

Wed May 1, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.8' SD = 15.9'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	218°38.0'	180°41.9'	N 14°55.3'	221°38.4'	15.2'	S 6°15.4'	11.0'	54.6'
1	233°40.5'	195°42.0'	N 14°56.1'	236°12.7'	15.2'	S 6°04.5'	11.0'	54.6'
2	248°43.0'	210°42.1'	N 14°56.8'	250°46.9'	15.2'	S 5°53.5'	11.0'	54.6'
3	263°45.4'	225°42.2'	N 14°57.6'	265°21.2'	15.2'	S 5°42.5'	11.0'	54.6'
4	278°47.9'	240°42.3'	N 14°58.3'	279°55.4'	15.2'	S 5°31.5'	11.1'	54.6'
5	293°50.3'	255°42.3'	N 14°59.1'	294°29.7'	15.2'	S 5°20.4'	11.1'	54.7'
6	308°52.8'	270°42.4'	N 14°59.9'	309°03.9'	15.2'	S 5°09.3'	11.1'	54.7'
7	323°55.3'	285°42.5'	N 15°00.6'	323°38.1'	15.2'	S 4°58.2'	11.2'	54.7'
8	338°57.7'	300°42.6'	N 15°01.4'	338°12.4'	15.2'	S 4°47.0'	11.2'	54.7'
9	354°00.2'	315°42.6'	N 15°02.1'	352°46.6'	15.2'	S 4°35.8'	11.2'	54.7'
10	9°02.7'	330°42.7'	N 15°02.9'	7°20.9'	15.2'	S 4°24.6'	11.2'	54.7'
11	24°05.1'	345°42.8'	N 15°03.7'	21°55.1'	15.2'	S 4°13.4'	11.3'	54.8'
12	39°07.6'	0°42.9'	N 15°04.4'	36°29.3'	15.2'	S 4°02.1'	11.3'	54.8'
13	54°10.1'	15°42.9'	N 15°05.2'	51°03.5'	15.2'	S 3°50.8'	11.3'	54.8'
14	69°12.5'	30°43.0'	N 15°05.9'	65°37.8'	15.2'	S 3°39.5'	11.3'	54.8'
15	84°15.0'	45°43.1'	N 15°06.7'	80°12.0'	15.2'	S 3°28.2'	11.4'	54.8'
16	99°17.5'	60°43.2'	N 15°07.4'	94°46.2'	15.2'	S 3°16.9'	11.4'	54.8'
17	114°19.9'	75°43.2'	N 15°08.2'	109°20.4'	15.2'	S 3°05.5'	11.4'	54.9'
18	129°22.4'	90°43.3'	N 15°08.9'	123°54.5'	15.2'	S 2°54.1'	11.4'	54.9'
19	144°24.8'	105°43.4'	N 15°09.7'	138°28.7'	15.2'	S 2°42.7'	11.4'	54.9'
20	159°27.3'	120°43.5'	N 15°10.5'	153°02.9'	15.1'	S 2°31.2'	11.5'	54.9'
21	174°29.8'	135°43.5'	N 15°11.2'	167°37.0'	15.1'	S 2°19.8'	11.5'	54.9'
22	189°32.2'	150°43.6'	N 15°12.0'	182°11.2'	15.1'	S 2°08.3'	11.5'	54.9'
23	204°34.7'	165°43.7'	N 15°12.7'	196°45.3'	15.1'	S 1°56.8'	11.5'	55.0'

Thu May 2, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.9'		SD = 15.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	219°37.2'	180°43.7'	N 15°13.5'	211°19.4'	15.1'	S 1°45.3'	11.5'	55.0'
1	234°39.6'	195°43.8'	N 15°14.2'	225°53.5'	15.1'	S 1°33.8'	11.5'	55.0'
2	249°42.1'	210°43.9'	N 15°15.0'	240°27.6'	15.1'	S 1°22.3'	11.5'	55.0'
3	264°44.6'	225°44.0'	N 15°15.7'	255°01.6'	15.0'	S 1°10.7'	11.6'	55.0'
4	279°47.0'	240°44.0'	N 15°16.5'	269°35.7'	15.0'	S 0°59.2'	11.6'	55.0'
5	294°49.5'	255°44.1'	N 15°17.2'	284°09.7'	15.0'	S 0°47.6'	11.6'	55.1'
6	309°51.9'	270°44.2'	N 15°18.0'	298°43.7'	15.0'	S 0°36.0'	11.6'	55.1'
7	324°54.4'	285°44.2'	N 15°18.7'	313°17.7'	15.0'	S 0°24.4'	11.6'	55.1'
8	339°56.9'	300°44.3'	N 15°19.5'	327°51.7'	14.9'	S 0°12.8'	11.6'	55.1'
9	354°59.3'	315°44.4'	N 15°20.2'	342°25.6'	14.9'	S 0°01.2'	11.6'	55.1'
10	10°01.8'	330°44.5'	N 15°21.0'	356°59.5'	14.9'	N 0°10.4'	11.6'	55.2'
11	25°04.3'	345°44.5'	N 15°21.7'	11°33.4'	14.9'	N 0°22.1'	11.6'	55.2'
12	40°06.7'	0°44.6'	N 15°22.4'	26°07.3'	14.9'	N 0°33.7'	11.7'	55.2'
13	55°09.2'	15°44.7'	N 15°23.2'	40°41.2'	14.8'	N 0°45.4'	11.7'	55.2'
14	70°11.7'	30°44.7'	N 15°23.9'	55°15.0'	14.8'	N 0°57.0'	11.7'	55.2'
15	85°14.1'	45°44.8'	N 15°24.7'	69°48.8'	14.8'	N 1°08.7'	11.7'	55.3'
16	100°16.6'	60°44.9'	N 15°25.4'	84°22.6'	14.8'	N 1°20.4'	11.7'	55.3'
17	115°19.1'	75°44.9'	N 15°26.2'	98°56.3'	14.7'	N 1°32.0'	11.7'	55.3'
18	130°21.5'	90°45.0'	N 15°26.9'	113°30.1'	14.7'	N 1°43.7'	11.7'	55.3'
19	145°24.0'	105°45.1'	N 15°27.7'	128°03.8'	14.7'	N 1°55.4'	11.7'	55.3'
20	160°26.4'	120°45.1'	N 15°28.4'	142°37.4'	14.6'	N 2°07.1'	11.7'	55.4'
21	175°28.9'	135°45.2'	N 15°29.1'	157°11.1'	14.6'	N 2°18.8'	11.7'	55.4'
22	190°31.4'	150°45.3'	N 15°29.9'	171°44.7'	14.6'	N 2°30.4'	11.7'	55.4'
23	205°33.8'	165°45.3'	N 15°30.6'	186°18.3'	14.5'	N 2°42.1'	11.7'	55.4'

Fri May 3, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.9'		SD = 15.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	220°36.3'	180°45.4'	N 15°31.4'	200°51.8'	14.5'	N 2°53.8'	11.7'	55.4'
1	235°38.8'	195°45.5'	N 15°32.1'	215°25.3'	14.5'	N 3°05.5'	11.7'	55.5'
2	250°41.2'	210°45.5'	N 15°32.9'	229°58.8'	14.4'	N 3°17.2'	11.7'	55.5'
3	265°43.7'	225°45.6'	N 15°33.6'	244°32.2'	14.4'	N 3°28.8'	11.7'	55.5'
4	280°46.2'	240°45.7'	N 15°34.3'	259°05.6'	14.4'	N 3°40.5'	11.7'	55.5'
5	295°48.6'	255°45.7'	N 15°35.1'	273°39.0'	14.3'	N 3°52.1'	11.7'	55.6'
6	310°51.1'	270°45.8'	N 15°35.8'	288°12.3'	14.3'	N 4°03.8'	11.6'	55.6'
7	325°53.6'	285°45.9'	N 15°36.5'	302°45.6'	14.3'	N 4°15.4'	11.6'	55.6'
8	340°56.0'	300°45.9'	N 15°37.3'	317°18.8'	14.2'	N 4°27.1'	11.6'	55.6'
9	355°58.5'	315°46.0'	N 15°38.0'	331°52.1'	14.2'	N 4°38.7'	11.6'	55.6'
10	11°00.9'	330°46.1'	N 15°38.8'	346°25.2'	14.1'	N 4°50.3'	11.6'	55.7'
11	26°03.4'	345°46.1'	N 15°39.5'	0°58.4'	14.1'	N 5°01.9'	11.6'	55.7'
12	41°05.9'	0°46.2'	N 15°40.2'	15°31.5'	14.0'	N 5°13.5'	11.6'	55.7'
13	56°08.3'	15°46.3'	N 15°41.0'	30°04.5'	14.0'	N 5°25.1'	11.6'	55.7'
14	71°10.8'	30°46.3'	N 15°41.7'	44°37.5'	14.0'	N 5°36.7'	11.6'	55.8'
15	86°13.3'	45°46.4'	N 15°42.4'	59°10.5'	13.9'	N 5°48.2'	11.5'	55.8'
16	101°15.7'	60°46.4'	N 15°43.2'	73°43.4'	13.9'	N 5°59.8'	11.5'	55.8'
17	116°18.2'	75°46.5'	N 15°43.9'	88°16.2'	13.8'	N 6°11.3'	11.5'	55.8'
18	131°20.7'	90°46.6'	N 15°44.6'	102°49.1'	13.8'	N 6°22.8'	11.5'	55.8'
19	146°23.1'	105°46.6'	N 15°45.4'	117°21.8'	13.7'	N 6°34.3'	11.5'	55.9'
20	161°25.6'	120°46.7'	N 15°46.1'	131°54.6'	13.7'	N 6°45.7'	11.4'	55.9'
21	176°28.0'	135°46.7'	N 15°46.8'	146°27.3'	13.6'	N 6°57.2'	11.4'	55.9'
22	191°30.5'	150°46.8'	N 15°47.6'	160°59.9'	13.6'	N 7°08.6'	11.4'	55.9'
23	206°33.0'	165°46.9'	N 15°48.3'	175°32.5'	13.5'	N 7°20.0'	11.4'	56.0'

Sat May 4, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.9'		SD = 15.3'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	221°35.4'	180°46.9'	N 15°49.0'	190°05.0'	13.5'	N 7°31.4'	11.4'	56.0'
1	236°37.9'	195°47.0'	N 15°49.7'	204°37.5'	13.4'	N 7°42.8'	11.3'	56.0'
2	251°40.4'	210°47.1'	N 15°50.5'	219°09.9'	13.4'	N 7°54.1'	11.3'	56.0'
3	266°42.8'	225°47.1'	N 15°51.2'	233°42.3'	13.3'	N 8°05.4'	11.3'	56.0'
4	281°45.3'	240°47.2'	N 15°51.9'	248°14.6'	13.3'	N 8°16.7'	11.3'	56.1'
5	296°47.8'	255°47.2'	N 15°52.7'	262°46.9'	13.2'	N 8°27.9'	11.2'	56.1'
6	311°50.2'	270°47.3'	N 15°53.4'	277°19.1'	13.2'	N 8°39.1'	11.2'	56.1'
7	326°52.7'	285°47.4'	N 15°54.1'	291°51.2'	13.1'	N 8°50.3'	11.2'	56.1'
8	341°55.2'	300°47.4'	N 15°54.8'	306°23.3'	13.0'	N 9°01.5'	11.1'	56.2'
9	356°57.6'	315°47.5'	N 15°55.6'	320°55.4'	13.0'	N 9°12.6'	11.1'	56.2'
10	12°00.1'	330°47.5'	N 15°56.3'	335°27.4'	12.9'	N 9°23.7'	11.1'	56.2'
11	27°02.5'	345°47.6'	N 15°57.0'	349°59.3'	12.9'	N 9°34.8'	11.0'	56.2'
12	42°05.0'	0°47.6'	N 15°57.7'	4°31.2'	12.8'	N 9°45.8'	11.0'	56.2'
13	57°07.5'	15°47.7'	N 15°58.5'	19°03.0'	12.8'	N 9°56.8'	11.0'	56.3'
14	72°09.9'	30°47.8'	N 15°59.2'	33°34.7'	12.7'	N 10°07.8'	10.9'	56.3'
15	87°12.4'	45°47.8'	N 15°59.9'	48°06.4'	12.6'	N 10°18.7'	10.9'	56.3'
16	102°14.9'	60°47.9'	N 16°00.6'	62°38.1'	12.6'	N 10°29.5'	10.8'	56.3'
17	117°17.3'	75°47.9'	N 16°01.4'	77°09.6'	12.5'	N 10°40.4'	10.8'	56.4'
18	132°19.8'	90°48.0'	N 16°02.1'	91°41.2'	12.4'	N 10°51.2'	10.8'	56.4'
19	147°22.3'	105°48.0'	N 16°02.8'	106°12.6'	12.4'	N 11°01.9'	10.7'	56.4'
20	162°24.7'	120°48.1'	N 16°03.5'	120°44.0'	12.3'	N 11°12.6'	10.7'	56.4'
21	177°27.2'	135°48.2'	N 16°04.2'	135°15.3'	12.3'	N 11°23.3'	10.6'	56.5'
22	192°29.7'	150°48.2'	N 16°05.0'	149°46.6'	12.2'	N 11°33.9'	10.6'	56.5'
23	207°32.1'	165°48.3'	N 16°05.7'	164°17.8'	12.1'	N 11°44.5'	10.5'	56.5'

