

## Sun Jul 1, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.2' SD = 15.7'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	278°59.9'	179°03.6'	N 23°07.2'	326°56.7'	12.8'	S 18°10.8'	5.3'	54.0'
1	294°02.3'	194°03.4'	N 23°07.1'	341°28.6'	12.8'	S 18°05.5'	5.4'	54.0'
2	309°04.8'	209°03.3'	N 23°06.9'	356°00.4'	12.9'	S 18°00.1'	5.5'	54.1'
3	324°07.3'	224°03.2'	N 23°06.7'	10°32.3'	12.9'	S 17°54.7'	5.5'	54.1'
4	339°09.7'	239°03.1'	N 23°06.6'	25°04.2'	12.9'	S 17°49.1'	5.6'	54.1'
5	354°12.2'	254°03.0'	N 23°06.4'	39°36.1'	13.0'	S 17°43.5'	5.7'	54.1'
6	9°14.7'	269°02.8'	N 23°06.2'	54°08.1'	13.0'	S 17°37.8'	5.8'	54.1'
7	24°17.1'	284°02.7'	N 23°06.1'	68°40.1'	13.0'	S 17°32.1'	5.8'	54.1'
8	39°19.6'	299°02.6'	N 23°05.9'	83°12.1'	13.0'	S 17°26.2'	5.9'	54.1'
9	54°22.1'	314°02.5'	N 23°05.7'	97°44.1'	13.1'	S 17°20.3'	6.0'	54.1'
10	69°24.5'	329°02.4'	N 23°05.6'	112°16.2'	13.1'	S 17°14.3'	6.1'	54.1'
11	84°27.0'	344°02.2'	N 23°05.4'	126°48.3'	13.1'	S 17°08.2'	6.2'	54.1'
12	99°29.5'	359°02.1'	N 23°05.2'	141°20.5'	13.2'	S 17°02.1'	6.2'	54.1'
13	114°31.9'	14°02.0'	N 23°05.1'	155°52.6'	13.2'	S 16°55.8'	6.3'	54.1'
14	129°34.4'	29°01.9'	N 23°04.9'	170°24.8'	13.2'	S 16°49.5'	6.4'	54.1'
15	144°36.8'	44°01.8'	N 23°04.7'	184°57.0'	13.3'	S 16°43.2'	6.5'	54.1'
16	159°39.3'	59°01.6'	N 23°04.5'	199°29.3'	13.3'	S 16°36.7'	6.5'	54.1'
17	174°41.8'	74°01.5'	N 23°04.4'	214°01.6'	13.3'	S 16°30.2'	6.6'	54.1'
18	189°44.2'	89°01.4'	N 23°04.2'	228°33.9'	13.3'	S 16°23.6'	6.7'	54.1'
19	204°46.7'	104°01.3'	N 23°04.0'	243°06.2'	13.4'	S 16°16.9'	6.7'	54.2'
20	219°49.2'	119°01.2'	N 23°03.8'	257°38.6'	13.4'	S 16°10.2'	6.8'	54.2'
21	234°51.6'	134°01.0'	N 23°03.6'	272°11.0'	13.4'	S 16°03.3'	6.9'	54.2'
22	249°54.1'	149°00.9'	N 23°03.5'	286°43.4'	13.4'	S 15°56.5'	7.0'	54.2'
23	264°56.6'	164°00.8'	N 23°03.3'	301°15.8'	13.5'	S 15°49.5'	7.0'	54.2'

## Mon Jul 2, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.2' SD = 15.7'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	279°59.0'	179°00.7'	N 23°03.1'	315°48.3'	13.5'	S 15°42.5'	7.1'	54.2'
1	295°01.5'	194°00.6'	N 23°02.9'	330°20.8'	13.5'	S 15°35.4'	7.2'	54.2'
2	310°03.9'	209°00.5'	N 23°02.7'	344°53.3'	13.6'	S 15°28.2'	7.2'	54.2'
3	325°06.4'	224°00.3'	N 23°02.6'	359°25.9'	13.6'	S 15°21.0'	7.3'	54.2'
4	340°08.9'	239°00.2'	N 23°02.4'	13°58.5'	13.6'	S 15°13.7'	7.4'	54.2'
5	355°11.3'	254°00.1'	N 23°02.2'	28°31.1'	13.6'	S 15°06.3'	7.4'	54.2'
6	10°13.8'	268°60.0'	N 23°02.0'	43°03.7'	13.7'	S 14°58.9'	7.5'	54.3'
7	25°16.3'	283°59.9'	N 23°01.8'	57°36.4'	13.7'	S 14°51.4'	7.6'	54.3'
8	40°18.7'	298°59.7'	N 23°01.6'	72°09.1'	13.7'	S 14°43.8'	7.6'	54.3'
9	55°21.2'	313°59.6'	N 23°01.5'	86°41.8'	13.7'	S 14°36.1'	7.7'	54.3'
10	70°23.7'	328°59.5'	N 23°01.3'	101°14.5'	13.8'	S 14°28.4'	7.8'	54.3'
11	85°26.1'	343°59.4'	N 23°01.1'	115°47.3'	13.8'	S 14°20.7'	7.8'	54.3'
12	100°28.6'	358°59.3'	N 23°00.9'	130°20.1'	13.8'	S 14°12.8'	7.9'	54.3'
13	115°31.1'	13°59.2'	N 23°00.7'	144°52.9'	13.8'	S 14°05.0'	8.0'	54.3'
14	130°33.5'	28°59.0'	N 23°00.5'	159°25.7'	13.9'	S 13°57.0'	8.0'	54.3'
15	145°36.0'	43°58.9'	N 23°00.3'	173°58.6'	13.9'	S 13°49.0'	8.1'	54.4'
16	160°38.4'	58°58.8'	N 23°00.1'	188°31.5'	13.9'	S 13°40.9'	8.1'	54.4'
17	175°40.9'	73°58.7'	N 22°59.9'	203°04.4'	13.9'	S 13°32.8'	8.2'	54.4'
18	190°43.4'	88°58.6'	N 22°59.7'	217°37.3'	14.0'	S 13°24.6'	8.3'	54.4'
19	205°45.8'	103°58.5'	N 22°59.6'	232°10.3'	14.0'	S 13°16.3'	8.3'	54.4'
20	220°48.3'	118°58.3'	N 22°59.4'	246°43.2'	14.0'	S 13°08.0'	8.4'	54.4'
21	235°50.8'	133°58.2'	N 22°59.2'	261°16.2'	14.0'	S 12°59.6'	8.4'	54.4'
22	250°53.2'	148°58.1'	N 22°59.0'	275°49.3'	14.0'	S 12°51.1'	8.5'	54.4'
23	265°55.7'	163°58.0'	N 22°58.8'	290°22.3'	14.1'	S 12°42.6'	8.6'	54.5'

Tue Jul 3, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.2' SD = 15.7'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	280°58.2'	178°57.9'	N 22°58.6'	304°55.4'	14.1'	S 12°34.1'	8.6'	54.5'
1	296°00.6'	193°57.8'	N 22°58.4'	319°28.4'	14.1'	S 12°25.5'	8.7'	54.5'
2	311°03.1'	208°57.7'	N 22°58.2'	334°01.5'	14.1'	S 12°16.8'	8.7'	54.5'
3	326°05.6'	223°57.5'	N 22°58.0'	348°34.6'	14.1'	S 12°08.1'	8.8'	54.5'
4	341°08.0'	238°57.4'	N 22°57.8'	3°07.8'	14.2'	S 11°59.3'	8.8'	54.5'
5	356°10.5'	253°57.3'	N 22°57.6'	17°40.9'	14.2'	S 11°50.5'	8.9'	54.6'
6	11°12.9'	268°57.2'	N 22°57.4'	32°14.1'	14.2'	S 11°41.6'	8.9'	54.6'
7	26°15.4'	283°57.1'	N 22°57.2'	46°47.3'	14.2'	S 11°32.6'	9.0'	54.6'
8	41°17.9'	298°57.0'	N 22°57.0'	61°20.5'	14.2'	S 11°23.6'	9.1'	54.6'
9	56°20.3'	313°56.9'	N 22°56.8'	75°53.7'	14.2'	S 11°14.6'	9.1'	54.6'
10	71°22.8'	328°56.7'	N 22°56.6'	90°26.9'	14.2'	S 11°05.5'	9.2'	54.6'
11	86°25.3'	343°56.6'	N 22°56.4'	105°00.2'	14.3'	S 10°56.3'	9.2'	54.7'
12	101°27.7'	358°56.5'	N 22°56.2'	119°33.4'	14.3'	S 10°47.1'	9.3'	54.7'
13	116°30.2'	13°56.4'	N 22°56.0'	134°06.7'	14.3'	S 10°37.9'	9.3'	54.7'
14	131°32.7'	28°56.3'	N 22°55.7'	148°40.0'	14.3'	S 10°28.6'	9.4'	54.7'
15	146°35.1'	43°56.2'	N 22°55.5'	163°13.3'	14.3'	S 10°19.2'	9.4'	54.7'
16	161°37.6'	58°56.1'	N 22°55.3'	177°46.6'	14.3'	S 10°09.8'	9.5'	54.7'
17	176°40.0'	73°55.9'	N 22°55.1'	192°20.0'	14.3'	S 10°00.3'	9.5'	54.8'
18	191°42.5'	88°55.8'	N 22°54.9'	206°53.3'	14.3'	S 9°50.8'	9.5'	54.8'
19	206°45.0'	103°55.7'	N 22°54.7'	221°26.6'	14.4'	S 9°41.3'	9.6'	54.8'
20	221°47.4'	118°55.6'	N 22°54.5'	236°00.0'	14.4'	S 9°31.7'	9.6'	54.8'
21	236°49.9'	133°55.5'	N 22°54.3'	250°33.4'	14.4'	S 9°22.1'	9.7'	54.8'
22	251°52.4'	148°55.4'	N 22°54.1'	265°06.7'	14.4'	S 9°12.4'	9.7'	54.9'
23	266°54.8'	163°55.3'	N 22°53.9'	279°40.1'	14.4'	S 9°02.6'	9.8'	54.9'

Wed Jul 4, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.2' SD = 15.7'		SD = 15.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	281°57.3'	178°55.2'	N 22°53.6'	294°13.5'	14.4'	S 8°52.9'	9.8'	54.9'
1	296°59.8'	193°55.0'	N 22°53.4'	308°46.9'	14.4'	S 8°43.0'	9.9'	54.9'
2	312°02.2'	208°54.9'	N 22°53.2'	323°20.3'	14.4'	S 8°33.2'	9.9'	54.9'
3	327°04.7'	223°54.8'	N 22°53.0'	337°53.7'	14.4'	S 8°23.3'	9.9'	55.0'
4	342°07.2'	238°54.7'	N 22°52.8'	352°27.1'	14.4'	S 8°13.3'	10.0'	55.0'
5	357°09.6'	253°54.6'	N 22°52.6'	7°00.6'	14.4'	S 8°03.3'	10.0'	55.0'
6	12°12.1'	268°54.5'	N 22°52.3'	21°34.0'	14.4'	S 7°53.3'	10.1'	55.0'
7	27°14.5'	283°54.4'	N 22°52.1'	36°07.4'	14.4'	S 7°43.2'	10.1'	55.0'
8	42°17.0'	298°54.3'	N 22°51.9'	50°40.8'	14.4'	S 7°33.1'	10.2'	55.1'
9	57°19.5'	313°54.1'	N 22°51.7'	65°14.3'	14.4'	S 7°23.0'	10.2'	55.1'
10	72°21.9'	328°54.0'	N 22°51.5'	79°47.7'	14.4'	S 7°12.8'	10.2'	55.1'
11	87°24.4'	343°53.9'	N 22°51.3'	94°21.1'	14.4'	S 7°02.6'	10.3'	55.1'
12	102°26.9'	358°53.8'	N 22°51.0'	108°54.5'	14.4'	S 6°52.3'	10.3'	55.2'
13	117°29.3'	13°53.7'	N 22°50.8'	123°28.0'	14.4'	S 6°42.0'	10.3'	55.2'
14	132°31.8'	28°53.6'	N 22°50.6'	138°01.4'	14.4'	S 6°31.6'	10.4'	55.2'
15	147°34.3'	43°53.5'	N 22°50.4'	152°34.8'	14.4'	S 6°21.3'	10.4'	55.2'
16	162°36.7'	58°53.4'	N 22°50.1'	167°08.2'	14.4'	S 6°10.9'	10.4'	55.2'
17	177°39.2'	73°53.3'	N 22°49.9'	181°41.6'	14.4'	S 6°00.4'	10.5'	55.3'
18	192°41.7'	88°53.1'	N 22°49.7'	196°15.0'	14.4'	S 5°49.9'	10.5'	55.3'
19	207°44.1'	103°53.0'	N 22°49.5'	210°48.4'	14.4'	S 5°39.4'	10.5'	55.3'
20	222°46.6'	118°52.9'	N 22°49.2'	225°21.8'	14.4'	S 5°28.9'	10.6'	55.3'
21	237°49.0'	133°52.8'	N 22°49.0'	239°55.2'	14.4'	S 5°18.3'	10.6'	55.4'
22	252°51.5'	148°52.7'	N 22°48.8'	254°28.6'	14.4'	S 5°07.7'	10.6'	55.4'
23	267°54.0'	163°52.6'	N 22°48.5'	269°01.9'	14.4'	S 4°57.1'	10.7'	55.4'

