

Sun Jul 1, 2018 UTC

UTC	Venus -4.0 v = -0.3' d = 1.0'		Jupiter -2.1 v = 2.5' d = 0.0'		Saturn +0.0 v = 2.7' d = 0.0'		Mars -2.2 v = 2.6' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	136°16.8'	N 16°35.8'	57°37.4'	S 14°50.0'	2°56.1'	S 22°28.2'	326°01.5'	S 22°47.7'
1	151°16.5'	N 16°34.8'	72°39.9'	S 14°49.9'	17°58.7'	S 22°28.2'	341°04.0'	S 22°47.9'
2	166°16.2'	N 16°33.9'	87°42.5'	S 14°49.9'	33°01.4'	S 22°28.2'	356°06.5'	S 22°48.1'
3	181°15.9'	N 16°32.9'	102°45.0'	S 14°49.9'	48°04.0'	S 22°28.2'	11°09.1'	S 22°48.3'
4	196°15.5'	N 16°31.9'	117°47.5'	S 14°49.9'	63°06.7'	S 22°28.2'	26°11.6'	S 22°48.5'
5	211°15.2'	N 16°30.9'	132°50.1'	S 14°49.9'	78°09.4'	S 22°28.2'	41°14.2'	S 22°48.8'
6	226°14.9'	N 16°30.0'	147°52.6'	S 14°49.9'	93°12.0'	S 22°28.3'	56°16.7'	S 22°49.0'
7	241°14.6'	N 16°29.0'	162°55.2'	S 14°49.9'	108°14.7'	S 22°28.3'	71°19.3'	S 22°49.2'
8	256°14.2'	N 16°28.0'	177°57.7'	S 14°49.9'	123°17.4'	S 22°28.3'	86°21.8'	S 22°49.4'
9	271°13.9'	N 16°27.1'	193°00.2'	S 14°49.9'	138°20.0'	S 22°28.3'	101°24.4'	S 22°49.6'
10	286°13.6'	N 16°26.1'	208°02.8'	S 14°49.8'	153°22.7'	S 22°28.3'	116°27.0'	S 22°49.8'
11	301°13.3'	N 16°25.1'	223°05.3'	S 14°49.8'	168°25.3'	S 22°28.3'	131°29.5'	S 22°50.1'
12	316°12.9'	N 16°24.1'	238°07.8'	S 14°49.8'	183°28.0'	S 22°28.3'	146°32.1'	S 22°50.3'
13	331°12.6'	N 16°23.2'	253°10.4'	S 14°49.8'	198°30.7'	S 22°28.3'	161°34.6'	S 22°50.5'
14	346°12.3'	N 16°22.2'	268°12.9'	S 14°49.8'	213°33.3'	S 22°28.3'	176°37.2'	S 22°50.7'
15	1°12.0'	N 16°21.2'	283°15.4'	S 14°49.8'	228°36.0'	S 22°28.4'	191°39.8'	S 22°50.9'
16	16°11.7'	N 16°20.2'	298°18.0'	S 14°49.8'	243°38.7'	S 22°28.4'	206°42.3'	S 22°51.1'
17	31°11.3'	N 16°19.3'	313°20.5'	S 14°49.8'	258°41.3'	S 22°28.4'	221°44.9'	S 22°51.4'
18	46°11.0'	N 16°18.3'	328°23.0'	S 14°49.8'	273°44.0'	S 22°28.4'	236°47.5'	S 22°51.6'
19	61°10.7'	N 16°17.3'	343°25.6'	S 14°49.7'	288°46.6'	S 22°28.4'	251°50.0'	S 22°51.8'
20	76°10.4'	N 16°16.3'	358°28.1'	S 14°49.7'	303°49.3'	S 22°28.4'	266°52.6'	S 22°52.0'
21	91°10.1'	N 16°15.3'	13°30.6'	S 14°49.7'	318°52.0'	S 22°28.4'	281°55.2'	S 22°52.2'
22	106°09.8'	N 16°14.4'	28°33.2'	S 14°49.7'	333°54.6'	S 22°28.4'	296°57.8'	S 22°52.5'
23	121°09.5'	N 16°13.4'	43°35.7'	S 14°49.7'	348°57.3'	S 22°28.5'	312°00.3'	S 22°52.7'

Mon Jul 2, 2018 UTC

UTC	Venus -4.0 v = -0.3' d = 1.0'		Jupiter -2.1 v = 2.5' d = 0.0'		Saturn +0.0 v = 2.7' d = 0.0'		Mars -2.3 v = 2.6' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	136°09.1'	N 16°12.4'	58°38.2'	S 14°49.7'	3°60.0'	S 22°28.5'	327°02.9'	S 22°52.9'
1	151°08.8'	N 16°11.4'	73°40.8'	S 14°49.7'	19°02.6'	S 22°28.5'	342°05.5'	S 22°53.1'
2	166°08.5'	N 16°10.4'	88°43.3'	S 14°49.7'	34°05.3'	S 22°28.5'	357°08.1'	S 22°53.3'
3	181°08.2'	N 16°09.4'	103°45.8'	S 14°49.7'	49°07.9'	S 22°28.5'	12°10.6'	S 22°53.6'
4	196°07.9'	N 16°08.4'	118°48.4'	S 14°49.7'	64°10.6'	S 22°28.5'	27°13.2'	S 22°53.8'
5	211°07.6'	N 16°07.5'	133°50.9'	S 14°49.7'	79°13.3'	S 22°28.5'	42°15.8'	S 22°54.0'
6	226°07.3'	N 16°06.5'	148°53.4'	S 14°49.6'	94°15.9'	S 22°28.5'	57°18.4'	S 22°54.2'
7	241°07.0'	N 16°05.5'	163°56.0'	S 14°49.6'	109°18.6'	S 22°28.5'	72°21.0'	S 22°54.4'
8	256°06.7'	N 16°04.5'	178°58.5'	S 14°49.6'	124°21.2'	S 22°28.6'	87°23.6'	S 22°54.7'
9	271°06.4'	N 16°03.5'	194°01.0'	S 14°49.6'	139°23.9'	S 22°28.6'	102°26.2'	S 22°54.9'
10	286°06.1'	N 16°02.5'	209°03.6'	S 14°49.6'	154°26.6'	S 22°28.6'	117°28.7'	S 22°55.1'
11	301°05.8'	N 16°01.5'	224°06.1'	S 14°49.6'	169°29.2'	S 22°28.6'	132°31.3'	S 22°55.3'
12	316°05.5'	N 16°00.5'	239°08.6'	S 14°49.6'	184°31.9'	S 22°28.6'	147°33.9'	S 22°55.6'
13	331°05.2'	N 15°59.6'	254°11.1'	S 14°49.6'	199°34.6'	S 22°28.6'	162°36.5'	S 22°55.8'
14	346°04.9'	N 15°58.6'	269°13.7'	S 14°49.6'	214°37.2'	S 22°28.6'	177°39.1'	S 22°56.0'
15	1°04.6'	N 15°57.6'	284°16.2'	S 14°49.6'	229°39.9'	S 22°28.6'	192°41.7'	S 22°56.2'
16	16°04.3'	N 15°56.6'	299°18.7'	S 14°49.6'	244°42.5'	S 22°28.6'	207°44.3'	S 22°56.5'
17	31°04.0'	N 15°55.6'	314°21.3'	S 14°49.6'	259°45.2'	S 22°28.7'	222°46.9'	S 22°56.7'
18	46°03.7'	N 15°54.6'	329°23.8'	S 14°49.5'	274°47.9'	S 22°28.7'	237°49.5'	S 22°56.9'
19	61°03.4'	N 15°53.6'	344°26.3'	S 14°49.5'	289°50.5'	S 22°28.7'	252°52.1'	S 22°57.1'
20	76°03.1'	N 15°52.6'	359°28.8'	S 14°49.5'	304°53.2'	S 22°28.7'	267°54.7'	S 22°57.4'
21	91°02.8'	N 15°51.6'	14°31.4'	S 14°49.5'	319°55.9'	S 22°28.7'	282°57.3'	S 22°57.6'
22	106°02.5'	N 15°50.6'	29°33.9'	S 14°49.5'	334°58.5'	S 22°28.7'	297°59.9'	S 22°57.8'
23	121°02.2'	N 15°49.6'	44°36.4'	S 14°49.5'	350°01.2'	S 22°28.7'	313°02.5'	S 22°58.0'

Tue Jul 3, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.3	
	v = -0.3' d = 1.0'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.6' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	136°01.9'	N 15°48.6'	59°38.9'	S 14°49.5'	5°03.8'	S 22°28.7'	328°05.2'	S 22°58.3'
1	151°01.6'	N 15°47.6'	74°41.5'	S 14°49.5'	20°06.5'	S 22°28.7'	343°07.8'	S 22°58.5'
2	166°01.3'	N 15°46.6'	89°44.0'	S 14°49.5'	35°09.2'	S 22°28.8'	358°10.4'	S 22°58.7'
3	181°01.0'	N 15°45.6'	104°46.5'	S 14°49.5'	50°11.8'	S 22°28.8'	13°13.0'	S 22°59.0'
4	196°00.7'	N 15°44.6'	119°49.0'	S 14°49.5'	65°14.5'	S 22°28.8'	28°15.6'	S 22°59.2'
5	211°00.4'	N 15°43.6'	134°51.6'	S 14°49.5'	80°17.1'	S 22°28.8'	43°18.2'	S 22°59.4'
6	226°00.1'	N 15°42.6'	149°54.1'	S 14°49.5'	95°19.8'	S 22°28.8'	58°20.8'	S 22°59.6'
7	240°59.8'	N 15°41.6'	164°56.6'	S 14°49.5'	110°22.5'	S 22°28.8'	73°23.5'	S 22°59.9'
8	255°59.5'	N 15°40.6'	179°59.1'	S 14°49.5'	125°25.1'	S 22°28.8'	88°26.1'	S 23°00.1'
9	270°59.2'	N 15°39.6'	195°01.6'	S 14°49.4'	140°27.8'	S 22°28.8'	103°28.7'	S 23°00.3'
10	285°59.0'	N 15°38.6'	210°04.2'	S 14°49.4'	155°30.5'	S 22°28.8'	118°31.3'	S 23°00.6'
11	300°58.7'	N 15°37.6'	225°06.7'	S 14°49.4'	170°33.1'	S 22°28.9'	133°34.0'	S 23°00.8'
12	315°58.4'	N 15°36.6'	240°09.2'	S 14°49.4'	185°35.8'	S 22°28.9'	148°36.6'	S 23°01.0'
13	330°58.1'	N 15°35.6'	255°11.7'	S 14°49.4'	200°38.4'	S 22°28.9'	163°39.2'	S 23°01.3'
14	345°57.8'	N 15°34.6'	270°14.2'	S 14°49.4'	215°41.1'	S 22°28.9'	178°41.8'	S 23°01.5'
15	0°57.5'	N 15°33.6'	285°16.8'	S 14°49.4'	230°43.8'	S 22°28.9'	193°44.5'	S 23°01.7'
16	15°57.2'	N 15°32.6'	300°19.3'	S 14°49.4'	245°46.4'	S 22°28.9'	208°47.1'	S 23°01.9'
17	30°57.0'	N 15°31.5'	315°21.8'	S 14°49.4'	260°49.1'	S 22°28.9'	223°49.7'	S 23°02.2'
18	45°56.7'	N 15°30.5'	330°24.3'	S 14°49.4'	275°51.7'	S 22°28.9'	238°52.4'	S 23°02.4'
19	60°56.4'	N 15°29.5'	345°26.8'	S 14°49.4'	290°54.4'	S 22°29.0'	253°55.0'	S 23°02.6'
20	75°56.1'	N 15°28.5'	0°29.4'	S 14°49.4'	305°57.1'	S 22°29.0'	268°57.6'	S 23°02.9'
21	90°55.8'	N 15°27.5'	15°31.9'	S 14°49.4'	320°59.7'	S 22°29.0'	284°00.3'	S 23°03.1'
22	105°55.5'	N 15°26.5'	30°34.4'	S 14°49.4'	336°02.4'	S 22°29.0'	299°02.9'	S 23°03.3'
23	120°55.3'	N 15°25.5'	45°36.9'	S 14°49.4'	351°05.0'	S 22°29.0'	314°05.6'	S 23°03.6'

Wed Jul 4, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.4	
	v = -0.3' d = 1.0'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°55.0'	N 15°24.5'	60°39.4'	S 14°49.4'	6°07.7'	S 22°29.0'	329°08.2'	S 23°03.8'
1	150°54.7'	N 15°23.5'	75°42.0'	S 14°49.4'	21°10.4'	S 22°29.0'	344°10.8'	S 23°04.0'
2	165°54.4'	N 15°22.4'	90°44.5'	S 14°49.4'	36°13.0'	S 22°29.0'	359°13.5'	S 23°04.3'
3	180°54.2'	N 15°21.4'	105°47.0'	S 14°49.3'	51°15.7'	S 22°29.0'	14°16.1'	S 23°04.5'
4	195°53.9'	N 15°20.4'	120°49.5'	S 14°49.3'	66°18.4'	S 22°29.1'	29°18.8'	S 23°04.8'
5	210°53.6'	N 15°19.4'	135°52.0'	S 14°49.3'	81°21.0'	S 22°29.1'	44°21.4'	S 23°05.0'
6	225°53.3'	N 15°18.4'	150°54.5'	S 14°49.3'	96°23.7'	S 22°29.1'	59°24.1'	S 23°05.2'
7	240°53.1'	N 15°17.4'	165°57.1'	S 14°49.3'	111°26.3'	S 22°29.1'	74°26.7'	S 23°05.5'
8	255°52.8'	N 15°16.3'	180°59.6'	S 14°49.3'	126°29.0'	S 22°29.1'	89°29.4'	S 23°05.7'
9	270°52.5'	N 15°15.3'	196°02.1'	S 14°49.3'	141°31.7'	S 22°29.1'	104°32.0'	S 23°05.9'
10	285°52.2'	N 15°14.3'	211°04.6'	S 14°49.3'	156°34.3'	S 22°29.1'	119°34.7'	S 23°06.2'
11	300°52.0'	N 15°13.3'	226°07.1'	S 14°49.3'	171°37.0'	S 22°29.1'	134°37.4'	S 23°06.4'
12	315°51.7'	N 15°12.3'	241°09.6'	S 14°49.3'	186°39.6'	S 22°29.1'	149°40.0'	S 23°06.6'
13	330°51.4'	N 15°11.3'	256°12.1'	S 14°49.3'	201°42.3'	S 22°29.2'	164°42.7'	S 23°06.9'
14	345°51.2'	N 15°10.2'	271°14.7'	S 14°49.3'	216°45.0'	S 22°29.2'	179°45.3'	S 23°07.1'
15	0°50.9'	N 15°09.2'	286°17.2'	S 14°49.3'	231°47.6'	S 22°29.2'	194°48.0'	S 23°07.4'
16	15°50.6'	N 15°08.2'	301°19.7'	S 14°49.3'	246°50.3'	S 22°29.2'	209°50.7'	S 23°07.6'
17	30°50.4'	N 15°07.2'	316°22.2'	S 14°49.3'	261°52.9'	S 22°29.2'	224°53.3'	S 23°07.8'
18	45°50.1'	N 15°06.1'	331°24.7'	S 14°49.3'	276°55.6'	S 22°29.2'	239°56.0'	S 23°08.1'
19	60°49.8'	N 15°05.1'	346°27.2'	S 14°49.3'	291°58.3'	S 22°29.2'	254°58.7'	S 23°08.3'
20	75°49.6'	N 15°04.1'	1°29.7'	S 14°49.3'	307°00.9'	S 22°29.2'	270°01.3'	S 23°08.6'
21	90°49.3'	N 15°03.1'	16°32.2'	S 14°49.3'	322°03.6'	S 22°29.2'	285°04.0'	S 23°08.8'
22	105°49.0'	N 15°02.0'	31°34.8'	S 14°49.3'	337°06.2'	S 22°29.3'	300°06.7'	S 23°09.0'
23	120°48.8'	N 15°01.0'	46°37.3'	S 14°49.3'	352°08.9'	S 22°29.3'	315°09.4'	S 23°09.3'

