

Mon Apr 1, 2019 UTC

UTC	Venus -3.9 v = -0.4' d = 1.0'		Jupiter -2.1 v = 2.4' d = 0.0'		Saturn +0.6 v = 2.3' d = 0.0'		Mars +1.4 v = 0.7' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°43.5'	S 10°04.0'	285°20.9'	S 22°40.6'	257°39.9'	S 21°33.8'	130°56.4'	N 21°09.0'
1	225°43.1'	S 10°03.0'	300°23.3'	S 22°40.6'	272°42.3'	S 21°33.8'	145°57.1'	N 21°09.3'
2	240°42.7'	S 10°02.0'	315°25.7'	S 22°40.6'	287°44.6'	S 21°33.8'	160°57.8'	N 21°09.7'
3	255°42.2'	S 10°01.0'	330°28.1'	S 22°40.6'	302°46.9'	S 21°33.8'	175°58.6'	N 21°10.0'
4	270°41.8'	S 9°60.0'	345°30.5'	S 22°40.6'	317°49.3'	S 21°33.8'	190°59.3'	N 21°10.4'
5	285°41.4'	S 9°58.9'	0°32.9'	S 22°40.6'	332°51.6'	S 21°33.8'	206°00.0'	N 21°10.8'
6	300°41.0'	S 9°57.9'	15°35.2'	S 22°40.6'	347°54.0'	S 21°33.8'	221°00.8'	N 21°11.1'
7	315°40.6'	S 9°56.9'	30°37.6'	S 22°40.6'	2°56.3'	S 21°33.7'	236°01.5'	N 21°11.5'
8	330°40.2'	S 9°55.9'	45°40.0'	S 22°40.6'	17°58.7'	S 21°33.7'	251°02.2'	N 21°11.9'
9	345°39.7'	S 9°54.9'	60°42.4'	S 22°40.6'	33°01.0'	S 21°33.7'	266°03.0'	N 21°12.2'
10	0°39.3'	S 9°53.8'	75°44.8'	S 22°40.6'	48°03.3'	S 21°33.7'	281°03.7'	N 21°12.6'
11	15°38.9'	S 9°52.8'	90°47.2'	S 22°40.6'	63°05.7'	S 21°33.7'	296°04.4'	N 21°12.9'
12	30°38.5'	S 9°51.8'	105°49.6'	S 22°40.7'	78°08.0'	S 21°33.7'	311°05.2'	N 21°13.3'
13	45°38.1'	S 9°50.8'	120°51.9'	S 22°40.7'	93°10.4'	S 21°33.6'	326°05.9'	N 21°13.7'
14	60°37.7'	S 9°49.8'	135°54.3'	S 22°40.7'	108°12.7'	S 21°33.6'	341°06.6'	N 21°14.0'
15	75°37.2'	S 9°48.8'	150°56.7'	S 22°40.7'	123°15.1'	S 21°33.6'	356°07.4'	N 21°14.4'
16	90°36.8'	S 9°47.7'	165°59.1'	S 22°40.7'	138°17.4'	S 21°33.6'	11°08.1'	N 21°14.7'
17	105°36.4'	S 9°46.7'	181°01.5'	S 22°40.7'	153°19.7'	S 21°33.6'	26°08.8'	N 21°15.1'
18	120°36.0'	S 9°45.7'	196°03.9'	S 22°40.7'	168°22.1'	S 21°33.6'	41°09.6'	N 21°15.5'
19	135°35.6'	S 9°44.7'	211°06.3'	S 22°40.7'	183°24.4'	S 21°33.6'	56°10.3'	N 21°15.8'
20	150°35.2'	S 9°43.6'	226°08.7'	S 22°40.7'	198°26.8'	S 21°33.5'	71°11.0'	N 21°16.2'
21	165°34.8'	S 9°42.6'	241°11.0'	S 22°40.7'	213°29.1'	S 21°33.5'	86°11.8'	N 21°16.5'
22	180°34.3'	S 9°41.6'	256°13.4'	S 22°40.7'	228°31.5'	S 21°33.5'	101°12.5'	N 21°16.9'
23	195°33.9'	S 9°40.6'	271°15.8'	S 22°40.7'	243°33.8'	S 21°33.5'	116°13.2'	N 21°17.2'

Tue Apr 2, 2019 UTC

UTC	Venus -3.9 v = -0.4' d = 1.0'		Jupiter -2.1 v = 2.4' d = 0.0'		Saturn +0.6 v = 2.3' d = 0.0'		Mars +1.5 v = 0.7' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°33.5'	S 9°39.5'	286°18.2'	S 22°40.7'	258°36.1'	S 21°33.5'	131°14.0'	N 21°17.6'
1	225°33.1'	S 9°38.5'	301°20.6'	S 22°40.7'	273°38.5'	S 21°33.5'	146°14.7'	N 21°18.0'
2	240°32.7'	S 9°37.5'	316°23.0'	S 22°40.7'	288°40.8'	S 21°33.5'	161°15.4'	N 21°18.3'
3	255°32.3'	S 9°36.5'	331°25.4'	S 22°40.7'	303°43.2'	S 21°33.4'	176°16.1'	N 21°18.7'
4	270°31.9'	S 9°35.4'	346°27.8'	S 22°40.7'	318°45.5'	S 21°33.4'	191°16.9'	N 21°19.0'
5	285°31.5'	S 9°34.4'	1°30.2'	S 22°40.7'	333°47.9'	S 21°33.4'	206°17.6'	N 21°19.4'
6	300°31.1'	S 9°33.4'	16°32.6'	S 22°40.7'	348°50.2'	S 21°33.4'	221°18.3'	N 21°19.7'
7	315°30.6'	S 9°32.4'	31°35.0'	S 22°40.7'	3°52.6'	S 21°33.4'	236°19.1'	N 21°20.1'
8	330°30.2'	S 9°31.3'	46°37.3'	S 22°40.7'	18°54.9'	S 21°33.4'	251°19.8'	N 21°20.4'
9	345°29.8'	S 9°30.3'	61°39.7'	S 22°40.7'	33°57.3'	S 21°33.3'	266°20.5'	N 21°20.8'
10	0°29.4'	S 9°29.3'	76°42.1'	S 22°40.7'	48°59.6'	S 21°33.3'	281°21.3'	N 21°21.2'
11	15°29.0'	S 9°28.2'	91°44.5'	S 22°40.7'	64°01.9'	S 21°33.3'	296°22.0'	N 21°21.5'
12	30°28.6'	S 9°27.2'	106°46.9'	S 22°40.7'	79°04.3'	S 21°33.3'	311°22.7'	N 21°21.9'
13	45°28.2'	S 9°26.2'	121°49.3'	S 22°40.7'	94°06.6'	S 21°33.3'	326°23.4'	N 21°22.2'
14	60°27.8'	S 9°25.1'	136°51.7'	S 22°40.7'	109°09.0'	S 21°33.3'	341°24.2'	N 21°22.6'
15	75°27.4'	S 9°24.1'	151°54.1'	S 22°40.7'	124°11.3'	S 21°33.3'	356°24.9'	N 21°22.9'
16	90°27.0'	S 9°23.1'	166°56.5'	S 22°40.7'	139°13.7'	S 21°33.2'	11°25.6'	N 21°23.3'
17	105°26.6'	S 9°22.0'	181°58.9'	S 22°40.7'	154°16.0'	S 21°33.2'	26°26.4'	N 21°23.6'
18	120°26.2'	S 9°21.0'	197°01.3'	S 22°40.7'	169°18.4'	S 21°33.2'	41°27.1'	N 21°24.0'
19	135°25.7'	S 9°20.0'	212°03.7'	S 22°40.7'	184°20.7'	S 21°33.2'	56°27.8'	N 21°24.3'
20	150°25.3'	S 9°18.9'	227°06.1'	S 22°40.7'	199°23.1'	S 21°33.2'	71°28.5'	N 21°24.7'
21	165°24.9'	S 9°17.9'	242°08.5'	S 22°40.7'	214°25.4'	S 21°33.2'	86°29.3'	N 21°25.0'
22	180°24.5'	S 9°16.9'	257°10.9'	S 22°40.7'	229°27.8'	S 21°33.2'	101°30.0'	N 21°25.4'
23	195°24.1'	S 9°15.8'	272°13.3'	S 22°40.7'	244°30.1'	S 21°33.1'	116°30.7'	N 21°25.7'

Wed Apr 3, 2019 UTC

UTC	Venus -3.9		Jupiter -2.1		Saturn +0.6		Mars +1.5	
	v = -0.4' d = 1.0'		v = 2.4' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°23.7'	S 9°14.8'	287°15.7'	S 22°40.7'	259°32.5'	S 21°33.1'	131°31.5'	N 21°26.1'
1	225°23.3'	S 9°13.8'	302°18.1'	S 22°40.7'	274°34.8'	S 21°33.1'	146°32.2'	N 21°26.4'
2	240°22.9'	S 9°12.7'	317°20.5'	S 22°40.7'	289°37.2'	S 21°33.1'	161°32.9'	N 21°26.8'
3	255°22.5'	S 9°11.7'	332°22.9'	S 22°40.7'	304°39.5'	S 21°33.1'	176°33.7'	N 21°27.1'
4	270°22.1'	S 9°10.6'	347°25.3'	S 22°40.7'	319°41.9'	S 21°33.1'	191°34.4'	N 21°27.5'
5	285°21.7'	S 9°09.6'	2°27.7'	S 22°40.7'	334°44.2'	S 21°33.1'	206°35.1'	N 21°27.8'
6	300°21.3'	S 9°08.6'	17°30.1'	S 22°40.7'	349°46.6'	S 21°33.0'	221°35.8'	N 21°28.2'
7	315°20.9'	S 9°07.5'	32°32.5'	S 22°40.8'	4°48.9'	S 21°33.0'	236°36.6'	N 21°28.5'
8	330°20.5'	S 9°06.5'	47°34.9'	S 22°40.8'	19°51.3'	S 21°33.0'	251°37.3'	N 21°28.9'
9	345°20.1'	S 9°05.5'	62°37.3'	S 22°40.8'	34°53.6'	S 21°33.0'	266°38.0'	N 21°29.2'
10	0°19.7'	S 9°04.4'	77°39.7'	S 22°40.8'	49°56.0'	S 21°33.0'	281°38.7'	N 21°29.5'
11	15°19.3'	S 9°03.4'	92°42.1'	S 22°40.8'	64°58.3'	S 21°33.0'	296°39.5'	N 21°29.9'
12	30°18.9'	S 9°02.3'	107°44.5'	S 22°40.8'	80°00.7'	S 21°33.0'	311°40.2'	N 21°30.2'
13	45°18.5'	S 9°01.3'	122°46.9'	S 22°40.8'	95°03.0'	S 21°32.9'	326°40.9'	N 21°30.6'
14	60°18.1'	S 9°00.2'	137°49.3'	S 22°40.8'	110°05.4'	S 21°32.9'	341°41.7'	N 21°30.9'
15	75°17.7'	S 8°59.2'	152°51.7'	S 22°40.8'	125°07.7'	S 21°32.9'	356°42.4'	N 21°31.3'
16	90°17.3'	S 8°58.2'	167°54.1'	S 22°40.8'	140°10.1'	S 21°32.9'	11°43.1'	N 21°31.6'
17	105°16.9'	S 8°57.1'	182°56.5'	S 22°40.8'	155°12.4'	S 21°32.9'	26°43.8'	N 21°32.0'
18	120°16.5'	S 8°56.1'	197°58.9'	S 22°40.8'	170°14.8'	S 21°32.9'	41°44.6'	N 21°32.3'
19	135°16.1'	S 8°55.0'	213°01.3'	S 22°40.8'	185°17.1'	S 21°32.9'	56°45.3'	N 21°32.7'
20	150°15.7'	S 8°54.0'	228°03.7'	S 22°40.8'	200°19.5'	S 21°32.9'	71°46.0'	N 21°33.0'
21	165°15.3'	S 8°52.9'	243°06.1'	S 22°40.8'	215°21.8'	S 21°32.8'	86°46.7'	N 21°33.3'
22	180°14.9'	S 8°51.9'	258°08.5'	S 22°40.8'	230°24.2'	S 21°32.8'	101°47.5'	N 21°33.7'
23	195°14.5'	S 8°50.8'	273°10.9'	S 22°40.8'	245°26.5'	S 21°32.8'	116°48.2'	N 21°34.0'

Thu Apr 4, 2019 UTC

UTC	Venus -3.9		Jupiter -2.1		Saturn +0.6		Mars +1.5	
	v = -0.4' d = 1.1'		v = 2.4' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°14.1'	S 8°49.8'	288°13.4'	S 22°40.8'	260°28.9'	S 21°32.8'	131°48.9'	N 21°34.4'
1	225°13.7'	S 8°48.7'	303°15.8'	S 22°40.8'	275°31.2'	S 21°32.8'	146°49.6'	N 21°34.7'
2	240°13.3'	S 8°47.7'	318°18.2'	S 22°40.8'	290°33.6'	S 21°32.8'	161°50.4'	N 21°35.0'
3	255°12.9'	S 8°46.6'	333°20.6'	S 22°40.8'	305°35.9'	S 21°32.8'	176°51.1'	N 21°35.4'
4	270°12.5'	S 8°45.6'	348°23.0'	S 22°40.8'	320°38.3'	S 21°32.7'	191°51.8'	N 21°35.7'
5	285°12.1'	S 8°44.5'	3°25.4'	S 22°40.8'	335°40.6'	S 21°32.7'	206°52.6'	N 21°36.1'
6	300°11.7'	S 8°43.5'	18°27.8'	S 22°40.8'	350°43.0'	S 21°32.7'	221°53.3'	N 21°36.4'
7	315°11.3'	S 8°42.4'	33°30.2'	S 22°40.8'	5°45.4'	S 21°32.7'	236°54.0'	N 21°36.8'
8	330°10.9'	S 8°41.4'	48°32.6'	S 22°40.8'	20°47.7'	S 21°32.7'	251°54.7'	N 21°37.1'
9	345°10.5'	S 8°40.3'	63°35.0'	S 22°40.8'	35°50.1'	S 21°32.7'	266°55.5'	N 21°37.4'
10	0°10.1'	S 8°39.3'	78°37.4'	S 22°40.8'	50°52.4'	S 21°32.7'	281°56.2'	N 21°37.8'
11	15°09.7'	S 8°38.2'	93°39.9'	S 22°40.8'	65°54.8'	S 21°32.6'	296°56.9'	N 21°38.1'
12	30°09.3'	S 8°37.2'	108°42.3'	S 22°40.8'	80°57.1'	S 21°32.6'	311°57.6'	N 21°38.4'
13	45°08.9'	S 8°36.1'	123°44.7'	S 22°40.8'	95°59.5'	S 21°32.6'	326°58.4'	N 21°38.8'
14	60°08.5'	S 8°35.1'	138°47.1'	S 22°40.8'	111°01.8'	S 21°32.6'	341°59.1'	N 21°39.1'
15	75°08.1'	S 8°34.0'	153°49.5'	S 22°40.8'	126°04.2'	S 21°32.6'	356°59.8'	N 21°39.5'
16	90°07.7'	S 8°33.0'	168°51.9'	S 22°40.8'	141°06.5'	S 21°32.6'	12°00.5'	N 21°39.8'
17	105°07.3'	S 8°31.9'	183°54.3'	S 22°40.8'	156°08.9'	S 21°32.6'	27°01.3'	N 21°40.1'
18	120°06.9'	S 8°30.9'	198°56.7'	S 22°40.8'	171°11.3'	S 21°32.6'	42°02.0'	N 21°40.5'
19	135°06.5'	S 8°29.8'	213°59.2'	S 22°40.8'	186°13.6'	S 21°32.5'	57°02.7'	N 21°40.8'
20	150°06.2'	S 8°28.8'	229°01.6'	S 22°40.8'	201°16.0'	S 21°32.5'	72°03.4'	N 21°41.1'
21	165°05.8'	S 8°27.7'	244°04.0'	S 22°40.8'	216°18.3'	S 21°32.5'	87°04.1'	N 21°41.5'
22	180°05.4'	S 8°26.6'	259°06.4'	S 22°40.8'	231°20.7'	S 21°32.5'	102°04.9'	N 21°41.8'
23	195°05.0'	S 8°25.6'	274°08.8'	S 22°40.8'	246°23.0'	S 21°32.5'	117°05.6'	N 21°42.2'

