

AUGUST 2012

	° / P.L.	° / P.L.	° / P.L.	° / P.L.	° / P.L.
1 UT	+Spica	+Zubenelgen	+Antares	+Sabik	–Markab
0	90 15.7 2287	68 54.4 2289	44 58.1 2321	35 57.2 2350	59 59.9 2484
3	92 2.0 2296	70 40.6 2297	46 43.6 2327	37 42.0 2353	58 18.3 2500
6	93 48.1 2304	72 26.7 2305	48 28.9 2334	39 26.7 2357	56 37.1 2517
9	95 34.0 2313	74 12.5 2314	50 14.0 2341	41 11.3 2362	54 56.2 2535
12	97 19.7 2322	75 58.2 2323	51 59.0 2349	42 55.7 2368	53 15.8 2555
15	99 5.1 2331	77 43.6 2333	53 43.8 2357	44 40.1 2375	51 35.9 2576
18	100 50.3 2341	79 28.8 2343	55 28.4 2366	46 24.2 2382	49 56.5 2599
21	102 35.3 2351	81 13.7 2353	57 12.8 2375	48 8.2 2390	48 17.5 2624
2 UT	+Antares	+Sabik	+Shaula	+Nunki	–Jupiter
0	58 56.9 2385	49 52.0 2399	46 53.2 2671	26 52.8 2502	122 9.2 2414
3	60 40.9 2395	51 35.6 2408	48 30.5 2665	28 34.0 2497	120 26.0 2425
6	62 24.5 2406	53 19.0 2418	50 8.0 2662	30 15.3 2497	118 43.0 2437
9	64 8.0 2417	55 2.1 2428	51 45.4 2661	31 56.5 2498	117 0.3 2448
12	65 51.1 2429	56 45.0 2439	53 23.0 2662	33 37.8 2501	115 17.9 2461
15	67 34.0 2440	58 27.7 2450	55 0.5 2664	35 19.0 2506	113 35.7 2473
18	69 16.6 2452	60 10.0 2461	56 38.0 2667	37 0.1 2512	111 53.9 2485
21	70 59.0 2465	61 52.2 2473	58 15.4 2671	38 41.0 2519	110 12.3 2498
3 UT	+Antares	+Nunki	–Hamal	–Jupiter	–Venus
0	72 41.0 2477	40 21.8 2527	75 8.7 2502	108 31.1 2512	124 7.6 2738
3	74 22.7 2490	42 2.4 2536	73 27.5 2516	106 50.2 2524	122 31.7 2752
6	76 4.2 2504	43 42.7 2545	71 46.7 2530	105 9.5 2538	120 56.2 2767
9	77 45.3 2517	45 22.9 2556	70 6.2 2546	103 29.2 2553	119 21.1 2782
12	79 26.1 2531	47 2.8 2567	68 26.0 2560	101 49.2 2566	117 46.2 2796
15	81 6.6 2545	48 42.5 2578	66 46.2 2575	100 9.5 2580	116 11.7 2812
18	82 46.8 2559	50 21.9 2590	65 6.7 2591	98 30.2 2595	114 37.5 2828
21	84 26.6 2573	52 1.0 2602	63 27.6 2607	96 51.2 2609	113 3.6 2843
4 UT	+Nunki	–Hamal	–Aldebaran	–Jupiter	–Venus
0	53 39.9 2614	61 48.9 2623	94 47.8 2585	95 12.5 2623	111 30.1 2858
3	55 18.5 2628	60 10.5 2640	93 8.5 2599	93 34.1 2639	109 56.9 2875
6	56 56.7 2641	58 32.5 2656	91 29.6 2614	91 56.1 2653	108 24.1 2891
9	58 34.7 2654	56 54.8 2673	89 51.0 2629	90 18.4 2668	106 51.6 2907
12	60 12.4 2667	55 17.6 2690	88 12.8 2644	88 41.0 2683	105 19.4 2923
15	61 49.8 2681	53 40.7 2708	86 34.9 2658	87 4.0 2698	103 47.6 2939
18	63 26.9 2695	52 4.2 2726	84 57.3 2673	85 27.3 2713	102 16.1 2956
21	65 3.7 2708	50 28.1 2743	83 20.0 2688	83 50.9 2727	100 45.0 2971
5 UT	+Nunki	–Hamal	–Aldebaran	–Jupiter	–Venus
0	66 40.1 2722	48 52.4 2762	81 43.1 2703	82 14.8 2742	99 14.2 2988
3	68 16.3 2736	47 17.2 2781	80 6.5 2718	80 39.1 2757	97 43.7 3004
6	69 52.1 2750	45 42.3 2800	78 30.2 2732	79 3.7 2772	96 13.6 3020
9	71 27.7 2764	44 7.8 2819	76 54.3 2747	77 28.7 2786	94 43.8 3035
12	73 2.9 2778	42 33.8 2839	75 18.7 2762	75 53.9 2801	93 14.3 3052
15	74 37.9 2792	41 0.2 2859	73 43.4 2776	74 19.5 2815	91 45.2 3067
18	76 12.5 2805	39 27.0 2880	72 8.4 2791	72 45.4 2829	90 16.4 3083
21	77 46.8 2819	37 54.3 2902	70 33.8 2805	71 11.6 2844	88 47.9 3098

AUGUST 2012

	° / P.L.	° / P.L.	° / P.L.	° / P.L.	° / P.L.