Thu Jul 5, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.4	
	v = -0.3' d = 1.0'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°48.5'	N 14°60.0'	61°39.8'	S 14°49.3'	7°11.6'	S 22°29.3'	330°12.0'	S 23°09.5'
1	150°48.3'	N 14°59.0'	76°42.3'	S 14°49.3'	22°14.2'	S 22°29.3'	345°14.7'	S 23°09.8'
2	165°48.0'	N 14°57.9'	91°44.8'	S 14°49.3'	37°16.9'	S 22°29.3'	0°17.4'	S 23°10.0'
3	180°47.7'	N 14°56.9'	106°47.3'	S 14°49.3'	52°19.5'	S 22°29.3'	15°20.1'	S 23°10.2'
4	195°47.5'	N 14°55.9'	121°49.8'	S 14°49.3'	67°22.2'	S 22°29.3'	30°22.8'	S 23°10.5'
5	210°47.2'	N 14°54.8'	136°52.3'	S 14°49.3'	82°24.9'	S 22°29.3'	45°25.4'	S 23°10.7'
6	225°47.0'	N 14°53.8'	151°54.8'	S 14°49.3'	97°27.5'	S 22°29.3'	60°28.1'	S 23°11.0'
7	240°46.7'	N 14°52.8'	166°57.3'	S 14°49.3'	112°30.2'	S 22°29.4'	75°30.8'	S 23°11.2'
8	255°46.4'	N 14°51.8'	181°59.8'	S 14°49.3'	127°32.8'	S 22°29.4'	90°33.5'	S 23°11.4'
9	270°46.2'	N 14°50.7'	197°02.4'	S 14°49.3'	142°35.5'	S 22°29.4'	105°36.2'	S 23°11.7'
10	285°45.9'	N 14°49.7'	212°04.9'	S 14°49.3'	157°38.2'	S 22°29.4'	120°38.9'	S 23°11.9'
11	300°45.7'	N 14°48.7'	227°07.4'	S 14°49.3'	172°40.8'	S 22°29.4'	135°41.6'	S 23°12.2'
12	315°45.4'	N 14°47.6'	242°09.9'	S 14°49.3'	187°43.5'	S 22°29.4'	150°44.3'	S 23°12.4'
13	330°45.2'	N 14°46.6'	257°12.4'	S 14°49.2'	202°46.1'	S 22°29.4'	165°46.9'	S 23°12.7'
14	345°44.9'	N 14°45.6'	272°14.9'	S 14°49.2'	217°48.8'	S 22°29.4'	180°49.6'	S 23°12.9'
15	0°44.7'	N 14°44.5'	287°17.4'	S 14°49.2'	232°51.5'	S 22°29.4'	195°52.3'	S 23°13.2'
16	15°44.4'	N 14°43.5'	302°19.9'	S 14°49.2'	247°54.1'	S 22°29.5'	210°55.0'	S 23°13.4'
17	30°44.2'	N 14°42.4'	317°22.4'	S 14°49.2'	262°56.8'	S 22°29.5'	225°57.7'	S 23°13.6'
18	45°43.9'	N 14°41.4'	332°24.9'	S 14°49.2'	277°59.4'	S 22°29.5'	241°00.4'	S 23°13.9'
19	60°43.7'	N 14°40.4'	347°27.4'	S 14°49.2'	293°02.1'	S 22°29.5'	256°03.1'	S 23°14.1'
20	75°43.4'	N 14°39.3'	2°29.9'	S 14°49.2'	308°04.8'	S 22°29.5'	271°05.8'	S 23°14.4'
21	90°43.2'	N 14°38.3'	17°32.4'	S 14°49.2'	323°07.4'	S 22°29.5'	286°08.5'	S 23°14.6'
22	105°42.9'	N 14°37.3'	32°34.9'	S 14°49.2'	338°10.1'	S 22°29.5'	301°11.3'	S 23°14.9'
23	120°42.7'	N 14°36.2'	47°37.4'	S 14°49.2'	353°12.7'	S 22°29.5'	316°14.0'	S 23°15.1'

Fri Jul 6, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.4	
	v = -0.2' d = 1.0'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.7' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°42.4'	N 14°35.2'	62°39.9'	S 14°49.2'	8°15.4'	S 22°29.5'	331°16.7'	S 23°15.4'
1	150°42.2'	N 14°34.1'	77°42.4'	S 14°49.2'	23°18.1'	S 22°29.6'	346°19.4'	S 23°15.6'
2	165°41.9'	N 14°33.1'	92°44.9'	S 14°49.2'	38°20.7'	S 22°29.6'	1°22.1'	S 23°15.9'
3	180°41.7'	N 14°32.1'	107°47.4'	S 14°49.2'	53°23.4'	S 22°29.6'	16°24.8'	S 23°16.1'
4	195°41.5'	N 14°31.0'	122°49.9'	S 14°49.2'	68°26.0'	S 22°29.6'	31°27.5'	S 23°16.4'
5	210°41.2'	N 14°30.0'	137°52.4'	S 14°49.2'	83°28.7'	S 22°29.6'	46°30.2'	S 23°16.6'
6	225°41.0'	N 14°28.9'	152°54.9'	S 14°49.2'	98°31.4'	S 22°29.6'	61°32.9'	S 23°16.9'
7	240°40.7'	N 14°27.9'	167°57.4'	S 14°49.2'	113°34.0'	S 22°29.6'	76°35.7'	S 23°17.1'
8	255°40.5'	N 14°26.8'	182°59.9'	S 14°49.2'	128°36.7'	S 22°29.6'	91°38.4'	S 23°17.3'
9	270°40.2'	N 14°25.8'	198°02.4'	S 14°49.2'	143°39.3'	S 22°29.6'	106°41.1'	S 23°17.6'
10	285°40.0'	N 14°24.7'	213°04.9'	S 14°49.2'	158°42.0'	S 22°29.7'	121°43.8'	S 23°17.8'
11	300°39.8'	N 14°23.7'	228°07.4'	S 14°49.2'	173°44.7'	S 22°29.7'	136°46.6'	S 23°18.1'
12	315°39.5'	N 14°22.6'	243°09.9'	S 14°49.2'	188°47.3'	S 22°29.7'	151°49.3'	S 23°18.3'
13	330°39.3'	N 14°21.6'	258°12.4'	S 14°49.2'	203°50.0'	S 22°29.7'	166°52.0'	S 23°18.6'
14	345°39.1'	N 14°20.6'	273°14.9'	S 14°49.2'	218°52.6'	S 22°29.7'	181°54.7'	S 23°18.8'
15	0°38.8'	N 14°19.5'	288°17.4'	S 14°49.2'	233°55.3'	S 22°29.7'	196°57.5'	S 23°19.1'
16	15°38.6'	N 14°18.5'	303°19.9'	S 14°49.2'	248°58.0'	S 22°29.7'	212°00.2'	S 23°19.3'
17	30°38.4'	N 14°17.4'	318°22.4'	S 14°49.2'	264°00.6'	S 22°29.7'	227°02.9'	S 23°19.6'
18	45°38.1'	N 14°16.4'	333°24.9'	S 14°49.2'	279°03.3'	S 22°29.7'	242°05.7'	S 23°19.8'
19	60°37.9'	N 14°15.3'	348°27.4'	S 14°49.3'	294°05.9'	S 22°29.8'	257°08.4'	S 23°20.1'
20	75°37.7'	N 14°14.3'	3°29.9'	S 14°49.3'	309°08.6'	S 22°29.8'	272°11.1'	S 23°20.3'
21	90°37.4'	N 14°13.2'	18°32.4'	S 14°49.3'	324°11.2'	S 22°29.8'	287°13.9'	S 23°20.6'
22	105°37.2'	N 14°12.1'	33°34.9'	S 14°49.3'	339°13.9'	S 22°29.8'	302°16.6'	S 23°20.9'
23	120°37.0'	N 14°11.1'	48°37.4'	S 14°49.3'	354°16.6'	S 22°29.8'	317°19.3'	S 23°21.1'

Sat Jul 7, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.5	
	v = -0.2' d = 1.1'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°36.7'	N 14°10.0'	63°39.9'	S 14°49.3'	9°19.2'	S 22°29.8'	332°22.1'	S 23°21.4'
1	150°36.5'	N 14°09.0'	78°42.4'	S 14°49.3'	24°21.9'	S 22°29.8'	347°24.8'	S 23°21.6'
2	165°36.3'	N 14°07.9'	93°44.9'	S 14°49.3'	39°24.5'	S 22°29.8'	2°27.6'	S 23°21.9'
3	180°36.1'	N 14°06.9'	108°47.4'	S 14°49.3'	54°27.2'	S 22°29.8'	17°30.3'	S 23°22.1'
4	195°35.8'	N 14°05.8'	123°49.9'	S 14°49.3'	69°29.9'	S 22°29.9'	32°33.1'	S 23°22.4'
5	210°35.6'	N 14°04.8'	138°52.4'	S 14°49.3'	84°32.5'	S 22°29.9'	47°35.8'	S 23°22.6'
6	225°35.4'	N 14°03.7'	153°54.9'	S 14°49.3'	99°35.2'	S 22°29.9'	62°38.6'	S 23°22.9'
7	240°35.2'	N 14°02.6'	168°57.4'	S 14°49.3'	114°37.8'	S 22°29.9'	77°41.3'	S 23°23.1'
8	255°34.9'	N 14°01.6'	183°59.9'	S 14°49.3'	129°40.5'	S 22°29.9'	92°44.1'	S 23°23.4'
9	270°34.7'	N 14°00.5'	199°02.3'	S 14°49.3'	144°43.2'	S 22°29.9'	107°46.8'	S 23°23.6'
10	285°34.5'	N 13°59.5'	214°04.8'	S 14°49.3'	159°45.8'	S 22°29.9'	122°49.6'	S 23°23.9'
11	300°34.3'	N 13°58.4'	229°07.3'	S 14°49.3'	174°48.5'	S 22°29.9'	137°52.3'	S 23°24.1'
12	315°34.0'	N 13°57.4'	244°09.8'	S 14°49.3'	189°51.1'	S 22°29.9'	152°55.1'	S 23°24.4'
13	330°33.8'	N 13°56.3'	259°12.3'	S 14°49.3'	204°53.8'	S 22°30.0'	167°57.8'	S 23°24.7'
14	345°33.6'	N 13°55.2'	274°14.8'	S 14°49.3'	219°56.4'	S 22°30.0'	183°00.6'	S 23°24.9'
15	0°33.4'	N 13°54.2'	289°17.3'	S 14°49.3'	234°59.1'	S 22°30.0'	198°03.4'	S 23°25.2'
16	15°33.2'	N 13°53.1'	304°19.8'	S 14°49.3'	250°01.8'	S 22°30.0'	213°06.1'	S 23°25.4'
17	30°32.9'	N 13°52.0'	319°22.3'	S 14°49.3'	265°04.4'	S 22°30.0'	228°08.9'	S 23°25.7'
18	45°32.7'	N 13°51.0'	334°24.8'	S 14°49.3'	280°07.1'	S 22°30.0'	243°11.7'	S 23°25.9'
19	60°32.5'	N 13°49.9'	349°27.3'	S 14°49.3'	295°09.7'	S 22°30.0'	258°14.4'	S 23°26.2'
20	75°32.3'	N 13°48.9'	4°29.7'	S 14°49.3'	310°12.4'	S 22°30.0'	273°17.2'	S 23°26.4'
21	90°32.1'	N 13°47.8'	19°32.2'	S 14°49.3'	325°15.1'	S 22°30.0'	288°20.0'	S 23°26.7'
22	105°31.9'	N 13°46.7'	34°34.7'	S 14°49.3'	340°17.7'	S 22°30.1'	303°22.7'	S 23°27.0'
23	120°31.7'	N 13°45.7'	49°37.2'	S 14°49.3'	355°20.4'	S 22°30.1'	318°25.5'	S 23°27.2'

Sun Jul 8, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.5	
	v = -0.2' d = 1.1'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°31.4'	N 13°44.6'	64°39.7'	S 14°49.3'	10°23.0'	S 22°30.1'	333°28.3'	S 23°27.5'
1	150°31.2'	N 13°43.5'	79°42.2'	S 14°49.3'	25°25.7'	S 22°30.1'	348°31.1'	S 23°27.7'
2	165°31.0'	N 13°42.5'	94°44.7'	S 14°49.3'	40°28.3'	S 22°30.1'	3°33.8'	S 23°28.0'
3	180°30.8'	N 13°41.4'	109°47.2'	S 14°49.3'	55°31.0'	S 22°30.1'	18°36.6'	S 23°28.3'
4	195°30.6'	N 13°40.3'	124°49.6'	S 14°49.4'	70°33.7'	S 22°30.1'	33°39.4'	S 23°28.5'
5	210°30.4'	N 13°39.3'	139°52.1'	S 14°49.4'	85°36.3'	S 22°30.1'	48°42.2'	S 23°28.8'
6	225°30.2'	N 13°38.2'	154°54.6'	S 14°49.4'	100°39.0'	S 22°30.1'	63°44.9'	S 23°29.0'
7	240°30.0'	N 13°37.1'	169°57.1'	S 14°49.4'	115°41.6'	S 22°30.2'	78°47.7'	S 23°29.3'
8	255°29.8'	N 13°36.0'	184°59.6'	S 14°49.4'	130°44.3'	S 22°30.2'	93°50.5'	S 23°29.5'
9	270°29.6'	N 13°35.0'	200°02.1'	S 14°49.4'	145°46.9'	S 22°30.2'	108°53.3'	S 23°29.8'
10	285°29.3'	N 13°33.9'	215°04.6'	S 14°49.4'	160°49.6'	S 22°30.2'	123°56.1'	S 23°30.1'
11	300°29.1'	N 13°32.8'	230°07.0'	S 14°49.4'	175°52.3'	S 22°30.2'	138°58.9'	S 23°30.3'
12	315°28.9'	N 13°31.8'	245°09.5'	S 14°49.4'	190°54.9'	S 22°30.2'	154°01.7'	S 23°30.6'
13	330°28.7'	N 13°30.7'	260°12.0'	S 14°49.4'	205°57.6'	S 22°30.2'	169°04.5'	S 23°30.8'
14	345°28.5'	N 13°29.6'	275°14.5'	S 14°49.4'	221°00.2'	S 22°30.2'	184°07.2'	S 23°31.1'
15	0°28.3'	N 13°28.5'	290°17.0'	S 14°49.4'	236°02.9'	S 22°30.2'	199°10.0'	S 23°31.4'
16	15°28.1'	N 13°27.5'	305°19.5'	S 14°49.4'	251°05.5'	S 22°30.3'	214°12.8'	S 23°31.6'
17	30°27.9'	N 13°26.4'	320°21.9'	S 14°49.4'	266°08.2'	S 22°30.3'	229°15.6'	S 23°31.9'
18	45°27.7'	N 13°25.3'	335°24.4'	S 14°49.4'	281°10.9'	S 22°30.3'	244°18.4'	S 23°32.1'
19	60°27.5'	N 13°24.2'	350°26.9'	S 14°49.4'	296°13.5'	S 22°30.3'	259°21.2'	S 23°32.4'
20	75°27.3'	N 13°23.2'	5°29.4'	S 14°49.4'	311°16.2'	S 22°30.3'	274°24.0'	S 23°32.7'
21	90°27.1'	N 13°22.1'	20°31.9'	S 14°49.4'	326°18.8'	S 22°30.3'	289°26.8'	S 23°32.9'
22	105°26.9'	N 13°21.0'	35°34.4'	S 14°49.4'	341°21.5'	S 22°30.3'	304°29.6'	S 23°33.2'
23	120°26.7'	N 13°19.9'	50°36.8'	S 14°49.5'	356°24.1'	S 22°30.3'	319°32.4'	S 23°33.5'

