

Fri Sep 1, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.6'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°59.0'	N 18°36.6'	139°35.8'	S 7°33.0'	79°49.5'	S 21°59.3'	190°31.8'	N 13°32.0'
1	225°58.4'	N 18°36.0'	154°37.9'	S 7°33.2'	94°51.9'	S 21°59.3'	205°32.7'	N 13°31.5'
2	240°57.8'	N 18°35.3'	169°39.9'	S 7°33.4'	109°54.3'	S 21°59.3'	220°33.7'	N 13°31.0'
3	255°57.1'	N 18°34.7'	184°41.9'	S 7°33.6'	124°56.8'	S 21°59.4'	235°34.6'	N 13°30.4'
4	270°56.5'	N 18°34.1'	199°44.0'	S 7°33.7'	139°59.2'	S 21°59.4'	250°35.5'	N 13°29.9'
5	285°55.9'	N 18°33.4'	214°46.0'	S 7°33.9'	155°01.6'	S 21°59.4'	265°36.4'	N 13°29.3'
6	300°55.3'	N 18°32.8'	229°48.0'	S 7°34.1'	170°04.1'	S 21°59.4'	280°37.4'	N 13°28.8'
7	315°54.6'	N 18°32.1'	244°50.1'	S 7°34.3'	185°06.5'	S 21°59.4'	295°38.3'	N 13°28.2'
8	330°54.0'	N 18°31.5'	259°52.1'	S 7°34.5'	200°08.9'	S 21°59.4'	310°39.2'	N 13°27.7'
9	345°53.4'	N 18°30.9'	274°54.1'	S 7°34.6'	215°11.4'	S 21°59.4'	325°40.2'	N 13°27.1'
10	0°52.8'	N 18°30.2'	289°56.2'	S 7°34.8'	230°13.8'	S 21°59.4'	340°41.1'	N 13°26.6'
11	15°52.1'	N 18°29.6'	304°58.2'	S 7°35.0'	245°16.2'	S 21°59.4'	355°42.0'	N 13°26.0'
12	30°51.5'	N 18°28.9'	320°00.2'	S 7°35.2'	260°18.7'	S 21°59.4'	10°42.9'	N 13°25.5'
13	45°50.9'	N 18°28.3'	335°02.3'	S 7°35.3'	275°21.1'	S 21°59.4'	25°43.9'	N 13°24.9'
14	60°50.2'	N 18°27.6'	350°04.3'	S 7°35.5'	290°23.5'	S 21°59.5'	40°44.8'	N 13°24.4'
15	75°49.6'	N 18°27.0'	5°06.3'	S 7°35.7'	305°26.0'	S 21°59.5'	55°45.7'	N 13°23.9'
16	90°49.0'	N 18°26.4'	20°08.4'	S 7°35.9'	320°28.4'	S 21°59.5'	70°46.7'	N 13°23.3'
17	105°48.4'	N 18°25.7'	35°10.4'	S 7°36.0'	335°30.8'	S 21°59.5'	85°47.6'	N 13°22.8'
18	120°47.7'	N 18°25.1'	50°12.4'	S 7°36.2'	350°33.3'	S 21°59.5'	100°48.5'	N 13°22.2'
19	135°47.1'	N 18°24.4'	65°14.5'	S 7°36.4'	5°35.7'	S 21°59.5'	115°49.4'	N 13°21.7'
20	150°46.5'	N 18°23.8'	80°16.5'	S 7°36.6'	20°38.1'	S 21°59.5'	130°50.4'	N 13°21.1'
21	165°45.9'	N 18°23.1'	95°18.5'	S 7°36.8'	35°40.6'	S 21°59.5'	145°51.3'	N 13°20.6'
22	180°45.2'	N 18°22.4'	110°20.6'	S 7°36.9'	50°43.0'	S 21°59.5'	160°52.2'	N 13°20.0'
23	195°44.6'	N 18°21.8'	125°22.6'	S 7°37.1'	65°45.4'	S 21°59.5'	175°53.2'	N 13°19.5'

Sat Sep 2, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.7'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°44.0'	N 18°21.1'	140°24.6'	S 7°37.3'	80°47.9'	S 21°59.6'	190°54.1'	N 13°18.9'
1	225°43.4'	N 18°20.5'	155°26.7'	S 7°37.5'	95°50.3'	S 21°59.6'	205°55.0'	N 13°18.4'
2	240°42.8'	N 18°19.8'	170°28.7'	S 7°37.6'	110°52.7'	S 21°59.6'	220°56.0'	N 13°17.8'
3	255°42.1'	N 18°19.2'	185°30.7'	S 7°37.8'	125°55.2'	S 21°59.6'	235°56.9'	N 13°17.3'
4	270°41.5'	N 18°18.5'	200°32.8'	S 7°38.0'	140°57.6'	S 21°59.6'	250°57.8'	N 13°16.7'
5	285°40.9'	N 18°17.9'	215°34.8'	S 7°38.2'	156°00.0'	S 21°59.6'	265°58.8'	N 13°16.2'
6	300°40.3'	N 18°17.2'	230°36.8'	S 7°38.4'	171°02.5'	S 21°59.6'	280°59.7'	N 13°15.6'
7	315°39.6'	N 18°16.5'	245°38.9'	S 7°38.5'	186°04.9'	S 21°59.6'	296°00.6'	N 13°15.1'
8	330°39.0'	N 18°15.9'	260°40.9'	S 7°38.7'	201°07.3'	S 21°59.6'	311°01.6'	N 13°14.5'
9	345°38.4'	N 18°15.2'	275°42.9'	S 7°38.9'	216°09.7'	S 21°59.6'	326°02.5'	N 13°14.0'
10	0°37.8'	N 18°14.5'	290°45.0'	S 7°39.1'	231°12.2'	S 21°59.7'	341°03.4'	N 13°13.4'
11	15°37.2'	N 18°13.9'	305°47.0'	S 7°39.2'	246°14.6'	S 21°59.7'	356°04.3'	N 13°12.9'
12	30°36.5'	N 18°13.2'	320°49.0'	S 7°39.4'	261°17.0'	S 21°59.7'	11°05.3'	N 13°12.3'
13	45°35.9'	N 18°12.6'	335°51.1'	S 7°39.6'	276°19.5'	S 21°59.7'	26°06.2'	N 13°11.8'
14	60°35.3'	N 18°11.9'	350°53.1'	S 7°39.8'	291°21.9'	S 21°59.7'	41°07.1'	N 13°11.3'
15	75°34.7'	N 18°11.2'	5°55.1'	S 7°40.0'	306°24.3'	S 21°59.7'	56°08.1'	N 13°10.7'
16	90°34.1'	N 18°10.5'	20°57.2'	S 7°40.1'	321°26.8'	S 21°59.7'	71°09.0'	N 13°10.2'
17	105°33.4'	N 18°09.9'	35°59.2'	S 7°40.3'	336°29.2'	S 21°59.7'	86°09.9'	N 13°09.6'
18	120°32.8'	N 18°09.2'	51°01.2'	S 7°40.5'	351°31.6'	S 21°59.7'	101°10.9'	N 13°09.1'
19	135°32.2'	N 18°08.5'	66°03.2'	S 7°40.7'	6°34.0'	S 21°59.7'	116°11.8'	N 13°08.5'
20	150°31.6'	N 18°07.9'	81°05.3'	S 7°40.8'	21°36.5'	S 21°59.8'	131°12.7'	N 13°07.9'
21	165°31.0'	N 18°07.2'	96°07.3'	S 7°41.0'	36°38.9'	S 21°59.8'	146°13.7'	N 13°07.4'
22	180°30.4'	N 18°06.5'	111°09.3'	S 7°41.2'	51°41.3'	S 21°59.8'	161°14.6'	N 13°06.8'
23	195°29.7'	N 18°05.8'	126°11.4'	S 7°41.4'	66°43.8'	S 21°59.8'	176°15.5'	N 13°06.3'

Sun Sep 3, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.7'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°29.1'	N 18°05.2'	141°13.4'	S 7°41.6'	81°46.2'	S 21°59.8'	191°16.5'	N 13°05.7'
1	225°28.5'	N 18°04.5'	156°15.4'	S 7°41.7'	96°48.6'	S 21°59.8'	206°17.4'	N 13°05.2'
2	240°27.9'	N 18°03.8'	171°17.5'	S 7°41.9'	111°51.0'	S 21°59.8'	221°18.3'	N 13°04.6'
3	255°27.3'	N 18°03.1'	186°19.5'	S 7°42.1'	126°53.5'	S 21°59.8'	236°19.3'	N 13°04.1'
4	270°26.7'	N 18°02.5'	201°21.5'	S 7°42.3'	141°55.9'	S 21°59.8'	251°20.2'	N 13°03.5'
5	285°26.0'	N 18°01.8'	216°23.5'	S 7°42.4'	156°58.3'	S 21°59.8'	266°21.2'	N 13°03.0'
6	300°25.4'	N 18°01.1'	231°25.6'	S 7°42.6'	172°00.7'	S 21°59.9'	281°22.1'	N 13°02.4'
7	315°24.8'	N 18°00.4'	246°27.6'	S 7°42.8'	187°03.2'	S 21°59.9'	296°23.0'	N 13°01.9'
8	330°24.2'	N 17°59.7'	261°29.6'	S 7°43.0'	202°05.6'	S 21°59.9'	311°24.0'	N 13°01.3'
9	345°23.6'	N 17°59.0'	276°31.7'	S 7°43.2'	217°08.0'	S 21°59.9'	326°24.9'	N 13°00.8'
10	0°23.0'	N 17°58.4'	291°33.7'	S 7°43.3'	232°10.4'	S 21°59.9'	341°25.8'	N 13°00.2'
11	15°22.4'	N 17°57.7'	306°35.7'	S 7°43.5'	247°12.9'	S 21°59.9'	356°26.8'	N 12°59.7'
12	30°21.7'	N 17°57.0'	321°37.7'	S 7°43.7'	262°15.3'	S 21°59.9'	11°27.7'	N 12°59.1'
13	45°21.1'	N 17°56.3'	336°39.8'	S 7°43.9'	277°17.7'	S 21°59.9'	26°28.6'	N 12°58.6'
14	60°20.5'	N 17°55.6'	351°41.8'	S 7°44.1'	292°20.1'	S 21°59.9'	41°29.6'	N 12°58.0'
15	75°19.9'	N 17°54.9'	6°43.8'	S 7°44.2'	307°22.6'	S 21°59.9'	56°30.5'	N 12°57.5'
16	90°19.3'	N 17°54.2'	21°45.9'	S 7°44.4'	322°25.0'	S 21°60.0'	71°31.4'	N 12°56.9'
17	105°18.7'	N 17°53.5'	36°47.9'	S 7°44.6'	337°27.4'	S 21°60.0'	86°32.4'	N 12°56.4'
18	120°18.1'	N 17°52.8'	51°49.9'	S 7°44.8'	352°29.8'	S 21°60.0'	101°33.3'	N 12°55.8'
19	135°17.5'	N 17°52.2'	66°51.9'	S 7°44.9'	7°32.3'	S 21°60.0'	116°34.3'	N 12°55.3'
20	150°16.9'	N 17°51.5'	81°54.0'	S 7°45.1'	22°34.7'	S 21°60.0'	131°35.2'	N 12°54.7'
21	165°16.2'	N 17°50.8'	96°56.0'	S 7°45.3'	37°37.1'	S 22°00.0'	146°36.1'	N 12°54.1'
22	180°15.6'	N 17°50.1'	111°58.0'	S 7°45.5'	52°39.5'	S 22°00.0'	161°37.1'	N 12°53.6'
23	195°15.0'	N 17°49.4'	127°00.1'	S 7°45.7'	67°42.0'	S 22°00.0'	176°38.0'	N 12°53.0'

Mon Sep 4, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.7'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°14.4'	N 17°48.7'	142°02.1'	S 7°45.8'	82°44.4'	S 22°00.0'	191°38.9'	N 12°52.5'
1	225°13.8'	N 17°48.0'	157°04.1'	S 7°46.0'	97°46.8'	S 22°00.0'	206°39.9'	N 12°51.9'
2	240°13.2'	N 17°47.3'	172°06.1'	S 7°46.2'	112°49.2'	S 22°00.1'	221°40.8'	N 12°51.4'
3	255°12.6'	N 17°46.6'	187°08.2'	S 7°46.4'	127°51.7'	S 22°00.1'	236°41.7'	N 12°50.8'
4	270°12.0'	N 17°45.9'	202°10.2'	S 7°46.6'	142°54.1'	S 22°00.1'	251°42.7'	N 12°50.3'
5	285°11.4'	N 17°45.2'	217°12.2'	S 7°46.7'	157°56.5'	S 22°00.1'	266°43.6'	N 12°49.7'
6	300°10.8'	N 17°44.5'	232°14.2'	S 7°46.9'	172°58.9'	S 22°00.1'	281°44.6'	N 12°49.2'
7	315°10.2'	N 17°43.8'	247°16.3'	S 7°47.1'	188°01.3'	S 22°00.1'	296°45.5'	N 12°48.6'
8	330°09.5'	N 17°43.1'	262°18.3'	S 7°47.3'	203°03.8'	S 22°00.1'	311°46.4'	N 12°48.0'
9	345°08.9'	N 17°42.4'	277°20.3'	S 7°47.5'	218°06.2'	S 22°00.1'	326°47.4'	N 12°47.5'
10	0°08.3'	N 17°41.7'	292°22.3'	S 7°47.6'	233°08.6'	S 22°00.1'	341°48.3'	N 12°46.9'
11	15°07.7'	N 17°40.9'	307°24.4'	S 7°47.8'	248°11.0'	S 22°00.1'	356°49.2'	N 12°46.4'
12	30°07.1'	N 17°40.2'	322°26.4'	S 7°48.0'	263°13.5'	S 22°00.2'	11°50.2'	N 12°45.8'
13	45°06.5'	N 17°39.5'	337°28.4'	S 7°48.2'	278°15.9'	S 22°00.2'	26°51.1'	N 12°45.3'
14	60°05.9'	N 17°38.8'	352°30.4'	S 7°48.4'	293°18.3'	S 22°00.2'	41°52.1'	N 12°44.7'
15	75°05.3'	N 17°38.1'	7°32.5'	S 7°48.5'	308°20.7'	S 22°00.2'	56°53.0'	N 12°44.2'
16	90°04.7'	N 17°37.4'	22°34.5'	S 7°48.7'	323°23.1'	S 22°00.2'	71°53.9'	N 12°43.6'
17	105°04.1'	N 17°36.7'	37°36.5'	S 7°48.9'	338°25.6'	S 22°00.2'	86°54.9'	N 12°43.0'
18	120°03.5'	N 17°36.0'	52°38.5'	S 7°49.1'	353°28.0'	S 22°00.2'	101°55.8'	N 12°42.5'
19	135°02.9'	N 17°35.3'	67°40.6'	S 7°49.2'	8°30.4'	S 22°00.2'	116°56.8'	N 12°41.9'
20	150°02.3'	N 17°34.5'	82°42.6'	S 7°49.4'	23°32.8'	S 22°00.2'	131°57.7'	N 12°41.4'
21	165°01.7'	N 17°33.8'	97°44.6'	S 7°49.6'	38°35.2'	S 22°00.3'	146°58.6'	N 12°40.8'
22	180°01.1'	N 17°33.1'	112°46.6'	S 7°49.8'	53°37.7'	S 22°00.3'	161°59.6'	N 12°40.3'
23	195°00.5'	N 17°32.4'	127°48.7'	S 7°50.0'	68°40.1'	S 22°00.3'	177°00.5'	N 12°39.7'

