

Sun Sep 1, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.8'		SD = 16.6'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	339°52.1'	179°56.4'	N 8°27.7'	157°24.5'	8.4'	N 4°17.4'	14.2'	61.1'
1	354°54.6'	194°56.6'	N 8°26.8'	171°51.9'	8.4'	N 4°03.2'	14.2'	61.1'
2	9°57.1'	209°56.7'	N 8°25.9'	186°19.4'	8.5'	N 3°48.9'	14.3'	61.0'
3	24°59.5'	224°56.9'	N 8°25.0'	200°46.8'	8.5'	N 3°34.7'	14.3'	61.0'
4	40°02.0'	239°57.1'	N 8°24.1'	215°14.4'	8.6'	N 3°20.4'	14.3'	61.0'
5	55°04.4'	254°57.3'	N 8°23.2'	229°41.9'	8.6'	N 3°06.1'	14.3'	61.0'
6	70°06.9'	269°57.5'	N 8°22.3'	244°09.5'	8.6'	N 2°51.8'	14.3'	61.0'
7	85°09.4'	284°57.7'	N 8°21.4'	258°37.2'	8.7'	N 2°37.5'	14.3'	60.9'
8	100°11.8'	299°57.9'	N 8°20.5'	273°04.8'	8.7'	N 2°23.2'	14.3'	60.9'
9	115°14.3'	314°58.1'	N 8°19.5'	287°32.5'	8.8'	N 2°08.9'	14.3'	60.9'
10	130°16.8'	329°58.3'	N 8°18.6'	302°00.3'	8.8'	N 1°54.6'	14.3'	60.9'
11	145°19.2'	344°58.5'	N 8°17.7'	316°28.1'	8.8'	N 1°40.3'	14.3'	60.8'
12	160°21.7'	359°58.7'	N 8°16.8'	330°55.9'	8.9'	N 1°25.9'	14.3'	60.8'
13	175°24.2'	14°58.9'	N 8°15.9'	345°23.8'	8.9'	N 1°11.6'	14.3'	60.8'
14	190°26.6'	29°59.1'	N 8°15.0'	359°51.7'	8.9'	N 0°57.3'	14.3'	60.8'
15	205°29.1'	44°59.3'	N 8°14.1'	14°19.6'	9.0'	N 0°43.0'	14.3'	60.7'
16	220°31.6'	59°59.5'	N 8°13.2'	28°47.6'	9.0'	N 0°28.7'	14.3'	60.7'
17	235°34.0'	74°59.7'	N 8°12.3'	43°15.6'	9.0'	N 0°14.4'	14.3'	60.7'
18	250°36.5'	89°59.9'	N 8°11.4'	57°43.7'	9.1'	N 0°00.2'	14.3'	60.7'
19	265°38.9'	105°00.1'	N 8°10.5'	72°11.7'	9.1'	S 0°14.1'	14.2'	60.6'
20	280°41.4'	120°00.3'	N 8°09.6'	86°39.8'	9.1'	S 0°28.3'	14.2'	60.6'
21	295°43.9'	135°00.5'	N 8°08.7'	101°08.0'	9.2'	S 0°42.6'	14.2'	60.6'
22	310°46.3'	150°00.7'	N 8°07.8'	115°36.1'	9.2'	S 0°56.8'	14.2'	60.6'
23	325°48.8'	165°00.9'	N 8°06.8'	130°04.3'	9.2'	S 1°11.0'	14.2'	60.5'

Mon Sep 2, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.8'		SD = 16.4'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	340°51.3'	180°01.1'	N 8°05.9'	144°32.5'	9.2'	S 1°25.1'	14.1'	60.5'
1	355°53.7'	195°01.3'	N 8°05.0'	159°00.8'	9.3'	S 1°39.3'	14.1'	60.5'
2	10°56.2'	210°01.5'	N 8°04.1'	173°29.0'	9.3'	S 1°53.4'	14.1'	60.4'
3	25°58.7'	225°01.7'	N 8°03.2'	187°57.3'	9.3'	S 2°07.5'	14.1'	60.4'
4	41°01.1'	240°01.9'	N 8°02.3'	202°25.7'	9.3'	S 2°21.6'	14.0'	60.4'
5	56°03.6'	255°02.1'	N 8°01.4'	216°54.0'	9.4'	S 2°35.6'	14.0'	60.4'
6	71°06.0'	270°02.3'	N 8°00.5'	231°22.4'	9.4'	S 2°49.6'	14.0'	60.3'
7	86°08.5'	285°02.5'	N 7°59.6'	245°50.8'	9.4'	S 3°03.6'	13.9'	60.3'
8	101°11.0'	300°02.7'	N 7°58.7'	260°19.2'	9.4'	S 3°17.6'	13.9'	60.3'
9	116°13.4'	315°02.9'	N 7°57.7'	274°47.7'	9.5'	S 3°31.5'	13.9'	60.2'
10	131°15.9'	330°03.1'	N 7°56.8'	289°16.1'	9.5'	S 3°45.3'	13.8'	60.2'
11	146°18.4'	345°03.3'	N 7°55.9'	303°44.6'	9.5'	S 3°59.2'	13.8'	60.2'
12	161°20.8'	0°03.5'	N 7°55.0'	318°13.1'	9.5'	S 4°13.0'	13.8'	60.1'
13	176°23.3'	15°03.7'	N 7°54.1'	332°41.6'	9.5'	S 4°26.8'	13.7'	60.1'
14	191°25.8'	30°03.9'	N 7°53.2'	347°10.2'	9.6'	S 4°40.5'	13.7'	60.1'
15	206°28.2'	45°04.1'	N 7°52.3'	1°38.7'	9.6'	S 4°54.2'	13.6'	60.0'
16	221°30.7'	60°04.3'	N 7°51.4'	16°07.3'	9.6'	S 5°07.8'	13.6'	60.0'
17	236°33.2'	75°04.5'	N 7°50.4'	30°35.9'	9.6'	S 5°21.4'	13.5'	60.0'
18	251°35.6'	90°04.7'	N 7°49.5'	45°04.5'	9.6'	S 5°34.9'	13.5'	59.9'
19	266°38.1'	105°04.9'	N 7°48.6'	59°33.1'	9.6'	S 5°48.4'	13.4'	59.9'
20	281°40.5'	120°05.1'	N 7°47.7'	74°01.8'	9.6'	S 6°01.8'	13.4'	59.9'
21	296°43.0'	135°05.3'	N 7°46.8'	88°30.4'	9.7'	S 6°15.2'	13.3'	59.8'
22	311°45.5'	150°05.5'	N 7°45.9'	102°59.1'	9.7'	S 6°28.6'	13.3'	59.8'
23	326°47.9'	165°05.7'	N 7°45.0'	117°27.7'	9.7'	S 6°41.9'	13.2'	59.8'

Tue Sep 3, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	341°50.4'	180°05.9'	N 7°44.1'	131°56.4'	9.7'	S 6°55.1'	13.2'	59.7'
1	356°52.9'	195°06.1'	N 7°43.1'	146°25.1'	9.7'	S 7°08.3'	13.1'	59.7'
2	11°55.3'	210°06.3'	N 7°42.2'	160°53.8'	9.7'	S 7°21.4'	13.1'	59.6'
3	26°57.8'	225°06.5'	N 7°41.3'	175°22.5'	9.7'	S 7°34.4'	13.0'	59.6'
4	42°00.3'	240°06.7'	N 7°40.4'	189°51.3'	9.7'	S 7°47.4'	12.9'	59.6'
5	57°02.7'	255°06.9'	N 7°39.5'	204°20.0'	9.7'	S 8°00.4'	12.9'	59.5'
6	72°05.2'	270°07.1'	N 7°38.6'	218°48.7'	9.7'	S 8°13.3'	12.8'	59.5'
7	87°07.6'	285°07.3'	N 7°37.6'	233°17.5'	9.8'	S 8°26.1'	12.7'	59.5'
8	102°10.1'	300°07.5'	N 7°36.7'	247°46.3'	9.8'	S 8°38.8'	12.7'	59.4'
9	117°12.6'	315°07.7'	N 7°35.8'	262°15.0'	9.8'	S 8°51.5'	12.6'	59.4'
10	132°15.0'	330°07.9'	N 7°34.9'	276°43.8'	9.8'	S 9°04.1'	12.5'	59.4'
11	147°17.5'	345°08.1'	N 7°34.0'	291°12.6'	9.8'	S 9°16.7'	12.5'	59.3'
12	162°20.0'	0°08.3'	N 7°33.1'	305°41.3'	9.8'	S 9°29.1'	12.4'	59.3'
13	177°22.4'	15°08.5'	N 7°32.1'	320°10.1'	9.8'	S 9°41.6'	12.3'	59.2'
14	192°24.9'	30°08.7'	N 7°31.2'	334°38.9'	9.8'	S 9°53.9'	12.3'	59.2'
15	207°27.4'	45°08.9'	N 7°30.3'	349°07.7'	9.8'	S 10°06.2'	12.2'	59.2'
16	222°29.8'	60°09.1'	N 7°29.4'	3°36.5'	9.8'	S 10°18.4'	12.1'	59.1'
17	237°32.3'	75°09.4'	N 7°28.5'	18°05.3'	9.8'	S 10°30.5'	12.0'	59.1'
18	252°34.8'	90°09.6'	N 7°27.6'	32°34.1'	9.8'	S 10°42.5'	12.0'	59.1'
19	267°37.2'	105°09.8'	N 7°26.6'	47°02.9'	9.8'	S 10°54.5'	11.9'	59.0'
20	282°39.7'	120°10.0'	N 7°25.7'	61°31.7'	9.8'	S 11°06.4'	11.8'	59.0'
21	297°42.1'	135°10.2'	N 7°24.8'	76°00.5'	9.8'	S 11°18.2'	11.7'	58.9'
22	312°44.6'	150°10.4'	N 7°23.9'	90°29.3'	9.8'	S 11°29.9'	11.7'	58.9'
23	327°47.1'	165°10.6'	N 7°23.0'	104°58.0'	9.8'	S 11°41.6'	11.6'	58.9'

Wed Sep 4, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 15.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	342°49.5'	180°10.8'	N 7°22.0'	119°26.8'	9.8'	S 11°53.2'	11.5'	58.8'
1	357°52.0'	195°11.0'	N 7°21.1'	133°55.6'	9.8'	S 12°04.6'	11.4'	58.8'
2	12°54.5'	210°11.2'	N 7°20.2'	148°24.4'	9.8'	S 12°16.1'	11.3'	58.7'
3	27°56.9'	225°11.4'	N 7°19.3'	162°53.2'	9.8'	S 12°27.4'	11.2'	58.7'
4	42°59.4'	240°11.6'	N 7°18.4'	177°22.0'	9.8'	S 12°38.6'	11.2'	58.7'
5	58°01.9'	255°11.8'	N 7°17.4'	191°50.8'	9.8'	S 12°49.8'	11.1'	58.6'
6	73°04.3'	270°12.0'	N 7°16.5'	206°19.6'	9.8'	S 13°00.8'	11.0'	58.6'
7	88°06.8'	285°12.2'	N 7°15.6'	220°48.3'	9.8'	S 13°11.8'	10.9'	58.6'
8	103°09.3'	300°12.4'	N 7°14.7'	235°17.1'	9.8'	S 13°22.7'	10.8'	58.5'
9	118°11.7'	315°12.6'	N 7°13.8'	249°45.9'	9.8'	S 13°33.5'	10.7'	58.5'
10	133°14.2'	330°12.8'	N 7°12.8'	264°14.6'	9.8'	S 13°44.2'	10.6'	58.4'
11	148°16.6'	345°13.0'	N 7°11.9'	278°43.4'	9.8'	S 13°54.8'	10.5'	58.4'
12	163°19.1'	0°13.2'	N 7°11.0'	293°12.1'	9.7'	S 14°05.4'	10.4'	58.4'
13	178°21.6'	15°13.5'	N 7°10.1'	307°40.9'	9.7'	S 14°15.8'	10.3'	58.3'
14	193°24.0'	30°13.7'	N 7°09.2'	322°09.6'	9.7'	S 14°26.2'	10.3'	58.3'
15	208°26.5'	45°13.9'	N 7°08.2'	336°38.4'	9.7'	S 14°36.4'	10.2'	58.2'
16	223°29.0'	60°14.1'	N 7°07.3'	351°07.1'	9.7'	S 14°46.6'	10.1'	58.2'
17	238°31.4'	75°14.3'	N 7°06.4'	5°35.8'	9.7'	S 14°56.6'	10.0'	58.2'
18	253°33.9'	90°14.5'	N 7°05.5'	20°04.5'	9.7'	S 15°06.6'	9.9'	58.1'
19	268°36.4'	105°14.7'	N 7°04.5'	34°33.2'	9.7'	S 15°16.4'	9.8'	58.1'
20	283°38.8'	120°14.9'	N 7°03.6'	49°02.0'	9.7'	S 15°26.2'	9.7'	58.1'
21	298°41.3'	135°15.1'	N 7°02.7'	63°30.6'	9.7'	S 15°35.9'	9.6'	58.0'
22	313°43.7'	150°15.3'	N 7°01.8'	77°59.3'	9.7'	S 15°45.5'	9.5'	58.0'
23	328°46.2'	165°15.5'	N 7°00.8'	92°28.0'	9.7'	S 15°54.9'	9.4'	57.9'