Thu Jul 5, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.2' SD = 15.7'		SD = 15.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	282°56.4'	178°52.5'	N 22°48.3'	283°35.3'	14.3'	S 4°46.4'	10.7'	55.5'
1	297°58.9'	193°52.4'	N 22°48.1'	298°08.6'	14.3'	S 4°35.7'	10.7'	55.5'
2	313°01.4'	208°52.3'	N 22°47.9'	312°42.0'	14.3'	S 4°25.0'	10.8'	55.5'
3	328°03.8'	223°52.2'	N 22°47.6'	327°15.3'	14.3'	S 4°14.2'	10.8'	55.5'
4	343°06.3'	238°52.1'	N 22°47.4'	341°48.6'	14.3'	S 4°03.4'	10.8'	55.6'
5	358°08.8'	253°51.9'	N 22°47.2'	356°21.9'	14.3'	S 3°52.6'	10.8'	55.6'
6	13°11.2'	268°51.8'	N 22°46.9'	10°55.2'	14.3'	S 3°41.7'	10.9'	55.6'
7	28°13.7'	283°51.7'	N 22°46.7'	25°28.4'	14.2'	S 3°30.9'	10.9'	55.6'
8	43°16.1'	298°51.6'	N 22°46.4'	40°01.7'	14.2'	S 3°20.0'	10.9'	55.7'
9	58°18.6'	313°51.5'	N 22°46.2'	54°34.9'	14.2'	S 3°09.1'	10.9'	55.7'
10	73°21.1'	328°51.4'	N 22°46.0'	69°08.1'	14.2'	S 2°58.1'	11.0'	55.7'
11	88°23.5'	343°51.3'	N 22°45.7'	83°41.3'	14.2'	S 2°47.2'	11.0'	55.8'
12	103°26.0'	358°51.2'	N 22°45.5'	98°14.5'	14.1'	S 2°36.2'	11.0'	55.8'
13	118°28.5'	13°51.1'	N 22°45.3'	112°47.6'	14.1'	S 2°25.2'	11.0'	55.8'
14	133°30.9'	28°51.0'	N 22°45.0'	127°20.7'	14.1'	S 2°14.1'	11.1'	55.8'
15	148°33.4'	43°50.9'	N 22°44.8'	141°53.8'	14.1'	S 2°03.1'	11.1'	55.9'
16	163°35.9'	58°50.8'	N 22°44.5'	156°26.9'	14.1'	S 1°52.0'	11.1'	55.9'
17	178°38.3'	73°50.7'	N 22°44.3'	170°60.0'	14.0'	S 1°40.9'	11.1'	55.9'
18	193°40.8'	88°50.5'	N 22°44.1'	185°33.0'	14.0'	S 1°29.8'	11.1'	56.0'
19	208°43.3'	103°50.4'	N 22°43.8'	200°06.0'	14.0'	S 1°18.7'	11.1'	56.0'
20	223°45.7'	118°50.3'	N 22°43.6'	214°39.0'	13.9'	S 1°07.5'	11.2'	56.0'
21	238°48.2'	133°50.2'	N 22°43.3'	229°11.9'	13.9'	S 0°56.3'	11.2'	56.1'
22	253°50.6'	148°50.1'	N 22°43.1'	243°44.9'	13.9'	S 0°45.2'	11.2'	56.1'
23	268°53.1'	163°50.0'	N 22°42.8'	258°17.7'	13.9'	S 0°34.0'	11.2'	56.1'

Fri Jul 6, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.3' SD = 15.7'		SD = 15.4'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	283°55.6'	178°49.9'	N 22°42.6'	272°50.6'	13.8'	S 0°22.7'	11.2'	56.1'
1	298°58.0'	193°49.8'	N 22°42.3'	287°23.4'	13.8'	S 0°11.5'	11.2'	56.2'
2	314°00.5'	208°49.7'	N 22°42.1'	301°56.2'	13.8'	S 0°00.3'	11.3'	56.2'
3	329°03.0'	223°49.6'	N 22°41.8'	316°29.0'	13.7'	N 0°11.0'	11.3'	56.2'
4	344°05.4'	238°49.5'	N 22°41.6'	331°01.7'	13.7'	N 0°22.2'	11.3'	56.3'
5	359°07.9'	253°49.4'	N 22°41.3'	345°34.4'	13.7'	N 0°33.5'	11.3'	56.3'
6	14°10.4'	268°49.3'	N 22°41.1'	0°07.1'	13.6'	N 0°44.8'	11.3'	56.3'
7	29°12.8'	283°49.2'	N 22°40.8'	14°39.7'	13.6'	N 0°56.1'	11.3'	56.4'
8	44°15.3'	298°49.1'	N 22°40.6'	29°12.3'	13.5'	N 1°07.4'	11.3'	56.4'
9	59°17.8'	313°49.0'	N 22°40.3'	43°44.8'	13.5'	N 1°18.7'	11.3'	56.4'
10	74°20.2'	328°48.9'	N 22°40.1'	58°17.3'	13.5'	N 1°30.1'	11.3'	56.5'
11	89°22.7'	343°48.8'	N 22°39.8'	72°49.8'	13.4'	N 1°41.4'	11.3'	56.5'
12	104°25.1'	358°48.7'	N 22°39.6'	87°22.2'	13.4'	N 1°52.7'	11.3'	56.5'
13	119°27.6'	13°48.5'	N 22°39.3'	101°54.6'	13.3'	N 2°04.1'	11.3'	56.6'
14	134°30.1'	28°48.4'	N 22°39.1'	116°26.9'	13.3'	N 2°15.4'	11.3'	56.6'
15	149°32.5'	43°48.3'	N 22°38.8'	130°59.2'	13.2'	N 2°26.7'	11.4'	56.6'
16	164°35.0'	58°48.2'	N 22°38.5'	145°31.4'	13.2'	N 2°38.1'	11.4'	56.7'
17	179°37.5'	73°48.1'	N 22°38.3'	160°03.6'	13.1'	N 2°49.4'	11.4'	56.7'
18	194°39.9'	88°48.0'	N 22°38.0'	174°35.8'	13.1'	N 3°00.8'	11.4'	56.8'
19	209°42.4'	103°47.9'	N 22°37.8'	189°07.9'	13.0'	N 3°12.2'	11.4'	56.8'
20	224°44.9'	118°47.8'	N 22°37.5'	203°39.9'	13.0'	N 3°23.5'	11.4'	56.8'
21	239°47.3'	133°47.7'	N 22°37.3'	218°11.9'	12.9'	N 3°34.9'	11.3'	56.9'
22	254°49.8'	148°47.6'	N 22°37.0'	232°43.9'	12.9'	N 3°46.2'	11.3'	56.9'
23	269°52.2'	163°47.5'	N 22°36.7'	247°15.7'	12.8'	N 3°57.6'	11.3'	56.9'

Sat Jul 7, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.3' SD = 15.7'		SD = 15.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	284°54.7'	178°47.4'	N 22°36.5'	261°47.6'	12.8'	N 4°08.9'	11.3'	57.0'
1	299°57.2'	193°47.3'	N 22°36.2'	276°19.4'	12.7'	N 4°20.2'	11.3'	57.0'
2	314°59.6'	208°47.2'	N 22°35.9'	290°51.1'	12.7'	N 4°31.6'	11.3'	57.0'
3	330°02.1'	223°47.1'	N 22°35.7'	305°22.8'	12.6'	N 4°42.9'	11.3'	57.1'
4	345°04.6'	238°47.0'	N 22°35.4'	319°54.4'	12.6'	N 4°54.2'	11.3'	57.1'
5	0°07.0'	253°46.9'	N 22°35.1'	334°26.0'	12.5'	N 5°05.5'	11.3'	57.1'
6	15°09.5'	268°46.8'	N 22°34.9'	348°57.5'	12.4'	N 5°16.8'	11.3'	57.2'
7	30°12.0'	283°46.7'	N 22°34.6'	3°28.9'	12.4'	N 5°28.1'	11.3'	57.2'
8	45°14.4'	298°46.6'	N 22°34.3'	18°00.3'	12.3'	N 5°39.4'	11.3'	57.3'
9	60°16.9'	313°46.5'	N 22°34.1'	32°31.6'	12.3'	N 5°50.6'	11.2'	57.3'
10	75°19.4'	328°46.4'	N 22°33.8'	47°02.9'	12.2'	N 6°01.9'	11.2'	57.3'
11	90°21.8'	343°46.3'	N 22°33.5'	61°34.1'	12.1'	N 6°13.1'	11.2'	57.4'
12	105°24.3'	358°46.2'	N 22°33.3'	76°05.2'	12.1'	N 6°24.3'	11.2'	57.4'
13	120°26.7'	13°46.1'	N 22°33.0'	90°36.3'	12.0'	N 6°35.5'	11.2'	57.5'
14	135°29.2'	28°46.0'	N 22°32.7'	105°07.3'	11.9'	N 6°46.7'	11.2'	57.5'
15	150°31.7'	43°45.9'	N 22°32.4'	119°38.2'	11.9'	N 6°57.9'	11.1'	57.5'
16	165°34.1'	58°45.8'	N 22°32.2'	134°09.0'	11.8'	N 7°09.0'	11.1'	57.6'
17	180°36.6'	73°45.7'	N 22°31.9'	148°39.8'	11.7'	N 7°20.2'	11.1'	57.6'
18	195°39.1'	88°45.6'	N 22°31.6'	163°10.6'	11.7'	N 7°31.3'	11.1'	57.6'
19	210°41.5'	103°45.5'	N 22°31.3'	177°41.2'	11.6'	N 7°42.3'	11.1'	57.7'
20	225°44.0'	118°45.4'	N 22°31.1'	192°11.8'	11.5'	N 7°53.4'	11.0'	57.7'
21	240°46.5'	133°45.3'	N 22°30.8'	206°42.3'	11.4'	N 8°04.4'	11.0'	57.8'
22	255°48.9'	148°45.2'	N 22°30.5'	221°12.7'	11.4'	N 8°15.4'	11.0'	57.8'
23	270°51.4'	163°45.1'	N 22°30.2'	235°43.1'	11.3'	N 8°26.4'	11.0'	57.8'

Sun Jul 8, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.3' SD = 15.7'		SD = 15.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	285°53.8'	178°45.0'	N 22°29.9'	250°13.4'	11.2'	N 8°37.4'	10.9'	57.9'
1	300°56.3'	193°44.9'	N 22°29.7'	264°43.6'	11.1'	N 8°48.3'	10.9'	57.9'
2	315°58.8'	208°44.8'	N 22°29.4'	279°13.7'	11.1'	N 8°59.2'	10.9'	58.0'
3	331°01.2'	223°44.7'	N 22°29.1'	293°43.8'	11.0'	N 9°10.0'	10.8'	58.0'
4	346°03.7'	238°44.6'	N 22°28.8'	308°13.7'	10.9'	N 9°20.9'	10.8'	58.0'
5	1°06.2'	253°44.5'	N 22°28.5'	322°43.6'	10.8'	N 9°31.7'	10.8'	58.1'
6	16°08.6'	268°44.4'	N 22°28.3'	337°13.5'	10.7'	N 9°42.4'	10.7'	58.1'
7	31°11.1'	283°44.3'	N 22°28.0'	351°43.2'	10.7'	N 9°53.1'	10.7'	58.2'
8	46°13.6'	298°44.2'	N 22°27.7'	6°12.8'	10.6'	N 10°03.8'	10.6'	58.2'
9	61°16.0'	313°44.1'	N 22°27.4'	20°42.4'	10.5'	N 10°14.5'	10.6'	58.2'
10	76°18.5'	328°44.0'	N 22°27.1'	35°11.9'	10.4'	N 10°25.1'	10.6'	58.3'
11	91°21.0'	343°43.9'	N 22°26.8'	49°41.3'	10.3'	N 10°35.6'	10.5'	58.3'
12	106°23.4'	358°43.8'	N 22°26.5'	64°10.6'	10.2'	N 10°46.1'	10.5'	58.3'
13	121°25.9'	13°43.7'	N 22°26.3'	78°39.9'	10.1'	N 10°56.6'	10.4'	58.4'
14	136°28.3'	28°43.6'	N 22°26.0'	93°09.0'	10.1'	N 11°07.1'	10.4'	58.4'
15	151°30.8'	43°43.5'	N 22°25.7'	107°38.1'	10.0'	N 11°17.4'	10.3'	58.5'
16	166°33.3'	58°43.4'	N 22°25.4'	122°07.0'	9.9'	N 11°27.8'	10.3'	58.5'
17	181°35.7'	73°43.4'	N 22°25.1'	136°35.9'	9.8'	N 11°38.1'	10.2'	58.5'
18	196°38.2'	88°43.3'	N 22°24.8'	151°04.7'	9.7'	N 11°48.3'	10.2'	58.6'
19	211°40.7'	103°43.2'	N 22°24.5'	165°33.4'	9.6'	N 11°58.5'	10.1'	58.6'
20	226°43.1'	118°43.1'	N 22°24.2'	180°02.0'	9.5'	N 12°08.6'	10.1'	58.7'
21	241°45.6'	133°43.0'	N 22°23.9'	194°30.6'	9.4'	N 12°18.7'	10.0'	58.7'
22	256°48.1'	148°42.9'	N 22°23.6'	208°59.0'	9.3'	N 12°28.7'	10.0'	58.7'
23	271°50.5'	163°42.8'	N 22°23.3'	223°27.3'	9.2'	N 12°38.7'	9.9'	58.8'

