041	84°35.3′	2936
9	10°09.5′	2943	54°11.1′	2769	31°10.0′	3378	56°25.0′	3041	85°05.8′	2933
10	9°39.0′	2964	53°39.4′	2766	30°42.5′	3396	55°55.2′	3042	85°36.4′	2929
11	9°08.7′	2989	53°07.6′	2763	30°15.0′	3414	55°25.4′	3043	86°06.9′	2926
12	8°38.5′	3019	52°35.9′	2761	29°47.7′	3434	54°55.6′	3044	86°37.5′	2923
13	8°08.6′	3056	52°04.1′	2758	29°20.5′	3455	54°25.8′	3046	87°08.1′	2920
14	7°38.9′	3102	51°32.3′	2756	28°53.4′	3477	53°56.1′	3047	87°38.8′	2916
15	7°09.5′	3160	51°00.5′	2753	28°26.5′	3500	53°26.3′	3049	88°09.4′	2913
16	6°40.6′	3234	50°28.7′	2751	27°59.7′	3526	52°56.6′	3050	88°40.1′	2910
17	6°12.1′	3328	49°56.8′	2748	27°33.0′	3552	52°26.9′	3052	89°10.8′	2907
18	5°44.2′	3451	49°24.9′	2746	27°06.5′	3581	51°57.2′	3054	89°41.5′	2904
19	–	–	48°53.1′	2743	26°40.2′	3611	51°27.5′	3056	90°12.3′	2901
20	–	–	48°21.2′	2741	26°14.1′	3643	50°57.8′	3059	90°43.0′	2898
21	–	–	47°49.2′	2739	25°48.2′	3678	50°28.1′	3061	91°13.8′	2895
22	–	–	47°17.3′	2736	25°22.4′	3714	49°58.5′	3064	91°44.6′	2892
23	–	–	46°45.3′	2734	24°56.9′	3753	49°28.8′	3067	92°15.5′	2890

Thu Nov 14, 2019 UTC

UTC	−Pollux		−Procyon		−Regulus		−Betelgeuse		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	46°13.4′	2732	48°59.2′	3070	81°59.5′	2703	24°31.6′	3795	92°46.3′	2887
1	45°41.4′	2729	48°29.6′	3073	81°27.3′	2700	24°06.6′	3840	93°17.2′	2884
2	45°09.4′	2727	48°00.1′	3077	80°55.1′	2697	23°41.8′	3888	93°48.0′	2881
3	44°37.4′	2725	47°30.5′	3081	80°22.9′	2694	23°17.3′	3940	94°19.0′	2879
4	44°05.3′	2723	47°01.0′	3085	79°50.6′	2691	22°53.1′	3995	94°49.9′	2876
5	43°33.3′	2721	46°31.5′	3089	79°18.3′	2688	22°29.2′	4054	95°20.8′	2874
6	43°01.2′	2719	46°02.1′	3094	78°46.0′	2685	22°05.6′	4118	95°51.8′	2871
7	42°29.1′	2717	45°32.6′	3099	78°13.7′	2682	21°42.3′	4186	96°22.8′	2869
8	41°57.0′	2715	45°03.2′	3104	77°41.3′	2679	21°19.5′	4260	96°53.7′	2866
9	41°24.9′	2713	44°33.9′	3110	77°08.9′	2677	20°57.0′	4339	97°24.8′	2864
10	40°52.8′	2711	44°04.6′	3116	76°36.5′	2674	20°34.9′	4425	97°55.8′	2861
11	40°20.6′	2709	43°35.3′	3122	76°04.1′	2671	20°13.2′	4518	98°26.8′	2859
12	39°48.5′	2707	43°06.0′	3128	75°31.7′	2668	19°52.0′	4618	98°57.9′	2857
13	39°16.3′	2706	42°36.9′	3135	74°59.2′	2665	19°31.3′	4726	99°29.0′	2854
14	38°44.1′	2704	42°07.7′	3143	74°26.7′	2663	19°11.1′	4844	100°00.1′	2852
15	38°12.0′	2702	41°38.6′	3150	73°54.2′	2660	18°51.4′	4972	100°31.2′	2850
16	37°39.7′	2701	41°09.6′	3159	73°21.7′	2657	18°32.3′	5112	101°02.3′	2848
17	37°07.5′	2699	40°40.6′	3167	72°49.2′	2654	18°13.8′	5264	101°33.5′	2846
18	36°35.3′	2698	40°11.6′	3176	72°16.6′	2651	17°56.0′	5430	102°04.6′	2844
19	36°03.1′	2696	39°42.8′	3186	71°44.0′	2649	17°38.8′	5612	102°35.8′	2842
20	35°30.8′	2695	39°13.9′	3196	71°11.4′	2646	17°22.3′	5812	103°07.0′	2840
21	34°58.6′	2694	38°45.2′	3207	70°38.8′	2643	17°06.6′	6033	103°38.2′	2838
22	34°26.3′	2693	38°16.5′	3218	70°06.1′	2640	–	–	104°09.4′	2836
23	33°54.0′	2692	37°47.9′	3230	69°33.5′	2638	–	–	104°40.6′	2834

