

Mon Oct 1, 2018 UTC

UTC	Venus -4.5		Jupiter -1.6		Saturn +0.5		Mars -1.3	
	v = 2.1' d = 0.3'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.5' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	153°58.6'	S 21°24.3'	139°48.7'	S 17°32.8'	96°23.4'	S 22°45.4'	60°19.2'	S 22°32.7'
1	169°00.7'	S 21°24.6'	154°50.7'	S 17°33.0'	111°25.8'	S 22°45.4'	75°20.7'	S 22°32.4'
2	184°02.8'	S 21°25.0'	169°52.7'	S 17°33.1'	126°28.2'	S 22°45.4'	90°22.2'	S 22°32.0'
3	199°04.9'	S 21°25.4'	184°54.7'	S 17°33.2'	141°30.5'	S 22°45.4'	105°23.7'	S 22°31.6'
4	214°07.0'	S 21°25.7'	199°56.6'	S 17°33.4'	156°32.9'	S 22°45.4'	120°25.2'	S 22°31.2'
5	229°09.1'	S 21°26.1'	214°58.6'	S 17°33.5'	171°35.2'	S 22°45.4'	135°26.6'	S 22°30.8'
6	244°11.3'	S 21°26.4'	230°00.6'	S 17°33.6'	186°37.6'	S 22°45.4'	150°28.1'	S 22°30.4'
7	259°13.4'	S 21°26.8'	245°02.6'	S 17°33.7'	201°39.9'	S 22°45.4'	165°29.6'	S 22°30.0'
8	274°15.5'	S 21°27.1'	260°04.6'	S 17°33.9'	216°42.3'	S 22°45.4'	180°31.1'	S 22°29.6'
9	289°17.6'	S 21°27.5'	275°06.6'	S 17°34.0'	231°44.7'	S 22°45.4'	195°32.5'	S 22°29.3'
10	304°19.8'	S 21°27.8'	290°08.6'	S 17°34.1'	246°47.0'	S 22°45.4'	210°34.0'	S 22°28.9'
11	319°21.9'	S 21°28.2'	305°10.6'	S 17°34.2'	261°49.4'	S 22°45.4'	225°35.5'	S 22°28.5'
12	334°24.0'	S 21°28.5'	320°12.6'	S 17°34.4'	276°51.7'	S 22°45.4'	240°37.0'	S 22°28.1'
13	349°26.2'	S 21°28.8'	335°14.6'	S 17°34.5'	291°54.1'	S 22°45.4'	255°38.4'	S 22°27.7'
14	4°28.3'	S 21°29.2'	350°16.6'	S 17°34.6'	306°56.4'	S 22°45.4'	270°39.9'	S 22°27.3'
15	19°30.5'	S 21°29.5'	5°18.6'	S 17°34.7'	321°58.8'	S 22°45.4'	285°41.4'	S 22°26.9'
16	34°32.6'	S 21°29.8'	20°20.5'	S 17°34.9'	337°01.1'	S 22°45.4'	300°42.8'	S 22°26.5'
17	49°34.8'	S 21°30.2'	35°22.5'	S 17°35.0'	352°03.5'	S 22°45.4'	315°44.3'	S 22°26.1'
18	64°36.9'	S 21°30.5'	50°24.5'	S 17°35.1'	7°05.9'	S 22°45.4'	330°45.8'	S 22°25.8'
19	79°39.1'	S 21°30.8'	65°26.5'	S 17°35.2'	22°08.2'	S 22°45.4'	345°47.2'	S 22°25.4'
20	94°41.3'	S 21°31.2'	80°28.5'	S 17°35.4'	37°10.6'	S 22°45.4'	0°48.7'	S 22°25.0'
21	109°43.4'	S 21°31.5'	95°30.5'	S 17°35.5'	52°12.9'	S 22°45.4'	15°50.2'	S 22°24.6'
22	124°45.6'	S 21°31.8'	110°32.5'	S 17°35.6'	67°15.3'	S 22°45.4'	30°51.6'	S 22°24.2'
23	139°47.8'	S 21°32.2'	125°34.5'	S 17°35.7'	82°17.6'	S 22°45.4'	45°53.1'	S 22°23.8'

Tue Oct 2, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars -1.3	
	v = 2.2' d = 0.3'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.5' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	154°50.0'	S 21°32.5'	140°36.5'	S 17°35.9'	97°20.0'	S 22°45.5'	60°54.6'	S 22°23.4'
1	169°52.1'	S 21°32.8'	155°38.5'	S 17°36.0'	112°22.3'	S 22°45.5'	75°56.0'	S 22°23.0'
2	184°54.3'	S 21°33.1'	170°40.4'	S 17°36.1'	127°24.7'	S 22°45.5'	90°57.5'	S 22°22.6'
3	199°56.5'	S 21°33.4'	185°42.4'	S 17°36.2'	142°27.0'	S 22°45.5'	105°58.9'	S 22°22.2'
4	214°58.7'	S 21°33.7'	200°44.4'	S 17°36.4'	157°29.4'	S 22°45.5'	121°00.4'	S 22°21.8'
5	230°00.9'	S 21°34.1'	215°46.4'	S 17°36.5'	172°31.7'	S 22°45.5'	136°01.9'	S 22°21.4'
6	245°03.1'	S 21°34.4'	230°48.4'	S 17°36.6'	187°34.1'	S 22°45.5'	151°03.3'	S 22°21.1'
7	260°05.3'	S 21°34.7'	245°50.4'	S 17°36.8'	202°36.4'	S 22°45.5'	166°04.8'	S 22°20.7'
8	275°07.5'	S 21°35.0'	260°52.4'	S 17°36.9'	217°38.8'	S 22°45.5'	181°06.2'	S 22°20.3'
9	290°09.7'	S 21°35.3'	275°54.4'	S 17°37.0'	232°41.1'	S 22°45.5'	196°07.7'	S 22°19.9'
10	305°12.0'	S 21°35.6'	290°56.4'	S 17°37.1'	247°43.5'	S 22°45.5'	211°09.1'	S 22°19.5'
11	320°14.2'	S 21°35.9'	305°58.3'	S 17°37.3'	262°45.8'	S 22°45.5'	226°10.6'	S 22°19.1'
12	335°16.4'	S 21°36.2'	321°00.3'	S 17°37.4'	277°48.2'	S 22°45.5'	241°12.0'	S 22°18.7'
13	350°18.6'	S 21°36.5'	336°02.3'	S 17°37.5'	292°50.5'	S 22°45.5'	256°13.5'	S 22°18.3'
14	5°20.9'	S 21°36.8'	351°04.3'	S 17°37.6'	307°52.9'	S 22°45.5'	271°14.9'	S 22°17.9'
15	20°23.1'	S 21°37.1'	6°06.3'	S 17°37.8'	322°55.2'	S 22°45.5'	286°16.4'	S 22°17.5'
16	35°25.3'	S 21°37.4'	21°08.3'	S 17°37.9'	337°57.6'	S 22°45.5'	301°17.8'	S 22°17.1'
17	50°27.6'	S 21°37.7'	36°10.3'	S 17°38.0'	352°59.9'	S 22°45.5'	316°19.3'	S 22°16.7'
18	65°29.8'	S 21°38.0'	51°12.3'	S 17°38.1'	8°02.3'	S 22°45.5'	331°20.7'	S 22°16.3'
19	80°32.1'	S 21°38.3'	66°14.2'	S 17°38.3'	23°04.6'	S 22°45.5'	346°22.2'	S 22°15.9'
20	95°34.3'	S 21°38.5'	81°16.2'	S 17°38.4'	38°07.0'	S 22°45.5'	1°23.6'	S 22°15.5'
21	110°36.6'	S 21°38.8'	96°18.2'	S 17°38.5'	53°09.3'	S 22°45.5'	16°25.1'	S 22°15.1'
22	125°38.8'	S 21°39.1'	111°20.2'	S 17°38.6'	68°11.7'	S 22°45.5'	31°26.5'	S 22°14.7'
23	140°41.1'	S 21°39.4'	126°22.2'	S 17°38.8'	83°14.0'	S 22°45.5'	46°28.0'	S 22°14.3'

Wed Oct 3, 2018 UTC

UTC	Venus -4.4 v = 2.3' d = 0.3'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.3 v = 1.4' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	155°43.4'	S 21°39.7'	141°24.2'	S 17°38.9'	98°16.4'	S 22°45.5'	61°29.4'	S 22°13.9'
1	170°45.6'	S 21°40.0'	156°26.2'	S 17°39.0'	113°18.7'	S 22°45.5'	76°30.9'	S 22°13.5'
2	185°47.9'	S 21°40.2'	171°28.1'	S 17°39.1'	128°21.1'	S 22°45.5'	91°32.3'	S 22°13.1'
3	200°50.2'	S 21°40.5'	186°30.1'	S 17°39.3'	143°23.4'	S 22°45.5'	106°33.7'	S 22°12.7'
4	215°52.5'	S 21°40.8'	201°32.1'	S 17°39.4'	158°25.8'	S 22°45.5'	121°35.2'	S 22°12.3'
5	230°54.8'	S 21°41.0'	216°34.1'	S 17°39.5'	173°28.1'	S 22°45.5'	136°36.6'	S 22°11.9'
6	245°57.0'	S 21°41.3'	231°36.1'	S 17°39.7'	188°30.5'	S 22°45.6'	151°38.1'	S 22°11.5'
7	260°59.3'	S 21°41.6'	246°38.1'	S 17°39.8'	203°32.8'	S 22°45.6'	166°39.5'	S 22°11.1'
8	276°01.6'	S 21°41.8'	261°40.1'	S 17°39.9'	218°35.2'	S 22°45.6'	181°40.9'	S 22°10.7'
9	291°03.9'	S 21°42.1'	276°42.0'	S 17°40.0'	233°37.5'	S 22°45.6'	196°42.4'	S 22°10.3'
10	306°06.2'	S 21°42.4'	291°44.0'	S 17°40.2'	248°39.9'	S 22°45.6'	211°43.8'	S 22°09.9'
11	321°08.6'	S 21°42.6'	306°46.0'	S 17°40.3'	263°42.2'	S 22°45.6'	226°45.2'	S 22°09.5'
12	336°10.9'	S 21°42.9'	321°48.0'	S 17°40.4'	278°44.6'	S 22°45.6'	241°46.7'	S 22°09.1'
13	351°13.2'	S 21°43.1'	336°50.0'	S 17°40.5'	293°46.9'	S 22°45.6'	256°48.1'	S 22°08.7'
14	6°15.5'	S 21°43.4'	351°52.0'	S 17°40.7'	308°49.3'	S 22°45.6'	271°49.5'	S 22°08.3'
15	21°17.8'	S 21°43.7'	6°54.0'	S 17°40.8'	323°51.6'	S 22°45.6'	286°51.0'	S 22°07.9'
16	36°20.1'	S 21°43.9'	21°55.9'	S 17°40.9'	338°54.0'	S 22°45.6'	301°52.4'	S 22°07.5'
17	51°22.5'	S 21°44.2'	36°57.9'	S 17°41.0'	353°56.3'	S 22°45.6'	316°53.8'	S 22°07.1'
18	66°24.8'	S 21°44.4'	51°59.9'	S 17°41.2'	8°58.6'	S 22°45.6'	331°55.3'	S 22°06.7'
19	81°27.1'	S 21°44.6'	67°01.9'	S 17°41.3'	24°01.0'	S 22°45.6'	346°56.7'	S 22°06.3'
20	96°29.5'	S 21°44.9'	82°03.9'	S 17°41.4'	39°03.3'	S 22°45.6'	1°58.1'	S 22°05.9'
21	111°31.8'	S 21°45.1'	97°05.9'	S 17°41.6'	54°05.7'	S 22°45.6'	16°59.6'	S 22°05.5'
22	126°34.2'	S 21°45.4'	112°07.8'	S 17°41.7'	69°08.0'	S 22°45.6'	32°01.0'	S 22°05.1'
23	141°36.5'	S 21°45.6'	127°09.8'	S 17°41.8'	84°10.4'	S 22°45.6'	47°02.4'	S 22°04.7'

Thu Oct 4, 2018 UTC

UTC	Venus -4.4 v = 2.4' d = 0.2'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.2 v = 1.4' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	156°38.9'	S 21°45.8'	142°11.8'	S 17°41.9'	99°12.7'	S 22°45.6'	62°03.8'	S 22°04.3'
1	171°41.2'	S 21°46.1'	157°13.8'	S 17°42.1'	114°15.1'	S 22°45.6'	77°05.3'	S 22°03.9'
2	186°43.6'	S 21°46.3'	172°15.8'	S 17°42.2'	129°17.4'	S 22°45.6'	92°06.7'	S 22°03.5'
3	201°46.0'	S 21°46.5'	187°17.7'	S 17°42.3'	144°19.8'	S 22°45.6'	107°08.1'	S 22°03.1'
4	216°48.3'	S 21°46.8'	202°19.7'	S 17°42.4'	159°22.1'	S 22°45.6'	122°09.5'	S 22°02.7'
5	231°50.7'	S 21°47.0'	217°21.7'	S 17°42.6'	174°24.4'	S 22°45.6'	137°11.0'	S 22°02.3'
6	246°53.1'	S 21°47.2'	232°23.7'	S 17°42.7'	189°26.8'	S 22°45.6'	152°12.4'	S 22°01.9'
7	261°55.5'	S 21°47.5'	247°25.7'	S 17°42.8'	204°29.1'	S 22°45.6'	167°13.8'	S 22°01.5'
8	276°57.9'	S 21°47.7'	262°27.7'	S 17°42.9'	219°31.5'	S 22°45.6'	182°15.2'	S 22°01.0'
9	292°00.3'	S 21°47.9'	277°29.6'	S 17°43.1'	234°33.8'	S 22°45.6'	197°16.6'	S 22°00.6'
10	307°02.7'	S 21°48.1'	292°31.6'	S 17°43.2'	249°36.2'	S 22°45.6'	212°18.1'	S 22°00.2'
11	322°05.0'	S 21°48.3'	307°33.6'	S 17°43.3'	264°38.5'	S 22°45.6'	227°19.5'	S 21°59.8'
12	337°07.4'	S 21°48.5'	322°35.6'	S 17°43.4'	279°40.8'	S 22°45.6'	242°20.9'	S 21°59.4'
13	352°09.9'	S 21°48.8'	337°37.6'	S 17°43.6'	294°43.2'	S 22°45.6'	257°22.3'	S 21°59.0'
14	7°12.3'	S 21°49.0'	352°39.5'	S 17°43.7'	309°45.5'	S 22°45.7'	272°23.7'	S 21°58.6'
15	22°14.7'	S 21°49.2'	7°41.5'	S 17°43.8'	324°47.9'	S 22°45.7'	287°25.1'	S 21°58.2'
16	37°17.1'	S 21°49.4'	22°43.5'	S 17°44.0'	339°50.2'	S 22°45.7'	302°26.6'	S 21°57.8'
17	52°19.5'	S 21°49.6'	37°45.5'	S 17°44.1'	354°52.6'	S 22°45.7'	317°28.0'	S 21°57.4'
18	67°21.9'	S 21°49.8'	52°47.5'	S 17°44.2'	9°54.9'	S 22°45.7'	332°29.4'	S 21°57.0'
19	82°24.4'	S 21°50.0'	67°49.4'	S 17°44.3'	24°57.2'	S 22°45.7'	347°30.8'	S 21°56.6'
20	97°26.8'	S 21°50.2'	82°51.4'	S 17°44.5'	39°59.6'	S 22°45.7'	2°32.2'	S 21°56.2'
21	112°29.2'	S 21°50.4'	97°53.4'	S 17°44.6'	55°01.9'	S 22°45.7'	17°33.6'	S 21°55.7'
22	127°31.7'	S 21°50.6'	112°55.4'	S 17°44.7'	70°04.3'	S 22°45.7'	32°35.0'	S 21°55.3'
23	142°34.1'	S 21°50.8'	127°57.4'	S 17°44.8'	85°06.6'	S 22°45.7'	47°36.4'	S 21°54.9'