Mon Jul 9, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.3' SD = 15.7'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	286°53.0'	178°42.7'	N 22°23.0'	237°55.6'	9.2'	N 12°48.6'	9.8'	58.8'
1	301°55.5'	193°42.6'	N 22°22.8'	252°23.7'	9.1'	N 12°58.4'	9.8'	58.9'
2	316°57.9'	208°42.5'	N 22°22.5'	266°51.8'	9.0'	N 13°08.2'	9.7'	58.9'
3	332°00.4'	223°42.4'	N 22°22.2'	281°19.8'	8.9'	N 13°17.9'	9.7'	58.9'
4	347°02.8'	238°42.3'	N 22°21.9'	295°47.6'	8.8'	N 13°27.6'	9.6'	59.0'
5	2°05.3'	253°42.2'	N 22°21.6'	310°15.4'	8.7'	N 13°37.2'	9.5'	59.0'
6	17°07.8'	268°42.1'	N 22°21.3'	324°43.1'	8.6'	N 13°46.7'	9.5'	59.1'
7	32°10.2'	283°42.0'	N 22°21.0'	339°10.7'	8.5'	N 13°56.2'	9.4'	59.1'
8	47°12.7'	298°41.9'	N 22°20.7'	353°38.2'	8.4'	N 14°05.6'	9.3'	59.1'
9	62°15.2'	313°41.8'	N 22°20.4'	8°05.6'	8.3'	N 14°14.9'	9.2'	59.2'
10	77°17.6'	328°41.8'	N 22°20.1'	22°32.9'	8.2'	N 14°24.1'	9.2'	59.2'
11	92°20.1'	343°41.7'	N 22°19.8'	37°00.1'	8.1'	N 14°33.3'	9.1'	59.2'
12	107°22.6'	358°41.6'	N 22°19.4'	51°27.2'	8.0'	N 14°42.4'	9.0'	59.3'
13	122°25.0'	13°41.5'	N 22°19.1'	65°54.2'	7.9'	N 14°51.4'	8.9'	59.3'
14	137°27.5'	28°41.4'	N 22°18.8'	80°21.2'	7.8'	N 15°00.3'	8.9'	59.4'
15	152°30.0'	43°41.3'	N 22°18.5'	94°48.0'	7.7'	N 15°09.2'	8.8'	59.4'
16	167°32.4'	58°41.2'	N 22°18.2'	109°14.7'	7.6'	N 15°18.0'	8.7'	59.4'
17	182°34.9'	73°41.1'	N 22°17.9'	123°41.3'	7.5'	N 15°26.7'	8.6'	59.5'
18	197°37.3'	88°41.0'	N 22°17.6'	138°07.8'	7.4'	N 15°35.3'	8.5'	59.5'
19	212°39.8'	103°40.9'	N 22°17.3'	152°34.3'	7.3'	N 15°43.8'	8.4'	59.5'
20	227°42.3'	118°40.8'	N 22°17.0'	167°00.6'	7.2'	N 15°52.2'	8.3'	59.6'
21	242°44.7'	133°40.7'	N 22°16.7'	181°26.8'	7.1'	N 16°00.6'	8.3'	59.6'
22	257°47.2'	148°40.7'	N 22°16.4'	195°53.0'	7.0'	N 16°08.8'	8.2'	59.7'
23	272°49.7'	163°40.6'	N 22°16.1'	210°19.0'	6.9'	N 16°17.0'	8.1'	59.7'

Tue Jul 10, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.3' SD = 15.7'		SD = 16.4'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	287°52.1'	178°40.5'	N 22°15.8'	224°45.0'	6.8'	N 16°25.1'	8.0'	59.7'
1	302°54.6'	193°40.4'	N 22°15.4'	239°10.8'	6.7'	N 16°33.0'	7.9'	59.8'
2	317°57.1'	208°40.3'	N 22°15.1'	253°36.6'	6.7'	N 16°40.9'	7.8'	59.8'
3	332°59.5'	223°40.2'	N 22°14.8'	268°02.2'	6.6'	N 16°48.7'	7.7'	59.8'
4	348°02.0'	238°40.1'	N 22°14.5'	282°27.8'	6.5'	N 16°56.4'	7.6'	59.9'
5	3°04.4'	253°40.0'	N 22°14.2'	296°53.2'	6.4'	N 17°04.0'	7.5'	59.9'
6	18°06.9'	268°39.9'	N 22°13.9'	311°18.6'	6.3'	N 17°11.4'	7.4'	59.9'
7	33°09.4'	283°39.8'	N 22°13.6'	325°43.9'	6.2'	N 17°18.8'	7.3'	60.0'
8	48°11.8'	298°39.8'	N 22°13.2'	340°09.0'	6.1'	N 17°26.1'	7.2'	60.0'
9	63°14.3'	313°39.7'	N 22°12.9'	354°34.1'	6.0'	N 17°33.2'	7.1'	60.0'
10	78°16.8'	328°39.6'	N 22°12.6'	8°59.1'	5.9'	N 17°40.3'	6.9'	60.1'
11	93°19.2'	343°39.5'	N 22°12.3'	23°24.0'	5.8'	N 17°47.2'	6.8'	60.1'
12	108°21.7'	358°39.4'	N 22°12.0'	37°48.8'	5.7'	N 17°54.1'	6.7'	60.1'
13	123°24.2'	13°39.3'	N 22°11.6'	52°13.5'	5.6'	N 18°00.8'	6.6'	60.2'
14	138°26.6'	28°39.2'	N 22°11.3'	66°38.1'	5.5'	N 18°07.4'	6.5'	60.2'
15	153°29.1'	43°39.1'	N 22°11.0'	81°02.7'	5.4'	N 18°13.9'	6.4'	60.2'
16	168°31.6'	58°39.0'	N 22°10.7'	95°27.1'	5.4'	N 18°20.2'	6.2'	60.3'
17	183°34.0'	73°39.0'	N 22°10.4'	109°51.5'	5.3'	N 18°26.5'	6.1'	60.3'
18	198°36.5'	88°38.9'	N 22°10.0'	124°15.7'	5.2'	N 18°32.6'	6.0'	60.3'
19	213°38.9'	103°38.8'	N 22°09.7'	138°39.9'	5.1'	N 18°38.6'	5.9'	60.4'
20	228°41.4'	118°38.7'	N 22°09.4'	153°04.0'	5.0'	N 18°44.5'	5.8'	60.4'
21	243°43.9'	133°38.6'	N 22°09.1'	167°28.0'	4.9'	N 18°50.3'	5.6'	60.4'
22	258°46.3'	148°38.5'	N 22°08.7'	181°51.9'	4.8'	N 18°55.9'	5.5'	60.4'
23	273°48.8'	163°38.4'	N 22°08.4'	196°15.8'	4.8'	N 19°01.4'	5.4'	60.5'

Wed Jul 11, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.3' SD = 15.7'		SD = 16.6'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	288°51.3'	178°38.4'	N 22°08.1'	210°39.5'	4.7'	N 19°06.8'	5.3'	60.5'
1	303°53.7'	193°38.3'	N 22°07.8'	225°03.2'	4.6'	N 19°12.0'	5.1'	60.5'
2	318°56.2'	208°38.2'	N 22°07.4'	239°26.8'	4.5'	N 19°17.2'	5.0'	60.6'
3	333°58.7'	223°38.1'	N 22°07.1'	253°50.3'	4.4'	N 19°22.1'	4.9'	60.6'
4	349°01.1'	238°38.0'	N 22°06.8'	268°13.8'	4.4'	N 19°27.0'	4.7'	60.6'
5	4°03.6'	253°37.9'	N 22°06.4'	282°37.1'	4.3'	N 19°31.7'	4.6'	60.6'
6	19°06.1'	268°37.8'	N 22°06.1'	297°00.4'	4.2'	N 19°36.3'	4.4'	60.7'
7	34°08.5'	283°37.8'	N 22°05.8'	311°23.6'	4.1'	N 19°40.7'	4.3'	60.7'
8	49°11.0'	298°37.7'	N 22°05.4'	325°46.8'	4.1'	N 19°45.0'	4.2'	60.7'
9	64°13.4'	313°37.6'	N 22°05.1'	340°09.9'	4.0'	N 19°49.2'	4.0'	60.7'
10	79°15.9'	328°37.5'	N 22°04.8'	354°32.9'	3.9'	N 19°53.2'	3.9'	60.8'
11	94°18.4'	343°37.4'	N 22°04.4'	8°55.8'	3.9'	N 19°57.1'	3.7'	60.8'
12	109°20.8'	358°37.3'	N 22°04.1'	23°18.7'	3.8'	N 20°00.9'	3.6'	60.8'
13	124°23.3'	13°37.3'	N 22°03.8'	37°41.5'	3.7'	N 20°04.5'	3.5'	60.8'
14	139°25.8'	28°37.2'	N 22°03.4'	52°04.2'	3.7'	N 20°07.9'	3.3'	60.9'
15	154°28.2'	43°37.1'	N 22°03.1'	66°26.9'	3.6'	N 20°11.2'	3.2'	60.9'
16	169°30.7'	58°37.0'	N 22°02.8'	80°49.6'	3.6'	N 20°14.4'	3.0'	60.9'
17	184°33.2'	73°36.9'	N 22°02.4'	95°12.1'	3.5'	N 20°17.4'	2.9'	60.9'
18	199°35.6'	88°36.8'	N 22°02.1'	109°34.7'	3.5'	N 20°20.3'	2.7'	60.9'
19	214°38.1'	103°36.8'	N 22°01.7'	123°57.1'	3.4'	N 20°23.0'	2.6'	61.0'
20	229°40.6'	118°36.7'	N 22°01.4'	138°19.5'	3.4'	N 20°25.6'	2.4'	61.0'
21	244°43.0'	133°36.6'	N 22°01.1'	152°41.9'	3.3'	N 20°28.0'	2.3'	61.0'
22	259°45.5'	148°36.5'	N 22°00.7'	167°04.2'	3.3'	N 20°30.3'	2.1'	61.0'
23	274°47.9'	163°36.4'	N 22°00.4'	181°26.5'	3.2'	N 20°32.4'	2.0'	61.0'

Thu Jul 12, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 16.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	289°50.4'	178°36.3'	N 22°00.0'	195°48.7'	3.2'	N 20°34.3'	1.8'	61.1'
1	304°52.9'	193°36.3'	N 21°59.7'	210°10.9'	3.1'	N 20°36.1'	1.7'	61.1'
2	319°55.3'	208°36.2'	N 21°59.3'	224°33.0'	3.1'	N 20°37.8'	1.5'	61.1'
3	334°57.8'	223°36.1'	N 21°59.0'	238°55.1'	3.1'	N 20°39.3'	1.3'	61.1'
4	350°00.3'	238°36.0'	N 21°58.6'	253°17.2'	3.0'	N 20°40.6'	1.2'	61.1'
5	5°02.7'	253°35.9'	N 21°58.3'	267°39.3'	3.0'	N 20°41.8'	1.0'	61.1'
6	20°05.2'	268°35.9'	N 21°58.0'	282°01.3'	3.0'	N 20°42.8'	0.9'	61.2'
7	35°07.7'	283°35.8'	N 21°57.6'	296°23.2'	2.9'	N 20°43.7'	0.7'	61.2'
8	50°10.1'	298°35.7'	N 21°57.3'	310°45.2'	2.9'	N 20°44.4'	0.6'	61.2'
9	65°12.6'	313°35.6'	N 21°56.9'	325°07.1'	2.9'	N 20°45.0'	0.4'	61.2'
10	80°15.1'	328°35.5'	N 21°56.6'	339°29.0'	2.9'	N 20°45.4'	0.2'	61.2'
11	95°17.5'	343°35.5'	N 21°56.2'	353°50.9'	2.9'	N 20°45.6'	0.1'	61.2'
12	110°20.0'	358°35.4'	N 21°55.9'	8°12.8'	2.8'	N 20°45.7'	0.1'	61.2'
13	125°22.4'	13°35.3'	N 21°55.5'	22°34.6'	2.8'	N 20°45.6'	0.2'	61.2'
14	140°24.9'	28°35.2'	N 21°55.2'	36°56.4'	2.8'	N 20°45.4'	0.4'	61.3'
15	155°27.4'	43°35.1'	N 21°54.8'	51°18.2'	2.8'	N 20°45.0'	0.6'	61.3'
16	170°29.8'	58°35.1'	N 21°54.4'	65°40.1'	2.8'	N 20°44.4'	0.7'	61.3'
17	185°32.3'	73°35.0'	N 21°54.1'	80°01.9'	2.8'	N 20°43.7'	0.9'	61.3'
18	200°34.8'	88°34.9'	N 21°53.7'	94°23.7'	2.8'	N 20°42.8'	1.0'	61.3'
19	215°37.2'	103°34.8'	N 21°53.4'	108°45.5'	2.8'	N 20°41.8'	1.2'	61.3'
20	230°39.7'	118°34.8'	N 21°53.0'	123°07.2'	2.8'	N 20°40.6'	1.4'	61.3'
21	245°42.2'	133°34.7'	N 21°52.7'	137°29.0'	2.8'	N 20°39.3'	1.5'	61.3'
22	260°44.6'	148°34.6'	N 21°52.3'	151°50.8'	2.8'	N 20°37.7'	1.7'	61.3'
23	275°47.1'	163°34.5'	N 21°52.0'	166°12.6'	2.8'	N 20°36.1'	1.8'	61.3'

