

Sat Jun 1, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.3		Mars +1.8	
	v = -0.6' d = 0.9'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.1'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	201°06.0'	N 16°33.3'	349°16.0'	S 22°30.6'	317°54.2'	S 21°37.5'	147°58.6'	N 24°11.7'
1	216°05.4'	N 16°34.2'	4°18.8'	S 22°30.6'	332°56.7'	S 21°37.5'	162°59.3'	N 24°11.6'
2	231°04.9'	N 16°35.1'	19°21.6'	S 22°30.6'	347°59.3'	S 21°37.5'	178°00.0'	N 24°11.5'
3	246°04.3'	N 16°36.0'	34°24.4'	S 22°30.6'	3°01.9'	S 21°37.6'	193°00.7'	N 24°11.4'
4	261°03.7'	N 16°36.8'	49°27.2'	S 22°30.5'	18°04.5'	S 21°37.6'	208°01.4'	N 24°11.3'
5	276°03.1'	N 16°37.7'	64°30.0'	S 22°30.5'	33°07.1'	S 21°37.6'	223°02.2'	N 24°11.1'
6	291°02.6'	N 16°38.6'	79°32.8'	S 22°30.5'	48°09.7'	S 21°37.6'	238°02.9'	N 24°11.0'
7	306°02.0'	N 16°39.4'	94°35.6'	S 22°30.5'	63°12.3'	S 21°37.6'	253°03.6'	N 24°10.9'
8	321°01.4'	N 16°40.3'	109°38.4'	S 22°30.5'	78°14.9'	S 21°37.7'	268°04.3'	N 24°10.8'
9	336°00.8'	N 16°41.2'	124°41.2'	S 22°30.4'	93°17.5'	S 21°37.7'	283°05.0'	N 24°10.6'
10	351°00.2'	N 16°42.1'	139°44.0'	S 22°30.4'	108°20.1'	S 21°37.7'	298°05.7'	N 24°10.5'
11	5°59.7'	N 16°42.9'	154°46.8'	S 22°30.4'	123°22.7'	S 21°37.7'	313°06.4'	N 24°10.4'
12	20°59.1'	N 16°43.8'	169°49.6'	S 22°30.4'	138°25.3'	S 21°37.7'	328°07.1'	N 24°10.3'
13	35°58.5'	N 16°44.7'	184°52.4'	S 22°30.4'	153°27.8'	S 21°37.8'	343°07.8'	N 24°10.1'
14	50°57.9'	N 16°45.5'	199°55.2'	S 22°30.4'	168°30.4'	S 21°37.8'	358°08.6'	N 24°10.0'
15	65°57.3'	N 16°46.4'	214°58.0'	S 22°30.3'	183°33.0'	S 21°37.8'	13°09.3'	N 24°09.9'
16	80°56.7'	N 16°47.2'	230°00.8'	S 22°30.3'	198°35.6'	S 21°37.8'	28°10.0'	N 24°09.8'
17	95°56.2'	N 16°48.1'	245°03.6'	S 22°30.3'	213°38.2'	S 21°37.8'	43°10.7'	N 24°09.6'
18	110°55.6'	N 16°49.0'	260°06.4'	S 22°30.3'	228°40.8'	S 21°37.9'	58°11.4'	N 24°09.5'
19	125°55.0'	N 16°49.8'	275°09.2'	S 22°30.3'	243°43.4'	S 21°37.9'	73°12.1'	N 24°09.4'
20	140°54.4'	N 16°50.7'	290°12.0'	S 22°30.3'	258°46.0'	S 21°37.9'	88°12.8'	N 24°09.3'
21	155°53.8'	N 16°51.6'	305°14.8'	S 22°30.2'	273°48.6'	S 21°37.9'	103°13.5'	N 24°09.1'
22	170°53.2'	N 16°52.4'	320°17.6'	S 22°30.2'	288°51.2'	S 21°37.9'	118°14.2'	N 24°09.0'
23	185°52.6'	N 16°53.3'	335°20.4'	S 22°30.2'	303°53.8'	S 21°38.0'	133°15.0'	N 24°08.9'

Sun Jun 2, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.3		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.1'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	200°52.1'	N 16°54.1'	350°23.2'	S 22°30.2'	318°56.4'	S 21°38.0'	148°15.7'	N 24°08.8'
1	215°51.5'	N 16°55.0'	5°26.0'	S 22°30.2'	333°59.0'	S 21°38.0'	163°16.4'	N 24°08.6'
2	230°50.9'	N 16°55.9'	20°28.8'	S 22°30.1'	349°01.6'	S 21°38.0'	178°17.1'	N 24°08.5'
3	245°50.3'	N 16°56.7'	35°31.6'	S 22°30.1'	4°04.2'	S 21°38.0'	193°17.8'	N 24°08.4'
4	260°49.7'	N 16°57.6'	50°34.4'	S 22°30.1'	19°06.7'	S 21°38.1'	208°18.5'	N 24°08.2'
5	275°49.1'	N 16°58.4'	65°37.2'	S 22°30.1'	34°09.3'	S 21°38.1'	223°19.2'	N 24°08.1'
6	290°48.5'	N 16°59.3'	80°40.0'	S 22°30.1'	49°11.9'	S 21°38.1'	238°19.9'	N 24°08.0'
7	305°47.9'	N 17°00.1'	95°42.8'	S 22°30.1'	64°14.5'	S 21°38.1'	253°20.7'	N 24°07.9'
8	320°47.3'	N 17°01.0'	110°45.6'	S 22°30.0'	79°17.1'	S 21°38.1'	268°21.4'	N 24°07.7'
9	335°46.7'	N 17°01.8'	125°48.4'	S 22°30.0'	94°19.7'	S 21°38.2'	283°22.1'	N 24°07.6'
10	350°46.1'	N 17°02.7'	140°51.2'	S 22°30.0'	109°22.3'	S 21°38.2'	298°22.8'	N 24°07.5'
11	5°45.6'	N 17°03.5'	155°54.0'	S 22°30.0'	124°24.9'	S 21°38.2'	313°23.5'	N 24°07.3'
12	20°45.0'	N 17°04.4'	170°56.8'	S 22°30.0'	139°27.5'	S 21°38.2'	328°24.2'	N 24°07.2'
13	35°44.4'	N 17°05.2'	185°59.6'	S 22°30.0'	154°30.1'	S 21°38.2'	343°24.9'	N 24°07.1'
14	50°43.8'	N 17°06.1'	201°02.4'	S 22°29.9'	169°32.7'	S 21°38.3'	358°25.6'	N 24°06.9'
15	65°43.2'	N 17°06.9'	216°05.2'	S 22°29.9'	184°35.3'	S 21°38.3'	13°26.4'	N 24°06.8'
16	80°42.6'	N 17°07.8'	231°08.0'	S 22°29.9'	199°37.9'	S 21°38.3'	28°27.1'	N 24°06.7'
17	95°42.0'	N 17°08.6'	246°10.8'	S 22°29.9'	214°40.5'	S 21°38.3'	43°27.8'	N 24°06.5'
18	110°41.4'	N 17°09.5'	261°13.6'	S 22°29.9'	229°43.1'	S 21°38.3'	58°28.5'	N 24°06.4'
19	125°40.8'	N 17°10.3'	276°16.4'	S 22°29.8'	244°45.7'	S 21°38.4'	73°29.2'	N 24°06.3'
20	140°40.2'	N 17°11.2'	291°19.2'	S 22°29.8'	259°48.3'	S 21°38.4'	88°29.9'	N 24°06.1'
21	155°39.6'	N 17°12.0'	306°22.0'	S 22°29.8'	274°50.9'	S 21°38.4'	103°30.6'	N 24°06.0'
22	170°39.0'	N 17°12.8'	321°24.8'	S 22°29.8'	289°53.5'	S 21°38.4'	118°31.3'	N 24°05.9'
23	185°38.4'	N 17°13.7'	336°27.6'	S 22°29.8'	304°56.1'	S 21°38.4'	133°32.1'	N 24°05.7'

Mon Jun 3, 2019 UTC

UTC	Venus -3.8 v = -0.6' d = 0.8'		Jupiter -2.5 v = 2.8' d = 0.0'		Saturn +0.3 v = 2.6' d = 0.0'		Mars +1.8 v = 0.7' d = 0.1'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	200°37.8'	N 17°14.5'	351°30.4'	S 22°29.8'	319°58.7'	S 21°38.5'	148°32.8'	N 24°05.6'
1	215°37.2'	N 17°15.4'	6°33.2'	S 22°29.7'	335°01.3'	S 21°38.5'	163°33.5'	N 24°05.5'
2	230°36.6'	N 17°16.2'	21°36.0'	S 22°29.7'	350°03.9'	S 21°38.5'	178°34.2'	N 24°05.3'
3	245°36.0'	N 17°17.1'	36°38.8'	S 22°29.7'	5°06.5'	S 21°38.5'	193°34.9'	N 24°05.2'
4	260°35.4'	N 17°17.9'	51°41.6'	S 22°29.7'	20°09.1'	S 21°38.6'	208°35.6'	N 24°05.1'
5	275°34.8'	N 17°18.7'	66°44.4'	S 22°29.7'	35°11.7'	S 21°38.6'	223°36.3'	N 24°04.9'
6	290°34.2'	N 17°19.6'	81°47.2'	S 22°29.6'	50°14.3'	S 21°38.6'	238°37.1'	N 24°04.8'
7	305°33.6'	N 17°20.4'	96°50.0'	S 22°29.6'	65°16.9'	S 21°38.6'	253°37.8'	N 24°04.6'
8	320°33.0'	N 17°21.2'	111°52.8'	S 22°29.6'	80°19.4'	S 21°38.6'	268°38.5'	N 24°04.5'
9	335°32.4'	N 17°22.1'	126°55.6'	S 22°29.6'	95°22.0'	S 21°38.7'	283°39.2'	N 24°04.4'
10	350°31.8'	N 17°22.9'	141°58.4'	S 22°29.6'	110°24.6'	S 21°38.7'	298°39.9'	N 24°04.2'
11	5°31.2'	N 17°23.7'	157°01.2'	S 22°29.6'	125°27.2'	S 21°38.7'	313°40.6'	N 24°04.1'
12	20°30.6'	N 17°24.6'	172°04.0'	S 22°29.5'	140°29.8'	S 21°38.7'	328°41.3'	N 24°03.9'
13	35°30.0'	N 17°25.4'	187°06.8'	S 22°29.5'	155°32.4'	S 21°38.7'	343°42.1'	N 24°03.8'
14	50°29.4'	N 17°26.2'	202°09.6'	S 22°29.5'	170°35.0'	S 21°38.8'	358°42.8'	N 24°03.7'
15	65°28.8'	N 17°27.1'	217°12.4'	S 22°29.5'	185°37.6'	S 21°38.8'	13°43.5'	N 24°03.5'
16	80°28.2'	N 17°27.9'	232°15.2'	S 22°29.5'	200°40.2'	S 21°38.8'	28°44.2'	N 24°03.4'
17	95°27.5'	N 17°28.7'	247°18.0'	S 22°29.4'	215°42.8'	S 21°38.8'	43°44.9'	N 24°03.2'
18	110°26.9'	N 17°29.5'	262°20.8'	S 22°29.4'	230°45.4'	S 21°38.8'	58°45.6'	N 24°03.1'
19	125°26.3'	N 17°30.4'	277°23.6'	S 22°29.4'	245°48.0'	S 21°38.9'	73°46.4'	N 24°03.0'
20	140°25.7'	N 17°31.2'	292°26.5'	S 22°29.4'	260°50.6'	S 21°38.9'	88°47.1'	N 24°02.8'
21	155°25.1'	N 17°32.0'	307°29.3'	S 22°29.4'	275°53.2'	S 21°38.9'	103°47.8'	N 24°02.7'
22	170°24.5'	N 17°32.8'	322°32.1'	S 22°29.4'	290°55.8'	S 21°38.9'	118°48.5'	N 24°02.5'
23	185°23.9'	N 17°33.7'	337°34.9'	S 22°29.3'	305°58.4'	S 21°38.9'	133°49.2'	N 24°02.4'

Tue Jun 4, 2019 UTC

UTC	Venus -3.8 v = -0.6' d = 0.8'		Jupiter -2.5 v = 2.8' d = 0.0'		Saturn +0.2 v = 2.6' d = 0.0'		Mars +1.8 v = 0.7' d = 0.1'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	200°23.3'	N 17°34.5'	352°37.7'	S 22°29.3'	321°01.0'	S 21°39.0'	148°49.9'	N 24°02.3'
1	215°22.7'	N 17°35.3'	7°40.5'	S 22°29.3'	336°03.6'	S 21°39.0'	163°50.6'	N 24°02.1'
2	230°22.1'	N 17°36.1'	22°43.3'	S 22°29.3'	351°06.2'	S 21°39.0'	178°51.4'	N 24°02.0'
3	245°21.4'	N 17°37.0'	37°46.1'	S 22°29.3'	6°08.8'	S 21°39.0'	193°52.1'	N 24°01.8'
4	260°20.8'	N 17°37.8'	52°48.9'	S 22°29.2'	21°11.4'	S 21°39.0'	208°52.8'	N 24°01.7'
5	275°20.2'	N 17°38.6'	67°51.7'	S 22°29.2'	36°14.0'	S 21°39.1'	223°53.5'	N 24°01.5'
6	290°19.6'	N 17°39.4'	82°54.5'	S 22°29.2'	51°16.6'	S 21°39.1'	238°54.2'	N 24°01.4'
7	305°19.0'	N 17°40.2'	97°57.3'	S 22°29.2'	66°19.2'	S 21°39.1'	253°54.9'	N 24°01.2'
8	320°18.4'	N 17°41.1'	113°00.1'	S 22°29.2'	81°21.8'	S 21°39.1'	268°55.7'	N 24°01.1'
9	335°17.8'	N 17°41.9'	128°02.9'	S 22°29.2'	96°24.4'	S 21°39.2'	283°56.4'	N 24°01.0'
10	350°17.1'	N 17°42.7'	143°05.7'	S 22°29.1'	111°27.0'	S 21°39.2'	298°57.1'	N 24°00.8'
11	5°16.5'	N 17°43.5'	158°08.5'	S 22°29.1'	126°29.7'	S 21°39.2'	313°57.8'	N 24°00.7'
12	20°15.9'	N 17°44.3'	173°11.3'	S 22°29.1'	141°32.3'	S 21°39.2'	328°58.5'	N 24°00.5'
13	35°15.3'	N 17°45.1'	188°14.1'	S 22°29.1'	156°34.9'	S 21°39.2'	343°59.2'	N 24°00.4'
14	50°14.7'	N 17°45.9'	203°16.9'	S 22°29.1'	171°37.5'	S 21°39.3'	358°60.0'	N 24°00.2'
15	65°14.1'	N 17°46.7'	218°19.7'	S 22°29.0'	186°40.1'	S 21°39.3'	14°00.7'	N 24°00.1'
16	80°13.4'	N 17°47.6'	233°22.5'	S 22°29.0'	201°42.7'	S 21°39.3'	29°01.4'	N 23°59.9'
17	95°12.8'	N 17°48.4'	248°25.3'	S 22°29.0'	216°45.3'	S 21°39.3'	44°02.1'	N 23°59.8'
18	110°12.2'	N 17°49.2'	263°28.1'	S 22°29.0'	231°47.9'	S 21°39.3'	59°02.8'	N 23°59.6'
19	125°11.6'	N 17°50.0'	278°30.9'	S 22°29.0'	246°50.5'	S 21°39.4'	74°03.6'	N 23°59.5'
20	140°11.0'	N 17°50.8'	293°33.7'	S 22°29.0'	261°53.1'	S 21°39.4'	89°04.3'	N 23°59.3'
21	155°10.3'	N 17°51.6'	308°36.5'	S 22°28.9'	276°55.7'	S 21°39.4'	104°05.0'	N 23°59.2'
22	170°09.7'	N 17°52.4'	323°39.4'	S 22°28.9'	291°58.3'	S 21°39.4'	119°05.7'	N 23°59.0'
23	185°09.1'	N 17°53.2'	338°42.2'	S 22°28.9'	307°00.9'	S 21°39.5'	134°06.4'	N 23°58.9'