Mon Jul 9, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.0		Mars -2.5	
	v = -0.2' d = 1.1'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°26.5'	N 13°18.8'	65°39.3'	S 14°49.5'	11°26.8'	S 22°30.3'	334°35.2'	S 23°33.7'
1	150°26.3'	N 13°17.8'	80°41.8'	S 14°49.5'	26°29.5'	S 22°30.4'	349°38.1'	S 23°34.0'
2	165°26.1'	N 13°16.7'	95°44.3'	S 14°49.5'	41°32.1'	S 22°30.4'	4°40.9'	S 23°34.2'
3	180°25.9'	N 13°15.6'	110°46.8'	S 14°49.5'	56°34.8'	S 22°30.4'	19°43.7'	S 23°34.5'
4	195°25.7'	N 13°14.5'	125°49.2'	S 14°49.5'	71°37.4'	S 22°30.4'	34°46.5'	S 23°34.8'
5	210°25.5'	N 13°13.4'	140°51.7'	S 14°49.5'	86°40.1'	S 22°30.4'	49°49.3'	S 23°35.0'
6	225°25.4'	N 13°12.4'	155°54.2'	S 14°49.5'	101°42.7'	S 22°30.4'	64°52.1'	S 23°35.3'
7	240°25.2'	N 13°11.3'	170°56.7'	S 14°49.5'	116°45.4'	S 22°30.4'	79°54.9'	S 23°35.6'
8	255°25.0'	N 13°10.2'	185°59.2'	S 14°49.5'	131°48.1'	S 22°30.4'	94°57.7'	S 23°35.8'
9	270°24.8'	N 13°09.1'	201°01.6'	S 14°49.5'	146°50.7'	S 22°30.4'	110°00.6'	S 23°36.1'
10	285°24.6'	N 13°08.0'	216°04.1'	S 14°49.5'	161°53.4'	S 22°30.4'	125°03.4'	S 23°36.3'
11	300°24.4'	N 13°06.9'	231°06.6'	S 14°49.5'	176°56.0'	S 22°30.5'	140°06.2'	S 23°36.6'
12	315°24.2'	N 13°05.9'	246°09.1'	S 14°49.5'	191°58.7'	S 22°30.5'	155°09.0'	S 23°36.9'
13	330°24.0'	N 13°04.8'	261°11.5'	S 14°49.6'	207°01.3'	S 22°30.5'	170°11.8'	S 23°37.1'
14	345°23.8'	N 13°03.7'	276°14.0'	S 14°49.6'	222°04.0'	S 22°30.5'	185°14.7'	S 23°37.4'
15	0°23.6'	N 13°02.6'	291°16.5'	S 14°49.6'	237°06.6'	S 22°30.5'	200°17.5'	S 23°37.7'
16	15°23.5'	N 13°01.5'	306°19.0'	S 14°49.6'	252°09.3'	S 22°30.5'	215°20.3'	S 23°37.9'
17	30°23.3'	N 13°00.4'	321°21.4'	S 14°49.6'	267°12.0'	S 22°30.5'	230°23.1'	S 23°38.2'
18	45°23.1'	N 12°59.3'	336°23.9'	S 14°49.6'	282°14.6'	S 22°30.5'	245°26.0'	S 23°38.5'
19	60°22.9'	N 12°58.3'	351°26.4'	S 14°49.6'	297°17.3'	S 22°30.5'	260°28.8'	S 23°38.7'
20	75°22.7'	N 12°57.2'	6°28.9'	S 14°49.6'	312°19.9'	S 22°30.6'	275°31.6'	S 23°39.0'
21	90°22.5'	N 12°56.1'	21°31.3'	S 14°49.6'	327°22.6'	S 22°30.6'	290°34.5'	S 23°39.3'
22	105°22.4'	N 12°55.0'	36°33.8'	S 14°49.6'	342°25.2'	S 22°30.6'	305°37.3'	S 23°39.5'
23	120°22.2'	N 12°53.9'	51°36.3'	S 14°49.6'	357°27.9'	S 22°30.6'	320°40.1'	S 23°39.8'

Tue Jul 10, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.6	
	v = -0.2' d = 1.1'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°22.0'	N 12°52.8'	66°38.8'	S 14°49.6'	12°30.6'	S 22°30.6'	335°43.0'	S 23°40.1'
1	150°21.8'	N 12°51.7'	81°41.2'	S 14°49.7'	27°33.2'	S 22°30.6'	350°45.8'	S 23°40.3'
2	165°21.6'	N 12°50.6'	96°43.7'	S 14°49.7'	42°35.9'	S 22°30.6'	5°48.6'	S 23°40.6'
3	180°21.5'	N 12°49.5'	111°46.2'	S 14°49.7'	57°38.5'	S 22°30.6'	20°51.5'	S 23°40.9'
4	195°21.3'	N 12°48.4'	126°48.6'	S 14°49.7'	72°41.2'	S 22°30.6'	35°54.3'	S 23°41.1'
5	210°21.1'	N 12°47.3'	141°51.1'	S 14°49.7'	87°43.8'	S 22°30.7'	50°57.2'	S 23°41.4'
6	225°20.9'	N 12°46.3'	156°53.6'	S 14°49.7'	102°46.5'	S 22°30.7'	66°00.0'	S 23°41.7'
7	240°20.7'	N 12°45.2'	171°56.1'	S 14°49.7'	117°49.1'	S 22°30.7'	81°02.9'	S 23°41.9'
8	255°20.6'	N 12°44.1'	186°58.5'	S 14°49.7'	132°51.8'	S 22°30.7'	96°05.7'	S 23°42.2'
9	270°20.4'	N 12°43.0'	202°01.0'	S 14°49.7'	147°54.4'	S 22°30.7'	111°08.6'	S 23°42.5'
10	285°20.2'	N 12°41.9'	217°03.5'	S 14°49.7'	162°57.1'	S 22°30.7'	126°11.4'	S 23°42.7'
11	300°20.0'	N 12°40.8'	232°05.9'	S 14°49.7'	177°59.8'	S 22°30.7'	141°14.3'	S 23°43.0'
12	315°19.9'	N 12°39.7'	247°08.4'	S 14°49.8'	193°02.4'	S 22°30.7'	156°17.1'	S 23°43.3'
13	330°19.7'	N 12°38.6'	262°10.9'	S 14°49.8'	208°05.1'	S 22°30.7'	171°20.0'	S 23°43.5'
14	345°19.5'	N 12°37.5'	277°13.3'	S 14°49.8'	223°07.7'	S 22°30.8'	186°22.8'	S 23°43.8'
15	0°19.3'	N 12°36.4'	292°15.8'	S 14°49.8'	238°10.4'	S 22°30.8'	201°25.7'	S 23°44.1'
16	15°19.2'	N 12°35.3'	307°18.3'	S 14°49.8'	253°13.0'	S 22°30.8'	216°28.5'	S 23°44.3'
17	30°19.0'	N 12°34.2'	322°20.8'	S 14°49.8'	268°15.7'	S 22°30.8'	231°31.4'	S 23°44.6'
18	45°18.8'	N 12°33.1'	337°23.2'	S 14°49.8'	283°18.3'	S 22°30.8'	246°34.2'	S 23°44.9'
19	60°18.7'	N 12°32.0'	352°25.7'	S 14°49.8'	298°21.0'	S 22°30.8'	261°37.1'	S 23°45.1'
20	75°18.5'	N 12°30.9'	7°28.2'	S 14°49.8'	313°23.7'	S 22°30.8'	276°40.0'	S 23°45.4'
21	90°18.3'	N 12°29.8'	22°30.6'	S 14°49.9'	328°26.3'	S 22°30.8'	291°42.8'	S 23°45.7'
22	105°18.2'	N 12°28.7'	37°33.1'	S 14°49.9'	343°29.0'	S 22°30.8'	306°45.7'	S 23°46.0'
23	120°18.0'	N 12°27.6'	52°35.6'	S 14°49.9'	358°31.6'	S 22°30.8'	321°48.6'	S 23°46.2'

Wed Jul 11, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.7	
	v = -0.2' d = 1.1'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°17.8'	N 12°26.5'	67°38.0'	S 14°49.9'	13°34.3'	S 22°30.9'	336°51.4'	S 23°46.5'
1	150°17.7'	N 12°25.4'	82°40.5'	S 14°49.9'	28°36.9'	S 22°30.9'	351°54.3'	S 23°46.8'
2	165°17.5'	N 12°24.3'	97°42.9'	S 14°49.9'	43°39.6'	S 22°30.9'	6°57.2'	S 23°47.0'
3	180°17.3'	N 12°23.2'	112°45.4'	S 14°49.9'	58°42.2'	S 22°30.9'	22°00.0'	S 23°47.3'
4	195°17.2'	N 12°22.1'	127°47.9'	S 14°49.9'	73°44.9'	S 22°30.9'	37°02.9'	S 23°47.6'
5	210°17.0'	N 12°21.0'	142°50.3'	S 14°49.9'	88°47.5'	S 22°30.9'	52°05.8'	S 23°47.8'
6	225°16.9'	N 12°19.9'	157°52.8'	S 14°50.0'	103°50.2'	S 22°30.9'	67°08.7'	S 23°48.1'
7	240°16.7'	N 12°18.8'	172°55.3'	S 14°50.0'	118°52.8'	S 22°30.9'	82°11.5'	S 23°48.4'
8	255°16.5'	N 12°17.7'	187°57.7'	S 14°50.0'	133°55.5'	S 22°30.9'	97°14.4'	S 23°48.7'
9	270°16.4'	N 12°16.6'	203°00.2'	S 14°50.0'	148°58.2'	S 22°31.0'	112°17.3'	S 23°48.9'
10	285°16.2'	N 12°15.5'	218°02.7'	S 14°50.0'	164°00.8'	S 22°31.0'	127°20.2'	S 23°49.2'
11	300°16.1'	N 12°14.3'	233°05.1'	S 14°50.0'	179°03.5'	S 22°31.0'	142°23.0'	S 23°49.5'
12	315°15.9'	N 12°13.2'	248°07.6'	S 14°50.0'	194°06.1'	S 22°31.0'	157°25.9'	S 23°49.7'
13	330°15.7'	N 12°12.1'	263°10.0'	S 14°50.0'	209°08.8'	S 22°31.0'	172°28.8'	S 23°50.0'
14	345°15.6'	N 12°11.0'	278°12.5'	S 14°50.0'	224°11.4'	S 22°31.0'	187°31.7'	S 23°50.3'
15	0°15.4'	N 12°09.9'	293°15.0'	S 14°50.1'	239°14.1'	S 22°31.0'	202°34.6'	S 23°50.6'
16	15°15.3'	N 12°08.8'	308°17.4'	S 14°50.1'	254°16.7'	S 22°31.0'	217°37.5'	S 23°50.8'
17	30°15.1'	N 12°07.7'	323°19.9'	S 14°50.1'	269°19.4'	S 22°31.0'	232°40.4'	S 23°51.1'
18	45°15.0'	N 12°06.6'	338°22.3'	S 14°50.1'	284°22.0'	S 22°31.1'	247°43.2'	S 23°51.4'
19	60°14.8'	N 12°05.5'	353°24.8'	S 14°50.1'	299°24.7'	S 22°31.1'	262°46.1'	S 23°51.6'
20	75°14.7'	N 12°04.4'	8°27.3'	S 14°50.1'	314°27.3'	S 22°31.1'	277°49.0'	S 23°51.9'
21	90°14.5'	N 12°03.3'	23°29.7'	S 14°50.1'	329°30.0'	S 22°31.1'	292°51.9'	S 23°52.2'
22	105°14.4'	N 12°02.1'	38°32.2'	S 14°50.1'	344°32.7'	S 22°31.1'	307°54.8'	S 23°52.5'
23	120°14.2'	N 12°01.0'	53°34.6'	S 14°50.2'	359°35.3'	S 22°31.1'	322°57.7'	S 23°52.7'

Thu Jul 12, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.7	
	v = -0.1' d = 1.1'		v = 2.5' d = 0.0'		v = 2.7' d = 0.0'		v = 2.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°14.1'	N 11°59.9'	68°37.1'	S 14°50.2'	14°38.0'	S 22°31.1'	338°00.6'	S 23°53.0'
1	150°13.9'	N 11°58.8'	83°39.6'	S 14°50.2'	29°40.6'	S 22°31.1'	353°03.5'	S 23°53.3'
2	165°13.8'	N 11°57.7'	98°42.0'	S 14°50.2'	44°43.3'	S 22°31.1'	8°06.4'	S 23°53.5'
3	180°13.6'	N 11°56.6'	113°44.5'	S 14°50.2'	59°45.9'	S 22°31.1'	23°09.3'	S 23°53.8'
4	195°13.5'	N 11°55.5'	128°46.9'	S 14°50.2'	74°48.6'	S 22°31.2'	38°12.2'	S 23°54.1'
5	210°13.3'	N 11°54.3'	143°49.4'	S 14°50.2'	89°51.2'	S 22°31.2'	53°15.1'	S 23°54.4'
6	225°13.2'	N 11°53.2'	158°51.8'	S 14°50.3'	104°53.9'	S 22°31.2'	68°18.0'	S 23°54.6'
7	240°13.0'	N 11°52.1'	173°54.3'	S 14°50.3'	119°56.5'	S 22°31.2'	83°20.9'	S 23°54.9'
8	255°12.9'	N 11°51.0'	188°56.7'	S 14°50.3'	134°59.2'	S 22°31.2'	98°23.8'	S 23°55.2'
9	270°12.7'	N 11°49.9'	203°59.2'	S 14°50.3'	150°01.8'	S 22°31.2'	113°26.7'	S 23°55.5'
10	285°12.6'	N 11°48.8'	219°01.7'	S 14°50.3'	165°04.5'	S 22°31.2'	128°29.6'	S 23°55.7'
11	300°12.4'	N 11°47.7'	234°04.1'	S 14°50.3'	180°07.1'	S 22°31.2'	143°32.6'	S 23°56.0'
12	315°12.3'	N 11°46.5'	249°06.6'	S 14°50.3'	195°09.8'	S 22°31.2'	158°35.5'	S 23°56.3'
13	330°12.2'	N 11°45.4'	264°09.0'	S 14°50.4'	210°12.4'	S 22°31.3'	173°38.4'	S 23°56.6'
14	345°12.0'	N 11°44.3'	279°11.5'	S 14°50.4'	225°15.1'	S 22°31.3'	188°41.3'	S 23°56.8'
15	0°11.9'	N 11°43.2'	294°13.9'	S 14°50.4'	240°17.7'	S 22°31.3'	203°44.2'	S 23°57.1'
16	15°11.7'	N 11°42.1'	309°16.4'	S 14°50.4'	255°20.4'	S 22°31.3'	218°47.1'	S 23°57.4'
17	30°11.6'	N 11°40.9'	324°18.8'	S 14°50.4'	270°23.1'	S 22°31.3'	233°50.0'	S 23°57.7'
18	45°11.5'	N 11°39.8'	339°21.3'	S 14°50.4'	285°25.7'	S 22°31.3'	248°53.0'	S 23°57.9'
19	60°11.3'	N 11°38.7'	354°23.7'	S 14°50.4'	300°28.4'	S 22°31.3'	263°55.9'	S 23°58.2'
20	75°11.2'	N 11°37.6'	9°26.2'	S 14°50.5'	315°31.0'	S 22°31.3'	278°58.8'	S 23°58.5'
21	90°11.1'	N 11°36.5'	24°28.6'	S 14°50.5'	330°33.7'	S 22°31.3'	294°01.7'	S 23°58.8'
22	105°10.9'	N 11°35.3'	39°31.1'	S 14°50.5'	345°36.3'	S 22°31.4'	309°04.6'	S 23°59.0'
23	120°10.8'	N 11°34.2'	54°33.5'	S 14°50.5'	0°39.0'	S 22°31.4'	324°07.6'	S 23°59.3'