Fri Oct 5, 2018 UTC

UTC	Venus -4.4 v = 2.5' d = 0.2'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.2 v = 1.4' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	157°36.6'	S 21°51.0'	142°59.3'	S 17°45.0'	100°08.9'	S 22°45.7'	62°37.8'	S 21°54.5'
1	172°39.0'	S 21°51.1'	158°01.3'	S 17°45.1'	115°11.3'	S 22°45.7'	77°39.2'	S 21°54.1'
2	187°41.5'	S 21°51.3'	173°03.3'	S 17°45.2'	130°13.6'	S 22°45.7'	92°40.7'	S 21°53.7'
3	202°43.9'	S 21°51.5'	188°05.3'	S 17°45.3'	145°16.0'	S 22°45.7'	107°42.1'	S 21°53.3'
4	217°46.4'	S 21°51.7'	203°07.3'	S 17°45.5'	160°18.3'	S 22°45.7'	122°43.5'	S 21°52.9'
5	232°48.8'	S 21°51.9'	218°09.2'	S 17°45.6'	175°20.7'	S 22°45.7'	137°44.9'	S 21°52.5'
6	247°51.3'	S 21°52.1'	233°11.2'	S 17°45.7'	190°23.0'	S 22°45.7'	152°46.3'	S 21°52.0'
7	262°53.8'	S 21°52.2'	248°13.2'	S 17°45.9'	205°25.3'	S 22°45.7'	167°47.7'	S 21°51.6'
8	277°56.3'	S 21°52.4'	263°15.2'	S 17°46.0'	220°27.7'	S 22°45.7'	182°49.1'	S 21°51.2'
9	292°58.7'	S 21°52.6'	278°17.2'	S 17°46.1'	235°30.0'	S 22°45.7'	197°50.5'	S 21°50.8'
10	308°01.2'	S 21°52.8'	293°19.1'	S 17°46.2'	250°32.3'	S 22°45.7'	212°51.9'	S 21°50.4'
11	323°03.7'	S 21°52.9'	308°21.1'	S 17°46.4'	265°34.7'	S 22°45.7'	227°53.3'	S 21°50.0'
12	338°06.2'	S 21°53.1'	323°23.1'	S 17°46.5'	280°37.0'	S 22°45.7'	242°54.7'	S 21°49.6'
13	353°08.7'	S 21°53.3'	338°25.1'	S 17°46.6'	295°39.4'	S 22°45.7'	257°56.1'	S 21°49.2'
14	8°11.2'	S 21°53.4'	353°27.0'	S 17°46.7'	310°41.7'	S 22°45.7'	272°57.5'	S 21°48.7'
15	23°13.7'	S 21°53.6'	8°29.0'	S 17°46.9'	325°44.0'	S 22°45.7'	287°58.9'	S 21°48.3'
16	38°16.2'	S 21°53.7'	23°31.0'	S 17°47.0'	340°46.4'	S 22°45.7'	303°00.3'	S 21°47.9'
17	53°18.7'	S 21°53.9'	38°33.0'	S 17°47.1'	355°48.7'	S 22°45.7'	318°01.7'	S 21°47.5'
18	68°21.2'	S 21°54.1'	53°34.9'	S 17°47.3'	10°51.1'	S 22°45.7'	333°03.1'	S 21°47.1'
19	83°23.7'	S 21°54.2'	68°36.9'	S 17°47.4'	25°53.4'	S 22°45.7'	348°04.5'	S 21°46.7'
20	98°26.3'	S 21°54.4'	83°38.9'	S 17°47.5'	40°55.7'	S 22°45.7'	3°05.8'	S 21°46.3'
21	113°28.8'	S 21°54.5'	98°40.9'	S 17°47.6'	55°58.1'	S 22°45.7'	18°07.2'	S 21°45.8'
22	128°31.3'	S 21°54.7'	113°42.9'	S 17°47.8'	71°00.4'	S 22°45.7'	33°08.6'	S 21°45.4'
23	143°33.9'	S 21°54.8'	128°44.8'	S 17°47.9'	86°02.7'	S 22°45.7'	48°10.0'	S 21°45.0'

Sat Oct 6, 2018 UTC

UTC	Venus -4.4 v = 2.6' d = 0.1'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.2 v = 1.4' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	158°36.4'	S 21°55.0'	143°46.8'	S 17°48.0'	101°05.1'	S 22°45.8'	63°11.4'	S 21°44.6'
1	173°38.9'	S 21°55.1'	158°48.8'	S 17°48.1'	116°07.4'	S 22°45.8'	78°12.8'	S 21°44.2'
2	188°41.5'	S 21°55.2'	173°50.8'	S 17°48.3'	131°09.8'	S 22°45.8'	93°14.2'	S 21°43.8'
3	203°44.0'	S 21°55.4'	188°52.7'	S 17°48.4'	146°12.1'	S 22°45.8'	108°15.6'	S 21°43.3'
4	218°46.6'	S 21°55.5'	203°54.7'	S 17°48.5'	161°14.4'	S 22°45.8'	123°17.0'	S 21°42.9'
5	233°49.1'	S 21°55.6'	218°56.7'	S 17°48.6'	176°16.8'	S 22°45.8'	138°18.4'	S 21°42.5'
6	248°51.7'	S 21°55.8'	233°58.7'	S 17°48.8'	191°19.1'	S 22°45.8'	153°19.7'	S 21°42.1'
7	263°54.3'	S 21°55.9'	249°00.6'	S 17°48.9'	206°21.4'	S 22°45.8'	168°21.1'	S 21°41.7'
8	278°56.8'	S 21°56.0'	264°02.6'	S 17°49.0'	221°23.8'	S 22°45.8'	183°22.5'	S 21°41.2'
9	293°59.4'	S 21°56.2'	279°04.6'	S 17°49.2'	236°26.1'	S 22°45.8'	198°23.9'	S 21°40.8'
10	309°02.0'	S 21°56.3'	294°06.6'	S 17°49.3'	251°28.4'	S 22°45.8'	213°25.3'	S 21°40.4'
11	324°04.6'	S 21°56.4'	309°08.5'	S 17°49.4'	266°30.8'	S 22°45.8'	228°26.7'	S 21°40.0'
12	339°07.1'	S 21°56.5'	324°10.5'	S 17°49.5'	281°33.1'	S 22°45.8'	243°28.1'	S 21°39.6'
13	354°09.7'	S 21°56.6'	339°12.5'	S 17°49.7'	296°35.4'	S 22°45.8'	258°29.4'	S 21°39.1'
14	9°12.3'	S 21°56.8'	354°14.5'	S 17°49.8'	311°37.8'	S 22°45.8'	273°30.8'	S 21°38.7'
15	24°14.9'	S 21°56.9'	9°16.4'	S 17°49.9'	326°40.1'	S 22°45.8'	288°32.2'	S 21°38.3'
16	39°17.5'	S 21°57.0'	24°18.4'	S 17°50.0'	341°42.4'	S 22°45.8'	303°33.6'	S 21°37.9'
17	54°20.1'	S 21°57.1'	39°20.4'	S 17°50.2'	356°44.8'	S 22°45.8'	318°35.0'	S 21°37.5'
18	69°22.7'	S 21°57.2'	54°22.3'	S 17°50.3'	11°47.1'	S 22°45.8'	333°36.3'	S 21°37.0'
19	84°25.3'	S 21°57.3'	69°24.3'	S 17°50.4'	26°49.4'	S 22°45.8'	348°37.7'	S 21°36.6'
20	99°28.0'	S 21°57.4'	84°26.3'	S 17°50.6'	41°51.8'	S 22°45.8'	3°39.1'	S 21°36.2'
21	114°30.6'	S 21°57.5'	99°28.3'	S 17°50.7'	56°54.1'	S 22°45.8'	18°40.5'	S 21°35.8'
22	129°33.2'	S 21°57.6'	114°30.2'	S 17°50.8'	71°56.4'	S 22°45.8'	33°41.8'	S 21°35.4'
23	144°35.8'	S 21°57.7'	129°32.2'	S 17°50.9'	86°58.8'	S 22°45.8'	48°43.2'	S 21°34.9'

Sun Oct 7, 2018 UTC

UTC	Venus -4.4		Jupiter -1.6		Saturn +0.5		Mars -1.2	
	v = 2.7' d = 0.1'		v = 2.0' d = 0.1'		v = 2.3' d = 0.0'		v = 1.4' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	159°38.4'	S 21°57.8'	144°34.2'	S 17°51.1'	102°01.1'	S 22°45.8'	63°44.6'	S 21°34.5'
1	174°41.1'	S 21°57.9'	159°36.2'	S 17°51.2'	117°03.4'	S 22°45.8'	78°46.0'	S 21°34.1'
2	189°43.7'	S 21°58.0'	174°38.1'	S 17°51.3'	132°05.8'	S 22°45.8'	93°47.3'	S 21°33.7'
3	204°46.4'	S 21°58.1'	189°40.1'	S 17°51.4'	147°08.1'	S 22°45.8'	108°48.7'	S 21°33.2'
4	219°49.0'	S 21°58.2'	204°42.1'	S 17°51.6'	162°10.4'	S 22°45.8'	123°50.1'	S 21°32.8'
5	234°51.7'	S 21°58.2'	219°44.0'	S 17°51.7'	177°12.8'	S 22°45.8'	138°51.5'	S 21°32.4'
6	249°54.3'	S 21°58.3'	234°46.0'	S 17°51.8'	192°15.1'	S 22°45.8'	153°52.8'	S 21°32.0'
7	264°57.0'	S 21°58.4'	249°48.0'	S 17°52.0'	207°17.4'	S 22°45.8'	168°54.2'	S 21°31.5'
8	279°59.6'	S 21°58.5'	264°50.0'	S 17°52.1'	222°19.8'	S 22°45.8'	183°55.6'	S 21°31.1'
9	295°02.3'	S 21°58.6'	279°51.9'	S 17°52.2'	237°22.1'	S 22°45.8'	198°56.9'	S 21°30.7'
10	310°05.0'	S 21°58.6'	294°53.9'	S 17°52.3'	252°24.4'	S 22°45.8'	213°58.3'	S 21°30.3'
11	325°07.6'	S 21°58.7'	309°55.9'	S 17°52.5'	267°26.8'	S 22°45.8'	228°59.7'	S 21°29.8'
12	340°10.3'	S 21°58.8'	324°57.8'	S 17°52.6'	282°29.1'	S 22°45.8'	244°01.0'	S 21°29.4'
13	355°13.0'	S 21°58.8'	339°59.8'	S 17°52.7'	297°31.4'	S 22°45.9'	259°02.4'	S 21°29.0'
14	10°15.7'	S 21°58.9'	355°01.8'	S 17°52.8'	312°33.7'	S 22°45.9'	274°03.8'	S 21°28.6'
15	25°18.4'	S 21°59.0'	10°03.8'	S 17°53.0'	327°36.1'	S 22°45.9'	289°05.1'	S 21°28.1'
16	40°21.1'	S 21°59.0'	25°05.7'	S 17°53.1'	342°38.4'	S 22°45.9'	304°06.5'	S 21°27.7'
17	55°23.7'	S 21°59.1'	40°07.7'	S 17°53.2'	357°40.7'	S 22°45.9'	319°07.9'	S 21°27.3'
18	70°26.4'	S 21°59.2'	55°09.7'	S 17°53.3'	12°43.1'	S 22°45.9'	334°09.2'	S 21°26.9'
19	85°29.2'	S 21°59.2'	70°11.6'	S 17°53.5'	27°45.4'	S 22°45.9'	349°10.6'	S 21°26.4'
20	100°31.9'	S 21°59.3'	85°13.6'	S 17°53.6'	42°47.7'	S 22°45.9'	4°11.9'	S 21°26.0'
21	115°34.6'	S 21°59.3'	100°15.6'	S 17°53.7'	57°50.1'	S 22°45.9'	19°13.3'	S 21°25.6'
22	130°37.3'	S 21°59.4'	115°17.6'	S 17°53.9'	72°52.4'	S 22°45.9'	34°14.7'	S 21°25.1'
23	145°40.0'	S 21°59.4'	130°19.5'	S 17°54.0'	87°54.7'	S 22°45.9'	49°16.0'	S 21°24.7'

Mon Oct 8, 2018 UTC

UTC	Venus -4.3		Jupiter -1.6		Saturn +0.5		Mars -1.1	
	v = 2.8' d = 0.0'		v = 2.0' d = 0.1'		v = 2.3' d = 0.0'		v = 1.3' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	160°42.7'	S 21°59.5'	145°21.5'	S 17°54.1'	102°57.0'	S 22°45.9'	64°17.4'	S 21°24.3'
1	175°45.5'	S 21°59.5'	160°23.5'	S 17°54.2'	117°59.4'	S 22°45.9'	79°18.7'	S 21°23.9'
2	190°48.2'	S 21°59.5'	175°25.4'	S 17°54.4'	133°01.7'	S 22°45.9'	94°20.1'	S 21°23.4'
3	205°50.9'	S 21°59.6'	190°27.4'	S 17°54.5'	148°04.0'	S 22°45.9'	109°21.4'	S 21°23.0'
4	220°53.7'	S 21°59.6'	205°29.4'	S 17°54.6'	163°06.4'	S 22°45.9'	124°22.8'	S 21°22.6'
5	235°56.4'	S 21°59.6'	220°31.3'	S 17°54.7'	178°08.7'	S 22°45.9'	139°24.2'	S 21°22.1'
6	250°59.2'	S 21°59.7'	235°33.3'	S 17°54.9'	193°11.0'	S 22°45.9'	154°25.5'	S 21°21.7'
7	266°01.9'	S 21°59.7'	250°35.3'	S 17°55.0'	208°13.3'	S 22°45.9'	169°26.9'	S 21°21.3'
8	281°04.7'	S 21°59.7'	265°37.2'	S 17°55.1'	223°15.7'	S 22°45.9'	184°28.2'	S 21°20.8'
9	296°07.4'	S 21°59.8'	280°39.2'	S 17°55.3'	238°18.0'	S 22°45.9'	199°29.6'	S 21°20.4'
10	311°10.2'	S 21°59.8'	295°41.2'	S 17°55.4'	253°20.3'	S 22°45.9'	214°30.9'	S 21°20.0'
11	326°12.9'	S 21°59.8'	310°43.1'	S 17°55.5'	268°22.6'	S 22°45.9'	229°32.3'	S 21°19.6'
12	341°15.7'	S 21°59.8'	325°45.1'	S 17°55.6'	283°25.0'	S 22°45.9'	244°33.6'	S 21°19.1'
13	356°18.5'	S 21°59.8'	340°47.1'	S 17°55.8'	298°27.3'	S 22°45.9'	259°35.0'	S 21°18.7'
14	11°21.3'	S 21°59.8'	355°49.1'	S 17°55.9'	313°29.6'	S 22°45.9'	274°36.3'	S 21°18.3'
15	26°24.0'	S 21°59.9'	10°51.0'	S 17°56.0'	328°32.0'	S 22°45.9'	289°37.7'	S 21°17.8'
16	41°26.8'	S 21°59.9'	25°53.0'	S 17°56.1'	343°34.3'	S 22°45.9'	304°39.0'	S 21°17.4'
17	56°29.6'	S 21°59.9'	40°55.0'	S 17°56.3'	358°36.6'	S 22°45.9'	319°40.4'	S 21°17.0'
18	71°32.4'	S 21°59.9'	55°56.9'	S 17°56.4'	13°38.9'	S 22°45.9'	334°41.7'	S 21°16.5'
19	86°35.2'	S 21°59.9'	70°58.9'	S 17°56.5'	28°41.3'	S 22°45.9'	349°43.0'	S 21°16.1'
20	101°38.0'	S 21°59.9'	86°00.9'	S 17°56.7'	43°43.6'	S 22°45.9'	4°44.4'	S 21°15.7'
21	116°40.8'	S 21°59.9'	101°02.8'	S 17°56.8'	58°45.9'	S 22°45.9'	19°45.7'	S 21°15.2'
22	131°43.6'	S 21°59.9'	116°04.8'	S 17°56.9'	73°48.2'	S 22°45.9'	34°47.1'	S 21°14.8'
23	146°46.4'	S 21°59.9'	131°06.8'	S 17°57.0'	88°50.6'	S 22°45.9'	49°48.4'	S 21°14.4'