6 UT	+Nunki	–Aldebaran	–Jupiter	–Elnath	–Venus
0	79 20.9 2832	68 59.4 2819	69 38.1 2857	80 48.2 2836	87 19.7 3113
3	80 54.6 2846	67 25.4 2833	68 4.8 2871	79 14.5 2850	85 51.8 3128
6	82 28.1 2859	65 51.6 2847	66 31.9 2885	77 41.2 2864	84 24.2 3143
9	84 1.3 2872	64 18.2 2860	64 59.3 2898	76 8.1 2878	82 56.9 3157
12	85 34.2 2884	62 45.0 2873	63 26.9 2910	74 35.3 2891	81 30.0 3172
15	87 6.8 2897	61 12.2 2887	61 54.8 2924	73 2.8 2905	80 3.3 3186
18	88 39.2 2909	59 39.6 2900	60 23.0 2936	71 30.6 2918	78 36.8 3199
21	90 11.3 2921	58 7.3 2912	58 51.5 2948	69 58.7 2930	77 10.7 3213
7 UT	+Enif	–Aldebaran	–Jupiter	–Venus	–Sun
0	44 37.3 3307	56 35.2 2925	57 20.2 2959	75 44.8 3225	120 45.4 3276
3	46 1.4 3298	55 3.5 2937	55 49.2 2971	74 19.1 3239	119 20.8 3289
6	47 25.6 3291	53 31.9 2949	54 18.4 2982	72 53.8 3251	117 56.4 3300
9	48 49.9 3285	52 0.7 2961	52 47.8 2993	71 28.6 3263	116 32.2 3311
12	50 14.4 3280	50 29.7 2972	51 17.4 3003	70 3.7 3274	115 8.2 3322
15	51 39.0 3277	48 58.9 2984	49 47.3 3014	68 39.0 3286	113 44.5 3333
18	53 3.6 3273	47 28.3 2994	48 17.4 3023	67 14.5 3296	112 20.9 3343
21	54 28.3 3271	45 58.0 3005	46 47.7 3033	65 50.3 3307	110 57.6 3353
8 UT	+Enif	–Aldebaran	–Jupiter	–Venus	–Sun
0	55 53.1 3270	44 27.9 3016	45 18.1 3041	64 26.2 3316	109 34.4 3362
3	57 17.8 3268	42 58.0 3025	43 48.8 3049	63 2.4 3326	108 11.4 3371
6	58 42.6 3268	41 28.4 3036	42 19.6 3058	61 38.7 3335	106 48.6 3380
9	60 7.4 3267	39 58.9 3046	40 50.6 3065	60 15.2 3343	105 26.0 3387
12	61 32.3 3267	38 29.6 3055	39 21.7 3072	58 51.8 3352	104 3.5 3395
15	62 57.1 3267	37 0.6 3064	37 53.0 3079	57 28.7 3359	102 41.1 3402
18	64 21.9 3267	35 31.7 3074	36 24.4 3085	56 5.6 3366	101 18.9 3409
21	65 46.7 3268	34 3.0 3084	34 56.0 3091	54 42.7 3373	99 56.8 3415
9 UT	+Markab	–Aldebaran	–Jupiter	–Venus	–Sun
0	46 53.2 3312	32 34.5 3093	33 27.6 3097	53 19.9 3380	98 34.8 3421
3	48 17.2 3304	31 6.3 3103	31 59.4 3101	51 57.3 3385	97 12.9 3426
6	49 41.3 3297	29 38.2 3113	30 31.3 3105	50 34.7 3390	95 51.1 3430
9	51 5.5 3291	28 10.3 3123	29 3.2 3109	49 12.3 3395	94 29.4 3435
12	52 29.9 3285	26 42.6 3134	27 35.3 3113	47 49.9 3398	93 7.8 3439
15	53 54.4 3280	25 15.1 3147	26 7.4 3115	46 27.6 3403	91 46.3 3442