Fri Jul 13, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.7	
	v = -0.1' d = 1.1'		v = 2.4' d = 0.0'		v = 2.7' d = 0.0'		v = 2.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°10.6'	N 11°33.1'	69°36.0'	S 14°50.5'	15°41.6'	S 22°31.4'	339°10.5'	S 23°59.6'
1	150°10.5'	N 11°32.0'	84°38.4'	S 14°50.5'	30°44.3'	S 22°31.4'	354°13.4'	S 23°59.9'
2	165°10.4'	N 11°30.8'	99°40.9'	S 14°50.6'	45°46.9'	S 22°31.4'	9°16.3'	S 24°00.1'
3	180°10.2'	N 11°29.7'	114°43.3'	S 14°50.6'	60°49.6'	S 22°31.4'	24°19.3'	S 24°00.4'
4	195°10.1'	N 11°28.6'	129°45.8'	S 14°50.6'	75°52.2'	S 22°31.4'	39°22.2'	S 24°00.7'
5	210°10.0'	N 11°27.5'	144°48.2'	S 14°50.6'	90°54.9'	S 22°31.4'	54°25.1'	S 24°01.0'
6	225°09.9'	N 11°26.3'	159°50.7'	S 14°50.6'	105°57.5'	S 22°31.4'	69°28.1'	S 24°01.2'
7	240°09.7'	N 11°25.2'	174°53.1'	S 14°50.6'	121°00.2'	S 22°31.4'	84°31.0'	S 24°01.5'
8	255°09.6'	N 11°24.1'	189°55.6'	S 14°50.7'	136°02.8'	S 22°31.5'	99°33.9'	S 24°01.8'
9	270°09.5'	N 11°23.0'	204°58.0'	S 14°50.7'	151°05.5'	S 22°31.5'	114°36.9'	S 24°02.1'
10	285°09.3'	N 11°21.8'	220°00.5'	S 14°50.7'	166°08.1'	S 22°31.5'	129°39.8'	S 24°02.3'
11	300°09.2'	N 11°20.7'	235°02.9'	S 14°50.7'	181°10.8'	S 22°31.5'	144°42.7'	S 24°02.6'
12	315°09.1'	N 11°19.6'	250°05.4'	S 14°50.7'	196°13.4'	S 22°31.5'	159°45.7'	S 24°02.9'
13	330°09.0'	N 11°18.5'	265°07.8'	S 14°50.7'	211°16.1'	S 22°31.5'	174°48.6'	S 24°03.2'
14	345°08.8'	N 11°17.3'	280°10.3'	S 14°50.8'	226°18.7'	S 22°31.5'	189°51.6'	S 24°03.4'
15	0°08.7'	N 11°16.2'	295°12.7'	S 14°50.8'	241°21.4'	S 22°31.5'	204°54.5'	S 24°03.7'
16	15°08.6'	N 11°15.1'	310°15.2'	S 14°50.8'	256°24.0'	S 22°31.5'	219°57.4'	S 24°04.0'
17	30°08.5'	N 11°13.9'	325°17.6'	S 14°50.8'	271°26.7'	S 22°31.6'	235°00.4'	S 24°04.3'
18	45°08.3'	N 11°12.8'	340°20.1'	S 14°50.8'	286°29.3'	S 22°31.6'	250°03.3'	S 24°04.5'
19	60°08.2'	N 11°11.7'	355°22.5'	S 14°50.8'	301°32.0'	S 22°31.6'	265°06.3'	S 24°04.8'
20	75°08.1'	N 11°10.5'	10°24.9'	S 14°50.9'	316°34.6'	S 22°31.6'	280°09.2'	S 24°05.1'
21	90°08.0'	N 11°09.4'	25°27.4'	S 14°50.9'	331°37.3'	S 22°31.6'	295°12.2'	S 24°05.4'
22	105°07.8'	N 11°08.3'	40°29.8'	S 14°50.9'	346°39.9'	S 22°31.6'	310°15.1'	S 24°05.6'
23	120°07.7'	N 11°07.2'	55°32.3'	S 14°50.9'	1°42.6'	S 22°31.6'	325°18.1'	S 24°05.9'

Sat Jul 14, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.7	
	v = -0.1' d = 1.1'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.0' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°07.6'	N 11°06.0'	70°34.7'	S 14°50.9'	16°45.2'	S 22°31.6'	340°21.0'	S 24°06.2'
1	150°07.5'	N 11°04.9'	85°37.2'	S 14°50.9'	31°47.9'	S 22°31.6'	355°24.0'	S 24°06.5'
2	165°07.4'	N 11°03.8'	100°39.6'	S 14°51.0'	46°50.5'	S 22°31.7'	10°26.9'	S 24°06.7'
3	180°07.3'	N 11°02.6'	115°42.0'	S 14°51.0'	61°53.2'	S 22°31.7'	25°29.9'	S 24°07.0'
4	195°07.1'	N 11°01.5'	130°44.5'	S 14°51.0'	76°55.8'	S 22°31.7'	40°32.9'	S 24°07.3'
5	210°07.0'	N 11°00.4'	145°46.9'	S 14°51.0'	91°58.5'	S 22°31.7'	55°35.8'	S 24°07.6'
6	225°06.9'	N 10°59.2'	160°49.4'	S 14°51.0'	107°01.1'	S 22°31.7'	70°38.8'	S 24°07.9'
7	240°06.8'	N 10°58.1'	175°51.8'	S 14°51.1'	122°03.8'	S 22°31.7'	85°41.7'	S 24°08.1'
8	255°06.7'	N 10°56.9'	190°54.3'	S 14°51.1'	137°06.4'	S 22°31.7'	100°44.7'	S 24°08.4'
9	270°06.6'	N 10°55.8'	205°56.7'	S 14°51.1'	152°09.1'	S 22°31.7'	115°47.7'	S 24°08.7'
10	285°06.5'	N 10°54.7'	220°59.1'	S 14°51.1'	167°11.7'	S 22°31.7'	130°50.6'	S 24°09.0'
11	300°06.3'	N 10°53.5'	236°01.6'	S 14°51.1'	182°14.4'	S 22°31.7'	145°53.6'	S 24°09.2'
12	315°06.2'	N 10°52.4'	251°04.0'	S 14°51.1'	197°17.0'	S 22°31.8'	160°56.6'	S 24°09.5'
13	330°06.1'	N 10°51.3'	266°06.4'	S 14°51.2'	212°19.7'	S 22°31.8'	175°59.5'	S 24°09.8'
14	345°06.0'	N 10°50.1'	281°08.9'	S 14°51.2'	227°22.3'	S 22°31.8'	191°02.5'	S 24°10.1'
15	0°05.9'	N 10°49.0'	296°11.3'	S 14°51.2'	242°25.0'	S 22°31.8'	206°05.5'	S 24°10.3'
16	15°05.8'	N 10°47.8'	311°13.8'	S 14°51.2'	257°27.6'	S 22°31.8'	221°08.4'	S 24°10.6'
17	30°05.7'	N 10°46.7'	326°16.2'	S 14°51.2'	272°30.3'	S 22°31.8'	236°11.4'	S 24°10.9'
18	45°05.6'	N 10°45.6'	341°18.6'	S 14°51.3'	287°32.9'	S 22°31.8'	251°14.4'	S 24°11.2'
19	60°05.5'	N 10°44.4'	356°21.1'	S 14°51.3'	302°35.6'	S 22°31.8'	266°17.4'	S 24°11.5'
20	75°05.4'	N 10°43.3'	11°23.5'	S 14°51.3'	317°38.2'	S 22°31.8'	281°20.3'	S 24°11.7'
21	90°05.3'	N 10°42.1'	26°25.9'	S 14°51.3'	332°40.9'	S 22°31.9'	296°23.3'	S 24°12.0'
22	105°05.1'	N 10°41.0'	41°28.4'	S 14°51.3'	347°43.5'	S 22°31.9'	311°26.3'	S 24°12.3'
23	120°05.0'	N 10°39.9'	56°30.8'	S 14°51.4'	2°46.2'	S 22°31.9'	326°29.3'	S 24°12.6'

Sun Jul 15, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.8	
	v = -0.1' d = 1.1'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.0' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°04.9'	N 10°38.7'	71°33.3'	S 14°51.4'	17°48.8'	S 22°31.9'	341°32.2'	S 24°12.8'
1	150°04.8'	N 10°37.6'	86°35.7'	S 14°51.4'	32°51.5'	S 22°31.9'	356°35.2'	S 24°13.1'
2	165°04.7'	N 10°36.4'	101°38.1'	S 14°51.4'	47°54.1'	S 22°31.9'	11°38.2'	S 24°13.4'
3	180°04.6'	N 10°35.3'	116°40.6'	S 14°51.4'	62°56.8'	S 22°31.9'	26°41.2'	S 24°13.7'
4	195°04.5'	N 10°34.1'	131°43.0'	S 14°51.5'	77°59.4'	S 22°31.9'	41°44.2'	S 24°14.0'
5	210°04.4'	N 10°33.0'	146°45.4'	S 14°51.5'	93°02.1'	S 22°31.9'	56°47.1'	S 24°14.2'
6	225°04.3'	N 10°31.9'	161°47.9'	S 14°51.5'	108°04.7'	S 22°31.9'	71°50.1'	S 24°14.5'
7	240°04.2'	N 10°30.7'	176°50.3'	S 14°51.5'	123°07.3'	S 22°32.0'	86°53.1'	S 24°14.8'
8	255°04.1'	N 10°29.6'	191°52.7'	S 14°51.5'	138°10.0'	S 22°32.0'	101°56.1'	S 24°15.1'
9	270°04.0'	N 10°28.4'	206°55.2'	S 14°51.6'	153°12.6'	S 22°32.0'	116°59.1'	S 24°15.3'
10	285°03.9'	N 10°27.3'	221°57.6'	S 14°51.6'	168°15.3'	S 22°32.0'	132°02.1'	S 24°15.6'
11	300°03.8'	N 10°26.1'	237°00.0'	S 14°51.6'	183°17.9'	S 22°32.0'	147°05.1'	S 24°15.9'
12	315°03.7'	N 10°25.0'	252°02.5'	S 14°51.6'	198°20.6'	S 22°32.0'	162°08.1'	S 24°16.2'
13	330°03.6'	N 10°23.8'	267°04.9'	S 14°51.7'	213°23.2'	S 22°32.0'	177°11.1'	S 24°16.4'
14	345°03.5'	N 10°22.7'	282°07.3'	S 14°51.7'	228°25.9'	S 22°32.0'	192°14.1'	S 24°16.7'
15	0°03.5'	N 10°21.5'	297°09.8'	S 14°51.7'	243°28.5'	S 22°32.0'	207°17.0'	S 24°17.0'
16	15°03.4'	N 10°20.4'	312°12.2'	S 14°51.7'	258°31.2'	S 22°32.0'	222°20.0'	S 24°17.3'
17	30°03.3'	N 10°19.3'	327°14.6'	S 14°51.7'	273°33.8'	S 22°32.1'	237°23.0'	S 24°17.6'
18	45°03.2'	N 10°18.1'	342°17.0'	S 14°51.8'	288°36.5'	S 22°32.1'	252°26.0'	S 24°17.8'
19	60°03.1'	N 10°17.0'	357°19.5'	S 14°51.8'	303°39.1'	S 22°32.1'	267°29.0'	S 24°18.1'
20	75°03.0'	N 10°15.8'	12°21.9'	S 14°51.8'	318°41.8'	S 22°32.1'	282°32.0'	S 24°18.4'
21	90°02.9'	N 10°14.7'	27°24.3'	S 14°51.8'	333°44.4'	S 22°32.1'	297°35.0'	S 24°18.7'
22	105°02.8'	N 10°13.5'	42°26.8'	S 14°51.8'	348°47.1'	S 22°32.1'	312°38.0'	S 24°18.9'
23	120°02.7'	N 10°12.4'	57°29.2'	S 14°51.9'	3°49.7'	S 22°32.1'	327°41.0'	S 24°19.2'