Fri Apr 5, 2019 UTC

UTC	Venus -3.9		Jupiter -2.1		Saturn +0.6		Mars +1.5	
	v = -0.4' d = 1.1'		v = 2.4' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	210°04.6'	S 8°24.5'	289°11.2'	S 22°40.8'	261°25.4'	S 21°32.5'	132°06.3'	N 21°42.5'
1	225°04.2'	S 8°23.5'	304°13.6'	S 22°40.8'	276°27.7'	S 21°32.5'	147°07.0'	N 21°42.8'
2	240°03.8'	S 8°22.4'	319°16.1'	S 22°40.8'	291°30.1'	S 21°32.4'	162°07.8'	N 21°43.2'
3	255°03.4'	S 8°21.4'	334°18.5'	S 22°40.8'	306°32.5'	S 21°32.4'	177°08.5'	N 21°43.5'
4	270°03.0'	S 8°20.3'	349°20.9'	S 22°40.8'	321°34.8'	S 21°32.4'	192°09.2'	N 21°43.8'
5	285°02.6'	S 8°19.2'	4°23.3'	S 22°40.8'	336°37.2'	S 21°32.4'	207°09.9'	N 21°44.2'
6	300°02.2'	S 8°18.2'	19°25.7'	S 22°40.8'	351°39.5'	S 21°32.4'	222°10.7'	N 21°44.5'
7	315°01.8'	S 8°17.1'	34°28.1'	S 22°40.8'	6°41.9'	S 21°32.4'	237°11.4'	N 21°44.8'
8	330°01.4'	S 8°16.1'	49°30.6'	S 22°40.8'	21°44.3'	S 21°32.4'	252°12.1'	N 21°45.2'
9	345°01.1'	S 8°15.0'	64°33.0'	S 22°40.8'	36°46.6'	S 21°32.4'	267°12.8'	N 21°45.5'
10	0°00.7'	S 8°13.9'	79°35.4'	S 22°40.8'	51°49.0'	S 21°32.3'	282°13.6'	N 21°45.8'
11	15°00.3'	S 8°12.9'	94°37.8'	S 22°40.8'	66°51.3'	S 21°32.3'	297°14.3'	N 21°46.1'
12	29°59.9'	S 8°11.8'	109°40.2'	S 22°40.8'	81°53.7'	S 21°32.3'	312°15.0'	N 21°46.5'
13	44°59.5'	S 8°10.7'	124°42.7'	S 22°40.8'	96°56.0'	S 21°32.3'	327°15.7'	N 21°46.8'
14	59°59.1'	S 8°09.7'	139°45.1'	S 22°40.8'	111°58.4'	S 21°32.3'	342°16.4'	N 21°47.1'
15	74°58.7'	S 8°08.6'	154°47.5'	S 22°40.8'	127°00.8'	S 21°32.3'	357°17.2'	N 21°47.5'
16	89°58.3'	S 8°07.6'	169°49.9'	S 22°40.8'	142°03.1'	S 21°32.3'	12°17.9'	N 21°47.8'
17	104°57.9'	S 8°06.5'	184°52.3'	S 22°40.8'	157°05.5'	S 21°32.3'	27°18.6'	N 21°48.1'
18	119°57.6'	S 8°05.4'	199°54.8'	S 22°40.8'	172°07.8'	S 21°32.2'	42°19.3'	N 21°48.5'
19	134°57.2'	S 8°04.4'	214°57.2'	S 22°40.8'	187°10.2'	S 21°32.2'	57°20.1'	N 21°48.8'
20	149°56.8'	S 8°03.3'	229°59.6'	S 22°40.8'	202°12.6'	S 21°32.2'	72°20.8'	N 21°49.1'
21	164°56.4'	S 8°02.2'	245°02.0'	S 22°40.9'	217°14.9'	S 21°32.2'	87°21.5'	N 21°49.4'
22	179°56.0'	S 8°01.2'	260°04.5'	S 22°40.9'	232°17.3'	S 21°32.2'	102°22.2'	N 21°49.8'
23	194°55.6'	S 8°00.1'	275°06.9'	S 22°40.9'	247°19.6'	S 21°32.2'	117°22.9'	N 21°50.1'

Sat Apr 6, 2019 UTC

UTC	Venus -3.9		Jupiter -2.1		Saturn +0.6		Mars +1.5	
	v = -0.4' d = 1.1'		v = 2.4' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°55.2'	S 7°59.0'	290°09.3'	S 22°40.9'	262°22.0'	S 21°32.2'	132°23.7'	N 21°50.4'
1	224°54.8'	S 7°58.0'	305°11.7'	S 22°40.9'	277°24.4'	S 21°32.2'	147°24.4'	N 21°50.8'
2	239°54.5'	S 7°56.9'	320°14.2'	S 22°40.9'	292°26.7'	S 21°32.1'	162°25.1'	N 21°51.1'
3	254°54.1'	S 7°55.8'	335°16.6'	S 22°40.9'	307°29.1'	S 21°32.1'	177°25.8'	N 21°51.4'
4	269°53.7'	S 7°54.7'	350°19.0'	S 22°40.9'	322°31.4'	S 21°32.1'	192°26.5'	N 21°51.7'
5	284°53.3'	S 7°53.7'	5°21.4'	S 22°40.9'	337°33.8'	S 21°32.1'	207°27.3'	N 21°52.1'
6	299°52.9'	S 7°52.6'	20°23.9'	S 22°40.9'	352°36.2'	S 21°32.1'	222°28.0'	N 21°52.4'
7	314°52.5'	S 7°51.5'	35°26.3'	S 22°40.9'	7°38.5'	S 21°32.1'	237°28.7'	N 21°52.7'
8	329°52.2'	S 7°50.5'	50°28.7'	S 22°40.9'	22°40.9'	S 21°32.1'	252°29.4'	N 21°53.0'
9	344°51.8'	S 7°49.4'	65°31.1'	S 22°40.9'	37°43.3'	S 21°32.1'	267°30.2'	N 21°53.4'
10	359°51.4'	S 7°48.3'	80°33.6'	S 22°40.9'	52°45.6'	S 21°32.0'	282°30.9'	N 21°53.7'
11	14°51.0'	S 7°47.3'	95°36.0'	S 22°40.9'	67°48.0'	S 21°32.0'	297°31.6'	N 21°54.0'
12	29°50.6'	S 7°46.2'	110°38.4'	S 22°40.9'	82°50.3'	S 21°32.0'	312°32.3'	N 21°54.3'
13	44°50.2'	S 7°45.1'	125°40.8'	S 22°40.9'	97°52.7'	S 21°32.0'	327°33.0'	N 21°54.7'
14	59°49.9'	S 7°44.0'	140°43.3'	S 22°40.9'	112°55.1'	S 21°32.0'	342°33.8'	N 21°55.0'
15	74°49.5'	S 7°43.0'	155°45.7'	S 22°40.9'	127°57.4'	S 21°32.0'	357°34.5'	N 21°55.3'
16	89°49.1'	S 7°41.9'	170°48.1'	S 22°40.9'	142°59.8'	S 21°32.0'	12°35.2'	N 21°55.6'
17	104°48.7'	S 7°40.8'	185°50.6'	S 22°40.9'	158°02.2'	S 21°32.0'	27°35.9'	N 21°55.9'
18	119°48.3'	S 7°39.7'	200°53.0'	S 22°40.9'	173°04.5'	S 21°31.9'	42°36.6'	N 21°56.3'
19	134°47.9'	S 7°38.7'	215°55.4'	S 22°40.9'	188°06.9'	S 21°31.9'	57°37.4'	N 21°56.6'
20	149°47.6'	S 7°37.6'	230°57.9'	S 22°40.9'	203°09.3'	S 21°31.9'	72°38.1'	N 21°56.9'
21	164°47.2'	S 7°36.5'	246°00.3'	S 22°40.9'	218°11.6'	S 21°31.9'	87°38.8'	N 21°57.2'
22	179°46.8'	S 7°35.4'	261°02.7'	S 22°40.9'	233°14.0'	S 21°31.9'	102°39.5'	N 21°57.6'
23	194°46.4'	S 7°34.4'	276°05.2'	S 22°40.9'	248°16.4'	S 21°31.9'	117°40.2'	N 21°57.9'

Sun Apr 7, 2019 UTC

UTC	Venus -3.9 v = -0.4' d = 1.1'		Jupiter -2.1 v = 2.4' d = 0.0'		Saturn +0.6 v = 2.4' d = 0.0'		Mars +1.5 v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°46.0'	S 7°33.3'	291°07.6'	S 22°40.9'	263°18.7'	S 21°31.9'	132°41.0'	N 21°58.2'
1	224°45.7'	S 7°32.2'	306°10.0'	S 22°40.9'	278°21.1'	S 21°31.9'	147°41.7'	N 21°58.5'
2	239°45.3'	S 7°31.1'	321°12.5'	S 22°40.9'	293°23.4'	S 21°31.8'	162°42.4'	N 21°58.8'
3	254°44.9'	S 7°30.1'	336°14.9'	S 22°40.9'	308°25.8'	S 21°31.8'	177°43.1'	N 21°59.1'
4	269°44.5'	S 7°29.0'	351°17.3'	S 22°40.9'	323°28.2'	S 21°31.8'	192°43.8'	N 21°59.5'
5	284°44.1'	S 7°27.9'	6°19.8'	S 22°40.9'	338°30.5'	S 21°31.8'	207°44.5'	N 21°59.8'
6	299°43.8'	S 7°26.8'	21°22.2'	S 22°40.9'	353°32.9'	S 21°31.8'	222°45.3'	N 22°00.1'
7	314°43.4'	S 7°25.7'	36°24.6'	S 22°40.9'	8°35.3'	S 21°31.8'	237°46.0'	N 22°00.4'
8	329°43.0'	S 7°24.7'	51°27.1'	S 22°40.9'	23°37.6'	S 21°31.8'	252°46.7'	N 22°00.7'
9	344°42.6'	S 7°23.6'	66°29.5'	S 22°40.9'	38°40.0'	S 21°31.8'	267°47.4'	N 22°01.1'
10	359°42.2'	S 7°22.5'	81°31.9'	S 22°40.9'	53°42.4'	S 21°31.7'	282°48.1'	N 22°01.4'
11	14°41.9'	S 7°21.4'	96°34.4'	S 22°40.9'	68°44.7'	S 21°31.7'	297°48.9'	N 22°01.7'
12	29°41.5'	S 7°20.3'	111°36.8'	S 22°40.9'	83°47.1'	S 21°31.7'	312°49.6'	N 22°02.0'
13	44°41.1'	S 7°19.3'	126°39.2'	S 22°40.9'	98°49.5'	S 21°31.7'	327°50.3'	N 22°02.3'
14	59°40.7'	S 7°18.2'	141°41.7'	S 22°40.9'	113°51.8'	S 21°31.7'	342°51.0'	N 22°02.6'
15	74°40.4'	S 7°17.1'	156°44.1'	S 22°40.9'	128°54.2'	S 21°31.7'	357°51.7'	N 22°03.0'
16	89°40.0'	S 7°16.0'	171°46.6'	S 22°40.9'	143°56.6'	S 21°31.7'	12°52.4'	N 22°03.3'
17	104°39.6'	S 7°14.9'	186°49.0'	S 22°40.9'	158°58.9'	S 21°31.7'	27°53.2'	N 22°03.6'
18	119°39.2'	S 7°13.8'	201°51.4'	S 22°40.9'	174°01.3'	S 21°31.7'	42°53.9'	N 22°03.9'
19	134°38.8'	S 7°12.8'	216°53.9'	S 22°40.9'	189°03.7'	S 21°31.6'	57°54.6'	N 22°04.2'
20	149°38.5'	S 7°11.7'	231°56.3'	S 22°40.9'	204°06.1'	S 21°31.6'	72°55.3'	N 22°04.5'
21	164°38.1'	S 7°10.6'	246°58.7'	S 22°40.9'	219°08.4'	S 21°31.6'	87°56.0'	N 22°04.8'
22	179°37.7'	S 7°09.5'	262°01.2'	S 22°40.9'	234°10.8'	S 21°31.6'	102°56.8'	N 22°05.1'
23	194°37.3'	S 7°08.4'	277°03.6'	S 22°40.9'	249°13.2'	S 21°31.6'	117°57.5'	N 22°05.5'