Tue Oct 9, 2018 UTC

UTC	Venus -4.3 v = 2.9' d = 0.0'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.1 v = 1.3' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	161°49.3'	S 21°59.9'	146°08.7'	S 17°57.2'	103°52.9'	S 22°45.9'	64°49.8'	S 21°13.9'
1	176°52.1'	S 21°59.9'	161°10.7'	S 17°57.3'	118°55.2'	S 22°45.9'	79°51.1'	S 21°13.5'
2	191°54.9'	S 21°59.8'	176°12.7'	S 17°57.4'	133°57.5'	S 22°45.9'	94°52.5'	S 21°13.1'
3	206°57.7'	S 21°59.8'	191°14.6'	S 17°57.5'	148°59.9'	S 22°45.9'	109°53.8'	S 21°12.6'
4	222°00.6'	S 21°59.8'	206°16.6'	S 17°57.7'	164°02.2'	S 22°45.9'	124°55.1'	S 21°12.2'
5	237°03.4'	S 21°59.8'	221°18.5'	S 17°57.8'	179°04.5'	S 22°45.9'	139°56.5'	S 21°11.7'
6	252°06.2'	S 21°59.8'	236°20.5'	S 17°57.9'	194°06.8'	S 22°46.0'	154°57.8'	S 21°11.3'
7	267°09.1'	S 21°59.8'	251°22.5'	S 17°58.1'	209°09.2'	S 22°46.0'	169°59.1'	S 21°10.9'
8	282°11.9'	S 21°59.7'	266°24.4'	S 17°58.2'	224°11.5'	S 22°46.0'	185°00.5'	S 21°10.4'
9	297°14.8'	S 21°59.7'	281°26.4'	S 17°58.3'	239°13.8'	S 22°46.0'	200°01.8'	S 21°10.0'
10	312°17.6'	S 21°59.7'	296°28.4'	S 17°58.4'	254°16.1'	S 22°46.0'	215°03.2'	S 21°09.6'
11	327°20.5'	S 21°59.6'	311°30.3'	S 17°58.6'	269°18.4'	S 22°46.0'	230°04.5'	S 21°09.1'
12	342°23.4'	S 21°59.6'	326°32.3'	S 17°58.7'	284°20.8'	S 22°46.0'	245°05.8'	S 21°08.7'
13	357°26.2'	S 21°59.6'	341°34.3'	S 17°58.8'	299°23.1'	S 22°46.0'	260°07.2'	S 21°08.2'
14	12°29.1'	S 21°59.5'	356°36.2'	S 17°58.9'	314°25.4'	S 22°46.0'	275°08.5'	S 21°07.8'
15	27°32.0'	S 21°59.5'	11°38.2'	S 17°59.1'	329°27.7'	S 22°46.0'	290°09.8'	S 21°07.4'
16	42°34.8'	S 21°59.4'	26°40.2'	S 17°59.2'	344°30.1'	S 22°46.0'	305°11.2'	S 21°06.9'
17	57°37.7'	S 21°59.4'	41°42.1'	S 17°59.3'	359°32.4'	S 22°46.0'	320°12.5'	S 21°06.5'
18	72°40.6'	S 21°59.3'	56°44.1'	S 17°59.5'	14°34.7'	S 22°46.0'	335°13.8'	S 21°06.0'
19	87°43.5'	S 21°59.3'	71°46.1'	S 17°59.6'	29°37.0'	S 22°46.0'	350°15.1'	S 21°05.6'
20	102°46.4'	S 21°59.2'	86°48.0'	S 17°59.7'	44°39.3'	S 22°46.0'	5°16.5'	S 21°05.2'
21	117°49.3'	S 21°59.2'	101°50.0'	S 17°59.8'	59°41.7'	S 22°46.0'	20°17.8'	S 21°04.7'
22	132°52.2'	S 21°59.1'	116°51.9'	S 17°60.0'	74°44.0'	S 22°46.0'	35°19.1'	S 21°04.3'
23	147°55.1'	S 21°59.1'	131°53.9'	S 18°00.1'	89°46.3'	S 22°46.0'	50°20.5'	S 21°03.8'

Wed Oct 10, 2018 UTC

UTC	Venus -4.3 v = 3.0' d = 0.1'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.1 v = 1.3' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	162°58.0'	S 21°59.0'	146°55.9'	S 18°00.2'	104°48.6'	S 22°46.0'	65°21.8'	S 21°03.4'
1	178°00.9'	S 21°58.9'	161°57.8'	S 18°00.3'	119°50.9'	S 22°46.0'	80°23.1'	S 21°03.0'
2	193°03.8'	S 21°58.9'	176°59.8'	S 18°00.5'	134°53.3'	S 22°46.0'	95°24.4'	S 21°02.5'
3	208°06.8'	S 21°58.8'	192°01.8'	S 18°00.6'	149°55.6'	S 22°46.0'	110°25.8'	S 21°02.1'
4	223°09.7'	S 21°58.7'	207°03.7'	S 18°00.7'	164°57.9'	S 22°46.0'	125°27.1'	S 21°01.6'
5	238°12.6'	S 21°58.7'	222°05.7'	S 18°00.9'	180°00.2'	S 22°46.0'	140°28.4'	S 21°01.2'
6	253°15.6'	S 21°58.6'	237°07.6'	S 18°01.0'	195°02.5'	S 22°46.0'	155°29.7'	S 21°00.8'
7	268°18.5'	S 21°58.5'	252°09.6'	S 18°01.1'	210°04.9'	S 22°46.0'	170°31.1'	S 21°00.3'
8	283°21.4'	S 21°58.4'	267°11.6'	S 18°01.2'	225°07.2'	S 22°46.0'	185°32.4'	S 20°59.9'
9	298°24.4'	S 21°58.3'	282°13.5'	S 18°01.4'	240°09.5'	S 22°46.0'	200°33.7'	S 20°59.4'
10	313°27.3'	S 21°58.3'	297°15.5'	S 18°01.5'	255°11.8'	S 22°46.0'	215°35.0'	S 20°59.0'
11	328°30.3'	S 21°58.2'	312°17.5'	S 18°01.6'	270°14.1'	S 22°46.0'	230°36.3'	S 20°58.5'
12	343°33.2'	S 21°58.1'	327°19.4'	S 18°01.8'	285°16.5'	S 22°46.0'	245°37.7'	S 20°58.1'
13	358°36.2'	S 21°58.0'	342°21.4'	S 18°01.9'	300°18.8'	S 22°46.0'	260°39.0'	S 20°57.7'
14	13°39.2'	S 21°57.9'	357°23.3'	S 18°02.0'	315°21.1'	S 22°46.0'	275°40.3'	S 20°57.2'
15	28°42.1'	S 21°57.8'	12°25.3'	S 18°02.1'	330°23.4'	S 22°46.0'	290°41.6'	S 20°56.8'
16	43°45.1'	S 21°57.7'	27°27.3'	S 18°02.3'	345°25.7'	S 22°46.0'	305°42.9'	S 20°56.3'
17	58°48.1'	S 21°57.6'	42°29.2'	S 18°02.4'	0°28.1'	S 22°46.0'	320°44.3'	S 20°55.9'
18	73°51.0'	S 21°57.5'	57°31.2'	S 18°02.5'	15°30.4'	S 22°46.0'	335°45.6'	S 20°55.4'
19	88°54.0'	S 21°57.4'	72°33.1'	S 18°02.6'	30°32.7'	S 22°46.0'	350°46.9'	S 20°55.0'
20	103°57.0'	S 21°57.3'	87°35.1'	S 18°02.8'	45°35.0'	S 22°46.0'	5°48.2'	S 20°54.5'
21	119°00.0'	S 21°57.2'	102°37.1'	S 18°02.9'	60°37.3'	S 22°46.0'	20°49.5'	S 20°54.1'
22	134°03.0'	S 21°57.1'	117°39.0'	S 18°03.0'	75°39.6'	S 22°46.0'	35°50.8'	S 20°53.6'
23	149°06.0'	S 21°56.9'	132°41.0'	S 18°03.2'	90°42.0'	S 22°46.0'	50°52.1'	S 20°53.2'

Thu Oct 11, 2018 UTC

UTC	Venus -4.3 v = 3.1' d = 0.1'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.1 v = 1.3' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	164°09.0'	S 21°56.8'	147°42.9'	S 18°03.3'	105°44.3'	S 22°46.0'	65°53.5'	S 20°52.7'
1	179°12.0'	S 21°56.7'	162°44.9'	S 18°03.4'	120°46.6'	S 22°46.0'	80°54.8'	S 20°52.3'
2	194°15.0'	S 21°56.6'	177°46.9'	S 18°03.5'	135°48.9'	S 22°46.0'	95°56.1'	S 20°51.9'
3	209°18.0'	S 21°56.5'	192°48.8'	S 18°03.7'	150°51.2'	S 22°46.0'	110°57.4'	S 20°51.4'
4	224°21.0'	S 21°56.3'	207°50.8'	S 18°03.8'	165°53.5'	S 22°46.0'	125°58.7'	S 20°51.0'
5	239°24.1'	S 21°56.2'	222°52.7'	S 18°03.9'	180°55.9'	S 22°46.0'	141°00.0'	S 20°50.5'
6	254°27.1'	S 21°56.1'	237°54.7'	S 18°04.0'	195°58.2'	S 22°46.0'	156°01.3'	S 20°50.1'
7	269°30.1'	S 21°55.9'	252°56.7'	S 18°04.2'	211°00.5'	S 22°46.1'	171°02.6'	S 20°49.6'
8	284°33.2'	S 21°55.8'	267°58.6'	S 18°04.3'	226°02.8'	S 22°46.1'	186°03.9'	S 20°49.2'
9	299°36.2'	S 21°55.7'	283°00.6'	S 18°04.4'	241°05.1'	S 22°46.1'	201°05.2'	S 20°48.7'
10	314°39.2'	S 21°55.5'	298°02.5'	S 18°04.6'	256°07.4'	S 22°46.1'	216°06.5'	S 20°48.3'
11	329°42.3'	S 21°55.4'	313°04.5'	S 18°04.7'	271°09.7'	S 22°46.1'	231°07.8'	S 20°47.8'
12	344°45.3'	S 21°55.2'	328°06.5'	S 18°04.8'	286°12.1'	S 22°46.1'	246°09.2'	S 20°47.4'
13	359°48.4'	S 21°55.1'	343°08.4'	S 18°04.9'	301°14.4'	S 22°46.1'	261°10.5'	S 20°46.9'
14	14°51.4'	S 21°54.9'	358°10.4'	S 18°05.1'	316°16.7'	S 22°46.1'	276°11.8'	S 20°46.5'
15	29°54.5'	S 21°54.8'	13°12.3'	S 18°05.2'	331°19.0'	S 22°46.1'	291°13.1'	S 20°46.0'
16	44°57.5'	S 21°54.6'	28°14.3'	S 18°05.3'	346°21.3'	S 22°46.1'	306°14.4'	S 20°45.6'
17	60°00.6'	S 21°54.5'	43°16.3'	S 18°05.4'	1°23.6'	S 22°46.1'	321°15.7'	S 20°45.1'
18	75°03.7'	S 21°54.3'	58°18.2'	S 18°05.6'	16°25.9'	S 22°46.1'	336°17.0'	S 20°44.7'
19	90°06.8'	S 21°54.2'	73°20.2'	S 18°05.7'	31°28.3'	S 22°46.1'	351°18.3'	S 20°44.2'
20	105°09.8'	S 21°54.0'	88°22.1'	S 18°05.8'	46°30.6'	S 22°46.1'	6°19.6'	S 20°43.8'
21	120°12.9'	S 21°53.8'	103°24.1'	S 18°06.0'	61°32.9'	S 22°46.1'	21°20.9'	S 20°43.3'
22	135°16.0'	S 21°53.7'	118°26.0'	S 18°06.1'	76°35.2'	S 22°46.1'	36°22.2'	S 20°42.8'
23	150°19.1'	S 21°53.5'	133°28.0'	S 18°06.2'	91°37.5'	S 22°46.1'	51°23.5'	S 20°42.4'

Fri Oct 12, 2018 UTC

UTC	Venus -4.3 v = 3.1' d = 0.2'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.0 v = 1.3' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	165°22.2'	S 21°53.3'	148°30.0'	S 18°06.3'	106°39.8'	S 22°46.1'	66°24.8'	S 20°41.9'
1	180°25.3'	S 21°53.1'	163°31.9'	S 18°06.5'	121°42.1'	S 22°46.1'	81°26.1'	S 20°41.5'
2	195°28.4'	S 21°52.9'	178°33.9'	S 18°06.6'	136°44.5'	S 22°46.1'	96°27.4'	S 20°41.0'
3	210°31.5'	S 21°52.8'	193°35.8'	S 18°06.7'	151°46.8'	S 22°46.1'	111°28.7'	S 20°40.6'
4	225°34.6'	S 21°52.6'	208°37.8'	S 18°06.8'	166°49.1'	S 22°46.1'	126°29.9'	S 20°40.1'
5	240°37.7'	S 21°52.4'	223°39.7'	S 18°07.0'	181°51.4'	S 22°46.1'	141°31.2'	S 20°39.7'
6	255°40.8'	S 21°52.2'	238°41.7'	S 18°07.1'	196°53.7'	S 22°46.1'	156°32.5'	S 20°39.2'
7	270°43.9'	S 21°52.0'	253°43.7'	S 18°07.2'	211°56.0'	S 22°46.1'	171°33.8'	S 20°38.8'
8	285°47.1'	S 21°51.8'	268°45.6'	S 18°07.4'	226°58.3'	S 22°46.1'	186°35.1'	S 20°38.3'
9	300°50.2'	S 21°51.6'	283°47.6'	S 18°07.5'	242°00.6'	S 22°46.1'	201°36.4'	S 20°37.9'
10	315°53.3'	S 21°51.4'	298°49.5'	S 18°07.6'	257°02.9'	S 22°46.1'	216°37.7'	S 20°37.4'
11	330°56.5'	S 21°51.2'	313°51.5'	S 18°07.7'	272°05.3'	S 22°46.1'	231°39.0'	S 20°36.9'
12	345°59.6'	S 21°51.0'	328°53.4'	S 18°07.9'	287°07.6'	S 22°46.1'	246°40.3'	S 20°36.5'
13	1°02.7'	S 21°50.8'	343°55.4'	S 18°08.0'	302°09.9'	S 22°46.1'	261°41.6'	S 20°36.0'
14	16°05.9'	S 21°50.6'	358°57.3'	S 18°08.1'	317°12.2'	S 22°46.1'	276°42.9'	S 20°35.6'
15	31°09.0'	S 21°50.4'	13°59.3'	S 18°08.3'	332°14.5'	S 22°46.1'	291°44.2'	S 20°35.1'
16	46°12.2'	S 21°50.2'	29°01.3'	S 18°08.4'	347°16.8'	S 22°46.1'	306°45.4'	S 20°34.7'
17	61°15.3'	S 21°50.0'	44°03.2'	S 18°08.5'	2°19.1'	S 22°46.1'	321°46.7'	S 20°34.2'
18	76°18.5'	S 21°49.8'	59°05.2'	S 18°08.6'	17°21.4'	S 22°46.1'	336°48.0'	S 20°33.7'
19	91°21.7'	S 21°49.5'	74°07.1'	S 18°08.8'	32°23.7'	S 22°46.1'	351°49.3'	S 20°33.3'
20	106°24.8'	S 21°49.3'	89°09.1'	S 18°08.9'	47°26.1'	S 22°46.1'	6°50.6'	S 20°32.8'
21	121°28.0'	S 21°49.1'	104°11.0'	S 18°09.0'	62°28.4'	S 22°46.1'	21°51.9'	S 20°32.4'
22	136°31.2'	S 21°48.9'	119°13.0'	S 18°09.1'	77°30.7'	S 22°46.1'	36°53.2'	S 20°31.9'
23	151°34.3'	S 21°48.6'	134°14.9'	S 18°09.3'	92°33.0'	S 22°46.1'	51°54.5'	S 20°31.5'