Wed Jun 5, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	200°08.5'	N 17°54.0'	353°45.0'	S 22°28.9'	322°03.5'	S 21°39.5'	149°07.1'	N 23°58.7'
1	215°07.9'	N 17°54.8'	8°47.8'	S 22°28.9'	337°06.1'	S 21°39.5'	164°07.9'	N 23°58.6'
2	230°07.2'	N 17°55.6'	23°50.6'	S 22°28.8'	352°08.7'	S 21°39.5'	179°08.6'	N 23°58.4'
3	245°06.6'	N 17°56.4'	38°53.4'	S 22°28.8'	7°11.3'	S 21°39.5'	194°09.3'	N 23°58.3'
4	260°06.0'	N 17°57.2'	53°56.2'	S 22°28.8'	22°13.9'	S 21°39.6'	209°10.0'	N 23°58.1'
5	275°05.4'	N 17°58.0'	68°59.0'	S 22°28.8'	37°16.5'	S 21°39.6'	224°10.7'	N 23°58.0'
6	290°04.7'	N 17°58.8'	84°01.8'	S 22°28.8'	52°19.1'	S 21°39.6'	239°11.5'	N 23°57.8'
7	305°04.1'	N 17°59.6'	99°04.6'	S 22°28.7'	67°21.7'	S 21°39.6'	254°12.2'	N 23°57.7'
8	320°03.5'	N 18°00.4'	114°07.4'	S 22°28.7'	82°24.3'	S 21°39.6'	269°12.9'	N 23°57.5'
9	335°02.9'	N 18°01.2'	129°10.2'	S 22°28.7'	97°26.9'	S 21°39.7'	284°13.6'	N 23°57.4'
10	350°02.2'	N 18°02.0'	144°13.0'	S 22°28.7'	112°29.5'	S 21°39.7'	299°14.3'	N 23°57.2'
11	5°01.6'	N 18°02.8'	159°15.8'	S 22°28.7'	127°32.1'	S 21°39.7'	314°15.0'	N 23°57.0'
12	20°01.0'	N 18°03.6'	174°18.6'	S 22°28.7'	142°34.7'	S 21°39.7'	329°15.8'	N 23°56.9'
13	35°00.4'	N 18°04.4'	189°21.4'	S 22°28.6'	157°37.3'	S 21°39.8'	344°16.5'	N 23°56.7'
14	49°59.7'	N 18°05.2'	204°24.2'	S 22°28.6'	172°39.9'	S 21°39.8'	359°17.2'	N 23°56.6'
15	64°59.1'	N 18°06.0'	219°27.0'	S 22°28.6'	187°42.6'	S 21°39.8'	14°17.9'	N 23°56.4'
16	79°58.5'	N 18°06.8'	234°29.8'	S 22°28.6'	202°45.2'	S 21°39.8'	29°18.6'	N 23°56.3'
17	94°57.8'	N 18°07.6'	249°32.6'	S 22°28.6'	217°47.8'	S 21°39.8'	44°19.4'	N 23°56.1'
18	109°57.2'	N 18°08.4'	264°35.5'	S 22°28.5'	232°50.4'	S 21°39.9'	59°20.1'	N 23°56.0'
19	124°56.6'	N 18°09.2'	279°38.3'	S 22°28.5'	247°53.0'	S 21°39.9'	74°20.8'	N 23°55.8'
20	139°55.9'	N 18°09.9'	294°41.1'	S 22°28.5'	262°55.6'	S 21°39.9'	89°21.5'	N 23°55.6'
21	154°55.3'	N 18°10.7'	309°43.9'	S 22°28.5'	277°58.2'	S 21°39.9'	104°22.2'	N 23°55.5'
22	169°54.7'	N 18°11.5'	324°46.7'	S 22°28.5'	293°00.8'	S 21°39.9'	119°23.0'	N 23°55.3'
23	184°54.0'	N 18°12.3'	339°49.5'	S 22°28.4'	308°03.4'	S 21°40.0'	134°23.7'	N 23°55.2'

Thu Jun 6, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.6' d = 0.8'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	199°53.4'	N 18°13.1'	354°52.3'	S 22°28.4'	323°06.0'	S 21°40.0'	149°24.4'	N 23°55.0'
1	214°52.8'	N 18°13.9'	9°55.1'	S 22°28.4'	338°08.6'	S 21°40.0'	164°25.1'	N 23°54.9'
2	229°52.1'	N 18°14.7'	24°57.9'	S 22°28.4'	353°11.2'	S 21°40.0'	179°25.8'	N 23°54.7'
3	244°51.5'	N 18°15.4'	40°00.7'	S 22°28.4'	8°13.8'	S 21°40.1'	194°26.6'	N 23°54.5'
4	259°50.9'	N 18°16.2'	55°03.5'	S 22°28.4'	23°16.4'	S 21°40.1'	209°27.3'	N 23°54.4'
5	274°50.2'	N 18°17.0'	70°06.3'	S 22°28.3'	38°19.0'	S 21°40.1'	224°28.0'	N 23°54.2'
6	289°49.6'	N 18°17.8'	85°09.1'	S 22°28.3'	53°21.7'	S 21°40.1'	239°28.7'	N 23°54.1'
7	304°49.0'	N 18°18.6'	100°11.9'	S 22°28.3'	68°24.3'	S 21°40.1'	254°29.4'	N 23°53.9'
8	319°48.3'	N 18°19.3'	115°14.7'	S 22°28.3'	83°26.9'	S 21°40.2'	269°30.2'	N 23°53.7'
9	334°47.7'	N 18°20.1'	130°17.5'	S 22°28.3'	98°29.5'	S 21°40.2'	284°30.9'	N 23°53.6'
10	349°47.0'	N 18°20.9'	145°20.4'	S 22°28.2'	113°32.1'	S 21°40.2'	299°31.6'	N 23°53.4'
11	4°46.4'	N 18°21.7'	160°23.2'	S 22°28.2'	128°34.7'	S 21°40.2'	314°32.3'	N 23°53.2'
12	19°45.8'	N 18°22.4'	175°26.0'	S 22°28.2'	143°37.3'	S 21°40.3'	329°33.1'	N 23°53.1'
13	34°45.1'	N 18°23.2'	190°28.8'	S 22°28.2'	158°39.9'	S 21°40.3'	344°33.8'	N 23°52.9'
14	49°44.5'	N 18°24.0'	205°31.6'	S 22°28.2'	173°42.5'	S 21°40.3'	359°34.5'	N 23°52.8'
15	64°43.8'	N 18°24.8'	220°34.4'	S 22°28.1'	188°45.1'	S 21°40.3'	14°35.2'	N 23°52.6'
16	79°43.2'	N 18°25.5'	235°37.2'	S 22°28.1'	203°47.7'	S 21°40.3'	29°35.9'	N 23°52.4'
17	94°42.6'	N 18°26.3'	250°40.0'	S 22°28.1'	218°50.3'	S 21°40.4'	44°36.7'	N 23°52.3'
18	109°41.9'	N 18°27.1'	265°42.8'	S 22°28.1'	233°52.9'	S 21°40.4'	59°37.4'	N 23°52.1'
19	124°41.3'	N 18°27.9'	280°45.6'	S 22°28.1'	248°55.6'	S 21°40.4'	74°38.1'	N 23°51.9'
20	139°40.6'	N 18°28.6'	295°48.4'	S 22°28.1'	263°58.2'	S 21°40.4'	89°38.8'	N 23°51.8'
21	154°40.0'	N 18°29.4'	310°51.2'	S 22°28.0'	279°00.8'	S 21°40.4'	104°39.6'	N 23°51.6'
22	169°39.3'	N 18°30.2'	325°54.0'	S 22°28.0'	294°03.4'	S 21°40.5'	119°40.3'	N 23°51.4'
23	184°38.7'	N 18°30.9'	340°56.8'	S 22°28.0'	309°06.0'	S 21°40.5'	134°41.0'	N 23°51.3'

Fri Jun 7, 2019 UTC

UTC	Venus -3.8 v = -0.7' d = 0.8'		Jupiter -2.5 v = 2.8' d = 0.0'		Saturn +0.2 v = 2.6' d = 0.0'		Mars +1.8 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	199°38.1'	N 18°31.7'	355°59.6'	S 22°28.0'	324°08.6'	S 21°40.5'	149°41.7'	N 23°51.1'
1	214°37.4'	N 18°32.5'	11°02.5'	S 22°28.0'	339°11.2'	S 21°40.5'	164°42.4'	N 23°51.0'
2	229°36.8'	N 18°33.2'	26°05.3'	S 22°27.9'	354°13.8'	S 21°40.6'	179°43.2'	N 23°50.8'
3	244°36.1'	N 18°34.0'	41°08.1'	S 22°27.9'	9°16.4'	S 21°40.6'	194°43.9'	N 23°50.6'
4	259°35.5'	N 18°34.7'	56°10.9'	S 22°27.9'	24°19.0'	S 21°40.6'	209°44.6'	N 23°50.5'
5	274°34.8'	N 18°35.5'	71°13.7'	S 22°27.9'	39°21.7'	S 21°40.6'	224°45.3'	N 23°50.3'
6	289°34.2'	N 18°36.3'	86°16.5'	S 22°27.9'	54°24.3'	S 21°40.6'	239°46.1'	N 23°50.1'
7	304°33.5'	N 18°37.0'	101°19.3'	S 22°27.8'	69°26.9'	S 21°40.7'	254°46.8'	N 23°49.9'
8	319°32.9'	N 18°37.8'	116°22.1'	S 22°27.8'	84°29.5'	S 21°40.7'	269°47.5'	N 23°49.8'
9	334°32.2'	N 18°38.5'	131°24.9'	S 22°27.8'	99°32.1'	S 21°40.7'	284°48.2'	N 23°49.6'
10	349°31.6'	N 18°39.3'	146°27.7'	S 22°27.8'	114°34.7'	S 21°40.7'	299°49.0'	N 23°49.4'
11	4°30.9'	N 18°40.1'	161°30.5'	S 22°27.8'	129°37.3'	S 21°40.8'	314°49.7'	N 23°49.3'
12	19°30.3'	N 18°40.8'	176°33.3'	S 22°27.7'	144°39.9'	S 21°40.8'	329°50.4'	N 23°49.1'
13	34°29.6'	N 18°41.6'	191°36.1'	S 22°27.7'	159°42.5'	S 21°40.8'	344°51.1'	N 23°48.9'
14	49°29.0'	N 18°42.3'	206°38.9'	S 22°27.7'	174°45.1'	S 21°40.8'	359°51.8'	N 23°48.8'
15	64°28.3'	N 18°43.1'	221°41.8'	S 22°27.7'	189°47.8'	S 21°40.8'	14°52.6'	N 23°48.6'
16	79°27.7'	N 18°43.8'	236°44.6'	S 22°27.7'	204°50.4'	S 21°40.9'	29°53.3'	N 23°48.4'
17	94°27.0'	N 18°44.6'	251°47.4'	S 22°27.6'	219°53.0'	S 21°40.9'	44°54.0'	N 23°48.2'
18	109°26.4'	N 18°45.3'	266°50.2'	S 22°27.6'	234°55.6'	S 21°40.9'	59°54.7'	N 23°48.1'
19	124°25.7'	N 18°46.1'	281°53.0'	S 22°27.6'	249°58.2'	S 21°40.9'	74°55.5'	N 23°47.9'
20	139°25.1'	N 18°46.8'	296°55.8'	S 22°27.6'	265°00.8'	S 21°41.0'	89°56.2'	N 23°47.7'
21	154°24.4'	N 18°47.6'	311°58.6'	S 22°27.6'	280°03.4'	S 21°41.0'	104°56.9'	N 23°47.6'
22	169°23.7'	N 18°48.3'	327°01.4'	S 22°27.6'	295°06.0'	S 21°41.0'	119°57.6'	N 23°47.4'
23	184°23.1'	N 18°49.1'	342°04.2'	S 22°27.5'	310°08.7'	S 21°41.0'	134°58.4'	N 23°47.2'