Mon Apr 8, 2019 UTC

UTC	Venus -3.8 v = -0.4' d = 1.1'		Jupiter -2.1 v = 2.4' d = 0.0'		Saturn +0.6 v = 2.4' d = 0.0'		Mars +1.5 v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°37.0'	S 7°07.3'	292°06.1'	S 22°40.9'	264°15.5'	S 21°31.6'	132°58.2'	N 22°05.8'
1	224°36.6'	S 7°06.2'	307°08.5'	S 22°40.9'	279°17.9'	S 21°31.6'	147°58.9'	N 22°06.1'
2	239°36.2'	S 7°05.2'	322°11.0'	S 22°40.9'	294°20.3'	S 21°31.6'	162°59.6'	N 22°06.4'
3	254°35.8'	S 7°04.1'	337°13.4'	S 22°40.9'	309°22.6'	S 21°31.5'	178°00.3'	N 22°06.7'
4	269°35.5'	S 7°03.0'	352°15.8'	S 22°40.9'	324°25.0'	S 21°31.5'	193°01.1'	N 22°07.0'
5	284°35.1'	S 7°01.9'	7°18.3'	S 22°40.9'	339°27.4'	S 21°31.5'	208°01.8'	N 22°07.3'
6	299°34.7'	S 7°00.8'	22°20.7'	S 22°40.9'	354°29.7'	S 21°31.5'	223°02.5'	N 22°07.6'
7	314°34.4'	S 6°59.7'	37°23.2'	S 22°40.9'	9°32.1'	S 21°31.5'	238°03.2'	N 22°08.0'
8	329°34.0'	S 6°58.6'	52°25.6'	S 22°40.9'	24°34.5'	S 21°31.5'	253°03.9'	N 22°08.3'
9	344°33.6'	S 6°57.5'	67°28.1'	S 22°40.9'	39°36.9'	S 21°31.5'	268°04.6'	N 22°08.6'
10	359°33.2'	S 6°56.4'	82°30.5'	S 22°40.9'	54°39.2'	S 21°31.5'	283°05.4'	N 22°08.9'
11	14°32.9'	S 6°55.4'	97°32.9'	S 22°40.9'	69°41.6'	S 21°31.5'	298°06.1'	N 22°09.2'
12	29°32.5'	S 6°54.3'	112°35.4'	S 22°40.9'	84°44.0'	S 21°31.4'	313°06.8'	N 22°09.5'
13	44°32.1'	S 6°53.2'	127°37.8'	S 22°40.9'	99°46.3'	S 21°31.4'	328°07.5'	N 22°09.8'
14	59°31.7'	S 6°52.1'	142°40.3'	S 22°40.9'	114°48.7'	S 21°31.4'	343°08.2'	N 22°10.1'
15	74°31.4'	S 6°51.0'	157°42.7'	S 22°40.9'	129°51.1'	S 21°31.4'	358°08.9'	N 22°10.4'
16	89°31.0'	S 6°49.9'	172°45.2'	S 22°40.9'	144°53.5'	S 21°31.4'	13°09.6'	N 22°10.7'
17	104°30.6'	S 6°48.8'	187°47.6'	S 22°40.9'	159°55.8'	S 21°31.4'	28°10.4'	N 22°11.0'
18	119°30.3'	S 6°47.7'	202°50.1'	S 22°40.9'	174°58.2'	S 21°31.4'	43°11.1'	N 22°11.3'
19	134°29.9'	S 6°46.6'	217°52.5'	S 22°40.9'	190°00.6'	S 21°31.4'	58°11.8'	N 22°11.7'
20	149°29.5'	S 6°45.5'	232°55.0'	S 22°40.9'	205°02.9'	S 21°31.4'	73°12.5'	N 22°12.0'
21	164°29.1'	S 6°44.4'	247°57.4'	S 22°40.9'	220°05.3'	S 21°31.3'	88°13.2'	N 22°12.3'
22	179°28.8'	S 6°43.3'	262°59.9'	S 22°40.9'	235°07.7'	S 21°31.3'	103°13.9'	N 22°12.6'
23	194°28.4'	S 6°42.3'	278°02.3'	S 22°40.9'	250°10.1'	S 21°31.3'	118°14.7'	N 22°12.9'

Tue Apr 9, 2019 UTC

UTC	Venus -3.8 v = -0.4' d = 1.1'		Jupiter -2.2 v = 2.5' d = 0.0'		Saturn +0.6 v = 2.4' d = 0.0'		Mars +1.5 v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°28.0'	S 6°41.2'	293°04.8'	S 22°40.9'	265°12.4'	S 21°31.3'	133°15.4'	N 22°13.2'
1	224°27.7'	S 6°40.1'	308°07.2'	S 22°40.9'	280°14.8'	S 21°31.3'	148°16.1'	N 22°13.5'
2	239°27.3'	S 6°39.0'	323°09.7'	S 22°40.9'	295°17.2'	S 21°31.3'	163°16.8'	N 22°13.8'
3	254°26.9'	S 6°37.9'	338°12.1'	S 22°40.9'	310°19.6'	S 21°31.3'	178°17.5'	N 22°14.1'
4	269°26.6'	S 6°36.8'	353°14.6'	S 22°40.9'	325°21.9'	S 21°31.3'	193°18.2'	N 22°14.4'
5	284°26.2'	S 6°35.7'	8°17.0'	S 22°40.9'	340°24.3'	S 21°31.3'	208°18.9'	N 22°14.7'
6	299°25.8'	S 6°34.6'	23°19.5'	S 22°40.9'	355°26.7'	S 21°31.2'	223°19.7'	N 22°15.0'
7	314°25.5'	S 6°33.5'	38°21.9'	S 22°40.9'	10°29.1'	S 21°31.2'	238°20.4'	N 22°15.3'
8	329°25.1'	S 6°32.4'	53°24.4'	S 22°40.9'	25°31.4'	S 21°31.2'	253°21.1'	N 22°15.6'
9	344°24.7'	S 6°31.3'	68°26.8'	S 22°40.9'	40°33.8'	S 21°31.2'	268°21.8'	N 22°15.9'
10	359°24.4'	S 6°30.2'	83°29.3'	S 22°40.9'	55°36.2'	S 21°31.2'	283°22.5'	N 22°16.2'
11	14°24.0'	S 6°29.1'	98°31.7'	S 22°40.9'	70°38.6'	S 21°31.2'	298°23.2'	N 22°16.5'
12	29°23.6'	S 6°28.0'	113°34.2'	S 22°40.9'	85°40.9'	S 21°31.2'	313°23.9'	N 22°16.8'
13	44°23.2'	S 6°26.9'	128°36.6'	S 22°40.9'	100°43.3'	S 21°31.2'	328°24.7'	N 22°17.1'
14	59°22.9'	S 6°25.8'	143°39.1'	S 22°40.9'	115°45.7'	S 21°31.2'	343°25.4'	N 22°17.4'
15	74°22.5'	S 6°24.7'	158°41.5'	S 22°40.9'	130°48.1'	S 21°31.1'	358°26.1'	N 22°17.7'
16	89°22.2'	S 6°23.6'	173°44.0'	S 22°40.9'	145°50.4'	S 21°31.1'	13°26.8'	N 22°18.0'
17	104°21.8'	S 6°22.5'	188°46.5'	S 22°40.9'	160°52.8'	S 21°31.1'	28°27.5'	N 22°18.3'
18	119°21.4'	S 6°21.4'	203°48.9'	S 22°40.9'	175°55.2'	S 21°31.1'	43°28.2'	N 22°18.6'
19	134°21.1'	S 6°20.3'	218°51.4'	S 22°40.9'	190°57.6'	S 21°31.1'	58°28.9'	N 22°18.9'
20	149°20.7'	S 6°19.2'	233°53.8'	S 22°40.9'	205°59.9'	S 21°31.1'	73°29.7'	N 22°19.2'
21	164°20.3'	S 6°18.1'	248°56.3'	S 22°40.9'	221°02.3'	S 21°31.1'	88°30.4'	N 22°19.5'
22	179°20.0'	S 6°17.0'	263°58.7'	S 22°40.9'	236°04.7'	S 21°31.1'	103°31.1'	N 22°19.8'
23	194°19.6'	S 6°15.9'	279°01.2'	S 22°40.9'	251°07.1'	S 21°31.1'	118°31.8'	N 22°20.1'

Wed Apr 10, 2019 UTC

UTC	Venus -3.8 v = -0.4' d = 1.1'		Jupiter -2.2 v = 2.5' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.5 v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°19.2'	S 6°14.8'	294°03.7'	S 22°40.9'	266°09.5'	S 21°31.1'	133°32.5'	N 22°20.4'
1	224°18.9'	S 6°13.7'	309°06.1'	S 22°40.9'	281°11.8'	S 21°31.0'	148°33.2'	N 22°20.7'
2	239°18.5'	S 6°12.6'	324°08.6'	S 22°40.9'	296°14.2'	S 21°31.0'	163°33.9'	N 22°21.0'
3	254°18.1'	S 6°11.5'	339°11.0'	S 22°40.9'	311°16.6'	S 21°31.0'	178°34.6'	N 22°21.3'
4	269°17.8'	S 6°10.4'	354°13.5'	S 22°40.9'	326°19.0'	S 21°31.0'	193°35.4'	N 22°21.6'
5	284°17.4'	S 6°09.3'	9°15.9'	S 22°40.9'	341°21.3'	S 21°31.0'	208°36.1'	N 22°21.9'
6	299°17.0'	S 6°08.2'	24°18.4'	S 22°40.9'	356°23.7'	S 21°31.0'	223°36.8'	N 22°22.2'
7	314°16.7'	S 6°07.1'	39°20.9'	S 22°40.9'	11°26.1'	S 21°31.0'	238°37.5'	N 22°22.5'
8	329°16.3'	S 6°06.0'	54°23.3'	S 22°40.9'	26°28.5'	S 21°31.0'	253°38.2'	N 22°22.8'
9	344°16.0'	S 6°04.9'	69°25.8'	S 22°40.9'	41°30.9'	S 21°31.0'	268°38.9'	N 22°23.1'
10	359°15.6'	S 6°03.8'	84°28.3'	S 22°40.9'	56°33.2'	S 21°30.9'	283°39.6'	N 22°23.4'
11	14°15.2'	S 6°02.6'	99°30.7'	S 22°40.9'	71°35.6'	S 21°30.9'	298°40.3'	N 22°23.7'
12	29°14.9'	S 6°01.5'	114°33.2'	S 22°40.9'	86°38.0'	S 21°30.9'	313°41.1'	N 22°23.9'
13	44°14.5'	S 6°00.4'	129°35.6'	S 22°40.9'	101°40.4'	S 21°30.9'	328°41.8'	N 22°24.2'
14	59°14.1'	S 5°59.3'	144°38.1'	S 22°40.9'	116°42.8'	S 21°30.9'	343°42.5'	N 22°24.5'
15	74°13.8'	S 5°58.2'	159°40.6'	S 22°40.9'	131°45.1'	S 21°30.9'	358°43.2'	N 22°24.8'
16	89°13.4'	S 5°57.1'	174°43.0'	S 22°40.9'	146°47.5'	S 21°30.9'	13°43.9'	N 22°25.1'
17	104°13.1'	S 5°56.0'	189°45.5'	S 22°40.9'	161°49.9'	S 21°30.9'	28°44.6'	N 22°25.4'
18	119°12.7'	S 5°54.9'	204°48.0'	S 22°40.9'	176°52.3'	S 21°30.9'	43°45.3'	N 22°25.7'
19	134°12.3'	S 5°53.8'	219°50.4'	S 22°40.9'	191°54.7'	S 21°30.9'	58°46.0'	N 22°26.0'
20	149°12.0'	S 5°52.7'	234°52.9'	S 22°40.9'	206°57.0'	S 21°30.8'	73°46.8'	N 22°26.3'
21	164°11.6'	S 5°51.6'	249°55.3'	S 22°40.9'	221°59.4'	S 21°30.8'	88°47.5'	N 22°26.6'
22	179°11.3'	S 5°50.5'	264°57.8'	S 22°40.9'	237°01.8'	S 21°30.8'	103°48.2'	N 22°26.9'
23	194°10.9'	S 5°49.4'	280°00.3'	S 22°40.9'	252°04.2'	S 21°30.8'	118°48.9'	N 22°27.2'

Thu Apr 11, 2019 UTC

UTC	Venus -3.8		Jupiter -2.2		Saturn +0.5		Mars +1.5	
	v = -0.4' d = 1.1'		v = 2.5' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°10.5'	S 5°48.2'	295°02.7'	S 22°40.9'	267°06.6'	S 21°30.8'	133°49.6'	N 22°27.4'
1	224°10.2'	S 5°47.1'	310°05.2'	S 22°40.9'	282°08.9'	S 21°30.8'	148°50.3'	N 22°27.7'
2	239°09.8'	S 5°46.0'	325°07.7'	S 22°40.9'	297°11.3'	S 21°30.8'	163°51.0'	N 22°28.0'
3	254°09.5'	S 5°44.9'	340°10.1'	S 22°40.9'	312°13.7'	S 21°30.8'	178°51.7'	N 22°28.3'
4	269°09.1'	S 5°43.8'	355°12.6'	S 22°40.9'	327°16.1'	S 21°30.8'	193°52.4'	N 22°28.6'
5	284°08.7'	S 5°42.7'	10°15.1'	S 22°40.9'	342°18.5'	S 21°30.8'	208°53.1'	N 22°28.9'
6	299°08.4'	S 5°41.6'	25°17.6'	S 22°40.9'	357°20.9'	S 21°30.7'	223°53.9'	N 22°29.2'
7	314°08.0'	S 5°40.5'	40°20.0'	S 22°40.9'	12°23.2'	S 21°30.7'	238°54.6'	N 22°29.5'
8	329°07.7'	S 5°39.3'	55°22.5'	S 22°40.9'	27°25.6'	S 21°30.7'	253°55.3'	N 22°29.7'
9	344°07.3'	S 5°38.2'	70°25.0'	S 22°40.9'	42°28.0'	S 21°30.7'	268°56.0'	N 22°30.0'
10	359°06.9'	S 5°37.1'	85°27.4'	S 22°40.9'	57°30.4'	S 21°30.7'	283°56.7'	N 22°30.3'
11	14°06.6'	S 5°36.0'	100°29.9'	S 22°40.9'	72°32.8'	S 21°30.7'	298°57.4'	N 22°30.6'
12	29°06.2'	S 5°34.9'	115°32.4'	S 22°40.9'	87°35.2'	S 21°30.7'	313°58.1'	N 22°30.9'
13	44°05.9'	S 5°33.8'	130°34.8'	S 22°40.9'	102°37.5'	S 21°30.7'	328°58.8'	N 22°31.2'
14	59°05.5'	S 5°32.7'	145°37.3'	S 22°40.9'	117°39.9'	S 21°30.7'	343°59.5'	N 22°31.5'
15	74°05.2'	S 5°31.6'	160°39.8'	S 22°40.9'	132°42.3'	S 21°30.7'	359°00.3'	N 22°31.8'
16	89°04.8'	S 5°30.4'	175°42.3'	S 22°40.9'	147°44.7'	S 21°30.7'	14°01.0'	N 22°32.0'
17	104°04.4'	S 5°29.3'	190°44.7'	S 22°40.9'	162°47.1'	S 21°30.6'	29°01.7'	N 22°32.3'
18	119°04.1'	S 5°28.2'	205°47.2'	S 22°40.9'	177°49.5'	S 21°30.6'	44°02.4'	N 22°32.6'
19	134°03.7'	S 5°27.1'	220°49.7'	S 22°40.9'	192°51.9'	S 21°30.6'	59°03.1'	N 22°32.9'
20	149°03.4'	S 5°26.0'	235°52.2'	S 22°40.9'	207°54.2'	S 21°30.6'	74°03.8'	N 22°33.2'
21	164°03.0'	S 5°24.9'	250°54.6'	S 22°40.9'	222°56.6'	S 21°30.6'	89°04.5'	N 22°33.5'
22	179°02.7'	S 5°23.7'	265°57.1'	S 22°40.9'	237°59.0'	S 21°30.6'	104°05.2'	N 22°33.7'
23	194°02.3'	S 5°22.6'	280°59.6'	S 22°40.9'	253°01.4'	S 21°30.6'	119°05.9'	N 22°34.0'