Fri Nov 15, 2019 UTC

UTC	+Aldebaran		-Pollux		-Regulus		-Procyon		+Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	11°40.8'	2764	33°21.7'	2691	69°00.8'	2635	37°19.4'	3242	105°11.9'	2833
1	12°12.5'	2750	32°49.4'	2690	68°28.1'	2632	36°51.0'	3256	105°43.1'	2831
2	12°44.4'	2737	32°17.1'	2689	67°55.4'	2630	36°22.6'	3269	106°14.4'	2829
3	13°16.3'	2725	31°44.8'	2689	67°22.6'	2627	35°54.3'	3284	106°45.6'	2828
4	13°48.3'	2714	31°12.5'	2688	66°49.8'	2624	35°26.2'	3300	107°16.9'	2826
5	14°20.5'	2704	30°40.2'	2688	66°17.0'	2622	34°58.1'	3316	107°48.2'	2825
6	14°52.7'	2695	30°07.9'	2688	65°44.2'	2619	34°30.2'	3333	108°19.5'	2823
7	15°24.9'	2686	29°35.6'	2688	65°11.4'	2616	34°02.3'	3351	108°50.9'	2822
8	15°57.2'	2678	29°03.3'	2688	64°38.6'	2614	33°34.6'	3371	109°22.2'	2821
9	16°29.6'	2671	28°31.0'	2688	64°05.7'	2611	33°07.0'	3391	109°53.5'	2820
10	17°02.1'	2664	27°58.7'	2688	63°32.8'	2608	32°39.5'	3412	110°24.9'	2818
11	17°34.5'	2657	27°26.3'	2689	62°59.9'	2606	32°12.1'	3435	110°56.2'	2817
12	18°07.1'	2651	26°54.0'	2690	62°27.0'	2603	31°44.9'	3459	111°27.6'	2816
13	18°39.7'	2645	26°21.7'	2691	61°54.0'	2600	31°17.9'	3484	111°59.0'	2815
14	19°12.3'	2639	25°49.5'	2693	61°21.0'	2598	30°51.0'	3511	112°30.3'	2814
15	19°45.0'	2634	25°17.2'	2694	60°48.1'	2595	30°24.2'	3540	113°01.7'	2814
16	20°17.7'	2629	24°44.9'	2696	60°15.0'	2593	29°57.7'	3570	113°33.1'	2813
17	20°50.4'	2624	24°12.7'	2698	59°42.0'	2590	29°31.3'	3602	114°04.5'	2812
18	21°23.2'	2619	23°40.4'	2701	59°09.0'	2588	29°05.1'	3635	114°35.9'	2811
19	21°56.1'	2614	23°08.2'	2704	58°35.9'	2585	28°39.1'	3671	115°07.3'	2811
20	22°28.9'	2610	22°36.0'	2708	58°02.8'	2583	28°13.4'	3709	115°38.7'	2810
21	23°01.8'	2605	22°03.9'	2712	57°29.7'	2580	27°47.8'	3749	116°10.1'	2810
22	23°34.8'	2601	21°31.7'	2716	56°56.6'	2577	27°22.5'	3792	116°41.6'	2810
23	24°07.7'	2597	20°59.6'	2721	56°23.4'	2575	26°57.5'	3838	117°13.0'	2809

Sat Nov 16, 2019 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°40.7'	2593	20°27.6'	2727	55°50.3'	2573	109°48.5'	2597	26°32.7'	3886
1	25°13.8'	2589	19°55.5'	2734	55°17.1'	2570	109°15.5'	2594	26°08.2'	3938
2	25°46.8'	2585	19°23.6'	2741	54°43.9'	2568	108°42.5'	2591	25°43.9'	3993
3	26°19.9'	2581	18°51.7'	2749	54°10.7'	2565	108°09.5'	2589	25°20.0'	4052
4	26°53.0'	2578	18°19.8'	2759	53°37.4'	2563	107°36.4'	2586	24°56.4'	4114
5	27°26.2'	2574	17°48.0'	2769	53°04.2'	2560	107°03.3'	2583	24°33.1'	4181
6	27°59.3'	2570	17°16.3'	2781	52°30.9'	2558	106°30.2'	2580	24°10.2'	4253
7	28°32.5'	2567	16°44.7'	2794	51°57.6'	2555	105°57.1'	2577	23°47.7'	4329
8	29°05.7'	2563	16°13.1'	2808	51°24.3'	2553	105°24.0'	2575	23°25.6'	4411
9	29°39.0'	2560	15°41.7'	2825	50°51.0'	2551	104°50.8'	2572	23°03.8'	4499
10	30°12.3'	2556	15°10.4'	2844	50°17.6'	2548	104°17.6'	2569	22°42.5'	4594
11	30°45.6'	2553	14°39.2'	2865	49°44.2'	2546	103°44.4'	2566	22°21.7'	4695
12	31°18.9'	2550	14°08.2'	2890	49°10.9'	2543	103°11.2'	2563	22°01.3'	4804
13	31°52.3'	2547	13°37.4'	2917	48°37.5'	2541	102°37.9'	2561	21°41.5'	4922
14	32°25.7'	2543	13°06.7'	2949	48°04.0'	2539	102°04.7'	2558	21°22.2'	5049
15	32°59.1'	2540	12°36.3'	2985	47°30.6'	2537	101°31.4'	2555	21°03.4'	5186
16	33°32.5'	2537	12°06.1'	3027	46°57.1'	2534	100°58.0'	2553	20°45.2'	5334
17	34°05.9'	2534	11°36.2'	3076	46°23.7'	2532	100°24.7'	2550	20°27.7'	5495
18	34°39.4'	2531	11°06.7'	3132	45°50.2'	2530	99°51.4'	2547	20°10.7'	5669
19	35°12.9'	2528	10°37.5'	3198	45°16.7'	2527	99°18.0'	2544	19°54.5'	5859
20	35°46.4'	2525	10°08.8'	3275	44°43.1'	2525	98°44.6'	2542	19°38.9'	6067
21	36°20.0'	2522	9°40.5'	3366	44°09.6'	2523	98°11.2'	2539	19°24.1'	6294
22	36°53.6'	2519	9°12.9'	3475	43°36.0'	2521	97°37.7'	2537	19°10.0'	6543
23	37°27.2'	2516	8°46.0'	3606	43°02.4'	2519	97°04.3'	2534	-	-