Sat Jun 8, 2019 UTC

UTC	Venus -3.8 v = -0.7' d = 0.7'		Jupiter -2.5 v = 2.8' d = 0.0'		Saturn +0.2 v = 2.6' d = 0.0'		Mars +1.8 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	199°22.4'	N 18°49.8'	357°07.0'	S 22°27.5'	325°11.3'	S 21°41.1'	149°59.1'	N 23°47.0'
1	214°21.8'	N 18°50.6'	12°09.8'	S 22°27.5'	340°13.9'	S 21°41.1'	164°59.8'	N 23°46.9'
2	229°21.1'	N 18°51.3'	27°12.6'	S 22°27.5'	355°16.5'	S 21°41.1'	180°00.5'	N 23°46.7'
3	244°20.5'	N 18°52.1'	42°15.4'	S 22°27.5'	10°19.1'	S 21°41.1'	195°01.3'	N 23°46.5'
4	259°19.8'	N 18°52.8'	57°18.3'	S 22°27.4'	25°21.7'	S 21°41.1'	210°02.0'	N 23°46.3'
5	274°19.1'	N 18°53.5'	72°21.1'	S 22°27.4'	40°24.3'	S 21°41.2'	225°02.7'	N 23°46.2'
6	289°18.5'	N 18°54.3'	87°23.9'	S 22°27.4'	55°26.9'	S 21°41.2'	240°03.4'	N 23°46.0'
7	304°17.8'	N 18°55.0'	102°26.7'	S 22°27.4'	70°29.6'	S 21°41.2'	255°04.2'	N 23°45.8'
8	319°17.2'	N 18°55.8'	117°29.5'	S 22°27.4'	85°32.2'	S 21°41.2'	270°04.9'	N 23°45.6'
9	334°16.5'	N 18°56.5'	132°32.3'	S 22°27.3'	100°34.8'	S 21°41.3'	285°05.6'	N 23°45.5'
10	349°15.8'	N 18°57.2'	147°35.1'	S 22°27.3'	115°37.4'	S 21°41.3'	300°06.4'	N 23°45.3'
11	4°15.2'	N 18°58.0'	162°37.9'	S 22°27.3'	130°40.0'	S 21°41.3'	315°07.1'	N 23°45.1'
12	19°14.5'	N 18°58.7'	177°40.7'	S 22°27.3'	145°42.6'	S 21°41.3'	330°07.8'	N 23°44.9'
13	34°13.9'	N 18°59.4'	192°43.5'	S 22°27.3'	160°45.2'	S 21°41.3'	345°08.5'	N 23°44.8'
14	49°13.2'	N 19°00.2'	207°46.3'	S 22°27.2'	175°47.9'	S 21°41.4'	0°09.3'	N 23°44.6'
15	64°12.5'	N 19°00.9'	222°49.1'	S 22°27.2'	190°50.5'	S 21°41.4'	15°10.0'	N 23°44.4'
16	79°11.9'	N 19°01.6'	237°52.0'	S 22°27.2'	205°53.1'	S 21°41.4'	30°10.7'	N 23°44.2'
17	94°11.2'	N 19°02.4'	252°54.8'	S 22°27.2'	220°55.7'	S 21°41.4'	45°11.4'	N 23°44.0'
18	109°10.5'	N 19°03.1'	267°57.6'	S 22°27.2'	235°58.3'	S 21°41.5'	60°12.2'	N 23°43.9'
19	124°09.9'	N 19°03.8'	283°00.4'	S 22°27.1'	251°00.9'	S 21°41.5'	75°12.9'	N 23°43.7'
20	139°09.2'	N 19°04.6'	298°03.2'	S 22°27.1'	266°03.5'	S 21°41.5'	90°13.6'	N 23°43.5'
21	154°08.5'	N 19°05.3'	313°06.0'	S 22°27.1'	281°06.2'	S 21°41.5'	105°14.3'	N 23°43.3'
22	169°07.9'	N 19°06.0'	328°08.8'	S 22°27.1'	296°08.8'	S 21°41.5'	120°15.1'	N 23°43.1'
23	184°07.2'	N 19°06.7'	343°11.6'	S 22°27.1'	311°11.4'	S 21°41.6'	135°15.8'	N 23°43.0'

Sun Jun 9, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.7'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	199°06.5'	N 19°07.5'	358°14.4'	S 22°27.0'	326°14.0'	S 21°41.6'	150°16.5'	N 23°42.8'
1	214°05.9'	N 19°08.2'	13°17.2'	S 22°27.0'	341°16.6'	S 21°41.6'	165°17.3'	N 23°42.6'
2	229°05.2'	N 19°08.9'	28°20.0'	S 22°27.0'	356°19.2'	S 21°41.6'	180°18.0'	N 23°42.4'
3	244°04.5'	N 19°09.6'	43°22.8'	S 22°27.0'	11°21.8'	S 21°41.7'	195°18.7'	N 23°42.2'
4	259°03.9'	N 19°10.4'	58°25.7'	S 22°27.0'	26°24.5'	S 21°41.7'	210°19.4'	N 23°42.1'
5	274°03.2'	N 19°11.1'	73°28.5'	S 22°27.0'	41°27.1'	S 21°41.7'	225°20.2'	N 23°41.9'
6	289°02.5'	N 19°11.8'	88°31.3'	S 22°26.9'	56°29.7'	S 21°41.7'	240°20.9'	N 23°41.7'
7	304°01.9'	N 19°12.5'	103°34.1'	S 22°26.9'	71°32.3'	S 21°41.8'	255°21.6'	N 23°41.5'
8	319°01.2'	N 19°13.2'	118°36.9'	S 22°26.9'	86°34.9'	S 21°41.8'	270°22.4'	N 23°41.3'
9	334°00.5'	N 19°13.9'	133°39.7'	S 22°26.9'	101°37.5'	S 21°41.8'	285°23.1'	N 23°41.1'
10	348°59.8'	N 19°14.7'	148°42.5'	S 22°26.9'	116°40.2'	S 21°41.8'	300°23.8'	N 23°41.0'
11	3°59.2'	N 19°15.4'	163°45.3'	S 22°26.8'	131°42.8'	S 21°41.8'	315°24.5'	N 23°40.8'
12	18°58.5'	N 19°16.1'	178°48.1'	S 22°26.8'	146°45.4'	S 21°41.9'	330°25.3'	N 23°40.6'
13	33°57.8'	N 19°16.8'	193°50.9'	S 22°26.8'	161°48.0'	S 21°41.9'	345°26.0'	N 23°40.4'
14	48°57.1'	N 19°17.5'	208°53.7'	S 22°26.8'	176°50.6'	S 21°41.9'	0°26.7'	N 23°40.2'
15	63°56.5'	N 19°18.2'	223°56.5'	S 22°26.8'	191°53.2'	S 21°41.9'	15°27.5'	N 23°40.0'
16	78°55.8'	N 19°18.9'	238°59.4'	S 22°26.7'	206°55.9'	S 21°42.0'	30°28.2'	N 23°39.8'
17	93°55.1'	N 19°19.7'	254°02.2'	S 22°26.7'	221°58.5'	S 21°42.0'	45°28.9'	N 23°39.7'
18	108°54.4'	N 19°20.4'	269°05.0'	S 22°26.7'	237°01.1'	S 21°42.0'	60°29.6'	N 23°39.5'
19	123°53.8'	N 19°21.1'	284°07.8'	S 22°26.7'	252°03.7'	S 21°42.0'	75°30.4'	N 23°39.3'
20	138°53.1'	N 19°21.8'	299°10.6'	S 22°26.7'	267°06.3'	S 21°42.1'	90°31.1'	N 23°39.1'
21	153°52.4'	N 19°22.5'	314°13.4'	S 22°26.6'	282°08.9'	S 21°42.1'	105°31.8'	N 23°38.9'
22	168°51.7'	N 19°23.2'	329°16.2'	S 22°26.6'	297°11.6'	S 21°42.1'	120°32.6'	N 23°38.7'
23	183°51.1'	N 19°23.9'	344°19.0'	S 22°26.6'	312°14.2'	S 21°42.1'	135°33.3'	N 23°38.5'

Mon Jun 10, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.7'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	198°50.4'	N 19°24.6'	359°21.8'	S 22°26.6'	327°16.8'	S 21°42.1'	150°34.0'	N 23°38.4'
1	213°49.7'	N 19°25.3'	14°24.6'	S 22°26.6'	342°19.4'	S 21°42.2'	165°34.8'	N 23°38.2'
2	228°49.0'	N 19°26.0'	29°27.4'	S 22°26.5'	357°22.0'	S 21°42.2'	180°35.5'	N 23°38.0'
3	243°48.3'	N 19°26.7'	44°30.2'	S 22°26.5'	12°24.7'	S 21°42.2'	195°36.2'	N 23°37.8'
4	258°47.7'	N 19°27.4'	59°33.1'	S 22°26.5'	27°27.3'	S 21°42.2'	210°37.0'	N 23°37.6'
5	273°47.0'	N 19°28.1'	74°35.9'	S 22°26.5'	42°29.9'	S 21°42.3'	225°37.7'	N 23°37.4'
6	288°46.3'	N 19°28.8'	89°38.7'	S 22°26.5'	57°32.5'	S 21°42.3'	240°38.4'	N 23°37.2'
7	303°45.6'	N 19°29.5'	104°41.5'	S 22°26.4'	72°35.1'	S 21°42.3'	255°39.1'	N 23°37.0'
8	318°44.9'	N 19°30.2'	119°44.3'	S 22°26.4'	87°37.7'	S 21°42.3'	270°39.9'	N 23°36.8'
9	333°44.2'	N 19°30.9'	134°47.1'	S 22°26.4'	102°40.4'	S 21°42.4'	285°40.6'	N 23°36.6'
10	348°43.6'	N 19°31.6'	149°49.9'	S 22°26.4'	117°43.0'	S 21°42.4'	300°41.3'	N 23°36.5'
11	3°42.9'	N 19°32.3'	164°52.7'	S 22°26.4'	132°45.6'	S 21°42.4'	315°42.1'	N 23°36.3'
12	18°42.2'	N 19°33.0'	179°55.5'	S 22°26.3'	147°48.2'	S 21°42.4'	330°42.8'	N 23°36.1'
13	33°41.5'	N 19°33.7'	194°58.3'	S 22°26.3'	162°50.8'	S 21°42.4'	345°43.5'	N 23°35.9'
14	48°40.8'	N 19°34.4'	210°01.1'	S 22°26.3'	177°53.5'	S 21°42.5'	0°44.3'	N 23°35.7'
15	63°40.1'	N 19°35.1'	225°04.0'	S 22°26.3'	192°56.1'	S 21°42.5'	15°45.0'	N 23°35.5'
16	78°39.4'	N 19°35.8'	240°06.8'	S 22°26.3'	207°58.7'	S 21°42.5'	30°45.7'	N 23°35.3'
17	93°38.8'	N 19°36.4'	255°09.6'	S 22°26.2'	223°01.3'	S 21°42.5'	45°46.5'	N 23°35.1'
18	108°38.1'	N 19°37.1'	270°12.4'	S 22°26.2'	238°03.9'	S 21°42.6'	60°47.2'	N 23°34.9'
19	123°37.4'	N 19°37.8'	285°15.2'	S 22°26.2'	253°06.6'	S 21°42.6'	75°47.9'	N 23°34.7'
20	138°36.7'	N 19°38.5'	300°18.0'	S 22°26.2'	268°09.2'	S 21°42.6'	90°48.7'	N 23°34.5'
21	153°36.0'	N 19°39.2'	315°20.8'	S 22°26.2'	283°11.8'	S 21°42.6'	105°49.4'	N 23°34.3'
22	168°35.3'	N 19°39.9'	330°23.6'	S 22°26.1'	298°14.4'	S 21°42.7'	120°50.1'	N 23°34.1'
23	183°34.6'	N 19°40.6'	345°26.4'	S 22°26.1'	313°17.0'	S 21°42.7'	135°50.9'	N 23°33.9'

Tue Jun 11, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.7'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	198°33.9'	N 19°41.2'	0°29.2'	S 22°26.1'	328°19.7'	S 21°42.7'	150°51.6'	N 23°33.7'
1	213°33.3'	N 19°41.9'	15°32.0'	S 22°26.1'	343°22.3'	S 21°42.7'	165°52.3'	N 23°33.5'
2	228°32.6'	N 19°42.6'	30°34.8'	S 22°26.1'	358°24.9'	S 21°42.8'	180°53.1'	N 23°33.3'
3	243°31.9'	N 19°43.3'	45°37.7'	S 22°26.0'	13°27.5'	S 21°42.8'	195°53.8'	N 23°33.1'
4	258°31.2'	N 19°44.0'	60°40.5'	S 22°26.0'	28°30.1'	S 21°42.8'	210°54.5'	N 23°33.0'
5	273°30.5'	N 19°44.6'	75°43.3'	S 22°26.0'	43°32.8'	S 21°42.8'	225°55.3'	N 23°32.8'
6	288°29.8'	N 19°45.3'	90°46.1'	S 22°26.0'	58°35.4'	S 21°42.8'	240°56.0'	N 23°32.6'
7	303°29.1'	N 19°46.0'	105°48.9'	S 22°26.0'	73°38.0'	S 21°42.9'	255°56.7'	N 23°32.4'
8	318°28.4'	N 19°46.7'	120°51.7'	S 22°25.9'	88°40.6'	S 21°42.9'	270°57.5'	N 23°32.2'
9	333°27.7'	N 19°47.3'	135°54.5'	S 22°25.9'	103°43.3'	S 21°42.9'	285°58.2'	N 23°32.0'
10	348°27.0'	N 19°48.0'	150°57.3'	S 22°25.9'	118°45.9'	S 21°42.9'	300°58.9'	N 23°31.8'
11	3°26.3'	N 19°48.7'	166°00.1'	S 22°25.9'	133°48.5'	S 21°43.0'	315°59.7'	N 23°31.6'
12	18°25.6'	N 19°49.4'	181°02.9'	S 22°25.9'	148°51.1'	S 21°43.0'	331°00.4'	N 23°31.4'
13	33°24.9'	N 19°50.0'	196°05.7'	S 22°25.8'	163°53.7'	S 21°43.0'	346°01.1'	N 23°31.2'
14	48°24.2'	N 19°50.7'	211°08.5'	S 22°25.8'	178°56.4'	S 21°43.0'	1°01.9'	N 23°31.0'
15	63°23.5'	N 19°51.4'	226°11.4'	S 22°25.8'	193°59.0'	S 21°43.1'	16°02.6'	N 23°30.8'
16	78°22.8'	N 19°52.0'	241°14.2'	S 22°25.8'	209°01.6'	S 21°43.1'	31°03.3'	N 23°30.6'
17	93°22.1'	N 19°52.7'	256°17.0'	S 22°25.8'	224°04.2'	S 21°43.1'	46°04.1'	N 23°30.4'
18	108°21.4'	N 19°53.4'	271°19.8'	S 22°25.7'	239°06.9'	S 21°43.1'	61°04.8'	N 23°30.2'
19	123°20.7'	N 19°54.0'	286°22.6'	S 22°25.7'	254°09.5'	S 21°43.2'	76°05.5'	N 23°30.0'
20	138°20.0'	N 19°54.7'	301°25.4'	S 22°25.7'	269°12.1'	S 21°43.2'	91°06.3'	N 23°29.8'
21	153°19.3'	N 19°55.4'	316°28.2'	S 22°25.7'	284°14.7'	S 21°43.2'	106°07.0'	N 23°29.6'
22	168°18.6'	N 19°56.0'	331°31.0'	S 22°25.7'	299°17.3'	S 21°43.2'	121°07.7'	N 23°29.4'
23	183°17.9'	N 19°56.7'	346°33.8'	S 22°25.6'	314°20.0'	S 21°43.2'	136°08.5'	N 23°29.2'