Tue Sep 5, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.7'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°59.9'	N 17°31.7'	142°50.7'	S 7°50.1'	83°42.5'	S 22°00.3'	192°01.5'	N 12°39.1'
1	224°59.3'	N 17°31.0'	157°52.7'	S 7°50.3'	98°44.9'	S 22°00.3'	207°02.4'	N 12°38.6'
2	239°58.7'	N 17°30.2'	172°54.7'	S 7°50.5'	113°47.3'	S 22°00.3'	222°03.3'	N 12°38.0'
3	254°58.1'	N 17°29.5'	187°56.8'	S 7°50.7'	128°49.7'	S 22°00.3'	237°04.3'	N 12°37.5'
4	269°57.5'	N 17°28.8'	202°58.8'	S 7°50.9'	143°52.2'	S 22°00.3'	252°05.2'	N 12°36.9'
5	284°56.9'	N 17°28.1'	218°00.8'	S 7°51.0'	158°54.6'	S 22°00.3'	267°06.2'	N 12°36.4'
6	299°56.3'	N 17°27.3'	233°02.8'	S 7°51.2'	173°57.0'	S 22°00.3'	282°07.1'	N 12°35.8'
7	314°55.7'	N 17°26.6'	248°04.9'	S 7°51.4'	188°59.4'	S 22°00.4'	297°08.0'	N 12°35.2'
8	329°55.1'	N 17°25.9'	263°06.9'	S 7°51.6'	204°01.8'	S 22°00.4'	312°09.0'	N 12°34.7'
9	344°54.5'	N 17°25.2'	278°08.9'	S 7°51.8'	219°04.3'	S 22°00.4'	327°09.9'	N 12°34.1'
10	359°53.9'	N 17°24.4'	293°10.9'	S 7°51.9'	234°06.7'	S 22°00.4'	342°10.9'	N 12°33.6'
11	14°53.3'	N 17°23.7'	308°13.0'	S 7°52.1'	249°09.1'	S 22°00.4'	357°11.8'	N 12°33.0'
12	29°52.7'	N 17°23.0'	323°15.0'	S 7°52.3'	264°11.5'	S 22°00.4'	12°12.7'	N 12°32.4'
13	44°52.1'	N 17°22.3'	338°17.0'	S 7°52.5'	279°13.9'	S 22°00.4'	27°13.7'	N 12°31.9'
14	59°51.5'	N 17°21.5'	353°19.0'	S 7°52.7'	294°16.3'	S 22°00.4'	42°14.6'	N 12°31.3'
15	74°50.9'	N 17°20.8'	8°21.0'	S 7°52.8'	309°18.8'	S 22°00.4'	57°15.6'	N 12°30.8'
16	89°50.3'	N 17°20.1'	23°23.1'	S 7°53.0'	324°21.2'	S 22°00.5'	72°16.5'	N 12°30.2'
17	104°49.7'	N 17°19.3'	38°25.1'	S 7°53.2'	339°23.6'	S 22°00.5'	87°17.5'	N 12°29.6'
18	119°49.1'	N 17°18.6'	53°27.1'	S 7°53.4'	354°26.0'	S 22°00.5'	102°18.4'	N 12°29.1'
19	134°48.5'	N 17°17.9'	68°29.1'	S 7°53.6'	9°28.4'	S 22°00.5'	117°19.3'	N 12°28.5'
20	149°47.9'	N 17°17.1'	83°31.2'	S 7°53.7'	24°30.8'	S 22°00.5'	132°20.3'	N 12°28.0'
21	164°47.3'	N 17°16.4'	98°33.2'	S 7°53.9'	39°33.2'	S 22°00.5'	147°21.2'	N 12°27.4'
22	179°46.7'	N 17°15.7'	113°35.2'	S 7°54.1'	54°35.7'	S 22°00.5'	162°22.2'	N 12°26.8'
23	194°46.1'	N 17°14.9'	128°37.2'	S 7°54.3'	69°38.1'	S 22°00.5'	177°23.1'	N 12°26.3'

Wed Sep 6, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°45.5'	N 17°14.2'	143°39.2'	S 7°54.5'	84°40.5'	S 22°00.5'	192°24.1'	N 12°25.7'
1	224°44.9'	N 17°13.4'	158°41.3'	S 7°54.6'	99°42.9'	S 22°00.6'	207°25.0'	N 12°25.2'
2	239°44.3'	N 17°12.7'	173°43.3'	S 7°54.8'	114°45.3'	S 22°00.6'	222°25.9'	N 12°24.6'
3	254°43.7'	N 17°12.0'	188°45.3'	S 7°55.0'	129°47.7'	S 22°00.6'	237°26.9'	N 12°24.0'
4	269°43.1'	N 17°11.2'	203°47.3'	S 7°55.2'	144°50.1'	S 22°00.6'	252°27.8'	N 12°23.5'
5	284°42.5'	N 17°10.5'	218°49.3'	S 7°55.4'	159°52.6'	S 22°00.6'	267°28.8'	N 12°22.9'
6	299°41.9'	N 17°09.7'	233°51.4'	S 7°55.6'	174°55.0'	S 22°00.6'	282°29.7'	N 12°22.4'
7	314°41.3'	N 17°09.0'	248°53.4'	S 7°55.7'	189°57.4'	S 22°00.6'	297°30.7'	N 12°21.8'
8	329°40.7'	N 17°08.2'	263°55.4'	S 7°55.9'	204°59.8'	S 22°00.6'	312°31.6'	N 12°21.2'
9	344°40.1'	N 17°07.5'	278°57.4'	S 7°56.1'	220°02.2'	S 22°00.6'	327°32.5'	N 12°20.7'
10	359°39.6'	N 17°06.7'	293°59.4'	S 7°56.3'	235°04.6'	S 22°00.6'	342°33.5'	N 12°20.1'
11	14°39.0'	N 17°06.0'	309°01.5'	S 7°56.5'	250°07.0'	S 22°00.7'	357°34.4'	N 12°19.6'
12	29°38.4'	N 17°05.2'	324°03.5'	S 7°56.6'	265°09.5'	S 22°00.7'	12°35.4'	N 12°19.0'
13	44°37.8'	N 17°04.5'	339°05.5'	S 7°56.8'	280°11.9'	S 22°00.7'	27°36.3'	N 12°18.4'
14	59°37.2'	N 17°03.7'	354°07.5'	S 7°57.0'	295°14.3'	S 22°00.7'	42°37.3'	N 12°17.9'
15	74°36.6'	N 17°03.0'	9°09.5'	S 7°57.2'	310°16.7'	S 22°00.7'	57°38.2'	N 12°17.3'
16	89°36.0'	N 17°02.2'	24°11.6'	S 7°57.4'	325°19.1'	S 22°00.7'	72°39.2'	N 12°16.7'
17	104°35.4'	N 17°01.5'	39°13.6'	S 7°57.5'	340°21.5'	S 22°00.7'	87°40.1'	N 12°16.2'
18	119°34.8'	N 17°00.7'	54°15.6'	S 7°57.7'	355°23.9'	S 22°00.7'	102°41.0'	N 12°15.6'
19	134°34.2'	N 16°60.0'	69°17.6'	S 7°57.9'	10°26.3'	S 22°00.7'	117°42.0'	N 12°15.1'
20	149°33.6'	N 16°59.2'	84°19.6'	S 7°58.1'	25°28.7'	S 22°00.8'	132°42.9'	N 12°14.5'
21	164°33.1'	N 16°58.5'	99°21.7'	S 7°58.3'	40°31.2'	S 22°00.8'	147°43.9'	N 12°13.9'
22	179°32.5'	N 16°57.7'	114°23.7'	S 7°58.4'	55°33.6'	S 22°00.8'	162°44.8'	N 12°13.4'
23	194°31.9'	N 16°56.9'	129°25.7'	S 7°58.6'	70°36.0'	S 22°00.8'	177°45.8'	N 12°12.8'

Thu Sep 7, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°31.3'	N 16°56.2'	144°27.7'	S 7°58.8'	85°38.4'	S 22°00.8'	192°46.7'	N 12°12.2'
1	224°30.7'	N 16°55.4'	159°29.7'	S 7°59.0'	100°40.8'	S 22°00.8'	207°47.7'	N 12°11.7'
2	239°30.1'	N 16°54.7'	174°31.8'	S 7°59.2'	115°43.2'	S 22°00.8'	222°48.6'	N 12°11.1'
3	254°29.5'	N 16°53.9'	189°33.8'	S 7°59.4'	130°45.6'	S 22°00.8'	237°49.6'	N 12°10.5'
4	269°28.9'	N 16°53.1'	204°35.8'	S 7°59.5'	145°48.0'	S 22°00.8'	252°50.5'	N 12°10.0'
5	284°28.3'	N 16°52.4'	219°37.8'	S 7°59.7'	160°50.4'	S 22°00.9'	267°51.4'	N 12°09.4'
6	299°27.8'	N 16°51.6'	234°39.8'	S 7°59.9'	175°52.8'	S 22°00.9'	282°52.4'	N 12°08.9'
7	314°27.2'	N 16°50.8'	249°41.8'	S 8°00.1'	190°55.3'	S 22°00.9'	297°53.3'	N 12°08.3'
8	329°26.6'	N 16°50.1'	264°43.9'	S 8°00.3'	205°57.7'	S 22°00.9'	312°54.3'	N 12°07.7'
9	344°26.0'	N 16°49.3'	279°45.9'	S 8°00.4'	221°00.1'	S 22°00.9'	327°55.2'	N 12°07.2'
10	359°25.4'	N 16°48.5'	294°47.9'	S 8°00.6'	236°02.5'	S 22°00.9'	342°56.2'	N 12°06.6'
11	14°24.8'	N 16°47.8'	309°49.9'	S 8°00.8'	251°04.9'	S 22°00.9'	357°57.1'	N 12°06.0'
12	29°24.3'	N 16°47.0'	324°51.9'	S 8°01.0'	266°07.3'	S 22°00.9'	12°58.1'	N 12°05.5'
13	44°23.7'	N 16°46.2'	339°54.0'	S 8°01.2'	281°09.7'	S 22°00.9'	27°59.0'	N 12°04.9'
14	59°23.1'	N 16°45.5'	354°56.0'	S 8°01.3'	296°12.1'	S 22°01.0'	42°60.0'	N 12°04.3'
15	74°22.5'	N 16°44.7'	9°58.0'	S 8°01.5'	311°14.5'	S 22°01.0'	58°00.9'	N 12°03.8'
16	89°21.9'	N 16°43.9'	25°00.0'	S 8°01.7'	326°16.9'	S 22°01.0'	73°01.9'	N 12°03.2'
17	104°21.3'	N 16°43.2'	40°02.0'	S 8°01.9'	341°19.3'	S 22°01.0'	88°02.8'	N 12°02.6'
18	119°20.7'	N 16°42.4'	55°04.0'	S 8°02.1'	356°21.7'	S 22°01.0'	103°03.8'	N 12°02.1'
19	134°20.2'	N 16°41.6'	70°06.1'	S 8°02.3'	11°24.1'	S 22°01.0'	118°04.7'	N 12°01.5'
20	149°19.6'	N 16°40.8'	85°08.1'	S 8°02.4'	26°26.6'	S 22°01.0'	133°05.6'	N 12°00.9'
21	164°19.0'	N 16°40.0'	100°10.1'	S 8°02.6'	41°29.0'	S 22°01.0'	148°06.6'	N 12°00.4'
22	179°18.4'	N 16°39.3'	115°12.1'	S 8°02.8'	56°31.4'	S 22°01.0'	163°07.5'	N 11°59.8'
23	194°17.8'	N 16°38.5'	130°14.1'	S 8°03.0'	71°33.8'	S 22°01.1'	178°08.5'	N 11°59.2'

Fri Sep 8, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°17.3'	N 16°37.7'	145°16.1'	S 8°03.2'	86°36.2'	S 22°01.1'	193°09.4'	N 11°58.7'
1	224°16.7'	N 16°36.9'	160°18.2'	S 8°03.3'	101°38.6'	S 22°01.1'	208°10.4'	N 11°58.1'
2	239°16.1'	N 16°36.2'	175°20.2'	S 8°03.5'	116°41.0'	S 22°01.1'	223°11.3'	N 11°57.5'
3	254°15.5'	N 16°35.4'	190°22.2'	S 8°03.7'	131°43.4'	S 22°01.1'	238°12.3'	N 11°57.0'
4	269°14.9'	N 16°34.6'	205°24.2'	S 8°03.9'	146°45.8'	S 22°01.1'	253°13.2'	N 11°56.4'
5	284°14.4'	N 16°33.8'	220°26.2'	S 8°04.1'	161°48.2'	S 22°01.1'	268°14.2'	N 11°55.8'
6	299°13.8'	N 16°33.0'	235°28.2'	S 8°04.3'	176°50.6'	S 22°01.1'	283°15.1'	N 11°55.3'
7	314°13.2'	N 16°32.2'	250°30.2'	S 8°04.4'	191°53.0'	S 22°01.1'	298°16.1'	N 11°54.7'
8	329°12.6'	N 16°31.4'	265°32.3'	S 8°04.6'	206°55.4'	S 22°01.2'	313°17.0'	N 11°54.1'
9	344°12.0'	N 16°30.7'	280°34.3'	S 8°04.8'	221°57.8'	S 22°01.2'	328°18.0'	N 11°53.6'
10	359°11.5'	N 16°29.9'	295°36.3'	S 8°05.0'	237°00.2'	S 22°01.2'	343°18.9'	N 11°53.0'
11	14°10.9'	N 16°29.1'	310°38.3'	S 8°05.2'	252°02.6'	S 22°01.2'	358°19.9'	N 11°52.4'
12	29°10.3'	N 16°28.3'	325°40.3'	S 8°05.3'	267°05.0'	S 22°01.2'	13°20.8'	N 11°51.9'
13	44°09.7'	N 16°27.5'	340°42.3'	S 8°05.5'	282°07.4'	S 22°01.2'	28°21.8'	N 11°51.3'
14	59°09.2'	N 16°26.7'	355°44.3'	S 8°05.7'	297°09.8'	S 22°01.2'	43°22.7'	N 11°50.7'
15	74°08.6'	N 16°25.9'	10°46.4'	S 8°05.9'	312°12.2'	S 22°01.2'	58°23.7'	N 11°50.2'
16	89°08.0'	N 16°25.1'	25°48.4'	S 8°06.1'	327°14.7'	S 22°01.2'	73°24.6'	N 11°49.6'
17	104°07.4'	N 16°24.3'	40°50.4'	S 8°06.3'	342°17.1'	S 22°01.3'	88°25.6'	N 11°49.0'
18	119°06.9'	N 16°23.5'	55°52.4'	S 8°06.4'	357°19.5'	S 22°01.3'	103°26.5'	N 11°48.5'
19	134°06.3'	N 16°22.7'	70°54.4'	S 8°06.6'	12°21.9'	S 22°01.3'	118°27.5'	N 11°47.9'
20	149°05.7'	N 16°22.0'	85°56.4'	S 8°06.8'	27°24.3'	S 22°01.3'	133°28.4'	N 11°47.3'
21	164°05.1'	N 16°21.2'	100°58.4'	S 8°07.0'	42°26.7'	S 22°01.3'	148°29.4'	N 11°46.8'
22	179°04.6'	N 16°20.4'	116°00.5'	S 8°07.2'	57°29.1'	S 22°01.3'	163°30.3'	N 11°46.2'
23	194°04.0'	N 16°19.6'	131°02.5'	S 8°07.4'	72°31.5'	S 22°01.3'	178°31.3'	N 11°45.6'