Thu Sep 5, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 15.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	343°48.7'	180°15.7'	N 6°59.9'	106°56.7'	9.7'	S 16°04.3'	9.3'	57.9'
1	358°51.1'	195°15.9'	N 6°59.0'	121°25.4'	9.7'	S 16°13.6'	9.2'	57.9'
2	13°53.6'	210°16.1'	N 6°58.1'	135°54.0'	9.7'	S 16°22.8'	9.1'	57.8'
3	28°56.1'	225°16.4'	N 6°57.1'	150°22.7'	9.6'	S 16°31.8'	9.0'	57.8'
4	43°58.5'	240°16.6'	N 6°56.2'	164°51.3'	9.6'	S 16°40.8'	8.9'	57.7'
5	59°01.0'	255°16.8'	N 6°55.3'	179°20.0'	9.6'	S 16°49.6'	8.8'	57.7'
6	74°03.5'	270°17.0'	N 6°54.4'	193°48.6'	9.6'	S 16°58.4'	8.7'	57.7'
7	89°05.9'	285°17.2'	N 6°53.4'	208°17.2'	9.6'	S 17°07.1'	8.5'	57.6'
8	104°08.4'	300°17.4'	N 6°52.5'	222°45.9'	9.6'	S 17°15.6'	8.4'	57.6'
9	119°10.9'	315°17.6'	N 6°51.6'	237°14.5'	9.6'	S 17°24.1'	8.3'	57.6'
10	134°13.3'	330°17.8'	N 6°50.7'	251°43.1'	9.6'	S 17°32.4'	8.2'	57.5'
11	149°15.8'	345°18.0'	N 6°49.7'	266°11.7'	9.6'	S 17°40.6'	8.1'	57.5'
12	164°18.2'	0°18.2'	N 6°48.8'	280°40.3'	9.6'	S 17°48.7'	8.0'	57.4'
13	179°20.7'	15°18.4'	N 6°47.9'	295°08.8'	9.6'	S 17°56.8'	7.9'	57.4'
14	194°23.2'	30°18.6'	N 6°47.0'	309°37.4'	9.6'	S 18°04.7'	7.8'	57.4'
15	209°25.6'	45°18.9'	N 6°46.0'	324°06.0'	9.6'	S 18°12.5'	7.7'	57.3'
16	224°28.1'	60°19.1'	N 6°45.1'	338°34.6'	9.6'	S 18°20.2'	7.6'	57.3'
17	239°30.6'	75°19.3'	N 6°44.2'	353°03.1'	9.6'	S 18°27.7'	7.5'	57.3'
18	254°33.0'	90°19.5'	N 6°43.3'	7°31.7'	9.5'	S 18°35.2'	7.4'	57.2'
19	269°35.5'	105°19.7'	N 6°42.3'	22°00.2'	9.5'	S 18°42.6'	7.2'	57.2'
20	284°38.0'	120°19.9'	N 6°41.4'	36°28.8'	9.5'	S 18°49.8'	7.1'	57.2'
21	299°40.4'	135°20.1'	N 6°40.5'	50°57.3'	9.5'	S 18°56.9'	7.0'	57.1'
22	314°42.9'	150°20.3'	N 6°39.5'	65°25.8'	9.5'	S 19°04.0'	6.9'	57.1'
23	329°45.4'	165°20.5'	N 6°38.6'	79°54.4'	9.5'	S 19°10.9'	6.8'	57.1'

Fri Sep 6, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 15.5'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	344°47.8'	180°20.7'	N 6°37.7'	94°22.9'	9.5'	S 19°17.7'	6.7'	57.0'
1	359°50.3'	195°21.0'	N 6°36.8'	108°51.4'	9.5'	S 19°24.4'	6.6'	57.0'
2	14°52.7'	210°21.2'	N 6°35.8'	123°19.9'	9.5'	S 19°30.9'	6.5'	56.9'
3	29°55.2'	225°21.4'	N 6°34.9'	137°48.4'	9.5'	S 19°37.4'	6.3'	56.9'
4	44°57.7'	240°21.6'	N 6°34.0'	152°16.9'	9.5'	S 19°43.8'	6.2'	56.9'
5	60°00.1'	255°21.8'	N 6°33.0'	166°45.4'	9.5'	S 19°50.0'	6.1'	56.8'
6	75°02.6'	270°22.0'	N 6°32.1'	181°13.9'	9.5'	S 19°56.1'	6.0'	56.8'
7	90°05.1'	285°22.2'	N 6°31.2'	195°42.4'	9.5'	S 20°02.1'	5.9'	56.8'
8	105°07.5'	300°22.4'	N 6°30.2'	210°10.9'	9.5'	S 20°08.0'	5.8'	56.7'
9	120°10.0'	315°22.6'	N 6°29.3'	224°39.4'	9.5'	S 20°13.8'	5.7'	56.7'
10	135°12.5'	330°22.9'	N 6°28.4'	239°07.9'	9.5'	S 20°19.4'	5.5'	56.7'
11	150°14.9'	345°23.1'	N 6°27.5'	253°36.4'	9.5'	S 20°25.0'	5.4'	56.6'
12	165°17.4'	0°23.3'	N 6°26.5'	268°04.9'	9.5'	S 20°30.4'	5.3'	56.6'
13	180°19.8'	15°23.5'	N 6°25.6'	282°33.4'	9.5'	S 20°35.7'	5.2'	56.6'
14	195°22.3'	30°23.7'	N 6°24.7'	297°01.9'	9.5'	S 20°40.9'	5.1'	56.5'
15	210°24.8'	45°23.9'	N 6°23.7'	311°30.4'	9.5'	S 20°46.0'	5.0'	56.5'
16	225°27.2'	60°24.1'	N 6°22.8'	325°58.9'	9.5'	S 20°50.9'	4.8'	56.5'
17	240°29.7'	75°24.3'	N 6°21.9'	340°27.4'	9.5'	S 20°55.8'	4.7'	56.4'
18	255°32.2'	90°24.5'	N 6°20.9'	354°55.8'	9.5'	S 21°00.5'	4.6'	56.4'
19	270°34.6'	105°24.8'	N 6°20.0'	9°24.3'	9.5'	S 21°05.1'	4.5'	56.4'
20	285°37.1'	120°25.0'	N 6°19.1'	23°52.9'	9.5'	S 21°09.6'	4.4'	56.3'
21	300°39.6'	135°25.2'	N 6°18.1'	38°21.4'	9.5'	S 21°13.9'	4.3'	56.3'
22	315°42.0'	150°25.4'	N 6°17.2'	52°49.9'	9.5'	S 21°18.2'	4.1'	56.3'
23	330°44.5'	165°25.6'	N 6°16.3'	67°18.4'	9.5'	S 21°22.3'	4.0'	56.3'

Sat Sep 7, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 15.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	345°47.0'	180°25.8'	N 6°15.3'	81°46.9'	9.5'	S 21°26.3'	3.9'	56.2'
1	0°49.4'	195°26.0'	N 6°14.4'	96°15.4'	9.5'	S 21°30.2'	3.8'	56.2'
2	15°51.9'	210°26.2'	N 6°13.5'	110°44.0'	9.5'	S 21°34.0'	3.7'	56.2'
3	30°54.3'	225°26.5'	N 6°12.5'	125°12.5'	9.5'	S 21°37.7'	3.5'	56.1'
4	45°56.8'	240°26.7'	N 6°11.6'	139°41.1'	9.6'	S 21°41.2'	3.4'	56.1'
5	60°59.3'	255°26.9'	N 6°10.7'	154°09.6'	9.6'	S 21°44.6'	3.3'	56.1'
6	76°01.7'	270°27.1'	N 6°09.7'	168°38.2'	9.6'	S 21°47.9'	3.2'	56.0'
7	91°04.2'	285°27.3'	N 6°08.8'	183°06.8'	9.6'	S 21°51.1'	3.1'	56.0'
8	106°06.7'	300°27.5'	N 6°07.9'	197°35.3'	9.6'	S 21°54.2'	2.9'	56.0'
9	121°09.1'	315°27.7'	N 6°06.9'	212°03.9'	9.6'	S 21°57.1'	2.8'	56.0'
10	136°11.6'	330°27.9'	N 6°06.0'	226°32.5'	9.6'	S 21°60.0'	2.7'	55.9'
11	151°14.1'	345°28.2'	N 6°05.1'	241°01.2'	9.6'	S 22°02.7'	2.6'	55.9'
12	166°16.5'	0°28.4'	N 6°04.1'	255°29.8'	9.6'	S 22°05.3'	2.5'	55.9'
13	181°19.0'	15°28.6'	N 6°03.2'	269°58.4'	9.7'	S 22°07.7'	2.4'	55.8'
14	196°21.5'	30°28.8'	N 6°02.3'	284°27.1'	9.7'	S 22°10.1'	2.2'	55.8'
15	211°23.9'	45°29.0'	N 6°01.3'	298°55.8'	9.7'	S 22°12.3'	2.1'	55.8'
16	226°26.4'	60°29.2'	N 6°00.4'	313°24.4'	9.7'	S 22°14.5'	2.0'	55.8'
17	241°28.8'	75°29.4'	N 5°59.5'	327°53.1'	9.7'	S 22°16.5'	1.9'	55.7'
18	256°31.3'	90°29.7'	N 5°58.5'	342°21.9'	9.7'	S 22°18.3'	1.8'	55.7'
19	271°33.8'	105°29.9'	N 5°57.6'	356°50.6'	9.7'	S 22°20.1'	1.6'	55.7'
20	286°36.2'	120°30.1'	N 5°56.6'	11°19.3'	9.8'	S 22°21.7'	1.5'	55.6'
21	301°38.7'	135°30.3'	N 5°55.7'	25°48.1'	9.8'	S 22°23.3'	1.4'	55.6'
22	316°41.2'	150°30.5'	N 5°54.8'	40°16.9'	9.8'	S 22°24.7'	1.3'	55.6'
23	331°43.6'	165°30.7'	N 5°53.8'	54°45.7'	9.8'	S 22°26.0'	1.2'	55.6'