Sun Nov 17, 2019 UTC

UTC	+Aldebaran		-Regulus		+Betelgeuse		-Spica		-Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	38°00.8'	2513	42°28.8'	2516	24°52.1'	3519	96°30.8'	2531	100°50.7'	2727
1	38°34.4'	2510	41°55.2'	2514	25°18.8'	3475	95°57.3'	2529	100°18.7'	2724
2	39°08.1'	2507	41°21.6'	2512	25°45.8'	3433	95°23.8'	2526	99°46.7'	2721
3	39°41.8'	2504	40°48.0'	2510	26°13.0'	3393	94°50.2'	2523	99°14.6'	2719
4	40°15.5'	2501	40°14.3'	2508	26°40.5'	3356	94°16.7'	2521	98°42.5'	2716
5	40°49.2'	2499	39°40.6'	2506	27°08.2'	3320	93°43.1'	2518	98°10.4'	2713
6	41°22.9'	2496	39°06.9'	2504	27°36.1'	3287	93°09.5'	2516	97°38.3'	2711
7	41°56.7'	2493	38°33.2'	2502	28°04.3'	3255	92°35.9'	2513	97°06.1'	2708
8	42°30.5'	2490	37°59.5'	2500	28°32.6'	3224	92°02.2'	2511	96°34.0'	2705
9	43°04.3'	2487	37°25.7'	2498	29°01.2'	3196	91°28.6'	2508	96°01.8'	2703
10	43°38.2'	2484	36°52.0'	2496	29°29.9'	3168	90°54.9'	2505	95°29.6'	2700
11	44°12.0'	2482	36°18.2'	2494	29°58.9'	3142	90°21.2'	2503	94°57.4'	2697
12	44°45.9'	2479	35°44.4'	2492	30°28.0'	3117	89°47.5'	2500	94°25.1'	2695
13	45°19.8'	2476	35°10.6'	2491	30°57.2'	3094	89°13.8'	2498	93°52.9'	2692
14	45°53.8'	2473	34°36.8'	2489	31°26.7'	3071	88°40.0'	2495	93°20.6'	2689
15	46°27.7'	2471	34°03.0'	2487	31°56.2'	3049	88°06.2'	2493	92°48.3'	2687
16	47°01.7'	2468	33°29.1'	2485	32°26.0'	3029	87°32.4'	2490	92°16.0'	2684
17	47°35.7'	2465	32°55.3'	2484	32°55.8'	3009	86°58.6'	2488	91°43.6'	2681
18	48°09.7'	2463	32°21.4'	2482	33°25.9'	2990	86°24.8'	2486	91°11.3'	2679
19	48°43.7'	2460	31°47.5'	2481	33°56.0'	2972	85°50.9'	2483	90°38.9'	2676
20	49°17.8'	2457	31°13.7'	2479	34°26.3'	2954	85°17.0'	2481	90°06.5'	2673
21	49°51.8'	2455	30°39.7'	2478	34°56.7'	2938	84°43.2'	2478	89°34.1'	2671
22	50°25.9'	2452	30°05.8'	2476	35°27.2'	2921	84°09.2'	2476	89°01.6'	2668
23	51°00.0'	2449	29°31.9'	2475	35°57.8'	2906	83°35.3'	2473	88°29.2'	2665

Mon Nov 18, 2019 UTC

UTC	-Sun		-Regulus		+Aldebaran		+Betelgeuse		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	114°09.2'	2780	28°58.0'	2474	51°34.2'	2447	36°28.5'	2891	9°00.2'	3347
1	113°37.6'	2777	28°24.0'	2473	52°08.3'	2444	36°59.3'	2877	9°28.0'	3241
2	113°05.9'	2775	27°50.1'	2472	52°42.5'	2441	37°30.3'	2863	9°56.4'	3152
3	112°34.2'	2772	27°16.1'	2471	53°16.7'	2439	38°01.3'	2849	10°25.5'	3075
4	112°02.5'	2769	26°42.1'	2470	53°50.9'	2436	38°32.5'	2837	10°55.0'	3009
5	111°30.8'	2766	26°08.2'	2469	54°25.2'	2434	39°03.7'	2824	11°25.0'	2951
6	110°59.1'	2764	25°34.2'	2468	54°59.4'	2431	39°35.0'	2812	11°55.5'	2901
7	110°27.3'	2761	25°00.2'	2468	55°33.7'	2428	40°06.4'	2800	12°26.2'	2857
8	109°55.6'	2758	24°26.2'	2468	56°08.0'	2426	40°37.9'	2789	12°57.3'	2818
9	109°23.8'	2755	23°52.2'	2468	56°42.3'	2423	41°09.4'	2778	13°28.6'	2784
10	108°52.0'	2752	23°18.2'	2468	57°16.7'	2421	41°41.1'	2768	14°00.3'	2753
11	108°20.1'	2750	22°44.2'	2468	57°51.0'	2418	42°12.8'	2757	14°32.1'	2725
12	107°48.3'	2747	22°10.2'	2468	58°25.4'	2415	42°44.6'	2748	15°04.1'	2700
13	107°16.4'	2744	21°36.2'	2469	58°59.8'	2413	43°16.5'	2738	15°36.3'	2677
14	106°44.5'	2741	21°02.3'	2470	59°34.3'	2410	43°48.4'	2729	16°08.7'	2656
15	106°12.6'	2739	20°28.3'	2471	60°08.7'	2408	44°20.4'	2719	16°41.3'	2638
16	105°40.6'	2736	19°54.3'	2473	60°43.2'	2405	44°52.5'	2711	17°14.0'	2620
17	105°08.7'	2733	19°20.4'	2475	61°17.6'	2403	45°24.7'	2702	17°46.8'	2604
18	104°36.7'	2731	18°46.4'	2477	61°52.2'	2400	45°56.9'	2694	18°19.7'	2589
19	104°04.7'	2728	18°12.5'	2480	62°26.7'	2398	46°29.1'	2685	18°52.8'	2576
20	103°32.7'	2725	17°38.6'	2483	63°01.2'	2395	47°01.5'	2678	19°25.9'	2563
21	103°00.7'	2723	17°04.7'	2487	63°35.8'	2393	47°33.9'	2670	19°59.2'	2551
22	102°28.6'	2720	16°30.9'	2492	64°10.4'	2390	48°06.3'	2662	20°32.5'	2540
23	101°56.5'	2717	15°57.1'	2498	64°45.0'	2388	48°38.8'	2655	21°06.0'	2530