18	55 18.9 3274	23 47.9 3160	24 39.5 3118	45 5.4 3405	90 24.8 3444
21	56 43.6 3269	22 21.0 3175	23 11.8 3120	43 43.2 3408	89 3.4 3447
10 UT	+Markab	–Jupiter	–Betelgeuse	–Venus	–Sun
0	58 8.4 3264	21 44.0 3121	41 59.1 3363	42 21.1 3410	87 42.0 3449
3	59 33.3 3259	20 16.3 3122	40 36.1 3382	40 59.0 3412	86 20.7 3450
6	60 58.3 3254	18 48.6 3123	39 13.5 3404	39 37.0 3413	84 59.3 3451
9	62 23.3 3249	17 20.9 3122	37 51.3 3427	38 15.0 3413	83 38.0 3450
12	63 48.5 3244	15 53.2 3122	36 29.5 3453	36 53.0 3413	82 16.7 3451
15	65 13.8 3239	14 25.5 3121	35 8.3 3481	35 30.9 3412	80 55.4 3450
18	66 39.2 3233	12 57.8 3119	33 47.5 3513	34 8.9 3411	79 34.0 3448
21	68 4.7 3228	11 30.0 3118	32 27.4 3550	32 46.9 3410	78 12.7 3446

AUGUST 2012

	° / P.L.	° / P.L.	° / P.L.	° / P.L.	° / P.L.
11 UT	+Markab	+Alpheratz	+Hamal	-Venus	-Sun
0	69 30.2 3223	52 23.8 3593	25 54.3 3273	31 24.8 3408	76 51.3 3444
3	70 55.9 3217	53 42.5 3570	27 19.0 3249	30 2.7 3405	75 29.8 3441
6	72 21.7 3211	55 1.6 3548	28 44.2 3228	28 40.5 3402	74 8.3 3437
9	73 47.7 3205	56 21.1 3527	30 9.8 3209	27 18.3 3398	72 46.8 3434
12	75 13.7 3199	57 41.0 3508	31 35.7 3192	25 56.0 3394	71 25.2 3430
15	76 39.9 3192	59 1.3 3489	33 2.0 3177	24 33.6 3390	70 3.5 3425
18	78 6.2 3186	60 21.9 3471	34 28.6 3161	23 11.1 3385	68 41.7 3420
21	79 32.6 3179	61 42.8 3454	35 55.5 3147	21 48.6 3380	67 19.8 3414
12 UT	+Hamal	+Menkar	+Aldebaran	-Venus	-Sun
0	37 22.7 3134	31 11.2 3541	5 48.5 4882	20 25.9 3374	65 57.8 3409
3	38 50.2 3120	32 30.8 3493	6 46.9 4202	19 3.2 3367	64 35.7 3402
6	40 17.9 3108	33 51.4 3451	7 55.3 3820	17 40.3 3361	63 13.5 3395
9	41 45.9 3095	35 12.7 3412	9 10.0 3587	16 17.3 3354	61 51.1 3388
12	43 14.2 3083	36 34.7 3377	10 28.8 3435	14 54.2 3348	60 28.6 3381
15	44 42.7 3070	37 57.4 3344	11 50.4 3329	13 30.9 3340	59 6.0 3373
18	46 11.4 3058	39 20.7 3314	13 14.0 3252	12 7.5 3333	57 43.2 3365
21	47 40.4 3046	40 44.7 3285	14 39.1 3194	10 43.9 3325	56 20.3 3356
13 UT	+Hamal	+Menkar	+Aldebaran	+Jupiter	-Sun
0	49 9.7 3034	42 9.1 3259	16 5.4 3148	13 35.7 3016	54 57.2 3348
3	50 39.2 3021	43 34.1 3233	17 32.6 3110	15 5.6 3006	53 33.9 3338
6	52 9.0 3009	44 59.6 3209	19 0.6 3078	16 35.7 2997	52 10.5 3329
9	53 39.0 2997	46 25.6 3187	20 29.2 3051	18 5.9 2987	50 46.8 3320