Sun Sep 8, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 15.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	346°46.1'	180°30.9'	N 5°52.9'	69°14.5'	9.8'	S 22°27.1'	1.1'	55.5'
1	1°48.6'	195°31.2'	N 5°52.0'	83°43.4'	9.9'	S 22°28.2'	0.9'	55.5'
2	16°51.0'	210°31.4'	N 5°51.0'	98°12.2'	9.9'	S 22°29.1'	0.8'	55.5'
3	31°53.5'	225°31.6'	N 5°50.1'	112°41.1'	9.9'	S 22°30.0'	0.7'	55.5'
4	46°56.0'	240°31.8'	N 5°49.1'	127°10.0'	9.9'	S 22°30.7'	0.6'	55.4'
5	61°58.4'	255°32.0'	N 5°48.2'	141°39.0'	10.0'	S 22°31.3'	0.5'	55.4'
6	77°00.9'	270°32.2'	N 5°47.3'	156°07.9'	10.0'	S 22°31.7'	0.4'	55.4'
7	92°03.3'	285°32.5'	N 5°46.3'	170°36.9'	10.0'	S 22°32.1'	0.2'	55.4'
8	107°05.8'	300°32.7'	N 5°45.4'	185°05.9'	10.0'	S 22°32.3'	0.1'	55.3'
9	122°08.3'	315°32.9'	N 5°44.5'	199°34.9'	10.1'	S 22°32.5'	0.0'	55.3'
10	137°10.7'	330°33.1'	N 5°43.5'	214°04.0'	10.1'	S 22°32.5'	0.1'	55.3'
11	152°13.2'	345°33.3'	N 5°42.6'	228°33.1'	10.1'	S 22°32.4'	0.2'	55.3'
12	167°15.7'	0°33.5'	N 5°41.6'	243°02.2'	10.1'	S 22°32.2'	0.3'	55.2'
13	182°18.1'	15°33.7'	N 5°40.7'	257°31.3'	10.2'	S 22°31.8'	0.4'	55.2'
14	197°20.6'	30°34.0'	N 5°39.8'	272°00.5'	10.2'	S 22°31.4'	0.6'	55.2'
15	212°23.1'	45°34.2'	N 5°38.8'	286°29.7'	10.2'	S 22°30.8'	0.7'	55.2'
16	227°25.5'	60°34.4'	N 5°37.9'	300°58.9'	10.3'	S 22°30.1'	0.8'	55.2'
17	242°28.0'	75°34.6'	N 5°36.9'	315°28.2'	10.3'	S 22°29.4'	0.9'	55.1'
18	257°30.4'	90°34.8'	N 5°36.0'	329°57.5'	10.3'	S 22°28.5'	1.0'	55.1'
19	272°32.9'	105°35.0'	N 5°35.1'	344°26.8'	10.4'	S 22°27.5'	1.1'	55.1'
20	287°35.4'	120°35.3'	N 5°34.1'	358°56.1'	10.4'	S 22°26.3'	1.2'	55.1'
21	302°37.8'	135°35.5'	N 5°33.2'	13°25.5'	10.4'	S 22°25.1'	1.3'	55.0'
22	317°40.3'	150°35.7'	N 5°32.2'	27°55.0'	10.5'	S 22°23.7'	1.5'	55.0'
23	332°42.8'	165°35.9'	N 5°31.3'	42°24.4'	10.5'	S 22°22.3'	1.6'	55.0'

Mon Sep 9, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	347°45.2'	180°36.1'	N 5°30.4'	56°53.9'	10.5'	S 22°20.7'	1.7'	55.0'
1	2°47.7'	195°36.3'	N 5°29.4'	71°23.4'	10.6'	S 22°19.0'	1.8'	55.0'
2	17°50.2'	210°36.6'	N 5°28.5'	85°53.0'	10.6'	S 22°17.2'	1.9'	54.9'
3	32°52.6'	225°36.8'	N 5°27.5'	100°22.6'	10.6'	S 22°15.3'	2.0'	54.9'
4	47°55.1'	240°37.0'	N 5°26.6'	114°52.2'	10.7'	S 22°13.3'	2.1'	54.9'
5	62°57.6'	255°37.2'	N 5°25.6'	129°21.9'	10.7'	S 22°11.2'	2.2'	54.9'
6	78°00.0'	270°37.4'	N 5°24.7'	143°51.6'	10.7'	S 22°09.0'	2.3'	54.9'
7	93°02.5'	285°37.6'	N 5°23.8'	158°21.3'	10.8'	S 22°06.7'	2.4'	54.9'
8	108°04.9'	300°37.9'	N 5°22.8'	172°51.1'	10.8'	S 22°04.2'	2.5'	54.8'
9	123°07.4'	315°38.1'	N 5°21.9'	187°20.9'	10.9'	S 22°01.7'	2.7'	54.8'
10	138°09.9'	330°38.3'	N 5°20.9'	201°50.8'	10.9'	S 21°59.0'	2.8'	54.8'
11	153°12.3'	345°38.5'	N 5°20.0'	216°20.7'	10.9'	S 21°56.3'	2.9'	54.8'
12	168°14.8'	0°38.7'	N 5°19.0'	230°50.6'	11.0'	S 21°53.4'	3.0'	54.8'
13	183°17.3'	15°38.9'	N 5°18.1'	245°20.6'	11.0'	S 21°50.4'	3.1'	54.7'
14	198°19.7'	30°39.2'	N 5°17.2'	259°50.6'	11.1'	S 21°47.4'	3.2'	54.7'
15	213°22.2'	45°39.4'	N 5°16.2'	274°20.7'	11.1'	S 21°44.2'	3.3'	54.7'
16	228°24.7'	60°39.6'	N 5°15.3'	288°50.8'	11.1'	S 21°40.9'	3.4'	54.7'
17	243°27.1'	75°39.8'	N 5°14.3'	303°20.9'	11.2'	S 21°37.5'	3.5'	54.7'
18	258°29.6'	90°40.0'	N 5°13.4'	317°51.1'	11.2'	S 21°34.0'	3.6'	54.7'
19	273°32.1'	105°40.3'	N 5°12.4'	332°21.3'	11.3'	S 21°30.4'	3.7'	54.6'
20	288°34.5'	120°40.5'	N 5°11.5'	346°51.6'	11.3'	S 21°26.8'	3.8'	54.6'
21	303°37.0'	135°40.7'	N 5°10.6'	1°21.9'	11.4'	S 21°23.0'	3.9'	54.6'
22	318°39.4'	150°40.9'	N 5°09.6'	15°52.3'	11.4'	S 21°19.1'	4.0'	54.6'
23	333°41.9'	165°41.1'	N 5°08.7'	30°22.7'	11.5'	S 21°15.1'	4.1'	54.6'

Tue Sep 10, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.9' SD = 15.9'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	348°44.4'	180°41.3'	N 5°07.7'	44°53.2'	11.5'	S 21°11.0'	4.2'	54.6'
1	3°46.8'	195°41.6'	N 5°06.8'	59°23.7'	11.5'	S 21°06.8'	4.3'	54.5'
2	18°49.3'	210°41.8'	N 5°05.8'	73°54.2'	11.6'	S 21°02.5'	4.4'	54.5'
3	33°51.8'	225°42.0'	N 5°04.9'	88°24.8'	11.6'	S 20°58.1'	4.5'	54.5'
4	48°54.2'	240°42.2'	N 5°03.9'	102°55.4'	11.7'	S 20°53.7'	4.6'	54.5'
5	63°56.7'	255°42.4'	N 5°03.0'	117°26.1'	11.7'	S 20°49.1'	4.7'	54.5'
6	78°59.2'	270°42.7'	N 5°02.0'	131°56.8'	11.8'	S 20°44.4'	4.8'	54.5'
7	94°01.6'	285°42.9'	N 5°01.1'	146°27.6'	11.8'	S 20°39.7'	4.9'	54.5'
8	109°04.1'	300°43.1'	N 5°00.2'	160°58.4'	11.9'	S 20°34.8'	5.0'	54.4'
9	124°06.6'	315°43.3'	N 4°59.2'	175°29.3'	11.9'	S 20°29.8'	5.0'	54.4'
10	139°09.0'	330°43.5'	N 4°58.3'	190°00.2'	12.0'	S 20°24.8'	5.1'	54.4'
11	154°11.5'	345°43.8'	N 4°57.3'	204°31.2'	12.0'	S 20°19.6'	5.2'	54.4'
12	169°13.9'	0°44.0'	N 4°56.4'	219°02.2'	12.1'	S 20°14.4'	5.3'	54.4'
13	184°16.4'	15°44.2'	N 4°55.4'	233°33.3'	12.1'	S 20°09.1'	5.4'	54.4'
14	199°18.9'	30°44.4'	N 4°54.5'	248°04.4'	12.2'	S 20°03.7'	5.5'	54.4'
15	214°21.3'	45°44.6'	N 4°53.5'	262°35.5'	12.2'	S 19°58.2'	5.6'	54.4'
16	229°23.8'	60°44.9'	N 4°52.6'	277°06.7'	12.3'	S 19°52.6'	5.7'	54.3'
17	244°26.3'	75°45.1'	N 4°51.6'	291°38.0'	12.3'	S 19°46.9'	5.8'	54.3'
18	259°28.7'	90°45.3'	N 4°50.7'	306°09.3'	12.4'	S 19°41.1'	5.9'	54.3'
19	274°31.2'	105°45.5'	N 4°49.7'	320°40.7'	12.4'	S 19°35.2'	5.9'	54.3'
20	289°33.7'	120°45.7'	N 4°48.8'	335°12.1'	12.4'	S 19°29.3'	6.0'	54.3'
21	304°36.1'	135°45.9'	N 4°47.8'	349°43.5'	12.5'	S 19°23.3'	6.1'	54.3'
22	319°38.6'	150°46.2'	N 4°46.9'	4°15.0'	12.5'	S 19°17.1'	6.2'	54.3'
23	334°41.0'	165°46.4'	N 4°45.9'	18°46.5'	12.6'	S 19°10.9'	6.3'	54.3'

Wed Sep 11, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	349°43.5'	180°46.6'	N 4°45.0'	33°18.1'	12.6'	S 19°04.6'	6.4'	54.3'
1	4°46.0'	195°46.8'	N 4°44.1'	47°49.8'	12.7'	S 18°58.3'	6.5'	54.2'
2	19°48.4'	210°47.0'	N 4°43.1'	62°21.5'	12.7'	S 18°51.8'	6.5'	54.2'
3	34°50.9'	225°47.3'	N 4°42.2'	76°53.2'	12.8'	S 18°45.3'	6.6'	54.2'
4	49°53.4'	240°47.5'	N 4°41.2'	91°25.0'	12.8'	S 18°38.7'	6.7'	54.2'
5	64°55.8'	255°47.7'	N 4°40.3'	105°56.8'	12.9'	S 18°32.0'	6.8'	54.2'
6	79°58.3'	270°47.9'	N 4°39.3'	120°28.7'	12.9'	S 18°25.2'	6.9'	54.2'
7	95°00.8'	285°48.1'	N 4°38.4'	135°00.7'	13.0'	S 18°18.3'	6.9'	54.2'
8	110°03.2'	300°48.4'	N 4°37.4'	149°32.6'	13.0'	S 18°11.4'	7.0'	54.2'
9	125°05.7'	315°48.6'	N 4°36.5'	164°04.7'	13.1'	S 18°04.3'	7.1'	54.2'
10	140°08.2'	330°48.8'	N 4°35.5'	178°36.8'	13.1'	S 17°57.2'	7.2'	54.2'
11	155°10.6'	345°49.0'	N 4°34.6'	193°08.9'	13.2'	S 17°50.1'	7.3'	54.2'
12	170°13.1'	0°49.3'	N 4°33.6'	207°41.1'	13.2'	S 17°42.8'	7.3'	54.1'
13	185°15.5'	15°49.5'	N 4°32.7'	222°13.3'	13.3'	S 17°35.5'	7.4'	54.1'
14	200°18.0'	30°49.7'	N 4°31.7'	236°45.6'	13.3'	S 17°28.1'	7.5'	54.1'
15	215°20.5'	45°49.9'	N 4°30.8'	251°17.9'	13.4'	S 17°20.6'	7.6'	54.1'
16	230°22.9'	60°50.1'	N 4°29.8'	265°50.3'	13.4'	S 17°13.1'	7.6'	54.1'
17	245°25.4'	75°50.4'	N 4°28.9'	280°22.7'	13.5'	S 17°05.4'	7.7'	54.1'
18	260°27.9'	90°50.6'	N 4°27.9'	294°55.1'	13.5'	S 16°57.7'	7.8'	54.1'
19	275°30.3'	105°50.8'	N 4°27.0'	309°27.7'	13.6'	S 16°50.0'	7.8'	54.1'
20	290°32.8'	120°51.0'	N 4°26.0'	324°00.2'	13.6'	S 16°42.1'	7.9'	54.1'
21	305°35.3'	135°51.2'	N 4°25.1'	338°32.8'	13.7'	S 16°34.2'	8.0'	54.1'
22	320°37.7'	150°51.5'	N 4°24.1'	353°05.5'	13.7'	S 16°26.2'	8.0'	54.1'
23	335°40.2'	165°51.7'	N 4°23.2'	7°38.2'	13.7'	S 16°18.2'	8.1'	54.1'