Tue Nov 19, 2019 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	101°24.4′	2714	15°23.3′	2504	21°39.5′	2520	65°19.6′	2385	49°11.4′	2648
1	100°52.3′	2712	14°49.6′	2512	22°13.1′	2510	65°54.2′	2383	49°44.0′	2641
2	100°20.2′	2709	14°16.0′	2520	22°46.7′	2502	66°28.9′	2380	50°16.6′	2634
3	99°48.0′	2706	13°42.4′	2531	23°20.5′	2493	67°03.6′	2378	50°49.4′	2627
4	99°15.9′	2704	13°08.9′	2543	23°54.3′	2486	67°38.3′	2375	51°22.1′	2621
5	98°43.7′	2701	12°35.5′	2557	24°28.1′	2478	68°13.0′	2373	51°54.9′	2614
6	98°11.5′	2698	12°02.2′	2573	25°02.0′	2471	68°47.8′	2370	52°27.8′	2608
7	97°39.2′	2696	11°29.0′	2593	25°36.0′	2464	69°22.5′	2368	53°00.7′	2602
8	97°07.0′	2693	10°56.0′	2616	26°10.0′	2457	69°57.3′	2365	53°33.7′	2596
9	96°34.7′	2691	10°23.1′	2644	26°44.1′	2451	70°32.1′	2363	54°06.7′	2590
10	96°02.4′	2688	9°50.5′	2678	27°18.2′	2445	71°07.0′	2360	54°39.7′	2584
11	95°30.1′	2685	9°18.1′	2718	27°52.4′	2439	71°41.8′	2358	55°12.8′	2579
12	94°57.8′	2683	8°46.0′	2767	28°26.6′	2434	72°16.7′	2356	55°46.0′	2573
13	94°25.4′	2680	8°14.3′	2828	29°00.8′	2428	72°51.5′	2353	56°19.1′	2568
14	93°53.0′	2678	7°43.0′	2904	29°35.1′	2423	73°26.4′	2351	56°52.3′	2562
15	93°20.7′	2675	7°12.3′	3000	30°09.5′	2418	74°01.4′	2348	57°25.6′	2557
16	92°48.2′	2672	–	–	30°43.9′	2413	74°36.3′	2346	57°58.9′	2552
17	92°15.8′	2670	–	–	31°18.3′	2408	75°11.3′	2344	58°32.2′	2547
18	91°43.4′	2667	–	–	31°52.8′	2404	75°46.2′	2341	59°05.6′	2542
19	91°10.9′	2665	–	–	32°27.3′	2399	76°21.2′	2339	59°39.0′	2538
20	90°38.4′	2662	–	–	33°01.8′	2395	76°56.3′	2336	60°12.5′	2533
21	90°05.9′	2660	–	–	33°36.4′	2391	77°31.3′	2334	60°46.0′	2528
22	89°33.4′	2657	–	–	34°11.0′	2386	78°06.3′	2332	61°19.5′	2524
23	89°00.9′	2655	–	–	34°45.6′	2382	78°41.4′	2329	61°53.0′	2519

Wed Nov 20, 2019 UTC

UTC	−Sun		+Pollux		−Spica		+Betelgeuse		−Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	88°28.3′	2652	35°20.3′	2378	55°31.1′	2370	62°26.6′	2515	61°35.2′	2544
1	87°55.7′	2650	35°55.0′	2374	54°56.4′	2369	63°00.3′	2511	61°01.8′	2542
2	87°23.1′	2647	36°29.7′	2371	54°21.6′	2367	63°33.9′	2506	60°28.3′	2540
3	86°50.5′	2645	37°04.5′	2367	53°46.8′	2366	64°07.6′	2502	59°54.9′	2537
4	86°17.9′	2642	37°39.2′	2363	53°12.0′	2364	64°41.3′	2498	59°21.5′	2535
5	85°45.2′	2640	38°14.1′	2360	52°37.2′	2363	65°15.1′	2494	58°48.0′	2533
6	85°12.5′	2637	38°48.9′	2356	52°02.3′	2361	65°48.9′	2490	58°14.5′	2531
7	84°39.9′	2635	39°23.8′	2353	51°27.5′	2360	66°22.7′	2486	57°41.0′	2529
8	84°07.1′	2633	39°58.7′	2349	50°52.7′	2359	66°56.5′	2483	57°07.5′	2527
9	83°34.4′	2630	40°33.6′	2346	50°17.8′	2357	67°30.4′	2479	56°33.9′	2524
10	83°01.7′	2628	41°08.6′	2343	49°42.9′	2356	68°04.3′	2475	56°00.4′	2522
11	82°28.9′	2626	41°43.6′	2340	49°08.1′	2355	68°38.3′	2472	55°26.8′	2520
12	81°56.1′	2623	42°18.6′	2337	48°33.2′	2354	69°12.2′	2468	54°53.2′	2518
13	81°23.3′	2621	42°53.6′	2333	47°58.3′	2353	69°46.2′	2465	54°19.6′	2516
14	80°50.5′	2619	43°28.7′	2330	47°23.4′	2352	70°20.2′	2461	53°46.0′	2514
15	80°17.7′	2616	44°03.7′	2327	46°48.5′	2351	70°54.3′	2458	53°12.4′	2512
16	79°44.9′	2614	44°38.9′	2324	46°13.6′	2350	71°28.3′	2454	52°38.7′	2510
17	79°12.0′	2612	45°14.0′	2322	45°38.6′	2349	72°02.4′	2451	52°05.1′	2508
18	78°39.1′	2610	45°49.1′	2319	45°03.7′	2349	72°36.6′	2448	51°31.4′	2506
19	78°06.2′	2607	46°24.3′	2316	44°28.8′	2348	73°10.7′	2445	50°57.7′	2504
20	77°33.3′	2605	46°59.5′	2313	43°53.8′	2347	73°44.9′	2442	50°24.0′	2503
21	77°00.3′	2603	47°34.7′	2310	43°18.9′	2347	74°19.1′	2439	49°50.3′	2501
22	76°27.4′	2601	48°10.0′	2308	42°43.9′	2346	74°53.3′	2436	49°16.6′	2499
23	75°54.4′	2599	48°45.3′	2305	42°09.0′	2346	75°27.5′	2433	48°42.8′	2497