Fri Jul 13, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 16.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	290°49.6'	178°34.4'	N 21°51.6'	180°34.5'	2.8'	N 20°34.2'	2.0'	61.3'
1	305°52.0'	193°34.4'	N 21°51.2'	194°56.3'	2.8'	N 20°32.3'	2.1'	61.3'
2	320°54.5'	208°34.3'	N 21°50.9'	209°18.1'	2.8'	N 20°30.1'	2.3'	61.3'
3	335°56.9'	223°34.2'	N 21°50.5'	223°40.0'	2.9'	N 20°27.8'	2.5'	61.3'
4	350°59.4'	238°34.1'	N 21°50.2'	238°01.8'	2.9'	N 20°25.4'	2.6'	61.3'
5	6°01.9'	253°34.1'	N 21°49.8'	252°23.7'	2.9'	N 20°22.7'	2.8'	61.3'
6	21°04.3'	268°34.0'	N 21°49.4'	266°45.6'	2.9'	N 20°20.0'	2.9'	61.3'
7	36°06.8'	283°33.9'	N 21°49.1'	281°07.6'	3.0'	N 20°17.0'	3.1'	61.3'
8	51°09.3'	298°33.8'	N 21°48.7'	295°29.5'	3.0'	N 20°14.0'	3.2'	61.3'
9	66°11.7'	313°33.8'	N 21°48.3'	309°51.5'	3.0'	N 20°10.7'	3.4'	61.3'
10	81°14.2'	328°33.7'	N 21°48.0'	324°13.5'	3.0'	N 20°07.3'	3.5'	61.3'
11	96°16.7'	343°33.6'	N 21°47.6'	338°35.5'	3.1'	N 20°03.8'	3.7'	61.3'
12	111°19.1'	358°33.5'	N 21°47.2'	352°57.6'	3.1'	N 20°00.1'	3.9'	61.3'
13	126°21.6'	13°33.5'	N 21°46.9'	7°19.7'	3.2'	N 19°56.2'	4.0'	61.3'
14	141°24.1'	28°33.4'	N 21°46.5'	21°41.9'	3.2'	N 19°52.2'	4.2'	61.3'
15	156°26.5'	43°33.3'	N 21°46.1'	36°04.1'	3.2'	N 19°48.1'	4.3'	61.3'
16	171°29.0'	58°33.2'	N 21°45.8'	50°26.3'	3.3'	N 19°43.8'	4.5'	61.3'
17	186°31.4'	73°33.2'	N 21°45.4'	64°48.6'	3.3'	N 19°39.3'	4.6'	61.3'
18	201°33.9'	88°33.1'	N 21°45.0'	79°10.9'	3.4'	N 19°34.7'	4.7'	61.3'
19	216°36.4'	103°33.0'	N 21°44.7'	93°33.3'	3.4'	N 19°30.0'	4.9'	61.3'
20	231°38.8'	118°33.0'	N 21°44.3'	107°55.7'	3.5'	N 19°25.1'	5.0'	61.3'
21	246°41.3'	133°32.9'	N 21°43.9'	122°18.1'	3.5'	N 19°20.1'	5.2'	61.3'
22	261°43.8'	148°32.8'	N 21°43.5'	136°40.7'	3.6'	N 19°14.9'	5.3'	61.3'
23	276°46.2'	163°32.7'	N 21°43.2'	151°03.2'	3.6'	N 19°09.6'	5.5'	61.3'

Sat Jul 14, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 16.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	291°48.7'	178°32.7'	N 21°42.8'	165°25.9'	3.7'	N 19°04.1'	5.6'	61.3'
1	306°51.2'	193°32.6'	N 21°42.4'	179°48.5'	3.7'	N 18°58.5'	5.7'	61.3'
2	321°53.6'	208°32.5'	N 21°42.0'	194°11.3'	3.8'	N 18°52.7'	5.9'	61.2'
3	336°56.1'	223°32.5'	N 21°41.7'	208°34.1'	3.9'	N 18°46.9'	6.0'	61.2'
4	351°58.5'	238°32.4'	N 21°41.3'	222°56.9'	3.9'	N 18°40.8'	6.2'	61.2'
5	7°01.0'	253°32.3'	N 21°40.9'	237°19.9'	4.0'	N 18°34.7'	6.3'	61.2'
6	22°03.5'	268°32.2'	N 21°40.5'	251°42.9'	4.1'	N 18°28.4'	6.4'	61.2'
7	37°05.9'	283°32.2'	N 21°40.2'	266°05.9'	4.1'	N 18°22.0'	6.6'	61.2'
8	52°08.4'	298°32.1'	N 21°39.8'	280°29.0'	4.2'	N 18°15.4'	6.7'	61.2'
9	67°10.9'	313°32.0'	N 21°39.4'	294°52.2'	4.3'	N 18°08.7'	6.8'	61.2'
10	82°13.3'	328°32.0'	N 21°39.0'	309°15.5'	4.3'	N 18°01.9'	6.9'	61.1'
11	97°15.8'	343°31.9'	N 21°38.6'	323°38.8'	4.4'	N 17°55.0'	7.1'	61.1'
12	112°18.3'	358°31.8'	N 21°38.3'	338°02.2'	4.5'	N 17°47.9'	7.2'	61.1'
13	127°20.7'	13°31.8'	N 21°37.9'	352°25.7'	4.6'	N 17°40.7'	7.3'	61.1'
14	142°23.2'	28°31.7'	N 21°37.5'	6°49.3'	4.6'	N 17°33.4'	7.4'	61.1'
15	157°25.7'	43°31.6'	N 21°37.1'	21°12.9'	4.7'	N 17°26.0'	7.6'	61.1'
16	172°28.1'	58°31.6'	N 21°36.7'	35°36.6'	4.8'	N 17°18.4'	7.7'	61.0'
17	187°30.6'	73°31.5'	N 21°36.3'	50°00.4'	4.9'	N 17°10.7'	7.8'	61.0'
18	202°33.0'	88°31.4'	N 21°35.9'	64°24.2'	4.9'	N 17°02.9'	7.9'	61.0'
19	217°35.5'	103°31.3'	N 21°35.6'	78°48.2'	5.0'	N 16°55.0'	8.0'	61.0'
20	232°38.0'	118°31.3'	N 21°35.2'	93°12.2'	5.1'	N 16°47.0'	8.1'	61.0'
21	247°40.4'	133°31.2'	N 21°34.8'	107°36.3'	5.2'	N 16°38.9'	8.2'	60.9'
22	262°42.9'	148°31.1'	N 21°34.4'	122°00.5'	5.3'	N 16°30.6'	8.4'	60.9'
23	277°45.4'	163°31.1'	N 21°34.0'	136°24.8'	5.3'	N 16°22.3'	8.5'	60.9'

Sun Jul 15, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 16.5'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	292°47.8'	178°31.0'	N 21°33.6'	150°49.1'	5.4'	N 16°13.8'	8.6'	60.9'
1	307°50.3'	193°30.9'	N 21°33.2'	165°13.5'	5.5'	N 16°05.2'	8.7'	60.9'
2	322°52.8'	208°30.9'	N 21°32.8'	179°38.0'	5.6'	N 15°56.5'	8.8'	60.8'
3	337°55.2'	223°30.8'	N 21°32.4'	194°02.6'	5.7'	N 15°47.8'	8.9'	60.8'
4	352°57.7'	238°30.8'	N 21°32.1'	208°27.3'	5.8'	N 15°38.9'	9.0'	60.8'
5	8°00.2'	253°30.7'	N 21°31.7'	222°52.1'	5.9'	N 15°29.9'	9.1'	60.8'
6	23°02.6'	268°30.6'	N 21°31.3'	237°17.0'	5.9'	N 15°20.8'	9.2'	60.7'
7	38°05.1'	283°30.6'	N 21°30.9'	251°41.9'	6.0'	N 15°11.6'	9.3'	60.7'
8	53°07.5'	298°30.5'	N 21°30.5'	266°06.9'	6.1'	N 15°02.4'	9.4'	60.7'
9	68°10.0'	313°30.4'	N 21°30.1'	280°32.1'	6.2'	N 14°53.0'	9.5'	60.7'
10	83°12.5'	328°30.4'	N 21°29.7'	294°57.3'	6.3'	N 14°43.5'	9.6'	60.6'
11	98°14.9'	343°30.3'	N 21°29.3'	309°22.6'	6.4'	N 14°34.0'	9.6'	60.6'
12	113°17.4'	358°30.2'	N 21°28.9'	323°47.9'	6.5'	N 14°24.3'	9.7'	60.6'
13	128°19.9'	13°30.2'	N 21°28.5'	338°13.4'	6.6'	N 14°14.6'	9.8'	60.6'
14	143°22.3'	28°30.1'	N 21°28.1'	352°39.0'	6.6'	N 14°04.8'	9.9'	60.5'
15	158°24.8'	43°30.0'	N 21°27.7'	7°04.6'	6.7'	N 13°54.9'	10.0'	60.5'
16	173°27.3'	58°30.0'	N 21°27.3'	21°30.3'	6.8'	N 13°44.9'	10.1'	60.5'
17	188°29.7'	73°29.9'	N 21°26.9'	35°56.2'	6.9'	N 13°34.9'	10.1'	60.5'
18	203°32.2'	88°29.9'	N 21°26.5'	50°22.1'	7.0'	N 13°24.7'	10.2'	60.4'
19	218°34.7'	103°29.8'	N 21°26.1'	64°48.1'	7.1'	N 13°14.5'	10.3'	60.4'
20	233°37.1'	118°29.7'	N 21°25.7'	79°14.2'	7.2'	N 13°04.2'	10.4'	60.4'
21	248°39.6'	133°29.7'	N 21°25.3'	93°40.3'	7.3'	N 12°53.9'	10.4'	60.3'
22	263°42.0'	148°29.6'	N 21°24.9'	108°06.6'	7.4'	N 12°43.4'	10.5'	60.3'
23	278°44.5'	163°29.5'	N 21°24.5'	122°33.0'	7.4'	N 12°32.9'	10.6'	60.3'