Fri Apr 12, 2019 UTC

UTC	Venus -3.8		Jupiter -2.2		Saturn +0.5		Mars +1.5	
	v = -0.4' d = 1.1'		v = 2.5' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	209°02.0'	S 5°21.5'	296°02.0'	S 22°40.9'	268°03.8'	S 21°30.6'	134°06.6'	N 22°34.3'
1	224°01.6'	S 5°20.4'	311°04.5'	S 22°40.9'	283°06.2'	S 21°30.6'	149°07.3'	N 22°34.6'
2	239°01.2'	S 5°19.3'	326°07.0'	S 22°40.9'	298°08.6'	S 21°30.6'	164°08.1'	N 22°34.9'
3	254°00.9'	S 5°18.2'	341°09.5'	S 22°40.9'	313°10.9'	S 21°30.5'	179°08.8'	N 22°35.1'
4	269°00.5'	S 5°17.0'	356°12.0'	S 22°40.9'	328°13.3'	S 21°30.5'	194°09.5'	N 22°35.4'
5	284°00.2'	S 5°15.9'	11°14.4'	S 22°40.9'	343°15.7'	S 21°30.5'	209°10.2'	N 22°35.7'
6	298°59.8'	S 5°14.8'	26°16.9'	S 22°40.9'	358°18.1'	S 21°30.5'	224°10.9'	N 22°36.0'
7	313°59.5'	S 5°13.7'	41°19.4'	S 22°40.9'	13°20.5'	S 21°30.5'	239°11.6'	N 22°36.3'
8	328°59.1'	S 5°12.6'	56°21.9'	S 22°40.9'	28°22.9'	S 21°30.5'	254°12.3'	N 22°36.5'
9	343°58.8'	S 5°11.4'	71°24.3'	S 22°40.9'	43°25.3'	S 21°30.5'	269°13.0'	N 22°36.8'
10	358°58.4'	S 5°10.3'	86°26.8'	S 22°40.9'	58°27.6'	S 21°30.5'	284°13.7'	N 22°37.1'
11	13°58.1'	S 5°09.2'	101°29.3'	S 22°40.9'	73°30.0'	S 21°30.5'	299°14.4'	N 22°37.4'
12	28°57.7'	S 5°08.1'	116°31.8'	S 22°40.9'	88°32.4'	S 21°30.5'	314°15.1'	N 22°37.7'
13	43°57.4'	S 5°07.0'	131°34.3'	S 22°40.9'	103°34.8'	S 21°30.5'	329°15.9'	N 22°37.9'
14	58°57.0'	S 5°05.8'	146°36.7'	S 22°40.9'	118°37.2'	S 21°30.4'	344°16.6'	N 22°38.2'
15	73°56.6'	S 5°04.7'	161°39.2'	S 22°40.9'	133°39.6'	S 21°30.4'	359°17.3'	N 22°38.5'
16	88°56.3'	S 5°03.6'	176°41.7'	S 22°40.9'	148°42.0'	S 21°30.4'	14°18.0'	N 22°38.8'
17	103°55.9'	S 5°02.5'	191°44.2'	S 22°40.9'	163°44.4'	S 21°30.4'	29°18.7'	N 22°39.0'
18	118°55.6'	S 5°01.4'	206°46.7'	S 22°40.9'	178°46.8'	S 21°30.4'	44°19.4'	N 22°39.3'
19	133°55.2'	S 5°00.2'	221°49.1'	S 22°40.9'	193°49.1'	S 21°30.4'	59°20.1'	N 22°39.6'
20	148°54.9'	S 4°59.1'	236°51.6'	S 22°40.9'	208°51.5'	S 21°30.4'	74°20.8'	N 22°39.9'
21	163°54.5'	S 4°58.0'	251°54.1'	S 22°40.9'	223°53.9'	S 21°30.4'	89°21.5'	N 22°40.1'
22	178°54.2'	S 4°56.9'	266°56.6'	S 22°40.9'	238°56.3'	S 21°30.4'	104°22.2'	N 22°40.4'
23	193°53.8'	S 4°55.7'	281°59.1'	S 22°40.9'	253°58.7'	S 21°30.4'	119°22.9'	N 22°40.7'

Sat Apr 13, 2019 UTC

UTC	Venus -3.8		Jupiter -2.2		Saturn +0.5		Mars +1.5	
	v = -0.3' d = 1.1'		v = 2.5' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°53.5'	S 4°54.6'	297°01.6'	S 22°40.9'	269°01.1'	S 21°30.4'	134°23.6'	N 22°41.0'
1	223°53.1'	S 4°53.5'	312°04.0'	S 22°40.9'	284°03.5'	S 21°30.4'	149°24.3'	N 22°41.2'
2	238°52.8'	S 4°52.4'	327°06.5'	S 22°40.9'	299°05.9'	S 21°30.3'	164°25.1'	N 22°41.5'
3	253°52.4'	S 4°51.2'	342°09.0'	S 22°40.9'	314°08.3'	S 21°30.3'	179°25.8'	N 22°41.8'
4	268°52.1'	S 4°50.1'	357°11.5'	S 22°40.9'	329°10.7'	S 21°30.3'	194°26.5'	N 22°42.1'
5	283°51.7'	S 4°49.0'	12°14.0'	S 22°40.9'	344°13.1'	S 21°30.3'	209°27.2'	N 22°42.3'
6	298°51.4'	S 4°47.9'	27°16.5'	S 22°40.9'	359°15.4'	S 21°30.3'	224°27.9'	N 22°42.6'
7	313°51.0'	S 4°46.7'	42°18.9'	S 22°40.9'	14°17.8'	S 21°30.3'	239°28.6'	N 22°42.9'
8	328°50.7'	S 4°45.6'	57°21.4'	S 22°40.9'	29°20.2'	S 21°30.3'	254°29.3'	N 22°43.2'
9	343°50.3'	S 4°44.5'	72°23.9'	S 22°40.9'	44°22.6'	S 21°30.3'	269°30.0'	N 22°43.4'
10	358°50.0'	S 4°43.4'	87°26.4'	S 22°40.9'	59°25.0'	S 21°30.3'	284°30.7'	N 22°43.7'
11	13°49.6'	S 4°42.2'	102°28.9'	S 22°40.9'	74°27.4'	S 21°30.3'	299°31.4'	N 22°44.0'
12	28°49.3'	S 4°41.1'	117°31.4'	S 22°40.9'	89°29.8'	S 21°30.3'	314°32.1'	N 22°44.2'
13	43°48.9'	S 4°40.0'	132°33.9'	S 22°40.9'	104°32.2'	S 21°30.3'	329°32.8'	N 22°44.5'
14	58°48.6'	S 4°38.9'	147°36.4'	S 22°40.9'	119°34.6'	S 21°30.2'	344°33.5'	N 22°44.8'
15	73°48.2'	S 4°37.7'	162°38.8'	S 22°40.9'	134°37.0'	S 21°30.2'	359°34.2'	N 22°45.0'
16	88°47.9'	S 4°36.6'	177°41.3'	S 22°40.9'	149°39.4'	S 21°30.2'	14°34.9'	N 22°45.3'
17	103°47.5'	S 4°35.5'	192°43.8'	S 22°40.9'	164°41.8'	S 21°30.2'	29°35.7'	N 22°45.6'
18	118°47.2'	S 4°34.3'	207°46.3'	S 22°40.9'	179°44.2'	S 21°30.2'	44°36.4'	N 22°45.9'
19	133°46.8'	S 4°33.2'	222°48.8'	S 22°40.9'	194°46.5'	S 21°30.2'	59°37.1'	N 22°46.1'
20	148°46.5'	S 4°32.1'	237°51.3'	S 22°40.8'	209°48.9'	S 21°30.2'	74°37.8'	N 22°46.4'
21	163°46.1'	S 4°31.0'	252°53.8'	S 22°40.8'	224°51.3'	S 21°30.2'	89°38.5'	N 22°46.7'
22	178°45.8'	S 4°29.8'	267°56.3'	S 22°40.8'	239°53.7'	S 21°30.2'	104°39.2'	N 22°46.9'
23	193°45.4'	S 4°28.7'	282°58.8'	S 22°40.8'	254°56.1'	S 21°30.2'	119°39.9'	N 22°47.2'

Sun Apr 14, 2019 UTC

UTC	Venus -3.8		Jupiter -2.2		Saturn +0.5		Mars +1.5	
	v = -0.3' d = 1.1'		v = 2.5' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°45.1'	S 4°27.6'	298°01.3'	S 22°40.8'	269°58.5'	S 21°30.2'	134°40.6'	N 22°47.5'
1	223°44.8'	S 4°26.4'	313°03.8'	S 22°40.8'	285°00.9'	S 21°30.2'	149°41.3'	N 22°47.7'
2	238°44.4'	S 4°25.3'	328°06.2'	S 22°40.8'	300°03.3'	S 21°30.1'	164°42.0'	N 22°48.0'
3	253°44.1'	S 4°24.2'	343°08.7'	S 22°40.8'	315°05.7'	S 21°30.1'	179°42.7'	N 22°48.3'
4	268°43.7'	S 4°23.0'	358°11.2'	S 22°40.8'	330°08.1'	S 21°30.1'	194°43.4'	N 22°48.5'
5	283°43.4'	S 4°21.9'	13°13.7'	S 22°40.8'	345°10.5'	S 21°30.1'	209°44.1'	N 22°48.8'
6	298°43.0'	S 4°20.8'	28°16.2'	S 22°40.8'	0°12.9'	S 21°30.1'	224°44.8'	N 22°49.1'
7	313°42.7'	S 4°19.7'	43°18.7'	S 22°40.8'	15°15.3'	S 21°30.1'	239°45.5'	N 22°49.3'
8	328°42.3'	S 4°18.5'	58°21.2'	S 22°40.8'	30°17.7'	S 21°30.1'	254°46.2'	N 22°49.6'
9	343°42.0'	S 4°17.4'	73°23.7'	S 22°40.8'	45°20.1'	S 21°30.1'	269°46.9'	N 22°49.8'
10	358°41.6'	S 4°16.3'	88°26.2'	S 22°40.8'	60°22.5'	S 21°30.1'	284°47.6'	N 22°50.1'
11	13°41.3'	S 4°15.1'	103°28.7'	S 22°40.8'	75°24.9'	S 21°30.1'	299°48.4'	N 22°50.4'
12	28°40.9'	S 4°14.0'	118°31.2'	S 22°40.8'	90°27.3'	S 21°30.1'	314°49.1'	N 22°50.6'
13	43°40.6'	S 4°12.9'	133°33.7'	S 22°40.8'	105°29.7'	S 21°30.1'	329°49.8'	N 22°50.9'
14	58°40.3'	S 4°11.7'	148°36.2'	S 22°40.8'	120°32.1'	S 21°30.0'	344°50.5'	N 22°51.2'
15	73°39.9'	S 4°10.6'	163°38.7'	S 22°40.8'	135°34.5'	S 21°30.0'	359°51.2'	N 22°51.4'
16	88°39.6'	S 4°09.5'	178°41.2'	S 22°40.8'	150°36.9'	S 21°30.0'	14°51.9'	N 22°51.7'
17	103°39.2'	S 4°08.3'	193°43.7'	S 22°40.8'	165°39.2'	S 21°30.0'	29°52.6'	N 22°51.9'
18	118°38.9'	S 4°07.2'	208°46.2'	S 22°40.8'	180°41.6'	S 21°30.0'	44°53.3'	N 22°52.2'
19	133°38.5'	S 4°06.1'	223°48.7'	S 22°40.8'	195°44.0'	S 21°30.0'	59°54.0'	N 22°52.5'
20	148°38.2'	S 4°04.9'	238°51.2'	S 22°40.8'	210°46.4'	S 21°30.0'	74°54.7'	N 22°52.7'
21	163°37.8'	S 4°03.8'	253°53.7'	S 22°40.8'	225°48.8'	S 21°30.0'	89°55.4'	N 22°53.0'
22	178°37.5'	S 4°02.7'	268°56.2'	S 22°40.8'	240°51.2'	S 21°30.0'	104°56.1'	N 22°53.2'
23	193°37.2'	S 4°01.5'	283°58.7'	S 22°40.8'	255°53.6'	S 21°30.0'	119°56.8'	N 22°53.5'

Mon Apr 15, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.1'		Jupiter -2.2 v = 2.5' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.5 v = 0.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°36.8'	S 4°00.4'	299°01.2'	S 22°40.8'	270°56.0'	S 21°30.0'	134°57.5'	N 22°53.8'
1	223°36.5'	S 3°59.2'	314°03.7'	S 22°40.8'	285°58.4'	S 21°30.0'	149°58.2'	N 22°54.0'
2	238°36.1'	S 3°58.1'	329°06.2'	S 22°40.8'	301°00.8'	S 21°30.0'	164°58.9'	N 22°54.3'
3	253°35.8'	S 3°57.0'	344°08.7'	S 22°40.8'	316°03.2'	S 21°30.0'	179°59.6'	N 22°54.5'
4	268°35.4'	S 3°55.8'	359°11.2'	S 22°40.8'	331°05.6'	S 21°29.9'	195°00.3'	N 22°54.8'
5	283°35.1'	S 3°54.7'	14°13.7'	S 22°40.8'	346°08.0'	S 21°29.9'	210°01.0'	N 22°55.0'
6	298°34.7'	S 3°53.6'	29°16.2'	S 22°40.8'	1°10.4'	S 21°29.9'	225°01.7'	N 22°55.3'
7	313°34.4'	S 3°52.4'	44°18.7'	S 22°40.8'	16°12.8'	S 21°29.9'	240°02.4'	N 22°55.6'
8	328°34.1'	S 3°51.3'	59°21.2'	S 22°40.8'	31°15.2'	S 21°29.9'	255°03.1'	N 22°55.8'
9	343°33.7'	S 3°50.1'	74°23.7'	S 22°40.8'	46°17.6'	S 21°29.9'	270°03.8'	N 22°56.1'
10	358°33.4'	S 3°49.0'	89°26.2'	S 22°40.8'	61°20.0'	S 21°29.9'	285°04.6'	N 22°56.3'
11	13°33.0'	S 3°47.9'	104°28.7'	S 22°40.8'	76°22.4'	S 21°29.9'	300°05.3'	N 22°56.6'
12	28°32.7'	S 3°46.7'	119°31.2'	S 22°40.8'	91°24.8'	S 21°29.9'	315°06.0'	N 22°56.8'
13	43°32.3'	S 3°45.6'	134°33.7'	S 22°40.8'	106°27.2'	S 21°29.9'	330°06.7'	N 22°57.1'
14	58°32.0'	S 3°44.5'	149°36.2'	S 22°40.8'	121°29.6'	S 21°29.9'	345°07.4'	N 22°57.3'
15	73°31.7'	S 3°43.3'	164°38.7'	S 22°40.8'	136°32.0'	S 21°29.9'	0°08.1'	N 22°57.6'
16	88°31.3'	S 3°42.2'	179°41.2'	S 22°40.8'	151°34.4'	S 21°29.9'	15°08.8'	N 22°57.9'
17	103°31.0'	S 3°41.0'	194°43.7'	S 22°40.8'	166°36.8'	S 21°29.8'	30°09.5'	N 22°58.1'
18	118°30.6'	S 3°39.9'	209°46.2'	S 22°40.8'	181°39.2'	S 21°29.8'	45°10.2'	N 22°58.4'
19	133°30.3'	S 3°38.8'	224°48.7'	S 22°40.8'	196°41.6'	S 21°29.8'	60°10.9'	N 22°58.6'
20	148°30.0'	S 3°37.6'	239°51.2'	S 22°40.8'	211°44.0'	S 21°29.8'	75°11.6'	N 22°58.9'
21	163°29.6'	S 3°36.5'	254°53.8'	S 22°40.8'	226°46.5'	S 21°29.8'	90°12.3'	N 22°59.1'
22	178°29.3'	S 3°35.3'	269°56.3'	S 22°40.8'	241°48.9'	S 21°29.8'	105°13.0'	N 22°59.4'
23	193°28.9'	S 3°34.2'	284°58.8'	S 22°40.8'	256°51.3'	S 21°29.8'	120°13.7'	N 22°59.6'

