

Sat Dec 1, 2018 UTC

UTC	Venus -4.5		Jupiter -1.6		Saturn +0.6		Mars -0.0	
	v = 1.1' d = 0.1'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	222°15.0'	S 9°53.0'	186°37.4'	S 20°29.1'	151°19.2'	S 22°40.8'	88°19.3'	S 9°05.0'
1	237°16.2'	S 9°53.1'	201°39.2'	S 20°29.2'	166°21.4'	S 22°40.8'	103°20.3'	S 9°04.3'
2	252°17.3'	S 9°53.2'	216°41.1'	S 20°29.3'	181°23.6'	S 22°40.8'	118°21.3'	S 9°03.6'
3	267°18.5'	S 9°53.3'	231°43.0'	S 20°29.4'	196°25.7'	S 22°40.8'	133°22.3'	S 9°02.9'
4	282°19.6'	S 9°53.4'	246°44.9'	S 20°29.5'	211°27.9'	S 22°40.8'	148°23.3'	S 9°02.2'
5	297°20.7'	S 9°53.6'	261°46.8'	S 20°29.6'	226°30.1'	S 22°40.7'	163°24.2'	S 9°01.6'
6	312°21.9'	S 9°53.7'	276°48.6'	S 20°29.7'	241°32.2'	S 22°40.7'	178°25.2'	S 9°00.9'
7	327°23.0'	S 9°53.8'	291°50.5'	S 20°29.8'	256°34.4'	S 22°40.7'	193°26.2'	S 9°00.2'
8	342°24.2'	S 9°53.9'	306°52.4'	S 20°29.9'	271°36.6'	S 22°40.7'	208°27.2'	S 8°59.5'
9	357°25.3'	S 9°54.0'	321°54.3'	S 20°30.0'	286°38.8'	S 22°40.7'	223°28.2'	S 8°58.8'
10	12°26.4'	S 9°54.1'	336°56.1'	S 20°30.1'	301°40.9'	S 22°40.7'	238°29.2'	S 8°58.1'
11	27°27.6'	S 9°54.3'	351°58.0'	S 20°30.2'	316°43.1'	S 22°40.7'	253°30.2'	S 8°57.5'
12	42°28.7'	S 9°54.4'	6°59.9'	S 20°30.3'	331°45.3'	S 22°40.7'	268°31.2'	S 8°56.8'
13	57°29.8'	S 9°54.5'	22°01.8'	S 20°30.4'	346°47.4'	S 22°40.7'	283°32.2'	S 8°56.1'
14	72°30.9'	S 9°54.6'	37°03.7'	S 20°30.5'	1°49.6'	S 22°40.6'	298°33.1'	S 8°55.4'
15	87°32.0'	S 9°54.8'	52°05.5'	S 20°30.6'	16°51.8'	S 22°40.6'	313°34.1'	S 8°54.7'
16	102°33.2'	S 9°54.9'	67°07.4'	S 20°30.7'	31°54.0'	S 22°40.6'	328°35.1'	S 8°54.1'
17	117°34.3'	S 9°55.0'	82°09.3'	S 20°30.8'	46°56.1'	S 22°40.6'	343°36.1'	S 8°53.4'
18	132°35.4'	S 9°55.2'	97°11.2'	S 20°30.9'	61°58.3'	S 22°40.6'	358°37.1'	S 8°52.7'
19	147°36.5'	S 9°55.3'	112°13.0'	S 20°31.0'	77°00.5'	S 22°40.6'	13°38.1'	S 8°52.0'
20	162°37.6'	S 9°55.4'	127°14.9'	S 20°31.1'	92°02.6'	S 22°40.6'	28°39.1'	S 8°51.3'
21	177°38.7'	S 9°55.6'	142°16.8'	S 20°31.3'	107°04.8'	S 22°40.6'	43°40.1'	S 8°50.6'
22	192°39.8'	S 9°55.7'	157°18.7'	S 20°31.4'	122°07.0'	S 22°40.5'	58°41.1'	S 8°50.0'
23	207°40.9'	S 9°55.8'	172°20.6'	S 20°31.5'	137°09.1'	S 22°40.5'	73°42.0'	S 8°49.3'

Sun Dec 2, 2018 UTC

UTC	Venus -4.5		Jupiter -1.6		Saturn +0.6		Mars +0.0	
	v = 1.1' d = 0.2'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	222°42.0'	S 9°56.0'	187°22.4'	S 20°31.6'	152°11.3'	S 22°40.5'	88°43.0'	S 8°48.6'
1	237°43.1'	S 9°56.1'	202°24.3'	S 20°31.7'	167°13.5'	S 22°40.5'	103°44.0'	S 8°47.9'
2	252°44.2'	S 9°56.3'	217°26.2'	S 20°31.8'	182°15.7'	S 22°40.5'	118°45.0'	S 8°47.2'
3	267°45.3'	S 9°56.4'	232°28.1'	S 20°31.9'	197°17.8'	S 22°40.5'	133°46.0'	S 8°46.5'
4	282°46.4'	S 9°56.6'	247°30.0'	S 20°32.0'	212°20.0'	S 22°40.5'	148°47.0'	S 8°45.9'
5	297°47.5'	S 9°56.7'	262°31.8'	S 20°32.1'	227°22.2'	S 22°40.5'	163°48.0'	S 8°45.2'
6	312°48.6'	S 9°56.9'	277°33.7'	S 20°32.2'	242°24.3'	S 22°40.4'	178°49.0'	S 8°44.5'
7	327°49.6'	S 9°57.0'	292°35.6'	S 20°32.3'	257°26.5'	S 22°40.4'	193°49.9'	S 8°43.8'
8	342°50.7'	S 9°57.2'	307°37.5'	S 20°32.4'	272°28.7'	S 22°40.4'	208°50.9'	S 8°43.1'
9	357°51.8'	S 9°57.3'	322°39.3'	S 20°32.5'	287°30.8'	S 22°40.4'	223°51.9'	S 8°42.4'
10	12°52.9'	S 9°57.5'	337°41.2'	S 20°32.6'	302°33.0'	S 22°40.4'	238°52.9'	S 8°41.7'
11	27°53.9'	S 9°57.6'	352°43.1'	S 20°32.7'	317°35.2'	S 22°40.4'	253°53.9'	S 8°41.1'
12	42°55.0'	S 9°57.8'	7°45.0'	S 20°32.8'	332°37.3'	S 22°40.4'	268°54.9'	S 8°40.4'
13	57°56.1'	S 9°57.9'	22°46.9'	S 20°32.9'	347°39.5'	S 22°40.4'	283°55.9'	S 8°39.7'
14	72°57.1'	S 9°58.1'	37°48.7'	S 20°33.0'	2°41.7'	S 22°40.3'	298°56.9'	S 8°39.0'
15	87°58.2'	S 9°58.3'	52°50.6'	S 20°33.1'	17°43.9'	S 22°40.3'	313°57.8'	S 8°38.3'
16	102°59.3'	S 9°58.4'	67°52.5'	S 20°33.2'	32°46.0'	S 22°40.3'	328°58.8'	S 8°37.6'
17	118°00.3'	S 9°58.6'	82°54.4'	S 20°33.3'	47°48.2'	S 22°40.3'	343°59.8'	S 8°37.0'
18	133°01.4'	S 9°58.8'	97°56.2'	S 20°33.4'	62°50.4'	S 22°40.3'	359°00.8'	S 8°36.3'
19	148°02.4'	S 9°58.9'	112°58.1'	S 20°33.5'	77°52.5'	S 22°40.3'	14°01.8'	S 8°35.6'
20	163°03.5'	S 9°59.1'	128°00.0'	S 20°33.6'	92°54.7'	S 22°40.3'	29°02.8'	S 8°34.9'
21	178°04.5'	S 9°59.3'	143°01.9'	S 20°33.7'	107°56.9'	S 22°40.3'	44°03.8'	S 8°34.2'
22	193°05.6'	S 9°59.4'	158°03.8'	S 20°33.8'	122°59.0'	S 22°40.2'	59°04.7'	S 8°33.5'
23	208°06.6'	S 9°59.6'	173°05.6'	S 20°33.9'	138°01.2'	S 22°40.2'	74°05.7'	S 8°32.8'

Mon Dec 3, 2018 UTC

UTC	Venus -4.5		Jupiter -1.6		Saturn +0.6		Mars +0.0	
	v = 1.0' d = 0.2'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	223°07.7'	S 9°59.8'	188°07.5'	S 20°34.0'	153°03.4'	S 22°40.2'	89°06.7'	S 8°32.2'
1	238°08.7'	S 9°60.0'	203°09.4'	S 20°34.1'	168°05.5'	S 22°40.2'	104°07.7'	S 8°31.5'
2	253°09.7'	S 10°00.1'	218°11.3'	S 20°34.2'	183°07.7'	S 22°40.2'	119°08.7'	S 8°30.8'
3	268°10.8'	S 10°00.3'	233°13.1'	S 20°34.3'	198°09.9'	S 22°40.2'	134°09.7'	S 8°30.1'
4	283°11.8'	S 10°00.5'	248°15.0'	S 20°34.4'	213°12.0'	S 22°40.2'	149°10.7'	S 8°29.4'
5	298°12.8'	S 10°00.7'	263°16.9'	S 20°34.5'	228°14.2'	S 22°40.2'	164°11.7'	S 8°28.7'
6	313°13.9'	S 10°00.8'	278°18.8'	S 20°34.6'	243°16.4'	S 22°40.1'	179°12.6'	S 8°28.0'
7	328°14.9'	S 10°01.0'	293°20.7'	S 20°34.7'	258°18.5'	S 22°40.1'	194°13.6'	S 8°27.3'
8	343°15.9'	S 10°01.2'	308°22.5'	S 20°34.8'	273°20.7'	S 22°40.1'	209°14.6'	S 8°26.7'
9	358°16.9'	S 10°01.4'	323°24.4'	S 20°34.9'	288°22.9'	S 22°40.1'	224°15.6'	S 8°26.0'
10	13°18.0'	S 10°01.6'	338°26.3'	S 20°35.0'	303°25.0'	S 22°40.1'	239°16.6'	S 8°25.3'
11	28°19.0'	S 10°01.8'	353°28.2'	S 20°35.1'	318°27.2'	S 22°40.1'	254°17.6'	S 8°24.6'
12	43°20.0'	S 10°02.0'	8°30.1'	S 20°35.2'	333°29.4'	S 22°40.1'	269°18.5'	S 8°23.9'
13	58°21.0'	S 10°02.2'	23°31.9'	S 20°35.3'	348°31.5'	S 22°40.1'	284°19.5'	S 8°23.2'
14	73°22.0'	S 10°02.4'	38°33.8'	S 20°35.4'	3°33.7'	S 22°40.0'	299°20.5'	S 8°22.5'
15	88°23.0'	S 10°02.5'	53°35.7'	S 20°35.5'	18°35.9'	S 22°40.0'	314°21.5'	S 8°21.9'
16	103°24.0'	S 10°02.7'	68°37.6'	S 20°35.6'	33°38.1'	S 22°40.0'	329°22.5'	S 8°21.2'
17	118°25.0'	S 10°02.9'	83°39.4'	S 20°35.7'	48°40.2'	S 22°40.0'	344°23.5'	S 8°20.5'
18	133°26.0'	S 10°03.1'	98°41.3'	S 20°35.8'	63°42.4'	S 22°40.0'	359°24.5'	S 8°19.8'
19	148°27.0'	S 10°03.3'	113°43.2'	S 20°35.9'	78°44.6'	S 22°40.0'	14°25.4'	S 8°19.1'
20	163°28.0'	S 10°03.5'	128°45.1'	S 20°36.0'	93°46.7'	S 22°40.0'	29°26.4'	S 8°18.4'
21	178°29.0'	S 10°03.7'	143°47.0'	S 20°36.1'	108°48.9'	S 22°39.9'	44°27.4'	S 8°17.7'
22	193°30.0'	S 10°03.9'	158°48.8'	S 20°36.2'	123°51.1'	S 22°39.9'	59°28.4'	S 8°17.0'
23	208°31.0'	S 10°04.1'	173°50.7'	S 20°36.3'	138°53.2'	S 22°39.9'	74°29.4'	S 8°16.3'

Tue Dec 4, 2018 UTC

UTC	Venus -4.5		Jupiter -1.6		Saturn +0.5		Mars +0.0	
	v = 1.0' d = 0.2'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	223°32.0'	S 10°04.3'	188°52.6'	S 20°36.4'	153°55.4'	S 22°39.9'	89°30.4'	S 8°15.7'
1	238°33.0'	S 10°04.6'	203°54.5'	S 20°36.5'	168°57.6'	S 22°39.9'	104°31.3'	S 8°15.0'
2	253°34.0'	S 10°04.8'	218°56.3'	S 20°36.6'	183°59.7'	S 22°39.9'	119°32.3'	S 8°14.3'
3	268°34.9'	S 10°05.0'	233°58.2'	S 20°36.7'	199°01.9'	S 22°39.9'	134°33.3'	S 8°13.6'
4	283°35.9'	S 10°05.2'	249°00.1'	S 20°36.8'	214°04.1'	S 22°39.9'	149°34.3'	S 8°12.9'
5	298°36.9'	S 10°05.4'	264°02.0'	S 20°36.9'	229°06.2'	S 22°39.8'	164°35.3'	S 8°12.2'
6	313°37.9'	S 10°05.6'	279°03.9'	S 20°37.0'	244°08.4'	S 22°39.8'	179°36.3'	S 8°11.5'
7	328°38.9'	S 10°05.8'	294°05.7'	S 20°37.1'	259°10.6'	S 22°39.8'	194°37.3'	S 8°10.8'
8	343°39.8'	S 10°06.0'	309°07.6'	S 20°37.2'	274°12.7'	S 22°39.8'	209°38.2'	S 8°10.1'
9	358°40.8'	S 10°06.3'	324°09.5'	S 20°37.3'	289°14.9'	S 22°39.8'	224°39.2'	S 8°09.5'
10	13°41.8'	S 10°06.5'	339°11.4'	S 20°37.4'	304°17.1'	S 22°39.8'	239°40.2'	S 8°08.8'
11	28°42.7'	S 10°06.7'	354°13.2'	S 20°37.5'	319°19.2'	S 22°39.8'	254°41.2'	S 8°08.1'
12	43°43.7'	S 10°06.9'	9°15.1'	S 20°37.6'	334°21.4'	S 22°39.8'	269°42.2'	S 8°07.4'
13	58°44.6'	S 10°07.1'	24°17.0'	S 20°37.7'	349°23.5'	S 22°39.7'	284°43.2'	S 8°06.7'
14	73°45.6'	S 10°07.4'	39°18.9'	S 20°37.8'	4°25.7'	S 22°39.7'	299°44.1'	S 8°06.0'
15	88°46.6'	S 10°07.6'	54°20.8'	S 20°37.9'	19°27.9'	S 22°39.7'	314°45.1'	S 8°05.3'
16	103°47.5'	S 10°07.8'	69°22.6'	S 20°38.0'	34°30.0'	S 22°39.7'	329°46.1'	S 8°04.6'
17	118°48.5'	S 10°08.0'	84°24.5'	S 20°38.1'	49°32.2'	S 22°39.7'	344°47.1'	S 8°03.9'
18	133°49.4'	S 10°08.3'	99°26.4'	S 20°38.2'	64°34.4'	S 22°39.7'	359°48.1'	S 8°03.2'
19	148°50.4'	S 10°08.5'	114°28.3'	S 20°38.3'	79°36.5'	S 22°39.7'	14°49.0'	S 8°02.6'
20	163°51.3'	S 10°08.7'	129°30.2'	S 20°38.4'	94°38.7'	S 22°39.6'	29°50.0'	S 8°01.9'
21	178°52.2'	S 10°08.9'	144°32.0'	S 20°38.5'	109°40.9'	S 22°39.6'	44°51.0'	S 8°01.2'
22	193°53.2'	S 10°09.2'	159°33.9'	S 20°38.6'	124°43.0'	S 22°39.6'	59°52.0'	S 8°00.5'
23	208°54.1'	S 10°09.4'	174°35.8'	S 20°38.7'	139°45.2'	S 22°39.6'	74°53.0'	S 7°59.8'