Mon Jul 16, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 16.3'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	293°47.0'	178°29.5'	N 21°24.1'	136°59.4'	7.5'	N 12°22.3'	10.6'	60.2'
1	308°49.4'	193°29.4'	N 21°23.7'	151°25.9'	7.6'	N 12°11.7'	10.7'	60.2'
2	323°51.9'	208°29.4'	N 21°23.3'	165°52.6'	7.7'	N 12°01.0'	10.8'	60.2'
3	338°54.4'	223°29.3'	N 21°22.9'	180°19.3'	7.8'	N 11°50.2'	10.8'	60.2'
4	353°56.8'	238°29.2'	N 21°22.4'	194°46.1'	7.9'	N 11°39.4'	10.9'	60.1'
5	8°59.3'	253°29.2'	N 21°22.0'	209°12.9'	8.0'	N 11°28.5'	11.0'	60.1'
6	24°01.8'	268°29.1'	N 21°21.6'	223°39.9'	8.1'	N 11°17.5'	11.0'	60.1'
7	39°04.2'	283°29.1'	N 21°21.2'	238°06.9'	8.1'	N 11°06.5'	11.1'	60.0'
8	54°06.7'	298°29.0'	N 21°20.8'	252°34.1'	8.2'	N 10°55.5'	11.1'	60.0'
9	69°09.1'	313°28.9'	N 21°20.4'	267°01.3'	8.3'	N 10°44.3'	11.2'	60.0'
10	84°11.6'	328°28.9'	N 21°20.0'	281°28.6'	8.4'	N 10°33.2'	11.2'	59.9'
11	99°14.1'	343°28.8'	N 21°19.6'	295°56.0'	8.5'	N 10°21.9'	11.3'	59.9'
12	114°16.5'	358°28.8'	N 21°19.2'	310°23.5'	8.6'	N 10°10.7'	11.3'	59.9'
13	129°19.0'	13°28.7'	N 21°18.8'	324°51.0'	8.6'	N 9°59.3'	11.4'	59.8'
14	144°21.5'	28°28.7'	N 21°18.3'	339°18.7'	8.7'	N 9°48.0'	11.4'	59.8'
15	159°23.9'	43°28.6'	N 21°17.9'	353°46.4'	8.8'	N 9°36.6'	11.5'	59.7'
16	174°26.4'	58°28.5'	N 21°17.5'	8°14.2'	8.9'	N 9°25.1'	11.5'	59.7'
17	189°28.9'	73°28.5'	N 21°17.1'	22°42.1'	9.0'	N 9°13.6'	11.5'	59.7'
18	204°31.3'	88°28.4'	N 21°16.7'	37°10.1'	9.0'	N 9°02.1'	11.6'	59.6'
19	219°33.8'	103°28.4'	N 21°16.3'	51°38.1'	9.1'	N 8°50.5'	11.6'	59.6'
20	234°36.3'	118°28.3'	N 21°15.8'	66°06.2'	9.2'	N 8°38.9'	11.7'	59.6'
21	249°38.7'	133°28.3'	N 21°15.4'	80°34.4'	9.3'	N 8°27.2'	11.7'	59.5'
22	264°41.2'	148°28.2'	N 21°15.0'	95°02.7'	9.4'	N 8°15.5'	11.7'	59.5'
23	279°43.6'	163°28.1'	N 21°14.6'	109°31.1'	9.4'	N 8°03.8'	11.8'	59.5'



Tue Jul 17, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 16.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	294°46.1'	178°28.1'	N 21°14.2'	123°59.5'	9.5'	N 7°52.0'	11.8'	59.4'
1	309°48.6'	193°28.0'	N 21°13.7'	138°28.0'	9.6'	N 7°40.3'	11.8'	59.4'
2	324°51.0'	208°28.0'	N 21°13.3'	152°56.6'	9.7'	N 7°28.5'	11.8'	59.4'
3	339°53.5'	223°27.9'	N 21°12.9'	167°25.3'	9.7'	N 7°16.6'	11.9'	59.3'
4	354°56.0'	238°27.9'	N 21°12.5'	181°54.0'	9.8'	N 7°04.7'	11.9'	59.3'
5	9°58.4'	253°27.8'	N 21°12.1'	196°22.8'	9.9'	N 6°52.9'	11.9'	59.2'
6	25°00.9'	268°27.8'	N 21°11.6'	210°51.7'	10.0'	N 6°40.9'	11.9'	59.2'
7	40°03.4'	283°27.7'	N 21°11.2'	225°20.7'	10.0'	N 6°29.0'	12.0'	59.2'
8	55°05.8'	298°27.7'	N 21°10.8'	239°49.7'	10.1'	N 6°17.0'	12.0'	59.1'
9	70°08.3'	313°27.6'	N 21°10.4'	254°18.8'	10.2'	N 6°05.1'	12.0'	59.1'
10	85°10.8'	328°27.6'	N 21°09.9'	268°47.9'	10.2'	N 5°53.1'	12.0'	59.1'
11	100°13.2'	343°27.5'	N 21°09.5'	283°17.2'	10.3'	N 5°41.1'	12.0'	59.0'
12	115°15.7'	358°27.4'	N 21°09.1'	297°46.5'	10.4'	N 5°29.0'	12.0'	59.0'
13	130°18.1'	13°27.4'	N 21°08.7'	312°15.8'	10.4'	N 5°17.0'	12.1'	58.9'
14	145°20.6'	28°27.3'	N 21°08.2'	326°45.3'	10.5'	N 5°04.9'	12.1'	58.9'
15	160°23.1'	43°27.3'	N 21°07.8'	341°14.8'	10.6'	N 4°52.9'	12.1'	58.9'
16	175°25.5'	58°27.2'	N 21°07.4'	355°44.3'	10.6'	N 4°40.8'	12.1'	58.8'
17	190°28.0'	73°27.2'	N 21°06.9'	10°13.9'	10.7'	N 4°28.7'	12.1'	58.8'
18	205°30.5'	88°27.1'	N 21°06.5'	24°43.6'	10.7'	N 4°16.6'	12.1'	58.8'
19	220°32.9'	103°27.1'	N 21°06.1'	39°13.4'	10.8'	N 4°04.5'	12.1'	58.7'
20	235°35.4'	118°27.0'	N 21°05.6'	53°43.2'	10.9'	N 3°52.4'	12.1'	58.7'
21	250°37.9'	133°27.0'	N 21°05.2'	68°13.0'	10.9'	N 3°40.3'	12.1'	58.6'
22	265°40.3'	148°26.9'	N 21°04.8'	82°43.0'	11.0'	N 3°28.2'	12.1'	58.6'
23	280°42.8'	163°26.9'	N 21°04.3'	97°13.0'	11.0'	N 3°16.1'	12.1'	58.6'

Wed Jul 18, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.7'		SD = 15.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	295°45.2'	178°26.8'	N 21°03.9'	111°43.0'	11.1'	N 3°04.0'	12.1'	58.5'
1	310°47.7'	193°26.8'	N 21°03.5'	126°13.1'	11.2'	N 2°51.8'	12.1'	58.5'
2	325°50.2'	208°26.7'	N 21°03.0'	140°43.2'	11.2'	N 2°39.7'	12.1'	58.4'
3	340°52.6'	223°26.7'	N 21°02.6'	155°13.5'	11.3'	N 2°27.6'	12.1'	58.4'
4	355°55.1'	238°26.6'	N 21°02.2'	169°43.7'	11.3'	N 2°15.5'	12.1'	58.4'
5	10°57.6'	253°26.6'	N 21°01.7'	184°14.0'	11.4'	N 2°03.4'	12.1'	58.3'
6	26°00.0'	268°26.5'	N 21°01.3'	198°44.4'	11.4'	N 1°51.3'	12.1'	58.3'
7	41°02.5'	283°26.5'	N 21°00.8'	213°14.8'	11.5'	N 1°39.2'	12.1'	58.3'
8	56°05.0'	298°26.4'	N 21°00.4'	227°45.3'	11.5'	N 1°27.1'	12.1'	58.2'
9	71°07.4'	313°26.4'	N 20°60.0'	242°15.8'	11.6'	N 1°15.1'	12.1'	58.2'
10	86°09.9'	328°26.4'	N 20°59.5'	256°46.4'	11.6'	N 1°03.0'	12.1'	58.1'
11	101°12.4'	343°26.3'	N 20°59.1'	271°17.0'	11.7'	N 0°50.9'	12.0'	58.1'
12	116°14.8'	358°26.3'	N 20°58.6'	285°47.6'	11.7'	N 0°38.9'	12.0'	58.1'
13	131°17.3'	13°26.2'	N 20°58.2'	300°18.3'	11.7'	N 0°26.9'	12.0'	58.0'
14	146°19.7'	28°26.2'	N 20°57.7'	314°49.1'	11.8'	N 0°14.8'	12.0'	58.0'
15	161°22.2'	43°26.1'	N 20°57.3'	329°19.9'	11.8'	N 0°02.8'	12.0'	58.0'
16	176°24.7'	58°26.1'	N 20°56.9'	343°50.7'	11.9'	S 0°09.1'	12.0'	57.9'
17	191°27.1'	73°26.0'	N 20°56.4'	358°21.6'	11.9'	S 0°21.1'	12.0'	57.9'
18	206°29.6'	88°26.0'	N 20°56.0'	12°52.5'	12.0'	S 0°33.1'	11.9'	57.8'
19	221°32.1'	103°25.9'	N 20°55.5'	27°23.4'	12.0'	S 0°45.0'	11.9'	57.8'
20	236°34.5'	118°25.9'	N 20°55.1'	41°54.4'	12.0'	S 0°56.9'	11.9'	57.8'
21	251°37.0'	133°25.8'	N 20°54.6'	56°25.5'	12.1'	S 1°08.8'	11.9'	57.7'
22	266°39.5'	148°25.8'	N 20°54.2'	70°56.5'	12.1'	S 1°20.7'	11.8'	57.7'
23	281°41.9'	163°25.8'	N 20°53.7'	85°27.7'	12.1'	S 1°32.5'	11.8'	57.7'

Thu Jul 19, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 15.6'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	296°44.4'	178°25.7'	N 20°53.3'	99°58.8'	12.2'	S 1°44.3'	11.8'	57.6'
1	311°46.8'	193°25.7'	N 20°52.8'	114°30.0'	12.2'	S 1°56.1'	11.8'	57.6'
2	326°49.3'	208°25.6'	N 20°52.4'	129°01.2'	12.2'	S 2°07.9'	11.7'	57.5'
3	341°51.8'	223°25.6'	N 20°51.9'	143°32.4'	12.3'	S 2°19.7'	11.7'	57.5'
4	356°54.2'	238°25.5'	N 20°51.5'	158°03.7'	12.3'	S 2°31.4'	11.7'	57.5'
5	11°56.7'	253°25.5'	N 20°51.0'	172°35.0'	12.3'	S 2°43.1'	11.7'	57.4'
6	26°59.2'	268°25.5'	N 20°50.6'	187°06.3'	12.4'	S 2°54.7'	11.6'	57.4'
7	42°01.6'	283°25.4'	N 20°50.1'	201°37.7'	12.4'	S 3°06.4'	11.6'	57.4'
8	57°04.1'	298°25.4'	N 20°49.7'	216°09.1'	12.4'	S 3°18.0'	11.6'	57.3'
9	72°06.6'	313°25.3'	N 20°49.2'	230°40.5'	12.5'	S 3°29.6'	11.5'	57.3'
10	87°09.0'	328°25.3'	N 20°48.8'	245°12.0'	12.5'	S 3°41.1'	11.5'	57.2'
11	102°11.5'	343°25.2'	N 20°48.3'	259°43.5'	12.5'	S 3°52.6'	11.5'	57.2'
12	117°14.0'	358°25.2'	N 20°47.8'	274°15.0'	12.5'	S 4°04.1'	11.4'	57.2'
13	132°16.4'	13°25.2'	N 20°47.4'	288°46.5'	12.5'	S 4°15.5'	11.4'	57.1'
14	147°18.9'	28°25.1'	N 20°46.9'	303°18.0'	12.6'	S 4°26.9'	11.4'	57.1'
15	162°21.3'	43°25.1'	N 20°46.5'	317°49.6'	12.6'	S 4°38.3'	11.3'	57.1'
16	177°23.8'	58°25.0'	N 20°46.0'	332°21.2'	12.6'	S 4°49.6'	11.3'	57.0'
17	192°26.3'	73°25.0'	N 20°45.5'	346°52.8'	12.6'	S 5°00.9'	11.3'	57.0'
18	207°28.7'	88°25.0'	N 20°45.1'	1°24.5'	12.7'	S 5°12.2'	11.2'	57.0'
19	222°31.2'	103°24.9'	N 20°44.6'	15°56.1'	12.7'	S 5°23.4'	11.2'	56.9'
20	237°33.7'	118°24.9'	N 20°44.2'	30°27.8'	12.7'	S 5°34.6'	11.1'	56.9'
21	252°36.1'	133°24.9'	N 20°43.7'	44°59.5'	12.7'	S 5°45.8'	11.1'	56.9'
22	267°38.6'	148°24.8'	N 20°43.2'	59°31.2'	12.7'	S 5°56.9'	11.1'	56.8'
23	282°41.1'	163°24.8'	N 20°42.8'	74°02.9'	12.7'	S 6°07.9'	11.0'	56.8'