Sun May 5, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.9'		SD = 15.5'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	222°34.6'	180°48.3'	N 16°06.4'	178°48.9'	12.1'	N 11°55.0'	10.5'	56.5'
1	237°37.0'	195°48.4'	N 16°07.1'	193°19.9'	12.0'	N 12°05.5'	10.4'	56.5'
2	252°39.5'	210°48.4'	N 16°07.8'	207°50.9'	11.9'	N 12°15.9'	10.4'	56.6'
3	267°42.0'	225°48.5'	N 16°08.6'	222°21.9'	11.9'	N 12°26.3'	10.3'	56.6'
4	282°44.4'	240°48.5'	N 16°09.3'	236°52.7'	11.8'	N 12°36.6'	10.3'	56.6'
5	297°46.9'	255°48.6'	N 16°10.0'	251°23.5'	11.7'	N 12°46.9'	10.2'	56.6'
6	312°49.4'	270°48.6'	N 16°10.7'	265°54.2'	11.7'	N 12°57.1'	10.2'	56.7'
7	327°51.8'	285°48.7'	N 16°11.4'	280°24.9'	11.6'	N 13°07.3'	10.1'	56.7'
8	342°54.3'	300°48.7'	N 16°12.1'	294°55.5'	11.5'	N 13°17.4'	10.0'	56.7'
9	357°56.8'	315°48.8'	N 16°12.9'	309°26.0'	11.4'	N 13°27.4'	10.0'	56.7'
10	12°59.2'	330°48.9'	N 16°13.6'	323°56.5'	11.4'	N 13°37.4'	9.9'	56.8'
11	28°01.7'	345°48.9'	N 16°14.3'	338°26.8'	11.3'	N 13°47.3'	9.9'	56.8'
12	43°04.1'	0°49.0'	N 16°15.0'	352°57.1'	11.2'	N 13°57.2'	9.8'	56.8'
13	58°06.6'	15°49.0'	N 16°15.7'	7°27.4'	11.2'	N 14°07.0'	9.7'	56.8'
14	73°09.1'	30°49.1'	N 16°16.4'	21°57.5'	11.1'	N 14°16.7'	9.7'	56.8'
15	88°11.5'	45°49.1'	N 16°17.1'	36°27.6'	11.0'	N 14°26.4'	9.6'	56.9'
16	103°14.0'	60°49.2'	N 16°17.9'	50°57.7'	11.0'	N 14°36.0'	9.5'	56.9'
17	118°16.5'	75°49.2'	N 16°18.6'	65°27.6'	10.9'	N 14°45.5'	9.5'	56.9'
18	133°18.9'	90°49.3'	N 16°19.3'	79°57.5'	10.8'	N 14°55.0'	9.4'	56.9'
19	148°21.4'	105°49.3'	N 16°20.0'	94°27.3'	10.7'	N 15°04.4'	9.3'	57.0'
20	163°23.9'	120°49.4'	N 16°20.7'	108°57.0'	10.7'	N 15°13.7'	9.3'	57.0'
21	178°26.3'	135°49.4'	N 16°21.4'	123°26.7'	10.6'	N 15°23.0'	9.2'	57.0'
22	193°28.8'	150°49.5'	N 16°22.1'	137°56.3'	10.5'	N 15°32.2'	9.1'	57.0'
23	208°31.3'	165°49.5'	N 16°22.8'	152°25.8'	10.4'	N 15°41.3'	9.0'	57.0'

Mon May 6, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.9'		SD = 15.6'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	223°33.7'	180°49.6'	N 16°23.5'	166°55.3'	10.4'	N 15°50.3'	9.0'	57.1'
1	238°36.2'	195°49.6'	N 16°24.2'	181°24.6'	10.3'	N 15°59.3'	8.9'	57.1'
2	253°38.6'	210°49.7'	N 16°24.9'	195°53.9'	10.2'	N 16°08.2'	8.8'	57.1'
3	268°41.1'	225°49.7'	N 16°25.7'	210°23.1'	10.1'	N 16°17.0'	8.7'	57.1'
4	283°43.6'	240°49.8'	N 16°26.4'	224°52.3'	10.1'	N 16°25.7'	8.6'	57.2'
5	298°46.0'	255°49.8'	N 16°27.1'	239°21.4'	10.0'	N 16°34.3'	8.6'	57.2'
6	313°48.5'	270°49.9'	N 16°27.8'	253°50.4'	9.9'	N 16°42.9'	8.5'	57.2'
7	328°51.0'	285°49.9'	N 16°28.5'	268°19.3'	9.9'	N 16°51.4'	8.4'	57.2'
8	343°53.4'	300°49.9'	N 16°29.2'	282°48.2'	9.8'	N 16°59.8'	8.3'	57.2'
9	358°55.9'	315°50.0'	N 16°29.9'	297°16.9'	9.7'	N 17°08.1'	8.2'	57.3'
10	13°58.4'	330°50.0'	N 16°30.6'	311°45.6'	9.6'	N 17°16.3'	8.1'	57.3'
11	29°00.8'	345°50.1'	N 16°31.3'	326°14.3'	9.6'	N 17°24.4'	8.0'	57.3'
12	44°03.3'	0°50.1'	N 16°32.0'	340°42.8'	9.5'	N 17°32.5'	8.0'	57.3'
13	59°05.8'	15°50.2'	N 16°32.7'	355°11.3'	9.4'	N 17°40.4'	7.9'	57.3'
14	74°08.2'	30°50.2'	N 16°33.4'	9°39.7'	9.3'	N 17°48.3'	7.8'	57.4'
15	89°10.7'	45°50.3'	N 16°34.1'	24°08.1'	9.3'	N 17°56.0'	7.7'	57.4'
16	104°13.1'	60°50.3'	N 16°34.8'	38°36.3'	9.2'	N 18°03.7'	7.6'	57.4'
17	119°15.6'	75°50.4'	N 16°35.5'	53°04.5'	9.1'	N 18°11.3'	7.5'	57.4'
18	134°18.1'	90°50.4'	N 16°36.2'	67°32.7'	9.0'	N 18°18.8'	7.4'	57.4'
19	149°20.5'	105°50.4'	N 16°36.9'	82°00.7'	9.0'	N 18°26.2'	7.3'	57.5'
20	164°23.0'	120°50.5'	N 16°37.6'	96°28.7'	8.9'	N 18°33.5'	7.2'	57.5'
21	179°25.5'	135°50.5'	N 16°38.3'	110°56.6'	8.8'	N 18°40.6'	7.1'	57.5'
22	194°27.9'	150°50.6'	N 16°39.0'	125°24.4'	8.8'	N 18°47.7'	7.0'	57.5'
23	209°30.4'	165°50.6'	N 16°39.7'	139°52.2'	8.7'	N 18°54.7'	6.9'	57.6'

Tue May 7, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.9'		SD = 15.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	224°32.9'	180°50.7'	N 16°40.4'	154°19.9'	8.6'	N 19°01.6'	6.8'	57.6'
1	239°35.3'	195°50.7'	N 16°41.1'	168°47.5'	8.6'	N 19°08.4'	6.7'	57.6'
2	254°37.8'	210°50.8'	N 16°41.8'	183°15.1'	8.5'	N 19°15.1'	6.6'	57.6'
3	269°40.2'	225°50.8'	N 16°42.5'	197°42.5'	8.4'	N 19°21.6'	6.5'	57.6'
4	284°42.7'	240°50.8'	N 16°43.2'	212°10.0'	8.3'	N 19°28.1'	6.4'	57.7'
5	299°45.2'	255°50.9'	N 16°43.9'	226°37.3'	8.3'	N 19°34.4'	6.2'	57.7'
6	314°47.6'	270°50.9'	N 16°44.5'	241°04.6'	8.2'	N 19°40.7'	6.1'	57.7'
7	329°50.1'	285°51.0'	N 16°45.2'	255°31.8'	8.1'	N 19°46.8'	6.0'	57.7'
8	344°52.6'	300°51.0'	N 16°45.9'	269°58.9'	8.1'	N 19°52.8'	5.9'	57.7'
9	359°55.0'	315°51.0'	N 16°46.6'	284°26.0'	8.0'	N 19°58.7'	5.8'	57.7'
10	14°57.5'	330°51.1'	N 16°47.3'	298°53.0'	7.9'	N 20°04.5'	5.7'	57.8'
11	29°60.0'	345°51.1'	N 16°48.0'	313°20.0'	7.9'	N 20°10.2'	5.6'	57.8'
12	45°02.4'	0°51.2'	N 16°48.7'	327°46.9'	7.8'	N 20°15.8'	5.5'	57.8'
13	60°04.9'	15°51.2'	N 16°49.4'	342°13.7'	7.8'	N 20°21.2'	5.3'	57.8'
14	75°07.4'	30°51.2'	N 16°50.1'	356°40.4'	7.7'	N 20°26.6'	5.2'	57.8'
15	90°09.8'	45°51.3'	N 16°50.8'	11°07.1'	7.6'	N 20°31.8'	5.1'	57.9'
16	105°12.3'	60°51.3'	N 16°51.5'	25°33.8'	7.6'	N 20°36.9'	5.0'	57.9'
17	120°14.7'	75°51.4'	N 16°52.1'	40°00.4'	7.5'	N 20°41.9'	4.9'	57.9'
18	135°17.2'	90°51.4'	N 16°52.8'	54°26.9'	7.5'	N 20°46.7'	4.7'	57.9'
19	150°19.7'	105°51.4'	N 16°53.5'	68°53.3'	7.4'	N 20°51.5'	4.6'	57.9'
20	165°22.1'	120°51.5'	N 16°54.2'	83°19.7'	7.3'	N 20°56.1'	4.5'	58.0'
21	180°24.6'	135°51.5'	N 16°54.9'	97°46.1'	7.3'	N 21°00.6'	4.4'	58.0'
22	195°27.1'	150°51.6'	N 16°55.6'	112°12.4'	7.2'	N 21°04.9'	4.2'	58.0'
23	210°29.5'	165°51.6'	N 16°56.3'	126°38.6'	7.2'	N 21°09.2'	4.1'	58.0'

Wed May 8, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.8'		SD = 15.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	225°32.0'	180°51.6'	N 16°56.9'	141°04.8'	7.1'	N 21°13.3'	4.0'	58.0'
1	240°34.5'	195°51.7'	N 16°57.6'	155°30.9'	7.1'	N 21°17.3'	3.9'	58.0'
2	255°36.9'	210°51.7'	N 16°58.3'	169°57.0'	7.0'	N 21°21.1'	3.7'	58.1'
3	270°39.4'	225°51.7'	N 16°59.0'	184°23.0'	7.0'	N 21°24.9'	3.6'	58.1'
4	285°41.9'	240°51.8'	N 16°59.7'	198°49.0'	6.9'	N 21°28.5'	3.5'	58.1'
5	300°44.3'	255°51.8'	N 17°00.4'	213°14.9'	6.9'	N 21°31.9'	3.3'	58.1'
6	315°46.8'	270°51.9'	N 17°01.0'	227°40.8'	6.8'	N 21°35.3'	3.2'	58.1'
7	330°49.2'	285°51.9'	N 17°01.7'	242°06.6'	6.8'	N 21°38.5'	3.1'	58.2'
8	345°51.7'	300°51.9'	N 17°02.4'	256°32.4'	6.7'	N 21°41.5'	2.9'	58.2'
9	0°54.2'	315°52.0'	N 17°03.1'	270°58.1'	6.7'	N 21°44.5'	2.8'	58.2'
10	15°56.6'	330°52.0'	N 17°03.8'	285°23.8'	6.7'	N 21°47.3'	2.7'	58.2'
11	30°59.1'	345°52.0'	N 17°04.5'	299°49.5'	6.6'	N 21°50.0'	2.5'	58.2'
12	46°01.6'	0°52.1'	N 17°05.1'	314°15.1'	6.6'	N 21°52.5'	2.4'	58.2'
13	61°04.0'	15°52.1'	N 17°05.8'	328°40.6'	6.5'	N 21°54.9'	2.3'	58.3'
14	76°06.5'	30°52.1'	N 17°06.5'	343°06.2'	6.5'	N 21°57.2'	2.1'	58.3'
15	91°09.0'	45°52.2'	N 17°07.2'	357°31.7'	6.5'	N 21°59.3'	2.0'	58.3'
16	106°11.4'	60°52.2'	N 17°07.8'	11°57.1'	6.4'	N 22°01.3'	1.9'	58.3'
17	121°13.9'	75°52.2'	N 17°08.5'	26°22.5'	6.4'	N 22°03.2'	1.7'	58.3'
18	136°16.4'	90°52.3'	N 17°09.2'	40°47.9'	6.4'	N 22°04.9'	1.6'	58.3'
19	151°18.8'	105°52.3'	N 17°09.9'	55°13.3'	6.3'	N 22°06.5'	1.4'	58.4'
20	166°21.3'	120°52.3'	N 17°10.5'	69°38.6'	6.3'	N 22°07.9'	1.3'	58.4'
21	181°23.7'	135°52.4'	N 17°11.2'	84°03.9'	6.3'	N 22°09.2'	1.2'	58.4'
22	196°26.2'	150°52.4'	N 17°11.9'	98°29.2'	6.2'	N 22°10.4'	1.0'	58.4'
23	211°28.7'	165°52.4'	N 17°12.6'	112°54.4'	6.2'	N 22°11.4'	0.9'	58.4'