Wed Dec 5, 2018 UTC

UTC	Venus -4.5 v = 0.9' d = 0.3'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +0.1 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	223°55.1'	S 10°09.7'	189°37.7'	S 20°38.8'	154°47.4'	S 22°39.6'	89°54.0'	S 7°59.1'
1	238°56.0'	S 10°09.9'	204°39.5'	S 20°38.9'	169°49.5'	S 22°39.6'	104°54.9'	S 7°58.4'
2	253°56.9'	S 10°10.1'	219°41.4'	S 20°39.0'	184°51.7'	S 22°39.6'	119°55.9'	S 7°57.7'
3	268°57.9'	S 10°10.4'	234°43.3'	S 20°39.1'	199°53.9'	S 22°39.6'	134°56.9'	S 7°57.0'
4	283°58.8'	S 10°10.6'	249°45.2'	S 20°39.2'	214°56.0'	S 22°39.5'	149°57.9'	S 7°56.3'
5	298°59.7'	S 10°10.8'	264°47.1'	S 20°39.3'	229°58.2'	S 22°39.5'	164°58.9'	S 7°55.6'
6	314°00.6'	S 10°11.1'	279°48.9'	S 20°39.4'	245°00.4'	S 22°39.5'	179°59.9'	S 7°55.0'
7	329°01.6'	S 10°11.3'	294°50.8'	S 20°39.5'	260°02.5'	S 22°39.5'	195°00.8'	S 7°54.3'
8	344°02.5'	S 10°11.6'	309°52.7'	S 20°39.6'	275°04.7'	S 22°39.5'	210°01.8'	S 7°53.6'
9	359°03.4'	S 10°11.8'	324°54.6'	S 20°39.7'	290°06.9'	S 22°39.5'	225°02.8'	S 7°52.9'
10	14°04.3'	S 10°12.1'	339°56.4'	S 20°39.8'	305°09.0'	S 22°39.5'	240°03.8'	S 7°52.2'
11	29°05.2'	S 10°12.3'	354°58.3'	S 20°39.9'	320°11.2'	S 22°39.4'	255°04.8'	S 7°51.5'
12	44°06.1'	S 10°12.6'	10°00.2'	S 20°40.0'	335°13.3'	S 22°39.4'	270°05.7'	S 7°50.8'
13	59°07.1'	S 10°12.8'	25°02.1'	S 20°40.1'	350°15.5'	S 22°39.4'	285°06.7'	S 7°50.1'
14	74°08.0'	S 10°13.1'	40°04.0'	S 20°40.2'	5°17.7'	S 22°39.4'	300°07.7'	S 7°49.4'
15	89°08.9'	S 10°13.3'	55°05.8'	S 20°40.3'	20°19.8'	S 22°39.4'	315°08.7'	S 7°48.7'
16	104°09.8'	S 10°13.6'	70°07.7'	S 20°40.4'	35°22.0'	S 22°39.4'	330°09.7'	S 7°48.0'
17	119°10.7'	S 10°13.8'	85°09.6'	S 20°40.5'	50°24.2'	S 22°39.4'	345°10.6'	S 7°47.3'
18	134°11.6'	S 10°14.1'	100°11.5'	S 20°40.6'	65°26.3'	S 22°39.3'	0°11.6'	S 7°46.6'
19	149°12.5'	S 10°14.4'	115°13.4'	S 20°40.7'	80°28.5'	S 22°39.3'	15°12.6'	S 7°46.0'
20	164°13.4'	S 10°14.6'	130°15.2'	S 20°40.8'	95°30.7'	S 22°39.3'	30°13.6'	S 7°45.3'
21	179°14.3'	S 10°14.9'	145°17.1'	S 20°40.9'	110°32.8'	S 22°39.3'	45°14.6'	S 7°44.6'
22	194°15.1'	S 10°15.1'	160°19.0'	S 20°41.0'	125°35.0'	S 22°39.3'	60°15.6'	S 7°43.9'
23	209°16.0'	S 10°15.4'	175°20.9'	S 20°41.1'	140°37.2'	S 22°39.3'	75°16.5'	S 7°43.2'

Thu Dec 6, 2018 UTC

UTC	Venus -4.5 v = 0.9' d = 0.3'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +0.1 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	224°16.9'	S 10°15.7'	190°22.7'	S 20°41.2'	155°39.3'	S 22°39.3'	90°17.5'	S 7°42.5'
1	239°17.8'	S 10°15.9'	205°24.6'	S 20°41.3'	170°41.5'	S 22°39.3'	105°18.5'	S 7°41.8'
2	254°18.7'	S 10°16.2'	220°26.5'	S 20°41.4'	185°43.6'	S 22°39.2'	120°19.5'	S 7°41.1'
3	269°19.6'	S 10°16.5'	235°28.4'	S 20°41.5'	200°45.8'	S 22°39.2'	135°20.5'	S 7°40.4'
4	284°20.4'	S 10°16.7'	250°30.3'	S 20°41.6'	215°48.0'	S 22°39.2'	150°21.4'	S 7°39.7'
5	299°21.3'	S 10°17.0'	265°32.1'	S 20°41.7'	230°50.1'	S 22°39.2'	165°22.4'	S 7°39.0'
6	314°22.2'	S 10°17.3'	280°34.0'	S 20°41.8'	245°52.3'	S 22°39.2'	180°23.4'	S 7°38.3'
7	329°23.1'	S 10°17.5'	295°35.9'	S 20°41.9'	260°54.5'	S 22°39.2'	195°24.4'	S 7°37.6'
8	344°23.9'	S 10°17.8'	310°37.8'	S 20°42.0'	275°56.6'	S 22°39.2'	210°25.4'	S 7°36.9'
9	359°24.8'	S 10°18.1'	325°39.6'	S 20°42.1'	290°58.8'	S 22°39.1'	225°26.3'	S 7°36.2'
10	14°25.7'	S 10°18.4'	340°41.5'	S 20°42.2'	306°00.9'	S 22°39.1'	240°27.3'	S 7°35.5'
11	29°26.5'	S 10°18.6'	355°43.4'	S 20°42.2'	321°03.1'	S 22°39.1'	255°28.3'	S 7°34.9'
12	44°27.4'	S 10°18.9'	10°45.3'	S 20°42.3'	336°05.3'	S 22°39.1'	270°29.3'	S 7°34.2'
13	59°28.3'	S 10°19.2'	25°47.2'	S 20°42.4'	351°07.4'	S 22°39.1'	285°30.3'	S 7°33.5'
14	74°29.1'	S 10°19.5'	40°49.0'	S 20°42.5'	6°09.6'	S 22°39.1'	300°31.2'	S 7°32.8'
15	89°30.0'	S 10°19.8'	55°50.9'	S 20°42.6'	21°11.8'	S 22°39.1'	315°32.2'	S 7°32.1'
16	104°30.8'	S 10°20.0'	70°52.8'	S 20°42.7'	36°13.9'	S 22°39.0'	330°33.2'	S 7°31.4'
17	119°31.7'	S 10°20.3'	85°54.7'	S 20°42.8'	51°16.1'	S 22°39.0'	345°34.2'	S 7°30.7'
18	134°32.5'	S 10°20.6'	100°56.6'	S 20°42.9'	66°18.3'	S 22°39.0'	0°35.1'	S 7°30.0'
19	149°33.4'	S 10°20.9'	115°58.4'	S 20°43.0'	81°20.4'	S 22°39.0'	15°36.1'	S 7°29.3'
20	164°34.2'	S 10°21.2'	131°00.3'	S 20°43.1'	96°22.6'	S 22°39.0'	30°37.1'	S 7°28.6'
21	179°35.1'	S 10°21.5'	146°02.2'	S 20°43.2'	111°24.7'	S 22°39.0'	45°38.1'	S 7°27.9'
22	194°35.9'	S 10°21.8'	161°04.1'	S 20°43.3'	126°26.9'	S 22°39.0'	60°39.1'	S 7°27.2'
23	209°36.8'	S 10°22.0'	176°05.9'	S 20°43.4'	141°29.1'	S 22°38.9'	75°40.0'	S 7°26.5'

Fri Dec 7, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.1	
	v = 0.8' d = 0.3'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	224°37.6'	S 10°22.3'	191°07.8'	S 20°43.5'	156°31.2'	S 22°38.9'	90°41.0'	S 7°25.8'
1	239°38.4'	S 10°22.6'	206°09.7'	S 20°43.6'	171°33.4'	S 22°38.9'	105°42.0'	S 7°25.1'
2	254°39.3'	S 10°22.9'	221°11.6'	S 20°43.7'	186°35.6'	S 22°38.9'	120°43.0'	S 7°24.4'
3	269°40.1'	S 10°23.2'	236°13.5'	S 20°43.8'	201°37.7'	S 22°38.9'	135°44.0'	S 7°23.7'
4	284°40.9'	S 10°23.5'	251°15.3'	S 20°43.9'	216°39.9'	S 22°38.9'	150°44.9'	S 7°23.0'
5	299°41.8'	S 10°23.8'	266°17.2'	S 20°44.0'	231°42.0'	S 22°38.9'	165°45.9'	S 7°22.3'
6	314°42.6'	S 10°24.1'	281°19.1'	S 20°44.1'	246°44.2'	S 22°38.9'	180°46.9'	S 7°21.6'
7	329°43.4'	S 10°24.4'	296°21.0'	S 20°44.2'	261°46.4'	S 22°38.8'	195°47.9'	S 7°20.9'
8	344°44.2'	S 10°24.7'	311°22.9'	S 20°44.3'	276°48.5'	S 22°38.8'	210°48.8'	S 7°20.2'
9	359°45.1'	S 10°25.0'	326°24.7'	S 20°44.4'	291°50.7'	S 22°38.8'	225°49.8'	S 7°19.5'
10	14°45.9'	S 10°25.3'	341°26.6'	S 20°44.5'	306°52.8'	S 22°38.8'	240°50.8'	S 7°18.9'
11	29°46.7'	S 10°25.6'	356°28.5'	S 20°44.6'	321°55.0'	S 22°38.8'	255°51.8'	S 7°18.2'
12	44°47.5'	S 10°25.9'	11°30.4'	S 20°44.7'	336°57.2'	S 22°38.8'	270°52.8'	S 7°17.5'
13	59°48.3'	S 10°26.2'	26°32.2'	S 20°44.8'	351°59.3'	S 22°38.8'	285°53.7'	S 7°16.8'
14	74°49.1'	S 10°26.5'	41°34.1'	S 20°44.9'	7°01.5'	S 22°38.7'	300°54.7'	S 7°16.1'
15	89°49.9'	S 10°26.8'	56°36.0'	S 20°45.0'	22°03.7'	S 22°38.7'	315°55.7'	S 7°15.4'
16	104°50.8'	S 10°27.1'	71°37.9'	S 20°45.1'	37°05.8'	S 22°38.7'	330°56.7'	S 7°14.7'
17	119°51.6'	S 10°27.5'	86°39.8'	S 20°45.2'	52°08.0'	S 22°38.7'	345°57.6'	S 7°14.0'
18	134°52.4'	S 10°27.8'	101°41.6'	S 20°45.3'	67°10.1'	S 22°38.7'	0°58.6'	S 7°13.3'
19	149°53.2'	S 10°28.1'	116°43.5'	S 20°45.4'	82°12.3'	S 22°38.7'	15°59.6'	S 7°12.6'
20	164°54.0'	S 10°28.4'	131°45.4'	S 20°45.5'	97°14.5'	S 22°38.7'	31°00.6'	S 7°11.9'
21	179°54.8'	S 10°28.7'	146°47.3'	S 20°45.6'	112°16.6'	S 22°38.6'	46°01.6'	S 7°11.2'
22	194°55.6'	S 10°29.0'	161°49.2'	S 20°45.6'	127°18.8'	S 22°38.6'	61°02.5'	S 7°10.5'
23	209°56.4'	S 10°29.3'	176°51.0'	S 20°45.7'	142°20.9'	S 22°38.6'	76°03.5'	S 7°09.8'

Sat Dec 8, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.1	
	v = 0.8' d = 0.3'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	224°57.1'	S 10°29.7'	191°52.9'	S 20°45.8'	157°23.1'	S 22°38.6'	91°04.5'	S 7°09.1'
1	239°57.9'	S 10°30.0'	206°54.8'	S 20°45.9'	172°25.3'	S 22°38.6'	106°05.5'	S 7°08.4'
2	254°58.7'	S 10°30.3'	221°56.7'	S 20°46.0'	187°27.4'	S 22°38.6'	121°06.4'	S 7°07.7'
3	269°59.5'	S 10°30.6'	236°58.5'	S 20°46.1'	202°29.6'	S 22°38.6'	136°07.4'	S 7°07.0'
4	285°00.3'	S 10°30.9'	252°00.4'	S 20°46.2'	217°31.8'	S 22°38.5'	151°08.4'	S 7°06.3'
5	300°01.1'	S 10°31.3'	267°02.3'	S 20°46.3'	232°33.9'	S 22°38.5'	166°09.4'	S 7°05.6'
6	315°01.9'	S 10°31.6'	282°04.2'	S 20°46.4'	247°36.1'	S 22°38.5'	181°10.3'	S 7°04.9'
7	330°02.6'	S 10°31.9'	297°06.1'	S 20°46.5'	262°38.2'	S 22°38.5'	196°11.3'	S 7°04.2'
8	345°03.4'	S 10°32.2'	312°07.9'	S 20°46.6'	277°40.4'	S 22°38.5'	211°12.3'	S 7°03.5'
9	0°04.2'	S 10°32.6'	327°09.8'	S 20°46.7'	292°42.6'	S 22°38.5'	226°13.3'	S 7°02.8'
10	15°05.0'	S 10°32.9'	342°11.7'	S 20°46.8'	307°44.7'	S 22°38.4'	241°14.3'	S 7°02.1'
11	30°05.7'	S 10°33.2'	357°13.6'	S 20°46.9'	322°46.9'	S 22°38.4'	256°15.2'	S 7°01.4'
12	45°06.5'	S 10°33.5'	12°15.5'	S 20°47.0'	337°49.0'	S 22°38.4'	271°16.2'	S 7°00.7'
13	60°07.3'	S 10°33.9'	27°17.3'	S 20°47.1'	352°51.2'	S 22°38.4'	286°17.2'	S 7°00.0'
14	75°08.0'	S 10°34.2'	42°19.2'	S 20°47.2'	7°53.4'	S 22°38.4'	301°18.2'	S 6°59.3'
15	90°08.8'	S 10°34.5'	57°21.1'	S 20°47.3'	22°55.5'	S 22°38.4'	316°19.1'	S 6°58.6'
16	105°09.6'	S 10°34.9'	72°23.0'	S 20°47.4'	37°57.7'	S 22°38.4'	331°20.1'	S 6°57.9'
17	120°10.3'	S 10°35.2'	87°24.9'	S 20°47.5'	52°59.8'	S 22°38.3'	346°21.1'	S 6°57.2'
18	135°11.1'	S 10°35.5'	102°26.7'	S 20°47.6'	68°02.0'	S 22°38.3'	1°22.1'	S 6°56.5'
19	150°11.8'	S 10°35.9'	117°28.6'	S 20°47.7'	83°04.2'	S 22°38.3'	16°23.0'	S 6°55.8'
20	165°12.6'	S 10°36.2'	132°30.5'	S 20°47.8'	98°06.3'	S 22°38.3'	31°24.0'	S 6°55.1'
21	180°13.3'	S 10°36.5'	147°32.4'	S 20°47.9'	113°08.5'	S 22°38.3'	46°25.0'	S 6°54.4'
22	195°14.1'	S 10°36.9'	162°34.2'	S 20°48.0'	128°10.6'	S 22°38.3'	61°26.0'	S 6°53.7'
23	210°14.8'	S 10°37.2'	177°36.1'	S 20°48.0'	143°12.8'	S 22°38.3'	76°26.9'	S 6°53.0'