Mon Jul 16, 2018 UTC

UTC	Venus -4.0		Jupiter -2.1		Saturn +0.1		Mars -2.8	
	v = -0.1' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.0' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°02.6'	N 10°11.2'	72°31.6'	S 14°51.9'	18°52.4'	S 22°32.1'	342°44.0'	S 24°19.5'
1	150°02.5'	N 10°10.1'	87°34.0'	S 14°51.9'	33°55.0'	S 22°32.1'	357°47.1'	S 24°19.8'
2	165°02.5'	N 10°08.9'	102°36.5'	S 14°51.9'	48°57.6'	S 22°32.2'	12°50.1'	S 24°20.1'
3	180°02.4'	N 10°07.8'	117°38.9'	S 14°52.0'	64°00.3'	S 22°32.2'	27°53.1'	S 24°20.3'
4	195°02.3'	N 10°06.6'	132°41.3'	S 14°52.0'	79°02.9'	S 22°32.2'	42°56.1'	S 24°20.6'
5	210°02.2'	N 10°05.4'	147°43.8'	S 14°52.0'	94°05.6'	S 22°32.2'	57°59.1'	S 24°20.9'
6	225°02.1'	N 10°04.3'	162°46.2'	S 14°52.0'	109°08.2'	S 22°32.2'	73°02.1'	S 24°21.2'
7	240°02.0'	N 10°03.1'	177°48.6'	S 14°52.1'	124°10.9'	S 22°32.2'	88°05.1'	S 24°21.4'
8	255°01.9'	N 10°02.0'	192°51.0'	S 14°52.1'	139°13.5'	S 22°32.2'	103°08.1'	S 24°21.7'
9	270°01.9'	N 10°00.8'	207°53.5'	S 14°52.1'	154°16.2'	S 22°32.2'	118°11.1'	S 24°22.0'
10	285°01.8'	N 9°59.7'	222°55.9'	S 14°52.1'	169°18.8'	S 22°32.2'	133°14.1'	S 24°22.3'
11	300°01.7'	N 9°58.5'	237°58.3'	S 14°52.1'	184°21.5'	S 22°32.2'	148°17.2'	S 24°22.6'
12	315°01.6'	N 9°57.4'	253°00.7'	S 14°52.2'	199°24.1'	S 22°32.3'	163°20.2'	S 24°22.8'
13	330°01.5'	N 9°56.2'	268°03.2'	S 14°52.2'	214°26.7'	S 22°32.3'	178°23.2'	S 24°23.1'
14	345°01.4'	N 9°55.1'	283°05.6'	S 14°52.2'	229°29.4'	S 22°32.3'	193°26.2'	S 24°23.4'
15	0°01.4'	N 9°53.9'	298°08.0'	S 14°52.2'	244°32.0'	S 22°32.3'	208°29.2'	S 24°23.7'
16	15°01.3'	N 9°52.7'	313°10.4'	S 14°52.3'	259°34.7'	S 22°32.3'	223°32.2'	S 24°23.9'
17	30°01.2'	N 9°51.6'	328°12.9'	S 14°52.3'	274°37.3'	S 22°32.3'	238°35.3'	S 24°24.2'
18	45°01.1'	N 9°50.4'	343°15.3'	S 14°52.3'	289°40.0'	S 22°32.3'	253°38.3'	S 24°24.5'
19	60°01.1'	N 9°49.3'	358°17.7'	S 14°52.3'	304°42.6'	S 22°32.3'	268°41.3'	S 24°24.8'
20	75°01.0'	N 9°48.1'	13°20.1'	S 14°52.4'	319°45.3'	S 22°32.3'	283°44.3'	S 24°25.0'
21	90°00.9'	N 9°47.0'	28°22.5'	S 14°52.4'	334°47.9'	S 22°32.4'	298°47.4'	S 24°25.3'
22	105°00.8'	N 9°45.8'	43°25.0'	S 14°52.4'	349°50.6'	S 22°32.4'	313°50.4'	S 24°25.6'
23	120°00.8'	N 9°44.6'	58°27.4'	S 14°52.4'	4°53.2'	S 22°32.4'	328°53.4'	S 24°25.9'

Tue Jul 17, 2018 UTC

UTC	Venus -4.0		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = -0.1' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.0' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°00.7'	N 9°43.5'	73°29.8'	S 14°52.5'	19°55.8'	S 22°32.4'	343°56.4'	S 24°26.2'
1	150°00.6'	N 9°42.3'	88°32.2'	S 14°52.5'	34°58.5'	S 22°32.4'	358°59.5'	S 24°26.4'
2	165°00.5'	N 9°41.2'	103°34.6'	S 14°52.5'	50°01.1'	S 22°32.4'	14°02.5'	S 24°26.7'
3	180°00.5'	N 9°40.0'	118°37.1'	S 14°52.5'	65°03.8'	S 22°32.4'	29°05.5'	S 24°27.0'
4	195°00.4'	N 9°38.8'	133°39.5'	S 14°52.6'	80°06.4'	S 22°32.4'	44°08.6'	S 24°27.3'
5	210°00.3'	N 9°37.7'	148°41.9'	S 14°52.6'	95°09.1'	S 22°32.4'	59°11.6'	S 24°27.5'
6	225°00.3'	N 9°36.5'	163°44.3'	S 14°52.6'	110°11.7'	S 22°32.4'	74°14.6'	S 24°27.8'
7	240°00.2'	N 9°35.4'	178°46.7'	S 14°52.6'	125°14.4'	S 22°32.5'	89°17.7'	S 24°28.1'
8	255°00.1'	N 9°34.2'	193°49.2'	S 14°52.7'	140°17.0'	S 22°32.5'	104°20.7'	S 24°28.4'
9	270°00.0'	N 9°33.0'	208°51.6'	S 14°52.7'	155°19.6'	S 22°32.5'	119°23.7'	S 24°28.6'
10	284°60.0'	N 9°31.9'	223°54.0'	S 14°52.7'	170°22.3'	S 22°32.5'	134°26.8'	S 24°28.9'
11	299°59.9'	N 9°30.7'	238°56.4'	S 14°52.7'	185°24.9'	S 22°32.5'	149°29.8'	S 24°29.2'
12	314°59.8'	N 9°29.5'	253°58.8'	S 14°52.8'	200°27.6'	S 22°32.5'	164°32.8'	S 24°29.5'
13	329°59.8'	N 9°28.4'	269°01.2'	S 14°52.8'	215°30.2'	S 22°32.5'	179°35.9'	S 24°29.8'
14	344°59.7'	N 9°27.2'	284°03.7'	S 14°52.8'	230°32.9'	S 22°32.5'	194°38.9'	S 24°30.0'
15	359°59.6'	N 9°26.1'	299°06.1'	S 14°52.8'	245°35.5'	S 22°32.5'	209°42.0'	S 24°30.3'
16	14°59.6'	N 9°24.9'	314°08.5'	S 14°52.9'	260°38.2'	S 22°32.5'	224°45.0'	S 24°30.6'
17	29°59.5'	N 9°23.7'	329°10.9'	S 14°52.9'	275°40.8'	S 22°32.6'	239°48.0'	S 24°30.9'
18	44°59.5'	N 9°22.6'	344°13.3'	S 14°52.9'	290°43.4'	S 22°32.6'	254°51.1'	S 24°31.1'
19	59°59.4'	N 9°21.4'	359°15.7'	S 14°52.9'	305°46.1'	S 22°32.6'	269°54.1'	S 24°31.4'
20	74°59.3'	N 9°20.2'	14°18.2'	S 14°53.0'	320°48.7'	S 22°32.6'	284°57.2'	S 24°31.7'
21	89°59.3'	N 9°19.1'	29°20.6'	S 14°53.0'	335°51.4'	S 22°32.6'	300°00.2'	S 24°32.0'
22	104°59.2'	N 9°17.9'	44°23.0'	S 14°53.0'	350°54.0'	S 22°32.6'	315°03.3'	S 24°32.2'
23	119°59.2'	N 9°16.7'	59°25.4'	S 14°53.0'	5°56.7'	S 22°32.6'	330°06.3'	S 24°32.5'

Wed Jul 18, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = -0.1' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.1' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°59.1'	N 9°15.6'	74°27.8'	S 14°53.1'	20°59.3'	S 22°32.6'	345°09.4'	S 24°32.8'
1	149°59.0'	N 9°14.4'	89°30.2'	S 14°53.1'	36°01.9'	S 22°32.6'	0°12.4'	S 24°33.1'
2	164°59.0'	N 9°13.2'	104°32.6'	S 14°53.1'	51°04.6'	S 22°32.7'	15°15.5'	S 24°33.3'
3	179°58.9'	N 9°12.1'	119°35.0'	S 14°53.2'	66°07.2'	S 22°32.7'	30°18.5'	S 24°33.6'
4	194°58.9'	N 9°10.9'	134°37.5'	S 14°53.2'	81°09.9'	S 22°32.7'	45°21.6'	S 24°33.9'
5	209°58.8'	N 9°09.7'	149°39.9'	S 14°53.2'	96°12.5'	S 22°32.7'	60°24.6'	S 24°34.2'
6	224°58.8'	N 9°08.6'	164°42.3'	S 14°53.2'	111°15.2'	S 22°32.7'	75°27.7'	S 24°34.4'
7	239°58.7'	N 9°07.4'	179°44.7'	S 14°53.3'	126°17.8'	S 22°32.7'	90°30.7'	S 24°34.7'
8	254°58.6'	N 9°06.2'	194°47.1'	S 14°53.3'	141°20.4'	S 22°32.7'	105°33.8'	S 24°35.0'
9	269°58.6'	N 9°05.1'	209°49.5'	S 14°53.3'	156°23.1'	S 22°32.7'	120°36.9'	S 24°35.3'
10	284°58.5'	N 9°03.9'	224°51.9'	S 14°53.3'	171°25.7'	S 22°32.7'	135°39.9'	S 24°35.5'
11	299°58.5'	N 9°02.7'	239°54.3'	S 14°53.4'	186°28.4'	S 22°32.7'	150°43.0'	S 24°35.8'
12	314°58.4'	N 9°01.5'	254°56.7'	S 14°53.4'	201°31.0'	S 22°32.8'	165°46.0'	S 24°36.1'
13	329°58.4'	N 9°00.4'	269°59.2'	S 14°53.4'	216°33.6'	S 22°32.8'	180°49.1'	S 24°36.4'
14	344°58.3'	N 8°59.2'	285°01.6'	S 14°53.5'	231°36.3'	S 22°32.8'	195°52.2'	S 24°36.6'
15	359°58.3'	N 8°58.0'	300°04.0'	S 14°53.5'	246°38.9'	S 22°32.8'	210°55.2'	S 24°36.9'
16	14°58.2'	N 8°56.9'	315°06.4'	S 14°53.5'	261°41.6'	S 22°32.8'	225°58.3'	S 24°37.2'
17	29°58.2'	N 8°55.7'	330°08.8'	S 14°53.5'	276°44.2'	S 22°32.8'	241°01.3'	S 24°37.5'
18	44°58.1'	N 8°54.5'	345°11.2'	S 14°53.6'	291°46.9'	S 22°32.8'	256°04.4'	S 24°37.7'
19	59°58.1'	N 8°53.3'	0°13.6'	S 14°53.6'	306°49.5'	S 22°32.8'	271°07.5'	S 24°38.0'
20	74°58.0'	N 8°52.2'	15°16.0'	S 14°53.6'	321°52.1'	S 22°32.8'	286°10.5'	S 24°38.3'
21	89°58.0'	N 8°51.0'	30°18.4'	S 14°53.7'	336°54.8'	S 22°32.8'	301°13.6'	S 24°38.6'
22	104°58.0'	N 8°49.8'	45°20.8'	S 14°53.7'	351°57.4'	S 22°32.9'	316°16.7'	S 24°38.8'
23	119°57.9'	N 8°48.6'	60°23.2'	S 14°53.7'	7°00.1'	S 22°32.9'	331°19.7'	S 24°39.1'

Thu Jul 19, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = -0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.1' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°57.9'	N 8°47.5'	75°25.6'	S 14°53.7'	22°02.7'	S 22°32.9'	346°22.8'	S 24°39.4'
1	149°57.8'	N 8°46.3'	90°28.0'	S 14°53.8'	37°05.3'	S 22°32.9'	1°25.9'	S 24°39.7'
2	164°57.8'	N 8°45.1'	105°30.4'	S 14°53.8'	52°08.0'	S 22°32.9'	16°29.0'	S 24°39.9'
3	179°57.7'	N 8°43.9'	120°32.9'	S 14°53.8'	67°10.6'	S 22°32.9'	31°32.0'	S 24°40.2'
4	194°57.7'	N 8°42.8'	135°35.3'	S 14°53.9'	82°13.3'	S 22°32.9'	46°35.1'	S 24°40.5'
5	209°57.6'	N 8°41.6'	150°37.7'	S 14°53.9'	97°15.9'	S 22°32.9'	61°38.2'	S 24°40.7'
6	224°57.6'	N 8°40.4'	165°40.1'	S 14°53.9'	112°18.5'	S 22°32.9'	76°41.3'	S 24°41.0'
7	239°57.6'	N 8°39.2'	180°42.5'	S 14°53.9'	127°21.2'	S 22°32.9'	91°44.3'	S 24°41.3'
8	254°57.5'	N 8°38.1'	195°44.9'	S 14°54.0'	142°23.8'	S 22°33.0'	106°47.4'	S 24°41.6'
9	269°57.5'	N 8°36.9'	210°47.3'	S 14°54.0'	157°26.5'	S 22°33.0'	121°50.5'	S 24°41.8'
10	284°57.5'	N 8°35.7'	225°49.7'	S 14°54.0'	172°29.1'	S 22°33.0'	136°53.6'	S 24°42.1'
11	299°57.4'	N 8°34.5'	240°52.1'	S 14°54.1'	187°31.7'	S 22°33.0'	151°56.6'	S 24°42.4'
12	314°57.4'	N 8°33.4'	255°54.5'	S 14°54.1'	202°34.4'	S 22°33.0'	166°59.7'	S 24°42.7'
13	329°57.3'	N 8°32.2'	270°56.9'	S 14°54.1'	217°37.0'	S 22°33.0'	182°02.8'	S 24°42.9'
14	344°57.3'	N 8°31.0'	285°59.3'	S 14°54.2'	232°39.7'	S 22°33.0'	197°05.9'	S 24°43.2'
15	359°57.3'	N 8°29.8'	301°01.7'	S 14°54.2'	247°42.3'	S 22°33.0'	212°09.0'	S 24°43.5'
16	14°57.2'	N 8°28.6'	316°04.1'	S 14°54.2'	262°44.9'	S 22°33.0'	227°12.0'	S 24°43.7'
17	29°57.2'	N 8°27.5'	331°06.5'	S 14°54.2'	277°47.6'	S 22°33.0'	242°15.1'	S 24°44.0'
18	44°57.2'	N 8°26.3'	346°08.9'	S 14°54.3'	292°50.2'	S 22°33.1'	257°18.2'	S 24°44.3'
19	59°57.1'	N 8°25.1'	1°11.3'	S 14°54.3'	307°52.9'	S 22°33.1'	272°21.3'	S 24°44.6'
20	74°57.1'	N 8°23.9'	16°13.7'	S 14°54.3'	322°55.5'	S 22°33.1'	287°24.4'	S 24°44.8'
21	89°57.1'	N 8°22.7'	31°16.1'	S 14°54.4'	337°58.1'	S 22°33.1'	302°27.5'	S 24°45.1'
22	104°57.0'	N 8°21.6'	46°18.5'	S 14°54.4'	353°00.8'	S 22°33.1'	317°30.6'	S 24°45.4'
23	119°57.0'	N 8°20.4'	61°20.9'	S 14°54.4'	8°03.4'	S 22°33.1'	332°33.6'	S 24°45.6'