Thu May 9, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.8'		SD = 16.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	226°31.1'	180°52.5'	N 17°13.2'	127°19.7'	6.2'	N 22°12.3'	0.7'	58.4'
1	241°33.6'	195°52.5'	N 17°13.9'	141°44.8'	6.2'	N 22°13.1'	0.6'	58.4'
2	256°36.1'	210°52.5'	N 17°14.6'	156°10.0'	6.1'	N 22°13.7'	0.5'	58.5'
3	271°38.5'	225°52.6'	N 17°15.3'	170°35.2'	6.1'	N 22°14.1'	0.3'	58.5'
4	286°41.0'	240°52.6'	N 17°15.9'	185°00.3'	6.1'	N 22°14.5'	0.2'	58.5'
5	301°43.5'	255°52.6'	N 17°16.6'	199°25.4'	6.1'	N 22°14.6'	0.0'	58.5'
6	316°45.9'	270°52.6'	N 17°17.3'	213°50.5'	6.1'	N 22°14.7'	0.1'	58.5'
7	331°48.4'	285°52.7'	N 17°17.9'	228°15.6'	6.1'	N 22°14.6'	0.2'	58.5'
8	346°50.9'	300°52.7'	N 17°18.6'	242°40.6'	6.0'	N 22°14.3'	0.4'	58.5'
9	1°53.3'	315°52.7'	N 17°19.3'	257°05.7'	6.0'	N 22°13.9'	0.5'	58.6'
10	16°55.8'	330°52.8'	N 17°19.9'	271°30.7'	6.0'	N 22°13.4'	0.7'	58.6'
11	31°58.2'	345°52.8'	N 17°20.6'	285°55.7'	6.0'	N 22°12.7'	0.8'	58.6'
12	47°00.7'	0°52.8'	N 17°21.3'	300°20.8'	6.0'	N 22°11.9'	1.0'	58.6'
13	62°03.2'	15°52.9'	N 17°21.9'	314°45.8'	6.0'	N 22°10.9'	1.1'	58.6'
14	77°05.6'	30°52.9'	N 17°22.6'	329°10.8'	6.0'	N 22°09.8'	1.2'	58.6'
15	92°08.1'	45°52.9'	N 17°23.3'	343°35.8'	6.0'	N 22°08.6'	1.4'	58.6'
16	107°10.6'	60°52.9'	N 17°23.9'	358°00.8'	6.0'	N 22°07.2'	1.5'	58.7'
17	122°13.0'	75°53.0'	N 17°24.6'	12°25.8'	6.0'	N 22°05.7'	1.7'	58.7'
18	137°15.5'	90°53.0'	N 17°25.3'	26°50.7'	6.0'	N 22°04.0'	1.8'	58.7'
19	152°18.0'	105°53.0'	N 17°25.9'	41°15.7'	6.0'	N 22°02.2'	2.0'	58.7'
20	167°20.4'	120°53.0'	N 17°26.6'	55°40.7'	6.0'	N 22°00.2'	2.1'	58.7'
21	182°22.9'	135°53.1'	N 17°27.3'	70°05.7'	6.0'	N 21°58.1'	2.2'	58.7'
22	197°25.3'	150°53.1'	N 17°27.9'	84°30.7'	6.0'	N 21°55.9'	2.4'	58.7'
23	212°27.8'	165°53.1'	N 17°28.6'	98°55.7'	6.0'	N 21°53.5'	2.5'	58.8'

Fri May 10, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.7' SD = 15.8'		SD = 16.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	227°30.3'	180°53.2'	N 17°29.2'	113°20.7'	6.0'	N 21°51.0'	2.7'	58.8'
1	242°32.7'	195°53.2'	N 17°29.9'	127°45.8'	6.0'	N 21°48.3'	2.8'	58.8'
2	257°35.2'	210°53.2'	N 17°30.6'	142°10.8'	6.0'	N 21°45.5'	3.0'	58.8'
3	272°37.7'	225°53.2'	N 17°31.2'	156°35.8'	6.1'	N 21°42.5'	3.1'	58.8'
4	287°40.1'	240°53.3'	N 17°31.9'	171°00.9'	6.1'	N 21°39.4'	3.2'	58.8'
5	302°42.6'	255°53.3'	N 17°32.5'	185°26.0'	6.1'	N 21°36.2'	3.4'	58.8'
6	317°45.1'	270°53.3'	N 17°33.2'	199°51.1'	6.1'	N 21°32.8'	3.5'	58.8'
7	332°47.5'	285°53.3'	N 17°33.8'	214°16.2'	6.1'	N 21°29.3'	3.7'	58.9'
8	347°50.0'	300°53.3'	N 17°34.5'	228°41.3'	6.1'	N 21°25.6'	3.8'	58.9'
9	2°52.5'	315°53.4'	N 17°35.2'	243°06.4'	6.2'	N 21°21.9'	3.9'	58.9'
10	17°54.9'	330°53.4'	N 17°35.8'	257°31.6'	6.2'	N 21°17.9'	4.1'	58.9'
11	32°57.4'	345°53.4'	N 17°36.5'	271°56.7'	6.2'	N 21°13.9'	4.2'	58.9'
12	47°59.8'	0°53.4'	N 17°37.1'	286°21.9'	6.2'	N 21°09.6'	4.3'	58.9'
13	63°02.3'	15°53.5'	N 17°37.8'	300°47.1'	6.2'	N 21°05.3'	4.5'	58.9'
14	78°04.8'	30°53.5'	N 17°38.4'	315°12.4'	6.3'	N 21°00.8'	4.6'	58.9'
15	93°07.2'	45°53.5'	N 17°39.1'	329°37.7'	6.3'	N 20°56.2'	4.8'	58.9'
16	108°09.7'	60°53.5'	N 17°39.7'	344°03.0'	6.3'	N 20°51.4'	4.9'	59.0'
17	123°12.2'	75°53.6'	N 17°40.4'	358°28.3'	6.4'	N 20°46.6'	5.0'	59.0'
18	138°14.6'	90°53.6'	N 17°41.0'	12°53.6'	6.4'	N 20°41.5'	5.2'	59.0'
19	153°17.1'	105°53.6'	N 17°41.7'	27°19.0'	6.4'	N 20°36.4'	5.3'	59.0'
20	168°19.6'	120°53.6'	N 17°42.3'	41°44.4'	6.4'	N 20°31.1'	5.4'	59.0'
21	183°22.0'	135°53.6'	N 17°43.0'	56°09.9'	6.5'	N 20°25.7'	5.6'	59.0'
22	198°24.5'	150°53.7'	N 17°43.6'	70°35.3'	6.5'	N 20°20.1'	5.7'	59.0'
23	213°27.0'	165°53.7'	N 17°44.3'	85°00.8'	6.5'	N 20°14.4'	5.8'	59.0'

Sat May 11, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	228°29.4'	180°53.7'	N 17°44.9'	99°26.4'	6.6'	N 20°08.6'	5.9'	59.0'
1	243°31.9'	195°53.7'	N 17°45.6'	113°52.0'	6.6'	N 20°02.6'	6.1'	59.1'
2	258°34.3'	210°53.7'	N 17°46.2'	128°17.6'	6.6'	N 19°56.6'	6.2'	59.1'
3	273°36.8'	225°53.8'	N 17°46.9'	142°43.2'	6.7'	N 19°50.4'	6.3'	59.1'
4	288°39.3'	240°53.8'	N 17°47.5'	157°08.9'	6.7'	N 19°44.0'	6.5'	59.1'
5	303°41.7'	255°53.8'	N 17°48.2'	171°34.6'	6.8'	N 19°37.6'	6.6'	59.1'
6	318°44.2'	270°53.8'	N 17°48.8'	186°00.4'	6.8'	N 19°31.0'	6.7'	59.1'
7	333°46.7'	285°53.8'	N 17°49.5'	200°26.2'	6.8'	N 19°24.3'	6.8'	59.1'
8	348°49.1'	300°53.9'	N 17°50.1'	214°52.0'	6.9'	N 19°17.4'	7.0'	59.1'
9	3°51.6'	315°53.9'	N 17°50.8'	229°17.9'	6.9'	N 19°10.5'	7.1'	59.1'
10	18°54.1'	330°53.9'	N 17°51.4'	243°43.8'	7.0'	N 19°03.4'	7.2'	59.1'
11	33°56.5'	345°53.9'	N 17°52.0'	258°09.8'	7.0'	N 18°56.2'	7.3'	59.1'
12	48°59.0'	0°53.9'	N 17°52.7'	272°35.8'	7.1'	N 18°48.9'	7.4'	59.2'
13	64°01.5'	15°53.9'	N 17°53.3'	287°01.9'	7.1'	N 18°41.4'	7.6'	59.2'
14	79°03.9'	30°54.0'	N 17°54.0'	301°28.0'	7.1'	N 18°33.9'	7.7'	59.2'
15	94°06.4'	45°54.0'	N 17°54.6'	315°54.1'	7.2'	N 18°26.2'	7.8'	59.2'
16	109°08.8'	60°54.0'	N 17°55.2'	330°20.3'	7.2'	N 18°18.4'	7.9'	59.2'
17	124°11.3'	75°54.0'	N 17°55.9'	344°46.5'	7.3'	N 18°10.5'	8.0'	59.2'
18	139°13.8'	90°54.0'	N 17°56.5'	359°12.8'	7.3'	N 18°02.5'	8.1'	59.2'
19	154°16.2'	105°54.0'	N 17°57.2'	13°39.1'	7.4'	N 17°54.3'	8.3'	59.2'
20	169°18.7'	120°54.1'	N 17°57.8'	28°05.5'	7.4'	N 17°46.1'	8.4'	59.2'
21	184°21.2'	135°54.1'	N 17°58.4'	42°31.9'	7.5'	N 17°37.7'	8.5'	59.2'
22	199°23.6'	150°54.1'	N 17°59.1'	56°58.3'	7.5'	N 17°29.2'	8.6'	59.2'
23	214°26.1'	165°54.1'	N 17°59.7'	71°24.9'	7.6'	N 17°20.6'	8.7'	59.2'

Sun May 12, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	229°28.6'	180°54.1'	N 18°00.3'	85°51.4'	7.6'	N 17°11.9'	8.8'	59.3'
1	244°31.0'	195°54.1'	N 18°01.0'	100°18.0'	7.7'	N 17°03.1'	8.9'	59.3'
2	259°33.5'	210°54.1'	N 18°01.6'	114°44.7'	7.7'	N 16°54.2'	9.0'	59.3'
3	274°35.9'	225°54.2'	N 18°02.3'	129°11.4'	7.7'	N 16°45.2'	9.1'	59.3'
4	289°38.4'	240°54.2'	N 18°02.9'	143°38.1'	7.8'	N 16°36.1'	9.2'	59.3'
5	304°40.9'	255°54.2'	N 18°03.5'	158°04.9'	7.8'	N 16°26.8'	9.3'	59.3'
6	319°43.3'	270°54.2'	N 18°04.2'	172°31.7'	7.9'	N 16°17.5'	9.4'	59.3'
7	334°45.8'	285°54.2'	N 18°04.8'	186°58.6'	7.9'	N 16°08.1'	9.5'	59.3'
8	349°48.3'	300°54.2'	N 18°05.4'	201°25.6'	8.0'	N 15°58.6'	9.6'	59.3'
9	4°50.7'	315°54.2'	N 18°06.0'	215°52.6'	8.0'	N 15°48.9'	9.7'	59.3'
10	19°53.2'	330°54.2'	N 18°06.7'	230°19.6'	8.1'	N 15°39.2'	9.8'	59.3'
11	34°55.7'	345°54.3'	N 18°07.3'	244°46.7'	8.1'	N 15°29.4'	9.9'	59.3'
12	49°58.1'	0°54.3'	N 18°07.9'	259°13.8'	8.2'	N 15°19.5'	10.0'	59.3'
13	65°00.6'	15°54.3'	N 18°08.6'	273°41.0'	8.2'	N 15°09.4'	10.1'	59.3'
14	80°03.1'	30°54.3'	N 18°09.2'	288°08.3'	8.3'	N 14°59.3'	10.2'	59.3'
15	95°05.5'	45°54.3'	N 18°09.8'	302°35.6'	8.3'	N 14°49.1'	10.3'	59.3'
16	110°08.0'	60°54.3'	N 18°10.4'	317°02.9'	8.4'	N 14°38.8'	10.4'	59.3'
17	125°10.4'	75°54.3'	N 18°11.1'	331°30.3'	8.4'	N 14°28.5'	10.5'	59.4'
18	140°12.9'	90°54.3'	N 18°11.7'	345°57.7'	8.5'	N 14°18.0'	10.6'	59.4'
19	155°15.4'	105°54.3'	N 18°12.3'	0°25.2'	8.5'	N 14°07.4'	10.6'	59.4'
20	170°17.8'	120°54.4'	N 18°13.0'	14°52.7'	8.6'	N 13°56.8'	10.7'	59.4'
21	185°20.3'	135°54.4'	N 18°13.6'	29°20.3'	8.6'	N 13°46.1'	10.8'	59.4'
22	200°22.8'	150°54.4'	N 18°14.2'	43°47.9'	8.7'	N 13°35.3'	10.9'	59.4'
23	215°25.2'	165°54.4'	N 18°14.8'	58°15.6'	8.7'	N 13°24.4'	11.0'	59.4'