Sun Dec 9, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.1	
	v = 0.7' d = 0.4'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	225°15.6'	S 10°37.6'	192°38.0'	S 20°48.1'	158°15.0'	S 22°38.2'	91°27.9'	S 6°52.3'
1	240°16.3'	S 10°37.9'	207°39.9'	S 20°48.2'	173°17.1'	S 22°38.2'	106°28.9'	S 6°51.6'
2	255°17.1'	S 10°38.3'	222°41.8'	S 20°48.3'	188°19.3'	S 22°38.2'	121°29.9'	S 6°50.9'
3	270°17.8'	S 10°38.6'	237°43.6'	S 20°48.4'	203°21.4'	S 22°38.2'	136°30.8'	S 6°50.2'
4	285°18.6'	S 10°38.9'	252°45.5'	S 20°48.5'	218°23.6'	S 22°38.2'	151°31.8'	S 6°49.5'
5	300°19.3'	S 10°39.3'	267°47.4'	S 20°48.6'	233°25.8'	S 22°38.2'	166°32.8'	S 6°48.8'
6	315°20.0'	S 10°39.6'	282°49.3'	S 20°48.7'	248°27.9'	S 22°38.2'	181°33.8'	S 6°48.1'
7	330°20.8'	S 10°40.0'	297°51.2'	S 20°48.8'	263°30.1'	S 22°38.1'	196°34.7'	S 6°47.4'
8	345°21.5'	S 10°40.3'	312°53.0'	S 20°48.9'	278°32.2'	S 22°38.1'	211°35.7'	S 6°46.7'
9	0°22.2'	S 10°40.7'	327°54.9'	S 20°49.0'	293°34.4'	S 22°38.1'	226°36.7'	S 6°46.0'
10	15°23.0'	S 10°41.0'	342°56.8'	S 20°49.1'	308°36.6'	S 22°38.1'	241°37.7'	S 6°45.3'
11	30°23.7'	S 10°41.4'	357°58.7'	S 20°49.2'	323°38.7'	S 22°38.1'	256°38.6'	S 6°44.6'
12	45°24.4'	S 10°41.7'	13°00.6'	S 20°49.3'	338°40.9'	S 22°38.1'	271°39.6'	S 6°43.9'
13	60°25.1'	S 10°42.1'	28°02.4'	S 20°49.4'	353°43.0'	S 22°38.1'	286°40.6'	S 6°43.2'
14	75°25.9'	S 10°42.5'	43°04.3'	S 20°49.5'	8°45.2'	S 22°38.0'	301°41.6'	S 6°42.5'
15	90°26.6'	S 10°42.8'	58°06.2'	S 20°49.6'	23°47.3'	S 22°38.0'	316°42.5'	S 6°41.8'
16	105°27.3'	S 10°43.2'	73°08.1'	S 20°49.7'	38°49.5'	S 22°38.0'	331°43.5'	S 6°41.1'
17	120°28.0'	S 10°43.5'	88°10.0'	S 20°49.8'	53°51.7'	S 22°38.0'	346°44.5'	S 6°40.4'
18	135°28.7'	S 10°43.9'	103°11.8'	S 20°49.9'	68°53.8'	S 22°38.0'	1°45.5'	S 6°39.7'
19	150°29.5'	S 10°44.2'	118°13.7'	S 20°50.0'	83°56.0'	S 22°38.0'	16°46.4'	S 6°39.0'
20	165°30.2'	S 10°44.6'	133°15.6'	S 20°50.0'	98°58.1'	S 22°37.9'	31°47.4'	S 6°38.3'
21	180°30.9'	S 10°45.0'	148°17.5'	S 20°50.1'	114°00.3'	S 22°37.9'	46°48.4'	S 6°37.6'
22	195°31.6'	S 10°45.3'	163°19.3'	S 20°50.2'	129°02.5'	S 22°37.9'	61°49.4'	S 6°36.9'
23	210°32.3'	S 10°45.7'	178°21.2'	S 20°50.3'	144°04.6'	S 22°37.9'	76°50.3'	S 6°36.2'

Mon Dec 10, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.1	
	v = 0.7' d = 0.4'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	225°33.0'	S 10°46.1'	193°23.1'	S 20°50.4'	159°06.8'	S 22°37.9'	91°51.3'	S 6°35.5'
1	240°33.7'	S 10°46.4'	208°25.0'	S 20°50.5'	174°08.9'	S 22°37.9'	106°52.3'	S 6°34.8'
2	255°34.4'	S 10°46.8'	223°26.9'	S 20°50.6'	189°11.1'	S 22°37.9'	121°53.2'	S 6°34.1'
3	270°35.1'	S 10°47.2'	238°28.7'	S 20°50.7'	204°13.3'	S 22°37.8'	136°54.2'	S 6°33.4'
4	285°35.8'	S 10°47.5'	253°30.6'	S 20°50.8'	219°15.4'	S 22°37.8'	151°55.2'	S 6°32.7'
5	300°36.5'	S 10°47.9'	268°32.5'	S 20°50.9'	234°17.6'	S 22°37.8'	166°56.2'	S 6°32.0'
6	315°37.2'	S 10°48.3'	283°34.4'	S 20°51.0'	249°19.7'	S 22°37.8'	181°57.1'	S 6°31.3'
7	330°37.9'	S 10°48.6'	298°36.3'	S 20°51.1'	264°21.9'	S 22°37.8'	196°58.1'	S 6°30.6'
8	345°38.6'	S 10°49.0'	313°38.1'	S 20°51.2'	279°24.0'	S 22°37.8'	211°59.1'	S 6°29.9'
9	0°39.2'	S 10°49.4'	328°40.0'	S 20°51.3'	294°26.2'	S 22°37.8'	227°00.1'	S 6°29.2'
10	15°39.9'	S 10°49.7'	343°41.9'	S 20°51.4'	309°28.4'	S 22°37.7'	242°01.0'	S 6°28.5'
11	30°40.6'	S 10°50.1'	358°43.8'	S 20°51.5'	324°30.5'	S 22°37.7'	257°02.0'	S 6°27.8'
12	45°41.3'	S 10°50.5'	13°45.7'	S 20°51.6'	339°32.7'	S 22°37.7'	272°03.0'	S 6°27.1'
13	60°42.0'	S 10°50.9'	28°47.5'	S 20°51.6'	354°34.8'	S 22°37.7'	287°04.0'	S 6°26.4'
14	75°42.7'	S 10°51.3'	43°49.4'	S 20°51.7'	9°37.0'	S 22°37.7'	302°04.9'	S 6°25.7'
15	90°43.3'	S 10°51.6'	58°51.3'	S 20°51.8'	24°39.1'	S 22°37.7'	317°05.9'	S 6°25.0'
16	105°44.0'	S 10°52.0'	73°53.2'	S 20°51.9'	39°41.3'	S 22°37.6'	332°06.9'	S 6°24.3'
17	120°44.7'	S 10°52.4'	88°55.1'	S 20°52.0'	54°43.5'	S 22°37.6'	347°07.8'	S 6°23.5'
18	135°45.4'	S 10°52.8'	103°56.9'	S 20°52.1'	69°45.6'	S 22°37.6'	2°08.8'	S 6°22.8'
19	150°46.0'	S 10°53.2'	118°58.8'	S 20°52.2'	84°47.8'	S 22°37.6'	17°09.8'	S 6°22.1'
20	165°46.7'	S 10°53.5'	134°00.7'	S 20°52.3'	99°49.9'	S 22°37.6'	32°10.8'	S 6°21.4'
21	180°47.4'	S 10°53.9'	149°02.6'	S 20°52.4'	114°52.1'	S 22°37.6'	47°11.7'	S 6°20.7'
22	195°48.0'	S 10°54.3'	164°04.5'	S 20°52.5'	129°54.3'	S 22°37.6'	62°12.7'	S 6°20.0'
23	210°48.7'	S 10°54.7'	179°06.3'	S 20°52.6'	144°56.4'	S 22°37.5'	77°13.7'	S 6°19.3'

Tue Dec 11, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.2	
	v = 0.6' d = 0.4'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	225°49.4'	S 10°55.1'	194°08.2'	S 20°52.7'	159°58.6'	S 22°37.5'	92°14.6'	S 6°18.6'
1	240°50.0'	S 10°55.5'	209°10.1'	S 20°52.8'	175°00.7'	S 22°37.5'	107°15.6'	S 6°17.9'
2	255°50.7'	S 10°55.8'	224°12.0'	S 20°52.9'	190°02.9'	S 22°37.5'	122°16.6'	S 6°17.2'
3	270°51.3'	S 10°56.2'	239°13.9'	S 20°53.0'	205°05.0'	S 22°37.5'	137°17.6'	S 6°16.5'
4	285°52.0'	S 10°56.6'	254°15.7'	S 20°53.1'	220°07.2'	S 22°37.5'	152°18.5'	S 6°15.8'
5	300°52.7'	S 10°57.0'	269°17.6'	S 20°53.1'	235°09.4'	S 22°37.4'	167°19.5'	S 6°15.1'
6	315°53.3'	S 10°57.4'	284°19.5'	S 20°53.2'	250°11.5'	S 22°37.4'	182°20.5'	S 6°14.4'
7	330°54.0'	S 10°57.8'	299°21.4'	S 20°53.3'	265°13.7'	S 22°37.4'	197°21.4'	S 6°13.7'
8	345°54.6'	S 10°58.2'	314°23.3'	S 20°53.4'	280°15.8'	S 22°37.4'	212°22.4'	S 6°13.0'
9	0°55.2'	S 10°58.6'	329°25.1'	S 20°53.5'	295°18.0'	S 22°37.4'	227°23.4'	S 6°12.3'
10	15°55.9'	S 10°59.0'	344°27.0'	S 20°53.6'	310°20.1'	S 22°37.4'	242°24.4'	S 6°11.6'
11	30°56.5'	S 10°59.4'	359°28.9'	S 20°53.7'	325°22.3'	S 22°37.4'	257°25.3'	S 6°10.9'
12	45°57.2'	S 10°59.8'	14°30.8'	S 20°53.8'	340°24.5'	S 22°37.3'	272°26.3'	S 6°10.2'
13	60°57.8'	S 11°00.2'	29°32.7'	S 20°53.9'	355°26.6'	S 22°37.3'	287°27.3'	S 6°09.5'
14	75°58.5'	S 11°00.6'	44°34.5'	S 20°54.0'	10°28.8'	S 22°37.3'	302°28.2'	S 6°08.8'
15	90°59.1'	S 11°01.0'	59°36.4'	S 20°54.1'	25°30.9'	S 22°37.3'	317°29.2'	S 6°08.1'
16	105°59.7'	S 11°01.4'	74°38.3'	S 20°54.2'	40°33.1'	S 22°37.3'	332°30.2'	S 6°07.4'
17	121°00.4'	S 11°01.8'	89°40.2'	S 20°54.3'	55°35.2'	S 22°37.3'	347°31.2'	S 6°06.6'
18	136°01.0'	S 11°02.2'	104°42.1'	S 20°54.4'	70°37.4'	S 22°37.2'	2°32.1'	S 6°05.9'
19	151°01.6'	S 11°02.6'	119°43.9'	S 20°54.4'	85°39.5'	S 22°37.2'	17°33.1'	S 6°05.2'
20	166°02.3'	S 11°03.0'	134°45.8'	S 20°54.5'	100°41.7'	S 22°37.2'	32°34.1'	S 6°04.5'
21	181°02.9'	S 11°03.4'	149°47.7'	S 20°54.6'	115°43.9'	S 22°37.2'	47°35.0'	S 6°03.8'
22	196°03.5'	S 11°03.8'	164°49.6'	S 20°54.7'	130°46.0'	S 22°37.2'	62°36.0'	S 6°03.1'
23	211°04.1'	S 11°04.2'	179°51.5'	S 20°54.8'	145°48.2'	S 22°37.2'	77°37.0'	S 6°02.4'

Wed Dec 12, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.2	
	v = 0.6' d = 0.4'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	226°04.7'	S 11°04.6'	194°53.3'	S 20°54.9'	160°50.3'	S 22°37.1'	92°38.0'	S 6°01.7'
1	241°05.4'	S 11°05.0'	209°55.2'	S 20°55.0'	175°52.5'	S 22°37.1'	107°38.9'	S 6°01.0'
2	256°06.0'	S 11°05.4'	224°57.1'	S 20°55.1'	190°54.6'	S 22°37.1'	122°39.9'	S 6°00.3'
3	271°06.6'	S 11°05.8'	239°59.0'	S 20°55.2'	205°56.8'	S 22°37.1'	137°40.9'	S 5°59.6'
4	286°07.2'	S 11°06.2'	255°00.9'	S 20°55.3'	220°59.0'	S 22°37.1'	152°41.8'	S 5°58.9'
5	301°07.8'	S 11°06.6'	270°02.8'	S 20°55.4'	236°01.1'	S 22°37.1'	167°42.8'	S 5°58.2'
6	316°08.4'	S 11°07.1'	285°04.6'	S 20°55.5'	251°03.3'	S 22°37.1'	182°43.8'	S 5°57.5'
7	331°09.1'	S 11°07.5'	300°06.5'	S 20°55.6'	266°05.4'	S 22°37.0'	197°44.7'	S 5°56.8'
8	346°09.7'	S 11°07.9'	315°08.4'	S 20°55.6'	281°07.6'	S 22°37.0'	212°45.7'	S 5°56.1'
9	1°10.3'	S 11°08.3'	330°10.3'	S 20°55.7'	296°09.7'	S 22°37.0'	227°46.7'	S 5°55.4'
10	16°10.9'	S 11°08.7'	345°12.2'	S 20°55.8'	311°11.9'	S 22°37.0'	242°47.7'	S 5°54.7'
11	31°11.5'	S 11°09.1'	0°14.0'	S 20°55.9'	326°14.0'	S 22°37.0'	257°48.6'	S 5°53.9'
12	46°12.1'	S 11°09.5'	15°15.9'	S 20°56.0'	341°16.2'	S 22°37.0'	272°49.6'	S 5°53.2'
13	61°12.7'	S 11°10.0'	30°17.8'	S 20°56.1'	356°18.4'	S 22°36.9'	287°50.6'	S 5°52.5'
14	76°13.3'	S 11°10.4'	45°19.7'	S 20°56.2'	11°20.5'	S 22°36.9'	302°51.5'	S 5°51.8'
15	91°13.9'	S 11°10.8'	60°21.6'	S 20°56.3'	26°22.7'	S 22°36.9'	317°52.5'	S 5°51.1'
16	106°14.5'	S 11°11.2'	75°23.4'	S 20°56.4'	41°24.8'	S 22°36.9'	332°53.5'	S 5°50.4'
17	121°15.1'	S 11°11.6'	90°25.3'	S 20°56.5'	56°27.0'	S 22°36.9'	347°54.4'	S 5°49.7'
18	136°15.7'	S 11°12.1'	105°27.2'	S 20°56.6'	71°29.1'	S 22°36.9'	2°55.4'	S 5°49.0'
19	151°16.2'	S 11°12.5'	120°29.1'	S 20°56.7'	86°31.3'	S 22°36.8'	17°56.4'	S 5°48.3'
20	166°16.8'	S 11°12.9'	135°31.0'	S 20°56.8'	101°33.4'	S 22°36.8'	32°57.4'	S 5°47.6'
21	181°17.4'	S 11°13.3'	150°32.8'	S 20°56.8'	116°35.6'	S 22°36.8'	47°58.3'	S 5°46.9'
22	196°18.0'	S 11°13.8'	165°34.7'	S 20°56.9'	131°37.8'	S 22°36.8'	62°59.3'	S 5°46.2'
23	211°18.6'	S 11°14.2'	180°36.6'	S 20°57.0'	146°39.9'	S 22°36.8'	78°00.3'	S 5°45.5'