Sat Oct 13, 2018 UTC

UTC	Venus -4.2 v = 3.2' d = 0.3'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.0 v = 1.3' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	166°37.5'	S 21°48.4'	149°16.9'	S 18°09.4'	107°35.3'	S 22°46.1'	66°55.7'	S 20°31.0'
1	181°40.7'	S 21°48.2'	164°18.8'	S 18°09.5'	122°37.6'	S 22°46.1'	81°57.0'	S 20°30.5'
2	196°43.9'	S 21°47.9'	179°20.8'	S 18°09.7'	137°39.9'	S 22°46.1'	96°58.3'	S 20°30.1'
3	211°47.1'	S 21°47.7'	194°22.8'	S 18°09.8'	152°42.2'	S 22°46.1'	111°59.6'	S 20°29.6'
4	226°50.3'	S 21°47.4'	209°24.7'	S 18°09.9'	167°44.5'	S 22°46.1'	127°00.9'	S 20°29.2'
5	241°53.5'	S 21°47.2'	224°26.7'	S 18°10.0'	182°46.8'	S 22°46.1'	142°02.1'	S 20°28.7'
6	256°56.7'	S 21°46.9'	239°28.6'	S 18°10.2'	197°49.1'	S 22°46.1'	157°03.4'	S 20°28.2'
7	271°59.9'	S 21°46.7'	254°30.6'	S 18°10.3'	212°51.4'	S 22°46.1'	172°04.7'	S 20°27.8'
8	287°03.1'	S 21°46.4'	269°32.5'	S 18°10.4'	227°53.8'	S 22°46.1'	187°06.0'	S 20°27.3'
9	302°06.3'	S 21°46.2'	284°34.5'	S 18°10.5'	242°56.1'	S 22°46.1'	202°07.3'	S 20°26.9'
10	317°09.5'	S 21°45.9'	299°36.4'	S 18°10.7'	257°58.4'	S 22°46.1'	217°08.5'	S 20°26.4'
11	332°12.8'	S 21°45.7'	314°38.4'	S 18°10.8'	273°00.7'	S 22°46.1'	232°09.8'	S 20°25.9'
12	347°16.0'	S 21°45.4'	329°40.3'	S 18°10.9'	288°03.0'	S 22°46.1'	247°11.1'	S 20°25.5'
13	2°19.2'	S 21°45.1'	344°42.3'	S 18°11.1'	303°05.3'	S 22°46.1'	262°12.4'	S 20°25.0'
14	17°22.5'	S 21°44.9'	359°44.2'	S 18°11.2'	318°07.6'	S 22°46.1'	277°13.7'	S 20°24.5'
15	32°25.7'	S 21°44.6'	14°46.2'	S 18°11.3'	333°09.9'	S 22°46.1'	292°14.9'	S 20°24.1'
16	47°28.9'	S 21°44.3'	29°48.1'	S 18°11.4'	348°12.2'	S 22°46.1'	307°16.2'	S 20°23.6'
17	62°32.2'	S 21°44.1'	44°50.1'	S 18°11.6'	3°14.5'	S 22°46.1'	322°17.5'	S 20°23.2'
18	77°35.4'	S 21°43.8'	59°52.0'	S 18°11.7'	18°16.8'	S 22°46.1'	337°18.8'	S 20°22.7'
19	92°38.7'	S 21°43.5'	74°54.0'	S 18°11.8'	33°19.1'	S 22°46.2'	352°20.0'	S 20°22.2'
20	107°41.9'	S 21°43.2'	89°55.9'	S 18°11.9'	48°21.4'	S 22°46.2'	7°21.3'	S 20°21.8'
21	122°45.2'	S 21°42.9'	104°57.9'	S 18°12.1'	63°23.7'	S 22°46.2'	22°22.6'	S 20°21.3'
22	137°48.4'	S 21°42.7'	119°59.9'	S 18°12.2'	78°26.0'	S 22°46.2'	37°23.8'	S 20°20.8'
23	152°51.7'	S 21°42.4'	135°01.8'	S 18°12.3'	93°28.4'	S 22°46.2'	52°25.1'	S 20°20.4'

Sun Oct 14, 2018 UTC

UTC	Venus -4.2 v = 3.3' d = 0.3'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -1.0 v = 1.3' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	167°55.0'	S 21°42.1'	150°03.8'	S 18°12.5'	108°30.7'	S 22°46.2'	67°26.4'	S 20°19.9'
1	182°58.2'	S 21°41.8'	165°05.7'	S 18°12.6'	123°33.0'	S 22°46.2'	82°27.7'	S 20°19.4'
2	198°01.5'	S 21°41.5'	180°07.7'	S 18°12.7'	138°35.3'	S 22°46.2'	97°28.9'	S 20°19.0'
3	213°04.8'	S 21°41.2'	195°09.6'	S 18°12.8'	153°37.6'	S 22°46.2'	112°30.2'	S 20°18.5'
4	228°08.1'	S 21°40.9'	210°11.6'	S 18°13.0'	168°39.9'	S 22°46.2'	127°31.5'	S 20°18.0'
5	243°11.4'	S 21°40.6'	225°13.5'	S 18°13.1'	183°42.2'	S 22°46.2'	142°32.7'	S 20°17.6'
6	258°14.6'	S 21°40.3'	240°15.5'	S 18°13.2'	198°44.5'	S 22°46.2'	157°34.0'	S 20°17.1'
7	273°17.9'	S 21°40.0'	255°17.4'	S 18°13.3'	213°46.8'	S 22°46.2'	172°35.3'	S 20°16.6'
8	288°21.2'	S 21°39.6'	270°19.4'	S 18°13.5'	228°49.1'	S 22°46.2'	187°36.5'	S 20°16.2'
9	303°24.5'	S 21°39.3'	285°21.3'	S 18°13.6'	243°51.4'	S 22°46.2'	202°37.8'	S 20°15.7'
10	318°27.8'	S 21°39.0'	300°23.3'	S 18°13.7'	258°53.7'	S 22°46.2'	217°39.1'	S 20°15.2'
11	333°31.1'	S 21°38.7'	315°25.2'	S 18°13.9'	273°56.0'	S 22°46.2'	232°40.3'	S 20°14.8'
12	348°34.5'	S 21°38.4'	330°27.2'	S 18°14.0'	288°58.3'	S 22°46.2'	247°41.6'	S 20°14.3'
13	3°37.8'	S 21°38.1'	345°29.1'	S 18°14.1'	304°00.6'	S 22°46.2'	262°42.9'	S 20°13.8'
14	18°41.1'	S 21°37.7'	0°31.1'	S 18°14.2'	319°02.9'	S 22°46.2'	277°44.1'	S 20°13.4'
15	33°44.4'	S 21°37.4'	15°33.0'	S 18°14.4'	334°05.2'	S 22°46.2'	292°45.4'	S 20°12.9'
16	48°47.7'	S 21°37.1'	30°35.0'	S 18°14.5'	349°07.5'	S 22°46.2'	307°46.6'	S 20°12.4'
17	63°51.0'	S 21°36.7'	45°36.9'	S 18°14.6'	4°09.8'	S 22°46.2'	322°47.9'	S 20°12.0'
18	78°54.4'	S 21°36.4'	60°38.9'	S 18°14.8'	19°12.1'	S 22°46.2'	337°49.2'	S 20°11.5'
19	93°57.7'	S 21°36.1'	75°40.8'	S 18°14.9'	34°14.4'	S 22°46.2'	352°50.4'	S 20°11.0'
20	109°01.0'	S 21°35.7'	90°42.8'	S 18°15.0'	49°16.7'	S 22°46.2'	7°51.7'	S 20°10.6'
21	124°04.4'	S 21°35.4'	105°44.7'	S 18°15.1'	64°19.0'	S 22°46.2'	22°52.9'	S 20°10.1'
22	139°07.7'	S 21°35.0'	120°46.7'	S 18°15.3'	79°21.3'	S 22°46.2'	37°54.2'	S 20°09.6'
23	154°11.1'	S 21°34.7'	135°48.6'	S 18°15.4'	94°23.6'	S 22°46.2'	52°55.5'	S 20°09.1'

Mon Oct 15, 2018 UTC

UTC	Venus -4.2		Jupiter -1.6		Saturn +0.5		Mars -1.0	
	v = 3.4' d = 0.4'		v = 1.9' d = 0.1'		v = 2.3' d = 0.0'		v = 1.3' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	169°14.4'	S 21°34.3'	150°50.6'	S 18°15.5'	109°25.9'	S 22°46.2'	67°56.7'	S 20°08.7'
1	184°17.8'	S 21°34.0'	165°52.5'	S 18°15.6'	124°28.2'	S 22°46.2'	82°58.0'	S 20°08.2'
2	199°21.1'	S 21°33.6'	180°54.4'	S 18°15.8'	139°30.5'	S 22°46.2'	97°59.2'	S 20°07.7'
3	214°24.5'	S 21°33.2'	195°56.4'	S 18°15.9'	154°32.8'	S 22°46.2'	113°00.5'	S 20°07.3'
4	229°27.9'	S 21°32.9'	210°58.3'	S 18°16.0'	169°35.1'	S 22°46.2'	128°01.7'	S 20°06.8'
5	244°31.2'	S 21°32.5'	226°00.3'	S 18°16.2'	184°37.4'	S 22°46.2'	143°03.0'	S 20°06.3'
6	259°34.6'	S 21°32.2'	241°02.2'	S 18°16.3'	199°39.7'	S 22°46.2'	158°04.3'	S 20°05.8'
7	274°38.0'	S 21°31.8'	256°04.2'	S 18°16.4'	214°42.0'	S 22°46.2'	173°05.5'	S 20°05.4'
8	289°41.3'	S 21°31.4'	271°06.1'	S 18°16.5'	229°44.3'	S 22°46.2'	188°06.8'	S 20°04.9'
9	304°44.7'	S 21°31.0'	286°08.1'	S 18°16.7'	244°46.6'	S 22°46.2'	203°08.0'	S 20°04.4'
10	319°48.1'	S 21°30.7'	301°10.0'	S 18°16.8'	259°48.9'	S 22°46.2'	218°09.3'	S 20°03.9'
11	334°51.5'	S 21°30.3'	316°12.0'	S 18°16.9'	274°51.2'	S 22°46.2'	233°10.5'	S 20°03.5'
12	349°54.9'	S 21°29.9'	331°13.9'	S 18°17.0'	289°53.5'	S 22°46.2'	248°11.8'	S 20°03.0'
13	4°58.3'	S 21°29.5'	346°15.9'	S 18°17.2'	304°55.8'	S 22°46.2'	263°13.0'	S 20°02.5'
14	20°01.7'	S 21°29.1'	1°17.8'	S 18°17.3'	319°58.1'	S 22°46.2'	278°14.3'	S 20°02.1'
15	35°05.1'	S 21°28.7'	16°19.8'	S 18°17.4'	335°00.4'	S 22°46.2'	293°15.5'	S 20°01.6'
16	50°08.5'	S 21°28.3'	31°21.7'	S 18°17.6'	350°02.7'	S 22°46.2'	308°16.8'	S 20°01.1'
17	65°11.9'	S 21°28.0'	46°23.7'	S 18°17.7'	5°05.0'	S 22°46.2'	323°18.0'	S 20°00.6'
18	80°15.3'	S 21°27.6'	61°25.6'	S 18°17.8'	20°07.3'	S 22°46.2'	338°19.3'	S 20°00.2'
19	95°18.7'	S 21°27.2'	76°27.6'	S 18°17.9'	35°09.6'	S 22°46.2'	353°20.5'	S 19°59.7'
20	110°22.1'	S 21°26.8'	91°29.5'	S 18°18.1'	50°11.9'	S 22°46.2'	8°21.8'	S 19°59.2'
21	125°25.5'	S 21°26.4'	106°31.4'	S 18°18.2'	65°14.2'	S 22°46.2'	23°23.0'	S 19°58.7'
22	140°29.0'	S 21°25.9'	121°33.4'	S 18°18.3'	80°16.5'	S 22°46.2'	38°24.3'	S 19°58.2'
23	155°32.4'	S 21°25.5'	136°35.3'	S 18°18.4'	95°18.8'	S 22°46.2'	53°25.5'	S 19°57.8'

Tue Oct 16, 2018 UTC

UTC	Venus -4.1		Jupiter -1.6		Saturn +0.5		Mars -0.9	
	v = 3.5' d = 0.4'		v = 1.9' d = 0.1'		v = 2.3' d = 0.0'		v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	170°35.8'	S 21°25.1'	151°37.3'	S 18°18.6'	110°21.1'	S 22°46.2'	68°26.8'	S 19°57.3'
1	185°39.2'	S 21°24.7'	166°39.2'	S 18°18.7'	125°23.4'	S 22°46.2'	83°28.0'	S 19°56.8'
2	200°42.7'	S 21°24.3'	181°41.2'	S 18°18.8'	140°25.7'	S 22°46.2'	98°29.2'	S 19°56.3'
3	215°46.1'	S 21°23.9'	196°43.1'	S 18°19.0'	155°28.0'	S 22°46.2'	113°30.5'	S 19°55.9'
4	230°49.6'	S 21°23.4'	211°45.1'	S 18°19.1'	170°30.3'	S 22°46.2'	128°31.7'	S 19°55.4'
5	245°53.0'	S 21°23.0'	226°47.0'	S 18°19.2'	185°32.6'	S 22°46.2'	143°33.0'	S 19°54.9'
6	260°56.4'	S 21°22.6'	241°49.0'	S 18°19.3'	200°34.9'	S 22°46.2'	158°34.2'	S 19°54.4'
7	275°59.9'	S 21°22.2'	256°50.9'	S 18°19.5'	215°37.2'	S 22°46.2'	173°35.5'	S 19°54.0'
8	291°03.3'	S 21°21.7'	271°52.8'	S 18°19.6'	230°39.5'	S 22°46.2'	188°36.7'	S 19°53.5'
9	306°06.8'	S 21°21.3'	286°54.8'	S 18°19.7'	245°41.8'	S 22°46.2'	203°37.9'	S 19°53.0'
10	321°10.3'	S 21°20.9'	301°56.7'	S 18°19.8'	260°44.1'	S 22°46.2'	218°39.2'	S 19°52.5'
11	336°13.7'	S 21°20.4'	316°58.7'	S 18°20.0'	275°46.4'	S 22°46.2'	233°40.4'	S 19°52.0'
12	351°17.2'	S 21°20.0'	332°00.6'	S 18°20.1'	290°48.7'	S 22°46.2'	248°41.7'	S 19°51.6'
13	6°20.7'	S 21°19.5'	347°02.6'	S 18°20.2'	305°51.0'	S 22°46.2'	263°42.9'	S 19°51.1'
14	21°24.1'	S 21°19.1'	2°04.5'	S 18°20.4'	320°53.3'	S 22°46.2'	278°44.1'	S 19°50.6'
15	36°27.6'	S 21°18.6'	17°06.5'	S 18°20.5'	335°55.6'	S 22°46.2'	293°45.4'	S 19°50.1'
16	51°31.1'	S 21°18.2'	32°08.4'	S 18°20.6'	350°57.9'	S 22°46.2'	308°46.6'	S 19°49.6'
17	66°34.6'	S 21°17.7'	47°10.3'	S 18°20.7'	6°00.2'	S 22°46.2'	323°47.8'	S 19°49.2'
18	81°38.0'	S 21°17.3'	62°12.3'	S 18°20.9'	21°02.5'	S 22°46.2'	338°49.1'	S 19°48.7'
19	96°41.5'	S 21°16.8'	77°14.2'	S 18°21.0'	36°04.7'	S 22°46.2'	353°50.3'	S 19°48.2'
20	111°45.0'	S 21°16.4'	92°16.2'	S 18°21.1'	51°07.0'	S 22°46.2'	8°51.6'	S 19°47.7'
21	126°48.5'	S 21°15.9'	107°18.1'	S 18°21.2'	66°09.3'	S 22°46.2'	23°52.8'	S 19°47.2'
22	141°52.0'	S 21°15.4'	122°20.1'	S 18°21.4'	81°11.6'	S 22°46.2'	38°54.0'	S 19°46.7'
23	156°55.5'	S 21°14.9'	137°22.0'	S 18°21.5'	96°13.9'	S 22°46.2'	53°55.3'	S 19°46.3'