Mon May 13, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	230°27.7'	180°54.4'	N 18°15.4'	72°43.3'	8.8'	N 13°13.4'	11.1'	59.4'
1	245°30.2'	195°54.4'	N 18°16.1'	87°11.1'	8.8'	N 13°02.3'	11.1'	59.4'
2	260°32.6'	210°54.4'	N 18°16.7'	101°38.9'	8.9'	N 12°51.2'	11.2'	59.4'
3	275°35.1'	225°54.4'	N 18°17.3'	116°06.7'	8.9'	N 12°40.0'	11.3'	59.4'
4	290°37.6'	240°54.4'	N 18°17.9'	130°34.6'	8.9'	N 12°28.7'	11.4'	59.4'
5	305°40.0'	255°54.4'	N 18°18.6'	145°02.6'	9.0'	N 12°17.3'	11.4'	59.4'
6	320°42.5'	270°54.4'	N 18°19.2'	159°30.6'	9.0'	N 12°05.9'	11.5'	59.4'
7	335°44.9'	285°54.4'	N 18°19.8'	173°58.6'	9.1'	N 11°54.4'	11.6'	59.4'
8	350°47.4'	300°54.4'	N 18°20.4'	188°26.7'	9.1'	N 11°42.8'	11.6'	59.4'
9	5°49.9'	315°54.5'	N 18°21.0'	202°54.8'	9.2'	N 11°31.2'	11.7'	59.4'
10	20°52.3'	330°54.5'	N 18°21.6'	217°23.0'	9.2'	N 11°19.5'	11.8'	59.4'
11	35°54.8'	345°54.5'	N 18°22.3'	231°51.2'	9.3'	N 11°07.7'	11.9'	59.4'
12	50°57.3'	0°54.5'	N 18°22.9'	246°19.4'	9.3'	N 10°55.8'	11.9'	59.4'
13	65°59.7'	15°54.5'	N 18°23.5'	260°47.7'	9.3'	N 10°43.9'	12.0'	59.4'
14	81°02.2'	30°54.5'	N 18°24.1'	275°16.1'	9.4'	N 10°31.9'	12.0'	59.4'
15	96°04.7'	45°54.5'	N 18°24.7'	289°44.5'	9.4'	N 10°19.9'	12.1'	59.4'
16	111°07.1'	60°54.5'	N 18°25.3'	304°12.9'	9.5'	N 10°07.8'	12.2'	59.4'
17	126°09.6'	75°54.5'	N 18°26.0'	318°41.3'	9.5'	N 9°55.6'	12.2'	59.4'
18	141°12.0'	90°54.5'	N 18°26.6'	333°09.8'	9.5'	N 9°43.4'	12.3'	59.4'
19	156°14.5'	105°54.5'	N 18°27.2'	347°38.4'	9.6'	N 9°31.1'	12.3'	59.4'
20	171°17.0'	120°54.5'	N 18°27.8'	2°07.0'	9.6'	N 9°18.8'	12.4'	59.4'
21	186°19.4'	135°54.5'	N 18°28.4'	16°35.6'	9.7'	N 9°06.4'	12.4'	59.4'
22	201°21.9'	150°54.5'	N 18°29.0'	31°04.2'	9.7'	N 8°54.0'	12.5'	59.4'
23	216°24.4'	165°54.5'	N 18°29.6'	45°32.9'	9.7'	N 8°41.5'	12.5'	59.4'

Tue May 14, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	231°26.8'	180°54.5'	N 18°30.2'	60°01.6'	9.8'	N 8°29.0'	12.6'	59.4'
1	246°29.3'	195°54.5'	N 18°30.8'	74°30.4'	9.8'	N 8°16.4'	12.6'	59.4'
2	261°31.8'	210°54.5'	N 18°31.5'	88°59.2'	9.8'	N 8°03.7'	12.7'	59.4'
3	276°34.2'	225°54.5'	N 18°32.1'	103°28.0'	9.9'	N 7°51.0'	12.7'	59.4'
4	291°36.7'	240°54.5'	N 18°32.7'	117°56.9'	9.9'	N 7°38.3'	12.8'	59.4'
5	306°39.2'	255°54.5'	N 18°33.3'	132°25.8'	9.9'	N 7°25.5'	12.8'	59.4'
6	321°41.6'	270°54.5'	N 18°33.9'	146°54.7'	10.0'	N 7°12.7'	12.9'	59.4'
7	336°44.1'	285°54.5'	N 18°34.5'	161°23.7'	10.0'	N 6°59.9'	12.9'	59.4'
8	351°46.5'	300°54.5'	N 18°35.1'	175°52.7'	10.0'	N 6°47.0'	12.9'	59.4'
9	6°49.0'	315°54.5'	N 18°35.7'	190°21.7'	10.0'	N 6°34.0'	13.0'	59.4'
10	21°51.5'	330°54.5'	N 18°36.3'	204°50.7'	10.1'	N 6°21.1'	13.0'	59.4'
11	36°53.9'	345°54.5'	N 18°36.9'	219°19.8'	10.1'	N 6°08.1'	13.0'	59.4'
12	51°56.4'	0°54.5'	N 18°37.5'	233°48.9'	10.1'	N 5°55.0'	13.1'	59.4'
13	66°58.9'	15°54.5'	N 18°38.1'	248°18.1'	10.2'	N 5°42.0'	13.1'	59.4'
14	82°01.3'	30°54.5'	N 18°38.7'	262°47.2'	10.2'	N 5°28.9'	13.1'	59.4'
15	97°03.8'	45°54.5'	N 18°39.3'	277°16.4'	10.2'	N 5°15.7'	13.2'	59.4'
16	112°06.3'	60°54.5'	N 18°39.9'	291°45.6'	10.2'	N 5°02.6'	13.2'	59.4'
17	127°08.7'	75°54.5'	N 18°40.5'	306°14.9'	10.3'	N 4°49.4'	13.2'	59.4'
18	142°11.2'	90°54.5'	N 18°41.1'	320°44.1'	10.3'	N 4°36.2'	13.2'	59.4'
19	157°13.7'	105°54.5'	N 18°41.7'	335°13.4'	10.3'	N 4°22.9'	13.3'	59.4'
20	172°16.1'	120°54.5'	N 18°42.3'	349°42.7'	10.3'	N 4°09.6'	13.3'	59.4'
21	187°18.6'	135°54.5'	N 18°42.9'	4°12.0'	10.3'	N 3°56.4'	13.3'	59.4'
22	202°21.0'	150°54.5'	N 18°43.5'	18°41.4'	10.4'	N 3°43.0'	13.3'	59.4'
23	217°23.5'	165°54.5'	N 18°44.1'	33°10.7'	10.4'	N 3°29.7'	13.3'	59.4'

Wed May 15, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	232°26.0'	180°54.5'	N 18°44.7'	47°40.1'	10.4'	N 3°16.4'	13.4'	59.3'
1	247°28.4'	195°54.5'	N 18°45.3'	62°09.5'	10.4'	N 3°03.0'	13.4'	59.3'
2	262°30.9'	210°54.5'	N 18°45.9'	76°38.9'	10.4'	N 2°49.6'	13.4'	59.3'
3	277°33.4'	225°54.5'	N 18°46.5'	91°08.4'	10.5'	N 2°36.2'	13.4'	59.3'
4	292°35.8'	240°54.5'	N 18°47.1'	105°37.8'	10.5'	N 2°22.8'	13.4'	59.3'
5	307°38.3'	255°54.5'	N 18°47.7'	120°07.3'	10.5'	N 2°09.4'	13.4'	59.3'
6	322°40.8'	270°54.5'	N 18°48.3'	134°36.8'	10.5'	N 1°56.0'	13.4'	59.3'
7	337°43.2'	285°54.5'	N 18°48.9'	149°06.3'	10.5'	N 1°42.5'	13.4'	59.3'
8	352°45.7'	300°54.5'	N 18°49.5'	163°35.8'	10.5'	N 1°29.1'	13.5'	59.3'
9	7°48.1'	315°54.5'	N 18°50.1'	178°05.3'	10.5'	N 1°15.6'	13.5'	59.3'
10	22°50.6'	330°54.5'	N 18°50.7'	192°34.9'	10.5'	N 1°02.2'	13.5'	59.3'
11	37°53.1'	345°54.5'	N 18°51.2'	207°04.4'	10.6'	N 0°48.7'	13.5'	59.3'
12	52°55.5'	0°54.5'	N 18°51.8'	221°34.0'	10.6'	N 0°35.3'	13.5'	59.3'
13	67°58.0'	15°54.5'	N 18°52.4'	236°03.5'	10.6'	N 0°21.8'	13.5'	59.3'
14	83°00.5'	30°54.5'	N 18°53.0'	250°33.1'	10.6'	N 0°08.3'	13.5'	59.2'
15	98°02.9'	45°54.5'	N 18°53.6'	265°02.7'	10.6'	S 0°05.1'	13.5'	59.2'
16	113°05.4'	60°54.4'	N 18°54.2'	279°32.3'	10.6'	S 0°18.6'	13.5'	59.2'
17	128°07.9'	75°54.4'	N 18°54.8'	294°01.9'	10.6'	S 0°32.0'	13.4'	59.2'
18	143°10.3'	90°54.4'	N 18°55.4'	308°31.5'	10.6'	S 0°45.5'	13.4'	59.2'
19	158°12.8'	105°54.4'	N 18°56.0'	323°01.1'	10.6'	S 0°58.9'	13.4'	59.2'
20	173°15.3'	120°54.4'	N 18°56.5'	337°30.7'	10.6'	S 1°12.3'	13.4'	59.2'
21	188°17.7'	135°54.4'	N 18°57.1'	352°00.3'	10.6'	S 1°25.8'	13.4'	59.2'
22	203°20.2'	150°54.4'	N 18°57.7'	6°29.9'	10.6'	S 1°39.2'	13.4'	59.2'
23	218°22.6'	165°54.4'	N 18°58.3'	20°59.5'	10.6'	S 1°52.6'	13.4'	59.2'

Thu May 16, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	233°25.1'	180°54.4'	N 18°58.9'	35°29.1'	10.6'	S 2°05.9'	13.4'	59.1'
1	248°27.6'	195°54.4'	N 18°59.5'	49°58.8'	10.6'	S 2°19.3'	13.4'	59.1'
2	263°30.0'	210°54.4'	N 19°00.0'	64°28.4'	10.6'	S 2°32.7'	13.3'	59.1'
3	278°32.5'	225°54.4'	N 19°00.6'	78°58.0'	10.6'	S 2°46.0'	13.3'	59.1'
4	293°35.0'	240°54.4'	N 19°01.2'	93°27.6'	10.6'	S 2°59.3'	13.3'	59.1'
5	308°37.4'	255°54.3'	N 19°01.8'	107°57.2'	10.6'	S 3°12.6'	13.3'	59.1'
6	323°39.9'	270°54.3'	N 19°02.4'	122°26.8'	10.6'	S 3°25.9'	13.2'	59.1'
7	338°42.4'	285°54.3'	N 19°02.9'	136°56.4'	10.6'	S 3°39.1'	13.2'	59.1'
8	353°44.8'	300°54.3'	N 19°03.5'	151°26.0'	10.6'	S 3°52.3'	13.2'	59.1'
9	8°47.3'	315°54.3'	N 19°04.1'	165°55.6'	10.6'	S 4°05.5'	13.2'	59.0'
10	23°49.7'	330°54.3'	N 19°04.7'	180°25.2'	10.6'	S 4°18.7'	13.1'	59.0'
11	38°52.2'	345°54.3'	N 19°05.3'	194°54.8'	10.6'	S 4°31.9'	13.1'	59.0'
12	53°54.7'	0°54.3'	N 19°05.8'	209°24.4'	10.6'	S 4°45.0'	13.1'	59.0'
13	68°57.1'	15°54.3'	N 19°06.4'	223°54.0'	10.6'	S 4°58.1'	13.1'	59.0'
14	83°59.6'	30°54.2'	N 19°07.0'	238°23.5'	10.6'	S 5°11.1'	13.0'	59.0'
15	99°02.1'	45°54.2'	N 19°07.6'	252°53.1'	10.5'	S 5°24.1'	13.0'	59.0'
16	114°04.5'	60°54.2'	N 19°08.1'	267°22.6'	10.5'	S 5°37.1'	12.9'	58.9'
17	129°07.0'	75°54.2'	N 19°08.7'	281°52.2'	10.5'	S 5°50.1'	12.9'	58.9'
18	144°09.5'	90°54.2'	N 19°09.3'	296°21.7'	10.5'	S 6°03.0'	12.9'	58.9'
19	159°11.9'	105°54.2'	N 19°09.9'	310°51.2'	10.5'	S 6°15.8'	12.8'	58.9'
20	174°14.4'	120°54.2'	N 19°10.4'	325°20.7'	10.5'	S 6°28.7'	12.8'	58.9'
21	189°16.9'	135°54.2'	N 19°11.0'	339°50.2'	10.5'	S 6°41.5'	12.7'	58.9'
22	204°19.3'	150°54.1'	N 19°11.6'	354°19.7'	10.5'	S 6°54.2'	12.7'	58.8'
23	219°21.8'	165°54.1'	N 19°12.1'	8°49.1'	10.4'	S 7°06.9'	12.7'	58.8'