Thu Dec 13, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.2	
	v = 0.6' d = 0.4'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	226°19.2'	S 11°14.6'	195°38.5'	S 20°57.1'	161°42.1'	S 22°36.8'	93°01.2'	S 5°44.8'
1	241°19.8'	S 11°15.0'	210°40.4'	S 20°57.2'	176°44.2'	S 22°36.8'	108°02.2'	S 5°44.1'
2	256°20.3'	S 11°15.5'	225°42.3'	S 20°57.3'	191°46.4'	S 22°36.7'	123°03.2'	S 5°43.3'
3	271°20.9'	S 11°15.9'	240°44.1'	S 20°57.4'	206°48.5'	S 22°36.7'	138°04.1'	S 5°42.6'
4	286°21.5'	S 11°16.3'	255°46.0'	S 20°57.5'	221°50.7'	S 22°36.7'	153°05.1'	S 5°41.9'
5	301°22.1'	S 11°16.7'	270°47.9'	S 20°57.6'	236°52.8'	S 22°36.7'	168°06.1'	S 5°41.2'
6	316°22.6'	S 11°17.2'	285°49.8'	S 20°57.7'	251°55.0'	S 22°36.7'	183°07.0'	S 5°40.5'
7	331°23.2'	S 11°17.6'	300°51.7'	S 20°57.8'	266°57.2'	S 22°36.7'	198°08.0'	S 5°39.8'
8	346°23.8'	S 11°18.0'	315°53.5'	S 20°57.8'	281°59.3'	S 22°36.6'	213°09.0'	S 5°39.1'
9	1°24.3'	S 11°18.5'	330°55.4'	S 20°57.9'	297°01.5'	S 22°36.6'	228°10.0'	S 5°38.4'
10	16°24.9'	S 11°18.9'	345°57.3'	S 20°58.0'	312°03.6'	S 22°36.6'	243°10.9'	S 5°37.7'
11	31°25.5'	S 11°19.3'	0°59.2'	S 20°58.1'	327°05.8'	S 22°36.6'	258°11.9'	S 5°37.0'
12	46°26.0'	S 11°19.8'	16°01.1'	S 20°58.2'	342°07.9'	S 22°36.6'	273°12.9'	S 5°36.3'
13	61°26.6'	S 11°20.2'	31°02.9'	S 20°58.3'	357°10.1'	S 22°36.6'	288°13.8'	S 5°35.6'
14	76°27.2'	S 11°20.6'	46°04.8'	S 20°58.4'	12°12.2'	S 22°36.5'	303°14.8'	S 5°34.9'
15	91°27.7'	S 11°21.1'	61°06.7'	S 20°58.5'	27°14.4'	S 22°36.5'	318°15.8'	S 5°34.1'
16	106°28.3'	S 11°21.5'	76°08.6'	S 20°58.6'	42°16.5'	S 22°36.5'	333°16.7'	S 5°33.4'
17	121°28.8'	S 11°22.0'	91°10.5'	S 20°58.7'	57°18.7'	S 22°36.5'	348°17.7'	S 5°32.7'
18	136°29.4'	S 11°22.4'	106°12.4'	S 20°58.8'	72°20.9'	S 22°36.5'	3°18.7'	S 5°32.0'
19	151°29.9'	S 11°22.8'	121°14.2'	S 20°58.8'	87°23.0'	S 22°36.5'	18°19.6'	S 5°31.3'
20	166°30.5'	S 11°23.3'	136°16.1'	S 20°58.9'	102°25.2'	S 22°36.4'	33°20.6'	S 5°30.6'
21	181°31.0'	S 11°23.7'	151°18.0'	S 20°59.0'	117°27.3'	S 22°36.4'	48°21.6'	S 5°29.9'
22	196°31.6'	S 11°24.2'	166°19.9'	S 20°59.1'	132°29.5'	S 22°36.4'	63°22.5'	S 5°29.2'
23	211°32.1'	S 11°24.6'	181°21.8'	S 20°59.2'	147°31.6'	S 22°36.4'	78°23.5'	S 5°28.5'

Fri Dec 14, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.2	
	v = 0.5' d = 0.5'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	226°32.7'	S 11°25.1'	196°23.6'	S 20°59.3'	162°33.8'	S 22°36.4'	93°24.5'	S 5°27.8'
1	241°33.2'	S 11°25.5'	211°25.5'	S 20°59.4'	177°35.9'	S 22°36.4'	108°25.4'	S 5°27.1'
2	256°33.8'	S 11°25.9'	226°27.4'	S 20°59.5'	192°38.1'	S 22°36.3'	123°26.4'	S 5°26.3'
3	271°34.3'	S 11°26.4'	241°29.3'	S 20°59.6'	207°40.2'	S 22°36.3'	138°27.4'	S 5°25.6'
4	286°34.8'	S 11°26.8'	256°31.2'	S 20°59.7'	222°42.4'	S 22°36.3'	153°28.3'	S 5°24.9'
5	301°35.4'	S 11°27.3'	271°33.1'	S 20°59.8'	237°44.6'	S 22°36.3'	168°29.3'	S 5°24.2'
6	316°35.9'	S 11°27.7'	286°34.9'	S 20°59.8'	252°46.7'	S 22°36.3'	183°30.3'	S 5°23.5'
7	331°36.4'	S 11°28.2'	301°36.8'	S 20°59.9'	267°48.9'	S 22°36.3'	198°31.2'	S 5°22.8'
8	346°37.0'	S 11°28.6'	316°38.7'	S 21°00.0'	282°51.0'	S 22°36.2'	213°32.2'	S 5°22.1'
9	1°37.5'	S 11°29.1'	331°40.6'	S 21°00.1'	297°53.2'	S 22°36.2'	228°33.2'	S 5°21.4'
10	16°38.0'	S 11°29.5'	346°42.5'	S 21°00.2'	312°55.3'	S 22°36.2'	243°34.1'	S 5°20.7'
11	31°38.6'	S 11°30.0'	1°44.3'	S 21°00.3'	327°57.5'	S 22°36.2'	258°35.1'	S 5°20.0'
12	46°39.1'	S 11°30.4'	16°46.2'	S 21°00.4'	342°59.6'	S 22°36.2'	273°36.1'	S 5°19.3'
13	61°39.6'	S 11°30.9'	31°48.1'	S 21°00.5'	358°01.8'	S 22°36.2'	288°37.0'	S 5°18.5'
14	76°40.1'	S 11°31.3'	46°50.0'	S 21°00.6'	13°03.9'	S 22°36.1'	303°38.0'	S 5°17.8'
15	91°40.6'	S 11°31.8'	61°51.9'	S 21°00.7'	28°06.1'	S 22°36.1'	318°39.0'	S 5°17.1'
16	106°41.2'	S 11°32.2'	76°53.8'	S 21°00.7'	43°08.2'	S 22°36.1'	333°39.9'	S 5°16.4'
17	121°41.7'	S 11°32.7'	91°55.6'	S 21°00.8'	58°10.4'	S 22°36.1'	348°40.9'	S 5°15.7'
18	136°42.2'	S 11°33.2'	106°57.5'	S 21°00.9'	73°12.6'	S 22°36.1'	3°41.9'	S 5°15.0'
19	151°42.7'	S 11°33.6'	121°59.4'	S 21°01.0'	88°14.7'	S 22°36.1'	18°42.8'	S 5°14.3'
20	166°43.2'	S 11°34.1'	137°01.3'	S 21°01.1'	103°16.9'	S 22°36.0'	33°43.8'	S 5°13.6'
21	181°43.7'	S 11°34.5'	152°03.2'	S 21°01.2'	118°19.0'	S 22°36.0'	48°44.8'	S 5°12.9'
22	196°44.3'	S 11°35.0'	167°05.1'	S 21°01.3'	133°21.2'	S 22°36.0'	63°45.7'	S 5°12.2'
23	211°44.8'	S 11°35.5'	182°06.9'	S 21°01.4'	148°23.3'	S 22°36.0'	78°46.7'	S 5°11.4'

Sat Dec 15, 2018 UTC

UTC	Venus -4.4 v = 0.5' d = 0.5'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +0.2 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	226°45.3'	S 11°35.9'	197°08.8'	S 21°01.5'	163°25.5'	S 22°36.0'	93°47.7'	S 5°10.7'
1	241°45.8'	S 11°36.4'	212°10.7'	S 21°01.6'	178°27.6'	S 22°36.0'	108°48.6'	S 5°10.0'
2	256°46.3'	S 11°36.8'	227°12.6'	S 21°01.6'	193°29.8'	S 22°35.9'	123°49.6'	S 5°09.3'
3	271°46.8'	S 11°37.3'	242°14.5'	S 21°01.7'	208°31.9'	S 22°35.9'	138°50.6'	S 5°08.6'
4	286°47.3'	S 11°37.8'	257°16.3'	S 21°01.8'	223°34.1'	S 22°35.9'	153°51.5'	S 5°07.9'
5	301°47.8'	S 11°38.2'	272°18.2'	S 21°01.9'	238°36.2'	S 22°35.9'	168°52.5'	S 5°07.2'
6	316°48.3'	S 11°38.7'	287°20.1'	S 21°02.0'	253°38.4'	S 22°35.9'	183°53.5'	S 5°06.5'
7	331°48.8'	S 11°39.2'	302°22.0'	S 21°02.1'	268°40.5'	S 22°35.9'	198°54.4'	S 5°05.8'
8	346°49.3'	S 11°39.6'	317°23.9'	S 21°02.2'	283°42.7'	S 22°35.8'	213°55.4'	S 5°05.1'
9	1°49.8'	S 11°40.1'	332°25.8'	S 21°02.3'	298°44.9'	S 22°35.8'	228°56.4'	S 5°04.3'
10	16°50.3'	S 11°40.6'	347°27.6'	S 21°02.4'	313°47.0'	S 22°35.8'	243°57.3'	S 5°03.6'
11	31°50.7'	S 11°41.0'	2°29.5'	S 21°02.4'	328°49.2'	S 22°35.8'	258°58.3'	S 5°02.9'
12	46°51.2'	S 11°41.5'	17°31.4'	S 21°02.5'	343°51.3'	S 22°35.8'	273°59.3'	S 5°02.2'
13	61°51.7'	S 11°42.0'	32°33.3'	S 21°02.6'	358°53.5'	S 22°35.8'	289°00.2'	S 5°01.5'
14	76°52.2'	S 11°42.4'	47°35.2'	S 21°02.7'	13°55.6'	S 22°35.7'	304°01.2'	S 5°00.8'
15	91°52.7'	S 11°42.9'	62°37.1'	S 21°02.8'	28°57.8'	S 22°35.7'	319°02.2'	S 5°00.1'
16	106°53.2'	S 11°43.4'	77°38.9'	S 21°02.9'	43°59.9'	S 22°35.7'	334°03.1'	S 4°59.4'
17	121°53.7'	S 11°43.8'	92°40.8'	S 21°03.0'	59°02.1'	S 22°35.7'	349°04.1'	S 4°58.7'
18	136°54.1'	S 11°44.3'	107°42.7'	S 21°03.1'	74°04.2'	S 22°35.7'	4°05.1'	S 4°57.9'
19	151°54.6'	S 11°44.8'	122°44.6'	S 21°03.2'	89°06.4'	S 22°35.7'	19°06.0'	S 4°57.2'
20	166°55.1'	S 11°45.3'	137°46.5'	S 21°03.2'	104°08.5'	S 22°35.6'	34°07.0'	S 4°56.5'
21	181°55.6'	S 11°45.7'	152°48.4'	S 21°03.3'	119°10.7'	S 22°35.6'	49°08.0'	S 4°55.8'
22	196°56.0'	S 11°46.2'	167°50.2'	S 21°03.4'	134°12.8'	S 22°35.6'	64°08.9'	S 4°55.1'
23	211°56.5'	S 11°46.7'	182°52.1'	S 21°03.5'	149°15.0'	S 22°35.6'	79°09.9'	S 4°54.4'