Fri Jul 20, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = -0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.1' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°57.0'	N 8°19.2'	76°23.3'	S 14°54.5'	23°06.1'	S 22°33.1'	347°36.7'	S 24°45.9'
1	149°57.0'	N 8°18.0'	91°25.7'	S 14°54.5'	38°08.7'	S 22°33.1'	2°39.8'	S 24°46.2'
2	164°56.9'	N 8°16.8'	106°28.1'	S 14°54.5'	53°11.3'	S 22°33.1'	17°42.9'	S 24°46.5'
3	179°56.9'	N 8°15.7'	121°30.5'	S 14°54.6'	68°14.0'	S 22°33.1'	32°46.0'	S 24°46.7'
4	194°56.9'	N 8°14.5'	136°32.9'	S 14°54.6'	83°16.6'	S 22°33.2'	47°49.1'	S 24°47.0'
5	209°56.8'	N 8°13.3'	151°35.3'	S 14°54.6'	98°19.2'	S 22°33.2'	62°52.2'	S 24°47.3'
6	224°56.8'	N 8°12.1'	166°37.7'	S 14°54.7'	113°21.9'	S 22°33.2'	77°55.3'	S 24°47.5'
7	239°56.8'	N 8°10.9'	181°40.1'	S 14°54.7'	128°24.5'	S 22°33.2'	92°58.4'	S 24°47.8'
8	254°56.8'	N 8°09.7'	196°42.5'	S 14°54.7'	143°27.2'	S 22°33.2'	108°01.5'	S 24°48.1'
9	269°56.7'	N 8°08.6'	211°44.9'	S 14°54.7'	158°29.8'	S 22°33.2'	123°04.6'	S 24°48.3'
10	284°56.7'	N 8°07.4'	226°47.3'	S 14°54.8'	173°32.4'	S 22°33.2'	138°07.7'	S 24°48.6'
11	299°56.7'	N 8°06.2'	241°49.7'	S 14°54.8'	188°35.1'	S 22°33.2'	153°10.8'	S 24°48.9'
12	314°56.7'	N 8°05.0'	256°52.0'	S 14°54.8'	203°37.7'	S 22°33.2'	168°13.9'	S 24°49.2'
13	329°56.7'	N 8°03.8'	271°54.4'	S 14°54.9'	218°40.3'	S 22°33.2'	183°17.0'	S 24°49.4'
14	344°56.6'	N 8°02.6'	286°56.8'	S 14°54.9'	233°43.0'	S 22°33.3'	198°20.0'	S 24°49.7'
15	359°56.6'	N 8°01.4'	301°59.2'	S 14°54.9'	248°45.6'	S 22°33.3'	213°23.1'	S 24°50.0'
16	14°56.6'	N 8°00.3'	317°01.6'	S 14°55.0'	263°48.3'	S 22°33.3'	228°26.2'	S 24°50.2'
17	29°56.6'	N 7°59.1'	332°04.0'	S 14°55.0'	278°50.9'	S 22°33.3'	243°29.4'	S 24°50.5'
18	44°56.6'	N 7°57.9'	347°06.4'	S 14°55.0'	293°53.5'	S 22°33.3'	258°32.5'	S 24°50.8'
19	59°56.5'	N 7°56.7'	2°08.8'	S 14°55.1'	308°56.2'	S 22°33.3'	273°35.6'	S 24°51.0'
20	74°56.5'	N 7°55.5'	17°11.2'	S 14°55.1'	323°58.8'	S 22°33.3'	288°38.7'	S 24°51.3'
21	89°56.5'	N 7°54.3'	32°13.6'	S 14°55.1'	339°01.4'	S 22°33.3'	303°41.8'	S 24°51.6'
22	104°56.5'	N 7°53.1'	47°16.0'	S 14°55.2'	354°04.1'	S 22°33.3'	318°44.9'	S 24°51.8'
23	119°56.5'	N 7°52.0'	62°18.4'	S 14°55.2'	9°06.7'	S 22°33.3'	333°48.0'	S 24°52.1'

Sat Jul 21, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = -0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.1' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°56.5'	N 7°50.8'	77°20.8'	S 14°55.2'	24°09.4'	S 22°33.4'	348°51.1'	S 24°52.4'
1	149°56.4'	N 7°49.6'	92°23.2'	S 14°55.3'	39°12.0'	S 22°33.4'	3°54.2'	S 24°52.6'
2	164°56.4'	N 7°48.4'	107°25.5'	S 14°55.3'	54°14.6'	S 22°33.4'	18°57.3'	S 24°52.9'
3	179°56.4'	N 7°47.2'	122°27.9'	S 14°55.3'	69°17.3'	S 22°33.4'	34°00.4'	S 24°53.2'
4	194°56.4'	N 7°46.0'	137°30.3'	S 14°55.4'	84°19.9'	S 22°33.4'	49°03.5'	S 24°53.4'
5	209°56.4'	N 7°44.8'	152°32.7'	S 14°55.4'	99°22.5'	S 22°33.4'	64°06.6'	S 24°53.7'
6	224°56.4'	N 7°43.6'	167°35.1'	S 14°55.4'	114°25.2'	S 22°33.4'	79°09.7'	S 24°54.0'
7	239°56.4'	N 7°42.4'	182°37.5'	S 14°55.5'	129°27.8'	S 22°33.4'	94°12.8'	S 24°54.2'
8	254°56.4'	N 7°41.3'	197°39.9'	S 14°55.5'	144°30.4'	S 22°33.4'	109°15.9'	S 24°54.5'
9	269°56.3'	N 7°40.1'	212°42.3'	S 14°55.5'	159°33.1'	S 22°33.4'	124°19.1'	S 24°54.8'
10	284°56.3'	N 7°38.9'	227°44.7'	S 14°55.6'	174°35.7'	S 22°33.5'	139°22.2'	S 24°55.0'
11	299°56.3'	N 7°37.7'	242°47.0'	S 14°55.6'	189°38.3'	S 22°33.5'	154°25.3'	S 24°55.3'
12	314°56.3'	N 7°36.5'	257°49.4'	S 14°55.6'	204°41.0'	S 22°33.5'	169°28.4'	S 24°55.6'
13	329°56.3'	N 7°35.3'	272°51.8'	S 14°55.7'	219°43.6'	S 22°33.5'	184°31.5'	S 24°55.8'
14	344°56.3'	N 7°34.1'	287°54.2'	S 14°55.7'	234°46.3'	S 22°33.5'	199°34.6'	S 24°56.1'
15	359°56.3'	N 7°32.9'	302°56.6'	S 14°55.7'	249°48.9'	S 22°33.5'	214°37.7'	S 24°56.4'
16	14°56.3'	N 7°31.7'	317°59.0'	S 14°55.8'	264°51.5'	S 22°33.5'	229°40.9'	S 24°56.6'
17	29°56.3'	N 7°30.5'	333°01.4'	S 14°55.8'	279°54.2'	S 22°33.5'	244°44.0'	S 24°56.9'
18	44°56.3'	N 7°29.3'	348°03.8'	S 14°55.9'	294°56.8'	S 22°33.5'	259°47.1'	S 24°57.2'
19	59°56.3'	N 7°28.2'	3°06.1'	S 14°55.9'	309°59.4'	S 22°33.5'	274°50.2'	S 24°57.4'
20	74°56.3'	N 7°27.0'	18°08.5'	S 14°55.9'	325°02.1'	S 22°33.6'	289°53.3'	S 24°57.7'
21	89°56.3'	N 7°25.8'	33°10.9'	S 14°56.0'	340°04.7'	S 22°33.6'	304°56.5'	S 24°58.0'
22	104°56.3'	N 7°24.6'	48°13.3'	S 14°56.0'	355°07.3'	S 22°33.6'	319°59.6'	S 24°58.2'
23	119°56.3'	N 7°23.4'	63°15.7'	S 14°56.0'	10°10.0'	S 22°33.6'	335°02.7'	S 24°58.5'

Sun Jul 22, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = 0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.1' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°56.3'	N 7°22.2'	78°18.1'	S 14°56.1'	25°12.6'	S 22°33.6'	350°05.8'	S 24°58.7'
1	149°56.3'	N 7°21.0'	93°20.4'	S 14°56.1'	40°15.2'	S 22°33.6'	5°08.9'	S 24°59.0'
2	164°56.3'	N 7°19.8'	108°22.8'	S 14°56.1'	55°17.9'	S 22°33.6'	20°12.1'	S 24°59.3'
3	179°56.3'	N 7°18.6'	123°25.2'	S 14°56.2'	70°20.5'	S 22°33.6'	35°15.2'	S 24°59.5'
4	194°56.3'	N 7°17.4'	138°27.6'	S 14°56.2'	85°23.1'	S 22°33.6'	50°18.3'	S 24°59.8'
5	209°56.3'	N 7°16.2'	153°30.0'	S 14°56.2'	100°25.8'	S 22°33.6'	65°21.4'	S 25°00.1'
6	224°56.3'	N 7°15.0'	168°32.4'	S 14°56.3'	115°28.4'	S 22°33.7'	80°24.6'	S 25°00.3'
7	239°56.3'	N 7°13.8'	183°34.7'	S 14°56.3'	130°31.0'	S 22°33.7'	95°27.7'	S 25°00.6'
8	254°56.3'	N 7°12.6'	198°37.1'	S 14°56.4'	145°33.7'	S 22°33.7'	110°30.8'	S 25°00.8'
9	269°56.3'	N 7°11.4'	213°39.5'	S 14°56.4'	160°36.3'	S 22°33.7'	125°33.9'	S 25°01.1'
10	284°56.3'	N 7°10.2'	228°41.9'	S 14°56.4'	175°38.9'	S 22°33.7'	140°37.1'	S 25°01.4'
11	299°56.3'	N 7°09.0'	243°44.3'	S 14°56.5'	190°41.6'	S 22°33.7'	155°40.2'	S 25°01.6'
12	314°56.3'	N 7°07.9'	258°46.6'	S 14°56.5'	205°44.2'	S 22°33.7'	170°43.3'	S 25°01.9'
13	329°56.3'	N 7°06.7'	273°49.0'	S 14°56.5'	220°46.8'	S 22°33.7'	185°46.5'	S 25°02.2'
14	344°56.3'	N 7°05.5'	288°51.4'	S 14°56.6'	235°49.5'	S 22°33.7'	200°49.6'	S 25°02.4'
15	359°56.3'	N 7°04.3'	303°53.8'	S 14°56.6'	250°52.1'	S 22°33.7'	215°52.7'	S 25°02.7'
16	14°56.3'	N 7°03.1'	318°56.2'	S 14°56.6'	265°54.7'	S 22°33.8'	230°55.8'	S 25°02.9'
17	29°56.4'	N 7°01.9'	333°58.5'	S 14°56.7'	280°57.4'	S 22°33.8'	245°59.0'	S 25°03.2'
18	44°56.4'	N 7°00.7'	349°00.9'	S 14°56.7'	295°60.0'	S 22°33.8'	261°02.1'	S 25°03.5'
19	59°56.4'	N 6°59.5'	4°03.3'	S 14°56.8'	311°02.6'	S 22°33.8'	276°05.2'	S 25°03.7'
20	74°56.4'	N 6°58.3'	19°05.7'	S 14°56.8'	326°05.3'	S 22°33.8'	291°08.4'	S 25°04.0'
21	89°56.4'	N 6°57.1'	34°08.1'	S 14°56.8'	341°07.9'	S 22°33.8'	306°11.5'	S 25°04.2'
22	104°56.4'	N 6°55.9'	49°10.4'	S 14°56.9'	356°10.5'	S 22°33.8'	321°14.6'	S 25°04.5'
23	119°56.4'	N 6°54.7'	64°12.8'	S 14°56.9'	11°13.2'	S 22°33.8'	336°17.8'	S 25°04.7'

Mon Jul 23, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = 0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.1' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°56.4'	N 6°53.5'	79°15.2'	S 14°56.9'	26°15.8'	S 22°33.8'	351°20.9'	S 25°05.0'
1	149°56.4'	N 6°52.3'	94°17.6'	S 14°57.0'	41°18.4'	S 22°33.8'	6°24.0'	S 25°05.3'
2	164°56.5'	N 6°51.1'	109°19.9'	S 14°57.0'	56°21.1'	S 22°33.8'	21°27.2'	S 25°05.5'
3	179°56.5'	N 6°49.9'	124°22.3'	S 14°57.1'	71°23.7'	S 22°33.9'	36°30.3'	S 25°05.8'
4	194°56.5'	N 6°48.7'	139°24.7'	S 14°57.1'	86°26.3'	S 22°33.9'	51°33.5'	S 25°06.0'
5	209°56.5'	N 6°47.5'	154°27.1'	S 14°57.1'	101°28.9'	S 22°33.9'	66°36.6'	S 25°06.3'
6	224°56.5'	N 6°46.3'	169°29.4'	S 14°57.2'	116°31.6'	S 22°33.9'	81°39.7'	S 25°06.6'
7	239°56.5'	N 6°45.1'	184°31.8'	S 14°57.2'	131°34.2'	S 22°33.9'	96°42.9'	S 25°06.8'
8	254°56.6'	N 6°43.9'	199°34.2'	S 14°57.2'	146°36.8'	S 22°33.9'	111°46.0'	S 25°07.1'
9	269°56.6'	N 6°42.7'	214°36.6'	S 14°57.3'	161°39.5'	S 22°33.9'	126°49.2'	S 25°07.3'
10	284°56.6'	N 6°41.5'	229°38.9'	S 14°57.3'	176°42.1'	S 22°33.9'	141°52.3'	S 25°07.6'
11	299°56.6'	N 6°40.3'	244°41.3'	S 14°57.4'	191°44.7'	S 22°33.9'	156°55.4'	S 25°07.8'
12	314°56.6'	N 6°39.1'	259°43.7'	S 14°57.4'	206°47.4'	S 22°33.9'	171°58.6'	S 25°08.1'
13	329°56.7'	N 6°37.9'	274°46.1'	S 14°57.4'	221°50.0'	S 22°34.0'	187°01.7'	S 25°08.3'
14	344°56.7'	N 6°36.7'	289°48.4'	S 14°57.5'	236°52.6'	S 22°34.0'	202°04.9'	S 25°08.6'
15	359°56.7'	N 6°35.5'	304°50.8'	S 14°57.5'	251°55.3'	S 22°34.0'	217°08.0'	S 25°08.9'
16	14°56.7'	N 6°34.3'	319°53.2'	S 14°57.6'	266°57.9'	S 22°34.0'	232°11.1'	S 25°09.1'
17	29°56.8'	N 6°33.1'	334°55.6'	S 14°57.6'	282°00.5'	S 22°34.0'	247°14.3'	S 25°09.4'
18	44°56.8'	N 6°31.9'	349°57.9'	S 14°57.6'	297°03.1'	S 22°34.0'	262°17.4'	S 25°09.6'
19	59°56.8'	N 6°30.7'	5°00.3'	S 14°57.7'	312°05.8'	S 22°34.0'	277°20.6'	S 25°09.9'
20	74°56.8'	N 6°29.4'	20°02.7'	S 14°57.7'	327°08.4'	S 22°34.0'	292°23.7'	S 25°10.1'
21	89°56.9'	N 6°28.2'	35°05.0'	S 14°57.8'	342°11.0'	S 22°34.0'	307°26.9'	S 25°10.4'
22	104°56.9'	N 6°27.0'	50°07.4'	S 14°57.8'	357°13.7'	S 22°34.0'	322°30.0'	S 25°10.6'
23	119°56.9'	N 6°25.8'	65°09.8'	S 14°57.8'	12°16.3'	S 22°34.1'	337°33.2'	S 25°10.9'