Wed Jun 12, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.6'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	198°17.2'	N 19°57.4'	1°36.6'	S 22°25.6'	329°22.6'	S 21°43.3'	151°09.2'	N 23°28.9'
1	213°16.5'	N 19°58.0'	16°39.4'	S 22°25.6'	344°25.2'	S 21°43.3'	166°10.0'	N 23°28.7'
2	228°15.8'	N 19°58.7'	31°42.2'	S 22°25.6'	359°27.8'	S 21°43.3'	181°10.7'	N 23°28.5'
3	243°15.1'	N 19°59.3'	46°45.1'	S 22°25.6'	14°30.5'	S 21°43.3'	196°11.4'	N 23°28.3'
4	258°14.4'	N 19°60.0'	61°47.9'	S 22°25.5'	29°33.1'	S 21°43.4'	211°12.2'	N 23°28.1'
5	273°13.7'	N 20°00.6'	76°50.7'	S 22°25.5'	44°35.7'	S 21°43.4'	226°12.9'	N 23°27.9'
6	288°13.0'	N 20°01.3'	91°53.5'	S 22°25.5'	59°38.3'	S 21°43.4'	241°13.6'	N 23°27.7'
7	303°12.3'	N 20°02.0'	106°56.3'	S 22°25.5'	74°41.0'	S 21°43.4'	256°14.4'	N 23°27.5'
8	318°11.6'	N 20°02.6'	121°59.1'	S 22°25.5'	89°43.6'	S 21°43.5'	271°15.1'	N 23°27.3'
9	333°10.9'	N 20°03.3'	137°01.9'	S 22°25.4'	104°46.2'	S 21°43.5'	286°15.8'	N 23°27.1'
10	348°10.2'	N 20°03.9'	152°04.7'	S 22°25.4'	119°48.8'	S 21°43.5'	301°16.6'	N 23°26.9'
11	3°09.5'	N 20°04.6'	167°07.5'	S 22°25.4'	134°51.5'	S 21°43.5'	316°17.3'	N 23°26.7'
12	18°08.8'	N 20°05.2'	182°10.3'	S 22°25.4'	149°54.1'	S 21°43.6'	331°18.1'	N 23°26.5'
13	33°08.1'	N 20°05.9'	197°13.1'	S 22°25.4'	164°56.7'	S 21°43.6'	346°18.8'	N 23°26.3'
14	48°07.4'	N 20°06.5'	212°15.9'	S 22°25.3'	179°59.3'	S 21°43.6'	1°19.5'	N 23°26.1'
15	63°06.7'	N 20°07.2'	227°18.8'	S 22°25.3'	195°02.0'	S 21°43.6'	16°20.3'	N 23°25.9'
16	78°06.0'	N 20°07.8'	242°21.6'	S 22°25.3'	210°04.6'	S 21°43.7'	31°21.0'	N 23°25.7'
17	93°05.2'	N 20°08.5'	257°24.4'	S 22°25.3'	225°07.2'	S 21°43.7'	46°21.7'	N 23°25.4'
18	108°04.5'	N 20°09.1'	272°27.2'	S 22°25.3'	240°09.8'	S 21°43.7'	61°22.5'	N 23°25.2'
19	123°03.8'	N 20°09.7'	287°30.0'	S 22°25.2'	255°12.5'	S 21°43.7'	76°23.2'	N 23°25.0'
20	138°03.1'	N 20°10.4'	302°32.8'	S 22°25.2'	270°15.1'	S 21°43.8'	91°24.0'	N 23°24.8'
21	153°02.4'	N 20°11.0'	317°35.6'	S 22°25.2'	285°17.7'	S 21°43.8'	106°24.7'	N 23°24.6'
22	168°01.7'	N 20°11.7'	332°38.4'	S 22°25.2'	300°20.3'	S 21°43.8'	121°25.4'	N 23°24.4'
23	183°01.0'	N 20°12.3'	347°41.2'	S 22°25.2'	315°23.0'	S 21°43.8'	136°26.2'	N 23°24.2'

Thu Jun 13, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.6'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	198°00.3'	N 20°12.9'	2°44.0'	S 22°25.1'	330°25.6'	S 21°43.8'	151°26.9'	N 23°24.0'
1	212°59.6'	N 20°13.6'	17°46.8'	S 22°25.1'	345°28.2'	S 21°43.9'	166°27.6'	N 23°23.8'
2	227°58.8'	N 20°14.2'	32°49.6'	S 22°25.1'	0°30.8'	S 21°43.9'	181°28.4'	N 23°23.6'
3	242°58.1'	N 20°14.9'	47°52.5'	S 22°25.1'	15°33.5'	S 21°43.9'	196°29.1'	N 23°23.3'
4	257°57.4'	N 20°15.5'	62°55.3'	S 22°25.1'	30°36.1'	S 21°43.9'	211°29.9'	N 23°23.1'
5	272°56.7'	N 20°16.1'	77°58.1'	S 22°25.0'	45°38.7'	S 21°44.0'	226°30.6'	N 23°22.9'
6	287°56.0'	N 20°16.8'	93°00.9'	S 22°25.0'	60°41.3'	S 21°44.0'	241°31.3'	N 23°22.7'
7	302°55.3'	N 20°17.4'	108°03.7'	S 22°25.0'	75°44.0'	S 21°44.0'	256°32.1'	N 23°22.5'
8	317°54.6'	N 20°18.0'	123°06.5'	S 22°25.0'	90°46.6'	S 21°44.0'	271°32.8'	N 23°22.3'
9	332°53.8'	N 20°18.7'	138°09.3'	S 22°25.0'	105°49.2'	S 21°44.1'	286°33.6'	N 23°22.1'
10	347°53.1'	N 20°19.3'	153°12.1'	S 22°24.9'	120°51.8'	S 21°44.1'	301°34.3'	N 23°21.9'
11	2°52.4'	N 20°19.9'	168°14.9'	S 22°24.9'	135°54.5'	S 21°44.1'	316°35.0'	N 23°21.6'
12	17°51.7'	N 20°20.5'	183°17.7'	S 22°24.9'	150°57.1'	S 21°44.1'	331°35.8'	N 23°21.4'
13	32°51.0'	N 20°21.2'	198°20.5'	S 22°24.9'	165°59.7'	S 21°44.2'	346°36.5'	N 23°21.2'
14	47°50.3'	N 20°21.8'	213°23.3'	S 22°24.8'	181°02.3'	S 21°44.2'	1°37.3'	N 23°21.0'
15	62°49.5'	N 20°22.4'	228°26.1'	S 22°24.8'	196°05.0'	S 21°44.2'	16°38.0'	N 23°20.8'
16	77°48.8'	N 20°23.0'	243°28.9'	S 22°24.8'	211°07.6'	S 21°44.2'	31°38.7'	N 23°20.6'
17	92°48.1'	N 20°23.7'	258°31.8'	S 22°24.8'	226°10.2'	S 21°44.3'	46°39.5'	N 23°20.4'
18	107°47.4'	N 20°24.3'	273°34.6'	S 22°24.8'	241°12.9'	S 21°44.3'	61°40.2'	N 23°20.1'
19	122°46.7'	N 20°24.9'	288°37.4'	S 22°24.7'	256°15.5'	S 21°44.3'	76°41.0'	N 23°19.9'
20	137°45.9'	N 20°25.5'	303°40.2'	S 22°24.7'	271°18.1'	S 21°44.3'	91°41.7'	N 23°19.7'
21	152°45.2'	N 20°26.1'	318°43.0'	S 22°24.7'	286°20.7'	S 21°44.4'	106°42.4'	N 23°19.5'
22	167°44.5'	N 20°26.8'	333°45.8'	S 22°24.7'	301°23.4'	S 21°44.4'	121°43.2'	N 23°19.3'
23	182°43.8'	N 20°27.4'	348°48.6'	S 22°24.7'	316°26.0'	S 21°44.4'	136°43.9'	N 23°19.1'

Fri Jun 14, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.6'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	197°43.0'	N 20°28.0'	3°51.4'	S 22°24.6'	331°28.6'	S 21°44.4'	151°44.7'	N 23°18.8'
1	212°42.3'	N 20°28.6'	18°54.2'	S 22°24.6'	346°31.3'	S 21°44.5'	166°45.4'	N 23°18.6'
2	227°41.6'	N 20°29.2'	33°57.0'	S 22°24.6'	1°33.9'	S 21°44.5'	181°46.1'	N 23°18.4'
3	242°40.9'	N 20°29.8'	48°59.8'	S 22°24.6'	16°36.5'	S 21°44.5'	196°46.9'	N 23°18.2'
4	257°40.1'	N 20°30.4'	64°02.6'	S 22°24.6'	31°39.1'	S 21°44.5'	211°47.6'	N 23°18.0'
5	272°39.4'	N 20°31.1'	79°05.4'	S 22°24.5'	46°41.8'	S 21°44.5'	226°48.4'	N 23°17.7'
6	287°38.7'	N 20°31.7'	94°08.3'	S 22°24.5'	61°44.4'	S 21°44.6'	241°49.1'	N 23°17.5'
7	302°38.0'	N 20°32.3'	109°11.1'	S 22°24.5'	76°47.0'	S 21°44.6'	256°49.9'	N 23°17.3'
8	317°37.2'	N 20°32.9'	124°13.9'	S 22°24.5'	91°49.7'	S 21°44.6'	271°50.6'	N 23°17.1'
9	332°36.5'	N 20°33.5'	139°16.7'	S 22°24.5'	106°52.3'	S 21°44.6'	286°51.3'	N 23°16.9'
10	347°35.8'	N 20°34.1'	154°19.5'	S 22°24.4'	121°54.9'	S 21°44.7'	301°52.1'	N 23°16.6'
11	2°35.1'	N 20°34.7'	169°22.3'	S 22°24.4'	136°57.5'	S 21°44.7'	316°52.8'	N 23°16.4'
12	17°34.3'	N 20°35.3'	184°25.1'	S 22°24.4'	152°00.2'	S 21°44.7'	331°53.6'	N 23°16.2'
13	32°33.6'	N 20°35.9'	199°27.9'	S 22°24.4'	167°02.8'	S 21°44.7'	346°54.3'	N 23°16.0'
14	47°32.9'	N 20°36.5'	214°30.7'	S 22°24.4'	182°05.4'	S 21°44.8'	1°55.1'	N 23°15.8'
15	62°32.1'	N 20°37.1'	229°33.5'	S 22°24.3'	197°08.1'	S 21°44.8'	16°55.8'	N 23°15.5'
16	77°31.4'	N 20°37.7'	244°36.3'	S 22°24.3'	212°10.7'	S 21°44.8'	31°56.5'	N 23°15.3'
17	92°30.7'	N 20°38.3'	259°39.1'	S 22°24.3'	227°13.3'	S 21°44.8'	46°57.3'	N 23°15.1'
18	107°30.0'	N 20°38.9'	274°41.9'	S 22°24.3'	242°15.9'	S 21°44.9'	61°58.0'	N 23°14.9'
19	122°29.2'	N 20°39.5'	289°44.7'	S 22°24.3'	257°18.6'	S 21°44.9'	76°58.8'	N 23°14.6'
20	137°28.5'	N 20°40.1'	304°47.5'	S 22°24.2'	272°21.2'	S 21°44.9'	91°59.5'	N 23°14.4'
21	152°27.8'	N 20°40.7'	319°50.4'	S 22°24.2'	287°23.8'	S 21°44.9'	107°00.3'	N 23°14.2'
22	167°27.0'	N 20°41.3'	334°53.2'	S 22°24.2'	302°26.5'	S 21°45.0'	122°01.0'	N 23°14.0'
23	182°26.3'	N 20°41.9'	349°56.0'	S 22°24.2'	317°29.1'	S 21°45.0'	137°01.7'	N 23°13.7'

Sat Jun 15, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.6'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	197°25.6'	N 20°42.5'	4°58.8'	S 22°24.2'	332°31.7'	S 21°45.0'	152°02.5'	N 23°13.5'
1	212°24.8'	N 20°43.1'	20°01.6'	S 22°24.1'	347°34.4'	S 21°45.0'	167°03.2'	N 23°13.3'
2	227°24.1'	N 20°43.7'	35°04.4'	S 22°24.1'	2°37.0'	S 21°45.1'	182°04.0'	N 23°13.1'
3	242°23.4'	N 20°44.3'	50°07.2'	S 22°24.1'	17°39.6'	S 21°45.1'	197°04.7'	N 23°12.8'
4	257°22.6'	N 20°44.9'	65°10.0'	S 22°24.1'	32°42.3'	S 21°45.1'	212°05.5'	N 23°12.6'
5	272°21.9'	N 20°45.4'	80°12.8'	S 22°24.0'	47°44.9'	S 21°45.1'	227°06.2'	N 23°12.4'
6	287°21.2'	N 20°46.0'	95°15.6'	S 22°24.0'	62°47.5'	S 21°45.2'	242°07.0'	N 23°12.2'
7	302°20.4'	N 20°46.6'	110°18.4'	S 22°24.0'	77°50.1'	S 21°45.2'	257°07.7'	N 23°11.9'
8	317°19.7'	N 20°47.2'	125°21.2'	S 22°24.0'	92°52.8'	S 21°45.2'	272°08.5'	N 23°11.7'
9	332°18.9'	N 20°47.8'	140°24.0'	S 22°24.0'	107°55.4'	S 21°45.2'	287°09.2'	N 23°11.5'
10	347°18.2'	N 20°48.4'	155°26.8'	S 22°23.9'	122°58.0'	S 21°45.3'	302°09.9'	N 23°11.3'
11	2°17.5'	N 20°48.9'	170°29.6'	S 22°23.9'	138°00.7'	S 21°45.3'	317°10.7'	N 23°11.0'
12	17°16.7'	N 20°49.5'	185°32.4'	S 22°23.9'	153°03.3'	S 21°45.3'	332°11.4'	N 23°10.8'
13	32°16.0'	N 20°50.1'	200°35.2'	S 22°23.9'	168°05.9'	S 21°45.3'	347°12.2'	N 23°10.6'
14	47°15.2'	N 20°50.7'	215°38.1'	S 22°23.9'	183°08.6'	S 21°45.4'	2°12.9'	N 23°10.3'
15	62°14.5'	N 20°51.3'	230°40.9'	S 22°23.8'	198°11.2'	S 21°45.4'	17°13.7'	N 23°10.1'
16	77°13.8'	N 20°51.8'	245°43.7'	S 22°23.8'	213°13.8'	S 21°45.4'	32°14.4'	N 23°09.9'
17	92°13.0'	N 20°52.4'	260°46.5'	S 22°23.8'	228°16.5'	S 21°45.4'	47°15.2'	N 23°09.7'
18	107°12.3'	N 20°53.0'	275°49.3'	S 22°23.8'	243°19.1'	S 21°45.5'	62°15.9'	N 23°09.4'
19	122°11.5'	N 20°53.6'	290°52.1'	S 22°23.8'	258°21.7'	S 21°45.5'	77°16.7'	N 23°09.2'
20	137°10.8'	N 20°54.1'	305°54.9'	S 22°23.7'	273°24.4'	S 21°45.5'	92°17.4'	N 23°09.0'
21	152°10.1'	N 20°54.7'	320°57.7'	S 22°23.7'	288°27.0'	S 21°45.5'	107°18.1'	N 23°08.7'
22	167°09.3'	N 20°55.3'	336°00.5'	S 22°23.7'	303°29.6'	S 21°45.6'	122°18.9'	N 23°08.5'
23	182°08.6'	N 20°55.9'	351°03.3'	S 22°23.7'	318°32.3'	S 21°45.6'	137°19.6'	N 23°08.3'