Fri May 17, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.6' SD = 15.8'		SD = 16.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	234°24.2'	180°54.1'	N 19°12.7'	23°18.6'	10.4'	S 7°19.6'	12.6'	58.8'
1	249°26.7'	195°54.1'	N 19°13.3'	37°48.0'	10.4'	S 7°32.2'	12.6'	58.8'
2	264°29.2'	210°54.1'	N 19°13.9'	52°17.4'	10.4'	S 7°44.7'	12.5'	58.8'
3	279°31.6'	225°54.1'	N 19°14.4'	66°46.8'	10.4'	S 7°57.3'	12.5'	58.8'
4	294°34.1'	240°54.1'	N 19°15.0'	81°16.2'	10.4'	S 8°09.7'	12.4'	58.7'
5	309°36.6'	255°54.0'	N 19°15.6'	95°45.6'	10.4'	S 8°22.1'	12.4'	58.7'
6	324°39.0'	270°54.0'	N 19°16.1'	110°14.9'	10.3'	S 8°34.5'	12.3'	58.7'
7	339°41.5'	285°54.0'	N 19°16.7'	124°44.3'	10.3'	S 8°46.8'	12.3'	58.7'
8	354°44.0'	300°54.0'	N 19°17.3'	139°13.6'	10.3'	S 8°59.1'	12.2'	58.7'
9	9°46.4'	315°54.0'	N 19°17.8'	153°42.9'	10.3'	S 9°11.3'	12.1'	58.7'
10	24°48.9'	330°54.0'	N 19°18.4'	168°12.2'	10.3'	S 9°23.4'	12.1'	58.6'
11	39°51.4'	345°53.9'	N 19°18.9'	182°41.4'	10.2'	S 9°35.5'	12.0'	58.6'
12	54°53.8'	0°53.9'	N 19°19.5'	197°10.7'	10.2'	S 9°47.5'	12.0'	58.6'
13	69°56.3'	15°53.9'	N 19°20.1'	211°39.9'	10.2'	S 9°59.5'	11.9'	58.6'
14	84°58.7'	30°53.9'	N 19°20.6'	226°09.1'	10.2'	S 10°11.4'	11.8'	58.6'
15	100°01.2'	45°53.9'	N 19°21.2'	240°38.3'	10.2'	S 10°23.2'	11.8'	58.5'
16	115°03.7'	60°53.8'	N 19°21.8'	255°07.4'	10.1'	S 10°35.0'	11.7'	58.5'
17	130°06.1'	75°53.8'	N 19°22.3'	269°36.6'	10.1'	S 10°46.7'	11.6'	58.5'
18	145°08.6'	90°53.8'	N 19°22.9'	284°05.7'	10.1'	S 10°58.3'	11.6'	58.5'
19	160°11.1'	105°53.8'	N 19°23.4'	298°34.8'	10.1'	S 11°09.9'	11.5'	58.5'
20	175°13.5'	120°53.8'	N 19°24.0'	313°03.9'	10.1'	S 11°21.4'	11.4'	58.4'
21	190°16.0'	135°53.8'	N 19°24.6'	327°32.9'	10.0'	S 11°32.9'	11.4'	58.4'
22	205°18.5'	150°53.7'	N 19°25.1'	342°01.9'	10.0'	S 11°44.2'	11.3'	58.4'
23	220°20.9'	165°53.7'	N 19°25.7'	356°30.9'	10.0'	S 11°55.5'	11.2'	58.4'

Sat May 18, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 15.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	235°23.4'	180°53.7'	N 19°26.2'	10°59.9'	10.0'	S 12°06.7'	11.1'	58.4'
1	250°25.8'	195°53.7'	N 19°26.8'	25°28.9'	9.9'	S 12°17.9'	11.1'	58.3'
2	265°28.3'	210°53.7'	N 19°27.3'	39°57.8'	9.9'	S 12°28.9'	11.0'	58.3'
3	280°30.8'	225°53.6'	N 19°27.9'	54°26.8'	9.9'	S 12°39.9'	10.9'	58.3'
4	295°33.2'	240°53.6'	N 19°28.4'	68°55.6'	9.9'	S 12°50.8'	10.8'	58.3'
5	310°35.7'	255°53.6'	N 19°29.0'	83°24.5'	9.8'	S 13°01.7'	10.8'	58.2'
6	325°38.2'	270°53.6'	N 19°29.6'	97°53.4'	9.8'	S 13°12.4'	10.7'	58.2'
7	340°40.6'	285°53.5'	N 19°30.1'	112°22.2'	9.8'	S 13°23.1'	10.6'	58.2'
8	355°43.1'	300°53.5'	N 19°30.7'	126°51.0'	9.8'	S 13°33.7'	10.5'	58.2'
9	10°45.6'	315°53.5'	N 19°31.2'	141°19.7'	9.7'	S 13°44.2'	10.4'	58.2'
10	25°48.0'	330°53.5'	N 19°31.8'	155°48.5'	9.7'	S 13°54.6'	10.3'	58.1'
11	40°50.5'	345°53.5'	N 19°32.3'	170°17.2'	9.7'	S 14°05.0'	10.3'	58.1'
12	55°53.0'	0°53.4'	N 19°32.9'	184°45.9'	9.7'	S 14°15.2'	10.2'	58.1'
13	70°55.4'	15°53.4'	N 19°33.4'	199°14.6'	9.7'	S 14°25.4'	10.1'	58.1'
14	85°57.9'	30°53.4'	N 19°34.0'	213°43.3'	9.6'	S 14°35.5'	10.0'	58.0'
15	101°00.3'	45°53.4'	N 19°34.5'	228°11.9'	9.6'	S 14°45.5'	9.9'	58.0'
16	116°02.8'	60°53.3'	N 19°35.1'	242°40.5'	9.6'	S 14°55.4'	9.8'	58.0'
17	131°05.3'	75°53.3'	N 19°35.6'	257°09.1'	9.6'	S 15°05.2'	9.7'	58.0'
18	146°07.7'	90°53.3'	N 19°36.1'	271°37.6'	9.5'	S 15°14.9'	9.6'	57.9'
19	161°10.2'	105°53.3'	N 19°36.7'	286°06.2'	9.5'	S 15°24.5'	9.5'	57.9'
20	176°12.7'	120°53.2'	N 19°37.2'	300°34.7'	9.5'	S 15°34.0'	9.4'	57.9'
21	191°15.1'	135°53.2'	N 19°37.8'	315°03.2'	9.5'	S 15°43.5'	9.3'	57.9'
22	206°17.6'	150°53.2'	N 19°38.3'	329°31.6'	9.4'	S 15°52.8'	9.2'	57.8'
23	221°20.1'	165°53.2'	N 19°38.9'	344°00.1'	9.4'	S 16°02.1'	9.1'	57.8'

## Sun May 19, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 15.7'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	236°22.5'	180°53.1'	N 19°39.4'	358°28.5'	9.4'	S 16°11.2'	9.0'	57.8'
1	251°25.0'	195°53.1'	N 19°39.9'	12°56.9'	9.4'	S 16°20.3'	9.0'	57.8'
2	266°27.5'	210°53.1'	N 19°40.5'	27°25.3'	9.4'	S 16°29.2'	8.9'	57.7'
3	281°29.9'	225°53.1'	N 19°41.0'	41°53.6'	9.3'	S 16°38.1'	8.8'	57.7'
4	296°32.4'	240°53.0'	N 19°41.6'	56°22.0'	9.3'	S 16°46.8'	8.6'	57.7'
5	311°34.8'	255°53.0'	N 19°42.1'	70°50.3'	9.3'	S 16°55.5'	8.5'	57.7'
6	326°37.3'	270°53.0'	N 19°42.6'	85°18.6'	9.3'	S 17°04.0'	8.4'	57.6'
7	341°39.8'	285°53.0'	N 19°43.2'	99°46.8'	9.3'	S 17°12.5'	8.3'	57.6'
8	356°42.2'	300°52.9'	N 19°43.7'	114°15.1'	9.2'	S 17°20.8'	8.2'	57.6'
9	11°44.7'	315°52.9'	N 19°44.3'	128°43.3'	9.2'	S 17°29.0'	8.1'	57.6'
10	26°47.2'	330°52.9'	N 19°44.8'	143°11.5'	9.2'	S 17°37.2'	8.0'	57.5'
11	41°49.6'	345°52.8'	N 19°45.3'	157°39.7'	9.2'	S 17°45.2'	7.9'	57.5'
12	56°52.1'	0°52.8'	N 19°45.9'	172°07.9'	9.2'	S 17°53.1'	7.8'	57.5'
13	71°54.6'	15°52.8'	N 19°46.4'	186°36.0'	9.1'	S 18°00.9'	7.7'	57.4'
14	86°57.0'	30°52.8'	N 19°46.9'	201°04.2'	9.1'	S 18°08.6'	7.6'	57.4'
15	101°59.5'	45°52.7'	N 19°47.5'	215°32.3'	9.1'	S 18°16.2'	7.5'	57.4'
16	117°02.0'	60°52.7'	N 19°48.0'	230°00.4'	9.1'	S 18°23.7'	7.4'	57.4'
17	132°04.4'	75°52.7'	N 19°48.5'	244°28.5'	9.1'	S 18°31.1'	7.3'	57.3'
18	147°06.9'	90°52.6'	N 19°49.1'	258°56.6'	9.1'	S 18°38.4'	7.2'	57.3'
19	162°09.3'	105°52.6'	N 19°49.6'	273°24.6'	9.0'	S 18°45.5'	7.0'	57.3'
20	177°11.8'	120°52.6'	N 19°50.1'	287°52.7'	9.0'	S 18°52.6'	6.9'	57.3'
21	192°14.3'	135°52.5'	N 19°50.7'	302°20.7'	9.0'	S 18°59.5'	6.8'	57.2'
22	207°16.7'	150°52.5'	N 19°51.2'	316°48.7'	9.0'	S 19°06.3'	6.7'	57.2'
23	222°19.2'	165°52.5'	N 19°51.7'	331°16.7'	9.0'	S 19°13.0'	6.6'	57.2'