Fri Jul 20, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 15.4'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	297°43.5'	178°24.7'	N 20°42.3'	88°34.6'	12.8'	S 6°18.9'	11.0'	56.8'
1	312°46.0'	193°24.7'	N 20°41.8'	103°06.4'	12.8'	S 6°29.9'	10.9'	56.7'
2	327°48.5'	208°24.7'	N 20°41.4'	117°38.2'	12.8'	S 6°40.8'	10.9'	56.7'
3	342°50.9'	223°24.6'	N 20°40.9'	132°10.0'	12.8'	S 6°51.7'	10.8'	56.7'
4	357°53.4'	238°24.6'	N 20°40.4'	146°41.7'	12.8'	S 7°02.6'	10.8'	56.6'
5	12°55.8'	253°24.6'	N 20°40.0'	161°13.6'	12.8'	S 7°13.4'	10.7'	56.6'
6	27°58.3'	268°24.5'	N 20°39.5'	175°45.4'	12.8'	S 7°24.1'	10.7'	56.6'
7	43°00.8'	283°24.5'	N 20°39.0'	190°17.2'	12.8'	S 7°34.8'	10.7'	56.5'
8	58°03.2'	298°24.4'	N 20°38.6'	204°49.0'	12.8'	S 7°45.5'	10.6'	56.5'
9	73°05.7'	313°24.4'	N 20°38.1'	219°20.9'	12.9'	S 7°56.1'	10.6'	56.5'
10	88°08.2'	328°24.4'	N 20°37.6'	233°52.7'	12.9'	S 8°06.6'	10.5'	56.4'
11	103°10.6'	343°24.3'	N 20°37.2'	248°24.6'	12.9'	S 8°17.1'	10.5'	56.4'
12	118°13.1'	358°24.3'	N 20°36.7'	262°56.5'	12.9'	S 8°27.6'	10.4'	56.4'
13	133°15.6'	13°24.3'	N 20°36.2'	277°28.3'	12.9'	S 8°38.0'	10.4'	56.3'
14	148°18.0'	28°24.2'	N 20°35.7'	292°00.2'	12.9'	S 8°48.3'	10.3'	56.3'
15	163°20.5'	43°24.2'	N 20°35.3'	306°32.1'	12.9'	S 8°58.6'	10.2'	56.3'
16	178°22.9'	58°24.2'	N 20°34.8'	321°04.0'	12.9'	S 9°08.9'	10.2'	56.2'
17	193°25.4'	73°24.1'	N 20°34.3'	335°35.9'	12.9'	S 9°19.1'	10.1'	56.2'
18	208°27.9'	88°24.1'	N 20°33.8'	350°07.8'	12.9'	S 9°29.2'	10.1'	56.2'
19	223°30.3'	103°24.1'	N 20°33.4'	4°39.7'	12.9'	S 9°39.3'	10.0'	56.2'
20	238°32.8'	118°24.0'	N 20°32.9'	19°11.6'	12.9'	S 9°49.3'	10.0'	56.1'
21	253°35.3'	133°24.0'	N 20°32.4'	33°43.5'	12.9'	S 9°59.3'	9.9'	56.1'
22	268°37.7'	148°24.0'	N 20°31.9'	48°15.4'	12.9'	S 10°09.2'	9.9'	56.1'
23	283°40.2'	163°23.9'	N 20°31.5'	62°47.3'	12.9'	S 10°19.1'	9.8'	56.0'

Sat Jul 21, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 15.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	298°42.7'	178°23.9'	N 20°31.0'	77°19.2'	12.9'	S 10°28.9'	9.7'	56.0'
1	313°45.1'	193°23.9'	N 20°30.5'	91°51.1'	12.9'	S 10°38.6'	9.7'	56.0'
2	328°47.6'	208°23.8'	N 20°30.0'	106°23.0'	12.9'	S 10°48.3'	9.6'	55.9'
3	343°50.1'	223°23.8'	N 20°29.5'	120°54.9'	12.9'	S 10°57.9'	9.6'	55.9'
4	358°52.5'	238°23.8'	N 20°29.1'	135°26.8'	12.9'	S 11°07.5'	9.5'	55.9'
5	13°55.0'	253°23.7'	N 20°28.6'	149°58.7'	12.9'	S 11°17.0'	9.4'	55.9'
6	28°57.4'	268°23.7'	N 20°28.1'	164°30.5'	12.9'	S 11°26.4'	9.4'	55.8'
7	43°59.9'	283°23.7'	N 20°27.6'	179°02.4'	12.9'	S 11°35.8'	9.3'	55.8'
8	59°02.4'	298°23.7'	N 20°27.1'	193°34.3'	12.9'	S 11°45.1'	9.3'	55.8'
9	74°04.8'	313°23.6'	N 20°26.6'	208°06.2'	12.9'	S 11°54.4'	9.2'	55.8'
10	89°07.3'	328°23.6'	N 20°26.2'	222°38.0'	12.9'	S 12°03.6'	9.1'	55.7'
11	104°09.8'	343°23.6'	N 20°25.7'	237°09.9'	12.9'	S 12°12.7'	9.1'	55.7'
12	119°12.2'	358°23.5'	N 20°25.2'	251°41.7'	12.8'	S 12°21.8'	9.0'	55.7'
13	134°14.7'	13°23.5'	N 20°24.7'	266°13.6'	12.8'	S 12°30.8'	8.9'	55.6'
14	149°17.2'	28°23.5'	N 20°24.2'	280°45.4'	12.8'	S 12°39.7'	8.9'	55.6'
15	164°19.6'	43°23.5'	N 20°23.7'	295°17.2'	12.8'	S 12°48.6'	8.8'	55.6'
16	179°22.1'	58°23.4'	N 20°23.2'	309°49.1'	12.8'	S 12°57.4'	8.7'	55.6'
17	194°24.6'	73°23.4'	N 20°22.8'	324°20.9'	12.8'	S 13°06.1'	8.7'	55.5'
18	209°27.0'	88°23.4'	N 20°22.3'	338°52.7'	12.8'	S 13°14.8'	8.6'	55.5'
19	224°29.5'	103°23.3'	N 20°21.8'	353°24.5'	12.8'	S 13°23.4'	8.5'	55.5'
20	239°31.9'	118°23.3'	N 20°21.3'	7°56.2'	12.8'	S 13°31.9'	8.5'	55.5'
21	254°34.4'	133°23.3'	N 20°20.8'	22°28.0'	12.8'	S 13°40.3'	8.4'	55.4'
22	269°36.9'	148°23.3'	N 20°20.3'	36°59.8'	12.7'	S 13°48.7'	8.3'	55.4'
23	284°39.3'	163°23.2'	N 20°19.8'	51°31.5'	12.7'	S 13°57.0'	8.2'	55.4'

Sun Jul 22, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 15.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	299°41.8'	178°23.2'	N 20°19.3'	66°03.2'	12.7'	S 14°05.3'	8.2'	55.4'
1	314°44.3'	193°23.2'	N 20°18.8'	80°35.0'	12.7'	S 14°13.4'	8.1'	55.3'
2	329°46.7'	208°23.2'	N 20°18.3'	95°06.7'	12.7'	S 14°21.5'	8.0'	55.3'
3	344°49.2'	223°23.1'	N 20°17.8'	109°38.4'	12.7'	S 14°29.6'	8.0'	55.3'
4	359°51.7'	238°23.1'	N 20°17.3'	124°10.1'	12.7'	S 14°37.5'	7.9'	55.3'
5	14°54.1'	253°23.1'	N 20°16.8'	138°41.7'	12.7'	S 14°45.4'	7.8'	55.3'
6	29°56.6'	268°23.1'	N 20°16.3'	153°13.4'	12.6'	S 14°53.2'	7.7'	55.2'
7	44°59.0'	283°23.0'	N 20°15.8'	167°45.0'	12.6'	S 15°01.0'	7.7'	55.2'
8	60°01.5'	298°23.0'	N 20°15.4'	182°16.7'	12.6'	S 15°08.6'	7.6'	55.2'
9	75°04.0'	313°23.0'	N 20°14.9'	196°48.3'	12.6'	S 15°16.2'	7.5'	55.2'
10	90°06.4'	328°23.0'	N 20°14.4'	211°19.9'	12.6'	S 15°23.7'	7.4'	55.1'
11	105°08.9'	343°23.0'	N 20°13.9'	225°51.5'	12.6'	S 15°31.1'	7.4'	55.1'
12	120°11.4'	358°22.9'	N 20°13.4'	240°23.0'	12.6'	S 15°38.5'	7.3'	55.1'
13	135°13.8'	13°22.9'	N 20°12.9'	254°54.6'	12.5'	S 15°45.8'	7.2'	55.1'
14	150°16.3'	28°22.9'	N 20°12.4'	269°26.1'	12.5'	S 15°53.0'	7.1'	55.1'
15	165°18.8'	43°22.9'	N 20°11.9'	283°57.7'	12.5'	S 16°00.1'	7.0'	55.0'
16	180°21.2'	58°22.8'	N 20°11.3'	298°29.2'	12.5'	S 16°07.1'	7.0'	55.0'
17	195°23.7'	73°22.8'	N 20°10.8'	313°00.7'	12.5'	S 16°14.1'	6.9'	55.0'
18	210°26.2'	88°22.8'	N 20°10.3'	327°32.2'	12.5'	S 16°21.0'	6.8'	55.0'
19	225°28.6'	103°22.8'	N 20°09.8'	342°03.6'	12.4'	S 16°27.8'	6.7'	55.0'
20	240°31.1'	118°22.8'	N 20°09.3'	356°35.1'	12.4'	S 16°34.5'	6.6'	54.9'
21	255°33.5'	133°22.7'	N 20°08.8'	11°06.5'	12.4'	S 16°41.1'	6.6'	54.9'
22	270°36.0'	148°22.7'	N 20°08.3'	25°37.9'	12.4'	S 16°47.7'	6.5'	54.9'
23	285°38.5'	163°22.7'	N 20°07.8'	40°09.3'	12.4'	S 16°54.2'	6.4'	54.9'

Mon Jul 23, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	300°40.9'	178°22.7'	N 20°07.3'	54°40.7'	12.4'	S 17°00.6'	6.3'	54.9'
1	315°43.4'	193°22.7'	N 20°06.8'	69°12.1'	12.4'	S 17°06.9'	6.2'	54.8'
2	330°45.9'	208°22.6'	N 20°06.3'	83°43.4'	12.3'	S 17°13.1'	6.1'	54.8'
3	345°48.3'	223°22.6'	N 20°05.8'	98°14.7'	12.3'	S 17°19.3'	6.1'	54.8'
4	0°50.8'	238°22.6'	N 20°05.3'	112°46.1'	12.3'	S 17°25.4'	6.0'	54.8'
5	15°53.3'	253°22.6'	N 20°04.8'	127°17.4'	12.3'	S 17°31.3'	5.9'	54.8'
6	30°55.7'	268°22.6'	N 20°04.3'	141°48.7'	12.3'	S 17°37.2'	5.8'	54.7'
7	45°58.2'	283°22.5'	N 20°03.7'	156°19.9'	12.3'	S 17°43.0'	5.7'	54.7'
8	61°00.7'	298°22.5'	N 20°03.2'	170°51.2'	12.2'	S 17°48.8'	5.6'	54.7'
9	76°03.1'	313°22.5'	N 20°02.7'	185°22.4'	12.2'	S 17°54.4'	5.6'	54.7'
10	91°05.6'	328°22.5'	N 20°02.2'	199°53.6'	12.2'	S 17°60.0'	5.5'	54.7'
11	106°08.0'	343°22.5'	N 20°01.7'	214°24.8'	12.2'	S 18°05.4'	5.4'	54.7'
12	121°10.5'	358°22.5'	N 20°01.2'	228°56.0'	12.2'	S 18°10.8'	5.3'	54.6'
13	136°13.0'	13°22.4'	N 20°00.7'	243°27.2'	12.2'	S 18°16.1'	5.2'	54.6'
14	151°15.4'	28°22.4'	N 20°00.2'	257°58.4'	12.1'	S 18°21.3'	5.1'	54.6'
15	166°17.9'	43°22.4'	N 19°59.6'	272°29.5'	12.1'	S 18°26.4'	5.0'	54.6'
16	181°20.4'	58°22.4'	N 19°59.1'	287°00.6'	12.1'	S 18°31.5'	4.9'	54.6'
17	196°22.8'	73°22.4'	N 19°58.6'	301°31.7'	12.1'	S 18°36.4'	4.9'	54.6'
18	211°25.3'	88°22.4'	N 19°58.1'	316°02.8'	12.1'	S 18°41.3'	4.8'	54.6'
19	226°27.8'	103°22.4'	N 19°57.6'	330°33.9'	12.1'	S 18°46.0'	4.7'	54.5'
20	241°30.2'	118°22.3'	N 19°57.0'	345°05.0'	12.1'	S 18°50.7'	4.6'	54.5'
21	256°32.7'	133°22.3'	N 19°56.5'	359°36.0'	12.0'	S 18°55.3'	4.5'	54.5'
22	271°35.2'	148°22.3'	N 19°56.0'	14°07.1'	12.0'	S 18°59.8'	4.4'	54.5'
23	286°37.6'	163°22.3'	N 19°55.5'	28°38.1'	12.0'	S 19°04.2'	4.3'	54.5'