Sun Dec 16, 2018 UTC

UTC	Venus -4.4 v = 0.5' d = 0.5'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +0.2 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	226°57.0'	S 11°47.2'	197°54.0'	S 21°03.6'	164°17.1'	S 22°35.6'	94°10.9'	S 4°53.7'
1	241°57.5'	S 11°47.6'	212°55.9'	S 21°03.7'	179°19.3'	S 22°35.6'	109°11.8'	S 4°53.0'
2	256°57.9'	S 11°48.1'	227°57.8'	S 21°03.8'	194°21.5'	S 22°35.5'	124°12.8'	S 4°52.2'
3	271°58.4'	S 11°48.6'	242°59.7'	S 21°03.9'	209°23.6'	S 22°35.5'	139°13.8'	S 4°51.5'
4	286°58.9'	S 11°49.1'	258°01.5'	S 21°03.9'	224°25.8'	S 22°35.5'	154°14.7'	S 4°50.8'
5	301°59.3'	S 11°49.6'	273°03.4'	S 21°04.0'	239°27.9'	S 22°35.5'	169°15.7'	S 4°50.1'
6	316°59.8'	S 11°50.0'	288°05.3'	S 21°04.1'	254°30.1'	S 22°35.5'	184°16.6'	S 4°49.4'
7	332°00.2'	S 11°50.5'	303°07.2'	S 21°04.2'	269°32.2'	S 22°35.5'	199°17.6'	S 4°48.7'
8	347°00.7'	S 11°51.0'	318°09.1'	S 21°04.3'	284°34.4'	S 22°35.4'	214°18.6'	S 4°48.0'
9	2°01.2'	S 11°51.5'	333°11.0'	S 21°04.4'	299°36.5'	S 22°35.4'	229°19.5'	S 4°47.3'
10	17°01.6'	S 11°52.0'	348°12.8'	S 21°04.5'	314°38.7'	S 22°35.4'	244°20.5'	S 4°46.6'
11	32°02.1'	S 11°52.4'	3°14.7'	S 21°04.6'	329°40.8'	S 22°35.4'	259°21.5'	S 4°45.8'
12	47°02.5'	S 11°52.9'	18°16.6'	S 21°04.7'	344°43.0'	S 22°35.4'	274°22.4'	S 4°45.1'
13	62°03.0'	S 11°53.4'	33°18.5'	S 21°04.7'	359°45.1'	S 22°35.4'	289°23.4'	S 4°44.4'
14	77°03.4'	S 11°53.9'	48°20.4'	S 21°04.8'	14°47.3'	S 22°35.3'	304°24.4'	S 4°43.7'
15	92°03.9'	S 11°54.4'	63°22.3'	S 21°04.9'	29°49.4'	S 22°35.3'	319°25.3'	S 4°43.0'
16	107°04.3'	S 11°54.9'	78°24.1'	S 21°05.0'	44°51.6'	S 22°35.3'	334°26.3'	S 4°42.3'
17	122°04.8'	S 11°55.4'	93°26.0'	S 21°05.1'	59°53.7'	S 22°35.3'	349°27.3'	S 4°41.6'
18	137°05.2'	S 11°55.8'	108°27.9'	S 21°05.2'	74°55.9'	S 22°35.3'	4°28.2'	S 4°40.9'
19	152°05.7'	S 11°56.3'	123°29.8'	S 21°05.3'	89°58.0'	S 22°35.2'	19°29.2'	S 4°40.1'
20	167°06.1'	S 11°56.8'	138°31.7'	S 21°05.4'	105°00.2'	S 22°35.2'	34°30.1'	S 4°39.4'
21	182°06.5'	S 11°57.3'	153°33.6'	S 21°05.4'	120°02.3'	S 22°35.2'	49°31.1'	S 4°38.7'
22	197°07.0'	S 11°57.8'	168°35.5'	S 21°05.5'	135°04.5'	S 22°35.2'	64°32.1'	S 4°38.0'
23	212°07.4'	S 11°58.3'	183°37.3'	S 21°05.6'	150°06.6'	S 22°35.2'	79°33.0'	S 4°37.3'

Mon Dec 17, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.2	
	v = 0.4' d = 0.5'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°07.9'	S 11°58.8'	198°39.2'	S 21°05.7'	165°08.8'	S 22°35.2'	94°34.0'	S 4°36.6'
1	242°08.3'	S 11°59.3'	213°41.1'	S 21°05.8'	180°10.9'	S 22°35.1'	109°35.0'	S 4°35.9'
2	257°08.7'	S 11°59.8'	228°43.0'	S 21°05.9'	195°13.1'	S 22°35.1'	124°35.9'	S 4°35.2'
3	272°09.2'	S 12°00.2'	243°44.9'	S 21°06.0'	210°15.2'	S 22°35.1'	139°36.9'	S 4°34.4'
4	287°09.6'	S 12°00.7'	258°46.8'	S 21°06.1'	225°17.4'	S 22°35.1'	154°37.9'	S 4°33.7'
5	302°10.0'	S 12°01.2'	273°48.6'	S 21°06.1'	240°19.6'	S 22°35.1'	169°38.8'	S 4°33.0'
6	317°10.4'	S 12°01.7'	288°50.5'	S 21°06.2'	255°21.7'	S 22°35.1'	184°39.8'	S 4°32.3'
7	332°10.9'	S 12°02.2'	303°52.4'	S 21°06.3'	270°23.9'	S 22°35.0'	199°40.7'	S 4°31.6'
8	347°11.3'	S 12°02.7'	318°54.3'	S 21°06.4'	285°26.0'	S 22°35.0'	214°41.7'	S 4°30.9'
9	2°11.7'	S 12°03.2'	333°56.2'	S 21°06.5'	300°28.2'	S 22°35.0'	229°42.7'	S 4°30.2'
10	17°12.1'	S 12°03.7'	348°58.1'	S 21°06.6'	315°30.3'	S 22°35.0'	244°43.6'	S 4°29.4'
11	32°12.6'	S 12°04.2'	3°59.9'	S 21°06.7'	330°32.5'	S 22°35.0'	259°44.6'	S 4°28.7'
12	47°13.0'	S 12°04.7'	19°01.8'	S 21°06.7'	345°34.6'	S 22°35.0'	274°45.6'	S 4°28.0'
13	62°13.4'	S 12°05.2'	34°03.7'	S 21°06.8'	0°36.8'	S 22°34.9'	289°46.5'	S 4°27.3'
14	77°13.8'	S 12°05.7'	49°05.6'	S 21°06.9'	15°38.9'	S 22°34.9'	304°47.5'	S 4°26.6'
15	92°14.2'	S 12°06.2'	64°07.5'	S 21°07.0'	30°41.1'	S 22°34.9'	319°48.5'	S 4°25.9'
16	107°14.6'	S 12°06.7'	79°09.4'	S 21°07.1'	45°43.2'	S 22°34.9'	334°49.4'	S 4°25.2'
17	122°15.1'	S 12°07.2'	94°11.3'	S 21°07.2'	60°45.4'	S 22°34.9'	349°50.4'	S 4°24.5'
18	137°15.5'	S 12°07.7'	109°13.1'	S 21°07.3'	75°47.5'	S 22°34.8'	4°51.3'	S 4°23.7'
19	152°15.9'	S 12°08.2'	124°15.0'	S 21°07.4'	90°49.7'	S 22°34.8'	19°52.3'	S 4°23.0'
20	167°16.3'	S 12°08.7'	139°16.9'	S 21°07.4'	105°51.8'	S 22°34.8'	34°53.3'	S 4°22.3'
21	182°16.7'	S 12°09.2'	154°18.8'	S 21°07.5'	120°54.0'	S 22°34.8'	49°54.2'	S 4°21.6'
22	197°17.1'	S 12°09.7'	169°20.7'	S 21°07.6'	135°56.1'	S 22°34.8'	64°55.2'	S 4°20.9'
23	212°17.5'	S 12°10.2'	184°22.6'	S 21°07.7'	150°58.3'	S 22°34.8'	79°56.2'	S 4°20.2'

Tue Dec 18, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.3	
	v = 0.4' d = 0.5'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°17.9'	S 12°10.7'	199°24.5'	S 21°07.8'	166°00.4'	S 22°34.7'	94°57.1'	S 4°19.5'
1	242°18.3'	S 12°11.2'	214°26.3'	S 21°07.9'	181°02.6'	S 22°34.7'	109°58.1'	S 4°18.7'
2	257°18.7'	S 12°11.7'	229°28.2'	S 21°08.0'	196°04.7'	S 22°34.7'	124°59.0'	S 4°18.0'
3	272°19.1'	S 12°12.2'	244°30.1'	S 21°08.0'	211°06.9'	S 22°34.7'	140°00.0'	S 4°17.3'
4	287°19.5'	S 12°12.7'	259°32.0'	S 21°08.1'	226°09.0'	S 22°34.7'	155°01.0'	S 4°16.6'
5	302°19.9'	S 12°13.2'	274°33.9'	S 21°08.2'	241°11.2'	S 22°34.7'	170°01.9'	S 4°15.9'
6	317°20.3'	S 12°13.7'	289°35.8'	S 21°08.3'	256°13.3'	S 22°34.6'	185°02.9'	S 4°15.2'
7	332°20.7'	S 12°14.3'	304°37.7'	S 21°08.4'	271°15.5'	S 22°34.6'	200°03.9'	S 4°14.5'
8	347°21.1'	S 12°14.8'	319°39.5'	S 21°08.5'	286°17.6'	S 22°34.6'	215°04.8'	S 4°13.7'
9	2°21.5'	S 12°15.3'	334°41.4'	S 21°08.6'	301°19.8'	S 22°34.6'	230°05.8'	S 4°13.0'
10	17°21.8'	S 12°15.8'	349°43.3'	S 21°08.6'	316°21.9'	S 22°34.6'	245°06.7'	S 4°12.3'
11	32°22.2'	S 12°16.3'	4°45.2'	S 21°08.7'	331°24.1'	S 22°34.5'	260°07.7'	S 4°11.6'
12	47°22.6'	S 12°16.8'	19°47.1'	S 21°08.8'	346°26.2'	S 22°34.5'	275°08.7'	S 4°10.9'
13	62°23.0'	S 12°17.3'	34°49.0'	S 21°08.9'	1°28.4'	S 22°34.5'	290°09.6'	S 4°10.2'
14	77°23.4'	S 12°17.8'	49°50.9'	S 21°09.0'	16°30.5'	S 22°34.5'	305°10.6'	S 4°09.5'
15	92°23.8'	S 12°18.3'	64°52.7'	S 21°09.1'	31°32.7'	S 22°34.5'	320°11.6'	S 4°08.7'
16	107°24.1'	S 12°18.8'	79°54.6'	S 21°09.2'	46°34.8'	S 22°34.5'	335°12.5'	S 4°08.0'
17	122°24.5'	S 12°19.4'	94°56.5'	S 21°09.2'	61°37.0'	S 22°34.4'	350°13.5'	S 4°07.3'
18	137°24.9'	S 12°19.9'	109°58.4'	S 21°09.3'	76°39.1'	S 22°34.4'	5°14.4'	S 4°06.6'
19	152°25.3'	S 12°20.4'	125°00.3'	S 21°09.4'	91°41.3'	S 22°34.4'	20°15.4'	S 4°05.9'
20	167°25.6'	S 12°20.9'	140°02.2'	S 21°09.5'	106°43.4'	S 22°34.4'	35°16.4'	S 4°05.2'
21	182°26.0'	S 12°21.4'	155°04.1'	S 21°09.6'	121°45.6'	S 22°34.4'	50°17.3'	S 4°04.4'
22	197°26.4'	S 12°21.9'	170°05.9'	S 21°09.7'	136°47.7'	S 22°34.3'	65°18.3'	S 4°03.7'
23	212°26.8'	S 12°22.4'	185°07.8'	S 21°09.8'	151°49.9'	S 22°34.3'	80°19.2'	S 4°03.0'

Wed Dec 19, 2018 UTC

UTC	Venus -4.4 v = 0.4' d = 0.5'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.3 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°27.1'	S 12°23.0'	200°09.7'	S 21°09.8'	166°52.0'	S 22°34.3'	95°20.2'	S 4°02.3'
1	242°27.5'	S 12°23.5'	215°11.6'	S 21°09.9'	181°54.2'	S 22°34.3'	110°21.2'	S 4°01.6'
2	257°27.9'	S 12°24.0'	230°13.5'	S 21°10.0'	196°56.3'	S 22°34.3'	125°22.1'	S 4°00.9'
3	272°28.2'	S 12°24.5'	245°15.4'	S 21°10.1'	211°58.5'	S 22°34.3'	140°23.1'	S 4°00.2'
4	287°28.6'	S 12°25.0'	260°17.3'	S 21°10.2'	227°00.6'	S 22°34.2'	155°24.1'	S 3°59.4'
5	302°29.0'	S 12°25.6'	275°19.1'	S 21°10.3'	242°02.8'	S 22°34.2'	170°25.0'	S 3°58.7'
6	317°29.3'	S 12°26.1'	290°21.0'	S 21°10.4'	257°04.9'	S 22°34.2'	185°26.0'	S 3°58.0'
7	332°29.7'	S 12°26.6'	305°22.9'	S 21°10.4'	272°07.1'	S 22°34.2'	200°26.9'	S 3°57.3'
8	347°30.0'	S 12°27.1'	320°24.8'	S 21°10.5'	287°09.2'	S 22°34.2'	215°27.9'	S 3°56.6'
9	2°30.4'	S 12°27.6'	335°26.7'	S 21°10.6'	302°11.4'	S 22°34.1'	230°28.9'	S 3°55.9'
10	17°30.7'	S 12°28.1'	350°28.6'	S 21°10.7'	317°13.5'	S 22°34.1'	245°29.8'	S 3°55.1'
11	32°31.1'	S 12°28.7'	5°30.5'	S 21°10.8'	332°15.7'	S 22°34.1'	260°30.8'	S 3°54.4'
12	47°31.4'	S 12°29.2'	20°32.3'	S 21°10.9'	347°17.8'	S 22°34.1'	275°31.7'	S 3°53.7'
13	62°31.8'	S 12°29.7'	35°34.2'	S 21°11.0'	2°20.0'	S 22°34.1'	290°32.7'	S 3°53.0'
14	77°32.1'	S 12°30.2'	50°36.1'	S 21°11.0'	17°22.1'	S 22°34.1'	305°33.7'	S 3°52.3'
15	92°32.5'	S 12°30.8'	65°38.0'	S 21°11.1'	32°24.3'	S 22°34.0'	320°34.6'	S 3°51.6'
16	107°32.8'	S 12°31.3'	80°39.9'	S 21°11.2'	47°26.4'	S 22°34.0'	335°35.6'	S 3°50.9'
17	122°33.2'	S 12°31.8'	95°41.8'	S 21°11.3'	62°28.6'	S 22°34.0'	350°36.5'	S 3°50.1'
18	137°33.5'	S 12°32.3'	110°43.7'	S 21°11.4'	77°30.7'	S 22°34.0'	5°37.5'	S 3°49.4'
19	152°33.9'	S 12°32.9'	125°45.6'	S 21°11.5'	92°32.9'	S 22°34.0'	20°38.5'	S 3°48.7'
20	167°34.2'	S 12°33.4'	140°47.4'	S 21°11.5'	107°35.0'	S 22°33.9'	35°39.4'	S 3°48.0'
21	182°34.6'	S 12°33.9'	155°49.3'	S 21°11.6'	122°37.2'	S 22°33.9'	50°40.4'	S 3°47.3'
22	197°34.9'	S 12°34.4'	170°51.2'	S 21°11.7'	137°39.3'	S 22°33.9'	65°41.3'	S 3°46.6'
23	212°35.2'	S 12°35.0'	185°53.1'	S 21°11.8'	152°41.5'	S 22°33.9'	80°42.3'	S 3°45.8'