12	55 9.2 2985	47 52.0 3164	21 58.3 3026	19 36.4 2976	49 23.0 3310
15	56 39.8 2972	49 18.8 3143	23 28.0 3003	21 7.1 2966	47 59.1 3300
18	58 10.5 2960	50 46.1 3123	24 58.1 2983	22 38.0 2955	46 34.9 3290
21	59 41.6 2947	52 13.8 3103	26 28.7 2965	24 9.2 2944	45 10.5 3280
14 UT	+Hamal	+Aldebaran	+Jupiter	+Elnath	-Sun
0	61 12.9 2935	27 59.6 2946	25 40.5 2933	17 18.9 3268	43 45.9 3270
3	62 44.5 2922	29 30.9 2929	27 12.1 2921	18 43.7 3199	42 21.1 3259
6	64 16.3 2909	31 2.6 2912	28 44.0 2909	20 9.9 3143	40 56.2 3249
9	65 48.4 2896	32 34.7 2896	30 16.1 2897	21 37.1 3094	39 31.0 3239
12	67 20.8 2883	34 7.1 2880	31 48.5 2885	23 5.4 3053	38 5.6 3229
15	68 53.5 2870	35 39.8 2865	33 21.1 2873	24 34.5 3016	36 40.1 3219
18	70 26.4 2857	37 12.9 2850	34 54.0 2861	26 4.4 2984	35 14.3 3210
21	71 59.7 2843	38 46.2 2835	36 27.1 2848	27 34.9 2954	33 48.3 3200
15 UT	+Aldebaran	+Jupiter	+Elnath	+Venus	-Sun
0	40 19.9 2820	38 0.5 2836	29 6.1 2928	13 31.3 3127	32 22.2 3192
3	41 53.9 2806	39 34.2 2823	30 37.8 2902	14 58.9 3113	30 55.9 3183
6	43 28.3 2791	41 8.2 2810	32 10.1 2879	16 26.8 3099	29 29.4 3176
9	45 2.9 2777	42 42.4 2797	33 42.8 2857	17 54.9 3086	28 2.8 3170
12	46 37.9 2763	44 16.9 2784	35 16.1 2836	19 23.4 3072	26 36.1 3164
15	48 13.1 2749	45 51.7 2771	36 49.7 2816	20 52.1 3059	25 9.2 3161
18	49 48.7 2735	47 26.8 2759	38 23.8 2797	22 21.1 3045	23 42.3 3160
21	51 24.6 2721	49 2.2 2745	39 58.4 2779	23 50.3 3031	22 15.3 3161

AUGUST 2012

	° / P.L.	° / P.L.	° / P.L.	° / P.L.	° / P.L.
16 UT	+Aldebaran	+Jupiter	+Elnath	+Venus	–Sun
0	53 0.8 2708	50 37.8 2732	41 33.3 2761	25 19.9 3018	20 48.4 3166
3	54 37.3 2694	52 13.8 2720	43 8.6 2744	26 49.7 3005	19 21.6 3176
6	56 14.0 2681	53 50.0 2707	44 44.3 2728	28 19.8 2991	17 55.0 3191
9	57 51.1 2667	55 26.5 2694	46 20.3 2711	29 50.2 2977	16 28.6 3216
12	59 28.5 2654	57 3.3 2681	47 56.7 2695	31 20.9 2965	15 2.8 3253
15	61 6.2 2641	58 40.3 2669	49 33.5 2680	32 51.8 2952	13 37.7 3311
18	62 44.2 2628	60 17.7 2656	51 10.6 2665	34 23.0 2939	12 13.7 3397
21	64 22.5 2615	61 55.3 2644	52 48.0 2651	35 54.5 2926	10 51.4 3531
19 UT	+Sun	–Spica	–Saturn	–Mars	–Antares
0	17 36.4 2908	40 40.7 2421	42 19.9 2487	43 52.3 2630	86 13.2 2438
3	19 8.6 2873	38 57.6 2412	40 38.3 2481	42 14.1 2621	84 30.5 2430