Tue Apr 16, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.1'		Jupiter -2.2 v = 2.5' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°28.6'	S 3°33.1'	300°01.3'	S 22°40.8'	271°53.7'	S 21°29.8'	135°14.4'	N 22°59.9'
1	223°28.3'	S 3°31.9'	315°03.8'	S 22°40.8'	286°56.1'	S 21°29.8'	150°15.1'	N 23°00.1'
2	238°27.9'	S 3°30.8'	330°06.3'	S 22°40.8'	301°58.5'	S 21°29.8'	165°15.8'	N 23°00.4'
3	253°27.6'	S 3°29.6'	345°08.8'	S 22°40.8'	317°00.9'	S 21°29.8'	180°16.5'	N 23°00.6'
4	268°27.2'	S 3°28.5'	0°11.3'	S 22°40.8'	332°03.3'	S 21°29.8'	195°17.2'	N 23°00.9'
5	283°26.9'	S 3°27.4'	15°13.8'	S 22°40.8'	347°05.7'	S 21°29.8'	210°17.9'	N 23°01.1'
6	298°26.5'	S 3°26.2'	30°16.3'	S 22°40.8'	2°08.1'	S 21°29.8'	225°18.6'	N 23°01.4'
7	313°26.2'	S 3°25.1'	45°18.9'	S 22°40.8'	17°10.5'	S 21°29.8'	240°19.3'	N 23°01.6'
8	328°25.9'	S 3°23.9'	60°21.4'	S 22°40.8'	32°12.9'	S 21°29.7'	255°20.0'	N 23°01.9'
9	343°25.5'	S 3°22.8'	75°23.9'	S 22°40.8'	47°15.3'	S 21°29.7'	270°20.7'	N 23°02.1'
10	358°25.2'	S 3°21.6'	90°26.4'	S 22°40.8'	62°17.7'	S 21°29.7'	285°21.4'	N 23°02.4'
11	13°24.8'	S 3°20.5'	105°28.9'	S 22°40.8'	77°20.1'	S 21°29.7'	300°22.1'	N 23°02.6'
12	28°24.5'	S 3°19.4'	120°31.4'	S 22°40.8'	92°22.5'	S 21°29.7'	315°22.8'	N 23°02.9'
13	43°24.2'	S 3°18.2'	135°33.9'	S 22°40.8'	107°24.9'	S 21°29.7'	330°23.5'	N 23°03.1'
14	58°23.8'	S 3°17.1'	150°36.4'	S 22°40.7'	122°27.3'	S 21°29.7'	345°24.2'	N 23°03.4'
15	73°23.5'	S 3°15.9'	165°39.0'	S 22°40.7'	137°29.7'	S 21°29.7'	0°24.9'	N 23°03.6'
16	88°23.2'	S 3°14.8'	180°41.5'	S 22°40.7'	152°32.1'	S 21°29.7'	15°25.6'	N 23°03.8'
17	103°22.8'	S 3°13.6'	195°44.0'	S 22°40.7'	167°34.5'	S 21°29.7'	30°26.3'	N 23°04.1'
18	118°22.5'	S 3°12.5'	210°46.5'	S 22°40.7'	182°36.9'	S 21°29.7'	45°27.0'	N 23°04.3'
19	133°22.1'	S 3°11.3'	225°49.0'	S 22°40.7'	197°39.4'	S 21°29.7'	60°27.7'	N 23°04.6'
20	148°21.8'	S 3°10.2'	240°51.5'	S 22°40.7'	212°41.8'	S 21°29.7'	75°28.4'	N 23°04.8'
21	163°21.5'	S 3°09.1'	255°54.0'	S 22°40.7'	227°44.2'	S 21°29.7'	90°29.1'	N 23°05.1'
22	178°21.1'	S 3°07.9'	270°56.6'	S 22°40.7'	242°46.6'	S 21°29.7'	105°29.8'	N 23°05.3'
23	193°20.8'	S 3°06.8'	285°59.1'	S 22°40.7'	257°49.0'	S 21°29.6'	120°30.5'	N 23°05.6'

Wed Apr 17, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.1'		Jupiter -2.2 v = 2.5' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°20.4'	S 3°05.6'	301°01.6'	S 22°40.7'	272°51.4'	S 21°29.6'	135°31.2'	N 23°05.8'
1	223°20.1'	S 3°04.5'	316°04.1'	S 22°40.7'	287°53.8'	S 21°29.6'	150°31.9'	N 23°06.0'
2	238°19.8'	S 3°03.3'	331°06.6'	S 22°40.7'	302°56.2'	S 21°29.6'	165°32.6'	N 23°06.3'
3	253°19.4'	S 3°02.2'	346°09.1'	S 22°40.7'	317°58.6'	S 21°29.6'	180°33.3'	N 23°06.5'
4	268°19.1'	S 3°01.0'	1°11.7'	S 22°40.7'	333°01.0'	S 21°29.6'	195°34.0'	N 23°06.8'
5	283°18.8'	S 2°59.9'	16°14.2'	S 22°40.7'	348°03.4'	S 21°29.6'	210°34.7'	N 23°07.0'
6	298°18.4'	S 2°58.7'	31°16.7'	S 22°40.7'	3°05.8'	S 21°29.6'	225°35.4'	N 23°07.2'
7	313°18.1'	S 2°57.6'	46°19.2'	S 22°40.7'	18°08.2'	S 21°29.6'	240°36.1'	N 23°07.5'
8	328°17.7'	S 2°56.4'	61°21.7'	S 22°40.7'	33°10.6'	S 21°29.6'	255°36.8'	N 23°07.7'
9	343°17.4'	S 2°55.3'	76°24.3'	S 22°40.7'	48°13.1'	S 21°29.6'	270°37.5'	N 23°08.0'
10	358°17.1'	S 2°54.1'	91°26.8'	S 22°40.7'	63°15.5'	S 21°29.6'	285°38.2'	N 23°08.2'
11	13°16.7'	S 2°53.0'	106°29.3'	S 22°40.7'	78°17.9'	S 21°29.6'	300°38.9'	N 23°08.4'
12	28°16.4'	S 2°51.9'	121°31.8'	S 22°40.7'	93°20.3'	S 21°29.6'	315°39.6'	N 23°08.7'
13	43°16.1'	S 2°50.7'	136°34.3'	S 22°40.7'	108°22.7'	S 21°29.6'	330°40.3'	N 23°08.9'
14	58°15.7'	S 2°49.6'	151°36.9'	S 22°40.7'	123°25.1'	S 21°29.6'	345°41.0'	N 23°09.2'
15	73°15.4'	S 2°48.4'	166°39.4'	S 22°40.7'	138°27.5'	S 21°29.5'	0°41.7'	N 23°09.4'
16	88°15.1'	S 2°47.3'	181°41.9'	S 22°40.7'	153°29.9'	S 21°29.5'	15°42.5'	N 23°09.6'
17	103°14.7'	S 2°46.1'	196°44.4'	S 22°40.7'	168°32.3'	S 21°29.5'	30°43.2'	N 23°09.9'
18	118°14.4'	S 2°45.0'	211°47.0'	S 22°40.7'	183°34.7'	S 21°29.5'	45°43.9'	N 23°10.1'
19	133°14.0'	S 2°43.8'	226°49.5'	S 22°40.7'	198°37.2'	S 21°29.5'	60°44.6'	N 23°10.4'
20	148°13.7'	S 2°42.7'	241°52.0'	S 22°40.7'	213°39.6'	S 21°29.5'	75°45.3'	N 23°10.6'
21	163°13.4'	S 2°41.5'	256°54.5'	S 22°40.7'	228°42.0'	S 21°29.5'	90°46.0'	N 23°10.8'
22	178°13.0'	S 2°40.4'	271°57.1'	S 22°40.7'	243°44.4'	S 21°29.5'	105°46.7'	N 23°11.1'
23	193°12.7'	S 2°39.2'	286°59.6'	S 22°40.7'	258°46.8'	S 21°29.5'	120°47.4'	N 23°11.3'

Thu Apr 18, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.2 v = 2.5' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°12.4'	S 2°38.1'	302°02.1'	S 22°40.7'	273°49.2'	S 21°29.5'	135°48.0'	N 23°11.5'
1	223°12.0'	S 2°36.9'	317°04.6'	S 22°40.7'	288°51.6'	S 21°29.5'	150°48.7'	N 23°11.8'
2	238°11.7'	S 2°35.8'	332°07.2'	S 22°40.7'	303°54.0'	S 21°29.5'	165°49.4'	N 23°12.0'
3	253°11.4'	S 2°34.6'	347°09.7'	S 22°40.7'	318°56.4'	S 21°29.5'	180°50.1'	N 23°12.2'
4	268°11.0'	S 2°33.5'	2°12.2'	S 22°40.7'	333°58.9'	S 21°29.5'	195°50.8'	N 23°12.5'
5	283°10.7'	S 2°32.3'	17°14.7'	S 22°40.7'	349°01.3'	S 21°29.5'	210°51.5'	N 23°12.7'
6	298°10.3'	S 2°31.2'	32°17.3'	S 22°40.7'	4°03.7'	S 21°29.5'	225°52.2'	N 23°12.9'
7	313°10.0'	S 2°30.0'	47°19.8'	S 22°40.7'	19°06.1'	S 21°29.5'	240°52.9'	N 23°13.2'
8	328°09.7'	S 2°28.9'	62°22.3'	S 22°40.7'	34°08.5'	S 21°29.5'	255°53.6'	N 23°13.4'
9	343°09.3'	S 2°27.7'	77°24.9'	S 22°40.7'	49°10.9'	S 21°29.4'	270°54.3'	N 23°13.6'
10	358°09.0'	S 2°26.6'	92°27.4'	S 22°40.7'	64°13.3'	S 21°29.4'	285°55.0'	N 23°13.9'
11	13°08.7'	S 2°25.4'	107°29.9'	S 22°40.7'	79°15.8'	S 21°29.4'	300°55.7'	N 23°14.1'
12	28°08.3'	S 2°24.2'	122°32.4'	S 22°40.6'	94°18.2'	S 21°29.4'	315°56.4'	N 23°14.3'
13	43°08.0'	S 2°23.1'	137°35.0'	S 22°40.6'	109°20.6'	S 21°29.4'	330°57.1'	N 23°14.6'
14	58°07.7'	S 2°21.9'	152°37.5'	S 22°40.6'	124°23.0'	S 21°29.4'	345°57.8'	N 23°14.8'
15	73°07.3'	S 2°20.8'	167°40.0'	S 22°40.6'	139°25.4'	S 21°29.4'	0°58.5'	N 23°15.0'
16	88°07.0'	S 2°19.6'	182°42.6'	S 22°40.6'	154°27.8'	S 21°29.4'	15°59.2'	N 23°15.2'
17	103°06.7'	S 2°18.5'	197°45.1'	S 22°40.6'	169°30.2'	S 21°29.4'	30°59.9'	N 23°15.5'
18	118°06.3'	S 2°17.3'	212°47.6'	S 22°40.6'	184°32.7'	S 21°29.4'	46°00.6'	N 23°15.7'
19	133°06.0'	S 2°16.2'	227°50.2'	S 22°40.6'	199°35.1'	S 21°29.4'	61°01.3'	N 23°15.9'
20	148°05.7'	S 2°15.0'	242°52.7'	S 22°40.6'	214°37.5'	S 21°29.4'	76°02.0'	N 23°16.2'
21	163°05.3'	S 2°13.9'	257°55.2'	S 22°40.6'	229°39.9'	S 21°29.4'	91°02.7'	N 23°16.4'
22	178°05.0'	S 2°12.7'	272°57.8'	S 22°40.6'	244°42.3'	S 21°29.4'	106°03.4'	N 23°16.6'
23	193°04.7'	S 2°11.6'	288°00.3'	S 22°40.6'	259°44.7'	S 21°29.4'	121°04.1'	N 23°16.8'

Fri Apr 19, 2019 UTC

UTC	Venus -3.8		Jupiter -2.2		Saturn +0.5		Mars +1.6	
	v = -0.3' d = 1.2'		v = 2.5' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	208°04.3'	S 2°10.4'	303°02.8'	S 22°40.6'	274°47.1'	S 21°29.4'	136°04.8'	N 23°17.1'
1	223°04.0'	S 2°09.3'	318°05.4'	S 22°40.6'	289°49.6'	S 21°29.4'	151°05.5'	N 23°17.3'
2	238°03.7'	S 2°08.1'	333°07.9'	S 22°40.6'	304°52.0'	S 21°29.4'	166°06.2'	N 23°17.5'
3	253°03.3'	S 2°06.9'	348°10.4'	S 22°40.6'	319°54.4'	S 21°29.4'	181°06.9'	N 23°17.8'
4	268°03.0'	S 2°05.8'	3°13.0'	S 22°40.6'	334°56.8'	S 21°29.3'	196°07.6'	N 23°18.0'
5	283°02.7'	S 2°04.6'	18°15.5'	S 22°40.6'	349°59.2'	S 21°29.3'	211°08.3'	N 23°18.2'
6	298°02.3'	S 2°03.5'	33°18.0'	S 22°40.6'	5°01.6'	S 21°29.3'	226°09.0'	N 23°18.4'
7	313°02.0'	S 2°02.3'	48°20.6'	S 22°40.6'	20°04.1'	S 21°29.3'	241°09.7'	N 23°18.7'
8	328°01.7'	S 2°01.2'	63°23.1'	S 22°40.6'	35°06.5'	S 21°29.3'	256°10.4'	N 23°18.9'
9	343°01.3'	S 2°00.0'	78°25.6'	S 22°40.6'	50°08.9'	S 21°29.3'	271°11.1'	N 23°19.1'
10	358°01.0'	S 1°58.9'	93°28.2'	S 22°40.6'	65°11.3'	S 21°29.3'	286°11.8'	N 23°19.3'
11	13°00.7'	S 1°57.7'	108°30.7'	S 22°40.6'	80°13.7'	S 21°29.3'	301°12.5'	N 23°19.6'
12	28°00.3'	S 1°56.6'	123°33.3'	S 22°40.6'	95°16.1'	S 21°29.3'	316°13.2'	N 23°19.8'
13	42°00.0'	S 1°55.4'	138°35.8'	S 22°40.6'	110°18.6'	S 21°29.3'	331°13.9'	N 23°20.0'
14	57°59.7'	S 1°54.2'	153°38.3'	S 22°40.6'	125°21.0'	S 21°29.3'	346°14.6'	N 23°20.2'
15	72°59.3'	S 1°53.1'	168°40.9'	S 22°40.6'	140°23.4'	S 21°29.3'	1°15.3'	N 23°20.4'
16	87°59.0'	S 1°51.9'	183°43.4'	S 22°40.6'	155°25.8'	S 21°29.3'	16°16.0'	N 23°20.7'
17	102°58.7'	S 1°50.8'	198°45.9'	S 22°40.6'	170°28.2'	S 21°29.3'	31°16.7'	N 23°20.9'
18	117°58.3'	S 1°49.6'	213°48.5'	S 22°40.6'	185°30.7'	S 21°29.3'	46°17.4'	N 23°21.1'
19	132°58.0'	S 1°48.5'	228°51.0'	S 22°40.6'	200°33.1'	S 21°29.3'	61°18.1'	N 23°21.3'
20	147°57.7'	S 1°47.3'	243°53.6'	S 22°40.6'	215°35.5'	S 21°29.3'	76°18.8'	N 23°21.6'
21	162°57.3'	S 1°46.1'	258°56.1'	S 22°40.6'	230°37.9'	S 21°29.3'	91°19.5'	N 23°21.8'
22	177°57.0'	S 1°45.0'	273°58.7'	S 22°40.6'	245°40.3'	S 21°29.3'	106°20.2'	N 23°22.0'
23	192°56.7'	S 1°43.8'	289°01.2'	S 22°40.6'	260°42.8'	S 21°29.3'	121°20.9'	N 23°22.2'