## Mon May 20, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 15.5'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	237°21.7'	180°52.5'	N 19°52.3'	345°44.7'	9.0'	S 19°19.6'	6.5'	57.1'
1	252°24.1'	195°52.4'	N 19°52.8'	0°12.7'	9.0'	S 19°26.1'	6.4'	57.1'
2	267°26.6'	210°52.4'	N 19°53.3'	14°40.6'	9.0'	S 19°32.5'	6.2'	57.1'
3	282°29.1'	225°52.4'	N 19°53.8'	29°08.6'	8.9'	S 19°38.7'	6.1'	57.1'
4	297°31.5'	240°52.3'	N 19°54.4'	43°36.6'	8.9'	S 19°44.8'	6.0'	57.0'
5	312°34.0'	255°52.3'	N 19°54.9'	58°04.5'	8.9'	S 19°50.9'	5.9'	57.0'
6	327°36.4'	270°52.3'	N 19°55.4'	72°32.4'	8.9'	S 19°56.8'	5.8'	57.0'
7	342°38.9'	285°52.2'	N 19°55.9'	87°00.3'	8.9'	S 20°02.6'	5.7'	57.0'
8	357°41.4'	300°52.2'	N 19°56.5'	101°28.3'	8.9'	S 20°08.2'	5.5'	56.9'
9	12°43.8'	315°52.2'	N 19°57.0'	115°56.2'	8.9'	S 20°13.8'	5.4'	56.9'
10	27°46.3'	330°52.1'	N 19°57.5'	130°24.1'	8.9'	S 20°19.2'	5.3'	56.9'
11	42°48.8'	345°52.1'	N 19°58.0'	144°52.0'	8.9'	S 20°24.5'	5.2'	56.8'
12	57°51.2'	0°52.1'	N 19°58.5'	159°19.9'	8.9'	S 20°29.7'	5.1'	56.8'
13	72°53.7'	15°52.0'	N 19°59.1'	173°47.8'	8.9'	S 20°34.8'	5.0'	56.8'
14	87°56.2'	30°52.0'	N 19°59.6'	188°15.7'	8.9'	S 20°39.7'	4.8'	56.8'
15	102°58.6'	45°52.0'	N 20°00.1'	202°43.6'	8.9'	S 20°44.6'	4.7'	56.7'
16	118°01.1'	60°51.9'	N 20°00.6'	217°11.4'	8.9'	S 20°49.3'	4.6'	56.7'
17	133°03.6'	75°51.9'	N 20°01.1'	231°39.3'	8.9'	S 20°53.9'	4.5'	56.7'
18	148°06.0'	90°51.8'	N 20°01.7'	246°07.2'	8.9'	S 20°58.4'	4.4'	56.6'
19	163°08.5'	105°51.8'	N 20°02.2'	260°35.1'	8.9'	S 21°02.7'	4.2'	56.6'
20	178°10.9'	120°51.8'	N 20°02.7'	275°03.0'	8.9'	S 21°07.0'	4.1'	56.6'
21	193°13.4'	135°51.7'	N 20°03.2'	289°30.9'	8.9'	S 21°11.1'	4.0'	56.6'
22	208°15.9'	150°51.7'	N 20°03.7'	303°58.8'	8.9'	S 21°15.1'	3.9'	56.5'
23	223°18.3'	165°51.7'	N 20°04.2'	318°26.7'	8.9'	S 21°18.9'	3.8'	56.5'

Tue May 21, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 15.3'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	238°20.8'	180°51.6'	N 20°04.8'	332°54.7'	8.9'	S 21°22.7'	3.6'	56.5'
1	253°23.3'	195°51.6'	N 20°05.3'	347°22.6'	8.9'	S 21°26.3'	3.5'	56.5'
2	268°25.7'	210°51.6'	N 20°05.8'	1°50.5'	8.9'	S 21°29.8'	3.4'	56.4'
3	283°28.2'	225°51.5'	N 20°06.3'	16°18.4'	8.9'	S 21°33.2'	3.3'	56.4'
4	298°30.7'	240°51.5'	N 20°06.8'	30°46.4'	9.0'	S 21°36.5'	3.1'	56.4'
5	313°33.1'	255°51.4'	N 20°07.3'	45°14.4'	9.0'	S 21°39.6'	3.0'	56.3'
6	328°35.6'	270°51.4'	N 20°07.8'	59°42.3'	9.0'	S 21°42.6'	2.9'	56.3'
7	343°38.1'	285°51.4'	N 20°08.3'	74°10.3'	9.0'	S 21°45.5'	2.8'	56.3'
8	358°40.5'	300°51.3'	N 20°08.9'	88°38.3'	9.0'	S 21°48.3'	2.7'	56.3'
9	13°43.0'	315°51.3'	N 20°09.4'	103°06.3'	9.0'	S 21°51.0'	2.5'	56.2'
10	28°45.4'	330°51.2'	N 20°09.9'	117°34.3'	9.0'	S 21°53.5'	2.4'	56.2'
11	43°47.9'	345°51.2'	N 20°10.4'	132°02.4'	9.1'	S 21°55.9'	2.3'	56.2'
12	58°50.4'	0°51.2'	N 20°10.9'	146°30.4'	9.1'	S 21°58.2'	2.2'	56.2'
13	73°52.8'	15°51.1'	N 20°11.4'	160°58.5'	9.1'	S 22°00.4'	2.0'	56.1'
14	88°55.3'	30°51.1'	N 20°11.9'	175°26.6'	9.1'	S 22°02.4'	1.9'	56.1'
15	103°57.8'	45°51.0'	N 20°12.4'	189°54.7'	9.1'	S 22°04.4'	1.8'	56.1'
16	119°00.2'	60°51.0'	N 20°12.9'	204°22.9'	9.2'	S 22°06.2'	1.7'	56.0'
17	134°02.7'	75°51.0'	N 20°13.4'	218°51.0'	9.2'	S 22°07.9'	1.6'	56.0'
18	149°05.2'	90°50.9'	N 20°13.9'	233°19.2'	9.2'	S 22°09.4'	1.4'	56.0'
19	164°07.6'	105°50.9'	N 20°14.4'	247°47.4'	9.2'	S 22°10.9'	1.3'	56.0'
20	179°10.1'	120°50.8'	N 20°14.9'	262°15.6'	9.2'	S 22°12.2'	1.2'	55.9'
21	194°12.6'	135°50.8'	N 20°15.4'	276°43.9'	9.3'	S 22°13.4'	1.1'	55.9'
22	209°15.0'	150°50.7'	N 20°15.9'	291°12.1'	9.3'	S 22°14.5'	1.0'	55.9'
23	224°17.5'	165°50.7'	N 20°16.4'	305°40.4'	9.3'	S 22°15.4'	0.8'	55.9'

Wed May 22, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 15.2'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	239°19.9'	180°50.7'	N 20°16.9'	320°08.8'	9.4'	S 22°16.3'	0.7'	55.8'
1	254°22.4'	195°50.6'	N 20°17.4'	334°37.1'	9.4'	S 22°17.0'	0.6'	55.8'
2	269°24.9'	210°50.6'	N 20°17.9'	349°05.5'	9.4'	S 22°17.6'	0.5'	55.8'
3	284°27.3'	225°50.5'	N 20°18.4'	3°33.9'	9.4'	S 22°18.1'	0.4'	55.8'
4	299°29.8'	240°50.5'	N 20°18.9'	18°02.4'	9.5'	S 22°18.5'	0.3'	55.7'
5	314°32.3'	255°50.4'	N 20°19.4'	32°30.8'	9.5'	S 22°18.7'	0.1'	55.7'
6	329°34.7'	270°50.4'	N 20°19.9'	46°59.3'	9.5'	S 22°18.9'	0.0'	55.7'
7	344°37.2'	285°50.4'	N 20°20.4'	61°27.9'	9.6'	S 22°18.9'	0.1'	55.7'
8	359°39.7'	300°50.3'	N 20°20.9'	75°56.5'	9.6'	S 22°18.8'	0.2'	55.6'
9	14°42.1'	315°50.3'	N 20°21.4'	90°25.1'	9.6'	S 22°18.6'	0.3'	55.6'
10	29°44.6'	330°50.2'	N 20°21.9'	104°53.7'	9.7'	S 22°18.2'	0.5'	55.6'
11	44°47.1'	345°50.2'	N 20°22.4'	119°22.4'	9.7'	S 22°17.8'	0.6'	55.6'
12	59°49.5'	0°50.1'	N 20°22.9'	133°51.1'	9.8'	S 22°17.2'	0.7'	55.5'
13	74°52.0'	15°50.1'	N 20°23.4'	148°19.9'	9.8'	S 22°16.5'	0.8'	55.5'
14	89°54.4'	30°50.0'	N 20°23.9'	162°48.6'	9.8'	S 22°15.7'	0.9'	55.5'
15	104°56.9'	45°50.0'	N 20°24.4'	177°17.5'	9.9'	S 22°14.8'	1.0'	55.5'
16	119°59.4'	60°49.9'	N 20°24.8'	191°46.3'	9.9'	S 22°13.8'	1.1'	55.4'
17	135°01.8'	75°49.9'	N 20°25.3'	206°15.3'	9.9'	S 22°12.7'	1.3'	55.4'
18	150°04.3'	90°49.9'	N 20°25.8'	220°44.2'	10.0'	S 22°11.4'	1.4'	55.4'
19	165°06.8'	105°49.8'	N 20°26.3'	235°13.2'	10.0'	S 22°10.0'	1.5'	55.4'
20	180°09.2'	120°49.8'	N 20°26.8'	249°42.2'	10.1'	S 22°08.6'	1.6'	55.3'
21	195°11.7'	135°49.7'	N 20°27.3'	264°11.3'	10.1'	S 22°07.0'	1.7'	55.3'
22	210°14.2'	150°49.7'	N 20°27.8'	278°40.4'	10.2'	S 22°05.3'	1.8'	55.3'
23	225°16.6'	165°49.6'	N 20°28.3'	293°09.6'	10.2'	S 22°03.5'	1.9'	55.3'

Thu May 23, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 15.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	240°19.1'	180°49.6'	N 20°28.7'	307°38.8'	10.3'	S 22°01.5'	2.0'	55.3'
1	255°21.5'	195°49.5'	N 20°29.2'	322°08.0'	10.3'	S 21°59.5'	2.1'	55.2'
2	270°24.0'	210°49.5'	N 20°29.7'	336°37.3'	10.3'	S 21°57.4'	2.2'	55.2'
3	285°26.5'	225°49.4'	N 20°30.2'	351°06.7'	10.4'	S 21°55.1'	2.4'	55.2'
4	300°28.9'	240°49.4'	N 20°30.7'	5°36.1'	10.4'	S 21°52.8'	2.5'	55.2'
5	315°31.4'	255°49.3'	N 20°31.2'	20°05.5'	10.5'	S 21°50.3'	2.6'	55.1'
6	330°33.9'	270°49.3'	N 20°31.6'	34°35.0'	10.5'	S 21°47.7'	2.7'	55.1'
7	345°36.3'	285°49.2'	N 20°32.1'	49°04.5'	10.6'	S 21°45.0'	2.8'	55.1'
8	0°38.8'	300°49.2'	N 20°32.6'	63°34.1'	10.6'	S 21°42.3'	2.9'	55.1'
9	15°41.3'	315°49.1'	N 20°33.1'	78°03.7'	10.7'	S 21°39.4'	3.0'	55.1'
10	30°43.7'	330°49.1'	N 20°33.6'	92°33.4'	10.7'	S 21°36.4'	3.1'	55.0'
11	45°46.2'	345°49.0'	N 20°34.0'	107°03.2'	10.8'	S 21°33.3'	3.2'	55.0'
12	60°48.7'	0°49.0'	N 20°34.5'	121°32.9'	10.8'	S 21°30.1'	3.3'	55.0'
13	75°51.1'	15°48.9'	N 20°35.0'	136°02.8'	10.9'	S 21°26.8'	3.4'	55.0'
14	90°53.6'	30°48.9'	N 20°35.5'	150°32.6'	10.9'	S 21°23.4'	3.5'	55.0'
15	105°56.0'	45°48.8'	N 20°36.0'	165°02.6'	11.0'	S 21°19.9'	3.6'	54.9'
16	120°58.5'	60°48.8'	N 20°36.4'	179°32.6'	11.0'	S 21°16.3'	3.7'	54.9'
17	136°01.0'	75°48.7'	N 20°36.9'	194°02.6'	11.1'	S 21°12.5'	3.8'	54.9'
18	151°03.4'	90°48.7'	N 20°37.4'	208°32.7'	11.1'	S 21°08.7'	3.9'	54.9'
19	166°05.9'	105°48.6'	N 20°37.9'	223°02.8'	11.2'	S 21°04.8'	4.0'	54.9'
20	181°08.4'	120°48.5'	N 20°38.3'	237°33.0'	11.2'	S 21°00.8'	4.1'	54.9'
21	196°10.8'	135°48.5'	N 20°38.8'	252°03.3'	11.3'	S 20°56.7'	4.2'	54.8'
22	211°13.3'	150°48.4'	N 20°39.3'	266°33.6'	11.4'	S 20°52.5'	4.3'	54.8'
23	226°15.8'	165°48.4'	N 20°39.7'	281°03.9'	11.4'	S 20°48.2'	4.4'	54.8'