Tue Jul 24, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.8	
	v = 0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°56.9'	N 6°24.6'	80°12.1'	S 14°57.9'	27°18.9'	S 22°34.1'	352°36.3'	S 25°11.1'
1	149°57.0'	N 6°23.4'	95°14.5'	S 14°57.9'	42°21.6'	S 22°34.1'	7°39.5'	S 25°11.4'
2	164°57.0'	N 6°22.2'	110°16.9'	S 14°58.0'	57°24.2'	S 22°34.1'	22°42.6'	S 25°11.7'
3	179°57.0'	N 6°21.0'	125°19.3'	S 14°58.0'	72°26.8'	S 22°34.1'	37°45.8'	S 25°11.9'
4	194°57.1'	N 6°19.8'	140°21.6'	S 14°58.0'	87°29.4'	S 22°34.1'	52°48.9'	S 25°12.2'
5	209°57.1'	N 6°18.6'	155°24.0'	S 14°58.1'	102°32.1'	S 22°34.1'	67°52.1'	S 25°12.4'
6	224°57.1'	N 6°17.4'	170°26.4'	S 14°58.1'	117°34.7'	S 22°34.1'	82°55.2'	S 25°12.7'
7	239°57.1'	N 6°16.2'	185°28.7'	S 14°58.2'	132°37.3'	S 22°34.1'	97°58.4'	S 25°12.9'
8	254°57.2'	N 6°15.0'	200°31.1'	S 14°58.2'	147°40.0'	S 22°34.1'	113°01.5'	S 25°13.2'
9	269°57.2'	N 6°13.8'	215°33.5'	S 14°58.2'	162°42.6'	S 22°34.2'	128°04.7'	S 25°13.4'
10	284°57.2'	N 6°12.6'	230°35.8'	S 14°58.3'	177°45.2'	S 22°34.2'	143°07.8'	S 25°13.7'
11	299°57.3'	N 6°11.4'	245°38.2'	S 14°58.3'	192°47.8'	S 22°34.2'	158°11.0'	S 25°13.9'
12	314°57.3'	N 6°10.2'	260°40.6'	S 14°58.4'	207°50.5'	S 22°34.2'	173°14.1'	S 25°14.2'
13	329°57.3'	N 6°09.0'	275°42.9'	S 14°58.4'	222°53.1'	S 22°34.2'	188°17.3'	S 25°14.4'
14	344°57.4'	N 6°07.8'	290°45.3'	S 14°58.4'	237°55.7'	S 22°34.2'	203°20.4'	S 25°14.7'
15	359°57.4'	N 6°06.5'	305°47.7'	S 14°58.5'	252°58.4'	S 22°34.2'	218°23.6'	S 25°14.9'
16	14°57.5'	N 6°05.3'	320°50.0'	S 14°58.5'	268°01.0'	S 22°34.2'	233°26.7'	S 25°15.2'
17	29°57.5'	N 6°04.1'	335°52.4'	S 14°58.6'	283°03.6'	S 22°34.2'	248°29.9'	S 25°15.4'
18	44°57.5'	N 6°02.9'	350°54.7'	S 14°58.6'	298°06.2'	S 22°34.2'	263°33.0'	S 25°15.7'
19	59°57.6'	N 6°01.7'	5°57.1'	S 14°58.6'	313°08.9'	S 22°34.2'	278°36.2'	S 25°15.9'
20	74°57.6'	N 6°00.5'	20°59.5'	S 14°58.7'	328°11.5'	S 22°34.3'	293°39.4'	S 25°16.2'
21	89°57.7'	N 5°59.3'	36°01.8'	S 14°58.7'	343°14.1'	S 22°34.3'	308°42.5'	S 25°16.4'
22	104°57.7'	N 5°58.1'	51°04.2'	S 14°58.8'	358°16.7'	S 22°34.3'	323°45.7'	S 25°16.7'
23	119°57.7'	N 5°56.9'	66°06.6'	S 14°58.8'	13°19.4'	S 22°34.3'	338°48.8'	S 25°16.9'

Wed Jul 25, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.1		Mars -2.9	
	v = 0.0' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°57.8'	N 5°55.7'	81°08.9'	S 14°58.9'	28°22.0'	S 22°34.3'	353°52.0'	S 25°17.1'
1	149°57.8'	N 5°54.5'	96°11.3'	S 14°58.9'	43°24.6'	S 22°34.3'	8°55.1'	S 25°17.4'
2	164°57.9'	N 5°53.3'	111°13.7'	S 14°58.9'	58°27.2'	S 22°34.3'	23°58.3'	S 25°17.6'
3	179°57.9'	N 5°52.1'	126°16.0'	S 14°59.0'	73°29.9'	S 22°34.3'	39°01.5'	S 25°17.9'
4	194°57.9'	N 5°50.8'	141°18.4'	S 14°59.0'	88°32.5'	S 22°34.3'	54°04.6'	S 25°18.1'
5	209°58.0'	N 5°49.6'	156°20.7'	S 14°59.1'	103°35.1'	S 22°34.3'	69°07.8'	S 25°18.4'
6	224°58.0'	N 5°48.4'	171°23.1'	S 14°59.1'	118°37.8'	S 22°34.4'	84°10.9'	S 25°18.6'
7	239°58.1'	N 5°47.2'	186°25.5'	S 14°59.1'	133°40.4'	S 22°34.4'	99°14.1'	S 25°18.9'
8	254°58.1'	N 5°46.0'	201°27.8'	S 14°59.2'	148°43.0'	S 22°34.4'	114°17.3'	S 25°19.1'
9	269°58.2'	N 5°44.8'	216°30.2'	S 14°59.2'	163°45.6'	S 22°34.4'	129°20.4'	S 25°19.4'
10	284°58.2'	N 5°43.6'	231°32.5'	S 14°59.3'	178°48.3'	S 22°34.4'	144°23.6'	S 25°19.6'
11	299°58.3'	N 5°42.4'	246°34.9'	S 14°59.3'	193°50.9'	S 22°34.4'	159°26.7'	S 25°19.8'
12	314°58.3'	N 5°41.2'	261°37.3'	S 14°59.4'	208°53.5'	S 22°34.4'	174°29.9'	S 25°20.1'
13	329°58.4'	N 5°39.9'	276°39.6'	S 14°59.4'	223°56.1'	S 22°34.4'	189°33.1'	S 25°20.3'
14	344°58.4'	N 5°38.7'	291°42.0'	S 14°59.4'	238°58.8'	S 22°34.4'	204°36.2'	S 25°20.6'
15	359°58.5'	N 5°37.5'	306°44.3'	S 14°59.5'	254°01.4'	S 22°34.4'	219°39.4'	S 25°20.8'
16	14°58.5'	N 5°36.3'	321°46.7'	S 14°59.5'	269°04.0'	S 22°34.4'	234°42.6'	S 25°21.1'
17	29°58.6'	N 5°35.1'	336°49.0'	S 14°59.6'	284°06.6'	S 22°34.5'	249°45.7'	S 25°21.3'
18	44°58.6'	N 5°33.9'	351°51.4'	S 14°59.6'	299°09.3'	S 22°34.5'	264°48.9'	S 25°21.5'
19	59°58.7'	N 5°32.7'	6°53.8'	S 14°59.7'	314°11.9'	S 22°34.5'	279°52.1'	S 25°21.8'
20	74°58.7'	N 5°31.5'	21°56.1'	S 14°59.7'	329°14.5'	S 22°34.5'	294°55.2'	S 25°22.0'
21	89°58.8'	N 5°30.3'	36°58.5'	S 14°59.8'	344°17.1'	S 22°34.5'	309°58.4'	S 25°22.3'
22	104°58.8'	N 5°29.0'	52°00.8'	S 14°59.8'	359°19.8'	S 22°34.5'	325°01.5'	S 25°22.5'
23	119°58.9'	N 5°27.8'	67°03.2'	S 14°59.8'	14°22.4'	S 22°34.5'	340°04.7'	S 25°22.8'

Thu Jul 26, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.2		Mars -2.9	
	v = 0.1' d = 1.2'		v = 2.4' d = 0.0'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	134°58.9'	N 5°26.6'	82°05.5'	S 14°59.9'	29°25.0'	S 22°34.5'	355°07.9'	S 25°23.0'
1	149°59.0'	N 5°25.4'	97°07.9'	S 14°59.9'	44°27.6'	S 22°34.5'	10°11.0'	S 25°23.2'
2	164°59.1'	N 5°24.2'	112°10.2'	S 14°60.0'	59°30.3'	S 22°34.5'	25°14.2'	S 25°23.5'
3	179°59.1'	N 5°23.0'	127°12.6'	S 15°00.0'	74°32.9'	S 22°34.6'	40°17.4'	S 25°23.7'
4	194°59.2'	N 5°21.8'	142°15.0'	S 15°00.1'	89°35.5'	S 22°34.6'	55°20.5'	S 25°24.0'
5	209°59.2'	N 5°20.6'	157°17.3'	S 15°00.1'	104°38.1'	S 22°34.6'	70°23.7'	S 25°24.2'
6	224°59.3'	N 5°19.3'	172°19.7'	S 15°00.1'	119°40.8'	S 22°34.6'	85°26.9'	S 25°24.4'
7	239°59.4'	N 5°18.1'	187°22.0'	S 15°00.2'	134°43.4'	S 22°34.6'	100°30.1'	S 25°24.7'
8	254°59.4'	N 5°16.9'	202°24.4'	S 15°00.2'	149°46.0'	S 22°34.6'	115°33.2'	S 25°24.9'
9	269°59.5'	N 5°15.7'	217°26.7'	S 15°00.3'	164°48.6'	S 22°34.6'	130°36.4'	S 25°25.1'
10	284°59.5'	N 5°14.5'	232°29.1'	S 15°00.3'	179°51.2'	S 22°34.6'	145°39.6'	S 25°25.4'
11	299°59.6'	N 5°13.3'	247°31.4'	S 15°00.4'	194°53.9'	S 22°34.6'	160°42.7'	S 25°25.6'
12	314°59.7'	N 5°12.1'	262°33.8'	S 15°00.4'	209°56.5'	S 22°34.6'	175°45.9'	S 25°25.9'
13	329°59.7'	N 5°10.8'	277°36.1'	S 15°00.5'	224°59.1'	S 22°34.6'	190°49.1'	S 25°26.1'
14	344°59.8'	N 5°09.6'	292°38.5'	S 15°00.5'	240°01.7'	S 22°34.7'	205°52.2'	S 25°26.3'
15	359°59.8'	N 5°08.4'	307°40.8'	S 15°00.6'	255°04.4'	S 22°34.7'	220°55.4'	S 25°26.6'
16	14°59.9'	N 5°07.2'	322°43.2'	S 15°00.6'	270°07.0'	S 22°34.7'	235°58.6'	S 25°26.8'
17	29°60.0'	N 5°06.0'	337°45.5'	S 15°00.6'	285°09.6'	S 22°34.7'	251°01.7'	S 25°27.0'
18	45°00.0'	N 5°04.8'	352°47.9'	S 15°00.7'	300°12.2'	S 22°34.7'	266°04.9'	S 25°27.3'
19	60°00.1'	N 5°03.5'	7°50.2'	S 15°00.7'	315°14.8'	S 22°34.7'	281°08.1'	S 25°27.5'
20	75°00.2'	N 5°02.3'	22°52.6'	S 15°00.8'	330°17.5'	S 22°34.7'	296°11.3'	S 25°27.7'
21	90°00.2'	N 5°01.1'	37°54.9'	S 15°00.8'	345°20.1'	S 22°34.7'	311°14.4'	S 25°28.0'
22	105°00.3'	N 4°59.9'	52°57.3'	S 15°00.9'	0°22.7'	S 22°34.7'	326°17.6'	S 25°28.2'
23	120°00.4'	N 4°58.7'	67°59.6'	S 15°00.9'	15°25.3'	S 22°34.7'	341°20.8'	S 25°28.4'

Fri Jul 27, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.2		Mars -2.9	
	v = 0.1' d = 1.2'		v = 2.3' d = 0.0'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°00.5'	N 4°57.5'	83°02.0'	S 15°01.0'	30°28.0'	S 22°34.8'	356°24.0'	S 25°28.7'
1	150°00.5'	N 4°56.2'	98°04.3'	S 15°01.0'	45°30.6'	S 22°34.8'	11°27.1'	S 25°28.9'
2	165°00.6'	N 4°55.0'	113°06.7'	S 15°01.1'	60°33.2'	S 22°34.8'	26°30.3'	S 25°29.1'
3	180°00.7'	N 4°53.8'	128°09.0'	S 15°01.1'	75°35.8'	S 22°34.8'	41°33.5'	S 25°29.4'
4	195°00.7'	N 4°52.6'	143°11.4'	S 15°01.1'	90°38.4'	S 22°34.8'	56°36.6'	S 25°29.6'
5	210°00.8'	N 4°51.4'	158°13.7'	S 15°01.2'	105°41.1'	S 22°34.8'	71°39.8'	S 25°29.8'
6	225°00.9'	N 4°50.2'	173°16.1'	S 15°01.2'	120°43.7'	S 22°34.8'	86°43.0'	S 25°30.1'
7	240°01.0'	N 4°48.9'	188°18.4'	S 15°01.3'	135°46.3'	S 22°34.8'	101°46.2'	S 25°30.3'
8	255°01.0'	N 4°47.7'	203°20.8'	S 15°01.3'	150°48.9'	S 22°34.8'	116°49.3'	S 25°30.5'
9	270°01.1'	N 4°46.5'	218°23.1'	S 15°01.4'	165°51.5'	S 22°34.8'	131°52.5'	S 25°30.7'
10	285°01.2'	N 4°45.3'	233°25.4'	S 15°01.4'	180°54.2'	S 22°34.8'	146°55.7'	S 25°31.0'
11	300°01.2'	N 4°44.1'	248°27.8'	S 15°01.5'	195°56.8'	S 22°34.9'	161°58.9'	S 25°31.2'
12	315°01.3'	N 4°42.9'	263°30.1'	S 15°01.5'	210°59.4'	S 22°34.9'	177°02.0'	S 25°31.4'
13	330°01.4'	N 4°41.6'	278°32.5'	S 15°01.6'	226°02.0'	S 22°34.9'	192°05.2'	S 25°31.7'
14	345°01.5'	N 4°40.4'	293°34.8'	S 15°01.6'	241°04.6'	S 22°34.9'	207°08.4'	S 25°31.9'
15	0°01.6'	N 4°39.2'	308°37.2'	S 15°01.7'	256°07.3'	S 22°34.9'	222°11.6'	S 25°32.1'
16	15°01.6'	N 4°38.0'	323°39.5'	S 15°01.7'	271°09.9'	S 22°34.9'	237°14.7'	S 25°32.4'
17	30°01.7'	N 4°36.8'	338°41.9'	S 15°01.8'	286°12.5'	S 22°34.9'	252°17.9'	S 25°32.6'
18	45°01.8'	N 4°35.5'	353°44.2'	S 15°01.8'	301°15.1'	S 22°34.9'	267°21.1'	S 25°32.8'
19	60°01.9'	N 4°34.3'	8°46.5'	S 15°01.9'	316°17.7'	S 22°34.9'	282°24.3'	S 25°33.0'
20	75°02.0'	N 4°33.1'	23°48.9'	S 15°01.9'	331°20.4'	S 22°34.9'	297°27.5'	S 25°33.3'
21	90°02.0'	N 4°31.9'	38°51.2'	S 15°01.9'	346°23.0'	S 22°35.0'	312°30.6'	S 25°33.5'
22	105°02.1'	N 4°30.7'	53°53.6'	S 15°02.0'	1°25.6'	S 22°35.0'	327°33.8'	S 25°33.7'
23	120°02.2'	N 4°29.4'	68°55.9'	S 15°02.0'	16°28.2'	S 22°35.0'	342°37.0'	S 25°33.9'