Sun Jun 16, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.7' d = 0.6'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	197°07.8'	N 20°56.4'	6°06.1'	S 22°23.7'	333°34.9'	S 21°45.6'	152°20.4'	N 23°08.0'
1	212°07.1'	N 20°57.0'	21°08.9'	S 22°23.6'	348°37.5'	S 21°45.6'	167°21.1'	N 23°07.8'
2	227°06.3'	N 20°57.6'	36°11.7'	S 22°23.6'	3°40.2'	S 21°45.7'	182°21.9'	N 23°07.6'
3	242°05.6'	N 20°58.1'	51°14.5'	S 22°23.6'	18°42.8'	S 21°45.7'	197°22.6'	N 23°07.3'
4	257°04.8'	N 20°58.7'	66°17.3'	S 22°23.6'	33°45.4'	S 21°45.7'	212°23.4'	N 23°07.1'
5	272°04.1'	N 20°59.3'	81°20.1'	S 22°23.6'	48°48.1'	S 21°45.7'	227°24.1'	N 23°06.9'
6	287°03.4'	N 20°59.8'	96°22.9'	S 22°23.5'	63°50.7'	S 21°45.8'	242°24.9'	N 23°06.6'
7	302°02.6'	N 21°00.4'	111°25.7'	S 22°23.5'	78°53.3'	S 21°45.8'	257°25.6'	N 23°06.4'
8	317°01.9'	N 21°00.9'	126°28.5'	S 22°23.5'	93°56.0'	S 21°45.8'	272°26.4'	N 23°06.2'
9	332°01.1'	N 21°01.5'	141°31.4'	S 22°23.5'	108°58.6'	S 21°45.8'	287°27.1'	N 23°05.9'
10	347°00.4'	N 21°02.1'	156°34.2'	S 22°23.4'	124°01.2'	S 21°45.9'	302°27.9'	N 23°05.7'
11	1°59.6'	N 21°02.6'	171°37.0'	S 22°23.4'	139°03.9'	S 21°45.9'	317°28.6'	N 23°05.5'
12	16°58.9'	N 21°03.2'	186°39.8'	S 22°23.4'	154°06.5'	S 21°45.9'	332°29.4'	N 23°05.2'
13	31°58.1'	N 21°03.7'	201°42.6'	S 22°23.4'	169°09.1'	S 21°45.9'	347°30.1'	N 23°05.0'
14	46°57.4'	N 21°04.3'	216°45.4'	S 22°23.4'	184°11.8'	S 21°46.0'	2°30.9'	N 23°04.8'
15	61°56.6'	N 21°04.9'	231°48.2'	S 22°23.3'	199°14.4'	S 21°46.0'	17°31.6'	N 23°04.5'
16	76°55.9'	N 21°05.4'	246°51.0'	S 22°23.3'	214°17.0'	S 21°46.0'	32°32.4'	N 23°04.3'
17	91°55.1'	N 21°06.0'	261°53.8'	S 22°23.3'	229°19.7'	S 21°46.0'	47°33.1'	N 23°04.0'
18	106°54.4'	N 21°06.5'	276°56.6'	S 22°23.3'	244°22.3'	S 21°46.1'	62°33.9'	N 23°03.8'
19	121°53.6'	N 21°07.1'	291°59.4'	S 22°23.3'	259°24.9'	S 21°46.1'	77°34.6'	N 23°03.6'
20	136°52.9'	N 21°07.6'	307°02.2'	S 22°23.2'	274°27.6'	S 21°46.1'	92°35.4'	N 23°03.3'
21	151°52.1'	N 21°08.2'	322°05.0'	S 22°23.2'	289°30.2'	S 21°46.1'	107°36.1'	N 23°03.1'
22	166°51.3'	N 21°08.7'	337°07.8'	S 22°23.2'	304°32.8'	S 21°46.2'	122°36.9'	N 23°02.9'
23	181°50.6'	N 21°09.3'	352°10.6'	S 22°23.2'	319°35.5'	S 21°46.2'	137°37.6'	N 23°02.6'

Mon Jun 17, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.8' d = 0.5'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	196°49.8'	N 21°09.8'	7°13.4'	S 22°23.2'	334°38.1'	S 21°46.2'	152°38.4'	N 23°02.4'
1	211°49.1'	N 21°10.3'	22°16.2'	S 22°23.1'	349°40.7'	S 21°46.2'	167°39.1'	N 23°02.1'
2	226°48.3'	N 21°10.9'	37°19.0'	S 22°23.1'	4°43.4'	S 21°46.3'	182°39.9'	N 23°01.9'
3	241°47.6'	N 21°11.4'	52°21.8'	S 22°23.1'	19°46.0'	S 21°46.3'	197°40.6'	N 23°01.7'
4	256°46.8'	N 21°12.0'	67°24.6'	S 22°23.1'	34°48.6'	S 21°46.3'	212°41.4'	N 23°01.4'
5	271°46.1'	N 21°12.5'	82°27.4'	S 22°23.1'	49°51.3'	S 21°46.3'	227°42.1'	N 23°01.2'
6	286°45.3'	N 21°13.1'	97°30.2'	S 22°23.0'	64°53.9'	S 21°46.4'	242°42.9'	N 23°00.9'
7	301°44.5'	N 21°13.6'	112°33.0'	S 22°23.0'	79°56.6'	S 21°46.4'	257°43.6'	N 23°00.7'
8	316°43.8'	N 21°14.1'	127°35.8'	S 22°23.0'	94°59.2'	S 21°46.4'	272°44.4'	N 23°00.4'
9	331°43.0'	N 21°14.7'	142°38.6'	S 22°23.0'	110°01.8'	S 21°46.4'	287°45.1'	N 23°00.2'
10	346°42.3'	N 21°15.2'	157°41.4'	S 22°23.0'	125°04.5'	S 21°46.5'	302°45.9'	N 22°60.0'
11	1°41.5'	N 21°15.7'	172°44.3'	S 22°22.9'	140°07.1'	S 21°46.5'	317°46.6'	N 22°59.7'
12	16°40.8'	N 21°16.3'	187°47.1'	S 22°22.9'	155°09.7'	S 21°46.5'	332°47.4'	N 22°59.5'
13	31°40.0'	N 21°16.8'	202°49.9'	S 22°22.9'	170°12.4'	S 21°46.5'	347°48.1'	N 22°59.2'
14	46°39.2'	N 21°17.3'	217°52.7'	S 22°22.9'	185°15.0'	S 21°46.6'	2°48.9'	N 22°59.0'
15	61°38.5'	N 21°17.9'	232°55.5'	S 22°22.8'	200°17.6'	S 21°46.6'	17°49.6'	N 22°58.7'
16	76°37.7'	N 21°18.4'	247°58.3'	S 22°22.8'	215°20.3'	S 21°46.6'	32°50.4'	N 22°58.5'
17	91°37.0'	N 21°18.9'	263°01.1'	S 22°22.8'	230°22.9'	S 21°46.6'	47°51.1'	N 22°58.3'
18	106°36.2'	N 21°19.4'	278°03.9'	S 22°22.8'	245°25.5'	S 21°46.7'	62°51.9'	N 22°58.0'
19	121°35.4'	N 21°20.0'	293°06.7'	S 22°22.8'	260°28.2'	S 21°46.7'	77°52.6'	N 22°57.8'
20	136°34.7'	N 21°20.5'	308°09.5'	S 22°22.7'	275°30.8'	S 21°46.7'	92°53.4'	N 22°57.5'
21	151°33.9'	N 21°21.0'	323°12.3'	S 22°22.7'	290°33.5'	S 21°46.7'	107°54.1'	N 22°57.3'
22	166°33.1'	N 21°21.5'	338°15.1'	S 22°22.7'	305°36.1'	S 21°46.8'	122°54.9'	N 22°57.0'
23	181°32.4'	N 21°22.1'	353°17.9'	S 22°22.7'	320°38.7'	S 21°46.8'	137°55.6'	N 22°56.8'

Tue Jun 18, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.2		Mars +1.8	
	v = -0.8' d = 0.5'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	196°31.6'	N 21°22.6'	8°20.7'	S 22°22.7'	335°41.4'	S 21°46.8'	152°56.4'	N 22°56.5'
1	211°30.8'	N 21°23.1'	23°23.5'	S 22°22.6'	350°44.0'	S 21°46.8'	167°57.1'	N 22°56.3'
2	226°30.1'	N 21°23.6'	38°26.3'	S 22°22.6'	5°46.6'	S 21°46.9'	182°57.9'	N 22°56.0'
3	241°29.3'	N 21°24.1'	53°29.1'	S 22°22.6'	20°49.3'	S 21°46.9'	197°58.7'	N 22°55.8'
4	256°28.6'	N 21°24.7'	68°31.9'	S 22°22.6'	35°51.9'	S 21°46.9'	212°59.4'	N 22°55.6'
5	271°27.8'	N 21°25.2'	83°34.7'	S 22°22.6'	50°54.6'	S 21°46.9'	228°00.2'	N 22°55.3'
6	286°27.0'	N 21°25.7'	98°37.5'	S 22°22.5'	65°57.2'	S 21°47.0'	243°00.9'	N 22°55.1'
7	301°26.3'	N 21°26.2'	113°40.3'	S 22°22.5'	80°59.8'	S 21°47.0'	258°01.7'	N 22°54.8'
8	316°25.5'	N 21°26.7'	128°43.1'	S 22°22.5'	96°02.5'	S 21°47.0'	273°02.4'	N 22°54.6'
9	331°24.7'	N 21°27.2'	143°45.9'	S 22°22.5'	111°05.1'	S 21°47.0'	288°03.2'	N 22°54.3'
10	346°23.9'	N 21°27.7'	158°48.7'	S 22°22.5'	126°07.7'	S 21°47.1'	303°03.9'	N 22°54.1'
11	1°23.2'	N 21°28.3'	173°51.5'	S 22°22.4'	141°10.4'	S 21°47.1'	318°04.7'	N 22°53.8'
12	16°22.4'	N 21°28.8'	188°54.3'	S 22°22.4'	156°13.0'	S 21°47.1'	333°05.4'	N 22°53.6'
13	31°21.6'	N 21°29.3'	203°57.1'	S 22°22.4'	171°15.7'	S 21°47.1'	348°06.2'	N 22°53.3'
14	46°20.9'	N 21°29.8'	218°59.9'	S 22°22.4'	186°18.3'	S 21°47.2'	3°06.9'	N 22°53.1'
15	61°20.1'	N 21°30.3'	234°02.7'	S 22°22.3'	201°20.9'	S 21°47.2'	18°07.7'	N 22°52.8'
16	76°19.3'	N 21°30.8'	249°05.5'	S 22°22.3'	216°23.6'	S 21°47.2'	33°08.5'	N 22°52.6'
17	91°18.6'	N 21°31.3'	264°08.3'	S 22°22.3'	231°26.2'	S 21°47.2'	48°09.2'	N 22°52.3'
18	106°17.8'	N 21°31.8'	279°11.1'	S 22°22.3'	246°28.9'	S 21°47.3'	63°10.0'	N 22°52.1'
19	121°17.0'	N 21°32.3'	294°13.9'	S 22°22.3'	261°31.5'	S 21°47.3'	78°10.7'	N 22°51.8'
20	136°16.2'	N 21°32.8'	309°16.7'	S 22°22.2'	276°34.1'	S 21°47.3'	93°11.5'	N 22°51.6'
21	151°15.5'	N 21°33.3'	324°19.5'	S 22°22.2'	291°36.8'	S 21°47.3'	108°12.2'	N 22°51.3'
22	166°14.7'	N 21°33.8'	339°22.3'	S 22°22.2'	306°39.4'	S 21°47.4'	123°13.0'	N 22°51.1'
23	181°13.9'	N 21°34.3'	354°25.1'	S 22°22.2'	321°42.0'	S 21°47.4'	138°13.7'	N 22°50.8'

Wed Jun 19, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.5'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	196°13.2'	N 21°34.8'	9°27.9'	S 22°22.2'	336°44.7'	S 21°47.4'	153°14.5'	N 22°50.5'
1	211°12.4'	N 21°35.3'	24°30.7'	S 22°22.1'	351°47.3'	S 21°47.4'	168°15.3'	N 22°50.3'
2	226°11.6'	N 21°35.8'	39°33.5'	S 22°22.1'	6°50.0'	S 21°47.5'	183°16.0'	N 22°50.0'
3	241°10.8'	N 21°36.3'	54°36.3'	S 22°22.1'	21°52.6'	S 21°47.5'	198°16.8'	N 22°49.8'
4	256°10.1'	N 21°36.8'	69°39.1'	S 22°22.1'	36°55.2'	S 21°47.5'	213°17.5'	N 22°49.5'
5	271°09.3'	N 21°37.3'	84°41.9'	S 22°22.1'	51°57.9'	S 21°47.6'	228°18.3'	N 22°49.3'
6	286°08.5'	N 21°37.8'	99°44.7'	S 22°22.0'	67°00.5'	S 21°47.6'	243°19.0'	N 22°49.0'
7	301°07.7'	N 21°38.2'	114°47.5'	S 22°22.0'	82°03.2'	S 21°47.6'	258°19.8'	N 22°48.8'
8	316°06.9'	N 21°38.7'	129°50.3'	S 22°22.0'	97°05.8'	S 21°47.6'	273°20.6'	N 22°48.5'
9	331°06.2'	N 21°39.2'	144°53.1'	S 22°22.0'	112°08.4'	S 21°47.7'	288°21.3'	N 22°48.3'
10	346°05.4'	N 21°39.7'	159°55.9'	S 22°21.9'	127°11.1'	S 21°47.7'	303°22.1'	N 22°48.0'
11	1°04.6'	N 21°40.2'	174°58.7'	S 22°21.9'	142°13.7'	S 21°47.7'	318°22.8'	N 22°47.7'
12	16°03.8'	N 21°40.7'	190°01.5'	S 22°21.9'	157°16.4'	S 21°47.7'	333°23.6'	N 22°47.5'
13	31°03.1'	N 21°41.2'	205°04.3'	S 22°21.9'	172°19.0'	S 21°47.8'	348°24.3'	N 22°47.2'
14	46°02.3'	N 21°41.6'	220°07.1'	S 22°21.9'	187°21.6'	S 21°47.8'	3°25.1'	N 22°47.0'
15	61°01.5'	N 21°42.1'	235°09.9'	S 22°21.8'	202°24.3'	S 21°47.8'	18°25.9'	N 22°46.7'
16	76°00.7'	N 21°42.6'	250°12.7'	S 22°21.8'	217°26.9'	S 21°47.8'	33°26.6'	N 22°46.5'
17	90°59.9'	N 21°43.1'	265°15.5'	S 22°21.8'	232°29.6'	S 21°47.9'	48°27.4'	N 22°46.2'
18	105°59.2'	N 21°43.6'	280°18.3'	S 22°21.8'	247°32.2'	S 21°47.9'	63°28.1'	N 22°45.9'
19	120°58.4'	N 21°44.0'	295°21.1'	S 22°21.8'	262°34.8'	S 21°47.9'	78°28.9'	N 22°45.7'
20	135°57.6'	N 21°44.5'	310°23.9'	S 22°21.7'	277°37.5'	S 21°47.9'	93°29.6'	N 22°45.4'
21	150°56.8'	N 21°45.0'	325°26.7'	S 22°21.7'	292°40.1'	S 21°48.0'	108°30.4'	N 22°45.2'
22	165°56.0'	N 21°45.5'	340°29.5'	S 22°21.7'	307°42.8'	S 21°48.0'	123°31.2'	N 22°44.9'
23	180°55.2'	N 21°45.9'	355°32.3'	S 22°21.7'	322°45.4'	S 21°48.0'	138°31.9'	N 22°44.6'