Fri May 24, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.5' SD = 15.8'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	241°18.2'	180°48.3'	N 20°40.2'	295°34.3'	11.5'	S 20°43.8'	4.5'	54.8'
1	256°20.7'	195°48.3'	N 20°40.7'	310°04.8'	11.5'	S 20°39.3'	4.6'	54.8'
2	271°23.2'	210°48.2'	N 20°41.2'	324°35.3'	11.6'	S 20°34.7'	4.7'	54.8'
3	286°25.6'	225°48.2'	N 20°41.6'	339°05.9'	11.6'	S 20°30.0'	4.8'	54.7'
4	301°28.1'	240°48.1'	N 20°42.1'	353°36.5'	11.7'	S 20°25.3'	4.9'	54.7'
5	316°30.5'	255°48.1'	N 20°42.6'	8°07.2'	11.7'	S 20°20.4'	5.0'	54.7'
6	331°33.0'	270°48.0'	N 20°43.0'	22°37.9'	11.8'	S 20°15.4'	5.1'	54.7'
7	346°35.5'	285°47.9'	N 20°43.5'	37°08.7'	11.8'	S 20°10.4'	5.1'	54.7'
8	1°37.9'	300°47.9'	N 20°44.0'	51°39.5'	11.9'	S 20°05.2'	5.2'	54.7'
9	16°40.4'	315°47.8'	N 20°44.4'	66°10.4'	11.9'	S 20°00.0'	5.3'	54.6'
10	31°42.9'	330°47.8'	N 20°44.9'	80°41.4'	12.0'	S 19°54.7'	5.4'	54.6'
11	46°45.3'	345°47.7'	N 20°45.4'	95°12.4'	12.1'	S 19°49.3'	5.5'	54.6'
12	61°47.8'	0°47.7'	N 20°45.8'	109°43.4'	12.1'	S 19°43.8'	5.6'	54.6'
13	76°50.3'	15°47.6'	N 20°46.3'	124°14.5'	12.2'	S 19°38.2'	5.7'	54.6'
14	91°52.7'	30°47.6'	N 20°46.7'	138°45.7'	12.2'	S 19°32.5'	5.8'	54.6'
15	106°55.2'	45°47.5'	N 20°47.2'	153°16.9'	12.3'	S 19°26.7'	5.8'	54.6'
16	121°57.7'	60°47.4'	N 20°47.7'	167°48.2'	12.3'	S 19°20.9'	5.9'	54.5'
17	137°00.1'	75°47.4'	N 20°48.1'	182°19.5'	12.4'	S 19°15.0'	6.0'	54.5'
18	152°02.6'	90°47.3'	N 20°48.6'	196°50.9'	12.4'	S 19°08.9'	6.1'	54.5'
19	167°05.0'	105°47.3'	N 20°49.0'	211°22.4'	12.5'	S 19°02.8'	6.2'	54.5'
20	182°07.5'	120°47.2'	N 20°49.5'	225°53.8'	12.5'	S 18°56.7'	6.3'	54.5'
21	197°10.0'	135°47.1'	N 20°50.0'	240°25.4'	12.6'	S 18°50.4'	6.3'	54.5'
22	212°12.4'	150°47.1'	N 20°50.4'	254°57.0'	12.7'	S 18°44.1'	6.4'	54.5'
23	227°14.9'	165°47.0'	N 20°50.9'	269°28.6'	12.7'	S 18°37.6'	6.5'	54.5'

## Sat May 25, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	242°17.4'	180°47.0'	N 20°51.3'	284°00.4'	12.8'	S 18°31.1'	6.6'	54.5'
1	257°19.8'	195°46.9'	N 20°51.8'	298°32.1'	12.8'	S 18°24.5'	6.7'	54.4'
2	272°22.3'	210°46.9'	N 20°52.2'	313°03.9'	12.9'	S 18°17.9'	6.7'	54.4'
3	287°24.8'	225°46.8'	N 20°52.7'	327°35.8'	12.9'	S 18°11.1'	6.8'	54.4'
4	302°27.2'	240°46.7'	N 20°53.1'	342°07.7'	13.0'	S 18°04.3'	6.9'	54.4'
5	317°29.7'	255°46.7'	N 20°53.6'	356°39.7'	13.0'	S 17°57.4'	7.0'	54.4'
6	332°32.1'	270°46.6'	N 20°54.0'	11°11.7'	13.1'	S 17°50.4'	7.1'	54.4'
7	347°34.6'	285°46.5'	N 20°54.5'	25°43.8'	13.1'	S 17°43.4'	7.1'	54.4'
8	2°37.1'	300°46.5'	N 20°55.0'	40°15.9'	13.2'	S 17°36.2'	7.2'	54.4'
9	17°39.5'	315°46.4'	N 20°55.4'	54°48.1'	13.2'	S 17°29.0'	7.3'	54.4'
10	32°42.0'	330°46.4'	N 20°55.9'	69°20.3'	13.3'	S 17°21.8'	7.3'	54.4'
11	47°44.5'	345°46.3'	N 20°56.3'	83°52.6'	13.3'	S 17°14.4'	7.4'	54.4'
12	62°46.9'	0°46.2'	N 20°56.7'	98°24.9'	13.4'	S 17°07.0'	7.5'	54.3'
13	77°49.4'	15°46.2'	N 20°57.2'	112°57.3'	13.4'	S 16°59.5'	7.6'	54.3'
14	92°51.9'	30°46.1'	N 20°57.6'	127°29.7'	13.5'	S 16°51.9'	7.6'	54.3'
15	107°54.3'	45°46.1'	N 20°58.1'	142°02.2'	13.5'	S 16°44.3'	7.7'	54.3'
16	122°56.8'	60°46.0'	N 20°58.5'	156°34.7'	13.6'	S 16°36.6'	7.8'	54.3'
17	137°59.3'	75°45.9'	N 20°59.0'	171°07.3'	13.6'	S 16°28.8'	7.8'	54.3'
18	153°01.7'	90°45.9'	N 20°59.4'	185°39.9'	13.7'	S 16°21.0'	7.9'	54.3'
19	168°04.2'	105°45.8'	N 20°59.9'	200°12.6'	13.7'	S 16°13.1'	8.0'	54.3'
20	183°06.6'	120°45.7'	N 21°00.3'	214°45.3'	13.8'	S 16°05.1'	8.0'	54.3'
21	198°09.1'	135°45.7'	N 21°00.8'	229°18.0'	13.8'	S 15°57.1'	8.1'	54.3'
22	213°11.6'	150°45.6'	N 21°01.2'	243°50.8'	13.9'	S 15°48.9'	8.2'	54.3'
23	228°14.0'	165°45.5'	N 21°01.6'	258°23.7'	13.9'	S 15°40.8'	8.2'	54.3'

## Sun May 26, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	243°16.5'	180°45.5'	N 21°02.1'	272°56.6'	13.9'	S 15°32.5'	8.3'	54.3'
1	258°19.0'	195°45.4'	N 21°02.5'	287°29.5'	14.0'	S 15°24.2'	8.4'	54.3'
2	273°21.4'	210°45.3'	N 21°03.0'	302°02.5'	14.0'	S 15°15.9'	8.4'	54.3'
3	288°23.9'	225°45.3'	N 21°03.4'	316°35.6'	14.1'	S 15°07.4'	8.5'	54.3'
4	303°26.4'	240°45.2'	N 21°03.8'	331°08.6'	14.1'	S 14°58.9'	8.6'	54.3'
5	318°28.8'	255°45.2'	N 21°04.3'	345°41.7'	14.2'	S 14°50.4'	8.6'	54.3'
6	333°31.3'	270°45.1'	N 21°04.7'	0°14.9'	14.2'	S 14°41.8'	8.7'	54.3'
7	348°33.8'	285°45.0'	N 21°05.2'	14°48.1'	14.2'	S 14°33.1'	8.7'	54.3'
8	3°36.2'	300°45.0'	N 21°05.6'	29°21.3'	14.3'	S 14°24.4'	8.8'	54.3'
9	18°38.7'	315°44.9'	N 21°06.0'	43°54.6'	14.3'	S 14°15.6'	8.9'	54.3'
10	33°41.1'	330°44.8'	N 21°06.5'	58°27.9'	14.4'	S 14°06.7'	8.9'	54.3'
11	48°43.6'	345°44.8'	N 21°06.9'	73°01.3'	14.4'	S 13°57.8'	9.0'	54.3'
12	63°46.1'	0°44.7'	N 21°07.3'	87°34.7'	14.4'	S 13°48.8'	9.0'	54.3'
13	78°48.5'	15°44.6'	N 21°07.8'	102°08.1'	14.5'	S 13°39.8'	9.1'	54.3'
14	93°51.0'	30°44.5'	N 21°08.2'	116°41.6'	14.5'	S 13°30.7'	9.1'	54.3'
15	108°53.5'	45°44.5'	N 21°08.6'	131°15.1'	14.5'	S 13°21.6'	9.2'	54.3'
16	123°55.9'	60°44.4'	N 21°09.1'	145°48.7'	14.6'	S 13°12.4'	9.2'	54.3'
17	138°58.4'	75°44.3'	N 21°09.5'	160°22.2'	14.6'	S 13°03.2'	9.3'	54.3'
18	154°00.9'	90°44.3'	N 21°09.9'	174°55.9'	14.7'	S 12°53.9'	9.4'	54.3'
19	169°03.3'	105°44.2'	N 21°10.3'	189°29.5'	14.7'	S 12°44.5'	9.4'	54.3'
20	184°05.8'	120°44.1'	N 21°10.8'	204°03.2'	14.7'	S 12°35.1'	9.5'	54.3'
21	199°08.2'	135°44.1'	N 21°11.2'	218°36.9'	14.7'	S 12°25.6'	9.5'	54.3'
22	214°10.7'	150°44.0'	N 21°11.6'	233°10.7'	14.8'	S 12°16.1'	9.6'	54.3'
23	229°13.2'	165°43.9'	N 21°12.1'	247°44.4'	14.8'	S 12°06.6'	9.6'	54.3'

Mon May 27, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		SD = 14.8'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	244°15.6'	180°43.9'	N 21°12.5'	262°18.2'	14.8'	S 11°57.0'	9.7'	54.3'
1	259°18.1'	195°43.8'	N 21°12.9'	276°52.1'	14.9'	S 11°47.3'	9.7'	54.3'
2	274°20.6'	210°43.7'	N 21°13.3'	291°26.0'	14.9'	S 11°37.6'	9.8'	54.3'
3	289°23.0'	225°43.6'	N 21°13.8'	305°59.9'	14.9'	S 11°27.9'	9.8'	54.3'
4	304°25.5'	240°43.6'	N 21°14.2'	320°33.8'	15.0'	S 11°18.0'	9.9'	54.3'
5	319°28.0'	255°43.5'	N 21°14.6'	335°07.7'	15.0'	S 11°08.2'	9.9'	54.3'
6	334°30.4'	270°43.4'	N 21°15.0'	349°41.7'	15.0'	S 10°58.3'	9.9'	54.3'
7	349°32.9'	285°43.4'	N 21°15.4'	4°15.7'	15.0'	S 10°48.4'	10.0'	54.3'
8	4°35.4'	300°43.3'	N 21°15.9'	18°49.8'	15.1'	S 10°38.4'	10.0'	54.3'
9	19°37.8'	315°43.2'	N 21°16.3'	33°23.8'	15.1'	S 10°28.3'	10.1'	54.3'
10	34°40.3'	330°43.1'	N 21°16.7'	47°57.9'	15.1'	S 10°18.3'	10.1'	54.3'
11	49°42.7'	345°43.1'	N 21°17.1'	62°32.0'	15.1'	S 10°08.1'	10.2'	54.3'
12	64°45.2'	0°43.0'	N 21°17.5'	77°06.2'	15.2'	S 9°58.0'	10.2'	54.3'
13	79°47.7'	15°42.9'	N 21°18.0'	91°40.3'	15.2'	S 9°47.8'	10.2'	54.3'
14	94°50.1'	30°42.9'	N 21°18.4'	106°14.5'	15.2'	S 9°37.5'	10.3'	54.4'
15	109°52.6'	45°42.8'	N 21°18.8'	120°48.7'	15.2'	S 9°27.2'	10.3'	54.4'
16	124°55.1'	60°42.7'	N 21°19.2'	135°22.9'	15.2'	S 9°16.9'	10.4'	54.4'
17	139°57.5'	75°42.6'	N 21°19.6'	149°57.1'	15.2'	S 9°06.5'	10.4'	54.4'
18	154°60.0'	90°42.6'	N 21°20.0'	164°31.4'	15.3'	S 8°56.1'	10.5'	54.4'
19	170°02.5'	105°42.5'	N 21°20.4'	179°05.6'	15.3'	S 8°45.7'	10.5'	54.4'
20	185°04.9'	120°42.4'	N 21°20.9'	193°39.9'	15.3'	S 8°35.2'	10.5'	54.4'
21	200°07.4'	135°42.3'	N 21°21.3'	208°14.2'	15.3'	S 8°24.6'	10.6'	54.4'
22	215°09.9'	150°42.3'	N 21°21.7'	222°48.5'	15.3'	S 8°14.1'	10.6'	54.4'
23	230°12.3'	165°42.2'	N 21°22.1'	237°22.9'	15.3'	S 8°03.5'	10.6'	54.4'