Thu Nov 21, 2019 UTC

UTC	-Sun		+Regulus		-Spica		+Pollux		-Mars	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	75°21.4'	2596	13°35.5'	2419	41°34.0'	2346	49°20.6'	2303	48°09.0'	2495
1	74°48.4'	2594	14°09.9'	2405	40°59.0'	2346	49°55.9'	2300	47°35.3'	2494
2	74°15.4'	2592	14°44.4'	2393	40°24.1'	2346	50°31.2'	2297	47°01.5'	2492
3	73°42.4'	2590	15°19.0'	2381	39°49.1'	2346	51°06.5'	2295	46°27.7'	2490
4	73°09.4'	2588	15°53.6'	2371	39°14.2'	2346	51°41.9'	2293	45°53.9'	2489
5	72°36.3'	2586	16°28.4'	2362	38°39.2'	2346	52°17.3'	2290	45°20.0'	2487
6	72°03.2'	2584	17°03.2'	2353	38°04.2'	2347	52°52.7'	2288	44°46.2'	2486
7	71°30.1'	2582	17°38.1'	2345	37°29.3'	2347	53°28.1'	2285	44°12.3'	2484
8	70°57.0'	2580	18°13.1'	2338	36°54.3'	2348	54°03.6'	2283	43°38.5'	2483
9	70°23.9'	2578	18°48.1'	2331	36°19.4'	2349	54°39.1'	2281	43°04.6'	2481
10	69°50.8'	2576	19°23.2'	2325	35°44.5'	2350	55°14.5'	2279	42°30.7'	2480
11	69°17.6'	2574	19°58.3'	2319	35°09.5'	2351	55°50.1'	2277	41°56.8'	2478
12	68°44.4'	2573	20°33.5'	2313	34°34.6'	2352	56°25.6'	2274	41°22.9'	2477
13	68°11.2'	2571	21°08.7'	2308	33°59.7'	2354	57°01.1'	2272	40°49.0'	2476
14	67°38.1'	2569	21°44.0'	2303	33°24.8'	2356	57°36.7'	2270	40°15.1'	2475
15	67°04.8'	2567	22°19.3'	2299	32°49.9'	2358	58°12.2'	2268	39°41.1'	2474
16	66°31.6'	2565	22°54.6'	2294	32°15.1'	2360	58°47.8'	2266	39°07.2'	2473
17	65°58.4'	2564	23°30.0'	2290	31°40.2'	2362	59°23.4'	2264	38°33.2'	2471
18	65°25.1'	2562	24°05.4'	2286	31°05.4'	2365	59°59.1'	2262	37°59.3'	2471
19	64°51.9'	2560	24°40.9'	2282	30°30.6'	2368	60°34.7'	2260	37°25.3'	2470
20	64°18.6'	2559	25°16.3'	2279	29°55.8'	2372	61°10.4'	2259	36°51.3'	2469
21	63°45.3'	2557	25°51.8'	2275	29°21.1'	2375	61°46.0'	2257	36°17.3'	2468
22	63°12.0'	2556	26°27.4'	2272	28°46.3'	2379	62°21.7'	2255	35°43.3'	2467
23	62°38.7'	2554	27°02.9'	2269	28°11.7'	2384	62°57.4'	2253	35°09.3'	2467

Fri Nov 22, 2019 UTC

UTC	-Sun		+Regulus		-Spica		-Mars		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	62°05.4'	2553	27°38.5'	2266	27°37.0'	2389	34°35.3'	2466	63°33.1'	2251
1	61°32.0'	2551	28°14.1'	2263	27°02.4'	2394	34°01.3'	2466	64°08.9'	2250
2	60°58.7'	2550	28°49.8'	2260	26°27.8'	2400	33°27.3'	2465	64°44.6'	2248
3	60°25.3'	2548	29°25.4'	2258	25°53.3'	2406	32°53.3'	2465	65°20.3'	2247
4	59°52.0'	2547	30°01.1'	2255	25°18.8'	2413	32°19.3'	2465	65°56.1'	2245
5	59°18.6'	2546	30°36.8'	2253	24°44.4'	2420	31°45.3'	2465	66°31.9'	2243
6	58°45.2'	2544	31°12.5'	2250	24°10.0'	2429	31°11.3'	2465	67°07.7'	2242
7	58°11.8'	2543	31°48.2'	2248	23°35.7'	2438	30°37.2'	2465	67°43.5'	2241
8	57°38.4'	2542	32°24.0'	2246	23°01.5'	2448	30°03.2'	2465	68°19.3'	2239
9	57°05.0'	2541	32°59.8'	2244	22°27.3'	2458	29°29.2'	2465	68°55.1'	2238
10	56°31.6'	2539	33°35.6'	2242	21°53.3'	2470	28°55.2'	2466	69°31.0'	2236
11	55°58.1'	2538	34°11.4'	2240	21°19.3'	2483	28°21.2'	2466	70°06.8'	2235
12	55°24.7'	2537	34°47.2'	2238	20°45.4'	2497	27°47.2'	2467	70°42.7'	2234
13	54°51.2'	2536	35°23.0'	2236	20°11.7'	2513	27°13.2'	2468	71°18.6'	2233
14	54°17.8'	2535	35°58.9'	2234	19°38.0'	2530	26°39.2'	2469	71°54.5'	2232
15	53°44.3'	2534	36°34.8'	2233	19°04.5'	2549	26°05.2'	2470	72°30.3'	2230
16	53°10.8'	2533	37°10.7'	2231	18°31.2'	2570	25°31.2'	2472	73°06.2'	2229
17	52°37.3'	2533	37°46.5'	2230	17°58.0'	2594	24°57.3'	2473	73°42.2'	2228
18	52°03.8'	2532	38°22.5'	2228	17°24.9'	2620	24°23.3'	2475	74°18.1'	2227
19	51°30.4'	2531	38°58.4'	2227	16°52.1'	2649	23°49.4'	2477	74°54.0'	2226
20	50°56.8'	2530	39°34.3'	2225	16°19.5'	2681	23°15.5'	2480	75°29.9'	2225
21	50°23.3'	2530	40°10.3'	2224	15°47.1'	2717	22°41.6'	2483	76°05.9'	2225
22	49°49.8'	2529	40°46.2'	2223	15°15.0'	2757	22°07.7'	2486	76°41.8'	2224
23	49°16.3'	2528	41°22.2'	2222	14°43.2'	2803	21°33.9'	2489	77°17.8'	2223