Wed Oct 17, 2018 UTC

UTC	Venus -4.1 v = 3.5' d = 0.5'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -0.9 v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	171°59.0'	S 21°14.5'	152°23.9'	S 18°21.6'	111°16.2'	S 22°46.2'	68°56.5'	S 19°45.8'
1	187°02.5'	S 21°14.0'	167°25.9'	S 18°21.8'	126°18.5'	S 22°46.2'	83°57.7'	S 19°45.3'
2	202°06.0'	S 21°13.5'	182°27.8'	S 18°21.9'	141°20.8'	S 22°46.2'	98°59.0'	S 19°44.8'
3	217°09.5'	S 21°13.0'	197°29.8'	S 18°22.0'	156°23.1'	S 22°46.2'	114°00.2'	S 19°44.3'
4	232°13.0'	S 21°12.6'	212°31.7'	S 18°22.1'	171°25.4'	S 22°46.2'	129°01.4'	S 19°43.9'
5	247°16.5'	S 21°12.1'	227°33.7'	S 18°22.3'	186°27.7'	S 22°46.2'	144°02.7'	S 19°43.4'
6	262°20.1'	S 21°11.6'	242°35.6'	S 18°22.4'	201°30.0'	S 22°46.2'	159°03.9'	S 19°42.9'
7	277°23.6'	S 21°11.1'	257°37.5'	S 18°22.5'	216°32.3'	S 22°46.2'	174°05.1'	S 19°42.4'
8	292°27.1'	S 21°10.6'	272°39.5'	S 18°22.6'	231°34.6'	S 22°46.2'	189°06.3'	S 19°41.9'
9	307°30.6'	S 21°10.1'	287°41.4'	S 18°22.8'	246°36.9'	S 22°46.2'	204°07.6'	S 19°41.4'
10	322°34.2'	S 21°09.6'	302°43.4'	S 18°22.9'	261°39.1'	S 22°46.2'	219°08.8'	S 19°40.9'
11	337°37.7'	S 21°09.1'	317°45.3'	S 18°23.0'	276°41.4'	S 22°46.2'	234°10.0'	S 19°40.5'
12	352°41.2'	S 21°08.6'	332°47.3'	S 18°23.2'	291°43.7'	S 22°46.2'	249°11.3'	S 19°40.0'
13	7°44.8'	S 21°08.1'	347°49.2'	S 18°23.3'	306°46.0'	S 22°46.2'	264°12.5'	S 19°39.5'
14	22°48.3'	S 21°07.6'	2°51.1'	S 18°23.4'	321°48.3'	S 22°46.2'	279°13.7'	S 19°39.0'
15	37°51.8'	S 21°07.1'	17°53.1'	S 18°23.5'	336°50.6'	S 22°46.3'	294°14.9'	S 19°38.5'
16	52°55.4'	S 21°06.6'	32°55.0'	S 18°23.7'	351°52.9'	S 22°46.3'	309°16.2'	S 19°38.0'
17	67°58.9'	S 21°06.1'	47°57.0'	S 18°23.8'	6°55.2'	S 22°46.3'	324°17.4'	S 19°37.5'
18	83°02.5'	S 21°05.5'	62°58.9'	S 18°23.9'	21°57.5'	S 22°46.3'	339°18.6'	S 19°37.1'
19	98°06.0'	S 21°05.0'	78°00.8'	S 18°24.0'	36°59.8'	S 22°46.3'	354°19.8'	S 19°36.6'
20	113°09.6'	S 21°04.5'	93°02.8'	S 18°24.2'	52°02.1'	S 22°46.3'	9°21.1'	S 19°36.1'
21	128°13.2'	S 21°04.0'	108°04.7'	S 18°24.3'	67°04.4'	S 22°46.3'	24°22.3'	S 19°35.6'
22	143°16.7'	S 21°03.4'	123°06.7'	S 18°24.4'	82°06.6'	S 22°46.3'	39°23.5'	S 19°35.1'
23	158°20.3'	S 21°02.9'	138°08.6'	S 18°24.6'	97°08.9'	S 22°46.3'	54°24.7'	S 19°34.6'

Thu Oct 18, 2018 UTC

UTC	Venus -4.0 v = 3.6' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -0.9 v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	173°23.9'	S 21°02.4'	153°10.6'	S 18°24.7'	112°11.2'	S 22°46.3'	69°26.0'	S 19°34.1'
1	188°27.4'	S 21°01.9'	168°12.5'	S 18°24.8'	127°13.5'	S 22°46.3'	84°27.2'	S 19°33.6'
2	203°31.0'	S 21°01.3'	183°14.4'	S 18°24.9'	142°15.8'	S 22°46.3'	99°28.4'	S 19°33.2'
3	218°34.6'	S 21°00.8'	198°16.4'	S 18°25.1'	157°18.1'	S 22°46.3'	114°29.6'	S 19°32.7'
4	233°38.2'	S 21°00.2'	213°18.3'	S 18°25.2'	172°20.4'	S 22°46.3'	129°30.8'	S 19°32.2'
5	248°41.7'	S 20°59.7'	228°20.3'	S 18°25.3'	187°22.7'	S 22°46.3'	144°32.1'	S 19°31.7'
6	263°45.3'	S 20°59.1'	243°22.2'	S 18°25.4'	202°25.0'	S 22°46.3'	159°33.3'	S 19°31.2'
7	278°48.9'	S 20°58.6'	258°24.1'	S 18°25.6'	217°27.3'	S 22°46.3'	174°34.5'	S 19°30.7'
8	293°52.5'	S 20°58.0'	273°26.1'	S 18°25.7'	232°29.5'	S 22°46.3'	189°35.7'	S 19°30.2'
9	308°56.1'	S 20°57.5'	288°28.0'	S 18°25.8'	247°31.8'	S 22°46.3'	204°36.9'	S 19°29.7'
10	323°59.7'	S 20°56.9'	303°30.0'	S 18°26.0'	262°34.1'	S 22°46.3'	219°38.2'	S 19°29.2'
11	339°03.3'	S 20°56.4'	318°31.9'	S 18°26.1'	277°36.4'	S 22°46.3'	234°39.4'	S 19°28.8'
12	354°06.9'	S 20°55.8'	333°33.8'	S 18°26.2'	292°38.7'	S 22°46.3'	249°40.6'	S 19°28.3'
13	9°10.5'	S 20°55.2'	348°35.8'	S 18°26.3'	307°41.0'	S 22°46.3'	264°41.8'	S 19°27.8'
14	24°14.1'	S 20°54.7'	3°37.7'	S 18°26.5'	322°43.3'	S 22°46.3'	279°43.0'	S 19°27.3'
15	39°17.7'	S 20°54.1'	18°39.6'	S 18°26.6'	337°45.6'	S 22°46.3'	294°44.2'	S 19°26.8'
16	54°21.3'	S 20°53.5'	33°41.6'	S 18°26.7'	352°47.9'	S 22°46.3'	309°45.4'	S 19°26.3'
17	69°24.9'	S 20°53.0'	48°43.5'	S 18°26.8'	7°50.1'	S 22°46.3'	324°46.7'	S 19°25.8'
18	84°28.5'	S 20°52.4'	63°45.5'	S 18°27.0'	22°52.4'	S 22°46.3'	339°47.9'	S 19°25.3'
19	99°32.1'	S 20°51.8'	78°47.4'	S 18°27.1'	37°54.7'	S 22°46.3'	354°49.1'	S 19°24.8'
20	114°35.7'	S 20°51.2'	93°49.3'	S 18°27.2'	52°57.0'	S 22°46.3'	9°50.3'	S 19°24.3'
21	129°39.4'	S 20°50.6'	108°51.3'	S 18°27.4'	67°59.3'	S 22°46.3'	24°51.5'	S 19°23.8'
22	144°43.0'	S 20°50.1'	123°53.2'	S 18°27.5'	83°01.6'	S 22°46.3'	39°52.7'	S 19°23.3'
23	159°46.6'	S 20°49.5'	138°55.2'	S 18°27.6'	98°03.9'	S 22°46.3'	54°53.9'	S 19°22.8'

Fri Oct 19, 2018 UTC

UTC	Venus -4.0 v = 3.7' d = 0.6'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -0.9 v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	174°50.2'	S 20°48.9'	153°57.1'	S 18°27.7'	113°06.2'	S 22°46.3'	69°55.2'	S 19°22.3'
1	189°53.9'	S 20°48.3'	168°59.0'	S 18°27.9'	128°08.4'	S 22°46.3'	84°56.4'	S 19°21.9'
2	204°57.5'	S 20°47.7'	184°01.0'	S 18°28.0'	143°10.7'	S 22°46.3'	99°57.6'	S 19°21.4'
3	220°01.1'	S 20°47.1'	199°02.9'	S 18°28.1'	158°13.0'	S 22°46.3'	114°58.8'	S 19°20.9'
4	235°04.8'	S 20°46.5'	214°04.8'	S 18°28.2'	173°15.3'	S 22°46.3'	129°60.0'	S 19°20.4'
5	250°08.4'	S 20°45.9'	229°06.8'	S 18°28.4'	188°17.6'	S 22°46.3'	145°01.2'	S 19°19.9'
6	265°12.0'	S 20°45.3'	244°08.7'	S 18°28.5'	203°19.9'	S 22°46.3'	160°02.4'	S 19°19.4'
7	280°15.7'	S 20°44.7'	259°10.7'	S 18°28.6'	218°22.2'	S 22°46.3'	175°03.6'	S 19°18.9'
8	295°19.3'	S 20°44.1'	274°12.6'	S 18°28.7'	233°24.4'	S 22°46.3'	190°04.8'	S 19°18.4'
9	310°23.0'	S 20°43.4'	289°14.5'	S 18°28.9'	248°26.7'	S 22°46.3'	205°06.0'	S 19°17.9'
10	325°26.6'	S 20°42.8'	304°16.5'	S 18°29.0'	263°29.0'	S 22°46.3'	220°07.2'	S 19°17.4'
11	340°30.3'	S 20°42.2'	319°18.4'	S 18°29.1'	278°31.3'	S 22°46.3'	235°08.4'	S 19°16.9'
12	355°33.9'	S 20°41.6'	334°20.3'	S 18°29.3'	293°33.6'	S 22°46.3'	250°09.7'	S 19°16.4'
13	10°37.6'	S 20°41.0'	349°22.3'	S 18°29.4'	308°35.9'	S 22°46.3'	265°10.9'	S 19°15.9'
14	25°41.3'	S 20°40.3'	4°24.2'	S 18°29.5'	323°38.1'	S 22°46.3'	280°12.1'	S 19°15.4'
15	40°44.9'	S 20°39.7'	19°26.1'	S 18°29.6'	338°40.4'	S 22°46.3'	295°13.3'	S 19°14.9'
16	55°48.6'	S 20°39.1'	34°28.1'	S 18°29.8'	353°42.7'	S 22°46.3'	310°14.5'	S 19°14.4'
17	70°52.2'	S 20°38.5'	49°30.0'	S 18°29.9'	8°45.0'	S 22°46.3'	325°15.7'	S 19°13.9'
18	85°55.9'	S 20°37.8'	64°32.0'	S 18°30.0'	23°47.3'	S 22°46.3'	340°16.9'	S 19°13.4'
19	100°59.6'	S 20°37.2'	79°33.9'	S 18°30.1'	38°49.6'	S 22°46.3'	355°18.1'	S 19°12.9'
20	116°03.3'	S 20°36.5'	94°35.8'	S 18°30.3'	53°51.9'	S 22°46.3'	10°19.3'	S 19°12.4'
21	131°06.9'	S 20°35.9'	109°37.8'	S 18°30.4'	68°54.1'	S 22°46.3'	25°20.5'	S 19°11.9'
22	146°10.6'	S 20°35.3'	124°39.7'	S 18°30.5'	83°56.4'	S 22°46.3'	40°21.7'	S 19°11.4'
23	161°14.3'	S 20°34.6'	139°41.6'	S 18°30.7'	98°58.7'	S 22°46.3'	55°22.9'	S 19°10.9'