Thu Sep 12, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	350°42.6'	180°51.9'	N 4°22.2'	22°10.9'	13.8'	S 16°10.1'	8.2'	54.1'
1	5°45.1'	195°52.1'	N 4°21.2'	36°43.7'	13.8'	S 16°01.9'	8.3'	54.1'
2	20°47.6'	210°52.3'	N 4°20.3'	51°16.5'	13.9'	S 15°53.6'	8.3'	54.1'
3	35°50.0'	225°52.6'	N 4°19.3'	65°49.4'	13.9'	S 15°45.3'	8.4'	54.0'
4	50°52.5'	240°52.8'	N 4°18.4'	80°22.4'	14.0'	S 15°36.9'	8.4'	54.0'
5	65°55.0'	255°53.0'	N 4°17.4'	94°55.3'	14.0'	S 15°28.5'	8.5'	54.0'
6	80°57.4'	270°53.2'	N 4°16.5'	109°28.3'	14.1'	S 15°20.0'	8.6'	54.0'
7	95°59.9'	285°53.5'	N 4°15.5'	124°01.4'	14.1'	S 15°11.4'	8.6'	54.0'
8	111°02.4'	300°53.7'	N 4°14.6'	138°34.5'	14.1'	S 15°02.7'	8.7'	54.0'
9	126°04.8'	315°53.9'	N 4°13.6'	153°07.6'	14.2'	S 14°54.0'	8.8'	54.0'
10	141°07.3'	330°54.1'	N 4°12.7'	167°40.8'	14.2'	S 14°45.3'	8.8'	54.0'
11	156°09.8'	345°54.3'	N 4°11.7'	182°14.1'	14.3'	S 14°36.5'	8.9'	54.0'
12	171°12.2'	0°54.6'	N 4°10.8'	196°47.3'	14.3'	S 14°27.6'	8.9'	54.0'
13	186°14.7'	15°54.8'	N 4°09.8'	211°20.7'	14.4'	S 14°18.6'	9.0'	54.0'
14	201°17.1'	30°55.0'	N 4°08.9'	225°54.0'	14.4'	S 14°09.6'	9.1'	54.0'
15	216°19.6'	45°55.2'	N 4°07.9'	240°27.4'	14.4'	S 14°00.6'	9.1'	54.0'
16	231°22.1'	60°55.4'	N 4°07.0'	255°00.9'	14.5'	S 13°51.4'	9.2'	54.0'
17	246°24.5'	75°55.7'	N 4°06.0'	269°34.3'	14.5'	S 13°42.3'	9.2'	54.0'
18	261°27.0'	90°55.9'	N 4°05.1'	284°07.9'	14.6'	S 13°33.0'	9.3'	54.0'
19	276°29.5'	105°56.1'	N 4°04.1'	298°41.4'	14.6'	S 13°23.8'	9.3'	54.0'
20	291°31.9'	120°56.3'	N 4°03.1'	313°15.0'	14.6'	S 13°14.4'	9.4'	54.0'
21	306°34.4'	135°56.6'	N 4°02.2'	327°48.7'	14.7'	S 13°05.0'	9.4'	54.0'
22	321°36.9'	150°56.8'	N 4°01.2'	342°22.3'	14.7'	S 12°55.6'	9.5'	54.0'
23	336°39.3'	165°57.0'	N 4°00.3'	356°56.1'	14.8'	S 12°46.1'	9.5'	54.0'

Fri Sep 13, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	351°41.8'	180°57.2'	N 3°59.3'	11°29.8'	14.8'	S 12°36.5'	9.6'	54.0'
1	6°44.3'	195°57.4'	N 3°58.4'	26°03.6'	14.8'	S 12°26.9'	9.7'	54.0'
2	21°46.7'	210°57.7'	N 3°57.4'	40°37.4'	14.9'	S 12°17.3'	9.7'	54.0'
3	36°49.2'	225°57.9'	N 3°56.5'	55°11.3'	14.9'	S 12°07.6'	9.7'	54.0'
4	51°51.6'	240°58.1'	N 3°55.5'	69°45.2'	14.9'	S 11°57.8'	9.8'	54.0'
5	66°54.1'	255°58.3'	N 3°54.6'	84°19.1'	15.0'	S 11°48.0'	9.8'	54.0'
6	81°56.6'	270°58.6'	N 3°53.6'	98°53.1'	15.0'	S 11°38.2'	9.9'	54.0'
7	96°59.0'	285°58.8'	N 3°52.6'	113°27.1'	15.0'	S 11°28.3'	9.9'	54.0'
8	112°01.5'	300°59.0'	N 3°51.7'	128°01.1'	15.1'	S 11°18.4'	10.0'	54.0'
9	127°04.0'	315°59.2'	N 3°50.7'	142°35.2'	15.1'	S 11°08.4'	10.0'	54.0'
10	142°06.4'	330°59.5'	N 3°49.8'	157°09.3'	15.1'	S 10°58.3'	10.1'	54.0'
11	157°08.9'	345°59.7'	N 3°48.8'	171°43.4'	15.2'	S 10°48.3'	10.1'	54.0'
12	172°11.4'	0°59.9'	N 3°47.9'	186°17.6'	15.2'	S 10°38.2'	10.2'	54.0'
13	187°13.8'	16°00.1'	N 3°46.9'	200°51.8'	15.2'	S 10°28.0'	10.2'	54.0'
14	202°16.3'	31°00.3'	N 3°46.0'	215°26.0'	15.3'	S 10°17.8'	10.2'	54.0'
15	217°18.7'	46°00.6'	N 3°45.0'	230°00.3'	15.3'	S 10°07.6'	10.3'	54.0'
16	232°21.2'	61°00.8'	N 3°44.0'	244°34.6'	15.3'	S 9°57.3'	10.3'	54.0'
17	247°23.7'	76°01.0'	N 3°43.1'	259°08.9'	15.3'	S 9°47.0'	10.4'	54.0'
18	262°26.1'	91°01.2'	N 3°42.1'	273°43.2'	15.4'	S 9°36.6'	10.4'	54.0'
19	277°28.6'	106°01.5'	N 3°41.2'	288°17.6'	15.4'	S 9°26.2'	10.4'	54.0'
20	292°31.1'	121°01.7'	N 3°40.2'	302°52.0'	15.4'	S 9°15.7'	10.5'	54.0'
21	307°33.5'	136°01.9'	N 3°39.3'	317°26.4'	15.5'	S 9°05.3'	10.5'	54.0'
22	322°36.0'	151°02.1'	N 3°38.3'	332°00.9'	15.5'	S 8°54.8'	10.5'	54.0'
23	337°38.5'	166°02.3'	N 3°37.3'	346°35.4'	15.5'	S 8°44.2'	10.6'	54.0'

Sat Sep 14, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	352°40.9'	181°02.6'	N 3°36.4'	1°09.9'	15.5'	S 8°33.6'	10.6'	54.0'
1	7°43.4'	196°02.8'	N 3°35.4'	15°44.4'	15.6'	S 8°23.0'	10.7'	54.0'
2	22°45.9'	211°03.0'	N 3°34.5'	30°18.9'	15.6'	S 8°12.4'	10.7'	54.0'
3	37°48.3'	226°03.2'	N 3°33.5'	44°53.5'	15.6'	S 8°01.7'	10.7'	54.0'
4	52°50.8'	241°03.5'	N 3°32.6'	59°28.1'	15.6'	S 7°51.0'	10.7'	54.0'
5	67°53.2'	256°03.7'	N 3°31.6'	74°02.7'	15.6'	S 7°40.2'	10.8'	54.0'
6	82°55.7'	271°03.9'	N 3°30.6'	88°37.4'	15.7'	S 7°29.4'	10.8'	54.0'
7	97°58.2'	286°04.1'	N 3°29.7'	103°12.0'	15.7'	S 7°18.6'	10.8'	54.0'
8	113°00.6'	301°04.4'	N 3°28.7'	117°46.7'	15.7'	S 7°07.8'	10.9'	54.0'
9	128°03.1'	316°04.6'	N 3°27.8'	132°21.4'	15.7'	S 6°56.9'	10.9'	54.0'
10	143°05.6'	331°04.8'	N 3°26.8'	146°56.1'	15.7'	S 6°46.0'	10.9'	54.0'
11	158°08.0'	346°05.0'	N 3°25.8'	161°30.8'	15.8'	S 6°35.1'	11.0'	54.0'
12	173°10.5'	1°05.2'	N 3°24.9'	176°05.6'	15.8'	S 6°24.1'	11.0'	54.0'
13	188°13.0'	16°05.5'	N 3°23.9'	190°40.4'	15.8'	S 6°13.1'	11.0'	54.0'
14	203°15.4'	31°05.7'	N 3°23.0'	205°15.2'	15.8'	S 6°02.1'	11.0'	54.0'
15	218°17.9'	46°05.9'	N 3°22.0'	219°50.0'	15.8'	S 5°51.1'	11.1'	54.0'
16	233°20.3'	61°06.1'	N 3°21.1'	234°24.8'	15.8'	S 5°40.1'	11.1'	54.0'
17	248°22.8'	76°06.4'	N 3°20.1'	248°59.6'	15.8'	S 5°29.0'	11.1'	54.0'
18	263°25.3'	91°06.6'	N 3°19.1'	263°34.4'	15.9'	S 5°17.9'	11.1'	54.0'
19	278°27.7'	106°06.8'	N 3°18.2'	278°09.3'	15.9'	S 5°06.8'	11.1'	54.0'
20	293°30.2'	121°07.0'	N 3°17.2'	292°44.2'	15.9'	S 4°55.6'	11.2'	54.0'
21	308°32.7'	136°07.3'	N 3°16.3'	307°19.0'	15.9'	S 4°44.4'	11.2'	54.0'
22	323°35.1'	151°07.5'	N 3°15.3'	321°53.9'	15.9'	S 4°33.3'	11.2'	54.0'
23	338°37.6'	166°07.7'	N 3°14.3'	336°28.8'	15.9'	S 4°22.0'	11.2'	54.0'

Sun Sep 15, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	353°40.1'	181°07.9'	N 3°13.4'	351°03.7'	15.9'	S 4°10.8'	11.2'	54.1'
1	8°42.5'	196°08.2'	N 3°12.4'	5°38.7'	15.9'	S 3°59.6'	11.3'	54.1'
2	23°45.0'	211°08.4'	N 3°11.5'	20°13.6'	15.9'	S 3°48.3'	11.3'	54.1'
3	38°47.5'	226°08.6'	N 3°10.5'	34°48.5'	15.9'	S 3°37.0'	11.3'	54.1'
4	53°49.9'	241°08.8'	N 3°09.5'	49°23.5'	15.9'	S 3°25.7'	11.3'	54.1'
5	68°52.4'	256°09.1'	N 3°08.6'	63°58.4'	16.0'	S 3°14.4'	11.3'	54.1'
6	83°54.8'	271°09.3'	N 3°07.6'	78°33.4'	16.0'	S 3°03.1'	11.3'	54.1'
7	98°57.3'	286°09.5'	N 3°06.7'	93°08.3'	16.0'	S 2°51.8'	11.4'	54.1'
8	113°59.8'	301°09.7'	N 3°05.7'	107°43.3'	16.0'	S 2°40.4'	11.4'	54.1'
9	129°02.2'	316°09.9'	N 3°04.7'	122°18.2'	16.0'	S 2°29.0'	11.4'	54.1'
10	144°04.7'	331°10.2'	N 3°03.8'	136°53.2'	16.0'	S 2°17.7'	11.4'	54.1'
11	159°07.2'	346°10.4'	N 3°02.8'	151°28.2'	16.0'	S 2°06.3'	11.4'	54.1'
12	174°09.6'	1°10.6'	N 3°01.9'	166°03.2'	16.0'	S 1°54.9'	11.4'	54.1'
13	189°12.1'	16°10.8'	N 3°00.9'	180°38.1'	16.0'	S 1°43.5'	11.4'	54.1'
14	204°14.6'	31°11.1'	N 2°59.9'	195°13.1'	16.0'	S 1°32.0'	11.4'	54.1'
15	219°17.0'	46°11.3'	N 2°59.0'	209°48.1'	16.0'	S 1°20.6'	11.4'	54.2'
16	234°19.5'	61°11.5'	N 2°58.0'	224°23.0'	16.0'	S 1°09.2'	11.4'	54.2'
17	249°21.9'	76°11.7'	N 2°57.0'	238°58.0'	16.0'	S 0°57.7'	11.5'	54.2'
18	264°24.4'	91°12.0'	N 2°56.1'	253°32.9'	16.0'	S 0°46.3'	11.5'	54.2'
19	279°26.9'	106°12.2'	N 2°55.1'	268°07.9'	15.9'	S 0°34.8'	11.5'	54.2'
20	294°29.3'	121°12.4'	N 2°54.2'	282°42.8'	15.9'	S 0°23.4'	11.5'	54.2'
21	309°31.8'	136°12.6'	N 2°53.2'	297°17.8'	15.9'	S 0°11.9'	11.5'	54.2'
22	324°34.3'	151°12.9'	N 2°52.2'	311°52.7'	15.9'	S 0°00.4'	11.5'	54.2'
23	339°36.7'	166°13.1'	N 2°51.3'	326°27.7'	15.9'	N 0°11.1'	11.5'	54.2'