Sat Nov 23, 2019 UTC

UTC	−Sun		+Regulus		−Mars		−Spica		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	48°42.8′	2528	41°58.1′	2221	21°00.0′	2493	14°11.8′	2854	77°53.7′	2222
1	48°09.3′	2527	42°34.1′	2220	20°26.2′	2497	13°40.7′	2913	78°29.7′	2222
2	47°35.7′	2527	43°10.1′	2219	19°52.5′	2502	13°10.0′	2979	79°05.7′	2221
3	47°02.2′	2527	43°46.1′	2218	19°18.8′	2507	12°39.8′	3056	79°41.7′	2220
4	46°28.7′	2526	44°22.1′	2217	18°45.1′	2513	12°10.1′	3144	80°17.7′	2220
5	45°55.1′	2526	44°58.1′	2216	18°11.4′	2519	11°41.0′	3245	80°53.6′	2219
6	45°21.6′	2526	45°34.1′	2215	17°37.8′	2526	11°12.6′	3363	81°29.6′	2219
7	44°48.1′	2526	46°10.2′	2215	17°04.3′	2534	–	–	82°05.6′	2218
8	44°14.5′	2526	46°46.2′	2214	16°30.8′	2543	–	–	82°41.6′	2218
9	43°41.0′	2525	47°22.2′	2214	15°57.4′	2553	–	–	83°17.6′	2218
10	43°07.4′	2525	47°58.3′	2213	15°24.1′	2564	–	–	83°53.7′	2217
11	42°33.9′	2526	48°34.3′	2213	14°50.8′	2577	–	–	84°29.7′	2217
12	42°00.3′	2526	49°10.4′	2212	14°17.7′	2591	–	–	85°05.7′	2217
13	41°26.8′	2526	49°46.4′	2212	13°44.7′	2608	–	–	85°41.7′	2217
14	40°53.3′	2526	50°22.5′	2212	13°11.7′	2626	–	–	86°17.7′	2217
15	40°19.7′	2526	50°58.5′	2211	12°39.0′	2647	–	–	86°53.7′	2217
16	39°46.2′	2527	51°34.6′	2211	12°06.4′	2672	–	–	87°29.7′	2217
17	39°12.7′	2527	52°10.7′	2211	11°33.9′	2700	–	–	88°05.7′	2217
18	38°39.1′	2528	52°46.7′	2211	11°01.7′	2732	–	–	88°41.8′	2217
19	38°05.6′	2528	53°22.8′	2211	10°29.7′	2770	–	–	89°17.8′	2217
20	37°32.1′	2529	53°58.8′	2211	9°58.0′	2816	–	–	89°53.8′	2217
21	36°58.6′	2530	54°34.9′	2211	9°26.6′	2869	–	–	90°29.8′	2218
22	36°25.0′	2530	55°11.0′	2211	8°55.6′	2933	–	–	91°05.8′	2218
23	35°51.5′	2531	55°47.0′	2211	8°25.1′	3011	–	–	91°41.8′	2218

Sun Nov 24, 2019 UTC

UTC	+Regulus		−Mars		+Pollux		+Procyon		+Betelgeuse	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	56°23.1′	2212	7°55.1′	3107	92°17.8′	2219	91°40.7′	2405	117°38.0′	2396
1	56°59.2′	2212	7°25.8′	3225	92°53.8′	2219	92°15.2′	2406	118°12.5′	2399
2	57°35.2′	2212	–	–	93°29.8′	2220	92°49.6′	2406	118°47.1′	2402
3	58°11.3′	2213	–	–	94°05.8′	2220	93°24.1′	2407	119°21.6′	2405
4	58°47.3′	2213	–	–	94°41.8′	2221	93°58.6′	2408	119°56.1′	2408
5	59°23.3′	2214	–	–	95°17.8′	2222	94°33.1′	2409	120°30.6′	2411
6	59°59.4′	2214	–	–	95°53.7′	2222	95°07.5′	2410	121°05.0′	2414
7	60°35.4′	2215	–	–	96°29.7′	2223	95°42.0′	2412	121°39.4′	2418
8	61°11.5′	2216	–	–	97°05.7′	2224	96°16.4′	2413	122°13.8′	2422
9	61°47.5′	2216	–	–	97°41.6′	2225	96°50.8′	2414	122°48.1′	2425
10	62°23.5′	2217	–	–	98°17.6′	2226	97°25.2′	2416	123°22.5′	2429
11	62°59.5′	2218	–	–	98°53.5′	2227	97°59.6′	2417	123°56.8′	2434
12	63°35.5′	2219	–	–	99°29.4′	2228	98°34.0′	2419	124°31.0′	2438
13	64°11.5′	2220	–	–	100°05.3′	2229	99°08.4′	2421	125°05.2′	2442
14	64°47.5′	2221	–	–	100°41.3′	2230	99°42.8′	2423	125°39.4′	2447
15	65°23.5′	2222	–	–	101°17.2′	2232	100°17.1′	2425	126°13.6′	2452
16	65°59.4′	2223	–	–	101°53.1′	2233	100°51.4′	2427	126°47.7′	2457
17	66°35.4′	2224	–	–	102°28.9′	2234	101°25.7′	2429	127°21.8′	2462
18	67°11.4′	2225	–	–	103°04.8′	2236	102°00.0′	2431	127°55.8′	2468
19	67°47.3′	2227	–	–	103°40.7′	2237	102°34.3′	2434	128°29.8′	2473
20	68°23.2′	2228	–	–	104°16.5′	2239	103°08.6′	2436	129°03.8′	2479
21	68°59.2′	2230	–	–	104°52.3′	2240	103°42.8′	2439	129°37.7′	2485
22	69°35.1′	2231	–	–	105°28.2′	2242	104°17.0′	2441	130°11.5′	2491
23	70°11.0′	2233	7°32.1′	3109	106°04.0′	2244	104°51.2′	2444	130°45.3′	2498