Sat Oct 20, 2018 UTC

UTC	Venus -3.9 v = 3.7' d = 0.7'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -0.8 v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	176°18.0'	S 20°34.0'	154°43.6'	S 18°30.8'	114°01.0'	S 22°46.3'	70°24.1'	S 19°10.4'
1	191°21.6'	S 20°33.3'	169°45.5'	S 18°30.9'	129°03.3'	S 22°46.3'	85°25.3'	S 19°09.9'
2	206°25.3'	S 20°32.7'	184°47.4'	S 18°31.0'	144°05.6'	S 22°46.3'	100°26.5'	S 19°09.4'
3	221°29.0'	S 20°32.0'	199°49.4'	S 18°31.2'	159°07.8'	S 22°46.3'	115°27.7'	S 19°08.9'
4	236°32.7'	S 20°31.3'	214°51.3'	S 18°31.3'	174°10.1'	S 22°46.3'	130°28.9'	S 19°08.4'
5	251°36.4'	S 20°30.7'	229°53.2'	S 18°31.4'	189°12.4'	S 22°46.3'	145°30.1'	S 19°07.9'
6	266°40.1'	S 20°30.0'	244°55.2'	S 18°31.5'	204°14.7'	S 22°46.3'	160°31.3'	S 19°07.4'
7	281°43.8'	S 20°29.4'	259°57.1'	S 18°31.7'	219°17.0'	S 22°46.3'	175°32.5'	S 19°06.9'
8	296°47.5'	S 20°28.7'	274°59.0'	S 18°31.8'	234°19.2'	S 22°46.3'	190°33.7'	S 19°06.4'
9	311°51.2'	S 20°28.0'	290°01.0'	S 18°31.9'	249°21.5'	S 22°46.3'	205°34.9'	S 19°05.9'
10	326°54.9'	S 20°27.3'	305°02.9'	S 18°32.0'	264°23.8'	S 22°46.3'	220°36.1'	S 19°05.4'
11	341°58.6'	S 20°26.7'	320°04.9'	S 18°32.2'	279°26.1'	S 22°46.3'	235°37.3'	S 19°04.9'
12	357°02.3'	S 20°26.0'	335°06.8'	S 18°32.3'	294°28.4'	S 22°46.3'	250°38.5'	S 19°04.4'
13	12°06.0'	S 20°25.3'	350°08.7'	S 18°32.4'	309°30.7'	S 22°46.3'	265°39.7'	S 19°03.9'
14	27°09.7'	S 20°24.6'	5°10.7'	S 18°32.6'	324°32.9'	S 22°46.3'	280°40.9'	S 19°03.4'
15	42°13.4'	S 20°23.9'	20°12.6'	S 18°32.7'	339°35.2'	S 22°46.3'	295°42.1'	S 19°02.9'
16	57°17.1'	S 20°23.3'	35°14.5'	S 18°32.8'	354°37.5'	S 22°46.3'	310°43.2'	S 19°02.4'
17	72°20.8'	S 20°22.6'	50°16.5'	S 18°32.9'	9°39.8'	S 22°46.3'	325°44.4'	S 19°01.9'
18	87°24.5'	S 20°21.9'	65°18.4'	S 18°33.1'	24°42.1'	S 22°46.3'	340°45.6'	S 19°01.4'
19	102°28.2'	S 20°21.2'	80°20.3'	S 18°33.2'	39°44.3'	S 22°46.3'	355°46.8'	S 19°00.9'
20	117°32.0'	S 20°20.5'	95°22.3'	S 18°33.3'	54°46.6'	S 22°46.3'	10°48.0'	S 19°00.4'
21	132°35.7'	S 20°19.8'	110°24.2'	S 18°33.4'	69°48.9'	S 22°46.3'	25°49.2'	S 18°59.9'
22	147°39.4'	S 20°19.1'	125°26.1'	S 18°33.6'	84°51.2'	S 22°46.3'	40°50.4'	S 18°59.4'
23	162°43.1'	S 20°18.4'	140°28.1'	S 18°33.7'	99°53.5'	S 22°46.3'	55°51.6'	S 18°58.9'

Sun Oct 21, 2018 UTC

UTC	Venus -3.9 v = 3.7' d = 0.7'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -0.8 v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	177°46.9'	S 20°17.7'	155°30.0'	S 18°33.8'	114°55.7'	S 22°46.3'	70°52.8'	S 18°58.4'
1	192°50.6'	S 20°17.0'	170°31.9'	S 18°33.9'	129°58.0'	S 22°46.3'	85°54.0'	S 18°57.9'
2	207°54.3'	S 20°16.3'	185°33.9'	S 18°34.1'	145°00.3'	S 22°46.3'	100°55.2'	S 18°57.4'
3	222°58.0'	S 20°15.6'	200°35.8'	S 18°34.2'	160°02.6'	S 22°46.3'	115°56.4'	S 18°56.9'
4	238°01.8'	S 20°14.9'	215°37.7'	S 18°34.3'	175°04.9'	S 22°46.3'	130°57.5'	S 18°56.3'
5	253°05.5'	S 20°14.1'	230°39.7'	S 18°34.5'	190°07.1'	S 22°46.3'	145°58.7'	S 18°55.8'
6	268°09.2'	S 20°13.4'	245°41.6'	S 18°34.6'	205°09.4'	S 22°46.3'	160°59.9'	S 18°55.3'
7	283°13.0'	S 20°12.7'	260°43.5'	S 18°34.7'	220°11.7'	S 22°46.3'	176°01.1'	S 18°54.8'
8	298°16.7'	S 20°12.0'	275°45.4'	S 18°34.8'	235°14.0'	S 22°46.3'	191°02.3'	S 18°54.3'
9	313°20.4'	S 20°11.3'	290°47.4'	S 18°35.0'	250°16.2'	S 22°46.3'	206°03.5'	S 18°53.8'
10	328°24.2'	S 20°10.5'	305°49.3'	S 18°35.1'	265°18.5'	S 22°46.3'	221°04.7'	S 18°53.3'
11	343°27.9'	S 20°09.8'	320°51.2'	S 18°35.2'	280°20.8'	S 22°46.3'	236°05.9'	S 18°52.8'
12	358°31.7'	S 20°09.1'	335°53.2'	S 18°35.3'	295°23.1'	S 22°46.3'	251°07.0'	S 18°52.3'
13	13°35.4'	S 20°08.3'	350°55.1'	S 18°35.5'	310°25.4'	S 22°46.3'	266°08.2'	S 18°51.8'
14	28°39.2'	S 20°07.6'	5°57.0'	S 18°35.6'	325°27.6'	S 22°46.3'	281°09.4'	S 18°51.3'
15	43°42.9'	S 20°06.9'	20°59.0'	S 18°35.7'	340°29.9'	S 22°46.3'	296°10.6'	S 18°50.8'
16	58°46.7'	S 20°06.1'	36°00.9'	S 18°35.8'	355°32.2'	S 22°46.3'	311°11.8'	S 18°50.3'
17	73°50.4'	S 20°05.4'	51°02.8'	S 18°36.0'	10°34.5'	S 22°46.3'	326°13.0'	S 18°49.8'
18	88°54.2'	S 20°04.6'	66°04.8'	S 18°36.1'	25°36.7'	S 22°46.3'	341°14.1'	S 18°49.2'
19	103°57.9'	S 20°03.9'	81°06.7'	S 18°36.2'	40°39.0'	S 22°46.3'	356°15.3'	S 18°48.7'
20	119°01.7'	S 20°03.1'	96°08.6'	S 18°36.4'	55°41.3'	S 22°46.3'	11°16.5'	S 18°48.2'
21	134°05.4'	S 20°02.4'	111°10.6'	S 18°36.5'	70°43.6'	S 22°46.3'	26°17.7'	S 18°47.7'
22	149°09.2'	S 20°01.6'	126°12.5'	S 18°36.6'	85°45.9'	S 22°46.3'	41°18.9'	S 18°47.2'
23	164°12.9'	S 20°00.9'	141°14.4'	S 18°36.7'	100°48.1'	S 22°46.3'	56°20.1'	S 18°46.7'

Mon Oct 22, 2018 UTC

UTC	Venus -3.8 v = 3.8' d = 0.8'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.5 v = 2.3' d = 0.0'		Mars -0.8 v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	179°16.7'	S 20°00.1'	156°16.4'	S 18°36.9'	115°50.4'	S 22°46.3'	71°21.2'	S 18°46.2'
1	194°20.5'	S 19°59.4'	171°18.3'	S 18°37.0'	130°52.7'	S 22°46.3'	86°22.4'	S 18°45.7'
2	209°24.2'	S 19°58.6'	186°20.2'	S 18°37.1'	145°55.0'	S 22°46.3'	101°23.6'	S 18°45.2'
3	224°28.0'	S 19°57.8'	201°22.1'	S 18°37.2'	160°57.2'	S 22°46.3'	116°24.8'	S 18°44.6'
4	239°31.7'	S 19°57.1'	216°24.1'	S 18°37.4'	175°59.5'	S 22°46.3'	131°26.0'	S 18°44.1'
5	254°35.5'	S 19°56.3'	231°26.0'	S 18°37.5'	191°01.8'	S 22°46.3'	146°27.1'	S 18°43.6'
6	269°39.3'	S 19°55.5'	246°27.9'	S 18°37.6'	206°04.1'	S 22°46.3'	161°28.3'	S 18°43.1'
7	284°43.1'	S 19°54.8'	261°29.9'	S 18°37.7'	221°06.3'	S 22°46.3'	176°29.5'	S 18°42.6'
8	299°46.8'	S 19°54.0'	276°31.8'	S 18°37.9'	236°08.6'	S 22°46.3'	191°30.7'	S 18°42.1'
9	314°50.6'	S 19°53.2'	291°33.7'	S 18°38.0'	251°10.9'	S 22°46.3'	206°31.9'	S 18°41.6'
10	329°54.4'	S 19°52.4'	306°35.7'	S 18°38.1'	266°13.2'	S 22°46.3'	221°33.0'	S 18°41.1'
11	344°58.1'	S 19°51.7'	321°37.6'	S 18°38.2'	281°15.4'	S 22°46.3'	236°34.2'	S 18°40.5'
12	0°01.9'	S 19°50.9'	336°39.5'	S 18°38.4'	296°17.7'	S 22°46.3'	251°35.4'	S 18°40.0'
13	15°05.7'	S 19°50.1'	351°41.4'	S 18°38.5'	311°20.0'	S 22°46.3'	266°36.6'	S 18°39.5'
14	30°09.5'	S 19°49.3'	6°43.4'	S 18°38.6'	326°22.3'	S 22°46.3'	281°37.7'	S 18°39.0'
15	45°13.2'	S 19°48.5'	21°45.3'	S 18°38.8'	341°24.5'	S 22°46.3'	296°38.9'	S 18°38.5'
16	60°17.0'	S 19°47.7'	36°47.2'	S 18°38.9'	356°26.8'	S 22°46.3'	311°40.1'	S 18°38.0'
17	75°20.8'	S 19°46.9'	51°49.2'	S 18°39.0'	11°29.1'	S 22°46.3'	326°41.3'	S 18°37.5'
18	90°24.6'	S 19°46.1'	66°51.1'	S 18°39.1'	26°31.3'	S 22°46.3'	341°42.4'	S 18°37.0'
19	105°28.4'	S 19°45.3'	81°53.0'	S 18°39.3'	41°33.6'	S 22°46.3'	356°43.6'	S 18°36.4'
20	120°32.1'	S 19°44.5'	96°54.9'	S 18°39.4'	56°35.9'	S 22°46.3'	11°44.8'	S 18°35.9'
21	135°35.9'	S 19°43.7'	111°56.9'	S 18°39.5'	71°38.2'	S 22°46.3'	26°46.0'	S 18°35.4'
22	150°39.7'	S 19°42.9'	126°58.8'	S 18°39.6'	86°40.4'	S 22°46.3'	41°47.1'	S 18°34.9'
23	165°43.5'	S 19°42.1'	142°00.7'	S 18°39.8'	101°42.7'	S 22°46.3'	56°48.3'	S 18°34.4'

Tue Oct 23, 2018 UTC

UTC	Venus -3.7		Jupiter -1.6		Saturn +0.6		Mars -0.8	
	v = 3.8' d = 0.8'		v = 1.9' d = 0.1'		v = 2.3' d = 0.0'		v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	180°47.3'	S 19°41.3'	157°02.7'	S 18°39.9'	116°45.0'	S 22°46.3'	71°49.5'	S 18°33.9'
1	195°51.1'	S 19°40.5'	172°04.6'	S 18°40.0'	131°47.3'	S 22°46.3'	86°50.6'	S 18°33.3'
2	210°54.9'	S 19°39.7'	187°06.5'	S 18°40.1'	146°49.5'	S 22°46.3'	101°51.8'	S 18°32.8'
3	225°58.6'	S 19°38.9'	202°08.4'	S 18°40.3'	161°51.8'	S 22°46.3'	116°53.0'	S 18°32.3'
4	241°02.4'	S 19°38.1'	217°10.4'	S 18°40.4'	176°54.1'	S 22°46.3'	131°54.2'	S 18°31.8'
5	256°06.2'	S 19°37.3'	232°12.3'	S 18°40.5'	191°56.3'	S 22°46.3'	146°55.3'	S 18°31.3'
6	271°10.0'	S 19°36.5'	247°14.2'	S 18°40.6'	206°58.6'	S 22°46.3'	161°56.5'	S 18°30.8'
7	286°13.8'	S 19°35.6'	262°16.1'	S 18°40.8'	222°00.9'	S 22°46.3'	176°57.7'	S 18°30.2'
8	301°17.6'	S 19°34.8'	277°18.1'	S 18°40.9'	237°03.2'	S 22°46.3'	191°58.8'	S 18°29.7'
9	316°21.4'	S 19°34.0'	292°20.0'	S 18°41.0'	252°05.4'	S 22°46.3'	207°00.0'	S 18°29.2'
10	331°25.2'	S 19°33.2'	307°21.9'	S 18°41.2'	267°07.7'	S 22°46.3'	222°01.2'	S 18°28.7'
11	346°29.0'	S 19°32.3'	322°23.9'	S 18°41.3'	282°10.0'	S 22°46.3'	237°02.3'	S 18°28.2'
12	1°32.8'	S 19°31.5'	337°25.8'	S 18°41.4'	297°12.2'	S 22°46.3'	252°03.5'	S 18°27.6'
13	16°36.6'	S 19°30.7'	352°27.7'	S 18°41.5'	312°14.5'	S 22°46.3'	267°04.7'	S 18°27.1'
14	31°40.4'	S 19°29.8'	7°29.6'	S 18°41.7'	327°16.8'	S 22°46.3'	282°05.8'	S 18°26.6'
15	46°44.2'	S 19°29.0'	22°31.6'	S 18°41.8'	342°19.1'	S 22°46.3'	297°07.0'	S 18°26.1'
16	61°48.0'	S 19°28.2'	37°33.5'	S 18°41.9'	357°21.3'	S 22°46.3'	312°08.2'	S 18°25.6'
17	76°51.8'	S 19°27.3'	52°35.4'	S 18°42.0'	12°23.6'	S 22°46.3'	327°09.3'	S 18°25.1'
18	91°55.6'	S 19°26.5'	67°37.3'	S 18°42.2'	27°25.9'	S 22°46.3'	342°10.5'	S 18°24.5'
19	106°59.4'	S 19°25.6'	82°39.3'	S 18°42.3'	42°28.1'	S 22°46.3'	357°11.7'	S 18°24.0'
20	122°03.2'	S 19°24.8'	97°41.2'	S 18°42.4'	57°30.4'	S 22°46.3'	12°12.8'	S 18°23.5'
21	137°07.0'	S 19°23.9'	112°43.1'	S 18°42.5'	72°32.7'	S 22°46.3'	27°14.0'	S 18°23.0'
22	152°10.8'	S 19°23.1'	127°45.0'	S 18°42.7'	87°34.9'	S 22°46.3'	42°15.2'	S 18°22.4'
23	167°14.6'	S 19°22.2'	142°47.0'	S 18°42.8'	102°37.2'	S 22°46.3'	57°16.3'	S 18°21.9'