Tue Jul 24, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	301°40.1'	178°22.3'	N 19°55.0'	43°09.1'	12.0'	S 19°08.5'	4.2'	54.5'
1	316°42.5'	193°22.3'	N 19°54.4'	57°40.1'	12.0'	S 19°12.7'	4.1'	54.5'
2	331°45.0'	208°22.3'	N 19°53.9'	72°11.1'	12.0'	S 19°16.9'	4.0'	54.4'
3	346°47.5'	223°22.2'	N 19°53.4'	86°42.0'	12.0'	S 19°20.9'	3.9'	54.4'
4	1°49.9'	238°22.2'	N 19°52.9'	101°13.0'	11.9'	S 19°24.9'	3.9'	54.4'
5	16°52.4'	253°22.2'	N 19°52.4'	115°43.9'	11.9'	S 19°28.7'	3.8'	54.4'
6	31°54.9'	268°22.2'	N 19°51.8'	130°14.8'	11.9'	S 19°32.5'	3.7'	54.4'
7	46°57.3'	283°22.2'	N 19°51.3'	144°45.8'	11.9'	S 19°36.2'	3.6'	54.4'
8	61°59.8'	298°22.2'	N 19°50.8'	159°16.7'	11.9'	S 19°39.7'	3.5'	54.4'
9	77°02.3'	313°22.2'	N 19°50.3'	173°47.6'	11.9'	S 19°43.2'	3.4'	54.4'
10	92°04.7'	328°22.2'	N 19°49.7'	188°18.4'	11.9'	S 19°46.6'	3.3'	54.3'
11	107°07.2'	343°22.2'	N 19°49.2'	202°49.3'	11.9'	S 19°49.9'	3.2'	54.3'
12	122°09.6'	358°22.1'	N 19°48.7'	217°20.2'	11.8'	S 19°53.1'	3.1'	54.3'
13	137°12.1'	13°22.1'	N 19°48.1'	231°51.0'	11.8'	S 19°56.2'	3.0'	54.3'
14	152°14.6'	28°22.1'	N 19°47.6'	246°21.9'	11.8'	S 19°59.2'	2.9'	54.3'
15	167°17.0'	43°22.1'	N 19°47.1'	260°52.7'	11.8'	S 20°02.2'	2.8'	54.3'
16	182°19.5'	58°22.1'	N 19°46.6'	275°23.5'	11.8'	S 20°05.0'	2.7'	54.3'
17	197°22.0'	73°22.1'	N 19°46.0'	289°54.3'	11.8'	S 20°07.7'	2.6'	54.3'
18	212°24.4'	88°22.1'	N 19°45.5'	304°25.1'	11.8'	S 20°10.4'	2.5'	54.3'
19	227°26.9'	103°22.1'	N 19°45.0'	318°55.9'	11.8'	S 20°12.9'	2.4'	54.3'
20	242°29.4'	118°22.1'	N 19°44.4'	333°26.7'	11.8'	S 20°15.4'	2.4'	54.2'
21	257°31.8'	133°22.1'	N 19°43.9'	347°57.5'	11.8'	S 20°17.7'	2.3'	54.2'
22	272°34.3'	148°22.1'	N 19°43.4'	2°28.2'	11.8'	S 20°20.0'	2.2'	54.2'
23	287°36.8'	163°22.1'	N 19°42.8'	16°59.0'	11.8'	S 20°22.1'	2.1'	54.2'

Wed Jul 25, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.7'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	302°39.2'	178°22.0'	N 19°42.3'	31°29.8'	11.8'	S 20°24.2'	2.0'	54.2'
1	317°41.7'	193°22.0'	N 19°41.8'	46°00.5'	11.7'	S 20°26.2'	1.9'	54.2'
2	332°44.1'	208°22.0'	N 19°41.2'	60°31.3'	11.7'	S 20°28.0'	1.8'	54.2'
3	347°46.6'	223°22.0'	N 19°40.7'	75°02.0'	11.7'	S 20°29.8'	1.7'	54.2'
4	2°49.1'	238°22.0'	N 19°40.2'	89°32.8'	11.7'	S 20°31.5'	1.6'	54.2'
5	17°51.5'	253°22.0'	N 19°39.6'	104°03.5'	11.7'	S 20°33.1'	1.5'	54.2'
6	32°54.0'	268°22.0'	N 19°39.1'	118°34.2'	11.7'	S 20°34.6'	1.4'	54.2'
7	47°56.5'	283°22.0'	N 19°38.5'	133°05.0'	11.7'	S 20°36.0'	1.3'	54.1'
8	62°58.9'	298°22.0'	N 19°38.0'	147°35.7'	11.7'	S 20°37.3'	1.2'	54.1'
9	78°01.4'	313°22.0'	N 19°37.5'	162°06.4'	11.7'	S 20°38.4'	1.1'	54.1'
10	93°03.9'	328°22.0'	N 19°36.9'	176°37.1'	11.7'	S 20°39.5'	1.0'	54.1'
11	108°06.3'	343°22.0'	N 19°36.4'	191°07.9'	11.7'	S 20°40.6'	0.9'	54.1'
12	123°08.8'	358°22.0'	N 19°35.8'	205°38.6'	11.7'	S 20°41.5'	0.8'	54.1'
13	138°11.3'	13°22.0'	N 19°35.3'	220°09.3'	11.7'	S 20°42.3'	0.7'	54.1'
14	153°13.7'	28°22.0'	N 19°34.8'	234°40.0'	11.7'	S 20°43.0'	0.6'	54.1'
15	168°16.2'	43°22.0'	N 19°34.2'	249°10.7'	11.7'	S 20°43.6'	0.5'	54.1'
16	183°18.6'	58°22.0'	N 19°33.7'	263°41.5'	11.7'	S 20°44.1'	0.4'	54.1'
17	198°21.1'	73°22.0'	N 19°33.1'	278°12.2'	11.7'	S 20°44.5'	0.3'	54.1'
18	213°23.6'	88°22.0'	N 19°32.6'	292°42.9'	11.7'	S 20°44.9'	0.2'	54.1'
19	228°26.0'	103°22.0'	N 19°32.0'	307°13.7'	11.7'	S 20°45.1'	0.1'	54.1'
20	243°28.5'	118°22.0'	N 19°31.5'	321°44.4'	11.7'	S 20°45.2'	0.0'	54.1'
21	258°31.0'	133°22.0'	N 19°30.9'	336°15.1'	11.7'	S 20°45.2'	0.1'	54.1'
22	273°33.4'	148°22.0'	N 19°30.4'	350°45.9'	11.8'	S 20°45.2'	0.2'	54.1'
23	288°35.9'	163°22.0'	N 19°29.8'	5°16.6'	11.8'	S 20°45.0'	0.3'	54.0'

Thu Jul 26, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.7'		SD = 14.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	303°38.4'	178°22.0'	N 19°29.3'	19°47.4'	11.8'	S 20°44.8'	0.4'	54.0'
1	318°40.8'	193°22.0'	N 19°28.7'	34°18.2'	11.8'	S 20°44.4'	0.5'	54.0'
2	333°43.3'	208°22.0'	N 19°28.2'	48°48.9'	11.8'	S 20°44.0'	0.5'	54.0'
3	348°45.8'	223°22.0'	N 19°27.6'	63°19.7'	11.8'	S 20°43.4'	0.6'	54.0'
4	3°48.2'	238°22.0'	N 19°27.1'	77°50.5'	11.8'	S 20°42.8'	0.7'	54.0'
5	18°50.7'	253°22.0'	N 19°26.5'	92°21.3'	11.8'	S 20°42.0'	0.8'	54.0'
6	33°53.1'	268°22.0'	N 19°26.0'	106°52.1'	11.8'	S 20°41.2'	0.9'	54.0'
7	48°55.6'	283°22.0'	N 19°25.4'	121°22.9'	11.8'	S 20°40.2'	1.0'	54.0'
8	63°58.1'	298°22.0'	N 19°24.9'	135°53.7'	11.8'	S 20°39.2'	1.1'	54.0'
9	79°00.5'	313°22.0'	N 19°24.3'	150°24.5'	11.8'	S 20°38.1'	1.2'	54.0'
10	94°03.0'	328°22.0'	N 19°23.8'	164°55.4'	11.8'	S 20°36.9'	1.3'	54.0'
11	109°05.5'	343°22.0'	N 19°23.2'	179°26.2'	11.9'	S 20°35.6'	1.4'	54.0'
12	124°07.9'	358°22.0'	N 19°22.7'	193°57.1'	11.9'	S 20°34.1'	1.5'	54.0'
13	139°10.4'	13°22.0'	N 19°22.1'	208°27.9'	11.9'	S 20°32.6'	1.6'	54.0'
14	154°12.9'	28°22.0'	N 19°21.6'	222°58.8'	11.9'	S 20°31.0'	1.7'	54.0'
15	169°15.3'	43°22.0'	N 19°21.0'	237°29.7'	11.9'	S 20°29.3'	1.8'	54.0'
16	184°17.8'	58°22.0'	N 19°20.4'	252°00.6'	11.9'	S 20°27.5'	1.9'	54.0'
17	199°20.2'	73°22.0'	N 19°19.9'	266°31.6'	11.9'	S 20°25.6'	2.0'	54.0'
18	214°22.7'	88°22.0'	N 19°19.3'	281°02.5'	12.0'	S 20°23.7'	2.1'	54.0'
19	229°25.2'	103°22.0'	N 19°18.8'	295°33.5'	12.0'	S 20°21.6'	2.2'	54.0'
20	244°27.6'	118°22.0'	N 19°18.2'	310°04.4'	12.0'	S 20°19.4'	2.3'	54.0'
21	259°30.1'	133°22.0'	N 19°17.7'	324°35.4'	12.0'	S 20°17.2'	2.4'	54.0'
22	274°32.6'	148°22.0'	N 19°17.1'	339°06.4'	12.0'	S 20°14.8'	2.5'	54.0'
23	289°35.0'	163°22.0'	N 19°16.5'	353°37.4'	12.0'	S 20°12.3'	2.5'	54.0'

Fri Jul 27, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.7'		SD = 14.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	304°37.5'	178°22.0'	N 19°16.0'	8°08.5'	12.1'	S 20°09.8'	2.6'	54.0'
1	319°40.0'	193°22.0'	N 19°15.4'	22°39.5'	12.1'	S 20°07.2'	2.7'	54.0'
2	334°42.4'	208°22.0'	N 19°14.8'	37°10.6'	12.1'	S 20°04.4'	2.8'	54.0'
3	349°44.9'	223°22.0'	N 19°14.3'	51°41.7'	12.1'	S 20°01.6'	2.9'	54.0'
4	4°47.4'	238°22.0'	N 19°13.7'	66°12.8'	12.1'	S 19°58.7'	3.0'	54.0'
5	19°49.8'	253°22.0'	N 19°13.2'	80°43.9'	12.1'	S 19°55.7'	3.1'	54.0'
6	34°52.3'	268°22.0'	N 19°12.6'	95°15.1'	12.2'	S 19°52.6'	3.2'	54.0'
7	49°54.7'	283°22.1'	N 19°12.0'	109°46.3'	12.2'	S 19°49.4'	3.3'	54.0'
8	64°57.2'	298°22.1'	N 19°11.5'	124°17.5'	12.2'	S 19°46.1'	3.4'	54.0'
9	79°59.7'	313°22.1'	N 19°10.9'	138°48.7'	12.2'	S 19°42.7'	3.5'	54.0'
10	95°02.1'	328°22.1'	N 19°10.3'	153°19.9'	12.3'	S 19°39.3'	3.6'	54.0'
11	110°04.6'	343°22.1'	N 19°09.8'	167°51.1'	12.3'	S 19°35.7'	3.6'	54.0'
12	125°07.1'	358°22.1'	N 19°09.2'	182°22.4'	12.3'	S 19°32.1'	3.7'	54.0'
13	140°09.5'	13°22.1'	N 19°08.6'	196°53.7'	12.3'	S 19°28.4'	3.8'	54.0'
14	155°12.0'	28°22.1'	N 19°08.1'	211°25.0'	12.3'	S 19°24.5'	3.9'	54.0'
15	170°14.5'	43°22.1'	N 19°07.5'	225°56.4'	12.4'	S 19°20.6'	4.0'	54.0'
16	185°16.9'	58°22.1'	N 19°06.9'	240°27.7'	12.4'	S 19°16.6'	4.1'	54.0'
17	200°19.4'	73°22.1'	N 19°06.3'	254°59.1'	12.4'	S 19°12.5'	4.2'	54.0'
18	215°21.9'	88°22.2'	N 19°05.8'	269°30.5'	12.4'	S 19°08.4'	4.3'	54.0'
19	230°24.3'	103°22.2'	N 19°05.2'	284°02.0'	12.5'	S 19°04.1'	4.3'	54.0'
20	245°26.8'	118°22.2'	N 19°04.6'	298°33.4'	12.5'	S 18°59.8'	4.4'	54.0'
21	260°29.2'	133°22.2'	N 19°04.1'	313°04.9'	12.5'	S 18°55.3'	4.5'	54.0'
22	275°31.7'	148°22.2'	N 19°03.5'	327°36.4'	12.5'	S 18°50.8'	4.6'	54.0'
23	290°34.2'	163°22.2'	N 19°02.9'	342°08.0'	12.6'	S 18°46.2'	4.7'	54.0'