Sat Apr 20, 2019 UTC

UTC	Venus -3.8		Jupiter -2.2		Saturn +0.5		Mars +1.6	
	v = -0.3' d = 1.2'		v = 2.5' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°56.3'	S 1°42.7'	304°03.7'	S 22°40.6'	275°45.2'	S 21°29.3'	136°21.6'	N 23°22.4'
1	222°56.0'	S 1°41.5'	319°06.3'	S 22°40.5'	290°47.6'	S 21°29.2'	151°22.3'	N 23°22.6'
2	237°55.7'	S 1°40.4'	334°08.8'	S 22°40.5'	305°50.0'	S 21°29.2'	166°23.0'	N 23°22.9'
3	252°55.3'	S 1°39.2'	349°11.4'	S 22°40.5'	320°52.4'	S 21°29.2'	181°23.7'	N 23°23.1'
4	267°55.0'	S 1°38.0'	4°13.9'	S 22°40.5'	335°54.9'	S 21°29.2'	196°24.4'	N 23°23.3'
5	282°54.7'	S 1°36.9'	19°16.5'	S 22°40.5'	350°57.3'	S 21°29.2'	211°25.1'	N 23°23.5'
6	297°54.3'	S 1°35.7'	34°19.0'	S 22°40.5'	5°59.7'	S 21°29.2'	226°25.8'	N 23°23.7'
7	312°54.0'	S 1°34.6'	49°21.5'	S 22°40.5'	21°02.1'	S 21°29.2'	241°26.4'	N 23°24.0'
8	327°53.7'	S 1°33.4'	64°24.1'	S 22°40.5'	36°04.5'	S 21°29.2'	256°27.1'	N 23°24.2'
9	342°53.4'	S 1°32.2'	79°26.6'	S 22°40.5'	51°07.0'	S 21°29.2'	271°27.8'	N 23°24.4'
10	357°53.0'	S 1°31.1'	94°29.2'	S 22°40.5'	66°09.4'	S 21°29.2'	286°28.5'	N 23°24.6'
11	12°52.7'	S 1°29.9'	109°31.7'	S 22°40.5'	81°11.8'	S 21°29.2'	301°29.2'	N 23°24.8'
12	27°52.4'	S 1°28.8'	124°34.3'	S 22°40.5'	96°14.2'	S 21°29.2'	316°29.9'	N 23°25.0'
13	42°52.0'	S 1°27.6'	139°36.8'	S 22°40.5'	111°16.7'	S 21°29.2'	331°30.6'	N 23°25.2'
14	57°51.7'	S 1°26.4'	154°39.4'	S 22°40.5'	126°19.1'	S 21°29.2'	346°31.3'	N 23°25.5'
15	72°51.4'	S 1°25.3'	169°41.9'	S 22°40.5'	141°21.5'	S 21°29.2'	1°32.0'	N 23°25.7'
16	87°51.0'	S 1°24.1'	184°44.5'	S 22°40.5'	156°23.9'	S 21°29.2'	16°32.7'	N 23°25.9'
17	102°50.7'	S 1°23.0'	199°47.0'	S 22°40.5'	171°26.3'	S 21°29.2'	31°33.4'	N 23°26.1'
18	117°50.4'	S 1°21.8'	214°49.6'	S 22°40.5'	186°28.8'	S 21°29.2'	46°34.1'	N 23°26.3'
19	132°50.0'	S 1°20.7'	229°52.1'	S 22°40.5'	201°31.2'	S 21°29.2'	61°34.8'	N 23°26.5'
20	147°49.7'	S 1°19.5'	244°54.6'	S 22°40.5'	216°33.6'	S 21°29.2'	76°35.5'	N 23°26.7'
21	162°49.4'	S 1°18.3'	259°57.2'	S 22°40.5'	231°36.0'	S 21°29.2'	91°36.2'	N 23°27.0'
22	177°49.0'	S 1°17.2'	274°59.7'	S 22°40.5'	246°38.5'	S 21°29.2'	106°36.9'	N 23°27.2'
23	192°48.7'	S 1°16.0'	290°02.3'	S 22°40.5'	261°40.9'	S 21°29.2'	121°37.6'	N 23°27.4'

Sun Apr 21, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.2 v = 2.6' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°48.4'	S 1°14.8'	305°04.8'	S 22°40.5'	276°43.3'	S 21°29.1'	136°38.3'	N 23°27.6'
1	222°48.1'	S 1°13.7'	320°07.4'	S 22°40.5'	291°45.7'	S 21°29.1'	151°39.0'	N 23°27.8'
2	237°47.7'	S 1°12.5'	335°09.9'	S 22°40.5'	306°48.2'	S 21°29.1'	166°39.7'	N 23°28.0'
3	252°47.4'	S 1°11.4'	350°12.5'	S 22°40.5'	321°50.6'	S 21°29.1'	181°40.4'	N 23°28.2'
4	267°47.1'	S 1°10.2'	5°15.1'	S 22°40.5'	336°53.0'	S 21°29.1'	196°41.1'	N 23°28.4'
5	282°46.7'	S 1°09.0'	20°17.6'	S 22°40.5'	351°55.4'	S 21°29.1'	211°41.8'	N 23°28.6'
6	297°46.4'	S 1°07.9'	35°20.2'	S 22°40.5'	6°57.9'	S 21°29.1'	226°42.5'	N 23°28.9'
7	312°46.1'	S 1°06.7'	50°22.7'	S 22°40.5'	22°00.3'	S 21°29.1'	241°43.2'	N 23°29.1'
8	327°45.7'	S 1°05.6'	65°25.3'	S 22°40.5'	37°02.7'	S 21°29.1'	256°43.8'	N 23°29.3'
9	342°45.4'	S 1°04.4'	80°27.8'	S 22°40.4'	52°05.1'	S 21°29.1'	271°44.5'	N 23°29.5'
10	357°45.1'	S 1°03.2'	95°30.4'	S 22°40.4'	67°07.6'	S 21°29.1'	286°45.2'	N 23°29.7'
11	12°44.7'	S 1°02.1'	110°32.9'	S 22°40.4'	82°10.0'	S 21°29.1'	301°45.9'	N 23°29.9'
12	27°44.4'	S 1°00.9'	125°35.5'	S 22°40.4'	97°12.4'	S 21°29.1'	316°46.6'	N 23°30.1'
13	42°44.1'	S 0°59.8'	140°38.0'	S 22°40.4'	112°14.8'	S 21°29.1'	331°47.3'	N 23°30.3'
14	57°43.8'	S 0°58.6'	155°40.6'	S 22°40.4'	127°17.3'	S 21°29.1'	346°48.0'	N 23°30.5'
15	72°43.4'	S 0°57.4'	170°43.1'	S 22°40.4'	142°19.7'	S 21°29.1'	1°48.7'	N 23°30.7'
16	87°43.1'	S 0°56.3'	185°45.7'	S 22°40.4'	157°22.1'	S 21°29.1'	16°49.4'	N 23°30.9'
17	102°42.8'	S 0°55.1'	200°48.3'	S 22°40.4'	172°24.6'	S 21°29.1'	31°50.1'	N 23°31.1'
18	117°42.4'	S 0°53.9'	215°50.8'	S 22°40.4'	187°27.0'	S 21°29.1'	46°50.8'	N 23°31.3'
19	132°42.1'	S 0°52.8'	230°53.4'	S 22°40.4'	202°29.4'	S 21°29.1'	61°51.5'	N 23°31.5'
20	147°41.8'	S 0°51.6'	245°55.9'	S 22°40.4'	217°31.8'	S 21°29.1'	76°52.2'	N 23°31.7'
21	162°41.4'	S 0°50.5'	260°58.5'	S 22°40.4'	232°34.3'	S 21°29.1'	91°52.9'	N 23°32.0'
22	177°41.1'	S 0°49.3'	276°01.0'	S 22°40.4'	247°36.7'	S 21°29.1'	106°53.6'	N 23°32.2'
23	192°40.8'	S 0°48.1'	291°03.6'	S 22°40.4'	262°39.1'	S 21°29.1'	121°54.3'	N 23°32.4'

Mon Apr 22, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.2 v = 2.6' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°40.5'	S 0°47.0'	306°06.2'	S 22°40.4'	277°41.6'	S 21°29.1'	136°55.0'	N 23°32.6'
1	222°40.1'	S 0°45.8'	321°08.7'	S 22°40.4'	292°44.0'	S 21°29.1'	151°55.7'	N 23°32.8'
2	237°39.8'	S 0°44.6'	336°11.3'	S 22°40.4'	307°46.4'	S 21°29.1'	166°56.4'	N 23°33.0'
3	252°39.5'	S 0°43.5'	351°13.8'	S 22°40.4'	322°48.8'	S 21°29.1'	181°57.1'	N 23°33.2'
4	267°39.1'	S 0°42.3'	6°16.4'	S 22°40.4'	337°51.3'	S 21°29.0'	196°57.7'	N 23°33.4'
5	282°38.8'	S 0°41.1'	21°19.0'	S 22°40.4'	352°53.7'	S 21°29.0'	211°58.4'	N 23°33.6'
6	297°38.5'	S 0°40.0'	36°21.5'	S 22°40.4'	7°56.1'	S 21°29.0'	226°59.1'	N 23°33.8'
7	312°38.1'	S 0°38.8'	51°24.1'	S 22°40.4'	22°58.6'	S 21°29.0'	241°59.8'	N 23°34.0'
8	327°37.8'	S 0°37.7'	66°26.6'	S 22°40.4'	38°01.0'	S 21°29.0'	257°00.5'	N 23°34.2'
9	342°37.5'	S 0°36.5'	81°29.2'	S 22°40.4'	53°03.4'	S 21°29.0'	272°01.2'	N 23°34.4'
10	357°37.2'	S 0°35.3'	96°31.8'	S 22°40.4'	68°05.9'	S 21°29.0'	287°01.9'	N 23°34.6'
11	12°36.8'	S 0°34.2'	111°34.3'	S 22°40.4'	83°08.3'	S 21°29.0'	302°02.6'	N 23°34.8'
12	27°36.5'	S 0°33.0'	126°36.9'	S 22°40.4'	98°10.7'	S 21°29.0'	317°03.3'	N 23°35.0'
13	42°36.2'	S 0°31.8'	141°39.5'	S 22°40.3'	113°13.1'	S 21°29.0'	332°04.0'	N 23°35.2'
14	57°35.8'	S 0°30.7'	156°42.0'	S 22°40.3'	128°15.6'	S 21°29.0'	347°04.7'	N 23°35.4'
15	72°35.5'	S 0°29.5'	171°44.6'	S 22°40.3'	143°18.0'	S 21°29.0'	2°05.4'	N 23°35.6'
16	87°35.2'	S 0°28.3'	186°47.1'	S 22°40.3'	158°20.4'	S 21°29.0'	17°06.1'	N 23°35.8'
17	102°34.8'	S 0°27.2'	201°49.7'	S 22°40.3'	173°22.9'	S 21°29.0'	32°06.8'	N 23°36.0'
18	117°34.5'	S 0°26.0'	216°52.3'	S 22°40.3'	188°25.3'	S 21°29.0'	47°07.5'	N 23°36.2'
19	132°34.2'	S 0°24.8'	231°54.8'	S 22°40.3'	203°27.7'	S 21°29.0'	62°08.2'	N 23°36.4'
20	147°33.9'	S 0°23.7'	246°57.4'	S 22°40.3'	218°30.2'	S 21°29.0'	77°08.8'	N 23°36.6'
21	162°33.5'	S 0°22.5'	261°60.0'	S 22°40.3'	233°32.6'	S 21°29.0'	92°09.5'	N 23°36.8'
22	177°33.2'	S 0°21.3'	277°02.5'	S 22°40.3'	248°35.0'	S 21°29.0'	107°10.2'	N 23°37.0'
23	192°32.9'	S 0°20.2'	292°05.1'	S 22°40.3'	263°37.5'	S 21°29.0'	122°10.9'	N 23°37.1'

Tue Apr 23, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.3 v = 2.6' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°32.5'	S 0°19.0'	307°07.7'	S 22°40.3'	278°39.9'	S 21°29.0'	137°11.6'	N 23°37.3'
1	222°32.2'	S 0°17.9'	322°10.2'	S 22°40.3'	293°42.3'	S 21°29.0'	152°12.3'	N 23°37.5'
2	237°31.9'	S 0°16.7'	337°12.8'	S 22°40.3'	308°44.8'	S 21°29.0'	167°13.0'	N 23°37.7'
3	252°31.5'	S 0°15.5'	352°15.4'	S 22°40.3'	323°47.2'	S 21°29.0'	182°13.7'	N 23°37.9'
4	267°31.2'	S 0°14.4'	7°17.9'	S 22°40.3'	338°49.6'	S 21°29.0'	197°14.4'	N 23°38.1'
5	282°30.9'	S 0°13.2'	22°20.5'	S 22°40.3'	353°52.1'	S 21°29.0'	212°15.1'	N 23°38.3'
6	297°30.6'	S 0°12.0'	37°23.1'	S 22°40.3'	8°54.5'	S 21°29.0'	227°15.8'	N 23°38.5'
7	312°30.2'	S 0°10.9'	52°25.6'	S 22°40.3'	23°56.9'	S 21°29.0'	242°16.5'	N 23°38.7'
8	327°29.9'	S 0°09.7'	67°28.2'	S 22°40.3'	38°59.4'	S 21°29.0'	257°17.2'	N 23°38.9'
9	342°29.6'	S 0°08.5'	82°30.8'	S 22°40.3'	54°01.8'	S 21°29.0'	272°17.9'	N 23°39.1'
10	357°29.2'	S 0°07.4'	97°33.4'	S 22°40.3'	69°04.2'	S 21°29.0'	287°18.6'	N 23°39.3'
11	12°28.9'	S 0°06.2'	112°35.9'	S 22°40.3'	84°06.7'	S 21°29.0'	302°19.2'	N 23°39.5'
12	27°28.6'	S 0°05.0'	127°38.5'	S 22°40.3'	99°09.1'	S 21°29.0'	317°19.9'	N 23°39.7'
13	42°28.3'	S 0°03.9'	142°41.1'	S 22°40.3'	114°11.5'	S 21°29.0'	332°20.6'	N 23°39.9'
14	57°27.9'	S 0°02.7'	157°43.6'	S 22°40.3'	129°14.0'	S 21°29.0'	347°21.3'	N 23°40.0'
15	72°27.6'	S 0°01.5'	172°46.2'	S 22°40.3'	144°16.4'	S 21°29.0'	2°22.0'	N 23°40.2'
16	87°27.3'	S 0°00.4'	187°48.8'	S 22°40.2'	159°18.9'	S 21°29.0'	17°22.7'	N 23°40.4'
17	102°26.9'	N 0°00.8'	202°51.4'	S 22°40.2'	174°21.3'	S 21°28.9'	32°23.4'	N 23°40.6'
18	117°26.6'	N 0°02.0'	217°53.9'	S 22°40.2'	189°23.7'	S 21°28.9'	47°24.1'	N 23°40.8'
19	132°26.3'	N 0°03.1'	232°56.5'	S 22°40.2'	204°26.2'	S 21°28.9'	62°24.8'	N 23°41.0'
20	147°25.9'	N 0°04.3'	247°59.1'	S 22°40.2'	219°28.6'	S 21°28.9'	77°25.5'	N 23°41.2'
21	162°25.6'	N 0°05.5'	263°01.6'	S 22°40.2'	234°31.0'	S 21°28.9'	92°26.2'	N 23°41.4'
22	177°25.3'	N 0°06.6'	278°04.2'	S 22°40.2'	249°33.5'	S 21°28.9'	107°26.9'	N 23°41.6'
23	192°25.0'	N 0°07.8'	293°06.8'	S 22°40.2'	264°35.9'	S 21°28.9'	122°27.6'	N 23°41.7'