Wed Oct 24, 2018 UTC

UTC	Venus -3.7		Jupiter -1.6		Saturn +0.6		Mars -0.8	
	v = 3.8' d = 0.9'		v = 1.9' d = 0.1'		v = 2.3' d = 0.0'		v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	182°18.4'	S 19°21.4'	157°48.9'	S 18°42.9'	117°39.5'	S 22°46.3'	72°17.5'	S 18°21.4'
1	197°22.2'	S 19°20.5'	172°50.8'	S 18°43.0'	132°41.8'	S 22°46.3'	87°18.6'	S 18°20.9'
2	212°26.0'	S 19°19.7'	187°52.8'	S 18°43.2'	147°44.0'	S 22°46.3'	102°19.8'	S 18°20.4'
3	227°29.8'	S 19°18.8'	202°54.7'	S 18°43.3'	162°46.3'	S 22°46.3'	117°21.0'	S 18°19.8'
4	242°33.6'	S 19°18.0'	217°56.6'	S 18°43.4'	177°48.6'	S 22°46.3'	132°22.1'	S 18°19.3'
5	257°37.4'	S 19°17.1'	232°58.5'	S 18°43.5'	192°50.8'	S 22°46.3'	147°23.3'	S 18°18.8'
6	272°41.2'	S 19°16.2'	248°00.5'	S 18°43.7'	207°53.1'	S 22°46.3'	162°24.5'	S 18°18.3'
7	287°45.0'	S 19°15.4'	263°02.4'	S 18°43.8'	222°55.4'	S 22°46.3'	177°25.6'	S 18°17.8'
8	302°48.8'	S 19°14.5'	278°04.3'	S 18°43.9'	237°57.6'	S 22°46.2'	192°26.8'	S 18°17.2'
9	317°52.6'	S 19°13.6'	293°06.2'	S 18°44.0'	252°59.9'	S 22°46.2'	207°27.9'	S 18°16.7'
10	332°56.4'	S 19°12.8'	308°08.2'	S 18°44.2'	268°02.2'	S 22°46.2'	222°29.1'	S 18°16.2'
11	348°00.3'	S 19°11.9'	323°10.1'	S 18°44.3'	283°04.4'	S 22°46.2'	237°30.3'	S 18°15.7'
12	3°04.1'	S 19°11.0'	338°12.0'	S 18°44.4'	298°06.7'	S 22°46.2'	252°31.4'	S 18°15.1'
13	18°07.9'	S 19°10.1'	353°13.9'	S 18°44.6'	313°09.0'	S 22°46.2'	267°32.6'	S 18°14.6'
14	33°11.7'	S 19°09.3'	8°15.9'	S 18°44.7'	328°11.2'	S 22°46.2'	282°33.7'	S 18°14.1'
15	48°15.5'	S 19°08.4'	23°17.8'	S 18°44.8'	343°13.5'	S 22°46.2'	297°34.9'	S 18°13.6'
16	63°19.3'	S 19°07.5'	38°19.7'	S 18°44.9'	358°15.8'	S 22°46.2'	312°36.0'	S 18°13.0'
17	78°23.1'	S 19°06.6'	53°21.6'	S 18°45.1'	13°18.0'	S 22°46.2'	327°37.2'	S 18°12.5'
18	93°26.9'	S 19°05.7'	68°23.6'	S 18°45.2'	28°20.3'	S 22°46.2'	342°38.4'	S 18°12.0'
19	108°30.7'	S 19°04.9'	83°25.5'	S 18°45.3'	43°22.6'	S 22°46.2'	357°39.5'	S 18°11.5'
20	123°34.5'	S 19°04.0'	98°27.4'	S 18°45.4'	58°24.8'	S 22°46.2'	12°40.7'	S 18°10.9'
21	138°38.3'	S 19°03.1'	113°29.3'	S 18°45.6'	73°27.1'	S 22°46.2'	27°41.8'	S 18°10.4'
22	153°42.2'	S 19°02.2'	128°31.2'	S 18°45.7'	88°29.4'	S 22°46.2'	42°43.0'	S 18°09.9'
23	168°46.0'	S 19°01.3'	143°33.2'	S 18°45.8'	103°31.6'	S 22°46.2'	57°44.1'	S 18°09.4'

Thu Oct 25, 2018 UTC

UTC	Venus -3.7		Jupiter -1.6		Saturn +0.6		Mars -0.7	
	v = 3.8' d = 0.9'		v = 1.9' d = 0.1'		v = 2.3' d = 0.0'		v = 1.2' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	183°49.8'	S 19°00.4'	158°35.1'	S 18°45.9'	118°33.9'	S 22°46.2'	72°45.3'	S 18°08.8'
1	198°53.6'	S 18°59.5'	173°37.0'	S 18°46.1'	133°36.2'	S 22°46.2'	87°46.4'	S 18°08.3'
2	213°57.4'	S 18°58.6'	188°38.9'	S 18°46.2'	148°38.4'	S 22°46.2'	102°47.6'	S 18°07.8'
3	229°01.2'	S 18°57.7'	203°40.9'	S 18°46.3'	163°40.7'	S 22°46.2'	117°48.8'	S 18°07.2'
4	244°05.0'	S 18°56.8'	218°42.8'	S 18°46.4'	178°43.0'	S 22°46.2'	132°49.9'	S 18°06.7'
5	259°08.8'	S 18°55.9'	233°44.7'	S 18°46.6'	193°45.2'	S 22°46.2'	147°51.1'	S 18°06.2'
6	274°12.6'	S 18°55.0'	248°46.6'	S 18°46.7'	208°47.5'	S 22°46.2'	162°52.2'	S 18°05.7'
7	289°16.4'	S 18°54.1'	263°48.6'	S 18°46.8'	223°49.8'	S 22°46.2'	177°53.4'	S 18°05.1'
8	304°20.3'	S 18°53.2'	278°50.5'	S 18°46.9'	238°52.0'	S 22°46.2'	192°54.5'	S 18°04.6'
9	319°24.1'	S 18°52.3'	293°52.4'	S 18°47.1'	253°54.3'	S 22°46.2'	207°55.7'	S 18°04.1'
10	334°27.9'	S 18°51.4'	308°54.3'	S 18°47.2'	268°56.6'	S 22°46.2'	222°56.8'	S 18°03.5'
11	349°31.7'	S 18°50.5'	323°56.2'	S 18°47.3'	283°58.8'	S 22°46.2'	237°58.0'	S 18°03.0'
12	4°35.5'	S 18°49.5'	338°58.2'	S 18°47.4'	299°01.1'	S 22°46.2'	252°59.1'	S 18°02.5'
13	19°39.3'	S 18°48.6'	354°00.1'	S 18°47.6'	314°03.3'	S 22°46.2'	268°00.3'	S 18°02.0'
14	34°43.1'	S 18°47.7'	9°02.0'	S 18°47.7'	329°05.6'	S 22°46.2'	283°01.4'	S 18°01.4'
15	49°46.9'	S 18°46.8'	24°03.9'	S 18°47.8'	344°07.9'	S 22°46.2'	298°02.6'	S 18°00.9'
16	64°50.7'	S 18°45.9'	39°05.9'	S 18°47.9'	359°10.1'	S 22°46.2'	313°03.7'	S 18°00.4'
17	79°54.5'	S 18°45.0'	54°07.8'	S 18°48.1'	14°12.4'	S 22°46.2'	328°04.9'	S 17°59.8'
18	94°58.4'	S 18°44.0'	69°09.7'	S 18°48.2'	29°14.7'	S 22°46.2'	343°06.0'	S 17°59.3'
19	110°02.2'	S 18°43.1'	84°11.6'	S 18°48.3'	44°16.9'	S 22°46.2'	358°07.2'	S 17°58.8'
20	125°06.0'	S 18°42.2'	99°13.5'	S 18°48.4'	59°19.2'	S 22°46.2'	13°08.3'	S 17°58.2'
21	140°09.8'	S 18°41.3'	114°15.5'	S 18°48.6'	74°21.5'	S 22°46.2'	28°09.5'	S 17°57.7'
22	155°13.6'	S 18°40.3'	129°17.4'	S 18°48.7'	89°23.7'	S 22°46.2'	43°10.6'	S 17°57.2'
23	170°17.4'	S 18°39.4'	144°19.3'	S 18°48.8'	104°26.0'	S 22°46.2'	58°11.8'	S 17°56.6'

Fri Oct 26, 2018 UTC

UTC	Venus -3.7		Jupiter -1.6		Saturn +0.6		Mars -0.7	
	v = 3.8' d = 0.9'		v = 1.9' d = 0.1'		v = 2.3' d = 0.0'		v = 1.1' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	185°21.2'	S 18°38.5'	159°21.2'	S 18°48.9'	119°28.2'	S 22°46.2'	73°12.9'	S 17°56.1'
1	200°25.0'	S 18°37.5'	174°23.2'	S 18°49.1'	134°30.5'	S 22°46.2'	88°14.0'	S 17°55.6'
2	215°28.8'	S 18°36.6'	189°25.1'	S 18°49.2'	149°32.8'	S 22°46.2'	103°15.2'	S 17°55.0'
3	230°32.6'	S 18°35.7'	204°27.0'	S 18°49.3'	164°35.0'	S 22°46.2'	118°16.3'	S 17°54.5'
4	245°36.4'	S 18°34.7'	219°28.9'	S 18°49.4'	179°37.3'	S 22°46.2'	133°17.5'	S 17°54.0'
5	260°40.2'	S 18°33.8'	234°30.8'	S 18°49.6'	194°39.6'	S 22°46.2'	148°18.6'	S 17°53.4'
6	275°44.0'	S 18°32.9'	249°32.8'	S 18°49.7'	209°41.8'	S 22°46.2'	163°19.8'	S 17°52.9'
7	290°47.8'	S 18°31.9'	264°34.7'	S 18°49.8'	224°44.1'	S 22°46.2'	178°20.9'	S 17°52.4'
8	305°51.7'	S 18°31.0'	279°36.6'	S 18°49.9'	239°46.3'	S 22°46.2'	193°22.1'	S 17°51.8'
9	320°55.5'	S 18°30.0'	294°38.5'	S 18°50.1'	254°48.6'	S 22°46.2'	208°23.2'	S 17°51.3'
10	335°59.3'	S 18°29.1'	309°40.4'	S 18°50.2'	269°50.9'	S 22°46.2'	223°24.3'	S 17°50.8'
11	351°03.1'	S 18°28.1'	324°42.4'	S 18°50.3'	284°53.1'	S 22°46.2'	238°25.5'	S 17°50.2'
12	6°06.9'	S 18°27.2'	339°44.3'	S 18°50.4'	299°55.4'	S 22°46.2'	253°26.6'	S 17°49.7'
13	21°10.7'	S 18°26.2'	354°46.2'	S 18°50.6'	314°57.6'	S 22°46.2'	268°27.8'	S 17°49.2'
14	36°14.5'	S 18°25.3'	9°48.1'	S 18°50.7'	329°59.9'	S 22°46.2'	283°28.9'	S 17°48.6'
15	51°18.3'	S 18°24.3'	24°50.0'	S 18°50.8'	345°02.2'	S 22°46.2'	298°30.1'	S 17°48.1'
16	66°22.1'	S 18°23.4'	39°52.0'	S 18°51.0'	0°04.4'	S 22°46.2'	313°31.2'	S 17°47.6'
17	81°25.9'	S 18°22.4'	54°53.9'	S 18°51.1'	15°06.7'	S 22°46.2'	328°32.3'	S 17°47.0'
18	96°29.7'	S 18°21.5'	69°55.8'	S 18°51.2'	30°08.9'	S 22°46.2'	343°33.5'	S 17°46.5'
19	111°33.5'	S 18°20.5'	84°57.7'	S 18°51.3'	45°11.2'	S 22°46.2'	358°34.6'	S 17°46.0'
20	126°37.3'	S 18°19.6'	99°59.6'	S 18°51.5'	60°13.5'	S 22°46.2'	13°35.8'	S 17°45.4'
21	141°41.1'	S 18°18.6'	115°01.6'	S 18°51.6'	75°15.7'	S 22°46.2'	28°36.9'	S 17°44.9'
22	156°44.9'	S 18°17.6'	130°03.5'	S 18°51.7'	90°18.0'	S 22°46.2'	43°38.0'	S 17°44.4'
23	171°48.7'	S 18°16.7'	145°05.4'	S 18°51.8'	105°20.2'	S 22°46.2'	58°39.2'	S 17°43.8'

Sat Oct 27, 2018 UTC

UTC	Venus -3.7 v = 3.8' d = 1.0'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.6 v = 2.3' d = 0.0'		Mars -0.7 v = 1.1' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	186°52.4'	S 18°15.7'	160°07.3'	S 18°52.0'	120°22.5'	S 22°46.2'	73°40.3'	S 17°43.3'
1	201°56.2'	S 18°14.8'	175°09.2'	S 18°52.1'	135°24.8'	S 22°46.2'	88°41.5'	S 17°42.7'
2	217°00.0'	S 18°13.8'	190°11.2'	S 18°52.2'	150°27.0'	S 22°46.2'	103°42.6'	S 17°42.2'
3	232°03.8'	S 18°12.8'	205°13.1'	S 18°52.3'	165°29.3'	S 22°46.2'	118°43.7'	S 17°41.7'
4	247°07.6'	S 18°11.9'	220°15.0'	S 18°52.5'	180°31.5'	S 22°46.2'	133°44.9'	S 17°41.1'
5	262°11.4'	S 18°10.9'	235°16.9'	S 18°52.6'	195°33.8'	S 22°46.2'	148°46.0'	S 17°40.6'
6	277°15.2'	S 18°09.9'	250°18.8'	S 18°52.7'	210°36.1'	S 22°46.2'	163°47.1'	S 17°40.0'
7	292°19.0'	S 18°08.9'	265°20.8'	S 18°52.8'	225°38.3'	S 22°46.2'	178°48.3'	S 17°39.5'
8	307°22.8'	S 18°08.0'	280°22.7'	S 18°53.0'	240°40.6'	S 22°46.2'	193°49.4'	S 17°39.0'
9	322°26.6'	S 18°07.0'	295°24.6'	S 18°53.1'	255°42.8'	S 22°46.2'	208°50.5'	S 17°38.4'
10	337°30.3'	S 18°06.0'	310°26.5'	S 18°53.2'	270°45.1'	S 22°46.2'	223°51.7'	S 17°37.9'
11	352°34.1'	S 18°05.0'	325°28.4'	S 18°53.3'	285°47.3'	S 22°46.2'	238°52.8'	S 17°37.3'
12	7°37.9'	S 18°04.1'	340°30.3'	S 18°53.5'	300°49.6'	S 22°46.2'	253°54.0'	S 17°36.8'
13	22°41.7'	S 18°03.1'	355°32.3'	S 18°53.6'	315°51.9'	S 22°46.2'	268°55.1'	S 17°36.3'
14	37°45.5'	S 18°02.1'	10°34.2'	S 18°53.7'	330°54.1'	S 22°46.2'	283°56.2'	S 17°35.7'
15	52°49.3'	S 18°01.1'	25°36.1'	S 18°53.8'	345°56.4'	S 22°46.2'	298°57.4'	S 17°35.2'
16	67°53.0'	S 18°00.2'	40°38.0'	S 18°53.9'	0°58.6'	S 22°46.2'	313°58.5'	S 17°34.6'
17	82°56.8'	S 17°59.2'	55°39.9'	S 18°54.1'	16°00.9'	S 22°46.2'	328°59.6'	S 17°34.1'
18	98°00.6'	S 17°58.2'	70°41.9'	S 18°54.2'	31°03.1'	S 22°46.2'	344°00.8'	S 17°33.6'
19	113°04.4'	S 17°57.2'	85°43.8'	S 18°54.3'	46°05.4'	S 22°46.1'	359°01.9'	S 17°33.0'
20	128°08.2'	S 17°56.2'	100°45.7'	S 18°54.4'	61°07.7'	S 22°46.1'	14°03.0'	S 17°32.5'
21	143°11.9'	S 17°55.2'	115°47.6'	S 18°54.6'	76°09.9'	S 22°46.1'	29°04.2'	S 17°31.9'
22	158°15.7'	S 17°54.2'	130°49.5'	S 18°54.7'	91°12.2'	S 22°46.1'	44°05.3'	S 17°31.4'
23	173°19.5'	S 17°53.3'	145°51.4'	S 18°54.8'	106°14.4'	S 22°46.1'	59°06.4'	S 17°30.9'