Sat Jul 28, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 14.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	305°36.6'	178°22.2'	N 19°02.3'	356°39.5'	12.6'	S 18°41.5'	4.8'	54.0'
1	320°39.1'	193°22.2'	N 19°01.8'	11°11.1'	12.6'	S 18°36.8'	4.9'	54.0'
2	335°41.6'	208°22.2'	N 19°01.2'	25°42.7'	12.6'	S 18°31.9'	4.9'	54.0'
3	350°44.0'	223°22.3'	N 19°00.6'	40°14.4'	12.7'	S 18°27.0'	5.0'	54.0'
4	5°46.5'	238°22.3'	N 19°00.0'	54°46.1'	12.7'	S 18°21.9'	5.1'	54.0'
5	20°49.0'	253°22.3'	N 18°59.5'	69°17.7'	12.7'	S 18°16.8'	5.2'	54.0'
6	35°51.4'	268°22.3'	N 18°58.9'	83°49.5'	12.7'	S 18°11.6'	5.3'	54.0'
7	50°53.9'	283°22.3'	N 18°58.3'	98°21.2'	12.8'	S 18°06.4'	5.4'	54.0'
8	65°56.4'	298°22.3'	N 18°57.7'	112°53.0'	12.8'	S 18°01.0'	5.4'	54.0'
9	80°58.8'	313°22.3'	N 18°57.1'	127°24.8'	12.8'	S 17°55.6'	5.5'	54.0'
10	96°01.3'	328°22.4'	N 18°56.6'	141°56.6'	12.9'	S 17°50.1'	5.6'	54.0'
11	111°03.7'	343°22.4'	N 18°56.0'	156°28.5'	12.9'	S 17°44.5'	5.7'	54.0'
12	126°06.2'	358°22.4'	N 18°55.4'	171°00.4'	12.9'	S 17°38.8'	5.8'	54.1'
13	141°08.7'	13°22.4'	N 18°54.8'	185°32.3'	12.9'	S 17°33.0'	5.8'	54.1'
14	156°11.1'	28°22.4'	N 18°54.2'	200°04.2'	13.0'	S 17°27.2'	5.9'	54.1'
15	171°13.6'	43°22.4'	N 18°53.6'	214°36.2'	13.0'	S 17°21.3'	6.0'	54.1'
16	186°16.1'	58°22.4'	N 18°53.1'	229°08.2'	13.0'	S 17°15.3'	6.1'	54.1'
17	201°18.5'	73°22.5'	N 18°52.5'	243°40.2'	13.1'	S 17°09.2'	6.1'	54.1'
18	216°21.0'	88°22.5'	N 18°51.9'	258°12.2'	13.1'	S 17°03.1'	6.2'	54.1'
19	231°23.5'	103°22.5'	N 18°51.3'	272°44.3'	13.1'	S 16°56.9'	6.3'	54.1'
20	246°25.9'	118°22.5'	N 18°50.7'	287°16.4'	13.1'	S 16°50.6'	6.4'	54.1'
21	261°28.4'	133°22.5'	N 18°50.1'	301°48.6'	13.2'	S 16°44.2'	6.4'	54.1'
22	276°30.8'	148°22.5'	N 18°49.6'	316°20.7'	13.2'	S 16°37.7'	6.5'	54.1'
23	291°33.3'	163°22.6'	N 18°49.0'	330°52.9'	13.2'	S 16°31.2'	6.6'	54.1'

Sun Jul 29, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	306°35.8'	178°22.6'	N 18°48.4'	345°25.1'	13.2'	S 16°24.6'	6.7'	54.1'
1	321°38.2'	193°22.6'	N 18°47.8'	359°57.4'	13.3'	S 16°18.0'	6.7'	54.1'
2	336°40.7'	208°22.6'	N 18°47.2'	14°29.7'	13.3'	S 16°11.2'	6.8'	54.1'
3	351°43.2'	223°22.6'	N 18°46.6'	29°02.0'	13.3'	S 16°04.4'	6.9'	54.1'
4	6°45.6'	238°22.7'	N 18°46.0'	43°34.3'	13.4'	S 15°57.5'	7.0'	54.1'
5	21°48.1'	253°22.7'	N 18°45.4'	58°06.7'	13.4'	S 15°50.6'	7.0'	54.2'
6	36°50.6'	268°22.7'	N 18°44.8'	72°39.1'	13.4'	S 15°43.5'	7.1'	54.2'
7	51°53.0'	283°22.7'	N 18°44.3'	87°11.5'	13.4'	S 15°36.4'	7.2'	54.2'
8	66°55.5'	298°22.7'	N 18°43.7'	101°43.9'	13.5'	S 15°29.3'	7.2'	54.2'
9	81°58.0'	313°22.8'	N 18°43.1'	116°16.4'	13.5'	S 15°22.0'	7.3'	54.2'
10	97°00.4'	328°22.8'	N 18°42.5'	130°48.9'	13.5'	S 15°14.7'	7.4'	54.2'
11	112°02.9'	343°22.8'	N 18°41.9'	145°21.4'	13.6'	S 15°07.3'	7.4'	54.2'
12	127°05.3'	358°22.8'	N 18°41.3'	159°54.0'	13.6'	S 14°59.9'	7.5'	54.2'
13	142°07.8'	13°22.8'	N 18°40.7'	174°26.5'	13.6'	S 14°52.4'	7.6'	54.2'
14	157°10.3'	28°22.9'	N 18°40.1'	188°59.2'	13.6'	S 14°44.8'	7.6'	54.2'
15	172°12.7'	43°22.9'	N 18°39.5'	203°31.8'	13.7'	S 14°37.2'	7.7'	54.2'
16	187°15.2'	58°22.9'	N 18°38.9'	218°04.5'	13.7'	S 14°29.5'	7.8'	54.2'
17	202°17.7'	73°22.9'	N 18°38.3'	232°37.1'	13.7'	S 14°21.7'	7.8'	54.3'
18	217°20.1'	88°22.9'	N 18°37.7'	247°09.9'	13.7'	S 14°13.9'	7.9'	54.3'
19	232°22.6'	103°23.0'	N 18°37.1'	261°42.6'	13.8'	S 14°06.0'	8.0'	54.3'
20	247°25.1'	118°23.0'	N 18°36.5'	276°15.4'	13.8'	S 13°58.0'	8.0'	54.3'
21	262°27.5'	133°23.0'	N 18°35.9'	290°48.2'	13.8'	S 13°50.0'	8.1'	54.3'
22	277°30.0'	148°23.0'	N 18°35.3'	305°21.0'	13.8'	S 13°41.9'	8.1'	54.3'
23	292°32.5'	163°23.1'	N 18°34.7'	319°53.8'	13.9'	S 13°33.8'	8.2'	54.3'

Mon Jul 30, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	307°34.9'	178°23.1'	N 18°34.1'	334°26.7'	13.9'	S 13°25.5'	8.3'	54.3'
1	322°37.4'	193°23.1'	N 18°33.5'	348°59.6'	13.9'	S 13°17.3'	8.3'	54.3'
2	337°39.8'	208°23.1'	N 18°32.9'	3°32.5'	13.9'	S 13°09.0'	8.4'	54.3'
3	352°42.3'	223°23.2'	N 18°32.3'	18°05.4'	14.0'	S 13°00.6'	8.4'	54.4'
4	7°44.8'	238°23.2'	N 18°31.7'	32°38.4'	14.0'	S 12°52.1'	8.5'	54.4'
5	22°47.2'	253°23.2'	N 18°31.1'	47°11.4'	14.0'	S 12°43.6'	8.6'	54.4'
6	37°49.7'	268°23.2'	N 18°30.5'	61°44.4'	14.0'	S 12°35.1'	8.6'	54.4'
7	52°52.2'	283°23.3'	N 18°29.9'	76°17.4'	14.1'	S 12°26.4'	8.7'	54.4'
8	67°54.6'	298°23.3'	N 18°29.3'	90°50.5'	14.1'	S 12°17.8'	8.7'	54.4'
9	82°57.1'	313°23.3'	N 18°28.7'	105°23.6'	14.1'	S 12°09.0'	8.8'	54.4'
10	97°59.6'	328°23.3'	N 18°28.1'	119°56.7'	14.1'	S 12°00.3'	8.8'	54.4'
11	113°02.0'	343°23.4'	N 18°27.5'	134°29.8'	14.1'	S 11°51.4'	8.9'	54.4'
12	128°04.5'	358°23.4'	N 18°26.9'	149°02.9'	14.2'	S 11°42.5'	8.9'	54.5'
13	143°06.9'	13°23.4'	N 18°26.3'	163°36.1'	14.2'	S 11°33.6'	9.0'	54.5'
14	158°09.4'	28°23.5'	N 18°25.7'	178°09.3'	14.2'	S 11°24.6'	9.0'	54.5'
15	173°11.9'	43°23.5'	N 18°25.0'	192°42.5'	14.2'	S 11°15.5'	9.1'	54.5'
16	188°14.3'	58°23.5'	N 18°24.4'	207°15.7'	14.2'	S 11°06.4'	9.1'	54.5'
17	203°16.8'	73°23.5'	N 18°23.8'	221°48.9'	14.3'	S 10°57.3'	9.2'	54.5'
18	218°19.3'	88°23.6'	N 18°23.2'	236°22.2'	14.3'	S 10°48.1'	9.2'	54.5'
19	233°21.7'	103°23.6'	N 18°22.6'	250°55.4'	14.3'	S 10°38.9'	9.3'	54.6'
20	248°24.2'	118°23.6'	N 18°22.0'	265°28.7'	14.3'	S 10°29.6'	9.3'	54.6'
21	263°26.7'	133°23.7'	N 18°21.4'	280°02.0'	14.3'	S 10°20.2'	9.4'	54.6'
22	278°29.1'	148°23.7'	N 18°20.8'	294°35.4'	14.3'	S 10°10.8'	9.4'	54.6'
23	293°31.6'	163°23.7'	N 18°20.2'	309°08.7'	14.4'	S 10°01.4'	9.5'	54.6'

Tue Jul 31, 2018 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 14.9'				
		GHA	dec	GHA	v	dec	d	HP
0	308°34.1'	178°23.7'	N 18°19.6'	323°42.1'	14.4'	S 9°51.9'	9.5'	54.6'
1	323°36.5'	193°23.8'	N 18°18.9'	338°15.4'	14.4'	S 9°42.4'	9.6'	54.6'
2	338°39.0'	208°23.8'	N 18°18.3'	352°48.8'	14.4'	S 9°32.8'	9.6'	54.7'
3	353°41.4'	223°23.8'	N 18°17.7'	7°22.2'	14.4'	S 9°23.2'	9.7'	54.7'
4	8°43.9'	238°23.9'	N 18°17.1'	21°55.6'	14.4'	S 9°13.5'	9.7'	54.7'
5	23°46.4'	253°23.9'	N 18°16.5'	36°29.1'	14.4'	S 9°03.8'	9.8'	54.7'
6	38°48.8'	268°23.9'	N 18°15.9'	51°02.5'	14.5'	S 8°54.0'	9.8'	54.7'
7	53°51.3'	283°24.0'	N 18°15.2'	65°35.9'	14.5'	S 8°44.2'	9.8'	54.7'
8	68°53.8'	298°24.0'	N 18°14.6'	80°09.4'	14.5'	S 8°34.4'	9.9'	54.7'
9	83°56.2'	313°24.0'	N 18°14.0'	94°42.9'	14.5'	S 8°24.5'	9.9'	54.8'
10	98°58.7'	328°24.1'	N 18°13.4'	109°16.4'	14.5'	S 8°14.6'	10.0'	54.8'
11	114°01.2'	343°24.1'	N 18°12.8'	123°49.9'	14.5'	S 8°04.6'	10.0'	54.8'
12	129°03.6'	358°24.1'	N 18°12.2'	138°23.4'	14.5'	S 7°54.6'	10.0'	54.8'
13	144°06.1'	13°24.2'	N 18°11.5'	152°56.9'	14.5'	S 7°44.6'	10.1'	54.8'
14	159°08.6'	28°24.2'	N 18°10.9'	167°30.4'	14.5'	S 7°34.5'	10.1'	54.8'
15	174°11.0'	43°24.2'	N 18°10.3'	182°03.9'	14.5'	S 7°24.4'	10.1'	54.9'
16	189°13.5'	58°24.3'	N 18°09.7'	196°37.4'	14.5'	S 7°14.3'	10.2'	54.9'
17	204°15.9'	73°24.3'	N 18°09.1'	211°11.0'	14.5'	S 7°04.1'	10.2'	54.9'
18	219°18.4'	88°24.3'	N 18°08.4'	225°44.5'	14.5'	S 6°53.9'	10.3'	54.9'
19	234°20.9'	103°24.4'	N 18°07.8'	240°18.1'	14.6'	S 6°43.6'	10.3'	54.9'
20	249°23.3'	118°24.4'	N 18°07.2'	254°51.6'	14.6'	S 6°33.3'	10.3'	54.9'
21	264°25.8'	133°24.4'	N 18°06.6'	269°25.2'	14.6'	S 6°23.0'	10.4'	55.0'
22	279°28.3'	148°24.5'	N 18°05.9'	283°58.7'	14.6'	S 6°12.7'	10.4'	55.0'
23	294°30.7'	163°24.5'	N 18°05.3'	298°32.3'	14.6'	S 6°02.3'	10.4'	55.0'