Thu Dec 20, 2018 UTC

UTC	Venus -4.4 v = 0.3' d = 0.5'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.3 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°35.6'	S 12°35.5'	200°55.0'	S 21°11.9'	167°43.6'	S 22°33.9'	95°43.3'	S 3°45.1'
1	242°35.9'	S 12°36.0'	215°56.9'	S 21°12.0'	182°45.8'	S 22°33.9'	110°44.2'	S 3°44.4'
2	257°36.2'	S 12°36.5'	230°58.8'	S 21°12.0'	197°47.9'	S 22°33.8'	125°45.2'	S 3°43.7'
3	272°36.6'	S 12°37.1'	246°00.7'	S 21°12.1'	212°50.1'	S 22°33.8'	140°46.1'	S 3°43.0'
4	287°36.9'	S 12°37.6'	261°02.5'	S 21°12.2'	227°52.2'	S 22°33.8'	155°47.1'	S 3°42.3'
5	302°37.2'	S 12°38.1'	276°04.4'	S 21°12.3'	242°54.4'	S 22°33.8'	170°48.1'	S 3°41.5'
6	317°37.6'	S 12°38.7'	291°06.3'	S 21°12.4'	257°56.5'	S 22°33.8'	185°49.0'	S 3°40.8'
7	332°37.9'	S 12°39.2'	306°08.2'	S 21°12.5'	272°58.7'	S 22°33.7'	200°50.0'	S 3°40.1'
8	347°38.2'	S 12°39.7'	321°10.1'	S 21°12.6'	288°00.8'	S 22°33.7'	215°50.9'	S 3°39.4'
9	2°38.5'	S 12°40.3'	336°12.0'	S 21°12.6'	303°03.0'	S 22°33.7'	230°51.9'	S 3°38.7'
10	17°38.9'	S 12°40.8'	351°13.9'	S 21°12.7'	318°05.1'	S 22°33.7'	245°52.9'	S 3°38.0'
11	32°39.2'	S 12°41.3'	6°15.8'	S 21°12.8'	333°07.3'	S 22°33.7'	260°53.8'	S 3°37.2'
12	47°39.5'	S 12°41.8'	21°17.6'	S 21°12.9'	348°09.4'	S 22°33.6'	275°54.8'	S 3°36.5'
13	62°39.8'	S 12°42.4'	36°19.5'	S 21°13.0'	3°11.6'	S 22°33.6'	290°55.7'	S 3°35.8'
14	77°40.1'	S 12°42.9'	51°21.4'	S 21°13.1'	18°13.7'	S 22°33.6'	305°56.7'	S 3°35.1'
15	92°40.5'	S 12°43.4'	66°23.3'	S 21°13.1'	33°15.9'	S 22°33.6'	320°57.7'	S 3°34.4'
16	107°40.8'	S 12°44.0'	81°25.2'	S 21°13.2'	48°18.0'	S 22°33.6'	335°58.6'	S 3°33.7'
17	122°41.1'	S 12°44.5'	96°27.1'	S 21°13.3'	63°20.2'	S 22°33.6'	350°59.6'	S 3°32.9'
18	137°41.4'	S 12°45.1'	111°29.0'	S 21°13.4'	78°22.3'	S 22°33.5'	6°00.5'	S 3°32.2'
19	152°41.7'	S 12°45.6'	126°30.9'	S 21°13.5'	93°24.5'	S 22°33.5'	21°01.5'	S 3°31.5'
20	167°42.0'	S 12°46.1'	141°32.7'	S 21°13.6'	108°26.6'	S 22°33.5'	36°02.5'	S 3°30.8'
21	182°42.3'	S 12°46.7'	156°34.6'	S 21°13.6'	123°28.8'	S 22°33.5'	51°03.4'	S 3°30.1'
22	197°42.6'	S 12°47.2'	171°36.5'	S 21°13.7'	138°30.9'	S 22°33.5'	66°04.4'	S 3°29.4'
23	212°42.9'	S 12°47.7'	186°38.4'	S 21°13.8'	153°33.1'	S 22°33.4'	81°05.3'	S 3°28.6'

Fri Dec 21, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.3	
	v = 0.3' d = 0.5'		v = 1.9' d = 0.1'		v = 2.1' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°43.2'	S 12°48.3'	201°40.3'	S 21°13.9'	168°35.2'	S 22°33.4'	96°06.3'	S 3°27.9'
1	242°43.5'	S 12°48.8'	216°42.2'	S 21°14.0'	183°37.4'	S 22°33.4'	111°07.3'	S 3°27.2'
2	257°43.9'	S 12°49.3'	231°44.1'	S 21°14.1'	198°39.5'	S 22°33.4'	126°08.2'	S 3°26.5'
3	272°44.2'	S 12°49.9'	246°46.0'	S 21°14.1'	213°41.7'	S 22°33.4'	141°09.2'	S 3°25.8'
4	287°44.5'	S 12°50.4'	261°47.9'	S 21°14.2'	228°43.8'	S 22°33.3'	156°10.1'	S 3°25.1'
5	302°44.7'	S 12°51.0'	276°49.7'	S 21°14.3'	243°46.0'	S 22°33.3'	171°11.1'	S 3°24.3'
6	317°45.0'	S 12°51.5'	291°51.6'	S 21°14.4'	258°48.1'	S 22°33.3'	186°12.1'	S 3°23.6'
7	332°45.3'	S 12°52.0'	306°53.5'	S 21°14.5'	273°50.3'	S 22°33.3'	201°13.0'	S 3°22.9'
8	347°45.6'	S 12°52.6'	321°55.4'	S 21°14.6'	288°52.4'	S 22°33.3'	216°14.0'	S 3°22.2'
9	2°45.9'	S 12°53.1'	336°57.3'	S 21°14.6'	303°54.6'	S 22°33.3'	231°14.9'	S 3°21.5'
10	17°46.2'	S 12°53.7'	351°59.2'	S 21°14.7'	318°56.7'	S 22°33.2'	246°15.9'	S 3°20.8'
11	32°46.5'	S 12°54.2'	7°01.1'	S 21°14.8'	333°58.9'	S 22°33.2'	261°16.9'	S 3°20.0'
12	47°46.8'	S 12°54.7'	22°03.0'	S 21°14.9'	349°01.0'	S 22°33.2'	276°17.8'	S 3°19.3'
13	62°47.1'	S 12°55.3'	37°04.9'	S 21°15.0'	4°03.1'	S 22°33.2'	291°18.8'	S 3°18.6'
14	77°47.4'	S 12°55.8'	52°06.7'	S 21°15.1'	19°05.3'	S 22°33.2'	306°19.7'	S 3°17.9'
15	92°47.7'	S 12°56.4'	67°08.6'	S 21°15.1'	34°07.4'	S 22°33.1'	321°20.7'	S 3°17.2'
16	107°47.9'	S 12°56.9'	82°10.5'	S 21°15.2'	49°09.6'	S 22°33.1'	336°21.6'	S 3°16.5'
17	122°48.2'	S 12°57.5'	97°12.4'	S 21°15.3'	64°11.7'	S 22°33.1'	351°22.6'	S 3°15.7'
18	137°48.5'	S 12°58.0'	112°14.3'	S 21°15.4'	79°13.9'	S 22°33.1'	6°23.6'	S 3°15.0'
19	152°48.8'	S 12°58.6'	127°16.2'	S 21°15.5'	94°16.0'	S 22°33.1'	21°24.5'	S 3°14.3'
20	167°49.1'	S 12°59.1'	142°18.1'	S 21°15.5'	109°18.2'	S 22°33.0'	36°25.5'	S 3°13.6'
21	182°49.3'	S 12°59.6'	157°20.0'	S 21°15.6'	124°20.3'	S 22°33.0'	51°26.4'	S 3°12.9'
22	197°49.6'	S 13°00.2'	172°21.9'	S 21°15.7'	139°22.5'	S 22°33.0'	66°27.4'	S 3°12.1'
23	212°49.9'	S 13°00.7'	187°23.7'	S 21°15.8'	154°24.6'	S 22°33.0'	81°28.4'	S 3°11.4'

Sat Dec 22, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars +0.3	
	v = 0.3' d = 0.6'		v = 1.9' d = 0.1'		v = 2.1' d = 0.0'		v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°50.2'	S 13°01.3'	202°25.6'	S 21°15.9'	169°26.8'	S 22°33.0'	96°29.3'	S 3°10.7'
1	242°50.4'	S 13°01.8'	217°27.5'	S 21°16.0'	184°28.9'	S 22°33.0'	111°30.3'	S 3°10.0'
2	257°50.7'	S 13°02.4'	232°29.4'	S 21°16.0'	199°31.1'	S 22°32.9'	126°31.2'	S 3°09.3'
3	272°51.0'	S 13°02.9'	247°31.3'	S 21°16.1'	214°33.2'	S 22°32.9'	141°32.2'	S 3°08.6'
4	287°51.2'	S 13°03.5'	262°33.2'	S 21°16.2'	229°35.4'	S 22°32.9'	156°33.1'	S 3°07.8'
5	302°51.5'	S 13°04.0'	277°35.1'	S 21°16.3'	244°37.5'	S 22°32.9'	171°34.1'	S 3°07.1'
6	317°51.8'	S 13°04.6'	292°37.0'	S 21°16.4'	259°39.7'	S 22°32.9'	186°35.1'	S 3°06.4'
7	332°52.0'	S 13°05.1'	307°38.9'	S 21°16.4'	274°41.8'	S 22°32.8'	201°36.0'	S 3°05.7'
8	347°52.3'	S 13°05.7'	322°40.7'	S 21°16.5'	289°44.0'	S 22°32.8'	216°37.0'	S 3°05.0'
9	2°52.6'	S 13°06.2'	337°42.6'	S 21°16.6'	304°46.1'	S 22°32.8'	231°37.9'	S 3°04.3'
10	17°52.8'	S 13°06.8'	352°44.5'	S 21°16.7'	319°48.3'	S 22°32.8'	246°38.9'	S 3°03.5'
11	32°53.1'	S 13°07.3'	7°46.4'	S 21°16.8'	334°50.4'	S 22°32.8'	261°39.8'	S 3°02.8'
12	47°53.4'	S 13°07.9'	22°48.3'	S 21°16.9'	349°52.6'	S 22°32.7'	276°40.8'	S 3°02.1'
13	62°53.6'	S 13°08.4'	37°50.2'	S 21°16.9'	4°54.7'	S 22°32.7'	291°41.8'	S 3°01.4'
14	77°53.9'	S 13°09.0'	52°52.1'	S 21°17.0'	19°56.9'	S 22°32.7'	306°42.7'	S 3°00.7'
15	92°54.1'	S 13°09.5'	67°54.0'	S 21°17.1'	34°59.0'	S 22°32.7'	321°43.7'	S 2°59.9'
16	107°54.4'	S 13°10.1'	82°55.9'	S 21°17.2'	50°01.1'	S 22°32.7'	336°44.6'	S 2°59.2'
17	122°54.6'	S 13°10.6'	97°57.8'	S 21°17.3'	65°03.3'	S 22°32.6'	351°45.6'	S 2°58.5'
18	137°54.9'	S 13°11.2'	112°59.7'	S 21°17.3'	80°05.4'	S 22°32.6'	6°46.6'	S 2°57.8'
19	152°55.1'	S 13°11.7'	128°01.5'	S 21°17.4'	95°07.6'	S 22°32.6'	21°47.5'	S 2°57.1'
20	167°55.4'	S 13°12.3'	143°03.4'	S 21°17.5'	110°09.7'	S 22°32.6'	36°48.5'	S 2°56.4'
21	182°55.6'	S 13°12.8'	158°05.3'	S 21°17.6'	125°11.9'	S 22°32.6'	51°49.4'	S 2°55.6'
22	197°55.9'	S 13°13.4'	173°07.2'	S 21°17.7'	140°14.0'	S 22°32.5'	66°50.4'	S 2°54.9'
23	212°56.1'	S 13°13.9'	188°09.1'	S 21°17.8'	155°16.2'	S 22°32.5'	81°51.3'	S 2°54.2'

Sun Dec 23, 2018 UTC

UTC	Venus -4.4 v = 0.2' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.3 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	227°56.4'	S 13°14.5'	203°11.0'	S 21°17.8'	170°18.3'	S 22°32.5'	96°52.3'	S 2°53.5'
1	242°56.6'	S 13°15.0'	218°12.9'	S 21°17.9'	185°20.5'	S 22°32.5'	111°53.3'	S 2°52.8'
2	257°56.8'	S 13°15.6'	233°14.8'	S 21°18.0'	200°22.6'	S 22°32.5'	126°54.2'	S 2°52.0'
3	272°57.1'	S 13°16.2'	248°16.7'	S 21°18.1'	215°24.8'	S 22°32.5'	141°55.2'	S 2°51.3'
4	287°57.3'	S 13°16.7'	263°18.6'	S 21°18.2'	230°26.9'	S 22°32.4'	156°56.1'	S 2°50.6'
5	302°57.6'	S 13°17.3'	278°20.4'	S 21°18.2'	245°29.1'	S 22°32.4'	171°57.1'	S 2°49.9'
6	317°57.8'	S 13°17.8'	293°22.3'	S 21°18.3'	260°31.2'	S 22°32.4'	186°58.0'	S 2°49.2'
7	332°58.0'	S 13°18.4'	308°24.2'	S 21°18.4'	275°33.4'	S 22°32.4'	201°59.0'	S 2°48.4'
8	347°58.3'	S 13°18.9'	323°26.1'	S 21°18.5'	290°35.5'	S 22°32.4'	216°59.9'	S 2°47.7'
9	2°58.5'	S 13°19.5'	338°28.0'	S 21°18.6'	305°37.7'	S 22°32.3'	232°00.9'	S 2°47.0'
10	17°58.7'	S 13°20.1'	353°29.9'	S 21°18.6'	320°39.8'	S 22°32.3'	247°01.9'	S 2°46.3'
11	32°58.9'	S 13°20.6'	8°31.8'	S 21°18.7'	335°42.0'	S 22°32.3'	262°02.8'	S 2°45.6'
12	47°59.2'	S 13°21.2'	23°33.7'	S 21°18.8'	350°44.1'	S 22°32.3'	277°03.8'	S 2°44.9'
13	62°59.4'	S 13°21.7'	38°35.6'	S 21°18.9'	5°46.3'	S 22°32.3'	292°04.7'	S 2°44.1'
14	77°59.6'	S 13°22.3'	53°37.5'	S 21°19.0'	20°48.4'	S 22°32.2'	307°05.7'	S 2°43.4'
15	92°59.9'	S 13°22.8'	68°39.4'	S 21°19.0'	35°50.5'	S 22°32.2'	322°06.6'	S 2°42.7'
16	108°00.1'	S 13°23.4'	83°41.3'	S 21°19.1'	50°52.7'	S 22°32.2'	337°07.6'	S 2°42.0'
17	123°00.3'	S 13°24.0'	98°43.1'	S 21°19.2'	65°54.8'	S 22°32.2'	352°08.6'	S 2°41.3'
18	138°00.5'	S 13°24.5'	113°45.0'	S 21°19.3'	80°57.0'	S 22°32.2'	7°09.5'	S 2°40.5'
19	153°00.7'	S 13°25.1'	128°46.9'	S 21°19.4'	95°59.1'	S 22°32.1'	22°10.5'	S 2°39.8'
20	168°01.0'	S 13°25.6'	143°48.8'	S 21°19.4'	111°01.3'	S 22°32.1'	37°11.4'	S 2°39.1'
21	183°01.2'	S 13°26.2'	158°50.7'	S 21°19.5'	126°03.4'	S 22°32.1'	52°12.4'	S 2°38.4'
22	198°01.4'	S 13°26.8'	173°52.6'	S 21°19.6'	141°05.6'	S 22°32.1'	67°13.3'	S 2°37.7'
23	213°01.6'	S 13°27.3'	188°54.5'	S 21°19.7'	156°07.7'	S 22°32.1'	82°14.3'	S 2°36.9'