Mon Nov 25, 2019 UTC

UTC	+Spica		+Mars		+Regulus		+Pollux	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	17°56.2'	2588	8°01.4'	3021	70°46.8'	2234	106°39.8'	2245
1	18°29.3'	2568	8°31.3'	2948	71°22.7'	2236	107°15.5'	2247
2	19°02.5'	2549	9°01.8'	2889	71°58.6'	2237	107°51.3'	2249
3	19°35.9'	2533	9°32.6'	2840	72°34.4'	2239	108°27.0'	2251
4	20°09.4'	2518	10°03.8'	2799	73°10.2'	2241	109°02.8'	2253
5	20°43.0'	2504	10°35.3'	2764	73°46.1'	2243	109°38.5'	2255
6	21°16.7'	2492	11°07.1'	2735	74°21.9'	2245	110°14.2'	2257
7	21°50.5'	2481	11°39.0'	2710	74°57.6'	2247	110°49.9'	2259
8	22°24.4'	2471	12°11.2'	2688	75°33.4'	2249	111°25.5'	2262
9	22°58.3'	2462	12°43.5'	2670	76°09.2'	2251	112°01.2'	2264
10	23°32.4'	2454	13°15.9'	2654	76°44.9'	2253	112°36.8'	2266
11	24°06.5'	2447	13°48.5'	2641	77°20.6'	2255	113°12.4'	2269
12	24°40.6'	2440	14°21.2'	2629	77°56.3'	2257	113°48.0'	2271
13	25°14.8'	2434	14°53.9'	2619	78°32.0'	2260	114°23.5'	2274
14	25°49.1'	2429	15°26.7'	2610	79°07.7'	2262	114°59.1'	2276
15	26°23.4'	2424	15°59.6'	2602	79°43.3'	2264	115°34.6'	2279
16	26°57.7'	2420	16°32.6'	2596	80°18.9'	2267	116°10.1'	2282
17	27°32.1'	2416	17°05.6'	2590	80°54.5'	2269	116°45.6'	2284
18	28°06.5'	2413	17°38.6'	2586	81°30.1'	2272	117°21.1'	2287
19	28°40.9'	2410	18°11.7'	2582	82°05.7'	2274	117°56.5'	2290
20	29°15.4'	2407	18°44.8'	2578	82°41.2'	2277	118°31.9'	2293
21	29°49.8'	2405	19°18.0'	2575	83°16.7'	2280	119°07.3'	2296
22	30°24.3'	2403	19°51.1'	2573	83°52.2'	2282	119°42.6'	2299
23	30°58.8'	2402	20°24.3'	2571	84°27.7'	2285	120°18.0'	2302

Thu Nov 28, 2019 UTC

UTC	-Jupiter		-Saturn		-Venus		-Formalhaut	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	6°06.6'	2573	24°45.0'	2503	9°53.1'	2967	73°00.9'	2678
1	5°33.4'	2585	24°11.3'	2508	9°22.8'	2982	72°28.5'	2684
2	5°00.4'	2600	23°37.6'	2513	8°52.6'	2998	71°56.2'	2690
3	4°27.4'	2620	23°04.0'	2518	8°22.6'	3017	71°23.9'	2696
4	3°54.6'	2647	22°30.4'	2523	7°52.6'	3039	70°51.6'	2703
5	3°21.9'	2687	21°56.8'	2528	7°22.8'	3064	70°19.4'	2709
6	2°49.6'	2752	21°23.3'	2533	6°53.2'	3094	69°47.3'	2715
7	–	–	20°49.8'	2538	6°23.7'	3130	69°15.1'	2722
8	–	–	20°16.4'	2544	5°54.6'	3175	68°43.1'	2728
9	–	–	19°43.0'	2549	5°25.7'	3232	68°11.1'	2735
10	–	–	19°09.6'	2554	4°57.2'	3306	67°39.1'	2742
11	–	–	18°36.3'	2560	4°29.1'	3406	67°07.2'	2749
12	–	–	18°03.0'	2565	–	–	66°35.3'	2756
13	–	–	17°29.8'	2570	–	–	66°03.5'	2763
14	–	–	16°56.6'	2576	–	–	65°31.8'	2770
15	2°20.4'	2791	16°23.4'	2582	–	–	65°00.1'	2777
16	2°52.0'	2740	15°50.3'	2587	–	–	64°28.4'	2784
17	3°23.9'	2711	15°17.3'	2593	–	–	63°56.8'	2791
18	3°56.1'	2696	14°44.2'	2599	–	–	63°25.2'	2799
19	4°28.3'	2686	14°11.2'	2605	–	–	62°53.8'	2806
20	5°00.6'	2682	13°38.3'	2611	–	–	62°22.3'	2814
21	5°33.0'	2679	13°05.4'	2617	–	–	61°50.9'	2822
22	6°05.4'	2679	12°32.6'	2623	–	–	61°19.6'	2829
23	6°37.7'	2680	11°59.8'	2629	–	–	60°48.3'	2837