Sun Oct 28, 2018 UTC

UTC	Venus -3.7 v = 3.8' d = 1.0'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.6 v = 2.3' d = 0.0'		Mars -0.7 v = 1.1' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	188°23.3'	S 17°52.3'	160°53.4'	S 18°54.9'	121°16.7'	S 22°46.1'	74°07.5'	S 17°30.3'
1	203°27.0'	S 17°51.3'	175°55.3'	S 18°55.1'	136°18.9'	S 22°46.1'	89°08.7'	S 17°29.8'
2	218°30.8'	S 17°50.3'	190°57.2'	S 18°55.2'	151°21.2'	S 22°46.1'	104°09.8'	S 17°29.2'
3	233°34.6'	S 17°49.3'	205°59.1'	S 18°55.3'	166°23.4'	S 22°46.1'	119°10.9'	S 17°28.7'
4	248°38.3'	S 17°48.3'	221°01.0'	S 18°55.4'	181°25.7'	S 22°46.1'	134°12.1'	S 17°28.1'
5	263°42.1'	S 17°47.3'	236°02.9'	S 18°55.6'	196°28.0'	S 22°46.1'	149°13.2'	S 17°27.6'
6	278°45.9'	S 17°46.3'	251°04.9'	S 18°55.7'	211°30.2'	S 22°46.1'	164°14.3'	S 17°27.1'
7	293°49.6'	S 17°45.3'	266°06.8'	S 18°55.8'	226°32.5'	S 22°46.1'	179°15.5'	S 17°26.5'
8	308°53.4'	S 17°44.3'	281°08.7'	S 18°55.9'	241°34.7'	S 22°46.1'	194°16.6'	S 17°26.0'
9	323°57.2'	S 17°43.3'	296°10.6'	S 18°56.1'	256°37.0'	S 22°46.1'	209°17.7'	S 17°25.4'
10	339°00.9'	S 17°42.3'	311°12.5'	S 18°56.2'	271°39.2'	S 22°46.1'	224°18.8'	S 17°24.9'
11	354°04.7'	S 17°41.3'	326°14.4'	S 18°56.3'	286°41.5'	S 22°46.1'	239°20.0'	S 17°24.3'
12	9°08.4'	S 17°40.3'	341°16.4'	S 18°56.4'	301°43.7'	S 22°46.1'	254°21.1'	S 17°23.8'
13	24°12.2'	S 17°39.3'	356°18.3'	S 18°56.6'	316°46.0'	S 22°46.1'	269°22.2'	S 17°23.2'
14	39°15.9'	S 17°38.3'	11°20.2'	S 18°56.7'	331°48.2'	S 22°46.1'	284°23.3'	S 17°22.7'
15	54°19.7'	S 17°37.3'	26°22.1'	S 18°56.8'	346°50.5'	S 22°46.1'	299°24.5'	S 17°22.1'
16	69°23.4'	S 17°36.3'	41°24.0'	S 18°56.9'	1°52.8'	S 22°46.1'	314°25.6'	S 17°21.6'
17	84°27.2'	S 17°35.3'	56°25.9'	S 18°57.1'	16°55.0'	S 22°46.1'	329°26.7'	S 17°21.1'
18	99°30.9'	S 17°34.3'	71°27.8'	S 18°57.2'	31°57.3'	S 22°46.1'	344°27.9'	S 17°20.5'
19	114°34.7'	S 17°33.3'	86°29.8'	S 18°57.3'	46°59.5'	S 22°46.1'	359°29.0'	S 17°20.0'
20	129°38.4'	S 17°32.3'	101°31.7'	S 18°57.4'	62°01.8'	S 22°46.1'	14°30.1'	S 17°19.4'
21	144°42.2'	S 17°31.3'	116°33.6'	S 18°57.6'	77°04.0'	S 22°46.1'	29°31.2'	S 17°18.9'
22	159°45.9'	S 17°30.3'	131°35.5'	S 18°57.7'	92°06.3'	S 22°46.1'	44°32.4'	S 17°18.3'
23	174°49.7'	S 17°29.3'	146°37.4'	S 18°57.8'	107°08.5'	S 22°46.1'	59°33.5'	S 17°17.8'

Mon Oct 29, 2018 UTC

UTC	Venus -3.7 v = 3.7' d = 1.0'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.6 v = 2.3' d = 0.0'		Mars -0.7 v = 1.1' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	189°53.4'	S 17°28.3'	161°39.3'	S 18°57.9'	122°10.8'	S 22°46.1'	74°34.6'	S 17°17.2'
1	204°57.2'	S 17°27.3'	176°41.3'	S 18°58.1'	137°13.0'	S 22°46.1'	89°35.7'	S 17°16.7'
2	220°00.9'	S 17°26.2'	191°43.2'	S 18°58.2'	152°15.3'	S 22°46.1'	104°36.8'	S 17°16.1'
3	235°04.6'	S 17°25.2'	206°45.1'	S 18°58.3'	167°17.5'	S 22°46.1'	119°38.0'	S 17°15.6'
4	250°08.4'	S 17°24.2'	221°47.0'	S 18°58.4'	182°19.8'	S 22°46.1'	134°39.1'	S 17°15.0'
5	265°12.1'	S 17°23.2'	236°48.9'	S 18°58.6'	197°22.0'	S 22°46.1'	149°40.2'	S 17°14.5'
6	280°15.8'	S 17°22.2'	251°50.8'	S 18°58.7'	212°24.3'	S 22°46.1'	164°41.3'	S 17°13.9'
7	295°19.6'	S 17°21.2'	266°52.7'	S 18°58.8'	227°26.5'	S 22°46.1'	179°42.5'	S 17°13.4'
8	310°23.3'	S 17°20.2'	281°54.7'	S 18°58.9'	242°28.8'	S 22°46.1'	194°43.6'	S 17°12.8'
9	325°27.0'	S 17°19.2'	296°56.6'	S 18°59.1'	257°31.0'	S 22°46.1'	209°44.7'	S 17°12.3'
10	340°30.7'	S 17°18.1'	311°58.5'	S 18°59.2'	272°33.3'	S 22°46.1'	224°45.8'	S 17°11.7'
11	355°34.5'	S 17°17.1'	327°00.4'	S 18°59.3'	287°35.6'	S 22°46.1'	239°46.9'	S 17°11.2'
12	10°38.2'	S 17°16.1'	342°02.3'	S 18°59.4'	302°37.8'	S 22°46.1'	254°48.1'	S 17°10.6'
13	25°41.9'	S 17°15.1'	357°04.2'	S 18°59.6'	317°40.1'	S 22°46.1'	269°49.2'	S 17°10.1'
14	40°45.6'	S 17°14.1'	12°06.1'	S 18°59.7'	332°42.3'	S 22°46.1'	284°50.3'	S 17°09.5'
15	55°49.3'	S 17°13.0'	27°08.1'	S 18°59.8'	347°44.6'	S 22°46.1'	299°51.4'	S 17°09.0'
16	70°53.0'	S 17°12.0'	42°10.0'	S 18°59.9'	2°46.8'	S 22°46.1'	314°52.5'	S 17°08.4'
17	85°56.8'	S 17°11.0'	57°11.9'	S 19°00.1'	17°49.1'	S 22°46.1'	329°53.7'	S 17°07.9'
18	101°00.5'	S 17°10.0'	72°13.8'	S 19°00.2'	32°51.3'	S 22°46.1'	344°54.8'	S 17°07.3'
19	116°04.2'	S 17°09.0'	87°15.7'	S 19°00.3'	47°53.6'	S 22°46.1'	359°55.9'	S 17°06.8'
20	131°07.9'	S 17°07.9'	102°17.6'	S 19°00.4'	62°55.8'	S 22°46.1'	14°57.0'	S 17°06.2'
21	146°11.6'	S 17°06.9'	117°19.5'	S 19°00.5'	77°58.1'	S 22°46.1'	29°58.1'	S 17°05.7'
22	161°15.3'	S 17°05.9'	132°21.4'	S 19°00.7'	93°00.3'	S 22°46.1'	44°59.2'	S 17°05.1'
23	176°19.0'	S 17°04.9'	147°23.4'	S 19°00.8'	108°02.6'	S 22°46.1'	60°00.4'	S 17°04.6'

Tue Oct 30, 2018 UTC

UTC	Venus -3.7 v = 3.7' d = 1.0'		Jupiter -1.6 v = 1.9' d = 0.1'		Saturn +0.6 v = 2.2' d = 0.0'		Mars -0.6 v = 1.1' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	191°22.7'	S 17°03.9'	162°25.3'	S 19°00.9'	123°04.8'	S 22°46.0'	75°01.5'	S 17°04.0'
1	206°26.4'	S 17°02.8'	177°27.2'	S 19°01.0'	138°07.1'	S 22°46.0'	90°02.6'	S 17°03.5'
2	221°30.1'	S 17°01.8'	192°29.1'	S 19°01.2'	153°09.3'	S 22°46.0'	105°03.7'	S 17°02.9'
3	236°33.8'	S 17°00.8'	207°31.0'	S 19°01.3'	168°11.6'	S 22°46.0'	120°04.8'	S 17°02.4'
4	251°37.5'	S 16°59.8'	222°32.9'	S 19°01.4'	183°13.8'	S 22°46.0'	135°05.9'	S 17°01.8'
5	266°41.2'	S 16°58.7'	237°34.8'	S 19°01.5'	198°16.0'	S 22°46.0'	150°07.1'	S 17°01.2'
6	281°44.9'	S 16°57.7'	252°36.7'	S 19°01.7'	213°18.3'	S 22°46.0'	165°08.2'	S 17°00.7'
7	296°48.5'	S 16°56.7'	267°38.7'	S 19°01.8'	228°20.5'	S 22°46.0'	180°09.3'	S 17°00.1'
8	311°52.2'	S 16°55.6'	282°40.6'	S 19°01.9'	243°22.8'	S 22°46.0'	195°10.4'	S 16°59.6'
9	326°55.9'	S 16°54.6'	297°42.5'	S 19°02.0'	258°25.0'	S 22°46.0'	210°11.5'	S 16°59.0'
10	341°59.6'	S 16°53.6'	312°44.4'	S 19°02.2'	273°27.3'	S 22°46.0'	225°12.6'	S 16°58.5'
11	357°03.3'	S 16°52.6'	327°46.3'	S 19°02.3'	288°29.5'	S 22°46.0'	240°13.7'	S 16°57.9'
12	12°06.9'	S 16°51.5'	342°48.2'	S 19°02.4'	303°31.8'	S 22°46.0'	255°14.9'	S 16°57.4'
13	27°10.6'	S 16°50.5'	357°50.1'	S 19°02.5'	318°34.0'	S 22°46.0'	270°16.0'	S 16°56.8'
14	42°14.3'	S 16°49.5'	12°52.0'	S 19°02.7'	333°36.3'	S 22°46.0'	285°17.1'	S 16°56.2'
15	57°18.0'	S 16°48.4'	27°54.0'	S 19°02.8'	348°38.5'	S 22°46.0'	300°18.2'	S 16°55.7'
16	72°21.6'	S 16°47.4'	42°55.9'	S 19°02.9'	3°40.8'	S 22°46.0'	315°19.3'	S 16°55.1'
17	87°25.3'	S 16°46.4'	57°57.8'	S 19°03.0'	18°43.0'	S 22°46.0'	330°20.4'	S 16°54.6'
18	102°29.0'	S 16°45.4'	72°59.7'	S 19°03.1'	33°45.3'	S 22°46.0'	345°21.5'	S 16°54.0'
19	117°32.6'	S 16°44.3'	88°01.6'	S 19°03.3'	48°47.5'	S 22°46.0'	0°22.6'	S 16°53.5'
20	132°36.3'	S 16°43.3'	103°03.5'	S 19°03.4'	63°49.8'	S 22°46.0'	15°23.8'	S 16°52.9'
21	147°39.9'	S 16°42.3'	118°05.4'	S 19°03.5'	78°52.0'	S 22°46.0'	30°24.9'	S 16°52.4'
22	162°43.6'	S 16°41.2'	133°07.3'	S 19°03.6'	93°54.3'	S 22°46.0'	45°26.0'	S 16°51.8'
23	177°47.2'	S 16°40.2'	148°09.2'	S 19°03.8'	108°56.5'	S 22°46.0'	60°27.1'	S 16°51.2'

Wed Oct 31, 2018 UTC

UTC	Venus -3.7		Jupiter -1.6		Saturn +0.6		Mars -0.6	
	v = 3.6' d = 1.0'		v = 1.9' d = 0.1'		v = 2.2' d = 0.0'		v = 1.1' d = 0.6'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	192°50.9'	S 16°39.2'	163°11.2'	S 19°03.9'	123°58.8'	S 22°46.0'	75°28.2'	S 16°50.7'
1	207°54.5'	S 16°38.1'	178°13.1'	S 19°04.0'	139°01.0'	S 22°46.0'	90°29.3'	S 16°50.1'
2	222°58.2'	S 16°37.1'	193°15.0'	S 19°04.1'	154°03.2'	S 22°46.0'	105°30.4'	S 16°49.6'
3	238°01.8'	S 16°36.1'	208°16.9'	S 19°04.3'	169°05.5'	S 22°46.0'	120°31.5'	S 16°49.0'
4	253°05.5'	S 16°35.0'	223°18.8'	S 19°04.4'	184°07.7'	S 22°46.0'	135°32.6'	S 16°48.4'
5	268°09.1'	S 16°34.0'	238°20.7'	S 19°04.5'	199°10.0'	S 22°46.0'	150°33.7'	S 16°47.9'
6	283°12.7'	S 16°33.0'	253°22.6'	S 19°04.6'	214°12.2'	S 22°46.0'	165°34.8'	S 16°47.3'
7	298°16.4'	S 16°31.9'	268°24.5'	S 19°04.8'	229°14.5'	S 22°46.0'	180°36.0'	S 16°46.8'
8	313°20.0'	S 16°30.9'	283°26.4'	S 19°04.9'	244°16.7'	S 22°46.0'	195°37.1'	S 16°46.2'
9	328°23.6'	S 16°29.9'	298°28.4'	S 19°05.0'	259°19.0'	S 22°46.0'	210°38.2'	S 16°45.6'
10	343°27.3'	S 16°28.8'	313°30.3'	S 19°05.1'	274°21.2'	S 22°46.0'	225°39.3'	S 16°45.1'
11	358°30.9'	S 16°27.8'	328°32.2'	S 19°05.3'	289°23.5'	S 22°46.0'	240°40.4'	S 16°44.5'
12	13°34.5'	S 16°26.8'	343°34.1'	S 19°05.4'	304°25.7'	S 22°46.0'	255°41.5'	S 16°44.0'
13	28°38.1'	S 16°25.7'	358°36.0'	S 19°05.5'	319°27.9'	S 22°46.0'	270°42.6'	S 16°43.4'
14	43°41.8'	S 16°24.7'	13°37.9'	S 19°05.6'	334°30.2'	S 22°46.0'	285°43.7'	S 16°42.8'
15	58°45.4'	S 16°23.7'	28°39.8'	S 19°05.7'	349°32.4'	S 22°46.0'	300°44.8'	S 16°42.3'
16	73°49.0'	S 16°22.6'	43°41.7'	S 19°05.9'	4°34.7'	S 22°46.0'	315°45.9'	S 16°41.7'
17	88°52.6'	S 16°21.6'	58°43.6'	S 19°06.0'	19°36.9'	S 22°46.0'	330°47.0'	S 16°41.2'
18	103°56.2'	S 16°20.6'	73°45.5'	S 19°06.1'	34°39.2'	S 22°45.9'	345°48.1'	S 16°40.6'
19	118°59.8'	S 16°19.5'	88°47.5'	S 19°06.2'	49°41.4'	S 22°45.9'	0°49.2'	S 16°40.0'
20	134°03.4'	S 16°18.5'	103°49.4'	S 19°06.4'	64°43.6'	S 22°45.9'	15°50.3'	S 16°39.5'
21	149°07.0'	S 16°17.5'	118°51.3'	S 19°06.5'	79°45.9'	S 22°45.9'	30°51.4'	S 16°38.9'
22	164°10.6'	S 16°16.4'	133°53.2'	S 19°06.6'	94°48.1'	S 22°45.9'	45°52.5'	S 16°38.4'
23	179°14.2'	S 16°15.4'	148°55.1'	S 19°06.7'	109°50.4'	S 22°45.9'	60°53.6'	S 16°37.8'