Thu Jun 20, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.5'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	195°54.5'	N 21°46.4'	10°35.1'	S 22°21.7'	337°48.0'	S 21°48.0'	153°32.7'	N 22°44.4'
1	210°53.7'	N 21°46.9'	25°37.9'	S 22°21.6'	352°50.7'	S 21°48.1'	168°33.4'	N 22°44.1'
2	225°52.9'	N 21°47.3'	40°40.7'	S 22°21.6'	7°53.3'	S 21°48.1'	183°34.2'	N 22°43.9'
3	240°52.1'	N 21°47.8'	55°43.5'	S 22°21.6'	22°56.0'	S 21°48.1'	198°35.0'	N 22°43.6'
4	255°51.3'	N 21°48.3'	70°46.3'	S 22°21.6'	37°58.6'	S 21°48.1'	213°35.7'	N 22°43.3'
5	270°50.5'	N 21°48.8'	85°49.1'	S 22°21.6'	53°01.3'	S 21°48.2'	228°36.5'	N 22°43.1'
6	285°49.8'	N 21°49.2'	100°51.9'	S 22°21.5'	68°03.9'	S 21°48.2'	243°37.2'	N 22°42.8'
7	300°49.0'	N 21°49.7'	115°54.7'	S 22°21.5'	83°06.5'	S 21°48.2'	258°38.0'	N 22°42.5'
8	315°48.2'	N 21°50.1'	130°57.5'	S 22°21.5'	98°09.2'	S 21°48.2'	273°38.8'	N 22°42.3'
9	330°47.4'	N 21°50.6'	146°00.3'	S 22°21.5'	113°11.8'	S 21°48.3'	288°39.5'	N 22°42.0'
10	345°46.6'	N 21°51.1'	161°03.1'	S 22°21.4'	128°14.5'	S 21°48.3'	303°40.3'	N 22°41.8'
11	0°45.8'	N 21°51.5'	176°05.9'	S 22°21.4'	143°17.1'	S 21°48.3'	318°41.0'	N 22°41.5'
12	15°45.0'	N 21°52.0'	191°08.7'	S 22°21.4'	158°19.7'	S 21°48.3'	333°41.8'	N 22°41.2'
13	30°44.2'	N 21°52.4'	206°11.5'	S 22°21.4'	173°22.4'	S 21°48.4'	348°42.6'	N 22°41.0'
14	45°43.5'	N 21°52.9'	221°14.3'	S 22°21.4'	188°25.0'	S 21°48.4'	3°43.3'	N 22°40.7'
15	60°42.7'	N 21°53.4'	236°17.1'	S 22°21.3'	203°27.7'	S 21°48.4'	18°44.1'	N 22°40.4'
16	75°41.9'	N 21°53.8'	251°19.9'	S 22°21.3'	218°30.3'	S 21°48.5'	33°44.8'	N 22°40.2'
17	90°41.1'	N 21°54.3'	266°22.7'	S 22°21.3'	233°33.0'	S 21°48.5'	48°45.6'	N 22°39.9'
18	105°40.3'	N 21°54.7'	281°25.5'	S 22°21.3'	248°35.6'	S 21°48.5'	63°46.4'	N 22°39.6'
19	120°39.5'	N 21°55.2'	296°28.3'	S 22°21.3'	263°38.2'	S 21°48.5'	78°47.1'	N 22°39.4'
20	135°38.7'	N 21°55.6'	311°31.0'	S 22°21.2'	278°40.9'	S 21°48.6'	93°47.9'	N 22°39.1'
21	150°37.9'	N 21°56.1'	326°33.8'	S 22°21.2'	293°43.5'	S 21°48.6'	108°48.6'	N 22°38.8'
22	165°37.1'	N 21°56.5'	341°36.6'	S 22°21.2'	308°46.2'	S 21°48.6'	123°49.4'	N 22°38.6'
23	180°36.3'	N 21°57.0'	356°39.4'	S 22°21.2'	323°48.8'	S 21°48.6'	138°50.2'	N 22°38.3'

Fri Jun 21, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.4'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	195°35.5'	N 21°57.4'	11°42.2'	S 22°21.2'	338°51.5'	S 21°48.7'	153°50.9'	N 22°38.0'
1	210°34.8'	N 21°57.9'	26°45.0'	S 22°21.1'	353°54.1'	S 21°48.7'	168°51.7'	N 22°37.8'
2	225°34.0'	N 21°58.3'	41°47.8'	S 22°21.1'	8°56.7'	S 21°48.7'	183°52.5'	N 22°37.5'
3	240°33.2'	N 21°58.7'	56°50.6'	S 22°21.1'	23°59.4'	S 21°48.7'	198°53.2'	N 22°37.2'
4	255°32.4'	N 21°59.2'	71°53.4'	S 22°21.1'	39°02.0'	S 21°48.8'	213°54.0'	N 22°37.0'
5	270°31.6'	N 21°59.6'	86°56.2'	S 22°21.1'	54°04.7'	S 21°48.8'	228°54.7'	N 22°36.7'
6	285°30.8'	N 22°00.1'	101°59.0'	S 22°21.0'	69°07.3'	S 21°48.8'	243°55.5'	N 22°36.4'
7	300°30.0'	N 22°00.5'	117°01.8'	S 22°21.0'	84°10.0'	S 21°48.8'	258°56.3'	N 22°36.2'
8	315°29.2'	N 22°01.0'	132°04.6'	S 22°21.0'	99°12.6'	S 21°48.9'	273°57.0'	N 22°35.9'
9	330°28.4'	N 22°01.4'	147°07.4'	S 22°21.0'	114°15.2'	S 21°48.9'	288°57.8'	N 22°35.6'
10	345°27.6'	N 22°01.8'	162°10.2'	S 22°20.9'	129°17.9'	S 21°48.9'	303°58.6'	N 22°35.4'
11	0°26.8'	N 22°02.3'	177°13.0'	S 22°20.9'	144°20.5'	S 21°48.9'	318°59.3'	N 22°35.1'
12	15°26.0'	N 22°02.7'	192°15.8'	S 22°20.9'	159°23.2'	S 21°49.0'	334°00.1'	N 22°34.8'
13	30°25.2'	N 22°03.1'	207°18.6'	S 22°20.9'	174°25.8'	S 21°49.0'	349°00.8'	N 22°34.5'
14	45°24.4'	N 22°03.6'	222°21.4'	S 22°20.9'	189°28.5'	S 21°49.0'	4°01.6'	N 22°34.3'
15	60°23.6'	N 22°04.0'	237°24.2'	S 22°20.8'	204°31.1'	S 21°49.1'	19°02.4'	N 22°34.0'
16	75°22.8'	N 22°04.4'	252°27.0'	S 22°20.8'	219°33.8'	S 21°49.1'	34°03.1'	N 22°33.7'
17	90°22.0'	N 22°04.8'	267°29.8'	S 22°20.8'	234°36.4'	S 21°49.1'	49°03.9'	N 22°33.5'
18	105°21.2'	N 22°05.3'	282°32.5'	S 22°20.8'	249°39.0'	S 21°49.1'	64°04.7'	N 22°33.2'
19	120°20.4'	N 22°05.7'	297°35.3'	S 22°20.8'	264°41.7'	S 21°49.2'	79°05.4'	N 22°32.9'
20	135°19.6'	N 22°06.1'	312°38.1'	S 22°20.7'	279°44.3'	S 21°49.2'	94°06.2'	N 22°32.6'
21	150°18.8'	N 22°06.5'	327°40.9'	S 22°20.7'	294°47.0'	S 21°49.2'	109°07.0'	N 22°32.4'
22	165°18.0'	N 22°07.0'	342°43.7'	S 22°20.7'	309°49.6'	S 21°49.2'	124°07.7'	N 22°32.1'
23	180°17.2'	N 22°07.4'	357°46.5'	S 22°20.7'	324°52.3'	S 21°49.3'	139°08.5'	N 22°31.8'

Sat Jun 22, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.4'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	195°16.4'	N 22°07.8'	12°49.3'	S 22°20.7'	339°54.9'	S 21°49.3'	154°09.3'	N 22°31.5'
1	210°15.6'	N 22°08.2'	27°52.1'	S 22°20.6'	354°57.6'	S 21°49.3'	169°10.0'	N 22°31.3'
2	225°14.8'	N 22°08.7'	42°54.9'	S 22°20.6'	10°00.2'	S 21°49.3'	184°10.8'	N 22°31.0'
3	240°14.0'	N 22°09.1'	57°57.7'	S 22°20.6'	25°02.8'	S 21°49.4'	199°11.6'	N 22°30.7'
4	255°13.2'	N 22°09.5'	73°00.5'	S 22°20.6'	40°05.5'	S 21°49.4'	214°12.3'	N 22°30.4'
5	270°12.4'	N 22°09.9'	88°03.3'	S 22°20.6'	55°08.1'	S 21°49.4'	229°13.1'	N 22°30.2'
6	285°11.6'	N 22°10.3'	103°06.1'	S 22°20.5'	70°10.8'	S 21°49.4'	244°13.8'	N 22°29.9'
7	300°10.8'	N 22°10.7'	118°08.9'	S 22°20.5'	85°13.4'	S 21°49.5'	259°14.6'	N 22°29.6'
8	315°10.0'	N 22°11.1'	133°11.7'	S 22°20.5'	100°16.1'	S 21°49.5'	274°15.4'	N 22°29.3'
9	330°09.2'	N 22°11.6'	148°14.4'	S 22°20.5'	115°18.7'	S 21°49.5'	289°16.1'	N 22°29.1'
10	345°08.4'	N 22°12.0'	163°17.2'	S 22°20.4'	130°21.4'	S 21°49.5'	304°16.9'	N 22°28.8'
11	0°07.6'	N 22°12.4'	178°20.0'	S 22°20.4'	145°24.0'	S 21°49.6'	319°17.7'	N 22°28.5'
12	15°06.8'	N 22°12.8'	193°22.8'	S 22°20.4'	160°26.7'	S 21°49.6'	334°18.4'	N 22°28.2'
13	30°06.0'	N 22°13.2'	208°25.6'	S 22°20.4'	175°29.3'	S 21°49.6'	349°19.2'	N 22°28.0'
14	45°05.2'	N 22°13.6'	223°28.4'	S 22°20.4'	190°31.9'	S 21°49.7'	4°20.0'	N 22°27.7'
15	60°04.4'	N 22°14.0'	238°31.2'	S 22°20.3'	205°34.6'	S 21°49.7'	19°20.7'	N 22°27.4'
16	75°03.6'	N 22°14.4'	253°34.0'	S 22°20.3'	220°37.2'	S 21°49.7'	34°21.5'	N 22°27.1'
17	90°02.7'	N 22°14.8'	268°36.8'	S 22°20.3'	235°39.9'	S 21°49.7'	49°22.3'	N 22°26.8'
18	105°01.9'	N 22°15.2'	283°39.6'	S 22°20.3'	250°42.5'	S 21°49.8'	64°23.0'	N 22°26.6'
19	120°01.1'	N 22°15.6'	298°42.4'	S 22°20.3'	265°45.2'	S 21°49.8'	79°23.8'	N 22°26.3'
20	135°00.3'	N 22°16.0'	313°45.2'	S 22°20.2'	280°47.8'	S 21°49.8'	94°24.6'	N 22°26.0'
21	149°59.5'	N 22°16.4'	328°48.0'	S 22°20.2'	295°50.5'	S 21°49.8'	109°25.3'	N 22°25.7'
22	164°58.7'	N 22°16.8'	343°50.7'	S 22°20.2'	310°53.1'	S 21°49.9'	124°26.1'	N 22°25.4'
23	179°57.9'	N 22°17.2'	358°53.5'	S 22°20.2'	325°55.8'	S 21°49.9'	139°26.9'	N 22°25.2'

Sun Jun 23, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.4'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	194°57.1'	N 22°17.6'	13°56.3'	S 22°20.2'	340°58.4'	S 21°49.9'	154°27.7'	N 22°24.9'
1	209°56.3'	N 22°18.0'	28°59.1'	S 22°20.1'	356°01.1'	S 21°49.9'	169°28.4'	N 22°24.6'
2	224°55.5'	N 22°18.4'	44°01.9'	S 22°20.1'	11°03.7'	S 21°50.0'	184°29.2'	N 22°24.3'
3	239°54.7'	N 22°18.8'	59°04.7'	S 22°20.1'	26°06.3'	S 21°50.0'	199°30.0'	N 22°24.0'
4	254°53.8'	N 22°19.2'	74°07.5'	S 22°20.1'	41°09.0'	S 21°50.0'	214°30.7'	N 22°23.8'
5	269°53.0'	N 22°19.5'	89°10.3'	S 22°20.1'	56°11.6'	S 21°50.0'	229°31.5'	N 22°23.5'
6	284°52.2'	N 22°19.9'	104°13.1'	S 22°20.0'	71°14.3'	S 21°50.1'	244°32.3'	N 22°23.2'
7	299°51.4'	N 22°20.3'	119°15.9'	S 22°20.0'	86°16.9'	S 21°50.1'	259°33.0'	N 22°22.9'
8	314°50.6'	N 22°20.7'	134°18.6'	S 22°20.0'	101°19.6'	S 21°50.1'	274°33.8'	N 22°22.6'
9	329°49.8'	N 22°21.1'	149°21.4'	S 22°20.0'	116°22.2'	S 21°50.2'	289°34.6'	N 22°22.3'
10	344°49.0'	N 22°21.5'	164°24.2'	S 22°19.9'	131°24.9'	S 21°50.2'	304°35.3'	N 22°22.1'
11	359°48.2'	N 22°21.9'	179°27.0'	S 22°19.9'	146°27.5'	S 21°50.2'	319°36.1'	N 22°21.8'
12	14°47.3'	N 22°22.2'	194°29.8'	S 22°19.9'	161°30.2'	S 21°50.2'	334°36.9'	N 22°21.5'
13	29°46.5'	N 22°22.6'	209°32.6'	S 22°19.9'	176°32.8'	S 21°50.3'	349°37.6'	N 22°21.2'
14	44°45.7'	N 22°23.0'	224°35.4'	S 22°19.9'	191°35.5'	S 21°50.3'	4°38.4'	N 22°20.9'
15	59°44.9'	N 22°23.4'	239°38.2'	S 22°19.8'	206°38.1'	S 21°50.3'	19°39.2'	N 22°20.6'
16	74°44.1'	N 22°23.8'	254°41.0'	S 22°19.8'	221°40.8'	S 21°50.3'	34°40.0'	N 22°20.4'
17	89°43.3'	N 22°24.1'	269°43.8'	S 22°19.8'	236°43.4'	S 21°50.4'	49°40.7'	N 22°20.1'
18	104°42.5'	N 22°24.5'	284°46.5'	S 22°19.8'	251°46.1'	S 21°50.4'	64°41.5'	N 22°19.8'
19	119°41.6'	N 22°24.9'	299°49.3'	S 22°19.8'	266°48.7'	S 21°50.4'	79°42.3'	N 22°19.5'
20	134°40.8'	N 22°25.3'	314°52.1'	S 22°19.7'	281°51.3'	S 21°50.4'	94°43.0'	N 22°19.2'
21	149°40.0'	N 22°25.6'	329°54.9'	S 22°19.7'	296°54.0'	S 21°50.5'	109°43.8'	N 22°18.9'
22	164°39.2'	N 22°26.0'	344°57.7'	S 22°19.7'	311°56.6'	S 21°50.5'	124°44.6'	N 22°18.6'
23	179°38.4'	N 22°26.4'	0°00.5'	S 22°19.7'	326°59.3'	S 21°50.5'	139°45.4'	N 22°18.3'