6	20 41.5 2845	37 14.3 2405	38 56.7 2477	40 35.6 2614	82 47.6 2422
9	22 14.9 2820	35 30.9 2397	37 14.9 2473	38 57.0 2606	81 4.6 2415
12	23 49.0 2799	33 47.2 2390	35 33.1 2470	37 18.3 2599	79 21.4 2408
15	25 23.4 2780	32 3.4 2383	33 51.2 2468	35 39.4 2593	77 38.0 2401
18	26 58.3 2764	30 19.5 2376	32 9.2 2467	34 0.3 2586	75 54.4 2394
21	28 33.6 2749	28 35.3 2369	30 27.3 2468	32 21.1 2580	74 10.7 2387
20 UT	+Sun	–Spica	–Mars	–Zubenelgen	–Antares
0	30 9.1 2736	26 51.0 2364	30 41.7 2575	48 13.4 2364	72 26.9 2382
3	31 45.0 2724	25 6.6 2358	29 2.2 2570	46 28.9 2358	70 42.9 2376
6	33 21.1 2713	23 22.0 2353	27 22.7 2566	44 44.4 2352	68 58.7 2371
9	34 57.5 2703	21 37.3 2348	25 43.0 2562	42 59.7 2347	67 14.5 2366
12	36 34.1 2694	19 52.5 2344	24 3.2 2560	41 14.8 2342	65 30.1 2361
15	38 10.8 2685	18 7.6 2340	22 23.4 2557	39 29.9 2338	63 45.6 2357
18	39 47.8 2677	16 22.5 2336	20 43.5 2557	37 44.8 2333	62 1.0 2353
21	41 25.0 2670	14 37.4 2334	19 3.6 2557	35 59.6 2329	60 16.3 2349
21 UT	+Sun	–Mars	–Zubenelgen	–Antares	–Sabik
0	43 2.3 2663	17 23.7 2560	34 14.4 2326	58 31.5 2346	67 39.9 2345
3	44 39.8 2658	15 43.9 2565	32 29.0 2322	56 46.6 2343	65 55.0 2341
6	46 17.4 2652	14 4.2 2575	30 43.6 2319	55 1.7 2341	64 10.0 2339
9	47 55.1 2646	12 24.7 2591	28 58.0 2317	53 16.7 2339	62 25.0 2336
12	49 33.0 2642	10 45.6 2617	27 12.5 2314	51 31.7 2337	60 39.9 2334
15	51 10.9 2638	9 7.0 2665	25 26.8 2313	49 46.6 2336	58 54.7 2332
18	52 49.0 2634	7 29.6 2756	23 41.2 2312	48 1.5 2336	57 9.5 2330
21	54 27.1 2630	5 54.2 2958	21 55.5 2311	46 16.4 2335	55 24.3 2329
22 UT	+Sun	–Antares	–Sabik	–Kaus Aust.	–Nunki
0	56 5.3 2627	44 31.3 2335	53 39.0 2328	69 44.0 2443	77 4.7 2327
3	57 43.6 2624	42 46.2 2336	51 53.7 2328	68 1.4 2446	75 19.4 2326
6	59 22.0 2621	41 1.1 2337	50 8.4 2328	66 19.0 2448	73 34.1 2325
9	61 0.5 2618	39 16.0 2340	48 23.1 2329	64 36.5 2451	71 48.7 2324
12	62 38.9 2616	37 31.0 2342	46 37.8 2329	62 54.2 2455	70 3.3 2323
15	64 17.5 2614	35 46.0 2346	44 52.6 2331	61 11.9 2459	68 17.9 2323
18	65 56.1 2613	34 1.2 2351	43 7.3 2333	59 29.7 2465	66 32.5 2323
21	67 34.7 2611	32 16.4 2356	41 22.1 2335	57 47.7 2471	64 47.1 2323

AUGUST 2012

	° / P.L.	° / P.L.	° / P.L.	° / P.L.	° / P.L.