Mon Dec 24, 2018 UTC

UTC	Venus -4.4 v = 0.2' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.4 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°01.8'	S 13°27.9'	203°56.4'	S 21°19.8'	171°09.9'	S 22°32.0'	97°15.3'	S 2°36.2'
1	243°02.0'	S 13°28.4'	218°58.3'	S 21°19.8'	186°12.0'	S 22°32.0'	112°16.2'	S 2°35.5'
2	258°02.2'	S 13°29.0'	234°00.2'	S 21°19.9'	201°14.2'	S 22°32.0'	127°17.2'	S 2°34.8'
3	273°02.5'	S 13°29.6'	249°02.1'	S 21°20.0'	216°16.3'	S 22°32.0'	142°18.1'	S 2°34.1'
4	288°02.7'	S 13°30.1'	264°04.0'	S 21°20.1'	231°18.5'	S 22°32.0'	157°19.1'	S 2°33.4'
5	303°02.9'	S 13°30.7'	279°05.8'	S 21°20.2'	246°20.6'	S 22°31.9'	172°20.0'	S 2°32.6'
6	318°03.1'	S 13°31.3'	294°07.7'	S 21°20.2'	261°22.8'	S 22°31.9'	187°21.0'	S 2°31.9'
7	333°03.3'	S 13°31.8'	309°09.6'	S 21°20.3'	276°24.9'	S 22°31.9'	202°21.9'	S 2°31.2'
8	348°03.5'	S 13°32.4'	324°11.5'	S 21°20.4'	291°27.1'	S 22°31.9'	217°22.9'	S 2°30.5'
9	3°03.7'	S 13°32.9'	339°13.4'	S 21°20.5'	306°29.2'	S 22°31.9'	232°23.9'	S 2°29.8'
10	18°03.9'	S 13°33.5'	354°15.3'	S 21°20.6'	321°31.3'	S 22°31.8'	247°24.8'	S 2°29.0'
11	33°04.1'	S 13°34.1'	9°17.2'	S 21°20.6'	336°33.5'	S 22°31.8'	262°25.8'	S 2°28.3'
12	48°04.3'	S 13°34.6'	24°19.1'	S 21°20.7'	351°35.6'	S 22°31.8'	277°26.7'	S 2°27.6'
13	63°04.5'	S 13°35.2'	39°21.0'	S 21°20.8'	6°37.8'	S 22°31.8'	292°27.7'	S 2°26.9'
14	78°04.7'	S 13°35.8'	54°22.9'	S 21°20.9'	21°39.9'	S 22°31.8'	307°28.6'	S 2°26.2'
15	93°04.9'	S 13°36.3'	69°24.8'	S 21°21.0'	36°42.1'	S 22°31.7'	322°29.6'	S 2°25.4'
16	108°05.1'	S 13°36.9'	84°26.7'	S 21°21.0'	51°44.2'	S 22°31.7'	337°30.5'	S 2°24.7'
17	123°05.3'	S 13°37.5'	99°28.6'	S 21°21.1'	66°46.4'	S 22°31.7'	352°31.5'	S 2°24.0'
18	138°05.5'	S 13°38.0'	114°30.5'	S 21°21.2'	81°48.5'	S 22°31.7'	7°32.5'	S 2°23.3'
19	153°05.6'	S 13°38.6'	129°32.3'	S 21°21.3'	96°50.7'	S 22°31.7'	22°33.4'	S 2°22.6'
20	168°05.8'	S 13°39.2'	144°34.2'	S 21°21.4'	111°52.8'	S 22°31.6'	37°34.4'	S 2°21.8'
21	183°06.0'	S 13°39.7'	159°36.1'	S 21°21.4'	126°55.0'	S 22°31.6'	52°35.3'	S 2°21.1'
22	198°06.2'	S 13°40.3'	174°38.0'	S 21°21.5'	141°57.1'	S 22°31.6'	67°36.3'	S 2°20.4'
23	213°06.4'	S 13°40.9'	189°39.9'	S 21°21.6'	156°59.3'	S 22°31.6'	82°37.2'	S 2°19.7'

Tue Dec 25, 2018 UTC

UTC	Venus -4.3 v = 0.2' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.4 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°06.6'	S 13°41.4'	204°41.8'	S 21°21.7'	172°01.4'	S 22°31.6'	97°38.2'	S 2°19.0'
1	243°06.8'	S 13°42.0'	219°43.7'	S 21°21.8'	187°03.5'	S 22°31.5'	112°39.1'	S 2°18.2'
2	258°06.9'	S 13°42.6'	234°45.6'	S 21°21.8'	202°05.7'	S 22°31.5'	127°40.1'	S 2°17.5'
3	273°07.1'	S 13°43.1'	249°47.5'	S 21°21.9'	217°07.8'	S 22°31.5'	142°41.0'	S 2°16.8'
4	288°07.3'	S 13°43.7'	264°49.4'	S 21°22.0'	232°10.0'	S 22°31.5'	157°42.0'	S 2°16.1'
5	303°07.5'	S 13°44.3'	279°51.3'	S 21°22.1'	247°12.1'	S 22°31.5'	172°43.0'	S 2°15.4'
6	318°07.7'	S 13°44.8'	294°53.2'	S 21°22.1'	262°14.3'	S 22°31.4'	187°43.9'	S 2°14.7'
7	333°07.8'	S 13°45.4'	309°55.1'	S 21°22.2'	277°16.4'	S 22°31.4'	202°44.9'	S 2°13.9'
8	348°08.0'	S 13°46.0'	324°57.0'	S 21°22.3'	292°18.6'	S 22°31.4'	217°45.8'	S 2°13.2'
9	3°08.2'	S 13°46.6'	339°58.9'	S 21°22.4'	307°20.7'	S 22°31.4'	232°46.8'	S 2°12.5'
10	18°08.4'	S 13°47.1'	355°00.7'	S 21°22.5'	322°22.9'	S 22°31.4'	247°47.7'	S 2°11.8'
11	33°08.5'	S 13°47.7'	10°02.6'	S 21°22.5'	337°25.0'	S 22°31.3'	262°48.7'	S 2°11.1'
12	48°08.7'	S 13°48.3'	25°04.5'	S 21°22.6'	352°27.2'	S 22°31.3'	277°49.6'	S 2°10.3'
13	63°08.9'	S 13°48.8'	40°06.4'	S 21°22.7'	7°29.3'	S 22°31.3'	292°50.6'	S 2°09.6'
14	78°09.0'	S 13°49.4'	55°08.3'	S 21°22.8'	22°31.5'	S 22°31.3'	307°51.5'	S 2°08.9'
15	93°09.2'	S 13°50.0'	70°10.2'	S 21°22.9'	37°33.6'	S 22°31.3'	322°52.5'	S 2°08.2'
16	108°09.4'	S 13°50.5'	85°12.1'	S 21°22.9'	52°35.8'	S 22°31.2'	337°53.5'	S 2°07.5'
17	123°09.5'	S 13°51.1'	100°14.0'	S 21°23.0'	67°37.9'	S 22°31.2'	352°54.4'	S 2°06.7'
18	138°09.7'	S 13°51.7'	115°15.9'	S 21°23.1'	82°40.0'	S 22°31.2'	7°55.4'	S 2°06.0'
19	153°09.9'	S 13°52.3'	130°17.8'	S 21°23.2'	97°42.2'	S 22°31.2'	22°56.3'	S 2°05.3'
20	168°10.0'	S 13°52.8'	145°19.7'	S 21°23.2'	112°44.3'	S 22°31.2'	37°57.3'	S 2°04.6'
21	183°10.2'	S 13°53.4'	160°21.6'	S 21°23.3'	127°46.5'	S 22°31.1'	52°58.2'	S 2°03.9'
22	198°10.3'	S 13°54.0'	175°23.5'	S 21°23.4'	142°48.6'	S 22°31.1'	67°59.2'	S 2°03.1'
23	213°10.5'	S 13°54.5'	190°25.4'	S 21°23.5'	157°50.8'	S 22°31.1'	83°00.1'	S 2°02.4'

Wed Dec 26, 2018 UTC

UTC	Venus -4.3 v = 0.1' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.4 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°10.7'	S 13°55.1'	205°27.3'	S 21°23.6'	172°52.9'	S 22°31.1'	98°01.1'	S 2°01.7'
1	243°10.8'	S 13°55.7'	220°29.2'	S 21°23.6'	187°55.1'	S 22°31.1'	113°02.0'	S 2°01.0'
2	258°11.0'	S 13°56.3'	235°31.1'	S 21°23.7'	202°57.2'	S 22°31.0'	128°03.0'	S 2°00.3'
3	273°11.1'	S 13°56.8'	250°33.0'	S 21°23.8'	217°59.4'	S 22°31.0'	143°03.9'	S 1°59.5'
4	288°11.3'	S 13°57.4'	265°34.9'	S 21°23.9'	233°01.5'	S 22°31.0'	158°04.9'	S 1°58.8'
5	303°11.4'	S 13°58.0'	280°36.7'	S 21°23.9'	248°03.7'	S 22°31.0'	173°05.9'	S 1°58.1'
6	318°11.6'	S 13°58.6'	295°38.6'	S 21°24.0'	263°05.8'	S 22°31.0'	188°06.8'	S 1°57.4'
7	333°11.7'	S 13°59.1'	310°40.5'	S 21°24.1'	278°07.9'	S 22°30.9'	203°07.8'	S 1°56.7'
8	348°11.9'	S 13°59.7'	325°42.4'	S 21°24.2'	293°10.1'	S 22°30.9'	218°08.7'	S 1°55.9'
9	3°12.0'	S 14°00.3'	340°44.3'	S 21°24.3'	308°12.2'	S 22°30.9'	233°09.7'	S 1°55.2'
10	18°12.2'	S 14°00.8'	355°46.2'	S 21°24.3'	323°14.4'	S 22°30.9'	248°10.6'	S 1°54.5'
11	33°12.3'	S 14°01.4'	10°48.1'	S 21°24.4'	338°16.5'	S 22°30.9'	263°11.6'	S 1°53.8'
12	48°12.4'	S 14°02.0'	25°50.0'	S 21°24.5'	353°18.7'	S 22°30.8'	278°12.5'	S 1°53.1'
13	63°12.6'	S 14°02.6'	40°51.9'	S 21°24.6'	8°20.8'	S 22°30.8'	293°13.5'	S 1°52.3'
14	78°12.7'	S 14°03.1'	55°53.8'	S 21°24.6'	23°23.0'	S 22°30.8'	308°14.4'	S 1°51.6'
15	93°12.9'	S 14°03.7'	70°55.7'	S 21°24.7'	38°25.1'	S 22°30.8'	323°15.4'	S 1°50.9'
16	108°13.0'	S 14°04.3'	85°57.6'	S 21°24.8'	53°27.3'	S 22°30.8'	338°16.3'	S 1°50.2'
17	123°13.1'	S 14°04.9'	100°59.5'	S 21°24.9'	68°29.4'	S 22°30.7'	353°17.3'	S 1°49.5'
18	138°13.3'	S 14°05.4'	116°01.4'	S 21°25.0'	83°31.6'	S 22°30.7'	8°18.2'	S 1°48.7'
19	153°13.4'	S 14°06.0'	131°03.3'	S 21°25.0'	98°33.7'	S 22°30.7'	23°19.2'	S 1°48.0'
20	168°13.5'	S 14°06.6'	146°05.2'	S 21°25.1'	113°35.9'	S 22°30.7'	38°20.2'	S 1°47.3'
21	183°13.7'	S 14°07.2'	161°07.1'	S 21°25.2'	128°38.0'	S 22°30.7'	53°21.1'	S 1°46.6'
22	198°13.8'	S 14°07.8'	176°09.0'	S 21°25.3'	143°40.1'	S 22°30.6'	68°22.1'	S 1°45.9'
23	213°13.9'	S 14°08.3'	191°10.9'	S 21°25.3'	158°42.3'	S 22°30.6'	83°23.0'	S 1°45.1'

Thu Dec 27, 2018 UTC

UTC	Venus -4.3 v = 0.1' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.4 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°14.1'	S 14°08.9'	206°12.8'	S 21°25.4'	173°44.4'	S 22°30.6'	98°24.0'	S 1°44.4'
1	243°14.2'	S 14°09.5'	221°14.7'	S 21°25.5'	188°46.6'	S 22°30.6'	113°24.9'	S 1°43.7'
2	258°14.3'	S 14°10.1'	236°16.6'	S 21°25.6'	203°48.7'	S 22°30.5'	128°25.9'	S 1°43.0'
3	273°14.4'	S 14°10.6'	251°18.5'	S 21°25.6'	218°50.9'	S 22°30.5'	143°26.8'	S 1°42.3'
4	288°14.6'	S 14°11.2'	266°20.3'	S 21°25.7'	233°53.0'	S 22°30.5'	158°27.8'	S 1°41.5'
5	303°14.7'	S 14°11.8'	281°22.2'	S 21°25.8'	248°55.2'	S 22°30.5'	173°28.7'	S 1°40.8'
6	318°14.8'	S 14°12.4'	296°24.1'	S 21°25.9'	263°57.3'	S 22°30.5'	188°29.7'	S 1°40.1'
7	333°14.9'	S 14°12.9'	311°26.0'	S 21°26.0'	278°59.5'	S 22°30.4'	203°30.6'	S 1°39.4'
8	348°15.0'	S 14°13.5'	326°27.9'	S 21°26.0'	294°01.6'	S 22°30.4'	218°31.6'	S 1°38.7'
9	3°15.2'	S 14°14.1'	341°29.8'	S 21°26.1'	309°03.7'	S 22°30.4'	233°32.5'	S 1°37.9'
10	18°15.3'	S 14°14.7'	356°31.7'	S 21°26.2'	324°05.9'	S 22°30.4'	248°33.5'	S 1°37.2'
11	33°15.4'	S 14°15.3'	11°33.6'	S 21°26.3'	339°08.0'	S 22°30.4'	263°34.4'	S 1°36.5'
12	48°15.5'	S 14°15.8'	26°35.5'	S 21°26.3'	354°10.2'	S 22°30.3'	278°35.4'	S 1°35.8'
13	63°15.6'	S 14°16.4'	41°37.4'	S 21°26.4'	9°12.3'	S 22°30.3'	293°36.3'	S 1°35.1'
14	78°15.7'	S 14°17.0'	56°39.3'	S 21°26.5'	24°14.5'	S 22°30.3'	308°37.3'	S 1°34.3'
15	93°15.8'	S 14°17.6'	71°41.2'	S 21°26.6'	39°16.6'	S 22°30.3'	323°38.2'	S 1°33.6'
16	108°16.0'	S 14°18.1'	86°43.1'	S 21°26.6'	54°18.8'	S 22°30.3'	338°39.2'	S 1°32.9'
17	123°16.1'	S 14°18.7'	101°45.0'	S 21°26.7'	69°20.9'	S 22°30.2'	353°40.1'	S 1°32.2'
18	138°16.2'	S 14°19.3'	116°46.9'	S 21°26.8'	84°23.1'	S 22°30.2'	8°41.1'	S 1°31.5'
19	153°16.3'	S 14°19.9'	131°48.8'	S 21°26.9'	99°25.2'	S 22°30.2'	23°42.1'	S 1°30.7'
20	168°16.4'	S 14°20.5'	146°50.7'	S 21°26.9'	114°27.4'	S 22°30.2'	38°43.0'	S 1°30.0'
21	183°16.5'	S 14°21.0'	161°52.6'	S 21°27.0'	129°29.5'	S 22°30.2'	53°44.0'	S 1°29.3'
22	198°16.6'	S 14°21.6'	176°54.5'	S 21°27.1'	144°31.6'	S 22°30.1'	68°44.9'	S 1°28.6'
23	213°16.7'	S 14°22.2'	191°56.4'	S 21°27.2'	159°33.8'	S 22°30.1'	83°45.9'	S 1°27.9'