Wed Apr 24, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.3 v = 2.6' d = 0.0'		Saturn +0.5 v = 2.4' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°24.6'	N 0°09.0'	308°09.4'	S 22°40.2'	279°38.3'	S 21°28.9'	137°28.3'	N 23°41.9'
1	222°24.3'	N 0°10.1'	323°11.9'	S 22°40.2'	294°40.8'	S 21°28.9'	152°28.9'	N 23°42.1'
2	237°24.0'	N 0°11.3'	338°14.5'	S 22°40.2'	309°43.2'	S 21°28.9'	167°29.6'	N 23°42.3'
3	252°23.6'	N 0°12.5'	353°17.1'	S 22°40.2'	324°45.7'	S 21°28.9'	182°30.3'	N 23°42.5'
4	267°23.3'	N 0°13.6'	8°19.7'	S 22°40.2'	339°48.1'	S 21°28.9'	197°31.0'	N 23°42.7'
5	282°23.0'	N 0°14.8'	23°22.3'	S 22°40.2'	354°50.5'	S 21°28.9'	212°31.7'	N 23°42.9'
6	297°22.7'	N 0°16.0'	38°24.8'	S 22°40.2'	9°53.0'	S 21°28.9'	227°32.4'	N 23°43.0'
7	312°22.3'	N 0°17.1'	53°27.4'	S 22°40.2'	24°55.4'	S 21°28.9'	242°33.1'	N 23°43.2'
8	327°22.0'	N 0°18.3'	68°30.0'	S 22°40.2'	39°57.9'	S 21°28.9'	257°33.8'	N 23°43.4'
9	342°21.7'	N 0°19.5'	83°32.6'	S 22°40.2'	55°00.3'	S 21°28.9'	272°34.5'	N 23°43.6'
10	357°21.3'	N 0°20.6'	98°35.1'	S 22°40.2'	70°02.7'	S 21°28.9'	287°35.2'	N 23°43.8'
11	12°21.0'	N 0°21.8'	113°37.7'	S 22°40.2'	85°05.2'	S 21°28.9'	302°35.9'	N 23°44.0'
12	27°20.7'	N 0°23.0'	128°40.3'	S 22°40.2'	100°07.6'	S 21°28.9'	317°36.6'	N 23°44.1'
13	42°20.3'	N 0°24.1'	143°42.9'	S 22°40.2'	115°10.1'	S 21°28.9'	332°37.2'	N 23°44.3'
14	57°20.0'	N 0°25.3'	158°45.5'	S 22°40.2'	130°12.5'	S 21°28.9'	347°37.9'	N 23°44.5'
15	72°19.7'	N 0°26.5'	173°48.0'	S 22°40.2'	145°14.9'	S 21°28.9'	2°38.6'	N 23°44.7'
16	87°19.4'	N 0°27.7'	188°50.6'	S 22°40.1'	160°17.4'	S 21°28.9'	17°39.3'	N 23°44.9'
17	102°19.0'	N 0°28.8'	203°53.2'	S 22°40.1'	175°19.8'	S 21°28.9'	32°40.0'	N 23°45.1'
18	117°18.7'	N 0°30.0'	218°55.8'	S 22°40.1'	190°22.3'	S 21°28.9'	47°40.7'	N 23°45.2'
19	132°18.4'	N 0°31.2'	233°58.4'	S 22°40.1'	205°24.7'	S 21°28.9'	62°41.4'	N 23°45.4'
20	147°18.0'	N 0°32.3'	249°00.9'	S 22°40.1'	220°27.1'	S 21°28.9'	77°42.1'	N 23°45.6'
21	162°17.7'	N 0°33.5'	264°03.5'	S 22°40.1'	235°29.6'	S 21°28.9'	92°42.8'	N 23°45.8'
22	177°17.4'	N 0°34.7'	279°06.1'	S 22°40.1'	250°32.0'	S 21°28.9'	107°43.5'	N 23°46.0'
23	192°17.0'	N 0°35.8'	294°08.7'	S 22°40.1'	265°34.5'	S 21°28.9'	122°44.2'	N 23°46.1'

Thu Apr 25, 2019 UTC

UTC	Venus -3.8		Jupiter -2.3		Saturn +0.5		Mars +1.6	
	v = -0.3' d = 1.2'		v = 2.6' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°16.7'	N 0°37.0'	309°11.3'	S 22°40.1'	280°36.9'	S 21°28.9'	137°44.9'	N 23°46.3'
1	222°16.4'	N 0°38.2'	324°13.9'	S 22°40.1'	295°39.3'	S 21°28.9'	152°45.5'	N 23°46.5'
2	237°16.1'	N 0°39.3'	339°16.4'	S 22°40.1'	310°41.8'	S 21°28.9'	167°46.2'	N 23°46.7'
3	252°15.7'	N 0°40.5'	354°19.0'	S 22°40.1'	325°44.2'	S 21°28.9'	182°46.9'	N 23°46.9'
4	267°15.4'	N 0°41.7'	9°21.6'	S 22°40.1'	340°46.7'	S 21°28.9'	197°47.6'	N 23°47.0'
5	282°15.1'	N 0°42.8'	24°24.2'	S 22°40.1'	355°49.1'	S 21°28.9'	212°48.3'	N 23°47.2'
6	297°14.7'	N 0°44.0'	39°26.8'	S 22°40.1'	10°51.6'	S 21°28.9'	227°49.0'	N 23°47.4'
7	312°14.4'	N 0°45.2'	54°29.4'	S 22°40.1'	25°54.0'	S 21°28.9'	242°49.7'	N 23°47.6'
8	327°14.1'	N 0°46.3'	69°31.9'	S 22°40.1'	40°56.4'	S 21°28.9'	257°50.4'	N 23°47.7'
9	342°13.8'	N 0°47.5'	84°34.5'	S 22°40.1'	55°58.9'	S 21°28.9'	272°51.1'	N 23°47.9'
10	357°13.4'	N 0°48.7'	99°37.1'	S 22°40.1'	71°01.3'	S 21°28.9'	287°51.8'	N 23°48.1'
11	12°13.1'	N 0°49.8'	114°39.7'	S 22°40.1'	86°03.8'	S 21°28.9'	302°52.5'	N 23°48.3'
12	27°12.8'	N 0°51.0'	129°42.3'	S 22°40.1'	101°06.2'	S 21°28.9'	317°53.1'	N 23°48.4'
13	42°12.4'	N 0°52.2'	144°44.9'	S 22°40.1'	116°08.7'	S 21°28.9'	332°53.8'	N 23°48.6'
14	57°12.1'	N 0°53.4'	159°47.5'	S 22°40.1'	131°11.1'	S 21°28.9'	347°54.5'	N 23°48.8'
15	72°11.8'	N 0°54.5'	174°50.1'	S 22°40.0'	146°13.5'	S 21°28.9'	2°55.2'	N 23°49.0'
16	87°11.4'	N 0°55.7'	189°52.6'	S 22°40.0'	161°16.0'	S 21°28.9'	17°55.9'	N 23°49.1'
17	102°11.1'	N 0°56.9'	204°55.2'	S 22°40.0'	176°18.4'	S 21°28.9'	32°56.6'	N 23°49.3'
18	117°10.8'	N 0°58.0'	219°57.8'	S 22°40.0'	191°20.9'	S 21°28.9'	47°57.3'	N 23°49.5'
19	132°10.4'	N 0°59.2'	235°00.4'	S 22°40.0'	206°23.3'	S 21°28.9'	62°58.0'	N 23°49.7'
20	147°10.1'	N 1°00.4'	250°03.0'	S 22°40.0'	221°25.8'	S 21°28.9'	77°58.7'	N 23°49.8'
21	162°09.8'	N 1°01.5'	265°05.6'	S 22°40.0'	236°28.2'	S 21°28.9'	92°59.4'	N 23°50.0'
22	177°09.5'	N 1°02.7'	280°08.2'	S 22°40.0'	251°30.7'	S 21°28.9'	108°00.0'	N 23°50.2'
23	192°09.1'	N 1°03.9'	295°10.8'	S 22°40.0'	266°33.1'	S 21°28.9'	123°00.7'	N 23°50.4'

Fri Apr 26, 2019 UTC

UTC	Venus -3.8		Jupiter -2.3		Saturn +0.5		Mars +1.6	
	v = -0.3' d = 1.2'		v = 2.6' d = 0.0'		v = 2.4' d = 0.0'		v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°08.8'	N 1°05.0'	310°13.4'	S 22°40.0'	281°35.6'	S 21°28.9'	138°01.4'	N 23°50.5'
1	222°08.5'	N 1°06.2'	325°16.0'	S 22°40.0'	296°38.0'	S 21°28.9'	153°02.1'	N 23°50.7'
2	237°08.1'	N 1°07.4'	340°18.5'	S 22°40.0'	311°40.4'	S 21°28.9'	168°02.8'	N 23°50.9'
3	252°07.8'	N 1°08.5'	355°21.1'	S 22°40.0'	326°42.9'	S 21°28.9'	183°03.5'	N 23°51.0'
4	267°07.5'	N 1°09.7'	10°23.7'	S 22°40.0'	341°45.3'	S 21°28.9'	198°04.2'	N 23°51.2'
5	282°07.1'	N 1°10.9'	25°26.3'	S 22°40.0'	356°47.8'	S 21°28.9'	213°04.9'	N 23°51.4'
6	297°06.8'	N 1°12.1'	40°28.9'	S 22°40.0'	11°50.2'	S 21°28.9'	228°05.6'	N 23°51.5'
7	312°06.5'	N 1°13.2'	55°31.5'	S 22°40.0'	26°52.7'	S 21°28.9'	243°06.3'	N 23°51.7'
8	327°06.2'	N 1°14.4'	70°34.1'	S 22°40.0'	41°55.1'	S 21°28.9'	258°06.9'	N 23°51.9'
9	342°05.8'	N 1°15.6'	85°36.7'	S 22°40.0'	56°57.6'	S 21°28.9'	273°07.6'	N 23°52.0'
10	357°05.5'	N 1°16.7'	100°39.3'	S 22°40.0'	72°00.0'	S 21°28.9'	288°08.3'	N 23°52.2'
11	12°05.2'	N 1°17.9'	115°41.9'	S 22°40.0'	87°02.5'	S 21°28.9'	303°09.0'	N 23°52.4'
12	27°04.8'	N 1°19.1'	130°44.5'	S 22°39.9'	102°04.9'	S 21°28.9'	318°09.7'	N 23°52.6'
13	42°04.5'	N 1°20.2'	145°47.1'	S 22°39.9'	117°07.4'	S 21°28.9'	333°10.4'	N 23°52.7'
14	57°04.2'	N 1°21.4'	160°49.7'	S 22°39.9'	132°09.8'	S 21°28.9'	348°11.1'	N 23°52.9'
15	72°03.8'	N 1°22.6'	175°52.3'	S 22°39.9'	147°12.3'	S 21°28.9'	3°11.8'	N 23°53.1'
16	87°03.5'	N 1°23.7'	190°54.9'	S 22°39.9'	162°14.7'	S 21°28.9'	18°12.5'	N 23°53.2'
17	102°03.2'	N 1°24.9'	205°57.5'	S 22°39.9'	177°17.2'	S 21°28.9'	33°13.2'	N 23°53.4'
18	117°02.8'	N 1°26.1'	221°00.1'	S 22°39.9'	192°19.6'	S 21°28.9'	48°13.8'	N 23°53.5'
19	132°02.5'	N 1°27.3'	236°02.7'	S 22°39.9'	207°22.1'	S 21°28.9'	63°14.5'	N 23°53.7'
20	147°02.2'	N 1°28.4'	251°05.3'	S 22°39.9'	222°24.5'	S 21°28.9'	78°15.2'	N 23°53.9'
21	162°01.9'	N 1°29.6'	266°07.9'	S 22°39.9'	237°27.0'	S 21°28.9'	93°15.9'	N 23°54.0'
22	177°01.5'	N 1°30.8'	281°10.5'	S 22°39.9'	252°29.4'	S 21°28.9'	108°16.6'	N 23°54.2'
23	192°01.2'	N 1°31.9'	296°13.1'	S 22°39.9'	267°31.9'	S 21°28.9'	123°17.3'	N 23°54.4'