Sat Sep 9, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°03.4'	N 16°18.8'	146°04.5'	S 8°07.5'	87°33.9'	S 22°01.3'	193°32.2'	N 11°45.0'
1	224°02.8'	N 16°18.0'	161°06.5'	S 8°07.7'	102°36.3'	S 22°01.4'	208°33.2'	N 11°44.5'
2	239°02.3'	N 16°17.2'	176°08.5'	S 8°07.9'	117°38.7'	S 22°01.4'	223°34.1'	N 11°43.9'
3	254°01.7'	N 16°16.4'	191°10.5'	S 8°08.1'	132°41.1'	S 22°01.4'	238°35.1'	N 11°43.3'
4	269°01.1'	N 16°15.6'	206°12.5'	S 8°08.3'	147°43.5'	S 22°01.4'	253°36.0'	N 11°42.8'
5	284°00.5'	N 16°14.8'	221°14.6'	S 8°08.4'	162°45.9'	S 22°01.4'	268°37.0'	N 11°42.2'
6	298°60.0'	N 16°14.0'	236°16.6'	S 8°08.6'	177°48.3'	S 22°01.4'	283°37.9'	N 11°41.6'
7	313°59.4'	N 16°13.1'	251°18.6'	S 8°08.8'	192°50.7'	S 22°01.4'	298°38.9'	N 11°41.1'
8	328°58.8'	N 16°12.3'	266°20.6'	S 8°09.0'	207°53.1'	S 22°01.4'	313°39.8'	N 11°40.5'
9	343°58.3'	N 16°11.5'	281°22.6'	S 8°09.2'	222°55.5'	S 22°01.4'	328°40.8'	N 11°39.9'
10	358°57.7'	N 16°10.7'	296°24.6'	S 8°09.4'	237°57.9'	S 22°01.5'	343°41.8'	N 11°39.3'
11	13°57.1'	N 16°09.9'	311°26.6'	S 8°09.5'	253°00.3'	S 22°01.5'	358°42.7'	N 11°38.8'
12	28°56.5'	N 16°09.1'	326°28.6'	S 8°09.7'	268°02.7'	S 22°01.5'	13°43.7'	N 11°38.2'
13	43°56.0'	N 16°08.3'	341°30.6'	S 8°09.9'	283°05.1'	S 22°01.5'	28°44.6'	N 11°37.6'
14	58°55.4'	N 16°07.5'	356°32.7'	S 8°10.1'	298°07.5'	S 22°01.5'	43°45.6'	N 11°37.1'
15	73°54.8'	N 16°06.7'	11°34.7'	S 8°10.3'	313°09.9'	S 22°01.5'	58°46.5'	N 11°36.5'
16	88°54.3'	N 16°05.9'	26°36.7'	S 8°10.5'	328°12.3'	S 22°01.5'	73°47.5'	N 11°35.9'
17	103°53.7'	N 16°05.1'	41°38.7'	S 8°10.6'	343°14.7'	S 22°01.5'	88°48.4'	N 11°35.4'
18	118°53.1'	N 16°04.2'	56°40.7'	S 8°10.8'	358°17.1'	S 22°01.5'	103°49.4'	N 11°34.8'
19	133°52.6'	N 16°03.4'	71°42.7'	S 8°11.0'	13°19.5'	S 22°01.6'	118°50.3'	N 11°34.2'
20	148°52.0'	N 16°02.6'	86°44.7'	S 8°11.2'	28°21.9'	S 22°01.6'	133°51.3'	N 11°33.6'
21	163°51.4'	N 16°01.8'	101°46.7'	S 8°11.4'	43°24.3'	S 22°01.6'	148°52.2'	N 11°33.1'
22	178°50.9'	N 16°01.0'	116°48.8'	S 8°11.6'	58°26.7'	S 22°01.6'	163°53.2'	N 11°32.5'
23	193°50.3'	N 16°00.2'	131°50.8'	S 8°11.7'	73°29.1'	S 22°01.6'	178°54.1'	N 11°31.9'

Sun Sep 10, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°49.7'	N 15°59.3'	146°52.8'	S 8°11.9'	88°31.5'	S 22°01.6'	193°55.1'	N 11°31.4'
1	223°49.2'	N 15°58.5'	161°54.8'	S 8°12.1'	103°33.9'	S 22°01.6'	208°56.0'	N 11°30.8'
2	238°48.6'	N 15°57.7'	176°56.8'	S 8°12.3'	118°36.3'	S 22°01.6'	223°57.0'	N 11°30.2'
3	253°48.0'	N 15°56.9'	191°58.8'	S 8°12.5'	133°38.6'	S 22°01.7'	238°58.0'	N 11°29.6'
4	268°47.5'	N 15°56.1'	207°00.8'	S 8°12.7'	148°41.0'	S 22°01.7'	253°58.9'	N 11°29.1'
5	283°46.9'	N 15°55.2'	222°02.8'	S 8°12.8'	163°43.4'	S 22°01.7'	268°59.9'	N 11°28.5'
6	298°46.3'	N 15°54.4'	237°04.8'	S 8°13.0'	178°45.8'	S 22°01.7'	284°00.8'	N 11°27.9'
7	313°45.8'	N 15°53.6'	252°06.8'	S 8°13.2'	193°48.2'	S 22°01.7'	299°01.8'	N 11°27.3'
8	328°45.2'	N 15°52.8'	267°08.9'	S 8°13.4'	208°50.6'	S 22°01.7'	314°02.7'	N 11°26.8'
9	343°44.6'	N 15°51.9'	282°10.9'	S 8°13.6'	223°53.0'	S 22°01.7'	329°03.7'	N 11°26.2'
10	358°44.1'	N 15°51.1'	297°12.9'	S 8°13.8'	238°55.4'	S 22°01.7'	344°04.6'	N 11°25.6'
11	13°43.5'	N 15°50.3'	312°14.9'	S 8°13.9'	253°57.8'	S 22°01.7'	359°05.6'	N 11°25.0'
12	28°43.0'	N 15°49.5'	327°16.9'	S 8°14.1'	269°00.2'	S 22°01.8'	14°06.5'	N 11°24.5'
13	43°42.4'	N 15°48.6'	342°18.9'	S 8°14.3'	284°02.6'	S 22°01.8'	29°07.5'	N 11°23.9'
14	58°41.8'	N 15°47.8'	357°20.9'	S 8°14.5'	299°05.0'	S 22°01.8'	44°08.5'	N 11°23.3'
15	73°41.3'	N 15°47.0'	12°22.9'	S 8°14.7'	314°07.4'	S 22°01.8'	59°09.4'	N 11°22.8'
16	88°40.7'	N 15°46.1'	27°24.9'	S 8°14.9'	329°09.8'	S 22°01.8'	74°10.4'	N 11°22.2'
17	103°40.2'	N 15°45.3'	42°26.9'	S 8°15.0'	344°12.2'	S 22°01.8'	89°11.3'	N 11°21.6'
18	118°39.6'	N 15°44.5'	57°28.9'	S 8°15.2'	359°14.6'	S 22°01.8'	104°12.3'	N 11°21.0'
19	133°39.0'	N 15°43.6'	72°31.0'	S 8°15.4'	14°17.0'	S 22°01.8'	119°13.2'	N 11°20.5'
20	148°38.5'	N 15°42.8'	87°33.0'	S 8°15.6'	29°19.4'	S 22°01.9'	134°14.2'	N 11°19.9'
21	163°37.9'	N 15°42.0'	102°35.0'	S 8°15.8'	44°21.8'	S 22°01.9'	149°15.1'	N 11°19.3'
22	178°37.4'	N 15°41.1'	117°37.0'	S 8°16.0'	59°24.2'	S 22°01.9'	164°16.1'	N 11°18.7'
23	193°36.8'	N 15°40.3'	132°39.0'	S 8°16.1'	74°26.5'	S 22°01.9'	179°17.1'	N 11°18.2'

Mon Sep 11, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°36.2'	N 15°39.5'	147°41.0'	S 8°16.3'	89°28.9'	S 22°01.9'	194°18.0'	N 11°17.6'
1	223°35.7'	N 15°38.6'	162°43.0'	S 8°16.5'	104°31.3'	S 22°01.9'	209°19.0'	N 11°17.0'
2	238°35.1'	N 15°37.8'	177°45.0'	S 8°16.7'	119°33.7'	S 22°01.9'	224°19.9'	N 11°16.4'
3	253°34.6'	N 15°37.0'	192°47.0'	S 8°16.9'	134°36.1'	S 22°01.9'	239°20.9'	N 11°15.9'
4	268°34.0'	N 15°36.1'	207°49.0'	S 8°17.1'	149°38.5'	S 22°01.9'	254°21.8'	N 11°15.3'
5	283°33.4'	N 15°35.3'	222°51.0'	S 8°17.2'	164°40.9'	S 22°02.0'	269°22.8'	N 11°14.7'
6	298°32.9'	N 15°34.4'	237°53.0'	S 8°17.4'	179°43.3'	S 22°02.0'	284°23.7'	N 11°14.1'
7	313°32.3'	N 15°33.6'	252°55.1'	S 8°17.6'	194°45.7'	S 22°02.0'	299°24.7'	N 11°13.6'
8	328°31.8'	N 15°32.7'	267°57.1'	S 8°17.8'	209°48.1'	S 22°02.0'	314°25.7'	N 11°13.0'
9	343°31.2'	N 15°31.9'	282°59.1'	S 8°18.0'	224°50.5'	S 22°02.0'	329°26.6'	N 11°12.4'
10	358°30.7'	N 15°31.1'	298°01.1'	S 8°18.2'	239°52.9'	S 22°02.0'	344°27.6'	N 11°11.8'
11	13°30.1'	N 15°30.2'	313°03.1'	S 8°18.4'	254°55.3'	S 22°02.0'	359°28.5'	N 11°11.3'
12	28°29.6'	N 15°29.4'	328°05.1'	S 8°18.5'	269°57.6'	S 22°02.0'	14°29.5'	N 11°10.7'
13	43°29.0'	N 15°28.5'	343°07.1'	S 8°18.7'	285°00.0'	S 22°02.1'	29°30.4'	N 11°10.1'
14	58°28.4'	N 15°27.7'	358°09.1'	S 8°18.9'	300°02.4'	S 22°02.1'	44°31.4'	N 11°09.5'
15	73°27.9'	N 15°26.8'	13°11.1'	S 8°19.1'	315°04.8'	S 22°02.1'	59°32.4'	N 11°08.9'
16	88°27.3'	N 15°26.0'	28°13.1'	S 8°19.3'	330°07.2'	S 22°02.1'	74°33.3'	N 11°08.4'
17	103°26.8'	N 15°25.1'	43°15.1'	S 8°19.5'	345°09.6'	S 22°02.1'	89°34.3'	N 11°07.8'
18	118°26.2'	N 15°24.3'	58°17.1'	S 8°19.6'	0°12.0'	S 22°02.1'	104°35.2'	N 11°07.2'
19	133°25.7'	N 15°23.4'	73°19.1'	S 8°19.8'	15°14.4'	S 22°02.1'	119°36.2'	N 11°06.6'
20	148°25.1'	N 15°22.6'	88°21.1'	S 8°20.0'	30°16.8'	S 22°02.1'	134°37.2'	N 11°06.1'
21	163°24.6'	N 15°21.7'	103°23.1'	S 8°20.2'	45°19.2'	S 22°02.1'	149°38.1'	N 11°05.5'
22	178°24.0'	N 15°20.9'	118°25.1'	S 8°20.4'	60°21.5'	S 22°02.2'	164°39.1'	N 11°04.9'
23	193°23.5'	N 15°20.0'	133°27.2'	S 8°20.6'	75°23.9'	S 22°02.2'	179°40.0'	N 11°04.3'