Mon Sep 16, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	354°39.2'	181°13.3'	N 2°50.3'	341°02.6'	15.9'	N 0°22.5'	11.5'	54.2'
1	9°41.7'	196°13.5'	N 2°49.3'	355°37.5'	15.9'	N 0°34.0'	11.5'	54.2'
2	24°44.1'	211°13.8'	N 2°48.4'	10°12.4'	15.9'	N 0°45.5'	11.5'	54.2'
3	39°46.6'	226°14.0'	N 2°47.4'	24°47.3'	15.9'	N 0°57.0'	11.5'	54.3'
4	54°49.1'	241°14.2'	N 2°46.5'	39°22.2'	15.9'	N 1°08.5'	11.5'	54.3'
5	69°51.5'	256°14.4'	N 2°45.5'	53°57.0'	15.9'	N 1°19.9'	11.5'	54.3'
6	84°54.0'	271°14.7'	N 2°44.5'	68°31.9'	15.8'	N 1°31.4'	11.5'	54.3'
7	99°56.4'	286°14.9'	N 2°43.6'	83°06.7'	15.8'	N 1°42.9'	11.5'	54.3'
8	114°58.9'	301°15.1'	N 2°42.6'	97°41.6'	15.8'	N 1°54.4'	11.5'	54.3'
9	130°01.4'	316°15.3'	N 2°41.6'	112°16.4'	15.8'	N 2°05.9'	11.5'	54.3'
10	145°03.8'	331°15.5'	N 2°40.7'	126°51.2'	15.8'	N 2°17.3'	11.5'	54.3'
11	160°06.3'	346°15.8'	N 2°39.7'	141°26.0'	15.8'	N 2°28.8'	11.5'	54.3'
12	175°08.8'	1°16.0'	N 2°38.8'	156°00.8'	15.8'	N 2°40.2'	11.5'	54.3'
13	190°11.2'	16°16.2'	N 2°37.8'	170°35.5'	15.7'	N 2°51.7'	11.4'	54.4'
14	205°13.7'	31°16.4'	N 2°36.8'	185°10.2'	15.7'	N 3°03.1'	11.4'	54.4'
15	220°16.2'	46°16.7'	N 2°35.9'	199°45.0'	15.7'	N 3°14.6'	11.4'	54.4'
16	235°18.6'	61°16.9'	N 2°34.9'	214°19.6'	15.7'	N 3°26.0'	11.4'	54.4'
17	250°21.1'	76°17.1'	N 2°33.9'	228°54.3'	15.7'	N 3°37.4'	11.4'	54.4'
18	265°23.5'	91°17.3'	N 2°33.0'	243°29.0'	15.6'	N 3°48.8'	11.4'	54.4'
19	280°26.0'	106°17.6'	N 2°32.0'	258°03.6'	15.6'	N 4°00.2'	11.4'	54.4'
20	295°28.5'	121°17.8'	N 2°31.0'	272°38.2'	15.6'	N 4°11.6'	11.4'	54.4'
21	310°30.9'	136°18.0'	N 2°30.1'	287°12.8'	15.6'	N 4°23.0'	11.4'	54.5'
22	325°33.4'	151°18.2'	N 2°29.1'	301°47.3'	15.5'	N 4°34.4'	11.4'	54.5'
23	340°35.9'	166°18.5'	N 2°28.2'	316°21.9'	15.5'	N 4°45.7'	11.3'	54.5'

Tue Sep 17, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	355°38.3'	181°18.7'	N 2°27.2'	330°56.4'	15.5'	N 4°57.1'	11.3'	54.5'
1	10°40.8'	196°18.9'	N 2°26.2'	345°30.9'	15.5'	N 5°08.4'	11.3'	54.5'
2	25°43.3'	211°19.1'	N 2°25.3'	0°05.3'	15.4'	N 5°19.7'	11.3'	54.5'
3	40°45.7'	226°19.4'	N 2°24.3'	14°39.7'	15.4'	N 5°31.0'	11.3'	54.5'
4	55°48.2'	241°19.6'	N 2°23.3'	29°14.1'	15.4'	N 5°42.3'	11.3'	54.5'
5	70°50.7'	256°19.8'	N 2°22.4'	43°48.5'	15.3'	N 5°53.5'	11.2'	54.6'
6	85°53.1'	271°20.0'	N 2°21.4'	58°22.8'	15.3'	N 6°04.7'	11.2'	54.6'
7	100°55.6'	286°20.3'	N 2°20.4'	72°57.1'	15.3'	N 6°16.0'	11.2'	54.6'
8	115°58.0'	301°20.5'	N 2°19.5'	87°31.4'	15.2'	N 6°27.2'	11.2'	54.6'
9	131°00.5'	316°20.7'	N 2°18.5'	102°05.6'	15.2'	N 6°38.3'	11.2'	54.6'
10	146°03.0'	331°20.9'	N 2°17.5'	116°39.8'	15.2'	N 6°49.5'	11.1'	54.6'
11	161°05.4'	346°21.2'	N 2°16.6'	131°14.0'	15.1'	N 7°00.6'	11.1'	54.6'
12	176°07.9'	1°21.4'	N 2°15.6'	145°48.1'	15.1'	N 7°11.8'	11.1'	54.7'
13	191°10.4'	16°21.6'	N 2°14.6'	160°22.2'	15.1'	N 7°22.8'	11.1'	54.7'
14	206°12.8'	31°21.8'	N 2°13.7'	174°56.3'	15.0'	N 7°33.9'	11.0'	54.7'
15	221°15.3'	46°22.0'	N 2°12.7'	189°30.3'	15.0'	N 7°44.9'	11.0'	54.7'
16	236°17.8'	61°22.3'	N 2°11.7'	204°04.3'	14.9'	N 7°56.0'	11.0'	54.7'
17	251°20.2'	76°22.5'	N 2°10.8'	218°38.2'	14.9'	N 8°06.9'	11.0'	54.7'
18	266°22.7'	91°22.7'	N 2°09.8'	233°12.1'	14.9'	N 8°17.9'	10.9'	54.8'
19	281°25.2'	106°22.9'	N 2°08.9'	247°46.0'	14.8'	N 8°28.8'	10.9'	54.8'
20	296°27.6'	121°23.2'	N 2°07.9'	262°19.8'	14.8'	N 8°39.7'	10.9'	54.8'
21	311°30.1'	136°23.4'	N 2°06.9'	276°53.6'	14.7'	N 8°50.6'	10.8'	54.8'
22	326°32.5'	151°23.6'	N 2°06.0'	291°27.3'	14.7'	N 9°01.5'	10.8'	54.8'
23	341°35.0'	166°23.8'	N 2°05.0'	306°01.0'	14.6'	N 9°12.3'	10.8'	54.8'

Wed Sep 18, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 15.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	356°37.5'	181°24.1'	N 2°04.0'	320°34.6'	14.6'	N 9°23.0'	10.7'	54.9'
1	11°39.9'	196°24.3'	N 2°03.1'	335°08.2'	14.6'	N 9°33.8'	10.7'	54.9'
2	26°42.4'	211°24.5'	N 2°02.1'	349°41.8'	14.5'	N 9°44.5'	10.7'	54.9'
3	41°44.9'	226°24.7'	N 2°01.1'	4°15.3'	14.5'	N 9°55.2'	10.6'	54.9'
4	56°47.3'	241°25.0'	N 2°00.2'	18°48.7'	14.4'	N 10°05.8'	10.6'	54.9'
5	71°49.8'	256°25.2'	N 1°59.2'	33°22.2'	14.4'	N 10°16.4'	10.6'	54.9'
6	86°52.3'	271°25.4'	N 1°58.2'	47°55.5'	14.3'	N 10°27.0'	10.5'	55.0'
7	101°54.7'	286°25.6'	N 1°57.3'	62°28.8'	14.3'	N 10°37.5'	10.5'	55.0'
8	116°57.2'	301°25.9'	N 1°56.3'	77°02.1'	14.2'	N 10°48.0'	10.5'	55.0'
9	131°59.6'	316°26.1'	N 1°55.3'	91°35.3'	14.2'	N 10°58.5'	10.4'	55.0'
10	147°02.1'	331°26.3'	N 1°54.4'	106°08.5'	14.1'	N 11°08.9'	10.4'	55.0'
11	162°04.6'	346°26.5'	N 1°53.4'	120°41.6'	14.1'	N 11°19.3'	10.3'	55.1'
12	177°07.0'	1°26.8'	N 1°52.4'	135°14.6'	14.0'	N 11°29.6'	10.3'	55.1'
13	192°09.5'	16°27.0'	N 1°51.5'	149°47.6'	13.9'	N 11°39.9'	10.2'	55.1'
14	207°12.0'	31°27.2'	N 1°50.5'	164°20.5'	13.9'	N 11°50.2'	10.2'	55.1'
15	222°14.4'	46°27.4'	N 1°49.5'	178°53.4'	13.8'	N 12°00.4'	10.2'	55.1'
16	237°16.9'	61°27.6'	N 1°48.5'	193°26.3'	13.8'	N 12°10.5'	10.1'	55.2'
17	252°19.4'	76°27.9'	N 1°47.6'	207°59.0'	13.7'	N 12°20.6'	10.1'	55.2'
18	267°21.8'	91°28.1'	N 1°46.6'	222°31.8'	13.7'	N 12°30.7'	10.0'	55.2'
19	282°24.3'	106°28.3'	N 1°45.6'	237°04.4'	13.6'	N 12°40.7'	10.0'	55.2'
20	297°26.8'	121°28.5'	N 1°44.7'	251°37.0'	13.5'	N 12°50.7'	9.9'	55.2'
21	312°29.2'	136°28.8'	N 1°43.7'	266°09.6'	13.5'	N 13°00.6'	9.9'	55.3'
22	327°31.7'	151°29.0'	N 1°42.7'	280°42.0'	13.4'	N 13°10.5'	9.8'	55.3'
23	342°34.1'	166°29.2'	N 1°41.8'	295°14.4'	13.4'	N 13°20.3'	9.8'	55.3'

Thu Sep 19, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 15.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	357°36.6'	181°29.4'	N 1°40.8'	309°46.8'	13.3'	N 13°30.1'	9.7'	55.3'
1	12°39.1'	196°29.7'	N 1°39.8'	324°19.1'	13.2'	N 13°39.8'	9.7'	55.4'
2	27°41.5'	211°29.9'	N 1°38.9'	338°51.3'	13.2'	N 13°49.4'	9.6'	55.4'
3	42°44.0'	226°30.1'	N 1°37.9'	353°23.5'	13.1'	N 13°59.0'	9.5'	55.4'
4	57°46.5'	241°30.3'	N 1°36.9'	7°55.6'	13.0'	N 14°08.6'	9.5'	55.4'
5	72°48.9'	256°30.6'	N 1°36.0'	22°27.6'	13.0'	N 14°18.1'	9.4'	55.4'
6	87°51.4'	271°30.8'	N 1°35.0'	36°59.6'	12.9'	N 14°27.5'	9.4'	55.5'
7	102°53.9'	286°31.0'	N 1°34.0'	51°31.5'	12.8'	N 14°36.9'	9.3'	55.5'
8	117°56.3'	301°31.2'	N 1°33.1'	66°03.4'	12.8'	N 14°46.2'	9.3'	55.5'
9	132°58.8'	316°31.4'	N 1°32.1'	80°35.1'	12.7'	N 14°55.5'	9.2'	55.5'
10	148°01.2'	331°31.7'	N 1°31.1'	95°06.8'	12.6'	N 15°04.7'	9.1'	55.6'
11	163°03.7'	346°31.9'	N 1°30.2'	109°38.5'	12.6'	N 15°13.8'	9.1'	55.6'
12	178°06.2'	1°32.1'	N 1°29.2'	124°10.1'	12.5'	N 15°22.9'	9.0'	55.6'
13	193°08.6'	16°32.3'	N 1°28.2'	138°41.6'	12.4'	N 15°31.9'	8.9'	55.6'
14	208°11.1'	31°32.6'	N 1°27.2'	153°13.0'	12.4'	N 15°40.8'	8.9'	55.7'
15	223°13.6'	46°32.8'	N 1°26.3'	167°44.4'	12.3'	N 15°49.7'	8.8'	55.7'
16	238°16.0'	61°33.0'	N 1°25.3'	182°15.6'	12.2'	N 15°58.5'	8.7'	55.7'
17	253°18.5'	76°33.2'	N 1°24.3'	196°46.9'	12.1'	N 16°07.3'	8.7'	55.7'
18	268°21.0'	91°33.5'	N 1°23.4'	211°18.0'	12.1'	N 16°15.9'	8.6'	55.8'
19	283°23.4'	106°33.7'	N 1°22.4'	225°49.1'	12.0'	N 16°24.5'	8.5'	55.8'
20	298°25.9'	121°33.9'	N 1°21.4'	240°20.1'	11.9'	N 16°33.1'	8.5'	55.8'
21	313°28.4'	136°34.1'	N 1°20.5'	254°51.0'	11.9'	N 16°41.5'	8.4'	55.8'
22	328°30.8'	151°34.4'	N 1°19.5'	269°21.9'	11.8'	N 16°49.9'	8.3'	55.9'
23	343°33.3'	166°34.6'	N 1°18.5'	283°52.7'	11.7'	N 16°58.3'	8.2'	55.9'