Mon Jun 24, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.4'		v = 2.8' d = 0.0'		v = 2.6' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	194°37.6'	N 22°26.7'	15°03.3'	S 22°19.7'	342°01.9'	S 21°50.6'	154°46.1'	N 22°18.1'
1	209°36.7'	N 22°27.1'	30°06.1'	S 22°19.6'	357°04.6'	S 21°50.6'	169°46.9'	N 22°17.8'
2	224°35.9'	N 22°27.5'	45°08.8'	S 22°19.6'	12°07.2'	S 21°50.6'	184°47.7'	N 22°17.5'
3	239°35.1'	N 22°27.8'	60°11.6'	S 22°19.6'	27°09.9'	S 21°50.6'	199°48.4'	N 22°17.2'
4	254°34.3'	N 22°28.2'	75°14.4'	S 22°19.6'	42°12.5'	S 21°50.7'	214°49.2'	N 22°16.9'
5	269°33.5'	N 22°28.6'	90°17.2'	S 22°19.6'	57°15.2'	S 21°50.7'	229°50.0'	N 22°16.6'
6	284°32.6'	N 22°28.9'	105°20.0'	S 22°19.5'	72°17.8'	S 21°50.7'	244°50.8'	N 22°16.3'
7	299°31.8'	N 22°29.3'	120°22.8'	S 22°19.5'	87°20.5'	S 21°50.7'	259°51.5'	N 22°16.0'
8	314°31.0'	N 22°29.6'	135°25.6'	S 22°19.5'	102°23.1'	S 21°50.8'	274°52.3'	N 22°15.7'
9	329°30.2'	N 22°30.0'	150°28.4'	S 22°19.5'	117°25.8'	S 21°50.8'	289°53.1'	N 22°15.5'
10	344°29.4'	N 22°30.4'	165°31.1'	S 22°19.4'	132°28.4'	S 21°50.8'	304°53.8'	N 22°15.2'
11	359°28.5'	N 22°30.7'	180°33.9'	S 22°19.4'	147°31.1'	S 21°50.8'	319°54.6'	N 22°14.9'
12	14°27.7'	N 22°31.1'	195°36.7'	S 22°19.4'	162°33.7'	S 21°50.9'	334°55.4'	N 22°14.6'
13	29°26.9'	N 22°31.4'	210°39.5'	S 22°19.4'	177°36.4'	S 21°50.9'	349°56.2'	N 22°14.3'
14	44°26.1'	N 22°31.8'	225°42.3'	S 22°19.4'	192°39.0'	S 21°50.9'	4°56.9'	N 22°14.0'
15	59°25.3'	N 22°32.1'	240°45.1'	S 22°19.3'	207°41.7'	S 21°50.9'	19°57.7'	N 22°13.7'
16	74°24.4'	N 22°32.5'	255°47.9'	S 22°19.3'	222°44.3'	S 21°51.0'	34°58.5'	N 22°13.4'
17	89°23.6'	N 22°32.8'	270°50.6'	S 22°19.3'	237°47.0'	S 21°51.0'	49°59.3'	N 22°13.1'
18	104°22.8'	N 22°33.2'	285°53.4'	S 22°19.3'	252°49.6'	S 21°51.0'	65°00.0'	N 22°12.8'
19	119°22.0'	N 22°33.5'	300°56.2'	S 22°19.3'	267°52.3'	S 21°51.1'	80°00.8'	N 22°12.5'
20	134°21.1'	N 22°33.9'	315°59.0'	S 22°19.2'	282°54.9'	S 21°51.1'	95°01.6'	N 22°12.3'
21	149°20.3'	N 22°34.2'	331°01.8'	S 22°19.2'	297°57.6'	S 21°51.1'	110°02.3'	N 22°12.0'
22	164°19.5'	N 22°34.6'	346°04.6'	S 22°19.2'	313°00.2'	S 21°51.1'	125°03.1'	N 22°11.7'
23	179°18.7'	N 22°34.9'	1°07.4'	S 22°19.2'	328°02.9'	S 21°51.2'	140°03.9'	N 22°11.4'

Tue Jun 25, 2019 UTC

UTC	Venus -3.8		Jupiter -2.5		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.3'		v = 2.8' d = 0.0'		v = 2.7' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	194°17.8'	N 22°35.3'	16°10.1'	S 22°19.2'	343°05.5'	S 21°51.2'	155°04.7'	N 22°11.1'
1	209°17.0'	N 22°35.6'	31°12.9'	S 22°19.1'	358°08.2'	S 21°51.2'	170°05.4'	N 22°10.8'
2	224°16.2'	N 22°35.9'	46°15.7'	S 22°19.1'	13°10.8'	S 21°51.2'	185°06.2'	N 22°10.5'
3	239°15.4'	N 22°36.3'	61°18.5'	S 22°19.1'	28°13.5'	S 21°51.3'	200°07.0'	N 22°10.2'
4	254°14.5'	N 22°36.6'	76°21.3'	S 22°19.1'	43°16.1'	S 21°51.3'	215°07.8'	N 22°09.9'
5	269°13.7'	N 22°36.9'	91°24.1'	S 22°19.1'	58°18.8'	S 21°51.3'	230°08.5'	N 22°09.6'
6	284°12.9'	N 22°37.3'	106°26.9'	S 22°19.0'	73°21.4'	S 21°51.3'	245°09.3'	N 22°09.3'
7	299°12.1'	N 22°37.6'	121°29.6'	S 22°19.0'	88°24.1'	S 21°51.4'	260°10.1'	N 22°09.0'
8	314°11.2'	N 22°37.9'	136°32.4'	S 22°19.0'	103°26.7'	S 21°51.4'	275°10.9'	N 22°08.7'
9	329°10.4'	N 22°38.3'	151°35.2'	S 22°19.0'	118°29.4'	S 21°51.4'	290°11.6'	N 22°08.4'
10	344°09.6'	N 22°38.6'	166°38.0'	S 22°18.9'	133°32.0'	S 21°51.5'	305°12.4'	N 22°08.1'
11	359°08.7'	N 22°38.9'	181°40.8'	S 22°18.9'	148°34.7'	S 21°51.5'	320°13.2'	N 22°07.8'
12	14°07.9'	N 22°39.3'	196°43.6'	S 22°18.9'	163°37.3'	S 21°51.5'	335°14.0'	N 22°07.5'
13	29°07.1'	N 22°39.6'	211°46.3'	S 22°18.9'	178°40.0'	S 21°51.5'	350°14.7'	N 22°07.2'
14	44°06.3'	N 22°39.9'	226°49.1'	S 22°18.9'	193°42.6'	S 21°51.6'	5°15.5'	N 22°06.9'
15	59°05.4'	N 22°40.2'	241°51.9'	S 22°18.8'	208°45.3'	S 21°51.6'	20°16.3'	N 22°06.6'
16	74°04.6'	N 22°40.6'	256°54.7'	S 22°18.8'	223°47.9'	S 21°51.6'	35°17.1'	N 22°06.3'
17	89°03.8'	N 22°40.9'	271°57.5'	S 22°18.8'	238°50.6'	S 21°51.6'	50°17.9'	N 22°06.0'
18	104°02.9'	N 22°41.2'	287°00.3'	S 22°18.8'	253°53.2'	S 21°51.7'	65°18.6'	N 22°05.7'
19	119°02.1'	N 22°41.5'	302°03.0'	S 22°18.8'	268°55.9'	S 21°51.7'	80°19.4'	N 22°05.4'
20	134°01.3'	N 22°41.9'	317°05.8'	S 22°18.7'	283°58.5'	S 21°51.7'	95°20.2'	N 22°05.1'
21	149°00.5'	N 22°42.2'	332°08.6'	S 22°18.7'	299°01.2'	S 21°51.7'	110°21.0'	N 22°04.8'
22	163°59.6'	N 22°42.5'	347°11.4'	S 22°18.7'	314°03.8'	S 21°51.8'	125°21.7'	N 22°04.5'
23	178°58.8'	N 22°42.8'	2°14.2'	S 22°18.7'	329°06.5'	S 21°51.8'	140°22.5'	N 22°04.2'

Wed Jun 26, 2019 UTC

UTC	Venus -3.8		Jupiter -2.4		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.3'		v = 2.8' d = 0.0'		v = 2.7' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	193°58.0'	N 22°43.1'	17°16.9'	S 22°18.7'	344°09.1'	S 21°51.8'	155°23.3'	N 22°03.9'
1	208°57.1'	N 22°43.4'	32°19.7'	S 22°18.6'	359°11.8'	S 21°51.9'	170°24.1'	N 22°03.6'
2	223°56.3'	N 22°43.8'	47°22.5'	S 22°18.6'	14°14.4'	S 21°51.9'	185°24.8'	N 22°03.3'
3	238°55.5'	N 22°44.1'	62°25.3'	S 22°18.6'	29°17.1'	S 21°51.9'	200°25.6'	N 22°03.0'
4	253°54.6'	N 22°44.4'	77°28.1'	S 22°18.6'	44°19.7'	S 21°51.9'	215°26.4'	N 22°02.7'
5	268°53.8'	N 22°44.7'	92°30.8'	S 22°18.6'	59°22.4'	S 21°52.0'	230°27.2'	N 22°02.4'
6	283°53.0'	N 22°45.0'	107°33.6'	S 22°18.5'	74°25.0'	S 21°52.0'	245°28.0'	N 22°02.1'
7	298°52.1'	N 22°45.3'	122°36.4'	S 22°18.5'	89°27.7'	S 21°52.0'	260°28.7'	N 22°01.8'
8	313°51.3'	N 22°45.6'	137°39.2'	S 22°18.5'	104°30.3'	S 21°52.0'	275°29.5'	N 22°01.5'
9	328°50.5'	N 22°45.9'	152°42.0'	S 22°18.5'	119°33.0'	S 21°52.1'	290°30.3'	N 22°01.2'
10	343°49.6'	N 22°46.2'	167°44.7'	S 22°18.5'	134°35.6'	S 21°52.1'	305°31.1'	N 22°00.9'
11	358°48.8'	N 22°46.5'	182°47.5'	S 22°18.4'	149°38.3'	S 21°52.1'	320°31.8'	N 22°00.6'
12	13°47.9'	N 22°46.8'	197°50.3'	S 22°18.4'	164°40.9'	S 21°52.1'	335°32.6'	N 22°00.3'
13	28°47.1'	N 22°47.1'	212°53.1'	S 22°18.4'	179°43.6'	S 21°52.2'	350°33.4'	N 21°60.0'
14	43°46.3'	N 22°47.4'	227°55.9'	S 22°18.4'	194°46.2'	S 21°52.2'	5°34.2'	N 21°59.7'
15	58°45.4'	N 22°47.7'	242°58.6'	S 22°18.4'	209°48.9'	S 21°52.2'	20°35.0'	N 21°59.4'
16	73°44.6'	N 22°48.0'	258°01.4'	S 22°18.3'	224°51.5'	S 21°52.3'	35°35.7'	N 21°59.1'
17	88°43.8'	N 22°48.3'	273°04.2'	S 22°18.3'	239°54.2'	S 21°52.3'	50°36.5'	N 21°58.8'
18	103°42.9'	N 22°48.6'	288°07.0'	S 22°18.3'	254°56.9'	S 21°52.3'	65°37.3'	N 21°58.5'
19	118°42.1'	N 22°48.9'	303°09.8'	S 22°18.3'	269°59.5'	S 21°52.3'	80°38.1'	N 21°58.2'
20	133°41.3'	N 22°49.2'	318°12.5'	S 22°18.2'	285°02.2'	S 21°52.4'	95°38.9'	N 21°57.9'
21	148°40.4'	N 22°49.5'	333°15.3'	S 22°18.2'	300°04.8'	S 21°52.4'	110°39.6'	N 21°57.5'
22	163°39.6'	N 22°49.8'	348°18.1'	S 22°18.2'	315°07.5'	S 21°52.4'	125°40.4'	N 21°57.2'
23	178°38.7'	N 22°50.1'	3°20.9'	S 22°18.2'	330°10.1'	S 21°52.4'	140°41.2'	N 21°56.9'