Tue Sep 12, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 0.9'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°22.9'	N 15°19.1'	148°29.2'	S 8°20.7'	90°26.3'	S 22°02.2'	194°41.0'	N 11°03.8'
1	223°22.4'	N 15°18.3'	163°31.2'	S 8°20.9'	105°28.7'	S 22°02.2'	209°41.9'	N 11°03.2'
2	238°21.8'	N 15°17.4'	178°33.2'	S 8°21.1'	120°31.1'	S 22°02.2'	224°42.9'	N 11°02.6'
3	253°21.3'	N 15°16.6'	193°35.2'	S 8°21.3'	135°33.5'	S 22°02.2'	239°43.9'	N 11°02.0'
4	268°20.7'	N 15°15.7'	208°37.2'	S 8°21.5'	150°35.9'	S 22°02.2'	254°44.8'	N 11°01.4'
5	283°20.2'	N 15°14.9'	223°39.2'	S 8°21.7'	165°38.3'	S 22°02.2'	269°45.8'	N 11°00.9'
6	298°19.6'	N 15°14.0'	238°41.2'	S 8°21.9'	180°40.7'	S 22°02.3'	284°46.7'	N 11°00.3'
7	313°19.1'	N 15°13.1'	253°43.2'	S 8°22.0'	195°43.0'	S 22°02.3'	299°47.7'	N 10°59.7'
8	328°18.5'	N 15°12.3'	268°45.2'	S 8°22.2'	210°45.4'	S 22°02.3'	314°48.7'	N 10°59.1'
9	343°18.0'	N 15°11.4'	283°47.2'	S 8°22.4'	225°47.8'	S 22°02.3'	329°49.6'	N 10°58.5'
10	358°17.4'	N 15°10.5'	298°49.2'	S 8°22.6'	240°50.2'	S 22°02.3'	344°50.6'	N 10°58.0'
11	13°16.9'	N 15°09.7'	313°51.2'	S 8°22.8'	255°52.6'	S 22°02.3'	359°51.5'	N 10°57.4'
12	28°16.3'	N 15°08.8'	328°53.2'	S 8°23.0'	270°55.0'	S 22°02.3'	14°52.5'	N 10°56.8'
13	43°15.8'	N 15°08.0'	343°55.2'	S 8°23.1'	285°57.4'	S 22°02.3'	29°53.5'	N 10°56.2'
14	58°15.2'	N 15°07.1'	358°57.2'	S 8°23.3'	300°59.8'	S 22°02.4'	44°54.4'	N 10°55.7'
15	73°14.7'	N 15°06.2'	13°59.2'	S 8°23.5'	316°02.1'	S 22°02.4'	59°55.4'	N 10°55.1'
16	88°14.1'	N 15°05.4'	29°01.2'	S 8°23.7'	331°04.5'	S 22°02.4'	74°56.3'	N 10°54.5'
17	103°13.6'	N 15°04.5'	44°03.2'	S 8°23.9'	346°06.9'	S 22°02.4'	89°57.3'	N 10°53.9'
18	118°13.0'	N 15°03.6'	59°05.2'	S 8°24.1'	1°09.3'	S 22°02.4'	104°58.3'	N 10°53.3'
19	133°12.5'	N 15°02.7'	74°07.2'	S 8°24.3'	16°11.7'	S 22°02.4'	119°59.2'	N 10°52.8'
20	148°12.0'	N 15°01.9'	89°09.2'	S 8°24.4'	31°14.1'	S 22°02.4'	135°00.2'	N 10°52.2'
21	163°11.4'	N 15°01.0'	104°11.3'	S 8°24.6'	46°16.5'	S 22°02.4'	150°01.1'	N 10°51.6'
22	178°10.9'	N 15°00.1'	119°13.3'	S 8°24.8'	61°18.8'	S 22°02.5'	165°02.1'	N 10°51.0'
23	193°10.3'	N 14°59.3'	134°15.3'	S 8°25.0'	76°21.2'	S 22°02.5'	180°03.1'	N 10°50.4'

Wed Sep 13, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 0.9'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°09.8'	N 14°58.4'	149°17.3'	S 8°25.2'	91°23.6'	S 22°02.5'	195°04.0'	N 10°49.9'
1	223°09.2'	N 14°57.5'	164°19.3'	S 8°25.4'	106°26.0'	S 22°02.5'	210°05.0'	N 10°49.3'
2	238°08.7'	N 14°56.6'	179°21.3'	S 8°25.5'	121°28.4'	S 22°02.5'	225°05.9'	N 10°48.7'
3	253°08.1'	N 14°55.8'	194°23.3'	S 8°25.7'	136°30.8'	S 22°02.5'	240°06.9'	N 10°48.1'
4	268°07.6'	N 14°54.9'	209°25.3'	S 8°25.9'	151°33.1'	S 22°02.5'	255°07.9'	N 10°47.5'
5	283°07.1'	N 14°54.0'	224°27.3'	S 8°26.1'	166°35.5'	S 22°02.5'	270°08.8'	N 10°47.0'
6	298°06.5'	N 14°53.1'	239°29.3'	S 8°26.3'	181°37.9'	S 22°02.6'	285°09.8'	N 10°46.4'
7	313°06.0'	N 14°52.2'	254°31.3'	S 8°26.5'	196°40.3'	S 22°02.6'	300°10.8'	N 10°45.8'
8	328°05.4'	N 14°51.4'	269°33.3'	S 8°26.7'	211°42.7'	S 22°02.6'	315°11.7'	N 10°45.2'
9	343°04.9'	N 14°50.5'	284°35.3'	S 8°26.8'	226°45.1'	S 22°02.6'	330°12.7'	N 10°44.6'
10	358°04.4'	N 14°49.6'	299°37.3'	S 8°27.0'	241°47.4'	S 22°02.6'	345°13.6'	N 10°44.0'
11	13°03.8'	N 14°48.7'	314°39.3'	S 8°27.2'	256°49.8'	S 22°02.6'	0°14.6'	N 10°43.5'
12	28°03.3'	N 14°47.8'	329°41.3'	S 8°27.4'	271°52.2'	S 22°02.6'	15°15.6'	N 10°42.9'
13	43°02.7'	N 14°47.0'	344°43.3'	S 8°27.6'	286°54.6'	S 22°02.6'	30°16.5'	N 10°42.3'
14	58°02.2'	N 14°46.1'	359°45.3'	S 8°27.8'	301°57.0'	S 22°02.7'	45°17.5'	N 10°41.7'
15	73°01.7'	N 14°45.2'	14°47.3'	S 8°28.0'	316°59.4'	S 22°02.7'	60°18.5'	N 10°41.1'
16	88°01.1'	N 14°44.3'	29°49.3'	S 8°28.1'	332°01.7'	S 22°02.7'	75°19.4'	N 10°40.6'
17	103°00.6'	N 14°43.4'	44°51.3'	S 8°28.3'	347°04.1'	S 22°02.7'	90°20.4'	N 10°40.0'
18	118°00.0'	N 14°42.5'	59°53.3'	S 8°28.5'	2°06.5'	S 22°02.7'	105°21.3'	N 10°39.4'
19	132°59.5'	N 14°41.6'	74°55.3'	S 8°28.7'	17°08.9'	S 22°02.7'	120°22.3'	N 10°38.8'
20	147°59.0'	N 14°40.8'	89°57.3'	S 8°28.9'	32°11.3'	S 22°02.7'	135°23.3'	N 10°38.2'
21	162°58.4'	N 14°39.9'	104°59.3'	S 8°29.1'	47°13.6'	S 22°02.7'	150°24.2'	N 10°37.6'
22	177°57.9'	N 14°39.0'	120°01.3'	S 8°29.3'	62°16.0'	S 22°02.7'	165°25.2'	N 10°37.1'
23	192°57.4'	N 14°38.1'	135°03.3'	S 8°29.4'	77°18.4'	S 22°02.8'	180°26.2'	N 10°36.5'

Thu Sep 14, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 0.9'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°56.8'	N 14°37.2'	150°05.3'	S 8°29.6'	92°20.8'	S 22°02.8'	195°27.1'	N 10°35.9'
1	222°56.3'	N 14°36.3'	165°07.3'	S 8°29.8'	107°23.2'	S 22°02.8'	210°28.1'	N 10°35.3'
2	237°55.7'	N 14°35.4'	180°09.3'	S 8°30.0'	122°25.5'	S 22°02.8'	225°29.0'	N 10°34.7'
3	252°55.2'	N 14°34.5'	195°11.3'	S 8°30.2'	137°27.9'	S 22°02.8'	240°30.0'	N 10°34.1'
4	267°54.7'	N 14°33.6'	210°13.3'	S 8°30.4'	152°30.3'	S 22°02.8'	255°31.0'	N 10°33.6'
5	282°54.1'	N 14°32.7'	225°15.3'	S 8°30.6'	167°32.7'	S 22°02.8'	270°31.9'	N 10°33.0'
6	297°53.6'	N 14°31.8'	240°17.3'	S 8°30.7'	182°35.1'	S 22°02.9'	285°32.9'	N 10°32.4'
7	312°53.1'	N 14°30.9'	255°19.3'	S 8°30.9'	197°37.4'	S 22°02.9'	300°33.9'	N 10°31.8'
8	327°52.5'	N 14°30.0'	270°21.3'	S 8°31.1'	212°39.8'	S 22°02.9'	315°34.8'	N 10°31.2'
9	342°52.0'	N 14°29.1'	285°23.3'	S 8°31.3'	227°42.2'	S 22°02.9'	330°35.8'	N 10°30.6'
10	357°51.5'	N 14°28.2'	300°25.3'	S 8°31.5'	242°44.6'	S 22°02.9'	345°36.8'	N 10°30.1'
11	12°50.9'	N 14°27.3'	315°27.3'	S 8°31.7'	257°47.0'	S 22°02.9'	0°37.7'	N 10°29.5'
12	27°50.4'	N 14°26.4'	330°29.3'	S 8°31.9'	272°49.3'	S 22°02.9'	15°38.7'	N 10°28.9'
13	42°49.9'	N 14°25.5'	345°31.3'	S 8°32.0'	287°51.7'	S 22°02.9'	30°39.7'	N 10°28.3'
14	57°49.3'	N 14°24.6'	0°33.3'	S 8°32.2'	302°54.1'	S 22°03.0'	45°40.6'	N 10°27.7'
15	72°48.8'	N 14°23.7'	15°35.3'	S 8°32.4'	317°56.5'	S 22°03.0'	60°41.6'	N 10°27.1'
16	87°48.3'	N 14°22.8'	30°37.3'	S 8°32.6'	332°58.8'	S 22°03.0'	75°42.5'	N 10°26.6'
17	102°47.8'	N 14°21.9'	45°39.3'	S 8°32.8'	348°01.2'	S 22°03.0'	90°43.5'	N 10°26.0'
18	117°47.2'	N 14°21.0'	60°41.3'	S 8°33.0'	3°03.6'	S 22°03.0'	105°44.5'	N 10°25.4'
19	132°46.7'	N 14°20.1'	75°43.3'	S 8°33.2'	18°06.0'	S 22°03.0'	120°45.4'	N 10°24.8'
20	147°46.2'	N 14°19.2'	90°45.3'	S 8°33.3'	33°08.4'	S 22°03.0'	135°46.4'	N 10°24.2'
21	162°45.6'	N 14°18.3'	105°47.3'	S 8°33.5'	48°10.7'	S 22°03.0'	150°47.4'	N 10°23.6'
22	177°45.1'	N 14°17.4'	120°49.3'	S 8°33.7'	63°13.1'	S 22°03.1'	165°48.3'	N 10°23.0'
23	192°44.6'	N 14°16.5'	135°51.3'	S 8°33.9'	78°15.5'	S 22°03.1'	180°49.3'	N 10°22.5'

Fri Sep 15, 2017 UTC

UTC	Venus -3.8		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 0.9'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°44.0'	N 14°15.6'	150°53.3'	S 8°34.1'	93°17.9'	S 22°03.1'	195°50.3'	N 10°21.9'
1	222°43.5'	N 14°14.7'	165°55.3'	S 8°34.3'	108°20.2'	S 22°03.1'	210°51.2'	N 10°21.3'
2	237°43.0'	N 14°13.8'	180°57.3'	S 8°34.5'	123°22.6'	S 22°03.1'	225°52.2'	N 10°20.7'
3	252°42.5'	N 14°12.8'	195°59.3'	S 8°34.6'	138°25.0'	S 22°03.1'	240°53.2'	N 10°20.1'
4	267°41.9'	N 14°11.9'	211°01.3'	S 8°34.8'	153°27.4'	S 22°03.1'	255°54.1'	N 10°19.5'
5	282°41.4'	N 14°11.0'	226°03.3'	S 8°35.0'	168°29.7'	S 22°03.1'	270°55.1'	N 10°18.9'
6	297°40.9'	N 14°10.1'	241°05.3'	S 8°35.2'	183°32.1'	S 22°03.2'	285°56.1'	N 10°18.4'
7	312°40.4'	N 14°09.2'	256°07.3'	S 8°35.4'	198°34.5'	S 22°03.2'	300°57.0'	N 10°17.8'
8	327°39.8'	N 14°08.3'	271°09.3'	S 8°35.6'	213°36.9'	S 22°03.2'	315°58.0'	N 10°17.2'
9	342°39.3'	N 14°07.4'	286°11.3'	S 8°35.8'	228°39.2'	S 22°03.2'	330°59.0'	N 10°16.6'
10	357°38.8'	N 14°06.5'	301°13.3'	S 8°35.9'	243°41.6'	S 22°03.2'	345°59.9'	N 10°16.0'
11	12°38.2'	N 14°05.5'	316°15.3'	S 8°36.1'	258°44.0'	S 22°03.2'	1°00.9'	N 10°15.4'
12	27°37.7'	N 14°04.6'	331°17.3'	S 8°36.3'	273°46.4'	S 22°03.2'	16°01.9'	N 10°14.8'
13	42°37.2'	N 14°03.7'	346°19.3'	S 8°36.5'	288°48.7'	S 22°03.2'	31°02.8'	N 10°14.3'
14	57°36.7'	N 14°02.8'	1°21.3'	S 8°36.7'	303°51.1'	S 22°03.3'	46°03.8'	N 10°13.7'
15	72°36.1'	N 14°01.9'	16°23.2'	S 8°36.9'	318°53.5'	S 22°03.3'	61°04.8'	N 10°13.1'
16	87°35.6'	N 14°00.9'	31°25.2'	S 8°37.1'	333°55.9'	S 22°03.3'	76°05.7'	N 10°12.5'
17	102°35.1'	N 14°00.0'	46°27.2'	S 8°37.2'	348°58.2'	S 22°03.3'	91°06.7'	N 10°11.9'
18	117°34.6'	N 13°59.1'	61°29.2'	S 8°37.4'	4°00.6'	S 22°03.3'	106°07.7'	N 10°11.3'
19	132°34.1'	N 13°58.2'	76°31.2'	S 8°37.6'	19°03.0'	S 22°03.3'	121°08.6'	N 10°10.7'
20	147°33.5'	N 13°57.3'	91°33.2'	S 8°37.8'	34°05.3'	S 22°03.3'	136°09.6'	N 10°10.1'
21	162°33.0'	N 13°56.3'	106°35.2'	S 8°38.0'	49°07.7'	S 22°03.3'	151°10.6'	N 10°09.6'
22	177°32.5'	N 13°55.4'	121°37.2'	S 8°38.2'	64°10.1'	S 22°03.4'	166°11.5'	N 10°09.0'
23	192°32.0'	N 13°54.5'	136°39.2'	S 8°38.4'	79°12.5'	S 22°03.4'	181°12.5'	N 10°08.4'