Fri Sep 20, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 15.3'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	358°35.7'	181°34.8'	N 1°17.6'	298°23.4'	11.6'	N 17°06.5'	8.2'	55.9'
1	13°38.2'	196°35.0'	N 1°16.6'	312°54.0'	11.6'	N 17°14.7'	8.1'	55.9'
2	28°40.7'	211°35.2'	N 1°15.6'	327°24.6'	11.5'	N 17°22.8'	8.0'	56.0'
3	43°43.1'	226°35.5'	N 1°14.6'	341°55.0'	11.4'	N 17°30.8'	7.9'	56.0'
4	58°45.6'	241°35.7'	N 1°13.7'	356°25.4'	11.3'	N 17°38.7'	7.9'	56.0'
5	73°48.1'	256°35.9'	N 1°12.7'	10°55.8'	11.3'	N 17°46.6'	7.8'	56.0'
6	88°50.5'	271°36.1'	N 1°11.7'	25°26.0'	11.2'	N 17°54.4'	7.7'	56.1'
7	103°53.0'	286°36.4'	N 1°10.8'	39°56.2'	11.1'	N 18°02.1'	7.6'	56.1'
8	118°55.5'	301°36.6'	N 1°09.8'	54°26.3'	11.0'	N 18°09.7'	7.5'	56.1'
9	133°57.9'	316°36.8'	N 1°08.8'	68°56.3'	10.9'	N 18°17.2'	7.4'	56.2'
10	149°00.4'	331°37.0'	N 1°07.9'	83°26.3'	10.9'	N 18°24.6'	7.4'	56.2'
11	164°02.9'	346°37.2'	N 1°06.9'	97°56.1'	10.8'	N 18°32.0'	7.3'	56.2'
12	179°05.3'	1°37.5'	N 1°05.9'	112°25.9'	10.7'	N 18°39.3'	7.2'	56.2'
13	194°07.8'	16°37.7'	N 1°04.9'	126°55.6'	10.6'	N 18°46.5'	7.1'	56.3'
14	209°10.2'	31°37.9'	N 1°04.0'	141°25.3'	10.6'	N 18°53.6'	7.0'	56.3'
15	224°12.7'	46°38.1'	N 1°03.0'	155°54.8'	10.5'	N 19°00.6'	6.9'	56.3'
16	239°15.2'	61°38.4'	N 1°02.0'	170°24.3'	10.4'	N 19°07.5'	6.8'	56.4'
17	254°17.6'	76°38.6'	N 1°01.1'	184°53.7'	10.3'	N 19°14.3'	6.7'	56.4'
18	269°20.1'	91°38.8'	N 1°00.1'	199°23.0'	10.2'	N 19°21.1'	6.6'	56.4'
19	284°22.6'	106°39.0'	N 0°59.1'	213°52.3'	10.2'	N 19°27.7'	6.6'	56.4'
20	299°25.0'	121°39.3'	N 0°58.2'	228°21.4'	10.1'	N 19°34.3'	6.5'	56.5'
21	314°27.5'	136°39.5'	N 0°57.2'	242°50.5'	10.0'	N 19°40.7'	6.4'	56.5'
22	329°30.0'	151°39.7'	N 0°56.2'	257°19.5'	9.9'	N 19°47.1'	6.3'	56.5'
23	344°32.4'	166°39.9'	N 0°55.2'	271°48.4'	9.8'	N 19°53.3'	6.2'	56.6'

Sat Sep 21, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 15.5'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	359°34.9'	181°40.1'	N 0°54.3'	286°17.3'	9.8'	N 19°59.5'	6.1'	56.6'
1	14°37.4'	196°40.4'	N 0°53.3'	300°46.1'	9.7'	N 20°05.6'	6.0'	56.6'
2	29°39.8'	211°40.6'	N 0°52.3'	315°14.7'	9.6'	N 20°11.5'	5.9'	56.7'
3	44°42.3'	226°40.8'	N 0°51.4'	329°43.4'	9.5'	N 20°17.4'	5.8'	56.7'
4	59°44.7'	241°41.0'	N 0°50.4'	344°11.9'	9.5'	N 20°23.2'	5.7'	56.7'
5	74°47.2'	256°41.3'	N 0°49.4'	358°40.3'	9.4'	N 20°28.8'	5.6'	56.8'
6	89°49.7'	271°41.5'	N 0°48.4'	13°08.7'	9.3'	N 20°34.4'	5.4'	56.8'
7	104°52.1'	286°41.7'	N 0°47.5'	27°37.0'	9.2'	N 20°39.8'	5.3'	56.8'
8	119°54.6'	301°41.9'	N 0°46.5'	42°05.2'	9.1'	N 20°45.2'	5.2'	56.9'
9	134°57.1'	316°42.1'	N 0°45.5'	56°33.4'	9.1'	N 20°50.4'	5.1'	56.9'
10	149°59.5'	331°42.4'	N 0°44.6'	71°01.4'	9.0'	N 20°55.5'	5.0'	56.9'
11	165°02.0'	346°42.6'	N 0°43.6'	85°29.4'	8.9'	N 21°00.5'	4.9'	57.0'
12	180°04.5'	1°42.8'	N 0°42.6'	99°57.3'	8.8'	N 21°05.4'	4.8'	57.0'
13	195°06.9'	16°43.0'	N 0°41.6'	114°25.1'	8.8'	N 21°10.2'	4.7'	57.0'
14	210°09.4'	31°43.2'	N 0°40.7'	128°52.9'	8.7'	N 21°14.9'	4.6'	57.1'
15	225°11.8'	46°43.5'	N 0°39.7'	143°20.6'	8.6'	N 21°19.5'	4.5'	57.1'
16	240°14.3'	61°43.7'	N 0°38.7'	157°48.2'	8.5'	N 21°23.9'	4.3'	57.1'
17	255°16.8'	76°43.9'	N 0°37.8'	172°15.7'	8.5'	N 21°28.3'	4.2'	57.2'
18	270°19.2'	91°44.1'	N 0°36.8'	186°43.2'	8.4'	N 21°32.5'	4.1'	57.2'
19	285°21.7'	106°44.4'	N 0°35.8'	201°10.5'	8.3'	N 21°36.6'	4.0'	57.2'
20	300°24.2'	121°44.6'	N 0°34.8'	215°37.8'	8.2'	N 21°40.6'	3.9'	57.3'
21	315°26.6'	136°44.8'	N 0°33.9'	230°05.1'	8.2'	N 21°44.4'	3.7'	57.3'
22	330°29.1'	151°45.0'	N 0°32.9'	244°32.2'	8.1'	N 21°48.2'	3.6'	57.3'
23	345°31.6'	166°45.2'	N 0°31.9'	258°59.3'	8.0'	N 21°51.8'	3.5'	57.4'

Sun Sep 22, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 15.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	0°34.0'	181°45.5'	N 0°31.0'	273°26.3'	7.9'	N 21°55.3'	3.4'	57.4'
1	15°36.5'	196°45.7'	N 0°30.0'	287°53.3'	7.9'	N 21°58.7'	3.3'	57.4'
2	30°39.0'	211°45.9'	N 0°29.0'	302°20.2'	7.8'	N 22°02.0'	3.1'	57.5'
3	45°41.4'	226°46.1'	N 0°28.0'	316°47.0'	7.7'	N 22°05.1'	3.0'	57.5'
4	60°43.9'	241°46.3'	N 0°27.1'	331°13.7'	7.7'	N 22°08.1'	2.9'	57.5'
5	75°46.3'	256°46.6'	N 0°26.1'	345°40.4'	7.6'	N 22°11.0'	2.8'	57.6'
6	90°48.8'	271°46.8'	N 0°25.1'	0°07.0'	7.5'	N 22°13.7'	2.6'	57.6'
7	105°51.3'	286°47.0'	N 0°24.2'	14°33.5'	7.5'	N 22°16.4'	2.5'	57.6'
8	120°53.7'	301°47.2'	N 0°23.2'	28°60.0'	7.4'	N 22°18.9'	2.4'	57.7'
9	135°56.2'	316°47.5'	N 0°22.2'	43°26.4'	7.3'	N 22°21.2'	2.2'	57.7'
10	150°58.7'	331°47.7'	N 0°21.2'	57°52.7'	7.3'	N 22°23.5'	2.1'	57.7'
11	166°01.1'	346°47.9'	N 0°20.3'	72°19.0'	7.2'	N 22°25.6'	2.0'	57.8'
12	181°03.6'	1°48.1'	N 0°19.3'	86°45.2'	7.1'	N 22°27.6'	1.8'	57.8'
13	196°06.1'	16°48.3'	N 0°18.3'	101°11.3'	7.1'	N 22°29.4'	1.7'	57.8'
14	211°08.5'	31°48.6'	N 0°17.3'	115°37.4'	7.0'	N 22°31.1'	1.6'	57.9'
15	226°11.0'	46°48.8'	N 0°16.4'	130°03.4'	7.0'	N 22°32.7'	1.4'	57.9'
16	241°13.5'	61°49.0'	N 0°15.4'	144°29.4'	6.9'	N 22°34.1'	1.3'	58.0'
17	256°15.9'	76°49.2'	N 0°14.4'	158°55.3'	6.9'	N 22°35.4'	1.2'	58.0'
18	271°18.4'	91°49.4'	N 0°13.5'	173°21.2'	6.8'	N 22°36.6'	1.0'	58.0'
19	286°20.8'	106°49.7'	N 0°12.5'	187°47.0'	6.7'	N 22°37.6'	0.9'	58.1'
20	301°23.3'	121°49.9'	N 0°11.5'	202°12.7'	6.7'	N 22°38.5'	0.8'	58.1'
21	316°25.8'	136°50.1'	N 0°10.5'	216°38.4'	6.6'	N 22°39.3'	0.6'	58.1'
22	331°28.2'	151°50.3'	N 0°09.6'	231°04.0'	6.6'	N 22°39.9'	0.5'	58.2'
23	346°30.7'	166°50.5'	N 0°08.6'	245°29.6'	6.5'	N 22°40.4'	0.3'	58.2'

Mon Sep 23, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 16.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	1°33.2'	181°50.8'	N 0°07.6'	259°55.2'	6.5'	N 22°40.7'	0.2'	58.2'
1	16°35.6'	196°51.0'	N 0°06.6'	274°20.6'	6.4'	N 22°40.9'	0.1'	58.3'
2	31°38.1'	211°51.2'	N 0°05.7'	288°46.1'	6.4'	N 22°40.9'	0.1'	58.3'
3	46°40.6'	226°51.4'	N 0°04.7'	303°11.5'	6.3'	N 22°40.8'	0.2'	58.4'
4	61°43.0'	241°51.6'	N 0°03.7'	317°36.8'	6.3'	N 22°40.6'	0.4'	58.4'
5	76°45.5'	256°51.9'	N 0°02.8'	332°02.1'	6.3'	N 22°40.2'	0.5'	58.4'
6	91°48.0'	271°52.1'	N 0°01.8'	346°27.3'	6.2'	N 22°39.7'	0.7'	58.5'
7	106°50.4'	286°52.3'	N 0°00.8'	0°52.6'	6.2'	N 22°39.0'	0.8'	58.5'
8	121°52.9'	301°52.5'	S 0°00.2'	15°17.7'	6.1'	N 22°38.2'	1.0'	58.5'
9	136°55.3'	316°52.7'	S 0°01.1'	29°42.9'	6.1'	N 22°37.3'	1.1'	58.6'
10	151°57.8'	331°53.0'	S 0°02.1'	44°07.9'	6.1'	N 22°36.2'	1.2'	58.6'
11	167°00.3'	346°53.2'	S 0°03.1'	58°33.0'	6.0'	N 22°34.9'	1.4'	58.6'
12	182°02.7'	1°53.4'	S 0°04.1'	72°58.0'	6.0'	N 22°33.5'	1.5'	58.7'
13	197°05.2'	16°53.6'	S 0°05.0'	87°23.0'	5.9'	N 22°32.0'	1.7'	58.7'
14	212°07.7'	31°53.8'	S 0°06.0'	101°47.9'	5.9'	N 22°30.3'	1.8'	58.8'
15	227°10.1'	46°54.0'	S 0°07.0'	116°12.9'	5.9'	N 22°28.5'	2.0'	58.8'
16	242°12.6'	61°54.3'	S 0°07.9'	130°37.7'	5.9'	N 22°26.5'	2.1'	58.8'
17	257°15.1'	76°54.5'	S 0°08.9'	145°02.6'	5.8'	N 22°24.4'	2.3'	58.9'
18	272°17.5'	91°54.7'	S 0°09.9'	159°27.4'	5.8'	N 22°22.1'	2.4'	58.9'
19	287°20.0'	106°54.9'	S 0°10.9'	173°52.2'	5.8'	N 22°19.7'	2.6'	58.9'
20	302°22.4'	121°55.1'	S 0°11.8'	188°17.0'	5.7'	N 22°17.1'	2.7'	59.0'
21	317°24.9'	136°55.4'	S 0°12.8'	202°41.7'	5.7'	N 22°14.4'	2.9'	59.0'
22	332°27.4'	151°55.6'	S 0°13.8'	217°06.5'	5.7'	N 22°11.5'	3.0'	59.0'
23	347°29.8'	166°55.8'	S 0°14.8'	231°31.2'	5.7'	N 22°08.5'	3.2'	59.1'