Sat Apr 27, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.3 v = 2.6' d = 0.0'		Saturn +0.5 v = 2.5' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	207°00.9'	N 1°33.1'	311°15.7'	S 22°39.9'	282°34.3'	S 21°28.9'	138°18.0'	N 23°54.5'
1	222°00.5'	N 1°34.3'	326°18.3'	S 22°39.9'	297°36.8'	S 21°28.9'	153°18.7'	N 23°54.7'
2	237°00.2'	N 1°35.4'	341°20.9'	S 22°39.9'	312°39.2'	S 21°28.9'	168°19.4'	N 23°54.9'
3	251°59.9'	N 1°36.6'	356°23.5'	S 22°39.9'	327°41.7'	S 21°28.9'	183°20.1'	N 23°55.0'
4	266°59.5'	N 1°37.8'	11°26.1'	S 22°39.9'	342°44.1'	S 21°28.9'	198°20.7'	N 23°55.2'
5	281°59.2'	N 1°38.9'	26°28.7'	S 22°39.9'	357°46.6'	S 21°28.9'	213°21.4'	N 23°55.3'
6	296°58.9'	N 1°40.1'	41°31.3'	S 22°39.9'	12°49.0'	S 21°28.9'	228°22.1'	N 23°55.5'
7	311°58.5'	N 1°41.3'	56°33.9'	S 22°39.9'	27°51.5'	S 21°28.9'	243°22.8'	N 23°55.7'
8	326°58.2'	N 1°42.5'	71°36.5'	S 22°39.8'	42°53.9'	S 21°28.9'	258°23.5'	N 23°55.8'
9	341°57.9'	N 1°43.6'	86°39.1'	S 22°39.8'	57°56.4'	S 21°28.9'	273°24.2'	N 23°56.0'
10	356°57.5'	N 1°44.8'	101°41.7'	S 22°39.8'	72°58.8'	S 21°28.9'	288°24.9'	N 23°56.1'
11	11°57.2'	N 1°46.0'	116°44.3'	S 22°39.8'	88°01.3'	S 21°28.9'	303°25.6'	N 23°56.3'
12	26°56.9'	N 1°47.1'	131°46.9'	S 22°39.8'	103°03.7'	S 21°28.9'	318°26.3'	N 23°56.5'
13	41°56.5'	N 1°48.3'	146°49.5'	S 22°39.8'	118°06.2'	S 21°28.9'	333°26.9'	N 23°56.6'
14	56°56.2'	N 1°49.5'	161°52.1'	S 22°39.8'	133°08.6'	S 21°28.9'	348°27.6'	N 23°56.8'
15	71°55.9'	N 1°50.6'	176°54.7'	S 22°39.8'	148°11.1'	S 21°28.9'	3°28.3'	N 23°56.9'
16	86°55.5'	N 1°51.8'	191°57.3'	S 22°39.8'	163°13.5'	S 21°28.9'	18°29.0'	N 23°57.1'
17	101°55.2'	N 1°53.0'	206°59.9'	S 22°39.8'	178°16.0'	S 21°28.9'	33°29.7'	N 23°57.3'
18	116°54.9'	N 1°54.1'	222°02.5'	S 22°39.8'	193°18.5'	S 21°28.9'	48°30.4'	N 23°57.4'
19	131°54.6'	N 1°55.3'	237°05.1'	S 22°39.8'	208°20.9'	S 21°28.9'	63°31.1'	N 23°57.6'
20	146°54.2'	N 1°56.5'	252°07.7'	S 22°39.8'	223°23.4'	S 21°28.9'	78°31.8'	N 23°57.7'
21	161°53.9'	N 1°57.7'	267°10.3'	S 22°39.8'	238°25.8'	S 21°28.9'	93°32.4'	N 23°57.9'
22	176°53.6'	N 1°58.8'	282°12.9'	S 22°39.8'	253°28.3'	S 21°28.9'	108°33.1'	N 23°58.0'
23	191°53.2'	N 1°60.0'	297°15.5'	S 22°39.8'	268°30.7'	S 21°28.9'	123°33.8'	N 23°58.2'

Sun Apr 28, 2019 UTC

UTC	Venus -3.8 v = -0.3' d = 1.2'		Jupiter -2.3 v = 2.6' d = 0.0'		Saturn +0.5 v = 2.5' d = 0.0'		Mars +1.6 v = 0.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°52.9'	N 2°01.2'	312°18.1'	S 22°39.8'	283°33.2'	S 21°28.9'	138°34.5'	N 23°58.3'
1	221°52.6'	N 2°02.3'	327°20.7'	S 22°39.8'	298°35.6'	S 21°28.9'	153°35.2'	N 23°58.5'
2	236°52.2'	N 2°03.5'	342°23.3'	S 22°39.8'	313°38.1'	S 21°28.9'	168°35.9'	N 23°58.7'
3	251°51.9'	N 2°04.7'	357°26.0'	S 22°39.8'	328°40.5'	S 21°28.9'	183°36.6'	N 23°58.8'
4	266°51.6'	N 2°05.8'	12°28.6'	S 22°39.7'	343°43.0'	S 21°28.9'	198°37.3'	N 23°59.0'
5	281°51.2'	N 2°07.0'	27°31.2'	S 22°39.7'	358°45.5'	S 21°28.9'	213°38.0'	N 23°59.1'
6	296°50.9'	N 2°08.2'	42°33.8'	S 22°39.7'	13°47.9'	S 21°28.9'	228°38.6'	N 23°59.3'
7	311°50.6'	N 2°09.3'	57°36.4'	S 22°39.7'	28°50.4'	S 21°28.9'	243°39.3'	N 23°59.4'
8	326°50.2'	N 2°10.5'	72°39.0'	S 22°39.7'	43°52.8'	S 21°28.9'	258°40.0'	N 23°59.6'
9	341°49.9'	N 2°11.7'	87°41.6'	S 22°39.7'	58°55.3'	S 21°28.9'	273°40.7'	N 23°59.7'
10	356°49.6'	N 2°12.8'	102°44.2'	S 22°39.7'	73°57.7'	S 21°28.9'	288°41.4'	N 23°59.9'
11	11°49.2'	N 2°14.0'	117°46.8'	S 22°39.7'	89°00.2'	S 21°28.9'	303°42.1'	N 24°00.0'
12	26°48.9'	N 2°15.2'	132°49.4'	S 22°39.7'	104°02.7'	S 21°28.9'	318°42.8'	N 24°00.2'
13	41°48.6'	N 2°16.4'	147°52.1'	S 22°39.7'	119°05.1'	S 21°28.9'	333°43.5'	N 24°00.3'
14	56°48.2'	N 2°17.5'	162°54.7'	S 22°39.7'	134°07.6'	S 21°28.9'	348°44.1'	N 24°00.5'
15	71°47.9'	N 2°18.7'	177°57.3'	S 22°39.7'	149°10.0'	S 21°28.9'	3°44.8'	N 24°00.6'
16	86°47.6'	N 2°19.9'	192°59.9'	S 22°39.7'	164°12.5'	S 21°28.9'	18°45.5'	N 24°00.8'
17	101°47.2'	N 2°21.0'	208°02.5'	S 22°39.7'	179°14.9'	S 21°28.9'	33°46.2'	N 24°00.9'
18	116°46.9'	N 2°22.2'	223°05.1'	S 22°39.7'	194°17.4'	S 21°28.9'	48°46.9'	N 24°01.1'
19	131°46.6'	N 2°23.4'	238°07.7'	S 22°39.7'	209°19.9'	S 21°28.9'	63°47.6'	N 24°01.2'
20	146°46.2'	N 2°24.5'	253°10.3'	S 22°39.7'	224°22.3'	S 21°28.9'	78°48.3'	N 24°01.4'
21	161°45.9'	N 2°25.7'	268°13.0'	S 22°39.7'	239°24.8'	S 21°28.9'	93°49.0'	N 24°01.5'
22	176°45.6'	N 2°26.9'	283°15.6'	S 22°39.6'	254°27.2'	S 21°28.9'	108°49.7'	N 24°01.7'
23	191°45.2'	N 2°28.0'	298°18.2'	S 22°39.6'	269°29.7'	S 21°28.9'	123°50.3'	N 24°01.8'

Mon Apr 29, 2019 UTC

UTC	Venus -3.8		Jupiter -2.3		Saturn +0.5		Mars +1.6	
	v = -0.3' d = 1.2'		v = 2.6' d = 0.0'		v = 2.5' d = 0.0'		v = 0.7' d = 0.1'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°44.9'	N 2°29.2'	313°20.8'	S 22°39.6'	284°32.2'	S 21°28.9'	138°51.0'	N 24°02.0'
1	221°44.6'	N 2°30.4'	328°23.4'	S 22°39.6'	299°34.6'	S 21°28.9'	153°51.7'	N 24°02.1'
2	236°44.2'	N 2°31.5'	343°26.0'	S 22°39.6'	314°37.1'	S 21°28.9'	168°52.4'	N 24°02.3'
3	251°43.9'	N 2°32.7'	358°28.6'	S 22°39.6'	329°39.5'	S 21°28.9'	183°53.1'	N 24°02.4'
4	266°43.5'	N 2°33.9'	13°31.3'	S 22°39.6'	344°42.0'	S 21°28.9'	198°53.8'	N 24°02.5'
5	281°43.2'	N 2°35.0'	28°33.9'	S 22°39.6'	359°44.5'	S 21°28.9'	213°54.5'	N 24°02.7'
6	296°42.9'	N 2°36.2'	43°36.5'	S 22°39.6'	14°46.9'	S 21°28.9'	228°55.2'	N 24°02.8'
7	311°42.5'	N 2°37.4'	58°39.1'	S 22°39.6'	29°49.4'	S 21°28.9'	243°55.8'	N 24°03.0'
8	326°42.2'	N 2°38.6'	73°41.7'	S 22°39.6'	44°51.8'	S 21°28.9'	258°56.5'	N 24°03.1'
9	341°41.9'	N 2°39.7'	88°44.4'	S 22°39.6'	59°54.3'	S 21°28.9'	273°57.2'	N 24°03.3'
10	356°41.5'	N 2°40.9'	103°47.0'	S 22°39.6'	74°56.8'	S 21°28.9'	288°57.9'	N 24°03.4'
11	11°41.2'	N 2°42.1'	118°49.6'	S 22°39.6'	89°59.2'	S 21°28.9'	303°58.6'	N 24°03.6'
12	26°40.9'	N 2°43.2'	133°52.2'	S 22°39.6'	105°01.7'	S 21°28.9'	318°59.3'	N 24°03.7'
13	41°40.5'	N 2°44.4'	148°54.8'	S 22°39.6'	120°04.1'	S 21°28.9'	333°60.0'	N 24°03.8'
14	56°40.2'	N 2°45.6'	163°57.4'	S 22°39.6'	135°06.6'	S 21°28.9'	349°00.7'	N 24°04.0'
15	71°39.9'	N 2°46.7'	179°00.1'	S 22°39.6'	150°09.1'	S 21°28.9'	4°01.3'	N 24°04.1'
16	86°39.5'	N 2°47.9'	194°02.7'	S 22°39.5'	165°11.5'	S 21°28.9'	19°02.0'	N 24°04.3'
17	101°39.2'	N 2°49.1'	209°05.3'	S 22°39.5'	180°14.0'	S 21°28.9'	34°02.7'	N 24°04.4'
18	116°38.9'	N 2°50.2'	224°07.9'	S 22°39.5'	195°16.4'	S 21°28.9'	49°03.4'	N 24°04.5'
19	131°38.5'	N 2°51.4'	239°10.6'	S 22°39.5'	210°18.9'	S 21°28.9'	64°04.1'	N 24°04.7'
20	146°38.2'	N 2°52.6'	254°13.2'	S 22°39.5'	225°21.4'	S 21°28.9'	79°04.8'	N 24°04.8'
21	161°37.8'	N 2°53.7'	269°15.8'	S 22°39.5'	240°23.8'	S 21°28.9'	94°05.5'	N 24°05.0'
22	176°37.5'	N 2°54.9'	284°18.4'	S 22°39.5'	255°26.3'	S 21°28.9'	109°06.1'	N 24°05.1'
23	191°37.2'	N 2°56.1'	299°21.0'	S 22°39.5'	270°28.8'	S 21°28.9'	124°06.8'	N 24°05.2'

Tue Apr 30, 2019 UTC

UTC	Venus -3.8		Jupiter -2.3		Saturn +0.5		Mars +1.6	
	v = -0.3' d = 1.2'		v = 2.6' d = 0.0'		v = 2.5' d = 0.0'		v = 0.7' d = 0.1'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	206°36.8'	N 2°57.2'	314°23.7'	S 22°39.5'	285°31.2'	S 21°28.9'	139°07.5'	N 24°05.4'
1	221°36.5'	N 2°58.4'	329°26.3'	S 22°39.5'	300°33.7'	S 21°28.9'	154°08.2'	N 24°05.5'
2	236°36.2'	N 2°59.6'	344°28.9'	S 22°39.5'	315°36.2'	S 21°28.9'	169°08.9'	N 24°05.7'
3	251°35.8'	N 3°00.7'	359°31.5'	S 22°39.5'	330°38.6'	S 21°28.9'	184°09.6'	N 24°05.8'
4	266°35.5'	N 3°01.9'	14°34.2'	S 22°39.5'	345°41.1'	S 21°28.9'	199°10.3'	N 24°05.9'
5	281°35.2'	N 3°03.1'	29°36.8'	S 22°39.5'	0°43.5'	S 21°28.9'	214°11.0'	N 24°06.1'
6	296°34.8'	N 3°04.2'	44°39.4'	S 22°39.5'	15°46.0'	S 21°28.9'	229°11.6'	N 24°06.2'
7	311°34.5'	N 3°05.4'	59°42.0'	S 22°39.5'	30°48.5'	S 21°28.9'	244°12.3'	N 24°06.3'
8	326°34.1'	N 3°06.6'	74°44.7'	S 22°39.5'	45°50.9'	S 21°28.9'	259°13.0'	N 24°06.5'
9	341°33.8'	N 3°07.7'	89°47.3'	S 22°39.4'	60°53.4'	S 21°28.9'	274°13.7'	N 24°06.6'
10	356°33.5'	N 3°08.9'	104°49.9'	S 22°39.4'	75°55.9'	S 21°28.9'	289°14.4'	N 24°06.8'
11	11°33.1'	N 3°10.1'	119°52.5'	S 22°39.4'	90°58.3'	S 21°28.9'	304°15.1'	N 24°06.9'
12	26°32.8'	N 3°11.2'	134°55.2'	S 22°39.4'	106°00.8'	S 21°28.9'	319°15.8'	N 24°07.0'
13	41°32.5'	N 3°12.4'	149°57.8'	S 22°39.4'	121°03.3'	S 21°28.9'	334°16.4'	N 24°07.2'
14	56°32.1'	N 3°13.6'	165°00.4'	S 22°39.4'	136°05.7'	S 21°28.9'	349°17.1'	N 24°07.3'
15	71°31.8'	N 3°14.7'	180°03.0'	S 22°39.4'	151°08.2'	S 21°28.9'	4°17.8'	N 24°07.4'
16	86°31.4'	N 3°15.9'	195°05.7'	S 22°39.4'	166°10.7'	S 21°28.9'	19°18.5'	N 24°07.6'
17	101°31.1'	N 3°17.1'	210°08.3'	S 22°39.4'	181°13.1'	S 21°28.9'	34°19.2'	N 24°07.7'
18	116°30.8'	N 3°18.2'	225°10.9'	S 22°39.4'	196°15.6'	S 21°28.9'	49°19.9'	N 24°07.8'
19	131°30.4'	N 3°19.4'	240°13.6'	S 22°39.4'	211°18.1'	S 21°28.9'	64°20.6'	N 24°08.0'
20	146°30.1'	N 3°20.6'	255°16.2'	S 22°39.4'	226°20.5'	S 21°28.9'	79°21.3'	N 24°08.1'
21	161°29.7'	N 3°21.7'	270°18.8'	S 22°39.4'	241°23.0'	S 21°29.0'	94°21.9'	N 24°08.2'
22	176°29.4'	N 3°22.9'	285°21.4'	S 22°39.4'	256°25.5'	S 21°29.0'	109°22.6'	N 24°08.4'
23	191°29.1'	N 3°24.1'	300°24.1'	S 22°39.4'	271°27.9'	S 21°29.0'	124°23.3'	N 24°08.5'