Sat Sep 16, 2017 UTC

UTC	Venus -3.8		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 0.9'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°31.4'	N 13°53.6'	151°41.2'	S 8°38.6'	94°14.8'	S 22°03.4'	196°13.5'	N 10°07.8'
1	222°30.9'	N 13°52.6'	166°43.2'	S 8°38.7'	109°17.2'	S 22°03.4'	211°14.4'	N 10°07.2'
2	237°30.4'	N 13°51.7'	181°45.2'	S 8°38.9'	124°19.6'	S 22°03.4'	226°15.4'	N 10°06.6'
3	252°29.9'	N 13°50.8'	196°47.2'	S 8°39.1'	139°22.0'	S 22°03.4'	241°16.4'	N 10°06.0'
4	267°29.4'	N 13°49.9'	211°49.2'	S 8°39.3'	154°24.3'	S 22°03.4'	256°17.4'	N 10°05.4'
5	282°28.8'	N 13°48.9'	226°51.2'	S 8°39.5'	169°26.7'	S 22°03.5'	271°18.3'	N 10°04.9'
6	297°28.3'	N 13°48.0'	241°53.2'	S 8°39.7'	184°29.1'	S 22°03.5'	286°19.3'	N 10°04.3'
7	312°27.8'	N 13°47.1'	256°55.2'	S 8°39.9'	199°31.4'	S 22°03.5'	301°20.3'	N 10°03.7'
8	327°27.3'	N 13°46.1'	271°57.2'	S 8°40.0'	214°33.8'	S 22°03.5'	316°21.2'	N 10°03.1'
9	342°26.8'	N 13°45.2'	286°59.2'	S 8°40.2'	229°36.2'	S 22°03.5'	331°22.2'	N 10°02.5'
10	357°26.2'	N 13°44.3'	302°01.2'	S 8°40.4'	244°38.5'	S 22°03.5'	346°23.2'	N 10°01.9'
11	12°25.7'	N 13°43.3'	317°03.2'	S 8°40.6'	259°40.9'	S 22°03.5'	1°24.1'	N 10°01.3'
12	27°25.2'	N 13°42.4'	332°05.2'	S 8°40.8'	274°43.3'	S 22°03.5'	16°25.1'	N 10°00.7'
13	42°24.7'	N 13°41.5'	347°07.2'	S 8°41.0'	289°45.7'	S 22°03.6'	31°26.1'	N 10°00.1'
14	57°24.2'	N 13°40.5'	2°09.1'	S 8°41.2'	304°48.0'	S 22°03.6'	46°27.0'	N 9°59.6'
15	72°23.7'	N 13°39.6'	17°11.1'	S 8°41.4'	319°50.4'	S 22°03.6'	61°28.0'	N 9°59.0'
16	87°23.1'	N 13°38.7'	32°13.1'	S 8°41.5'	334°52.8'	S 22°03.6'	76°29.0'	N 9°58.4'
17	102°22.6'	N 13°37.7'	47°15.1'	S 8°41.7'	349°55.1'	S 22°03.6'	91°30.0'	N 9°57.8'
18	117°22.1'	N 13°36.8'	62°17.1'	S 8°41.9'	4°57.5'	S 22°03.6'	106°30.9'	N 9°57.2'
19	132°21.6'	N 13°35.8'	77°19.1'	S 8°42.1'	19°59.9'	S 22°03.6'	121°31.9'	N 9°56.6'
20	147°21.1'	N 13°34.9'	92°21.1'	S 8°42.3'	35°02.2'	S 22°03.6'	136°32.9'	N 9°56.0'
21	162°20.6'	N 13°34.0'	107°23.1'	S 8°42.5'	50°04.6'	S 22°03.7'	151°33.8'	N 9°55.4'
22	177°20.1'	N 13°33.0'	122°25.1'	S 8°42.7'	65°07.0'	S 22°03.7'	166°34.8'	N 9°54.8'
23	192°19.5'	N 13°32.1'	137°27.1'	S 8°42.8'	80°09.3'	S 22°03.7'	181°35.8'	N 9°54.2'



Sun Sep 17, 2017 UTC

UTC	Venus -3.8		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°19.0'	N 13°31.1'	152°29.1'	S 8°43.0'	95°11.7'	S 22°03.7'	196°36.7'	N 9°53.7'
1	222°18.5'	N 13°30.2'	167°31.1'	S 8°43.2'	110°14.1'	S 22°03.7'	211°37.7'	N 9°53.1'
2	237°18.0'	N 13°29.3'	182°33.1'	S 8°43.4'	125°16.4'	S 22°03.7'	226°38.7'	N 9°52.5'
3	252°17.5'	N 13°28.3'	197°35.1'	S 8°43.6'	140°18.8'	S 22°03.7'	241°39.7'	N 9°51.9'
4	267°17.0'	N 13°27.4'	212°37.1'	S 8°43.8'	155°21.2'	S 22°03.8'	256°40.6'	N 9°51.3'
5	282°16.5'	N 13°26.4'	227°39.1'	S 8°44.0'	170°23.5'	S 22°03.8'	271°41.6'	N 9°50.7'
6	297°15.9'	N 13°25.5'	242°41.0'	S 8°44.2'	185°25.9'	S 22°03.8'	286°42.6'	N 9°50.1'
7	312°15.4'	N 13°24.5'	257°43.0'	S 8°44.3'	200°28.3'	S 22°03.8'	301°43.5'	N 9°49.5'
8	327°14.9'	N 13°23.6'	272°45.0'	S 8°44.5'	215°30.6'	S 22°03.8'	316°44.5'	N 9°48.9'
9	342°14.4'	N 13°22.6'	287°47.0'	S 8°44.7'	230°33.0'	S 22°03.8'	331°45.5'	N 9°48.3'
10	357°13.9'	N 13°21.7'	302°49.0'	S 8°44.9'	245°35.4'	S 22°03.8'	346°46.4'	N 9°47.8'
11	12°13.4'	N 13°20.7'	317°51.0'	S 8°45.1'	260°37.7'	S 22°03.8'	1°47.4'	N 9°47.2'
12	27°12.9'	N 13°19.8'	332°53.0'	S 8°45.3'	275°40.1'	S 22°03.9'	16°48.4'	N 9°46.6'
13	42°12.4'	N 13°18.8'	347°55.0'	S 8°45.5'	290°42.5'	S 22°03.9'	31°49.4'	N 9°46.0'
14	57°11.9'	N 13°17.9'	2°57.0'	S 8°45.7'	305°44.8'	S 22°03.9'	46°50.3'	N 9°45.4'
15	72°11.4'	N 13°16.9'	17°59.0'	S 8°45.8'	320°47.2'	S 22°03.9'	61°51.3'	N 9°44.8'
16	87°10.8'	N 13°16.0'	33°01.0'	S 8°46.0'	335°49.6'	S 22°03.9'	76°52.3'	N 9°44.2'
17	102°10.3'	N 13°15.0'	48°03.0'	S 8°46.2'	350°51.9'	S 22°03.9'	91°53.3'	N 9°43.6'
18	117°09.8'	N 13°14.1'	63°05.0'	S 8°46.4'	5°54.3'	S 22°03.9'	106°54.2'	N 9°43.0'
19	132°09.3'	N 13°13.1'	78°06.9'	S 8°46.6'	20°56.7'	S 22°04.0'	121°55.2'	N 9°42.4'
20	147°08.8'	N 13°12.2'	93°08.9'	S 8°46.8'	35°59.0'	S 22°04.0'	136°56.2'	N 9°41.8'
21	162°08.3'	N 13°11.2'	108°10.9'	S 8°47.0'	51°01.4'	S 22°04.0'	151°57.1'	N 9°41.2'
22	177°07.8'	N 13°10.3'	123°12.9'	S 8°47.2'	66°03.8'	S 22°04.0'	166°58.1'	N 9°40.7'
23	192°07.3'	N 13°09.3'	138°14.9'	S 8°47.3'	81°06.1'	S 22°04.0'	181°59.1'	N 9°40.1'

Mon Sep 18, 2017 UTC

UTC	Venus -3.8		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°06.8'	N 13°08.3'	153°16.9'	S 8°47.5'	96°08.5'	S 22°04.0'	197°00.1'	N 9°39.5'
1	222°06.3'	N 13°07.4'	168°18.9'	S 8°47.7'	111°10.8'	S 22°04.0'	212°01.0'	N 9°38.9'
2	237°05.8'	N 13°06.4'	183°20.9'	S 8°47.9'	126°13.2'	S 22°04.0'	227°02.0'	N 9°38.3'
3	252°05.3'	N 13°05.5'	198°22.9'	S 8°48.1'	141°15.6'	S 22°04.1'	242°03.0'	N 9°37.7'
4	267°04.8'	N 13°04.5'	213°24.9'	S 8°48.3'	156°17.9'	S 22°04.1'	257°03.9'	N 9°37.1'
5	282°04.3'	N 13°03.5'	228°26.9'	S 8°48.5'	171°20.3'	S 22°04.1'	272°04.9'	N 9°36.5'
6	297°03.8'	N 13°02.6'	243°28.8'	S 8°48.7'	186°22.7'	S 22°04.1'	287°05.9'	N 9°35.9'
7	312°03.2'	N 13°01.6'	258°30.8'	S 8°48.8'	201°25.0'	S 22°04.1'	302°06.9'	N 9°35.3'
8	327°02.7'	N 13°00.6'	273°32.8'	S 8°49.0'	216°27.4'	S 22°04.1'	317°07.8'	N 9°34.7'
9	342°02.2'	N 12°59.7'	288°34.8'	S 8°49.2'	231°29.7'	S 22°04.1'	332°08.8'	N 9°34.1'
10	357°01.7'	N 12°58.7'	303°36.8'	S 8°49.4'	246°32.1'	S 22°04.2'	347°09.8'	N 9°33.5'
11	12°01.2'	N 12°57.8'	318°38.8'	S 8°49.6'	261°34.5'	S 22°04.2'	2°10.8'	N 9°32.9'
12	27°00.7'	N 12°56.8'	333°40.8'	S 8°49.8'	276°36.8'	S 22°04.2'	17°11.7'	N 9°32.3'
13	42°00.2'	N 12°55.8'	348°42.8'	S 8°50.0'	291°39.2'	S 22°04.2'	32°12.7'	N 9°31.8'
14	56°59.7'	N 12°54.9'	3°44.8'	S 8°50.2'	306°41.6'	S 22°04.2'	47°13.7'	N 9°31.2'
15	71°59.2'	N 12°53.9'	18°46.8'	S 8°50.3'	321°43.9'	S 22°04.2'	62°14.7'	N 9°30.6'
16	86°58.7'	N 12°52.9'	33°48.7'	S 8°50.5'	336°46.3'	S 22°04.2'	77°15.6'	N 9°30.0'
17	101°58.2'	N 12°52.0'	48°50.7'	S 8°50.7'	351°48.6'	S 22°04.2'	92°16.6'	N 9°29.4'
18	116°57.7'	N 12°51.0'	63°52.7'	S 8°50.9'	6°51.0'	S 22°04.3'	107°17.6'	N 9°28.8'
19	131°57.2'	N 12°50.0'	78°54.7'	S 8°51.1'	21°53.4'	S 22°04.3'	122°18.6'	N 9°28.2'
20	146°56.7'	N 12°49.0'	93°56.7'	S 8°51.3'	36°55.7'	S 22°04.3'	137°19.5'	N 9°27.6'
21	161°56.2'	N 12°48.1'	108°58.7'	S 8°51.5'	51°58.1'	S 22°04.3'	152°20.5'	N 9°27.0'
22	176°55.7'	N 12°47.1'	124°00.7'	S 8°51.7'	67°00.4'	S 22°04.3'	167°21.5'	N 9°26.4'
23	191°55.2'	N 12°46.1'	139°02.7'	S 8°51.8'	82°02.8'	S 22°04.3'	182°22.5'	N 9°25.8'

Tue Sep 19, 2017 UTC

UTC	Venus -3.8		Jupiter -1.6		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°54.7'	N 12°45.2'	154°04.7'	S 8°52.0'	97°05.2'	S 22°04.3'	197°23.4'	N 9°25.2'
1	221°54.2'	N 12°44.2'	169°06.6'	S 8°52.2'	112°07.5'	S 22°04.4'	212°24.4'	N 9°24.6'
2	236°53.7'	N 12°43.2'	184°08.6'	S 8°52.4'	127°09.9'	S 22°04.4'	227°25.4'	N 9°24.0'
3	251°53.2'	N 12°42.2'	199°10.6'	S 8°52.6'	142°12.2'	S 22°04.4'	242°26.4'	N 9°23.4'
4	266°52.7'	N 12°41.3'	214°12.6'	S 8°52.8'	157°14.6'	S 22°04.4'	257°27.3'	N 9°22.8'
5	281°52.2'	N 12°40.3'	229°14.6'	S 8°53.0'	172°17.0'	S 22°04.4'	272°28.3'	N 9°22.2'
6	296°51.7'	N 12°39.3'	244°16.6'	S 8°53.2'	187°19.3'	S 22°04.4'	287°29.3'	N 9°21.7'
7	311°51.2'	N 12°38.3'	259°18.6'	S 8°53.3'	202°21.7'	S 22°04.4'	302°30.3'	N 9°21.1'
8	326°50.7'	N 12°37.3'	274°20.6'	S 8°53.5'	217°24.0'	S 22°04.4'	317°31.2'	N 9°20.5'
9	341°50.2'	N 12°36.4'	289°22.6'	S 8°53.7'	232°26.4'	S 22°04.5'	332°32.2'	N 9°19.9'
10	356°49.7'	N 12°35.4'	304°24.5'	S 8°53.9'	247°28.7'	S 22°04.5'	347°33.2'	N 9°19.3'
11	11°49.3'	N 12°34.4'	319°26.5'	S 8°54.1'	262°31.1'	S 22°04.5'	2°34.2'	N 9°18.7'
12	26°48.8'	N 12°33.4'	334°28.5'	S 8°54.3'	277°33.5'	S 22°04.5'	17°35.1'	N 9°18.1'
13	41°48.3'	N 12°32.4'	349°30.5'	S 8°54.5'	292°35.8'	S 22°04.5'	32°36.1'	N 9°17.5'
14	56°47.8'	N 12°31.5'	4°32.5'	S 8°54.7'	307°38.2'	S 22°04.5'	47°37.1'	N 9°16.9'
15	71°47.3'	N 12°30.5'	19°34.5'	S 8°54.9'	322°40.5'	S 22°04.5'	62°38.1'	N 9°16.3'
16	86°46.8'	N 12°29.5'	34°36.5'	S 8°55.0'	337°42.9'	S 22°04.6'	77°39.0'	N 9°15.7'
17	101°46.3'	N 12°28.5'	49°38.5'	S 8°55.2'	352°45.2'	S 22°04.6'	92°40.0'	N 9°15.1'
18	116°45.8'	N 12°27.5'	64°40.4'	S 8°55.4'	7°47.6'	S 22°04.6'	107°41.0'	N 9°14.5'
19	131°45.3'	N 12°26.5'	79°42.4'	S 8°55.6'	22°50.0'	S 22°04.6'	122°42.0'	N 9°13.9'
20	146°44.8'	N 12°25.5'	94°44.4'	S 8°55.8'	37°52.3'	S 22°04.6'	137°42.9'	N 9°13.3'
21	161°44.3'	N 12°24.6'	109°46.4'	S 8°56.0'	52°54.7'	S 22°04.6'	152°43.9'	N 9°12.7'
22	176°43.8'	N 12°23.6'	124°48.4'	S 8°56.2'	67°57.0'	S 22°04.6'	167°44.9'	N 9°12.1'
23	191°43.3'	N 12°22.6'	139°50.4'	S 8°56.4'	82°59.4'	S 22°04.7'	182°45.9'	N 9°11.5'