Fri Dec 28, 2018 UTC

UTC	Venus -4.3 v = 0.1' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.4 v = 1.0' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°16.8'	S 14°22.8'	206°58.3'	S 21°27.2'	174°35.9'	S 22°30.1'	98°46.8'	S 1°27.1'
1	243°16.9'	S 14°23.4'	222°00.2'	S 21°27.3'	189°38.1'	S 22°30.1'	113°47.8'	S 1°26.4'
2	258°17.0'	S 14°23.9'	237°02.1'	S 21°27.4'	204°40.2'	S 22°30.0'	128°48.7'	S 1°25.7'
3	273°17.1'	S 14°24.5'	252°04.0'	S 21°27.5'	219°42.4'	S 22°30.0'	143°49.7'	S 1°25.0'
4	288°17.2'	S 14°25.1'	267°05.9'	S 21°27.6'	234°44.5'	S 22°30.0'	158°50.6'	S 1°24.3'
5	303°17.3'	S 14°25.7'	282°07.8'	S 21°27.6'	249°46.7'	S 22°30.0'	173°51.6'	S 1°23.5'
6	318°17.4'	S 14°26.3'	297°09.7'	S 21°27.7'	264°48.8'	S 22°30.0'	188°52.5'	S 1°22.8'
7	333°17.5'	S 14°26.8'	312°11.6'	S 21°27.8'	279°51.0'	S 22°29.9'	203°53.5'	S 1°22.1'
8	348°17.6'	S 14°27.4'	327°13.5'	S 21°27.9'	294°53.1'	S 22°29.9'	218°54.4'	S 1°21.4'
9	3°17.7'	S 14°28.0'	342°15.4'	S 21°27.9'	309°55.3'	S 22°29.9'	233°55.4'	S 1°20.7'
10	18°17.7'	S 14°28.6'	357°17.3'	S 21°28.0'	324°57.4'	S 22°29.9'	248°56.3'	S 1°19.9'
11	33°17.8'	S 14°29.2'	12°19.2'	S 21°28.1'	339°59.5'	S 22°29.9'	263°57.3'	S 1°19.2'
12	48°17.9'	S 14°29.7'	27°21.1'	S 21°28.2'	355°01.7'	S 22°29.8'	278°58.2'	S 1°18.5'
13	63°18.0'	S 14°30.3'	42°23.0'	S 21°28.2'	10°03.8'	S 22°29.8'	293°59.2'	S 1°17.8'
14	78°18.1'	S 14°30.9'	57°24.9'	S 21°28.3'	25°06.0'	S 22°29.8'	309°00.1'	S 1°17.1'
15	93°18.2'	S 14°31.5'	72°26.8'	S 21°28.4'	40°08.1'	S 22°29.8'	324°01.1'	S 1°16.3'
16	108°18.3'	S 14°32.1'	87°28.7'	S 21°28.5'	55°10.3'	S 22°29.8'	339°02.0'	S 1°15.6'
17	123°18.3'	S 14°32.6'	102°30.6'	S 21°28.5'	70°12.4'	S 22°29.7'	354°03.0'	S 1°14.9'
18	138°18.4'	S 14°33.2'	117°32.5'	S 21°28.6'	85°14.6'	S 22°29.7'	9°03.9'	S 1°14.2'
19	153°18.5'	S 14°33.8'	132°34.4'	S 21°28.7'	100°16.7'	S 22°29.7'	24°04.9'	S 1°13.5'
20	168°18.6'	S 14°34.4'	147°36.3'	S 21°28.8'	115°18.9'	S 22°29.7'	39°05.8'	S 1°12.7'
21	183°18.7'	S 14°35.0'	162°38.2'	S 21°28.8'	130°21.0'	S 22°29.6'	54°06.8'	S 1°12.0'
22	198°18.7'	S 14°35.5'	177°40.1'	S 21°28.9'	145°23.1'	S 22°29.6'	69°07.7'	S 1°11.3'
23	213°18.8'	S 14°36.1'	192°42.0'	S 21°29.0'	160°25.3'	S 22°29.6'	84°08.7'	S 1°10.6'

Sat Dec 29, 2018 UTC

UTC	Venus -4.3 v = 0.1' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.4 v = 0.9' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°18.9'	S 14°36.7'	207°43.9'	S 21°29.1'	175°27.4'	S 22°29.6'	99°09.6'	S 1°09.8'
1	243°19.0'	S 14°37.3'	222°45.8'	S 21°29.1'	190°29.6'	S 22°29.6'	114°10.6'	S 1°09.1'
2	258°19.0'	S 14°37.9'	237°47.7'	S 21°29.2'	205°31.7'	S 22°29.5'	129°11.5'	S 1°08.4'
3	273°19.1'	S 14°38.5'	252°49.6'	S 21°29.3'	220°33.9'	S 22°29.5'	144°12.5'	S 1°07.7'
4	288°19.2'	S 14°39.0'	267°51.5'	S 21°29.4'	235°36.0'	S 22°29.5'	159°13.4'	S 1°07.0'
5	303°19.3'	S 14°39.6'	282°53.4'	S 21°29.4'	250°38.2'	S 22°29.5'	174°14.4'	S 1°06.2'
6	318°19.3'	S 14°40.2'	297°55.3'	S 21°29.5'	265°40.3'	S 22°29.5'	189°15.3'	S 1°05.5'
7	333°19.4'	S 14°40.8'	312°57.2'	S 21°29.6'	280°42.5'	S 22°29.4'	204°16.3'	S 1°04.8'
8	348°19.5'	S 14°41.4'	327°59.1'	S 21°29.7'	295°44.6'	S 22°29.4'	219°17.2'	S 1°04.1'
9	3°19.5'	S 14°41.9'	343°01.0'	S 21°29.7'	310°46.7'	S 22°29.4'	234°18.2'	S 1°03.4'
10	18°19.6'	S 14°42.5'	358°02.9'	S 21°29.8'	325°48.9'	S 22°29.4'	249°19.1'	S 1°02.6'
11	33°19.6'	S 14°43.1'	13°04.8'	S 21°29.9'	340°51.0'	S 22°29.3'	264°20.1'	S 1°01.9'
12	48°19.7'	S 14°43.7'	28°06.7'	S 21°29.9'	355°53.2'	S 22°29.3'	279°21.0'	S 1°01.2'
13	63°19.8'	S 14°44.3'	43°08.6'	S 21°30.0'	10°55.3'	S 22°29.3'	294°22.0'	S 1°00.5'
14	78°19.8'	S 14°44.9'	58°10.5'	S 21°30.1'	25°57.5'	S 22°29.3'	309°22.9'	S 0°59.8'
15	93°19.9'	S 14°45.4'	73°12.4'	S 21°30.2'	40°59.6'	S 22°29.3'	324°23.9'	S 0°59.0'
16	108°19.9'	S 14°46.0'	88°14.3'	S 21°30.2'	56°01.8'	S 22°29.2'	339°24.8'	S 0°58.3'
17	123°20.0'	S 14°46.6'	103°16.2'	S 21°30.3'	71°03.9'	S 22°29.2'	354°25.8'	S 0°57.6'
18	138°20.1'	S 14°47.2'	118°18.1'	S 21°30.4'	86°06.1'	S 22°29.2'	9°26.7'	S 0°56.9'
19	153°20.1'	S 14°47.8'	133°20.0'	S 21°30.5'	101°08.2'	S 22°29.2'	24°27.7'	S 0°56.2'
20	168°20.2'	S 14°48.4'	148°21.9'	S 21°30.5'	116°10.3'	S 22°29.2'	39°28.6'	S 0°55.4'
21	183°20.2'	S 14°48.9'	163°23.8'	S 21°30.6'	131°12.5'	S 22°29.1'	54°29.6'	S 0°54.7'
22	198°20.3'	S 14°49.5'	178°25.7'	S 21°30.7'	146°14.6'	S 22°29.1'	69°30.5'	S 0°54.0'
23	213°20.3'	S 14°50.1'	193°27.6'	S 21°30.8'	161°16.8'	S 22°29.1'	84°31.5'	S 0°53.3'

Sun Dec 30, 2018 UTC

UTC	Venus -4.3 v = 0.0' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.5 v = 0.9' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°20.4'	S 14°50.7'	208°29.5'	S 21°30.8'	176°18.9'	S 22°29.1'	99°32.4'	S 0°52.6'
1	243°20.4'	S 14°51.3'	223°31.4'	S 21°30.9'	191°21.1'	S 22°29.0'	114°33.4'	S 0°51.8'
2	258°20.5'	S 14°51.8'	238°33.3'	S 21°31.0'	206°23.2'	S 22°29.0'	129°34.3'	S 0°51.1'
3	273°20.5'	S 14°52.4'	253°35.2'	S 21°31.1'	221°25.4'	S 22°29.0'	144°35.3'	S 0°50.4'
4	288°20.5'	S 14°53.0'	268°37.1'	S 21°31.1'	236°27.5'	S 22°29.0'	159°36.2'	S 0°49.7'
5	303°20.6'	S 14°53.6'	283°39.0'	S 21°31.2'	251°29.7'	S 22°29.0'	174°37.2'	S 0°49.0'
6	318°20.6'	S 14°54.2'	298°40.9'	S 21°31.3'	266°31.8'	S 22°28.9'	189°38.1'	S 0°48.2'
7	333°20.7'	S 14°54.8'	313°42.8'	S 21°31.4'	281°33.9'	S 22°28.9'	204°39.1'	S 0°47.5'
8	348°20.7'	S 14°55.3'	328°44.7'	S 21°31.4'	296°36.1'	S 22°28.9'	219°40.0'	S 0°46.8'
9	3°20.8'	S 14°55.9'	343°46.6'	S 21°31.5'	311°38.2'	S 22°28.9'	234°40.9'	S 0°46.1'
10	18°20.8'	S 14°56.5'	358°48.5'	S 21°31.6'	326°40.4'	S 22°28.9'	249°41.9'	S 0°45.4'
11	33°20.8'	S 14°57.1'	13°50.4'	S 21°31.6'	341°42.5'	S 22°28.8'	264°42.8'	S 0°44.6'
12	48°20.9'	S 14°57.7'	28°52.3'	S 21°31.7'	356°44.7'	S 22°28.8'	279°43.8'	S 0°43.9'
13	63°20.9'	S 14°58.3'	43°54.2'	S 21°31.8'	11°46.8'	S 22°28.8'	294°44.7'	S 0°43.2'
14	78°20.9'	S 14°58.8'	58°56.1'	S 21°31.9'	26°49.0'	S 22°28.8'	309°45.7'	S 0°42.5'
15	93°21.0'	S 14°59.4'	73°58.0'	S 21°31.9'	41°51.1'	S 22°28.7'	324°46.6'	S 0°41.7'
16	108°21.0'	S 15°00.0'	88°59.9'	S 21°32.0'	56°53.3'	S 22°28.7'	339°47.6'	S 0°41.0'
17	123°21.0'	S 15°00.6'	104°01.8'	S 21°32.1'	71°55.4'	S 22°28.7'	354°48.5'	S 0°40.3'
18	138°21.1'	S 15°01.2'	119°03.7'	S 21°32.2'	86°57.5'	S 22°28.7'	9°49.5'	S 0°39.6'
19	153°21.1'	S 15°01.8'	134°05.6'	S 21°32.2'	101°59.7'	S 22°28.7'	24°50.4'	S 0°38.9'
20	168°21.1'	S 15°02.3'	149°07.5'	S 21°32.3'	117°01.8'	S 22°28.6'	39°51.4'	S 0°38.1'
21	183°21.1'	S 15°02.9'	164°09.4'	S 21°32.4'	132°04.0'	S 22°28.6'	54°52.3'	S 0°37.4'
22	198°21.2'	S 15°03.5'	179°11.3'	S 21°32.4'	147°06.1'	S 22°28.6'	69°53.3'	S 0°36.7'
23	213°21.2'	S 15°04.1'	194°13.2'	S 21°32.5'	162°08.3'	S 22°28.6'	84°54.2'	S 0°36.0'

Mon Dec 31, 2018 UTC

UTC	Venus -4.3 v = 0.0' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.1' d = 0.0'		Mars +0.5 v = 0.9' d = 0.7'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	228°21.2'	S 15°04.7'	209°15.1'	S 21°32.6'	177°10.4'	S 22°28.5'	99°55.2'	S 0°35.3'
1	243°21.2'	S 15°05.3'	224°17.0'	S 21°32.7'	192°12.6'	S 22°28.5'	114°56.1'	S 0°34.5'
2	258°21.3'	S 15°05.8'	239°18.9'	S 21°32.7'	207°14.7'	S 22°28.5'	129°57.1'	S 0°33.8'
3	273°21.3'	S 15°06.4'	254°20.8'	S 21°32.8'	222°16.9'	S 22°28.5'	144°58.0'	S 0°33.1'
4	288°21.3'	S 15°07.0'	269°22.7'	S 21°32.9'	237°19.0'	S 22°28.5'	159°59.0'	S 0°32.4'
5	303°21.3'	S 15°07.6'	284°24.6'	S 21°33.0'	252°21.1'	S 22°28.4'	174°59.9'	S 0°31.7'
6	318°21.3'	S 15°08.2'	299°26.5'	S 21°33.0'	267°23.3'	S 22°28.4'	190°00.8'	S 0°30.9'
7	333°21.4'	S 15°08.8'	314°28.4'	S 21°33.1'	282°25.4'	S 22°28.4'	205°01.8'	S 0°30.2'
8	348°21.4'	S 15°09.3'	329°30.3'	S 21°33.2'	297°27.6'	S 22°28.4'	220°02.7'	S 0°29.5'
9	3°21.4'	S 15°09.9'	344°32.2'	S 21°33.2'	312°29.7'	S 22°28.4'	235°03.7'	S 0°28.8'
10	18°21.4'	S 15°10.5'	359°34.1'	S 21°33.3'	327°31.9'	S 22°28.3'	250°04.6'	S 0°28.1'
11	33°21.4'	S 15°11.1'	14°36.0'	S 21°33.4'	342°34.0'	S 22°28.3'	265°05.6'	S 0°27.3'
12	48°21.4'	S 15°11.7'	29°38.0'	S 21°33.5'	357°36.2'	S 22°28.3'	280°06.5'	S 0°26.6'
13	63°21.4'	S 15°12.2'	44°39.9'	S 21°33.5'	12°38.3'	S 22°28.3'	295°07.5'	S 0°25.9'
14	78°21.4'	S 15°12.8'	59°41.8'	S 21°33.6'	27°40.5'	S 22°28.2'	310°08.4'	S 0°25.2'
15	93°21.4'	S 15°13.4'	74°43.7'	S 21°33.7'	42°42.6'	S 22°28.2'	325°09.4'	S 0°24.5'
16	108°21.5'	S 15°14.0'	89°45.6'	S 21°33.7'	57°44.7'	S 22°28.2'	340°10.3'	S 0°23.7'
17	123°21.5'	S 15°14.6'	104°47.5'	S 21°33.8'	72°46.9'	S 22°28.2'	355°11.3'	S 0°23.0'
18	138°21.5'	S 15°15.2'	119°49.4'	S 21°33.9'	87°49.0'	S 22°28.2'	10°12.2'	S 0°22.3'
19	153°21.5'	S 15°15.7'	134°51.3'	S 21°34.0'	102°51.2'	S 22°28.1'	25°13.2'	S 0°21.6'
20	168°21.5'	S 15°16.3'	149°53.2'	S 21°34.0'	117°53.3'	S 22°28.1'	40°14.1'	S 0°20.9'
21	183°21.5'	S 15°16.9'	164°55.1'	S 21°34.1'	132°55.5'	S 22°28.1'	55°15.0'	S 0°20.1'
22	198°21.5'	S 15°17.5'	179°57.0'	S 21°34.2'	147°57.6'	S 22°28.1'	70°16.0'	S 0°19.4'
23	213°21.5'	S 15°18.1'	194°58.9'	S 21°34.2'	162°59.8'	S 22°28.0'	85°16.9'	S 0°18.7'