Tue May 28, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		SD = 14.9'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	245°14.8'	180°42.1'	N 21°22.5'	251°57.2'	15.4'	S 7°52.8'	10.7'	54.4'
1	260°17.2'	195°42.0'	N 21°22.9'	266°31.6'	15.4'	S 7°42.2'	10.7'	54.5'
2	275°19.7'	210°42.0'	N 21°23.3'	281°05.9'	15.4'	S 7°31.4'	10.7'	54.5'
3	290°22.2'	225°41.9'	N 21°23.7'	295°40.3'	15.4'	S 7°20.7'	10.8'	54.5'
4	305°24.6'	240°41.8'	N 21°24.1'	310°14.7'	15.4'	S 7°09.9'	10.8'	54.5'
5	320°27.1'	255°41.7'	N 21°24.5'	324°49.1'	15.4'	S 6°59.1'	10.8'	54.5'
6	335°29.6'	270°41.7'	N 21°25.0'	339°23.5'	15.4'	S 6°48.3'	10.9'	54.5'
7	350°32.0'	285°41.6'	N 21°25.4'	353°57.9'	15.4'	S 6°37.4'	10.9'	54.5'
8	5°34.5'	300°41.5'	N 21°25.8'	8°32.3'	15.4'	S 6°26.5'	10.9'	54.5'
9	20°37.0'	315°41.4'	N 21°26.2'	23°06.7'	15.4'	S 6°15.5'	11.0'	54.5'
10	35°39.4'	330°41.4'	N 21°26.6'	37°41.2'	15.4'	S 6°04.6'	11.0'	54.6'
11	50°41.9'	345°41.3'	N 21°27.0'	52°15.6'	15.4'	S 5°53.6'	11.0'	54.6'
12	65°44.3'	0°41.2'	N 21°27.4'	66°50.0'	15.4'	S 5°42.5'	11.1'	54.6'
13	80°46.8'	15°41.1'	N 21°27.8'	81°24.5'	15.4'	S 5°31.5'	11.1'	54.6'
14	95°49.3'	30°41.0'	N 21°28.2'	95°58.9'	15.4'	S 5°20.4'	11.1'	54.6'
15	110°51.7'	45°41.0'	N 21°28.6'	110°33.3'	15.4'	S 5°09.3'	11.1'	54.6'
16	125°54.2'	60°40.9'	N 21°29.0'	125°07.8'	15.4'	S 4°58.1'	11.2'	54.6'
17	140°56.7'	75°40.8'	N 21°29.4'	139°42.2'	15.4'	S 4°47.0'	11.2'	54.7'
18	155°59.1'	90°40.7'	N 21°29.8'	154°16.7'	15.4'	S 4°35.8'	11.2'	54.7'
19	171°01.6'	105°40.7'	N 21°30.2'	168°51.1'	15.4'	S 4°24.6'	11.2'	54.7'
20	186°04.1'	120°40.6'	N 21°30.6'	183°25.5'	15.4'	S 4°13.3'	11.3'	54.7'
21	201°06.5'	135°40.5'	N 21°31.0'	197°60.0'	15.4'	S 4°02.1'	11.3'	54.7'
22	216°09.0'	150°40.4'	N 21°31.4'	212°34.4'	15.4'	S 3°50.8'	11.3'	54.7'
23	231°11.5'	165°40.3'	N 21°31.8'	227°08.8'	15.4'	S 3°39.5'	11.3'	54.8'

Wed May 29, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		SD = 15.0'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	246°13.9'	180°40.3'	N 21°32.2'	241°43.2'	15.4'	S 3°28.1'	11.4'	54.8'
1	261°16.4'	195°40.2'	N 21°32.6'	256°17.6'	15.4'	S 3°16.8'	11.4'	54.8'
2	276°18.8'	210°40.1'	N 21°33.0'	270°52.0'	15.4'	S 3°05.4'	11.4'	54.8'
3	291°21.3'	225°40.0'	N 21°33.3'	285°26.4'	15.4'	S 2°54.0'	11.4'	54.8'
4	306°23.8'	240°39.9'	N 21°33.7'	300°00.8'	15.4'	S 2°42.6'	11.4'	54.8'
5	321°26.2'	255°39.9'	N 21°34.1'	314°35.1'	15.4'	S 2°31.1'	11.5'	54.9'
6	336°28.7'	270°39.8'	N 21°34.5'	329°09.5'	15.3'	S 2°19.7'	11.5'	54.9'
7	351°31.2'	285°39.7'	N 21°34.9'	343°43.8'	15.3'	S 2°08.2'	11.5'	54.9'
8	6°33.6'	300°39.6'	N 21°35.3'	358°18.2'	15.3'	S 1°56.7'	11.5'	54.9'
9	21°36.1'	315°39.5'	N 21°35.7'	12°52.5'	15.3'	S 1°45.2'	11.5'	54.9'
10	36°38.6'	330°39.4'	N 21°36.1'	27°26.8'	15.3'	S 1°33.7'	11.5'	55.0'
11	51°41.0'	345°39.4'	N 21°36.5'	42°01.0'	15.3'	S 1°22.1'	11.6'	55.0'
12	66°43.5'	0°39.3'	N 21°36.9'	56°35.3'	15.2'	S 1°10.6'	11.6'	55.0'
13	81°46.0'	15°39.2'	N 21°37.2'	71°09.5'	15.2'	S 0°59.0'	11.6'	55.0'
14	96°48.4'	30°39.1'	N 21°37.6'	85°43.8'	15.2'	S 0°47.4'	11.6'	55.0'
15	111°50.9'	45°39.0'	N 21°38.0'	100°18.0'	15.2'	S 0°35.8'	11.6'	55.1'
16	126°53.3'	60°38.9'	N 21°38.4'	114°52.2'	15.2'	S 0°24.2'	11.6'	55.1'
17	141°55.8'	75°38.9'	N 21°38.8'	129°26.3'	15.1'	S 0°12.6'	11.6'	55.1'
18	156°58.3'	90°38.8'	N 21°39.2'	144°00.5'	15.1'	S 0°01.0'	11.6'	55.1'
19	172°00.7'	105°38.7'	N 21°39.5'	158°34.6'	15.1'	N 0°10.6'	11.6'	55.1'
20	187°03.2'	120°38.6'	N 21°39.9'	173°08.7'	15.1'	N 0°22.3'	11.7'	55.2'
21	202°05.7'	135°38.5'	N 21°40.3'	187°42.7'	15.0'	N 0°33.9'	11.7'	55.2'
22	217°08.1'	150°38.4'	N 21°40.7'	202°16.8'	15.0'	N 0°45.6'	11.7'	55.2'
23	232°10.6'	165°38.4'	N 21°41.1'	216°50.8'	15.0'	N 0°57.3'	11.7'	55.2'

Thu May 30, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		SD = 15.1'				
	GHA	GHA	dec	GHA	v	dec	d	HP
0	247°13.1'	180°38.3'	N 21°41.5'	231°24.8'	15.0'	N 1°09.0'	11.7'	55.2'
1	262°15.5'	195°38.2'	N 21°41.8'	245°58.7'	14.9'	N 1°20.6'	11.7'	55.3'
2	277°18.0'	210°38.1'	N 21°42.2'	260°32.6'	14.9'	N 1°32.3'	11.7'	55.3'
3	292°20.4'	225°38.0'	N 21°42.6'	275°06.5'	14.9'	N 1°44.0'	11.7'	55.3'
4	307°22.9'	240°37.9'	N 21°43.0'	289°40.4'	14.8'	N 1°55.7'	11.7'	55.3'
5	322°25.4'	255°37.9'	N 21°43.3'	304°14.2'	14.8'	N 2°07.4'	11.7'	55.4'
6	337°27.8'	270°37.8'	N 21°43.7'	318°48.0'	14.8'	N 2°19.1'	11.7'	55.4'
7	352°30.3'	285°37.7'	N 21°44.1'	333°21.8'	14.7'	N 2°30.8'	11.7'	55.4'
8	7°32.8'	300°37.6'	N 21°44.5'	347°55.5'	14.7'	N 2°42.5'	11.7'	55.4'
9	22°35.2'	315°37.5'	N 21°44.8'	2°29.2'	14.7'	N 2°54.2'	11.7'	55.5'
10	37°37.7'	330°37.4'	N 21°45.2'	17°02.9'	14.6'	N 3°05.9'	11.7'	55.5'
11	52°40.2'	345°37.3'	N 21°45.6'	31°36.5'	14.6'	N 3°17.6'	11.7'	55.5'
12	67°42.6'	0°37.2'	N 21°46.0'	46°10.0'	14.5'	N 3°29.3'	11.7'	55.5'
13	82°45.1'	15°37.2'	N 21°46.3'	60°43.6'	14.5'	N 3°41.0'	11.7'	55.6'
14	97°47.6'	30°37.1'	N 21°46.7'	75°17.1'	14.5'	N 3°52.7'	11.7'	55.6'
15	112°50.0'	45°37.0'	N 21°47.1'	89°50.5'	14.4'	N 4°04.4'	11.7'	55.6'
16	127°52.5'	60°36.9'	N 21°47.4'	104°23.9'	14.4'	N 4°16.1'	11.7'	55.6'
17	142°54.9'	75°36.8'	N 21°47.8'	118°57.3'	14.3'	N 4°27.7'	11.7'	55.7'
18	157°57.4'	90°36.7'	N 21°48.2'	133°30.6'	14.3'	N 4°39.4'	11.7'	55.7'
19	172°59.9'	105°36.6'	N 21°48.5'	148°03.9'	14.2'	N 4°51.0'	11.6'	55.7'
20	188°02.3'	120°36.5'	N 21°48.9'	162°37.2'	14.2'	N 5°02.7'	11.6'	55.7'
21	203°04.8'	135°36.5'	N 21°49.3'	177°10.3'	14.1'	N 5°14.3'	11.6'	55.8'
22	218°07.3'	150°36.4'	N 21°49.6'	191°43.5'	14.1'	N 5°26.0'	11.6'	55.8'
23	233°09.7'	165°36.3'	N 21°50.0'	206°16.6'	14.0'	N 5°37.6'	11.6'	55.8'

Fri May 31, 2019 UTC

UTC	Aries	Sun		Moon				
	GHA	d = 0.4' SD = 15.8'		GHA	v	SD = 15.3'	d	HP
		GHA	dec			dec		
0	248°12.2'	180°36.2'	N 21°50.4'	220°49.6'	14.0'	N 5°49.2'	11.6'	55.8'
1	263°14.7'	195°36.1'	N 21°50.7'	235°22.6'	13.9'	N 6°00.8'	11.6'	55.9'
2	278°17.1'	210°36.0'	N 21°51.1'	249°55.6'	13.9'	N 6°12.3'	11.6'	55.9'
3	293°19.6'	225°35.9'	N 21°51.5'	264°28.4'	13.8'	N 6°23.9'	11.5'	55.9'
4	308°22.0'	240°35.8'	N 21°51.8'	279°01.3'	13.8'	N 6°35.4'	11.5'	55.9'
5	323°24.5'	255°35.7'	N 21°52.2'	293°34.1'	13.7'	N 6°47.0'	11.5'	56.0'
6	338°27.0'	270°35.6'	N 21°52.5'	308°06.8'	13.7'	N 6°58.5'	11.5'	56.0'
7	353°29.4'	285°35.6'	N 21°52.9'	322°39.5'	13.6'	N 7°10.0'	11.5'	56.0'
8	8°31.9'	300°35.5'	N 21°53.3'	337°12.1'	13.6'	N 7°21.4'	11.4'	56.1'
9	23°34.4'	315°35.4'	N 21°53.6'	351°44.6'	13.5'	N 7°32.9'	11.4'	56.1'
10	38°36.8'	330°35.3'	N 21°54.0'	6°17.1'	13.4'	N 7°44.3'	11.4'	56.1'
11	53°39.3'	345°35.2'	N 21°54.3'	20°49.6'	13.4'	N 7°55.7'	11.4'	56.1'
12	68°41.8'	0°35.1'	N 21°54.7'	35°22.0'	13.3'	N 8°07.1'	11.4'	56.2'
13	83°44.2'	15°35.0'	N 21°55.0'	49°54.3'	13.3'	N 8°18.4'	11.3'	56.2'
14	98°46.7'	30°34.9'	N 21°55.4'	64°26.6'	13.2'	N 8°29.8'	11.3'	56.2'
15	113°49.2'	45°34.8'	N 21°55.7'	78°58.8'	13.1'	N 8°41.1'	11.3'	56.2'
16	128°51.6'	60°34.7'	N 21°56.1'	93°30.9'	13.1'	N 8°52.4'	11.2'	56.3'
17	143°54.1'	75°34.6'	N 21°56.4'	108°03.0'	13.0'	N 9°03.6'	11.2'	56.3'
18	158°56.5'	90°34.5'	N 21°56.8'	122°35.0'	12.9'	N 9°14.8'	11.2'	56.3'
19	173°59.0'	105°34.5'	N 21°57.2'	137°06.9'	12.9'	N 9°26.0'	11.2'	56.4'
20	189°01.5'	120°34.4'	N 21°57.5'	151°38.8'	12.8'	N 9°37.2'	11.1'	56.4'
21	204°03.9'	135°34.3'	N 21°57.9'	166°10.6'	12.7'	N 9°48.3'	11.1'	56.4'
22	219°06.4'	150°34.2'	N 21°58.2'	180°42.4'	12.7'	N 9°59.4'	11.1'	56.4'
23	234°08.9'	165°34.1'	N 21°58.5'	195°14.1'	12.6'	N 10°10.4'	11.0'	56.5'