Wed Sep 20, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°42.8'	N 12°21.6'	154°52.4'	S 8°56.5'	98°01.7'	S 22°04.7'	197°46.8'	N 9°10.9'
1	221°42.3'	N 12°20.6'	169°54.4'	S 8°56.7'	113°04.1'	S 22°04.7'	212°47.8'	N 9°10.3'
2	236°41.8'	N 12°19.6'	184°56.3'	S 8°56.9'	128°06.4'	S 22°04.7'	227°48.8'	N 9°09.7'
3	251°41.4'	N 12°18.6'	199°58.3'	S 8°57.1'	143°08.8'	S 22°04.7'	242°49.8'	N 9°09.1'
4	266°40.9'	N 12°17.6'	215°00.3'	S 8°57.3'	158°11.2'	S 22°04.7'	257°50.8'	N 9°08.5'
5	281°40.4'	N 12°16.6'	230°02.3'	S 8°57.5'	173°13.5'	S 22°04.7'	272°51.7'	N 9°07.9'
6	296°39.9'	N 12°15.7'	245°04.3'	S 8°57.7'	188°15.9'	S 22°04.7'	287°52.7'	N 9°07.3'
7	311°39.4'	N 12°14.7'	260°06.3'	S 8°57.9'	203°18.2'	S 22°04.8'	302°53.7'	N 9°06.7'
8	326°38.9'	N 12°13.7'	275°08.3'	S 8°58.1'	218°20.6'	S 22°04.8'	317°54.7'	N 9°06.1'
9	341°38.4'	N 12°12.7'	290°10.2'	S 8°58.2'	233°22.9'	S 22°04.8'	332°55.6'	N 9°05.5'
10	356°37.9'	N 12°11.7'	305°12.2'	S 8°58.4'	248°25.3'	S 22°04.8'	347°56.6'	N 9°04.9'
11	11°37.4'	N 12°10.7'	320°14.2'	S 8°58.6'	263°27.6'	S 22°04.8'	2°57.6'	N 9°04.4'
12	26°37.0'	N 12°09.7'	335°16.2'	S 8°58.8'	278°30.0'	S 22°04.8'	17°58.6'	N 9°03.8'
13	41°36.5'	N 12°08.7'	350°18.2'	S 8°59.0'	293°32.3'	S 22°04.8'	32°59.6'	N 9°03.2'
14	56°36.0'	N 12°07.7'	5°20.2'	S 8°59.2'	308°34.7'	S 22°04.9'	48°00.5'	N 9°02.6'
15	71°35.5'	N 12°06.7'	20°22.2'	S 8°59.4'	323°37.0'	S 22°04.9'	63°01.5'	N 9°02.0'
16	86°35.0'	N 12°05.7'	35°24.1'	S 8°59.6'	338°39.4'	S 22°04.9'	78°02.5'	N 9°01.4'
17	101°34.5'	N 12°04.7'	50°26.1'	S 8°59.7'	353°41.7'	S 22°04.9'	93°03.5'	N 9°00.8'
18	116°34.0'	N 12°03.7'	65°28.1'	S 8°59.9'	8°44.1'	S 22°04.9'	108°04.4'	N 9°00.2'
19	131°33.5'	N 12°02.7'	80°30.1'	S 9°00.1'	23°46.4'	S 22°04.9'	123°05.4'	N 8°59.6'
20	146°33.1'	N 12°01.7'	95°32.1'	S 9°00.3'	38°48.8'	S 22°04.9'	138°06.4'	N 8°59.0'
21	161°32.6'	N 12°00.7'	110°34.1'	S 9°00.5'	53°51.2'	S 22°05.0'	153°07.4'	N 8°58.4'
22	176°32.1'	N 11°59.7'	125°36.1'	S 9°00.7'	68°53.5'	S 22°05.0'	168°08.4'	N 8°57.8'
23	191°31.6'	N 11°58.7'	140°38.0'	S 9°00.9'	83°55.9'	S 22°05.0'	183°09.3'	N 8°57.2'

Thu Sep 21, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°31.1'	N 11°57.7'	155°40.0'	S 9°01.1'	98°58.2'	S 22°05.0'	198°10.3'	N 8°56.6'
1	221°30.6'	N 11°56.7'	170°42.0'	S 9°01.3'	114°00.6'	S 22°05.0'	213°11.3'	N 8°56.0'
2	236°30.1'	N 11°55.7'	185°44.0'	S 9°01.4'	129°02.9'	S 22°05.0'	228°12.3'	N 8°55.4'
3	251°29.7'	N 11°54.7'	200°46.0'	S 9°01.6'	144°05.3'	S 22°05.0'	243°13.3'	N 8°54.8'
4	266°29.2'	N 11°53.7'	215°48.0'	S 9°01.8'	159°07.6'	S 22°05.1'	258°14.2'	N 8°54.2'
5	281°28.7'	N 11°52.7'	230°49.9'	S 9°02.0'	174°10.0'	S 22°05.1'	273°15.2'	N 8°53.6'
6	296°28.2'	N 11°51.7'	245°51.9'	S 9°02.2'	189°12.3'	S 22°05.1'	288°16.2'	N 8°53.0'
7	311°27.7'	N 11°50.7'	260°53.9'	S 9°02.4'	204°14.7'	S 22°05.1'	303°17.2'	N 8°52.4'
8	326°27.2'	N 11°49.6'	275°55.9'	S 9°02.6'	219°17.0'	S 22°05.1'	318°18.2'	N 8°51.8'
9	341°26.8'	N 11°48.6'	290°57.9'	S 9°02.8'	234°19.4'	S 22°05.1'	333°19.1'	N 8°51.2'
10	356°26.3'	N 11°47.6'	305°59.9'	S 9°03.0'	249°21.7'	S 22°05.1'	348°20.1'	N 8°50.6'
11	11°25.8'	N 11°46.6'	321°01.8'	S 9°03.1'	264°24.1'	S 22°05.1'	3°21.1'	N 8°50.0'
12	26°25.3'	N 11°45.6'	336°03.8'	S 9°03.3'	279°26.4'	S 22°05.2'	18°22.1'	N 8°49.4'
13	41°24.8'	N 11°44.6'	351°05.8'	S 9°03.5'	294°28.8'	S 22°05.2'	33°23.1'	N 8°48.8'
14	56°24.4'	N 11°43.6'	6°07.8'	S 9°03.7'	309°31.1'	S 22°05.2'	48°24.0'	N 8°48.2'
15	71°23.9'	N 11°42.6'	21°09.8'	S 9°03.9'	324°33.5'	S 22°05.2'	63°25.0'	N 8°47.6'
16	86°23.4'	N 11°41.6'	36°11.8'	S 9°04.1'	339°35.8'	S 22°05.2'	78°26.0'	N 8°47.0'
17	101°22.9'	N 11°40.5'	51°13.7'	S 9°04.3'	354°38.2'	S 22°05.2'	93°27.0'	N 8°46.4'
18	116°22.4'	N 11°39.5'	66°15.7'	S 9°04.5'	9°40.5'	S 22°05.2'	108°28.0'	N 8°45.8'
19	131°22.0'	N 11°38.5'	81°17.7'	S 9°04.7'	24°42.8'	S 22°05.3'	123°28.9'	N 8°45.2'
20	146°21.5'	N 11°37.5'	96°19.7'	S 9°04.8'	39°45.2'	S 22°05.3'	138°29.9'	N 8°44.6'
21	161°21.0'	N 11°36.5'	111°21.7'	S 9°05.0'	54°47.5'	S 22°05.3'	153°30.9'	N 8°44.0'
22	176°20.5'	N 11°35.5'	126°23.7'	S 9°05.2'	69°49.9'	S 22°05.3'	168°31.9'	N 8°43.4'
23	191°20.0'	N 11°34.5'	141°25.6'	S 9°05.4'	84°52.2'	S 22°05.3'	183°32.9'	N 8°42.8'

Fri Sep 22, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°19.6'	N 11°33.4'	156°27.6'	S 9°05.6'	99°54.6'	S 22°05.3'	198°33.8'	N 8°42.2'
1	221°19.1'	N 11°32.4'	171°29.6'	S 9°05.8'	114°56.9'	S 22°05.3'	213°34.8'	N 8°41.6'
2	236°18.6'	N 11°31.4'	186°31.6'	S 9°06.0'	129°59.3'	S 22°05.4'	228°35.8'	N 8°41.0'
3	251°18.1'	N 11°30.4'	201°33.6'	S 9°06.2'	145°01.6'	S 22°05.4'	243°36.8'	N 8°40.4'
4	266°17.7'	N 11°29.4'	216°35.6'	S 9°06.4'	160°04.0'	S 22°05.4'	258°37.8'	N 8°39.8'
5	281°17.2'	N 11°28.3'	231°37.5'	S 9°06.5'	175°06.3'	S 22°05.4'	273°38.8'	N 8°39.2'
6	296°16.7'	N 11°27.3'	246°39.5'	S 9°06.7'	190°08.7'	S 22°05.4'	288°39.7'	N 8°38.6'
7	311°16.2'	N 11°26.3'	261°41.5'	S 9°06.9'	205°11.0'	S 22°05.4'	303°40.7'	N 8°38.0'
8	326°15.8'	N 11°25.3'	276°43.5'	S 9°07.1'	220°13.4'	S 22°05.4'	318°41.7'	N 8°37.4'
9	341°15.3'	N 11°24.3'	291°45.5'	S 9°07.3'	235°15.7'	S 22°05.5'	333°42.7'	N 8°36.8'
10	356°14.8'	N 11°23.2'	306°47.5'	S 9°07.5'	250°18.0'	S 22°05.5'	348°43.7'	N 8°36.2'
11	11°14.3'	N 11°22.2'	321°49.4'	S 9°07.7'	265°20.4'	S 22°05.5'	3°44.6'	N 8°35.6'
12	26°13.9'	N 11°21.2'	336°51.4'	S 9°07.9'	280°22.7'	S 22°05.5'	18°45.6'	N 8°35.0'
13	41°13.4'	N 11°20.2'	351°53.4'	S 9°08.1'	295°25.1'	S 22°05.5'	33°46.6'	N 8°34.4'
14	56°12.9'	N 11°19.1'	6°55.4'	S 9°08.2'	310°27.4'	S 22°05.5'	48°47.6'	N 8°33.8'
15	71°12.4'	N 11°18.1'	21°57.4'	S 9°08.4'	325°29.8'	S 22°05.5'	63°48.6'	N 8°33.2'
16	86°12.0'	N 11°17.1'	36°59.3'	S 9°08.6'	340°32.1'	S 22°05.6'	78°49.6'	N 8°32.6'
17	101°11.5'	N 11°16.1'	52°01.3'	S 9°08.8'	355°34.5'	S 22°05.6'	93°50.5'	N 8°31.9'
18	116°11.0'	N 11°15.0'	67°03.3'	S 9°09.0'	10°36.8'	S 22°05.6'	108°51.5'	N 8°31.3'
19	131°10.5'	N 11°14.0'	82°05.3'	S 9°09.2'	25°39.1'	S 22°05.6'	123°52.5'	N 8°30.7'
20	146°10.1'	N 11°13.0'	97°07.3'	S 9°09.4'	40°41.5'	S 22°05.6'	138°53.5'	N 8°30.1'
21	161°09.6'	N 11°11.9'	112°09.2'	S 9°09.6'	55°43.8'	S 22°05.6'	153°54.5'	N 8°29.5'
22	176°09.1'	N 11°10.9'	127°11.2'	S 9°09.8'	70°46.2'	S 22°05.6'	168°55.5'	N 8°28.9'
23	191°08.7'	N 11°09.9'	142°13.2'	S 9°09.9'	85°48.5'	S 22°05.7'	183°56.4'	N 8°28.3'

Sat Sep 23, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.0'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°08.2'	N 11°08.8'	157°15.2'	S 9°10.1'	100°50.9'	S 22°05.7'	198°57.4'	N 8°27.7'
1	221°07.7'	N 11°07.8'	172°17.2'	S 9°10.3'	115°53.2'	S 22°05.7'	213°58.4'	N 8°27.1'
2	236°07.2'	N 11°06.8'	187°19.1'	S 9°10.5'	130°55.5'	S 22°05.7'	228°59.4'	N 8°26.5'
3	251°06.8'	N 11°05.8'	202°21.1'	S 9°10.7'	145°57.9'	S 22°05.7'	244°00.4'	N 8°25.9'
4	266°06.3'	N 11°04.7'	217°23.1'	S 9°10.9'	161°00.2'	S 22°05.7'	259°01.4'	N 8°25.3'
5	281°05.8'	N 11°03.7'	232°25.1'	S 9°11.1'	176°02.6'	S 22°05.7'	274°02.3'	N 8°24.7'
6	296°05.4'	N 11°02.7'	247°27.1'	S 9°11.3'	191°04.9'	S 22°05.8'	289°03.3'	N 8°24.1'
7	311°04.9'	N 11°01.6'	262°29.0'	S 9°11.5'	206°07.3'	S 22°05.8'	304°04.3'	N 8°23.5'
8	326°04.4'	N 11°00.6'	277°31.0'	S 9°11.6'	221°09.6'	S 22°05.8'	319°05.3'	N 8°22.9'
9	341°04.0'	N 10°59.5'	292°33.0'	S 9°11.8'	236°11.9'	S 22°05.8'	334°06.3'	N 8°22.3'
10	356°03.5'	N 10°58.5'	307°35.0'	S 9°12.0'	251°14.3'	S 22°05.8'	349°07.3'	N 8°21.7'
11	11°03.0'	N 10°57.5'	322°37.0'	S 9°12.2'	266°16.6'	S 22°05.8'	4°08.2'	N 8°21.1'
12	26°02.6'	N 10°56.4'	337°38.9'	S 9°12.4'	281°19.0'	S 22°05.8'	19°09.2'	N 8°20.5'
13	41°02.1'	N 10°55.4'	352°40.9'	S 9°12.6'	296°21.3'	S 22°05.9'	34°10.2'	N 8°19.9'
14	56°01.6'	N 10°54.4'	7°42.9'	S 9°12.8'	311°23.6'	S 22°05.9'	49°11.2'	N 8°19.3'
15	71°01.2'	N 10°53.3'	22°44.9'	S 9°13.0'	326°26.0'	S 22°05.9'	64°12.2'	N 8°18.7'
16	86°00.7'	N 10°52.3'	37°46.9'	S 9°13.2'	341°28.3'	S 22°05.9'	79°13.2'	N 8°18.1'
17	101°00.2'	N 10°51.2'	52°48.8'	S 9°13.4'	356°30.7'	S 22°05.9'	94°14.1'	N 8°17.5'
18	115°59.8'	N 10°50.2'	67°50.8'	S 9°13.5'	11°33.0'	S 22°05.9'	109°15.1'	N 8°16.9'
19	130°59.3'	N 10°49.2'	82°52.8'	S 9°13.7'	26°35.3'	S 22°05.9'	124°16.1'	N 8°16.3'
20	145°58.8'	N 10°48.1'	97°54.8'	S 9°13.9'	41°37.7'	S 22°06.0'	139°17.1'	N 8°15.7'
21	160°58.4'	N 10°47.1'	112°56.8'	S 9°14.1'	56°40.0'	S 22°06.0'	154°18.1'	N 8°15.1'
22	175°57.9'	N 10°46.0'	127°58.7'	S 9°14.3'	71°42.4'	S 22°06.0'	169°19.1'	N 8°14.4'
23	190°57.4'	N 10°45.0'	143°00.7'	S 9°14.5'	86°44.7'	S 22°06.0'	184°20.1'	N 8°13.8'