Thu Jun 27, 2019 UTC

UTC	Venus -3.8		Jupiter -2.4		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.3'		v = 2.8' d = 0.0'		v = 2.7' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	193°37.9'	N 22°50.3'	18°23.7'	S 22°18.2'	345°12.8'	S 21°52.5'	155°42.0'	N 21°56.6'
1	208°37.1'	N 22°50.6'	33°26.4'	S 22°18.1'	0°15.4'	S 21°52.5'	170°42.8'	N 21°56.3'
2	223°36.2'	N 22°50.9'	48°29.2'	S 22°18.1'	15°18.1'	S 21°52.5'	185°43.5'	N 21°56.0'
3	238°35.4'	N 22°51.2'	63°32.0'	S 22°18.1'	30°20.7'	S 21°52.6'	200°44.3'	N 21°55.7'
4	253°34.5'	N 22°51.5'	78°34.8'	S 22°18.1'	45°23.4'	S 21°52.6'	215°45.1'	N 21°55.4'
5	268°33.7'	N 22°51.8'	93°37.5'	S 22°18.1'	60°26.0'	S 21°52.6'	230°45.9'	N 21°55.1'
6	283°32.9'	N 22°52.1'	108°40.3'	S 22°18.0'	75°28.7'	S 21°52.6'	245°46.7'	N 21°54.8'
7	298°32.0'	N 22°52.3'	123°43.1'	S 22°18.0'	90°31.3'	S 21°52.7'	260°47.5'	N 21°54.5'
8	313°31.2'	N 22°52.6'	138°45.9'	S 22°18.0'	105°34.0'	S 21°52.7'	275°48.2'	N 21°54.2'
9	328°30.3'	N 22°52.9'	153°48.6'	S 22°18.0'	120°36.6'	S 21°52.7'	290°49.0'	N 21°53.8'
10	343°29.5'	N 22°53.2'	168°51.4'	S 22°18.0'	135°39.3'	S 21°52.7'	305°49.8'	N 21°53.5'
11	358°28.7'	N 22°53.4'	183°54.2'	S 22°17.9'	150°41.9'	S 21°52.8'	320°50.6'	N 21°53.2'
12	13°27.8'	N 22°53.7'	198°57.0'	S 22°17.9'	165°44.6'	S 21°52.8'	335°51.4'	N 21°52.9'
13	28°27.0'	N 22°54.0'	213°59.8'	S 22°17.9'	180°47.3'	S 21°52.8'	350°52.1'	N 21°52.6'
14	43°26.1'	N 22°54.3'	229°02.5'	S 22°17.9'	195°49.9'	S 21°52.8'	5°52.9'	N 21°52.3'
15	58°25.3'	N 22°54.5'	244°05.3'	S 22°17.9'	210°52.6'	S 21°52.9'	20°53.7'	N 21°52.0'
16	73°24.4'	N 22°54.8'	259°08.1'	S 22°17.8'	225°55.2'	S 21°52.9'	35°54.5'	N 21°51.7'
17	88°23.6'	N 22°55.1'	274°10.9'	S 22°17.8'	240°57.9'	S 21°52.9'	50°55.3'	N 21°51.4'
18	103°22.8'	N 22°55.3'	289°13.6'	S 22°17.8'	256°00.5'	S 21°53.0'	65°56.1'	N 21°51.0'
19	118°21.9'	N 22°55.6'	304°16.4'	S 22°17.8'	271°03.2'	S 21°53.0'	80°56.8'	N 21°50.7'
20	133°21.1'	N 22°55.9'	319°19.2'	S 22°17.8'	286°05.8'	S 21°53.0'	95°57.6'	N 21°50.4'
21	148°20.2'	N 22°56.1'	334°22.0'	S 22°17.7'	301°08.5'	S 21°53.0'	110°58.4'	N 21°50.1'
22	163°19.4'	N 22°56.4'	349°24.7'	S 22°17.7'	316°11.1'	S 21°53.1'	125°59.2'	N 21°49.8'
23	178°18.5'	N 22°56.7'	4°27.5'	S 22°17.7'	331°13.8'	S 21°53.1'	140°60.0'	N 21°49.5'

Fri Jun 28, 2019 UTC

UTC	Venus -3.8		Jupiter -2.4		Saturn +0.1		Mars +1.8	
	v = -0.8' d = 0.2'		v = 2.8' d = 0.0'		v = 2.7' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	193°17.7'	N 22°56.9'	19°30.3'	S 22°17.7'	346°16.4'	S 21°53.1'	156°00.8'	N 21°49.2'
1	208°16.9'	N 22°57.2'	34°33.1'	S 22°17.7'	1°19.1'	S 21°53.1'	171°01.5'	N 21°48.8'
2	223°16.0'	N 22°57.4'	49°35.8'	S 22°17.6'	16°21.7'	S 21°53.2'	186°02.3'	N 21°48.5'
3	238°15.2'	N 22°57.7'	64°38.6'	S 22°17.6'	31°24.4'	S 21°53.2'	201°03.1'	N 21°48.2'
4	253°14.3'	N 22°58.0'	79°41.4'	S 22°17.6'	46°27.1'	S 21°53.2'	216°03.9'	N 21°47.9'
5	268°13.5'	N 22°58.2'	94°44.1'	S 22°17.6'	61°29.7'	S 21°53.2'	231°04.7'	N 21°47.6'
6	283°12.6'	N 22°58.5'	109°46.9'	S 22°17.6'	76°32.4'	S 21°53.3'	246°05.5'	N 21°47.3'
7	298°11.8'	N 22°58.7'	124°49.7'	S 22°17.5'	91°35.0'	S 21°53.3'	261°06.2'	N 21°47.0'
8	313°10.9'	N 22°59.0'	139°52.5'	S 22°17.5'	106°37.7'	S 21°53.3'	276°07.0'	N 21°46.6'
9	328°10.1'	N 22°59.2'	154°55.2'	S 22°17.5'	121°40.3'	S 21°53.4'	291°07.8'	N 21°46.3'
10	343°09.2'	N 22°59.5'	169°58.0'	S 22°17.5'	136°43.0'	S 21°53.4'	306°08.6'	N 21°46.0'
11	358°08.4'	N 22°59.7'	185°00.8'	S 22°17.5'	151°45.6'	S 21°53.4'	321°09.4'	N 21°45.7'
12	13°07.5'	N 22°60.0'	200°03.6'	S 22°17.4'	166°48.3'	S 21°53.4'	336°10.2'	N 21°45.4'
13	28°06.7'	N 23°00.2'	215°06.3'	S 22°17.4'	181°50.9'	S 21°53.5'	351°11.0'	N 21°45.0'
14	43°05.8'	N 23°00.4'	230°09.1'	S 22°17.4'	196°53.6'	S 21°53.5'	6°11.7'	N 21°44.7'
15	58°05.0'	N 23°00.7'	245°11.9'	S 22°17.4'	211°56.3'	S 21°53.5'	21°12.5'	N 21°44.4'
16	73°04.1'	N 23°00.9'	260°14.6'	S 22°17.4'	226°58.9'	S 21°53.5'	36°13.3'	N 21°44.1'
17	88°03.3'	N 23°01.2'	275°17.4'	S 22°17.3'	242°01.6'	S 21°53.6'	51°14.1'	N 21°43.8'
18	103°02.4'	N 23°01.4'	290°20.2'	S 22°17.3'	257°04.2'	S 21°53.6'	66°14.9'	N 21°43.5'
19	118°01.6'	N 23°01.7'	305°23.0'	S 22°17.3'	272°06.9'	S 21°53.6'	81°15.7'	N 21°43.1'
20	133°00.7'	N 23°01.9'	320°25.7'	S 22°17.3'	287°09.5'	S 21°53.7'	96°16.5'	N 21°42.8'
21	147°59.9'	N 23°02.1'	335°28.5'	S 22°17.2'	302°12.2'	S 21°53.7'	111°17.2'	N 21°42.5'
22	162°59.0'	N 23°02.4'	350°31.3'	S 22°17.2'	317°14.8'	S 21°53.7'	126°18.0'	N 21°42.2'
23	177°58.2'	N 23°02.6'	5°34.0'	S 22°17.2'	332°17.5'	S 21°53.7'	141°18.8'	N 21°41.9'

Sat Jun 29, 2019 UTC

UTC	Venus -3.8		Jupiter -2.4		Saturn +0.1		Mars +1.8	
	v = -0.9' d = 0.2'		v = 2.8' d = 0.0'		v = 2.7' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	192°57.3'	N 23°02.8'	20°36.8'	S 22°17.2'	347°20.1'	S 21°53.8'	156°19.6'	N 21°41.5'
1	207°56.5'	N 23°03.1'	35°39.6'	S 22°17.2'	2°22.8'	S 21°53.8'	171°20.4'	N 21°41.2'
2	222°55.6'	N 23°03.3'	50°42.3'	S 22°17.1'	17°25.5'	S 21°53.8'	186°21.2'	N 21°40.9'
3	237°54.8'	N 23°03.5'	65°45.1'	S 22°17.1'	32°28.1'	S 21°53.8'	201°22.0'	N 21°40.6'
4	252°53.9'	N 23°03.8'	80°47.9'	S 22°17.1'	47°30.8'	S 21°53.9'	216°22.8'	N 21°40.3'
5	267°53.1'	N 23°04.0'	95°50.7'	S 22°17.1'	62°33.4'	S 21°53.9'	231°23.5'	N 21°39.9'
6	282°52.2'	N 23°04.2'	110°53.4'	S 22°17.1'	77°36.1'	S 21°53.9'	246°24.3'	N 21°39.6'
7	297°51.4'	N 23°04.4'	125°56.2'	S 22°17.0'	92°38.7'	S 21°53.9'	261°25.1'	N 21°39.3'
8	312°50.5'	N 23°04.7'	140°59.0'	S 22°17.0'	107°41.4'	S 21°54.0'	276°25.9'	N 21°39.0'
9	327°49.7'	N 23°04.9'	156°01.7'	S 22°17.0'	122°44.0'	S 21°54.0'	291°26.7'	N 21°38.6'
10	342°48.8'	N 23°05.1'	171°04.5'	S 22°17.0'	137°46.7'	S 21°54.0'	306°27.5'	N 21°38.3'
11	357°48.0'	N 23°05.3'	186°07.3'	S 22°17.0'	152°49.3'	S 21°54.1'	321°28.3'	N 21°38.0'
12	12°47.1'	N 23°05.5'	201°10.0'	S 22°16.9'	167°52.0'	S 21°54.1'	336°29.1'	N 21°37.7'
13	27°46.3'	N 23°05.8'	216°12.8'	S 22°16.9'	182°54.7'	S 21°54.1'	351°29.8'	N 21°37.3'
14	42°45.4'	N 23°06.0'	231°15.6'	S 22°16.9'	197°57.3'	S 21°54.1'	6°30.6'	N 21°37.0'
15	57°44.6'	N 23°06.2'	246°18.3'	S 22°16.9'	212°60.0'	S 21°54.2'	21°31.4'	N 21°36.7'
16	72°43.7'	N 23°06.4'	261°21.1'	S 22°16.9'	228°02.6'	S 21°54.2'	36°32.2'	N 21°36.4'
17	87°42.9'	N 23°06.6'	276°23.9'	S 22°16.8'	243°05.3'	S 21°54.2'	51°33.0'	N 21°36.0'
18	102°42.0'	N 23°06.8'	291°26.6'	S 22°16.8'	258°07.9'	S 21°54.2'	66°33.8'	N 21°35.7'
19	117°41.1'	N 23°07.0'	306°29.4'	S 22°16.8'	273°10.6'	S 21°54.3'	81°34.6'	N 21°35.4'
20	132°40.3'	N 23°07.2'	321°32.2'	S 22°16.8'	288°13.2'	S 21°54.3'	96°35.4'	N 21°35.1'
21	147°39.4'	N 23°07.5'	336°34.9'	S 22°16.8'	303°15.9'	S 21°54.3'	111°36.2'	N 21°34.7'
22	162°38.6'	N 23°07.7'	351°37.7'	S 22°16.7'	318°18.6'	S 21°54.4'	126°36.9'	N 21°34.4'
23	177°37.7'	N 23°07.9'	6°40.5'	S 22°16.7'	333°21.2'	S 21°54.4'	141°37.7'	N 21°34.1'

Sun Jun 30, 2019 UTC

UTC	Venus -3.8		Jupiter -2.4		Saturn +0.1		Mars +1.8	
	v = -0.9' d = 0.2'		v = 2.8' d = 0.0'		v = 2.7' d = 0.0'		v = 0.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	192°36.9'	N 23°08.1'	21°43.2'	S 22°16.7'	348°23.9'	S 21°54.4'	156°38.5'	N 21°33.8'
1	207°36.0'	N 23°08.3'	36°46.0'	S 22°16.7'	3°26.5'	S 21°54.4'	171°39.3'	N 21°33.4'
2	222°35.2'	N 23°08.5'	51°48.8'	S 22°16.7'	18°29.2'	S 21°54.5'	186°40.1'	N 21°33.1'
3	237°34.3'	N 23°08.7'	66°51.5'	S 22°16.6'	33°31.8'	S 21°54.5'	201°40.9'	N 21°32.8'
4	252°33.4'	N 23°08.9'	81°54.3'	S 22°16.6'	48°34.5'	S 21°54.5'	216°41.7'	N 21°32.5'
5	267°32.6'	N 23°09.1'	96°57.1'	S 22°16.6'	63°37.2'	S 21°54.5'	231°42.5'	N 21°32.1'
6	282°31.7'	N 23°09.3'	111°59.8'	S 22°16.6'	78°39.8'	S 21°54.6'	246°43.3'	N 21°31.8'
7	297°30.9'	N 23°09.5'	127°02.6'	S 22°16.6'	93°42.5'	S 21°54.6'	261°44.1'	N 21°31.5'
8	312°30.0'	N 23°09.7'	142°05.4'	S 22°16.5'	108°45.1'	S 21°54.6'	276°44.9'	N 21°31.1'
9	327°29.2'	N 23°09.9'	157°08.1'	S 22°16.5'	123°47.8'	S 21°54.7'	291°45.6'	N 21°30.8'
10	342°28.3'	N 23°10.1'	172°10.9'	S 22°16.5'	138°50.4'	S 21°54.7'	306°46.4'	N 21°30.5'
11	357°27.4'	N 23°10.3'	187°13.7'	S 22°16.5'	153°53.1'	S 21°54.7'	321°47.2'	N 21°30.1'
12	12°26.6'	N 23°10.4'	202°16.4'	S 22°16.5'	168°55.7'	S 21°54.7'	336°48.0'	N 21°29.8'
13	27°25.7'	N 23°10.6'	217°19.2'	S 22°16.4'	183°58.4'	S 21°54.8'	351°48.8'	N 21°29.5'
14	42°24.9'	N 23°10.8'	232°21.9'	S 22°16.4'	199°01.1'	S 21°54.8'	6°49.6'	N 21°29.2'
15	57°24.0'	N 23°11.0'	247°24.7'	S 22°16.4'	214°03.7'	S 21°54.8'	21°50.4'	N 21°28.8'
16	72°23.2'	N 23°11.2'	262°27.5'	S 22°16.4'	229°06.4'	S 21°54.8'	36°51.2'	N 21°28.5'
17	87°22.3'	N 23°11.4'	277°30.2'	S 22°16.4'	244°09.0'	S 21°54.9'	51°52.0'	N 21°28.2'
18	102°21.4'	N 23°11.6'	292°33.0'	S 22°16.3'	259°11.7'	S 21°54.9'	66°52.8'	N 21°27.8'
19	117°20.6'	N 23°11.8'	307°35.8'	S 22°16.3'	274°14.3'	S 21°54.9'	81°53.6'	N 21°27.5'
20	132°19.7'	N 23°11.9'	322°38.5'	S 22°16.3'	289°17.0'	S 21°54.9'	96°54.4'	N 21°27.2'
21	147°18.9'	N 23°12.1'	337°41.3'	S 22°16.3'	304°19.7'	S 21°55.0'	111°55.2'	N 21°26.8'
22	162°18.0'	N 23°12.3'	352°44.0'	S 22°16.3'	319°22.3'	S 21°55.0'	126°55.9'	N 21°26.5'
23	177°17.1'	N 23°12.5'	7°46.8'	S 22°16.3'	334°25.0'	S 21°55.0'	141°56.7'	N 21°26.2'