Sat Jul 28, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.2		Mars -2.9	
	v = 0.1' d = 1.2'		v = 2.3' d = 0.0'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°02.3'	N 4°28.2'	83°58.2'	S 15°02.1'	31°30.8'	S 22°35.0'	357°40.2'	S 25°34.2'
1	150°02.4'	N 4°27.0'	99°00.6'	S 15°02.1'	46°33.5'	S 22°35.0'	12°43.3'	S 25°34.4'
2	165°02.4'	N 4°25.8'	114°02.9'	S 15°02.2'	61°36.1'	S 22°35.0'	27°46.5'	S 25°34.6'
3	180°02.5'	N 4°24.6'	129°05.3'	S 15°02.2'	76°38.7'	S 22°35.0'	42°49.7'	S 25°34.8'
4	195°02.6'	N 4°23.3'	144°07.6'	S 15°02.3'	91°41.3'	S 22°35.0'	57°52.9'	S 25°35.1'
5	210°02.7'	N 4°22.1'	159°10.0'	S 15°02.3'	106°43.9'	S 22°35.0'	72°56.1'	S 25°35.3'
6	225°02.8'	N 4°20.9'	174°12.3'	S 15°02.4'	121°46.6'	S 22°35.0'	87°59.2'	S 25°35.5'
7	240°02.9'	N 4°19.7'	189°14.6'	S 15°02.4'	136°49.2'	S 22°35.0'	103°02.4'	S 25°35.7'
8	255°03.0'	N 4°18.5'	204°17.0'	S 15°02.5'	151°51.8'	S 22°35.1'	118°05.6'	S 25°35.9'
9	270°03.1'	N 4°17.2'	219°19.3'	S 15°02.5'	166°54.4'	S 22°35.1'	133°08.8'	S 25°36.2'
10	285°03.1'	N 4°16.0'	234°21.6'	S 15°02.6'	181°57.0'	S 22°35.1'	148°11.9'	S 25°36.4'
11	300°03.2'	N 4°14.8'	249°24.0'	S 15°02.6'	196°59.6'	S 22°35.1'	163°15.1'	S 25°36.6'
12	315°03.3'	N 4°13.6'	264°26.3'	S 15°02.7'	212°02.3'	S 22°35.1'	178°18.3'	S 25°36.8'
13	330°03.4'	N 4°12.4'	279°28.7'	S 15°02.7'	227°04.9'	S 22°35.1'	193°21.5'	S 25°37.1'
14	345°03.5'	N 4°11.1'	294°31.0'	S 15°02.8'	242°07.5'	S 22°35.1'	208°24.7'	S 25°37.3'
15	0°03.6'	N 4°09.9'	309°33.3'	S 15°02.8'	257°10.1'	S 22°35.1'	223°27.8'	S 25°37.5'
16	15°03.7'	N 4°08.7'	324°35.7'	S 15°02.9'	272°12.7'	S 22°35.1'	238°31.0'	S 25°37.7'
17	30°03.8'	N 4°07.5'	339°38.0'	S 15°02.9'	287°15.3'	S 22°35.1'	253°34.2'	S 25°37.9'
18	45°03.9'	N 4°06.3'	354°40.3'	S 15°03.0'	302°18.0'	S 22°35.1'	268°37.4'	S 25°38.1'
19	60°04.0'	N 4°05.0'	9°42.7'	S 15°03.0'	317°20.6'	S 22°35.2'	283°40.6'	S 25°38.4'
20	75°04.1'	N 4°03.8'	24°45.0'	S 15°03.1'	332°23.2'	S 22°35.2'	298°43.7'	S 25°38.6'
21	90°04.1'	N 4°02.6'	39°47.3'	S 15°03.1'	347°25.8'	S 22°35.2'	313°46.9'	S 25°38.8'
22	105°04.2'	N 4°01.4'	54°49.7'	S 15°03.2'	2°28.4'	S 22°35.2'	328°50.1'	S 25°39.0'
23	120°04.3'	N 4°00.1'	69°52.0'	S 15°03.2'	17°31.0'	S 22°35.2'	343°53.3'	S 25°39.2'

Sun Jul 29, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.2		Mars -2.9	
	v = 0.1' d = 1.2'		v = 2.3' d = 0.1'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°04.4'	N 3°58.9'	84°54.4'	S 15°03.3'	32°33.7'	S 22°35.2'	358°56.5'	S 25°39.5'
1	150°04.5'	N 3°57.7'	99°56.7'	S 15°03.3'	47°36.3'	S 22°35.2'	13°59.6'	S 25°39.7'
2	165°04.6'	N 3°56.5'	114°59.0'	S 15°03.4'	62°38.9'	S 22°35.2'	29°02.8'	S 25°39.9'
3	180°04.7'	N 3°55.3'	130°01.4'	S 15°03.4'	77°41.5'	S 22°35.2'	44°06.0'	S 25°40.1'
4	195°04.8'	N 3°54.0'	145°03.7'	S 15°03.5'	92°44.1'	S 22°35.2'	59°09.2'	S 25°40.3'
5	210°04.9'	N 3°52.8'	160°06.0'	S 15°03.5'	107°46.7'	S 22°35.3'	74°12.4'	S 25°40.5'
6	225°05.0'	N 3°51.6'	175°08.4'	S 15°03.6'	122°49.4'	S 22°35.3'	89°15.5'	S 25°40.7'
7	240°05.1'	N 3°50.4'	190°10.7'	S 15°03.6'	137°52.0'	S 22°35.3'	104°18.7'	S 25°41.0'
8	255°05.2'	N 3°49.1'	205°13.0'	S 15°03.7'	152°54.6'	S 22°35.3'	119°21.9'	S 25°41.2'
9	270°05.3'	N 3°47.9'	220°15.3'	S 15°03.7'	167°57.2'	S 22°35.3'	134°25.1'	S 25°41.4'
10	285°05.4'	N 3°46.7'	235°17.7'	S 15°03.8'	182°59.8'	S 22°35.3'	149°28.3'	S 25°41.6'
11	300°05.5'	N 3°45.5'	250°20.0'	S 15°03.8'	198°02.4'	S 22°35.3'	164°31.4'	S 25°41.8'
12	315°05.6'	N 3°44.2'	265°22.3'	S 15°03.9'	213°05.0'	S 22°35.3'	179°34.6'	S 25°42.0'
13	330°05.7'	N 3°43.0'	280°24.7'	S 15°03.9'	228°07.7'	S 22°35.3'	194°37.8'	S 25°42.2'
14	345°05.8'	N 3°41.8'	295°27.0'	S 15°04.0'	243°10.3'	S 22°35.3'	209°41.0'	S 25°42.4'
15	0°05.9'	N 3°40.6'	310°29.3'	S 15°04.0'	258°12.9'	S 22°35.3'	224°44.2'	S 25°42.7'
16	15°06.0'	N 3°39.3'	325°31.7'	S 15°04.1'	273°15.5'	S 22°35.4'	239°47.4'	S 25°42.9'
17	30°06.2'	N 3°38.1'	340°34.0'	S 15°04.1'	288°18.1'	S 22°35.4'	254°50.5'	S 25°43.1'
18	45°06.3'	N 3°36.9'	355°36.3'	S 15°04.2'	303°20.7'	S 22°35.4'	269°53.7'	S 25°43.3'
19	60°06.4'	N 3°35.7'	10°38.6'	S 15°04.2'	318°23.3'	S 22°35.4'	284°56.9'	S 25°43.5'
20	75°06.5'	N 3°34.4'	25°41.0'	S 15°04.3'	333°26.0'	S 22°35.4'	300°00.1'	S 25°43.7'
21	90°06.6'	N 3°33.2'	40°43.3'	S 15°04.3'	348°28.6'	S 22°35.4'	315°03.3'	S 25°43.9'
22	105°06.7'	N 3°32.0'	55°45.6'	S 15°04.4'	3°31.2'	S 22°35.4'	330°06.4'	S 25°44.1'
23	120°06.8'	N 3°30.8'	70°48.0'	S 15°04.4'	18°33.8'	S 22°35.4'	345°09.6'	S 25°44.3'

Mon Jul 30, 2018 UTC

UTC	Venus -4.1		Jupiter -2.0		Saturn +0.2		Mars -2.9	
	v = 0.1' d = 1.2'		v = 2.3' d = 0.1'		v = 2.6' d = 0.0'		v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°06.9'	N 3°29.6'	85°50.3'	S 15°04.5'	33°36.4'	S 22°35.4'	0°12.8'	S 25°44.5'
1	150°07.0'	N 3°28.3'	100°52.6'	S 15°04.5'	48°39.0'	S 22°35.4'	15°16.0'	S 25°44.7'
2	165°07.1'	N 3°27.1'	115°54.9'	S 15°04.6'	63°41.6'	S 22°35.4'	30°19.2'	S 25°44.9'
3	180°07.2'	N 3°25.9'	130°57.3'	S 15°04.7'	78°44.3'	S 22°35.5'	45°22.3'	S 25°45.2'
4	195°07.4'	N 3°24.7'	145°59.6'	S 15°04.7'	93°46.9'	S 22°35.5'	60°25.5'	S 25°45.4'
5	210°07.5'	N 3°23.4'	161°01.9'	S 15°04.8'	108°49.5'	S 22°35.5'	75°28.7'	S 25°45.6'
6	225°07.6'	N 3°22.2'	176°04.2'	S 15°04.8'	123°52.1'	S 22°35.5'	90°31.9'	S 25°45.8'
7	240°07.7'	N 3°21.0'	191°06.6'	S 15°04.9'	138°54.7'	S 22°35.5'	105°35.1'	S 25°46.0'
8	255°07.8'	N 3°19.7'	206°08.9'	S 15°04.9'	153°57.3'	S 22°35.5'	120°38.2'	S 25°46.2'
9	270°07.9'	N 3°18.5'	221°11.2'	S 15°05.0'	168°59.9'	S 22°35.5'	135°41.4'	S 25°46.4'
10	285°08.0'	N 3°17.3'	236°13.5'	S 15°05.0'	184°02.5'	S 22°35.5'	150°44.6'	S 25°46.6'
11	300°08.1'	N 3°16.1'	251°15.9'	S 15°05.1'	199°05.2'	S 22°35.5'	165°47.8'	S 25°46.8'
12	315°08.3'	N 3°14.8'	266°18.2'	S 15°05.1'	214°07.8'	S 22°35.5'	180°51.0'	S 25°47.0'
13	330°08.4'	N 3°13.6'	281°20.5'	S 15°05.2'	229°10.4'	S 22°35.5'	195°54.1'	S 25°47.2'
14	345°08.5'	N 3°12.4'	296°22.8'	S 15°05.2'	244°13.0'	S 22°35.6'	210°57.3'	S 25°47.4'
15	0°08.6'	N 3°11.2'	311°25.2'	S 15°05.3'	259°15.6'	S 22°35.6'	226°00.5'	S 25°47.6'
16	15°08.7'	N 3°09.9'	326°27.5'	S 15°05.3'	274°18.2'	S 22°35.6'	241°03.7'	S 25°47.8'
17	30°08.9'	N 3°08.7'	341°29.8'	S 15°05.4'	289°20.8'	S 22°35.6'	256°06.9'	S 25°48.0'
18	45°09.0'	N 3°07.5'	356°32.1'	S 15°05.4'	304°23.4'	S 22°35.6'	271°10.1'	S 25°48.2'
19	60°09.1'	N 3°06.3'	11°34.5'	S 15°05.5'	319°26.0'	S 22°35.6'	286°13.2'	S 25°48.4'
20	75°09.2'	N 3°05.0'	26°36.8'	S 15°05.6'	334°28.7'	S 22°35.6'	301°16.4'	S 25°48.6'
21	90°09.3'	N 3°03.8'	41°39.1'	S 15°05.6'	349°31.3'	S 22°35.6'	316°19.6'	S 25°48.8'
22	105°09.5'	N 3°02.6'	56°41.4'	S 15°05.7'	4°33.9'	S 22°35.6'	331°22.8'	S 25°49.0'
23	120°09.6'	N 3°01.4'	71°43.7'	S 15°05.7'	19°36.5'	S 22°35.6'	346°26.0'	S 25°49.2'

Tue Jul 31, 2018 UTC

UTC	Venus -4.1 v = 0.1' d = 1.2'		Jupiter -2.0 v = 2.3' d = 0.1'		Saturn +0.2 v = 2.6' d = 0.0'		Mars -2.9 v = 3.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	135°09.7'	N 3°00.1'	86°46.1'	S 15°05.8'	34°39.1'	S 22°35.6'	1°29.1'	S 25°49.4'
1	150°09.8'	N 2°58.9'	101°48.4'	S 15°05.8'	49°41.7'	S 22°35.7'	16°32.3'	S 25°49.6'
2	165°09.9'	N 2°57.7'	116°50.7'	S 15°05.9'	64°44.3'	S 22°35.7'	31°35.5'	S 25°49.8'
3	180°10.1'	N 2°56.5'	131°53.0'	S 15°05.9'	79°46.9'	S 22°35.7'	46°38.7'	S 25°50.0'
4	195°10.2'	N 2°55.2'	146°55.3'	S 15°06.0'	94°49.5'	S 22°35.7'	61°41.8'	S 25°50.2'
5	210°10.3'	N 2°54.0'	161°57.7'	S 15°06.0'	109°52.1'	S 22°35.7'	76°45.0'	S 25°50.4'
6	225°10.4'	N 2°52.8'	176°60.0'	S 15°06.1'	124°54.8'	S 22°35.7'	91°48.2'	S 25°50.6'
7	240°10.6'	N 2°51.5'	192°02.3'	S 15°06.2'	139°57.4'	S 22°35.7'	106°51.4'	S 25°50.8'
8	255°10.7'	N 2°50.3'	207°04.6'	S 15°06.2'	154°60.0'	S 22°35.7'	121°54.6'	S 25°51.0'
9	270°10.8'	N 2°49.1'	222°06.9'	S 15°06.3'	170°02.6'	S 22°35.7'	136°57.7'	S 25°51.2'
10	285°11.0'	N 2°47.9'	237°09.2'	S 15°06.3'	185°05.2'	S 22°35.7'	152°00.9'	S 25°51.3'
11	300°11.1'	N 2°46.6'	252°11.6'	S 15°06.4'	200°07.8'	S 22°35.7'	167°04.1'	S 25°51.5'
12	315°11.2'	N 2°45.4'	267°13.9'	S 15°06.4'	215°10.4'	S 22°35.8'	182°07.3'	S 25°51.7'
13	330°11.3'	N 2°44.2'	282°16.2'	S 15°06.5'	230°13.0'	S 22°35.8'	197°10.5'	S 25°51.9'
14	345°11.5'	N 2°42.9'	297°18.5'	S 15°06.5'	245°15.6'	S 22°35.8'	212°13.6'	S 25°52.1'
15	0°11.6'	N 2°41.7'	312°20.8'	S 15°06.6'	260°18.2'	S 22°35.8'	227°16.8'	S 25°52.3'
16	15°11.7'	N 2°40.5'	327°23.1'	S 15°06.6'	275°20.8'	S 22°35.8'	242°20.0'	S 25°52.5'
17	30°11.9'	N 2°39.3'	342°25.5'	S 15°06.7'	290°23.5'	S 22°35.8'	257°23.2'	S 25°52.7'
18	45°12.0'	N 2°38.0'	357°27.8'	S 15°06.8'	305°26.1'	S 22°35.8'	272°26.3'	S 25°52.9'
19	60°12.1'	N 2°36.8'	12°30.1'	S 15°06.8'	320°28.7'	S 22°35.8'	287°29.5'	S 25°53.1'
20	75°12.3'	N 2°35.6'	27°32.4'	S 15°06.9'	335°31.3'	S 22°35.8'	302°32.7'	S 25°53.3'
21	90°12.4'	N 2°34.4'	42°34.7'	S 15°06.9'	350°33.9'	S 22°35.8'	317°35.9'	S 25°53.5'
22	105°12.5'	N 2°33.1'	57°37.0'	S 15°07.0'	5°36.5'	S 22°35.8'	332°39.1'	S 25°53.6'
23	120°12.7'	N 2°31.9'	72°39.4'	S 15°07.0'	20°39.1'	S 22°35.9'	347°42.2'	S 25°53.8'