Sun Sep 24, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	205°57.0'	N 10°43.9'	158°02.7'	S 9°14.7'	101°47.0'	S 22°06.0'	199°21.0'	N 8°13.2'
1	220°56.5'	N 10°42.9'	173°04.7'	S 9°14.9'	116°49.4'	S 22°06.0'	214°22.0'	N 8°12.6'
2	235°56.0'	N 10°41.8'	188°06.7'	S 9°15.1'	131°51.7'	S 22°06.0'	229°23.0'	N 8°12.0'
3	250°55.6'	N 10°40.8'	203°08.6'	S 9°15.2'	146°54.1'	S 22°06.1'	244°24.0'	N 8°11.4'
4	265°55.1'	N 10°39.8'	218°10.6'	S 9°15.4'	161°56.4'	S 22°06.1'	259°25.0'	N 8°10.8'
5	280°54.6'	N 10°38.7'	233°12.6'	S 9°15.6'	176°58.7'	S 22°06.1'	274°26.0'	N 8°10.2'
6	295°54.2'	N 10°37.7'	248°14.6'	S 9°15.8'	192°01.1'	S 22°06.1'	289°27.0'	N 8°09.6'
7	310°53.7'	N 10°36.6'	263°16.5'	S 9°16.0'	207°03.4'	S 22°06.1'	304°27.9'	N 8°09.0'
8	325°53.3'	N 10°35.6'	278°18.5'	S 9°16.2'	222°05.7'	S 22°06.1'	319°28.9'	N 8°08.4'
9	340°52.8'	N 10°34.5'	293°20.5'	S 9°16.4'	237°08.1'	S 22°06.1'	334°29.9'	N 8°07.8'
10	355°52.3'	N 10°33.5'	308°22.5'	S 9°16.6'	252°10.4'	S 22°06.2'	349°30.9'	N 8°07.2'
11	10°51.9'	N 10°32.4'	323°24.5'	S 9°16.8'	267°12.8'	S 22°06.2'	4°31.9'	N 8°06.6'
12	25°51.4'	N 10°31.4'	338°26.4'	S 9°17.0'	282°15.1'	S 22°06.2'	19°32.9'	N 8°06.0'
13	40°50.9'	N 10°30.3'	353°28.4'	S 9°17.1'	297°17.4'	S 22°06.2'	34°33.9'	N 8°05.4'
14	55°50.5'	N 10°29.3'	8°30.4'	S 9°17.3'	312°19.8'	S 22°06.2'	49°34.8'	N 8°04.8'
15	70°50.0'	N 10°28.2'	23°32.4'	S 9°17.5'	327°22.1'	S 22°06.2'	64°35.8'	N 8°04.2'
16	85°49.6'	N 10°27.2'	38°34.3'	S 9°17.7'	342°24.4'	S 22°06.2'	79°36.8'	N 8°03.6'
17	100°49.1'	N 10°26.1'	53°36.3'	S 9°17.9'	357°26.8'	S 22°06.3'	94°37.8'	N 8°02.9'
18	115°48.6'	N 10°25.0'	68°38.3'	S 9°18.1'	12°29.1'	S 22°06.3'	109°38.8'	N 8°02.3'
19	130°48.2'	N 10°24.0'	83°40.3'	S 9°18.3'	27°31.5'	S 22°06.3'	124°39.8'	N 8°01.7'
20	145°47.7'	N 10°22.9'	98°42.3'	S 9°18.5'	42°33.8'	S 22°06.3'	139°40.8'	N 8°01.1'
21	160°47.3'	N 10°21.9'	113°44.2'	S 9°18.7'	57°36.1'	S 22°06.3'	154°41.7'	N 8°00.5'
22	175°46.8'	N 10°20.8'	128°46.2'	S 9°18.9'	72°38.5'	S 22°06.3'	169°42.7'	N 7°59.9'
23	190°46.4'	N 10°19.8'	143°48.2'	S 9°19.0'	87°40.8'	S 22°06.3'	184°43.7'	N 7°59.3'

Mon Sep 25, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.5' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	205°45.9'	N 10°18.7'	158°50.2'	S 9°19.2'	102°43.1'	S 22°06.4'	199°44.7'	N 7°58.7'
1	220°45.4'	N 10°17.7'	173°52.1'	S 9°19.4'	117°45.5'	S 22°06.4'	214°45.7'	N 7°58.1'
2	235°45.0'	N 10°16.6'	188°54.1'	S 9°19.6'	132°47.8'	S 22°06.4'	229°46.7'	N 7°57.5'
3	250°44.5'	N 10°15.5'	203°56.1'	S 9°19.8'	147°50.1'	S 22°06.4'	244°47.7'	N 7°56.9'
4	265°44.1'	N 10°14.5'	218°58.1'	S 9°20.0'	162°52.5'	S 22°06.4'	259°48.7'	N 7°56.3'
5	280°43.6'	N 10°13.4'	234°00.0'	S 9°20.2'	177°54.8'	S 22°06.4'	274°49.6'	N 7°55.7'
6	295°43.2'	N 10°12.4'	249°02.0'	S 9°20.4'	192°57.1'	S 22°06.4'	289°50.6'	N 7°55.1'
7	310°42.7'	N 10°11.3'	264°04.0'	S 9°20.6'	207°59.5'	S 22°06.5'	304°51.6'	N 7°54.5'
8	325°42.2'	N 10°10.2'	279°06.0'	S 9°20.7'	223°01.8'	S 22°06.5'	319°52.6'	N 7°53.8'
9	340°41.8'	N 10°09.2'	294°07.9'	S 9°20.9'	238°04.1'	S 22°06.5'	334°53.6'	N 7°53.2'
10	355°41.3'	N 10°08.1'	309°09.9'	S 9°21.1'	253°06.5'	S 22°06.5'	349°54.6'	N 7°52.6'
11	10°40.9'	N 10°07.0'	324°11.9'	S 9°21.3'	268°08.8'	S 22°06.5'	4°55.6'	N 7°52.0'
12	25°40.4'	N 10°06.0'	339°13.9'	S 9°21.5'	283°11.1'	S 22°06.5'	19°56.6'	N 7°51.4'
13	40°40.0'	N 10°04.9'	354°15.8'	S 9°21.7'	298°13.5'	S 22°06.5'	34°57.6'	N 7°50.8'
14	55°39.5'	N 10°03.9'	9°17.8'	S 9°21.9'	313°15.8'	S 22°06.6'	49°58.5'	N 7°50.2'
15	70°39.1'	N 10°02.8'	24°19.8'	S 9°22.1'	328°18.1'	S 22°06.6'	64°59.5'	N 7°49.6'
16	85°38.6'	N 10°01.7'	39°21.8'	S 9°22.3'	343°20.5'	S 22°06.6'	80°00.5'	N 7°49.0'
17	100°38.2'	N 10°00.7'	54°23.8'	S 9°22.5'	358°22.8'	S 22°06.6'	95°01.5'	N 7°48.4'
18	115°37.7'	N 9°59.6'	69°25.7'	S 9°22.6'	13°25.1'	S 22°06.6'	110°02.5'	N 7°47.8'
19	130°37.2'	N 9°58.5'	84°27.7'	S 9°22.8'	28°27.5'	S 22°06.6'	125°03.5'	N 7°47.2'
20	145°36.8'	N 9°57.5'	99°29.7'	S 9°23.0'	43°29.8'	S 22°06.6'	140°04.5'	N 7°46.6'
21	160°36.3'	N 9°56.4'	114°31.7'	S 9°23.2'	58°32.1'	S 22°06.7'	155°05.5'	N 7°46.0'
22	175°35.9'	N 9°55.3'	129°33.6'	S 9°23.4'	73°34.5'	S 22°06.7'	170°06.4'	N 7°45.3'
23	190°35.4'	N 9°54.3'	144°35.6'	S 9°23.6'	88°36.8'	S 22°06.7'	185°07.4'	N 7°44.7'

Tue Sep 26, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.4' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	205°35.0'	N 9°53.2'	159°37.6'	S 9°23.8'	103°39.1'	S 22°06.7'	200°08.4'	N 7°44.1'
1	220°34.5'	N 9°52.1'	174°39.6'	S 9°24.0'	118°41.4'	S 22°06.7'	215°09.4'	N 7°43.5'
2	235°34.1'	N 9°51.0'	189°41.5'	S 9°24.2'	133°43.8'	S 22°06.7'	230°10.4'	N 7°42.9'
3	250°33.6'	N 9°50.0'	204°43.5'	S 9°24.4'	148°46.1'	S 22°06.7'	245°11.4'	N 7°42.3'
4	265°33.2'	N 9°48.9'	219°45.5'	S 9°24.5'	163°48.4'	S 22°06.8'	260°12.4'	N 7°41.7'
5	280°32.7'	N 9°47.8'	234°47.5'	S 9°24.7'	178°50.8'	S 22°06.8'	275°13.4'	N 7°41.1'
6	295°32.3'	N 9°46.8'	249°49.4'	S 9°24.9'	193°53.1'	S 22°06.8'	290°14.4'	N 7°40.5'
7	310°31.8'	N 9°45.7'	264°51.4'	S 9°25.1'	208°55.4'	S 22°06.8'	305°15.4'	N 7°39.9'
8	325°31.4'	N 9°44.6'	279°53.4'	S 9°25.3'	223°57.8'	S 22°06.8'	320°16.3'	N 7°39.3'
9	340°30.9'	N 9°43.5'	294°55.3'	S 9°25.5'	239°00.1'	S 22°06.8'	335°17.3'	N 7°38.6'
10	355°30.5'	N 9°42.5'	309°57.3'	S 9°25.7'	254°02.4'	S 22°06.8'	350°18.3'	N 7°38.0'
11	10°30.0'	N 9°41.4'	324°59.3'	S 9°25.9'	269°04.7'	S 22°06.9'	5°19.3'	N 7°37.4'
12	25°29.6'	N 9°40.3'	340°01.3'	S 9°26.1'	284°07.1'	S 22°06.9'	20°20.3'	N 7°36.8'
13	40°29.1'	N 9°39.2'	355°03.2'	S 9°26.3'	299°09.4'	S 22°06.9'	35°21.3'	N 7°36.2'
14	55°28.7'	N 9°38.2'	10°05.2'	S 9°26.5'	314°11.7'	S 22°06.9'	50°22.3'	N 7°35.6'
15	70°28.2'	N 9°37.1'	25°07.2'	S 9°26.6'	329°14.1'	S 22°06.9'	65°23.3'	N 7°35.0'
16	85°27.8'	N 9°36.0'	40°09.2'	S 9°26.8'	344°16.4'	S 22°06.9'	80°24.3'	N 7°34.4'
17	100°27.3'	N 9°34.9'	55°11.1'	S 9°27.0'	359°18.7'	S 22°07.0'	95°25.3'	N 7°33.8'
18	115°26.9'	N 9°33.9'	70°13.1'	S 9°27.2'	14°21.0'	S 22°07.0'	110°26.2'	N 7°33.2'
19	130°26.5'	N 9°32.8'	85°15.1'	S 9°27.4'	29°23.4'	S 22°07.0'	125°27.2'	N 7°32.6'
20	145°26.0'	N 9°31.7'	100°17.1'	S 9°27.6'	44°25.7'	S 22°07.0'	140°28.2'	N 7°31.9'
21	160°25.6'	N 9°30.6'	115°19.0'	S 9°27.8'	59°28.0'	S 22°07.0'	155°29.2'	N 7°31.3'
22	175°25.1'	N 9°29.5'	130°21.0'	S 9°28.0'	74°30.4'	S 22°07.0'	170°30.2'	N 7°30.7'
23	190°24.7'	N 9°28.5'	145°23.0'	S 9°28.2'	89°32.7'	S 22°07.0'	185°31.2'	N 7°30.1'