23 UT	+Sun	+Spica	+Mars	–Antares	–Nunki
0	69 13.3 2610	15 27.7 2291	9 59.6 2578	30 31.8 2363	63 1.6 2323
3	70 52.0 2609	17 13.9 2290	11 39.0 2554	28 47.4 2373	61 16.2 2325
6	72 30.7 2609	19 0.2 2288	13 19.0 2537	27 3.1 2384	59 30.8 2326
9	74 9.4 2608	20 46.4 2287	14 59.3 2527	25 19.2 2398	57 45.5 2327
12	75 48.1 2608	22 32.7 2287	16 39.9 2518	23 35.6 2415	56 0.2 2329
15	77 26.9 2607	24 19.0 2286	18 20.7 2513	21 52.3 2437	54 14.9 2331
18	79 5.6 2608	26 5.3 2286	20 1.6 2508	20 9.7 2466	52 29.7 2334
21	80 44.3 2608	27 51.6 2286	21 42.6 2505	18 27.7 2504	50 44.5 2337
24 UT	+Sun	+Spica	+Saturn	+Mars	–Nunki
0	82 23.1 2609	29 38.0 2286	28 15.1 2389	23 23.7 2503	48 59.4 2340
3	84 1.8 2609	31 24.3 2287	29 58.9 2381	25 4.9 2501	47 14.4 2344
6	85 40.5 2610	33 10.6 2288	31 42.9 2376	26 46.1 2501	45 29.5 2349
9	87 19.2 2611	34 56.9 2288	33 27.1 2371	28 27.2 2500	43 44.7 2354
12	88 57.8 2612	36 43.1 2289	35 11.3 2367	30 8.5 2500	42 0.1 2360
15	90 36.5 2614	38 29.4 2291	36 55.7 2364	31 49.7 2500	40 15.5 2367
18	92 15.1 2614	40 15.6 2291	38 40.1 2362	33 30.9 2500	38 31.2 2374
21	93 53.6 2617	42 1.8 2293	40 24.6 2360	35 12.1 2501	36 47.0 2383
25 UT	+Sun	+Spica	+Saturn	+Mars	–Nunki
0	95 32.2 2618	43 47.9 2295	42 9.1 2360	36 53.3 2502	35 3.0 2393
3	97 10.7 2620	45 34.0 2296	43 53.6 2359	38 34.4 2504	33 19.3 2404
6	98 49.1 2622	47 20.1 2298	45 38.2 2358	40 15.5 2505	31 35.8 2418
9	100 27.5 2625	49 6.1 2300	47 22.8 2359	41 56.6 2506	29 52.6 2433
12	102 5.9 2627	50 52.1 2302	49 7.3 2359	43 37.7 2509	28 9.9 2452
15	103 44.1 2630	52 38.0 2304	50 51.9 2360	45 18.7 2511	26 27.5 2474
18	105 22.4 2632	54 23.9 2306	52 36.4 2360	46 59.7 2512	24 45.7 2501
21	107 0.5 2635	56 9.7 2309	54 20.9 2362	48 40.6 2515	23 4.5 2534
26 UT	+Sun	+Spica	+Saturn	+Mars	–Enif
0	108 38.6 2639	57 55.5 2312	56 5.4 2364	50 21.5 2518	71 1.9 2533
3	110 16.7 2642	59 41.2 2314	57 49.8 2366	52 2.3 2520	69 21.4 2541
6	111 54.6 2646	61 26.8 2317	59 34.2 2367	53 43.0 2523	67 41.2 2550
9	113 32.5 2650	63 12.4 2320	61 18.6 2370	55 23.7 2526	66 1.1 2559
12	115 10.3 2654	64 57.9 2323	63 2.8 2372	57 4.3 2529	64 21.3 2570
15	116 48.0 2658	66 43.3 2327	64 47.1 2376	58 44.8 2533	62 41.7 2581
18	118 25.6 2662	68 28.6 2330	66 31.2 2378	60 25.2 2536	61 2.3 2593
21	120 3.1 2667	70 13.9 2334	68 15.3 2382	62 5.6 2541	59 23.3 2607
27 UT	+Saturn	+Mars	+Zubenelgen	+Antares	–Markab
0	69 59.3 2385	63 45.9 2544	50 38.0 2340	26 57.2 2427	77 32.5 2491
3	71 43.2 2389	65 26.1 2549	52 23.0 2344	28 40.1 2422	75 51.0 2498
6	73 27.1 2393	67 6.1 2552	54 7.9 2348	30 23.2 2418	74 9.8 2505
9	75 10.8 2397	68 46.1 2557	55 52.8 2352	32 6.3 2415	72 28.7 2512
12	76 54.5 2401	70 26.0 2562	57 37.5 2357	33 49.5 2415	70 47.8 2521
15	78 38.0 2405	72 5.8 2567	59 22.1 2361	35 32.8 2414	69 7.0 2529
18	80 21.5 2410	73 45.5 2572	61 6.6 2366	37 16.0 2415	67 26.5 2538
21	82 4.8 2415	75 25.0 2577	62 51.0 2371	38 59.2 2416	65 46.2 2549

AUGUST 2012

	° / P.L.	° / P.L.	° / P.L.	° / P.L.	° / P.L.