Tue Sep 24, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	2°32.3'	181°56.0'	S 0°15.7'	245°55.8'	5.7'	N 22°05.3'	3.3'	59.1'
1	17°34.8'	196°56.2'	S 0°16.7'	260°20.5'	5.6'	N 22°02.0'	3.5'	59.2'
2	32°37.2'	211°56.5'	S 0°17.7'	274°45.2'	5.6'	N 21°58.5'	3.6'	59.2'
3	47°39.7'	226°56.7'	S 0°18.7'	289°09.8'	5.6'	N 21°54.9'	3.8'	59.2'
4	62°42.2'	241°56.9'	S 0°19.6'	303°34.4'	5.6'	N 21°51.1'	3.9'	59.3'
5	77°44.6'	256°57.1'	S 0°20.6'	317°59.0'	5.6'	N 21°47.2'	4.1'	59.3'
6	92°47.1'	271°57.3'	S 0°21.6'	332°23.6'	5.6'	N 21°43.1'	4.2'	59.3'
7	107°49.6'	286°57.5'	S 0°22.5'	346°48.2'	5.6'	N 21°38.9'	4.4'	59.4'
8	122°52.0'	301°57.8'	S 0°23.5'	1°12.7'	5.6'	N 21°34.6'	4.5'	59.4'
9	137°54.5'	316°58.0'	S 0°24.5'	15°37.3'	5.6'	N 21°30.0'	4.7'	59.4'
10	152°56.9'	331°58.2'	S 0°25.5'	30°01.8'	5.5'	N 21°25.4'	4.8'	59.5'
11	167°59.4'	346°58.4'	S 0°26.4'	44°26.4'	5.5'	N 21°20.6'	5.0'	59.5'
12	183°01.9'	1°58.6'	S 0°27.4'	58°50.9'	5.5'	N 21°15.6'	5.1'	59.5'
13	198°04.3'	16°58.8'	S 0°28.4'	73°15.5'	5.5'	N 21°10.5'	5.3'	59.6'
14	213°06.8'	31°59.1'	S 0°29.4'	87°40.0'	5.5'	N 21°05.3'	5.4'	59.6'
15	228°09.3'	46°59.3'	S 0°30.3'	102°04.5'	5.5'	N 20°59.9'	5.5'	59.6'
16	243°11.7'	61°59.5'	S 0°31.3'	116°29.1'	5.5'	N 20°54.3'	5.7'	59.7'
17	258°14.2'	76°59.7'	S 0°32.3'	130°53.6'	5.5'	N 20°48.6'	5.8'	59.7'
18	273°16.7'	91°59.9'	S 0°33.3'	145°18.1'	5.5'	N 20°42.8'	6.0'	59.7'
19	288°19.1'	107°00.2'	S 0°34.2'	159°42.7'	5.5'	N 20°36.8'	6.1'	59.8'
20	303°21.6'	122°00.4'	S 0°35.2'	174°07.2'	5.6'	N 20°30.7'	6.3'	59.8'
21	318°24.1'	137°00.6'	S 0°36.2'	188°31.8'	5.6'	N 20°24.4'	6.4'	59.8'
22	333°26.5'	152°00.8'	S 0°37.2'	202°56.4'	5.6'	N 20°18.0'	6.6'	59.9'
23	348°29.0'	167°01.0'	S 0°38.1'	217°20.9'	5.6'	N 20°11.4'	6.7'	59.9'

Wed Sep 25, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 15.9'		SD = 16.4'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	3°31.4'	182°01.2'	S 0°39.1'	231°45.5'	5.6'	N 20°04.7'	6.8'	59.9'
1	18°33.9'	197°01.5'	S 0°40.1'	246°10.1'	5.6'	N 19°57.9'	7.0'	60.0'
2	33°36.4'	212°01.7'	S 0°41.0'	260°34.7'	5.6'	N 19°50.9'	7.1'	60.0'
3	48°38.8'	227°01.9'	S 0°42.0'	274°59.3'	5.6'	N 19°43.8'	7.3'	60.0'
4	63°41.3'	242°02.1'	S 0°43.0'	289°24.0'	5.6'	N 19°36.5'	7.4'	60.1'
5	78°43.8'	257°02.3'	S 0°44.0'	303°48.6'	5.7'	N 19°29.1'	7.6'	60.1'
6	93°46.2'	272°02.5'	S 0°44.9'	318°13.3'	5.7'	N 19°21.5'	7.7'	60.1'
7	108°48.7'	287°02.8'	S 0°45.9'	332°38.0'	5.7'	N 19°13.8'	7.8'	60.2'
8	123°51.2'	302°03.0'	S 0°46.9'	347°02.7'	5.7'	N 19°06.0'	8.0'	60.2'
9	138°53.6'	317°03.2'	S 0°47.9'	1°27.4'	5.7'	N 18°58.0'	8.1'	60.2'
10	153°56.1'	332°03.4'	S 0°48.8'	15°52.1'	5.8'	N 18°49.9'	8.2'	60.3'
11	168°58.5'	347°03.6'	S 0°49.8'	30°16.9'	5.8'	N 18°41.7'	8.4'	60.3'
12	184°01.0'	2°03.8'	S 0°50.8'	44°41.7'	5.8'	N 18°33.3'	8.5'	60.3'
13	199°03.5'	17°04.0'	S 0°51.8'	59°06.5'	5.8'	N 18°24.8'	8.6'	60.3'
14	214°05.9'	32°04.3'	S 0°52.7'	73°31.3'	5.9'	N 18°16.2'	8.8'	60.4'
15	229°08.4'	47°04.5'	S 0°53.7'	87°56.2'	5.9'	N 18°07.4'	8.9'	60.4'
16	244°10.9'	62°04.7'	S 0°54.7'	102°21.0'	5.9'	N 17°58.5'	9.0'	60.4'
17	259°13.3'	77°04.9'	S 0°55.7'	116°45.9'	5.9'	N 17°49.5'	9.2'	60.4'
18	274°15.8'	92°05.1'	S 0°56.6'	131°10.9'	6.0'	N 17°40.3'	9.3'	60.5'
19	289°18.3'	107°05.3'	S 0°57.6'	145°35.8'	6.0'	N 17°31.1'	9.4'	60.5'
20	304°20.7'	122°05.6'	S 0°58.6'	160°00.8'	6.0'	N 17°21.6'	9.5'	60.5'
21	319°23.2'	137°05.8'	S 0°59.5'	174°25.8'	6.0'	N 17°12.1'	9.7'	60.6'
22	334°25.7'	152°06.0'	S 1°00.5'	188°50.9'	6.1'	N 17°02.4'	9.8'	60.6'
23	349°28.1'	167°06.2'	S 1°01.5'	203°16.0'	6.1'	N 16°52.7'	9.9'	60.6'

Thu Sep 26, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 16.0'		SD = 16.6'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	4°30.6'	182°06.4'	S 1°02.5'	217°41.1'	6.1'	N 16°42.8'	10.0'	60.6'
1	19°33.0'	197°06.6'	S 1°03.4'	232°06.2'	6.2'	N 16°32.7'	10.1'	60.7'
2	34°35.5'	212°06.8'	S 1°04.4'	246°31.4'	6.2'	N 16°22.6'	10.3'	60.7'
3	49°38.0'	227°07.1'	S 1°05.4'	260°56.6'	6.2'	N 16°12.3'	10.4'	60.7'
4	64°40.4'	242°07.3'	S 1°06.4'	275°21.8'	6.3'	N 16°01.9'	10.5'	60.7'
5	79°42.9'	257°07.5'	S 1°07.3'	289°47.1'	6.3'	N 15°51.4'	10.6'	60.8'
6	94°45.4'	272°07.7'	S 1°08.3'	304°12.4'	6.3'	N 15°40.8'	10.7'	60.8'
7	109°47.8'	287°07.9'	S 1°09.3'	318°37.8'	6.4'	N 15°30.1'	10.8'	60.8'
8	124°50.3'	302°08.1'	S 1°10.3'	333°03.1'	6.4'	N 15°19.2'	11.0'	60.8'
9	139°52.8'	317°08.3'	S 1°11.2'	347°28.6'	6.4'	N 15°08.3'	11.1'	60.8'
10	154°55.2'	332°08.6'	S 1°12.2'	1°54.0'	6.5'	N 14°57.2'	11.2'	60.9'
11	169°57.7'	347°08.8'	S 1°13.2'	16°19.5'	6.5'	N 14°46.1'	11.3'	60.9'
12	185°00.2'	2°09.0'	S 1°14.2'	30°45.0'	6.6'	N 14°34.8'	11.4'	60.9'
13	200°02.6'	17°09.2'	S 1°15.1'	45°10.6'	6.6'	N 14°23.4'	11.5'	60.9'
14	215°05.1'	32°09.4'	S 1°16.1'	59°36.2'	6.6'	N 14°11.9'	11.6'	60.9'
15	230°07.5'	47°09.6'	S 1°17.1'	74°01.8'	6.7'	N 14°00.3'	11.7'	61.0'
16	245°10.0'	62°09.8'	S 1°18.0'	88°27.5'	6.7'	N 13°48.6'	11.8'	61.0'
17	260°12.5'	77°10.1'	S 1°19.0'	102°53.2'	6.7'	N 13°36.9'	11.9'	61.0'
18	275°14.9'	92°10.3'	S 1°20.0'	117°18.9'	6.8'	N 13°25.0'	12.0'	61.0'
19	290°17.4'	107°10.5'	S 1°21.0'	131°44.7'	6.8'	N 13°13.0'	12.1'	61.0'
20	305°19.9'	122°10.7'	S 1°21.9'	146°10.5'	6.9'	N 13°00.9'	12.2'	61.0'
21	320°22.3'	137°10.9'	S 1°22.9'	160°36.4'	6.9'	N 12°48.8'	12.3'	61.1'
22	335°24.8'	152°11.1'	S 1°23.9'	175°02.3'	6.9'	N 12°36.5'	12.4'	61.1'
23	350°27.3'	167°11.3'	S 1°24.9'	189°28.2'	7.0'	N 12°24.1'	12.4'	61.1'