Wed Sep 27, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.4' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	205°24.2'	N 9°27.4'	160°25.0'	S 9°28.4'	104°35.0'	S 22°07.1'	200°32.2'	N 7°29.5'
1	220°23.8'	N 9°26.3'	175°26.9'	S 9°28.5'	119°37.3'	S 22°07.1'	215°33.2'	N 7°28.9'
2	235°23.3'	N 9°25.2'	190°28.9'	S 9°28.7'	134°39.7'	S 22°07.1'	230°34.2'	N 7°28.3'
3	250°22.9'	N 9°24.1'	205°30.9'	S 9°28.9'	149°42.0'	S 22°07.1'	245°35.2'	N 7°27.7'
4	265°22.4'	N 9°23.0'	220°32.8'	S 9°29.1'	164°44.3'	S 22°07.1'	260°36.2'	N 7°27.1'
5	280°22.0'	N 9°22.0'	235°34.8'	S 9°29.3'	179°46.6'	S 22°07.1'	275°37.1'	N 7°26.5'
6	295°21.6'	N 9°20.9'	250°36.8'	S 9°29.5'	194°49.0'	S 22°07.1'	290°38.1'	N 7°25.8'
7	310°21.1'	N 9°19.8'	265°38.8'	S 9°29.7'	209°51.3'	S 22°07.2'	305°39.1'	N 7°25.2'
8	325°20.7'	N 9°18.7'	280°40.7'	S 9°29.9'	224°53.6'	S 22°07.2'	320°40.1'	N 7°24.6'
9	340°20.2'	N 9°17.6'	295°42.7'	S 9°30.1'	239°55.9'	S 22°07.2'	335°41.1'	N 7°24.0'
10	355°19.8'	N 9°16.5'	310°44.7'	S 9°30.3'	254°58.3'	S 22°07.2'	350°42.1'	N 7°23.4'
11	10°19.3'	N 9°15.4'	325°46.6'	S 9°30.4'	270°00.6'	S 22°07.2'	5°43.1'	N 7°22.8'
12	25°18.9'	N 9°14.4'	340°48.6'	S 9°30.6'	285°02.9'	S 22°07.2'	20°44.1'	N 7°22.2'
13	40°18.4'	N 9°13.3'	355°50.6'	S 9°30.8'	300°05.2'	S 22°07.2'	35°45.1'	N 7°21.6'
14	55°18.0'	N 9°12.2'	10°52.6'	S 9°31.0'	315°07.6'	S 22°07.3'	50°46.1'	N 7°21.0'
15	70°17.6'	N 9°11.1'	25°54.5'	S 9°31.2'	330°09.9'	S 22°07.3'	65°47.1'	N 7°20.3'
16	85°17.1'	N 9°10.0'	40°56.5'	S 9°31.4'	345°12.2'	S 22°07.3'	80°48.1'	N 7°19.7'
17	100°16.7'	N 9°08.9'	55°58.5'	S 9°31.6'	0°14.5'	S 22°07.3'	95°49.0'	N 7°19.1'
18	115°16.2'	N 9°07.8'	71°00.5'	S 9°31.8'	15°16.9'	S 22°07.3'	110°50.0'	N 7°18.5'
19	130°15.8'	N 9°06.7'	86°02.4'	S 9°32.0'	30°19.2'	S 22°07.3'	125°51.0'	N 7°17.9'
20	145°15.4'	N 9°05.6'	101°04.4'	S 9°32.2'	45°21.5'	S 22°07.4'	140°52.0'	N 7°17.3'
21	160°14.9'	N 9°04.6'	116°06.4'	S 9°32.3'	60°23.8'	S 22°07.4'	155°53.0'	N 7°16.7'
22	175°14.5'	N 9°03.5'	131°08.3'	S 9°32.5'	75°26.2'	S 22°07.4'	170°54.0'	N 7°16.1'
23	190°14.0'	N 9°02.4'	146°10.3'	S 9°32.7'	90°28.5'	S 22°07.4'	185°55.0'	N 7°15.5'

Thu Sep 28, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.4' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	205°13.6'	N 9°01.3'	161°12.3'	S 9°32.9'	105°30.8'	S 22°07.4'	200°56.0'	N 7°14.8'
1	220°13.2'	N 9°00.2'	176°14.3'	S 9°33.1'	120°33.1'	S 22°07.4'	215°57.0'	N 7°14.2'
2	235°12.7'	N 8°59.1'	191°16.2'	S 9°33.3'	135°35.5'	S 22°07.4'	230°58.0'	N 7°13.6'
3	250°12.3'	N 8°58.0'	206°18.2'	S 9°33.5'	150°37.8'	S 22°07.5'	245°59.0'	N 7°13.0'
4	265°11.8'	N 8°56.9'	221°20.2'	S 9°33.7'	165°40.1'	S 22°07.5'	260°60.0'	N 7°12.4'
5	280°11.4'	N 8°55.8'	236°22.1'	S 9°33.9'	180°42.4'	S 22°07.5'	276°01.0'	N 7°11.8'
6	295°11.0'	N 8°54.7'	251°24.1'	S 9°34.1'	195°44.7'	S 22°07.5'	291°01.9'	N 7°11.2'
7	310°10.5'	N 8°53.6'	266°26.1'	S 9°34.3'	210°47.1'	S 22°07.5'	306°02.9'	N 7°10.6'
8	325°10.1'	N 8°52.5'	281°28.1'	S 9°34.4'	225°49.4'	S 22°07.5'	321°03.9'	N 7°10.0'
9	340°09.6'	N 8°51.4'	296°30.0'	S 9°34.6'	240°51.7'	S 22°07.5'	336°04.9'	N 7°09.3'
10	355°09.2'	N 8°50.3'	311°32.0'	S 9°34.8'	255°54.0'	S 22°07.6'	351°05.9'	N 7°08.7'
11	10°08.8'	N 8°49.2'	326°34.0'	S 9°35.0'	270°56.4'	S 22°07.6'	6°06.9'	N 7°08.1'
12	25°08.3'	N 8°48.1'	341°35.9'	S 9°35.2'	285°58.7'	S 22°07.6'	21°07.9'	N 7°07.5'
13	40°07.9'	N 8°47.0'	356°37.9'	S 9°35.4'	301°01.0'	S 22°07.6'	36°08.9'	N 7°06.9'
14	55°07.5'	N 8°45.9'	11°39.9'	S 9°35.6'	316°03.3'	S 22°07.6'	51°09.9'	N 7°06.3'
15	70°07.0'	N 8°44.8'	26°41.8'	S 9°35.8'	331°05.6'	S 22°07.6'	66°10.9'	N 7°05.7'
16	85°06.6'	N 8°43.7'	41°43.8'	S 9°36.0'	346°08.0'	S 22°07.6'	81°11.9'	N 7°05.1'
17	100°06.2'	N 8°42.6'	56°45.8'	S 9°36.2'	1°10.3'	S 22°07.7'	96°12.9'	N 7°04.4'
18	115°05.7'	N 8°41.5'	71°47.8'	S 9°36.3'	16°12.6'	S 22°07.7'	111°13.9'	N 7°03.8'
19	130°05.3'	N 8°40.4'	86°49.7'	S 9°36.5'	31°14.9'	S 22°07.7'	126°14.9'	N 7°03.2'
20	145°04.8'	N 8°39.3'	101°51.7'	S 9°36.7'	46°17.2'	S 22°07.7'	141°15.9'	N 7°02.6'
21	160°04.4'	N 8°38.2'	116°53.7'	S 9°36.9'	61°19.6'	S 22°07.7'	156°16.9'	N 7°02.0'
22	175°04.0'	N 8°37.1'	131°55.6'	S 9°37.1'	76°21.9'	S 22°07.7'	171°17.8'	N 7°01.4'
23	190°03.5'	N 8°36.0'	146°57.6'	S 9°37.3'	91°24.2'	S 22°07.8'	186°18.8'	N 7°00.8'

Fri Sep 29, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.4' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	205°03.1'	N 8°34.9'	161°59.6'	S 9°37.5'	106°26.5'	S 22°07.8'	201°19.8'	N 7°00.2'
1	220°02.7'	N 8°33.8'	177°01.5'	S 9°37.7'	121°28.8'	S 22°07.8'	216°20.8'	N 6°59.5'
2	235°02.2'	N 8°32.7'	192°03.5'	S 9°37.9'	136°31.2'	S 22°07.8'	231°21.8'	N 6°58.9'
3	250°01.8'	N 8°31.6'	207°05.5'	S 9°38.1'	151°33.5'	S 22°07.8'	246°22.8'	N 6°58.3'
4	265°01.4'	N 8°30.5'	222°07.5'	S 9°38.3'	166°35.8'	S 22°07.8'	261°23.8'	N 6°57.7'
5	280°00.9'	N 8°29.4'	237°09.4'	S 9°38.4'	181°38.1'	S 22°07.8'	276°24.8'	N 6°57.1'
6	295°00.5'	N 8°28.3'	252°11.4'	S 9°38.6'	196°40.4'	S 22°07.9'	291°25.8'	N 6°56.5'
7	310°00.1'	N 8°27.2'	267°13.4'	S 9°38.8'	211°42.7'	S 22°07.9'	306°26.8'	N 6°55.9'
8	324°59.6'	N 8°26.1'	282°15.3'	S 9°39.0'	226°45.1'	S 22°07.9'	321°27.8'	N 6°55.2'
9	339°59.2'	N 8°25.0'	297°17.3'	S 9°39.2'	241°47.4'	S 22°07.9'	336°28.8'	N 6°54.6'
10	354°58.8'	N 8°23.9'	312°19.3'	S 9°39.4'	256°49.7'	S 22°07.9'	351°29.8'	N 6°54.0'
11	9°58.3'	N 8°22.7'	327°21.2'	S 9°39.6'	271°52.0'	S 22°07.9'	6°30.8'	N 6°53.4'
12	24°57.9'	N 8°21.6'	342°23.2'	S 9°39.8'	286°54.3'	S 22°07.9'	21°31.8'	N 6°52.8'
13	39°57.5'	N 8°20.5'	357°25.2'	S 9°40.0'	301°56.7'	S 22°08.0'	36°32.8'	N 6°52.2'
14	54°57.1'	N 8°19.4'	12°27.1'	S 9°40.2'	316°59.0'	S 22°08.0'	51°33.8'	N 6°51.6'
15	69°56.6'	N 8°18.3'	27°29.1'	S 9°40.4'	332°01.3'	S 22°08.0'	66°34.8'	N 6°50.9'
16	84°56.2'	N 8°17.2'	42°31.1'	S 9°40.5'	347°03.6'	S 22°08.0'	81°35.8'	N 6°50.3'
17	99°55.8'	N 8°16.1'	57°33.0'	S 9°40.7'	2°05.9'	S 22°08.0'	96°36.7'	N 6°49.7'
18	114°55.3'	N 8°15.0'	72°35.0'	S 9°40.9'	17°08.2'	S 22°08.0'	111°37.7'	N 6°49.1'
19	129°54.9'	N 8°13.9'	87°37.0'	S 9°41.1'	32°10.6'	S 22°08.1'	126°38.7'	N 6°48.5'
20	144°54.5'	N 8°12.7'	102°38.9'	S 9°41.3'	47°12.9'	S 22°08.1'	141°39.7'	N 6°47.9'
21	159°54.0'	N 8°11.6'	117°40.9'	S 9°41.5'	62°15.2'	S 22°08.1'	156°40.7'	N 6°47.3'
22	174°53.6'	N 8°10.5'	132°42.9'	S 9°41.7'	77°17.5'	S 22°08.1'	171°41.7'	N 6°46.6'
23	189°53.2'	N 8°09.4'	147°44.9'	S 9°41.9'	92°19.8'	S 22°08.1'	186°42.7'	N 6°46.0'

Sat Sep 30, 2017 UTC

UTC	Venus -3.8		Jupiter -1.5		Saturn +0.5		Mars +1.8	
	v = -0.4' d = 1.1'		v = 2.0' d = 0.2'		v = 2.3' d = 0.0'		v = 1.0' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	204°52.7'	N 8°08.3'	162°46.8'	S 9°42.1'	107°22.1'	S 22°08.1'	201°43.7'	N 6°45.4'
1	219°52.3'	N 8°07.2'	177°48.8'	S 9°42.3'	122°24.4'	S 22°08.1'	216°44.7'	N 6°44.8'
2	234°51.9'	N 8°06.1'	192°50.8'	S 9°42.5'	137°26.8'	S 22°08.2'	231°45.7'	N 6°44.2'
3	249°51.5'	N 8°04.9'	207°52.7'	S 9°42.6'	152°29.1'	S 22°08.2'	246°46.7'	N 6°43.6'
4	264°51.0'	N 8°03.8'	222°54.7'	S 9°42.8'	167°31.4'	S 22°08.2'	261°47.7'	N 6°43.0'
5	279°50.6'	N 8°02.7'	237°56.7'	S 9°43.0'	182°33.7'	S 22°08.2'	276°48.7'	N 6°42.3'
6	294°50.2'	N 8°01.6'	252°58.6'	S 9°43.2'	197°36.0'	S 22°08.2'	291°49.7'	N 6°41.7'
7	309°49.8'	N 8°00.5'	268°00.6'	S 9°43.4'	212°38.3'	S 22°08.2'	306°50.7'	N 6°41.1'
8	324°49.3'	N 7°59.4'	283°02.6'	S 9°43.6'	227°40.7'	S 22°08.3'	321°51.7'	N 6°40.5'
9	339°48.9'	N 7°58.2'	298°04.5'	S 9°43.8'	242°43.0'	S 22°08.3'	336°52.7'	N 6°39.9'
10	354°48.5'	N 7°57.1'	313°06.5'	S 9°44.0'	257°45.3'	S 22°08.3'	351°53.7'	N 6°39.3'
11	9°48.0'	N 7°56.0'	328°08.5'	S 9°44.2'	272°47.6'	S 22°08.3'	6°54.7'	N 6°38.7'
12	24°47.6'	N 7°54.9'	343°10.4'	S 9°44.4'	287°49.9'	S 22°08.3'	21°55.7'	N 6°38.0'
13	39°47.2'	N 7°53.8'	358°12.4'	S 9°44.5'	302°52.2'	S 22°08.3'	36°56.7'	N 6°37.4'
14	54°46.8'	N 7°52.7'	13°14.4'	S 9°44.7'	317°54.5'	S 22°08.3'	51°57.7'	N 6°36.8'
15	69°46.3'	N 7°51.5'	28°16.3'	S 9°44.9'	332°56.8'	S 22°08.4'	66°58.7'	N 6°36.2'
16	84°45.9'	N 7°50.4'	43°18.3'	S 9°45.1'	347°59.2'	S 22°08.4'	81°59.7'	N 6°35.6'
17	99°45.5'	N 7°49.3'	58°20.3'	S 9°45.3'	3°01.5'	S 22°08.4'	97°00.7'	N 6°35.0'
18	114°45.1'	N 7°48.2'	73°22.2'	S 9°45.5'	18°03.8'	S 22°08.4'	112°01.7'	N 6°34.3'
19	129°44.6'	N 7°47.0'	88°24.2'	S 9°45.7'	33°06.1'	S 22°08.4'	127°02.7'	N 6°33.7'
20	144°44.2'	N 7°45.9'	103°26.2'	S 9°45.9'	48°08.4'	S 22°08.4'	142°03.7'	N 6°33.1'
21	159°43.8'	N 7°44.8'	118°28.1'	S 9°46.1'	63°10.7'	S 22°08.4'	157°04.7'	N 6°32.5'
22	174°43.4'	N 7°43.7'	133°30.1'	S 9°46.3'	78°13.0'	S 22°08.5'	172°05.6'	N 6°31.9'
23	189°42.9'	N 7°42.6'	148°32.1'	S 9°46.5'	93°15.3'	S 22°08.5'	187°06.6'	N 6°31.3'