Fri Nov 29, 2019 UTC

UTC	+Jupiter		-Saturn		-Formalhaut		-Altair		-Achernar	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	7°10.1'	2682	11°27.0'	2636	60°17.1'	2845	38°03.0'	5302	79°47.5'	5101
1	7°42.5'	2684	10°54.3'	2643	59°45.9'	2853	37°45.3'	5380	79°29.0'	5115
2	8°14.8'	2687	10°21.7'	2650	59°14.8'	2861	37°27.9'	5461	79°10.5'	5130
3	8°47.1'	2691	9°49.1'	2657	58°43.8'	2870	37°10.9'	5546	78°52.1'	5146
4	9°19.4'	2695	9°16.5'	2665	58°12.8'	2878	36°54.1'	5633	78°33.7'	5161
5	9°51.7'	2699	8°44.0'	2673	57°41.9'	2886	36°37.7'	5724	78°15.4'	5177
6	10°23.9'	2703	8°11.6'	2682	57°11.0'	2895	36°21.7'	5818	77°57.2'	5193
7	10°56.1'	2707	7°39.3'	2692	56°40.2'	2904	36°06.0'	5917	77°39.1'	5210
8	11°28.3'	2712	7°07.0'	2703	56°09.4'	2912	35°50.6'	6019	77°21.0'	5227
9	12°00.4'	2716	6°34.8'	2715	55°38.8'	2921	35°35.6'	6126	77°03.0'	5244
10	12°32.5'	2721	6°02.7'	2730	55°08.1'	2930	35°20.9'	6237	76°45.1'	5261
11	13°04.6'	2725	5°30.7'	2747	54°37.6'	2939	35°06.7'	6353	76°27.2'	5279
12	13°36.6'	2730	4°58.8'	2769	54°07.1'	2949	34°52.8'	6474	76°09.4'	5298
13	14°08.6'	2735	4°27.1'	2798	53°36.7'	2958	34°39.3'	6600	75°51.7'	5316
14	14°40.6'	2740	3°55.6'	2838	53°06.3'	2967	34°26.1'	6733	75°34.0'	5335
15	15°12.5'	2745	3°24.4'	2897	52°36.0'	2977	34°13.4'	6871	75°16.5'	5355
16	15°44.4'	2750	2°53.6'	2993	52°05.8'	2987	34°01.1'	7016	74°59.0'	5374
17	16°16.3'	2755	-	-	51°35.6'	2997	33°49.1'	7168	74°41.6'	5394
18	16°48.1'	2760	-	-	51°05.5'	3007	33°37.6'	7328	74°24.3'	5415
19	17°19.9'	2765	-	-	50°35.5'	3017	33°26.5'	7496	74°07.0'	5435
20	17°51.6'	2770	-	-	50°05.5'	3027	33°15.9'	7673	73°49.8'	5457
21	18°23.3'	2775	-	-	49°35.6'	3038	33°05.6'	7860	73°32.8'	5478
22	18°55.0'	2780	-	-	49°05.8'	3049	32°55.8'	8058	73°15.8'	5500
23	19°26.6'	2785	-	-	48°36.1'	3059	32°46.4'	8267	72°58.9'	5522

Sat Nov 30, 2019 UTC

UTC	+Sun		+Jupiter		+Venus		-Formalhaut		-Achernar	
	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.	Lunar Dist.	P.L.
0	41°52.3'	3080	19°58.2'	2790	14°23.8'	3188	48°06.4'	3070	72°42.0'	5545
1	42°21.8'	3085	20°29.8'	2795	14°52.6'	3191	47°36.8'	3082	72°25.3'	5568
2	42°51.3'	3091	21°01.3'	2800	15°21.4'	3195	47°07.3'	3093	72°08.7'	5592
3	43°20.7'	3096	21°32.8'	2805	15°50.1'	3198	46°37.9'	3105	71°52.1'	5615
4	43°50.2'	3101	22°04.2'	2810	16°18.9'	3202	46°08.5'	3117	71°35.6'	5640
5	44°19.5'	3107	22°35.6'	2815	16°47.6'	3206	45°39.3'	3129	71°19.3'	5665
6	44°48.9'	3112	23°07.0'	2820	17°16.3'	3210	45°10.1'	3141	71°03.0'	5690
7	45°18.2'	3117	23°38.4'	2825	17°44.9'	3215	44°41.0'	3154	70°46.8'	5715
8	45°47.5'	3122	24°09.7'	2830	18°13.5'	3219	44°11.9'	3166	70°30.7'	5741
9	46°16.7'	3127	24°40.9'	2835	18°42.1'	3223	43°43.0'	3180	70°14.7'	5768
10	46°45.9'	3133	25°12.2'	2840	19°10.7'	3228	43°14.1'	3193	69°58.8'	5795
11	47°15.1'	3138	25°43.4'	2845	19°39.2'	3232	42°45.4'	3206	69°43.0'	5822
12	47°44.2'	3143	26°14.5'	2850	20°07.7'	3237	42°16.7'	3220	69°27.3'	5850
13	48°13.3'	3148	26°45.7'	2855	20°36.2'	3241	41°48.1'	3235	69°11.7'	5878
14	48°42.4'	3153	27°16.8'	2860	21°04.6'	3246	41°19.6'	3249	68°56.2'	5907
15	49°11.4'	3158	27°47.8'	2865	21°33.1'	3251	40°51.2'	3264	68°40.8'	5937
16	49°40.4'	3164	28°18.8'	2870	22°01.4'	3255	40°22.9'	3279	68°25.5'	5966
17	50°09.3'	3169	28°49.8'	2875	22°29.8'	3260	39°54.7'	3295	68°10.3'	5997
18	50°38.3'	3174	29°20.8'	2879	22°58.1'	3265	39°26.7'	3311	67°55.2'	6028
19	51°07.2'	3179	29°51.7'	2884	23°26.4'	3270	38°58.7'	3327	67°40.3'	6059
20	51°36.0'	3184	30°22.6'	2889	23°54.7'	3274	38°30.8'	3344	67°25.4'	6091
21	52°04.8'	3189	30°53.4'	2894	24°22.9'	3279	38°03.0'	3362	67°10.6'	6124
22	52°33.6'	3194	31°24.2'	2899	24°51.1'	3284	37°35.3'	3379	66°56.0'	6157
23	53°02.4'	3199	31°55.0'	2903	25°19.3'	3288	37°07.8'	3398	66°41.4'	6190