Fri Sep 27, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 16.0'		SD = 16.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	5°29.7'	182°11.6'	S 1°25.8'	203°54.2'	7.0'	N 12°11.7'	12.5'	61.1'
1	20°32.2'	197°11.8'	S 1°26.8'	218°20.2'	7.0'	N 11°59.2'	12.6'	61.1'
2	35°34.6'	212°12.0'	S 1°27.8'	232°46.2'	7.1'	N 11°46.6'	12.7'	61.1'
3	50°37.1'	227°12.2'	S 1°28.8'	247°12.3'	7.1'	N 11°33.9'	12.8'	61.1'
4	65°39.6'	242°12.4'	S 1°29.7'	261°38.4'	7.2'	N 11°21.1'	12.9'	61.2'
5	80°42.0'	257°12.6'	S 1°30.7'	276°04.6'	7.2'	N 11°08.2'	12.9'	61.2'
6	95°44.5'	272°12.8'	S 1°31.7'	290°30.8'	7.2'	N 10°55.3'	13.0'	61.2'
7	110°47.0'	287°13.0'	S 1°32.7'	304°57.1'	7.3'	N 10°42.3'	13.1'	61.2'
8	125°49.4'	302°13.3'	S 1°33.6'	319°23.3'	7.3'	N 10°29.2'	13.2'	61.2'
9	140°51.9'	317°13.5'	S 1°34.6'	333°49.6'	7.4'	N 10°16.0'	13.2'	61.2'
10	155°54.4'	332°13.7'	S 1°35.6'	348°16.0'	7.4'	N 10°02.8'	13.3'	61.2'
11	170°56.8'	347°13.9'	S 1°36.5'	2°42.4'	7.4'	N 9°49.5'	13.4'	61.2'
12	185°59.3'	2°14.1'	S 1°37.5'	17°08.8'	7.5'	N 9°36.1'	13.4'	61.2'
13	201°01.8'	17°14.3'	S 1°38.5'	31°35.3'	7.5'	N 9°22.7'	13.5'	61.2'
14	216°04.2'	32°14.5'	S 1°39.5'	46°01.8'	7.5'	N 9°09.2'	13.6'	61.2'
15	231°06.7'	47°14.7'	S 1°40.4'	60°28.3'	7.6'	N 8°55.6'	13.6'	61.3'
16	246°09.1'	62°14.9'	S 1°41.4'	74°54.9'	7.6'	N 8°42.0'	13.7'	61.3'
17	261°11.6'	77°15.2'	S 1°42.4'	89°21.5'	7.6'	N 8°28.3'	13.7'	61.3'
18	276°14.1'	92°15.4'	S 1°43.4'	103°48.1'	7.7'	N 8°14.6'	13.8'	61.3'
19	291°16.5'	107°15.6'	S 1°44.3'	118°14.8'	7.7'	N 8°00.8'	13.9'	61.3'
20	306°19.0'	122°15.8'	S 1°45.3'	132°41.5'	7.7'	N 7°46.9'	13.9'	61.3'
21	321°21.5'	137°16.0'	S 1°46.3'	147°08.3'	7.8'	N 7°33.0'	14.0'	61.3'
22	336°23.9'	152°16.2'	S 1°47.3'	161°35.0'	7.8'	N 7°19.1'	14.0'	61.3'
23	351°26.4'	167°16.4'	S 1°48.2'	176°01.9'	7.8'	N 7°05.1'	14.1'	61.3'

Sat Sep 28, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 16.0'		SD = 16.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	6°28.9'	182°16.6'	S 1°49.2'	190°28.7'	7.9'	N 6°51.0'	14.1'	61.3'
1	21°31.3'	197°16.8'	S 1°50.2'	204°55.6'	7.9'	N 6°36.9'	14.1'	61.3'
2	36°33.8'	212°17.1'	S 1°51.1'	219°22.5'	7.9'	N 6°22.8'	14.2'	61.3'
3	51°36.2'	227°17.3'	S 1°52.1'	233°49.4'	8.0'	N 6°08.6'	14.2'	61.3'
4	66°38.7'	242°17.5'	S 1°53.1'	248°16.4'	8.0'	N 5°54.4'	14.3'	61.3'
5	81°41.2'	257°17.7'	S 1°54.1'	262°43.4'	8.0'	N 5°40.1'	14.3'	61.3'
6	96°43.6'	272°17.9'	S 1°55.0'	277°10.5'	8.1'	N 5°25.8'	14.3'	61.3'
7	111°46.1'	287°18.1'	S 1°56.0'	291°37.5'	8.1'	N 5°11.5'	14.4'	61.3'
8	126°48.6'	302°18.3'	S 1°57.0'	306°04.6'	8.1'	N 4°57.1'	14.4'	61.3'
9	141°51.0'	317°18.5'	S 1°58.0'	320°31.7'	8.2'	N 4°42.7'	14.4'	61.3'
10	156°53.5'	332°18.7'	S 1°58.9'	334°58.9'	8.2'	N 4°28.3'	14.4'	61.3'
11	171°56.0'	347°18.9'	S 1°59.9'	349°26.1'	8.2'	N 4°13.9'	14.5'	61.3'
12	186°58.4'	2°19.2'	S 2°00.9'	3°53.3'	8.2'	N 3°59.4'	14.5'	61.2'
13	202°00.9'	17°19.4'	S 2°01.8'	18°20.5'	8.3'	N 3°44.9'	14.5'	61.2'
14	217°03.4'	32°19.6'	S 2°02.8'	32°47.8'	8.3'	N 3°30.4'	14.5'	61.2'
15	232°05.8'	47°19.8'	S 2°03.8'	47°15.1'	8.3'	N 3°15.8'	14.6'	61.2'
16	247°08.3'	62°20.0'	S 2°04.8'	61°42.4'	8.3'	N 3°01.3'	14.6'	61.2'
17	262°10.7'	77°20.2'	S 2°05.7'	76°09.7'	8.4'	N 2°46.7'	14.6'	61.2'
18	277°13.2'	92°20.4'	S 2°06.7'	90°37.1'	8.4'	N 2°32.1'	14.6'	61.2'
19	292°15.7'	107°20.6'	S 2°07.7'	105°04.5'	8.4'	N 2°17.5'	14.6'	61.2'
20	307°18.1'	122°20.8'	S 2°08.7'	119°31.9'	8.4'	N 2°02.9'	14.6'	61.2'
21	322°20.6'	137°21.0'	S 2°09.6'	133°59.3'	8.5'	N 1°48.3'	14.6'	61.2'
22	337°23.1'	152°21.2'	S 2°10.6'	148°26.7'	8.5'	N 1°33.7'	14.6'	61.2'
23	352°25.5'	167°21.5'	S 2°11.6'	162°54.2'	8.5'	N 1°19.1'	14.6'	61.1'

Sun Sep 29, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 16.0'		SD = 16.6'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	7°28.0'	182°21.7'	S 2°12.5'	177°21.7'	8.5'	N 1°04.5'	14.6'	61.1'
1	22°30.5'	197°21.9'	S 2°13.5'	191°49.2'	8.5'	N 0°49.8'	14.6'	61.1'
2	37°32.9'	212°22.1'	S 2°14.5'	206°16.8'	8.6'	N 0°35.2'	14.6'	61.1'
3	52°35.4'	227°22.3'	S 2°15.5'	220°44.3'	8.6'	N 0°20.6'	14.6'	61.1'
4	67°37.9'	242°22.5'	S 2°16.4'	235°11.9'	8.6'	N 0°05.9'	14.6'	61.1'
5	82°40.3'	257°22.7'	S 2°17.4'	249°39.5'	8.6'	S 0°08.7'	14.6'	61.1'
6	97°42.8'	272°22.9'	S 2°18.4'	264°07.1'	8.6'	S 0°23.3'	14.6'	61.0'
7	112°45.2'	287°23.1'	S 2°19.4'	278°34.7'	8.6'	S 0°37.9'	14.6'	61.0'
8	127°47.7'	302°23.3'	S 2°20.3'	293°02.3'	8.7'	S 0°52.5'	14.6'	61.0'
9	142°50.2'	317°23.5'	S 2°21.3'	307°30.0'	8.7'	S 1°07.0'	14.6'	61.0'
10	157°52.6'	332°23.7'	S 2°22.3'	321°57.7'	8.7'	S 1°21.6'	14.5'	61.0'
11	172°55.1'	347°23.9'	S 2°23.2'	336°25.3'	8.7'	S 1°36.1'	14.5'	61.0'
12	187°57.6'	2°24.2'	S 2°24.2'	350°53.0'	8.7'	S 1°50.7'	14.5'	60.9'
13	203°00.0'	17°24.4'	S 2°25.2'	5°20.7'	8.7'	S 2°05.2'	14.5'	60.9'
14	218°02.5'	32°24.6'	S 2°26.2'	19°48.5'	8.7'	S 2°19.6'	14.5'	60.9'
15	233°05.0'	47°24.8'	S 2°27.1'	34°16.2'	8.7'	S 2°34.1'	14.4'	60.9'
16	248°07.4'	62°25.0'	S 2°28.1'	48°43.9'	8.8'	S 2°48.5'	14.4'	60.9'
17	263°09.9'	77°25.2'	S 2°29.1'	63°11.7'	8.8'	S 3°02.9'	14.4'	60.8'
18	278°12.3'	92°25.4'	S 2°30.0'	77°39.4'	8.8'	S 3°17.3'	14.3'	60.8'
19	293°14.8'	107°25.6'	S 2°31.0'	92°07.2'	8.8'	S 3°31.7'	14.3'	60.8'
20	308°17.3'	122°25.8'	S 2°32.0'	106°35.0'	8.8'	S 3°46.0'	14.3'	60.8'
21	323°19.7'	137°26.0'	S 2°33.0'	121°02.8'	8.8'	S 4°00.2'	14.2'	60.8'
22	338°22.2'	152°26.2'	S 2°33.9'	135°30.6'	8.8'	S 4°14.5'	14.2'	60.7'
23	353°24.7'	167°26.4'	S 2°34.9'	149°58.4'	8.8'	S 4°28.7'	14.2'	60.7'

Mon Sep 30, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 1.0' SD = 16.0'		SD = 16.5'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	8°27.1'	182°26.6'	S 2°35.9'	164°26.2'	8.8'	S 4°42.9'	14.1'	60.7'
1	23°29.6'	197°26.8'	S 2°36.8'	178°54.0'	8.8'	S 4°57.0'	14.1'	60.7'
2	38°32.1'	212°27.0'	S 2°37.8'	193°21.8'	8.8'	S 5°11.1'	14.0'	60.6'
3	53°34.5'	227°27.2'	S 2°38.8'	207°49.7'	8.8'	S 5°25.1'	14.0'	60.6'
4	68°37.0'	242°27.5'	S 2°39.8'	222°17.5'	8.8'	S 5°39.1'	14.0'	60.6'
5	83°39.5'	257°27.7'	S 2°40.7'	236°45.3'	8.8'	S 5°53.1'	13.9'	60.5'
6	98°41.9'	272°27.9'	S 2°41.7'	251°13.2'	8.8'	S 6°07.0'	13.9'	60.5'
7	113°44.4'	287°28.1'	S 2°42.7'	265°41.0'	8.8'	S 6°20.8'	13.8'	60.5'
8	128°46.8'	302°28.3'	S 2°43.6'	280°08.8'	8.8'	S 6°34.7'	13.8'	60.5'
9	143°49.3'	317°28.5'	S 2°44.6'	294°36.7'	8.8'	S 6°48.4'	13.7'	60.4'
10	158°51.8'	332°28.7'	S 2°45.6'	309°04.5'	8.8'	S 7°02.1'	13.6'	60.4'
11	173°54.2'	347°28.9'	S 2°46.6'	323°32.4'	8.8'	S 7°15.7'	13.6'	60.4'
12	188°56.7'	2°29.1'	S 2°47.5'	338°00.2'	8.8'	S 7°29.3'	13.5'	60.4'
13	203°59.2'	17°29.3'	S 2°48.5'	352°28.1'	8.8'	S 7°42.9'	13.5'	60.3'
14	219°01.6'	32°29.5'	S 2°49.5'	6°55.9'	8.8'	S 7°56.3'	13.4'	60.3'
15	234°04.1'	47°29.7'	S 2°50.4'	21°23.8'	8.8'	S 8°09.7'	13.3'	60.3'
16	249°06.6'	62°29.9'	S 2°51.4'	35°51.6'	8.8'	S 8°23.1'	13.3'	60.2'
17	264°09.0'	77°30.1'	S 2°52.4'	50°19.4'	8.8'	S 8°36.3'	13.2'	60.2'
18	279°11.5'	92°30.3'	S 2°53.4'	64°47.3'	8.8'	S 8°49.6'	13.1'	60.2'
19	294°13.9'	107°30.5'	S 2°54.3'	79°15.1'	8.8'	S 9°02.7'	13.1'	60.1'
20	309°16.4'	122°30.7'	S 2°55.3'	93°42.9'	8.8'	S 9°15.8'	13.0'	60.1'
21	324°18.9'	137°30.9'	S 2°56.3'	108°10.8'	8.8'	S 9°28.8'	12.9'	60.1'
22	339°21.3'	152°31.1'	S 2°57.2'	122°38.6'	8.8'	S 9°41.7'	12.9'	60.0'
23	354°23.8'	167°31.3'	S 2°58.2'	137°06.4'	8.8'	S 9°54.6'	12.8'	60.0'