28 UT	+Saturn	+Mars	+Antares	+Sabik	–Markab
0	83 48.0 2421	77 4.4 2583	40 42.4 2419	31 41.1 2448	64 6.1 2559
3	85 31.0 2426	78 43.7 2589	42 25.5 2421	33 23.5 2447	62 26.3 2571
6	87 14.0 2431	80 22.9 2594	44 8.6 2424	35 5.9 2447	60 46.7 2583
9	88 56.8 2438	82 1.9 2601	45 51.6 2428	36 48.4 2448	59 7.4 2596
12	90 39.5 2444	83 40.8 2607	47 34.5 2432	38 30.8 2450	57 28.4 2610
15	92 22.0 2451	85 19.5 2614	49 17.3 2437	40 13.2 2453	55 49.7 2626
18	94 4.4 2457	86 58.1 2621	50 60.0 2442	41 55.5 2456	54 11.4 2642
21	95 46.6 2464	88 36.6 2628	52 42.5 2447	43 37.7 2460	52 33.5 2660
29 UT	+Mars	+Antares	+Sabik	+Nunki	–Hamal
0	90 14.8 2635	54 25.0 2453	45 19.9 2465	22 31.0 2629	93 20.1 2467
3	91 52.9 2643	56 7.3 2459	47 1.9 2470	24 9.3 2611	91 38.2 2474
6	93 30.9 2651	57 49.5 2465	48 43.8 2475	25 47.9 2597	89 56.3 2482
9	95 8.6 2659	59 31.5 2472	50 25.6 2481	27 26.9 2588	88 14.7 2489
12	96 46.2 2667	61 13.4 2479	52 7.3 2487	29 6.1 2581	86 33.2 2497
15	98 23.6 2675	62 55.1 2486	53 48.8 2494	30 45.4 2577	84 52.0 2505
18	100 0.8 2684	64 36.6 2494	55 30.2 2501	32 24.8 2575	83 10.9 2514
21	101 37.8 2693	66 17.9 2502	57 11.4 2508	34 4.3 2575	81 30.0 2523
30 UT	+Antares	+Sabik	+Nunki	–Hamal	–Jupiter
0	67 59.1 2510	58 52.4 2516	35 43.8 2576	79 49.3 2532	116 59.8 2522
3	69 40.1 2518	60 33.2 2524	37 23.3 2579	78 8.9 2542	115 19.1 2532
6	71 20.9 2527	62 13.9 2532	39 2.6 2581	76 28.6 2551	113 38.6 2540
9	73 1.5 2536	63 54.4 2540	40 42.0 2586	74 48.6 2562	111 58.4 2550
12	74 41.8 2545	65 34.6 2549	42 21.2 2591	73 8.8 2572	110 18.3 2559
15	76 22.0 2554	67 14.7 2558	44 0.3 2597	71 29.3 2582	108 38.5 2569
18	78 1.9 2564	68 54.6 2567	45 39.3 2603	69 50.0 2593	106 58.8 2578
21	79 41.7 2574	70 34.2 2577	47 18.1 2610	68 10.9 2605	105 19.4 2589
31 UT	+Antares	+Nunki	–Hamal	–Aldebaran	–Jupiter
0	81 21.2 2584	48 56.8 2617	66 32.1 2616	99 32.9 2578	103 40.3 2598
3	83 0.4 2594	50 35.3 2625	64 53.6 2628	97 53.5 2588	102 1.3 2609
6	84 39.5 2605	52 13.6 2634	63 15.3 2640	96 14.3 2599	100 22.6 2620
9	86 18.3 2615	53 51.8 2643	61 37.3 2652	94 35.4 2609	98 44.2 2630
12	87 56.8 2626	55 29.7 2652	59 59.6 2665	92 56.7 2620	97 5.9 2641
15	89 35.2 2637	57 7.4 2661	58 22.1 2678	91 18.3 2631	95 28.0 2652
18	91 13.2 2648	58 45.0 2670	56 45.0 2692	89 40.1 2642	93 50.2 2663
21	92 51.0 2659	60 22.3 2680	55 8.2 2705	88 2.1 2653	92 12.7 2674