

Mon Jan 1, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.5	
	v = -1.0' d = 0.1'		v = 2.0' d = 0.1'		v = 2.1' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	181°17.1'	S 23°37.9'	235°49.0'	S 15°53.1'	189°05.5'	S 22°31.9'	238°36.7'	S 15°13.7'
1	196°16.2'	S 23°37.7'	250°51.0'	S 15°53.2'	204°07.6'	S 22°31.9'	253°37.6'	S 15°14.2'
2	211°15.2'	S 23°37.6'	265°53.0'	S 15°53.3'	219°09.8'	S 22°31.9'	268°38.5'	S 15°14.7'
3	226°14.2'	S 23°37.5'	280°55.1'	S 15°53.4'	234°11.9'	S 22°31.9'	283°39.5'	S 15°15.1'
4	241°13.2'	S 23°37.4'	295°57.1'	S 15°53.5'	249°14.1'	S 22°31.9'	298°40.4'	S 15°15.6'
5	256°12.3'	S 23°37.3'	310°59.2'	S 15°53.6'	264°16.2'	S 22°31.9'	313°41.3'	S 15°16.1'
6	271°11.3'	S 23°37.2'	326°01.2'	S 15°53.8'	279°18.4'	S 22°31.9'	328°42.2'	S 15°16.6'
7	286°10.3'	S 23°37.1'	341°03.3'	S 15°53.9'	294°20.5'	S 22°31.9'	343°43.2'	S 15°17.0'
8	301°09.4'	S 23°36.9'	356°05.3'	S 15°54.0'	309°22.6'	S 22°31.9'	358°44.1'	S 15°17.5'
9	316°08.4'	S 23°36.8'	11°07.3'	S 15°54.1'	324°24.8'	S 22°31.9'	13°45.0'	S 15°18.0'
10	331°07.4'	S 23°36.7'	26°09.4'	S 15°54.2'	339°26.9'	S 22°31.9'	28°45.9'	S 15°18.5'
11	346°06.5'	S 23°36.6'	41°11.4'	S 15°54.3'	354°29.1'	S 22°31.8'	43°46.9'	S 15°18.9'
12	1°05.5'	S 23°36.5'	56°13.5'	S 15°54.4'	9°31.2'	S 22°31.8'	58°47.8'	S 15°19.4'
13	16°04.5'	S 23°36.3'	71°15.5'	S 15°54.6'	24°33.4'	S 22°31.8'	73°48.7'	S 15°19.9'
14	31°03.6'	S 23°36.2'	86°17.6'	S 15°54.7'	39°35.5'	S 22°31.8'	88°49.6'	S 15°20.4'
15	46°02.6'	S 23°36.1'	101°19.6'	S 15°54.8'	54°37.7'	S 22°31.8'	103°50.6'	S 15°20.8'
16	61°01.6'	S 23°36.0'	116°21.7'	S 15°54.9'	69°39.8'	S 22°31.8'	118°51.5'	S 15°21.3'
17	76°00.7'	S 23°35.8'	131°23.7'	S 15°55.0'	84°42.0'	S 22°31.8'	133°52.4'	S 15°21.8'
18	90°59.7'	S 23°35.7'	146°25.7'	S 15°55.1'	99°44.1'	S 22°31.8'	148°53.3'	S 15°22.3'
19	105°58.7'	S 23°35.6'	161°27.8'	S 15°55.2'	114°46.3'	S 22°31.8'	163°54.3'	S 15°22.7'
20	120°57.8'	S 23°35.4'	176°29.8'	S 15°55.4'	129°48.4'	S 22°31.8'	178°55.2'	S 15°23.2'
21	135°56.8'	S 23°35.3'	191°31.9'	S 15°55.5'	144°50.6'	S 22°31.8'	193°56.1'	S 15°23.7'
22	150°55.8'	S 23°35.2'	206°33.9'	S 15°55.6'	159°52.7'	S 22°31.8'	208°57.0'	S 15°24.1'
23	165°54.9'	S 23°35.0'	221°36.0'	S 15°55.7'	174°54.9'	S 22°31.8'	223°57.9'	S 15°24.6'

Tue Jan 2, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.5	
	v = -1.0' d = 0.2'		v = 2.0' d = 0.1'		v = 2.1' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	180°53.9'	S 23°34.9'	236°38.0'	S 15°55.8'	189°57.0'	S 22°31.8'	238°58.9'	S 15°25.1'
1	195°52.9'	S 23°34.7'	251°40.1'	S 15°55.9'	204°59.2'	S 22°31.8'	253°59.8'	S 15°25.6'
2	210°52.0'	S 23°34.6'	266°42.1'	S 15°56.0'	220°01.3'	S 22°31.8'	269°00.7'	S 15°26.0'
3	225°51.0'	S 23°34.5'	281°44.2'	S 15°56.2'	235°03.5'	S 22°31.8'	284°01.6'	S 15°26.5'
4	240°50.0'	S 23°34.3'	296°46.2'	S 15°56.3'	250°05.6'	S 22°31.8'	299°02.6'	S 15°27.0'
5	255°49.1'	S 23°34.2'	311°48.3'	S 15°56.4'	265°07.7'	S 22°31.8'	314°03.5'	S 15°27.4'
6	270°48.1'	S 23°34.0'	326°50.3'	S 15°56.5'	280°09.9'	S 22°31.8'	329°04.4'	S 15°27.9'
7	285°47.1'	S 23°33.9'	341°52.3'	S 15°56.6'	295°12.0'	S 22°31.8'	344°05.3'	S 15°28.4'
8	300°46.2'	S 23°33.7'	356°54.4'	S 15°56.7'	310°14.2'	S 22°31.8'	359°06.3'	S 15°28.9'
9	315°45.2'	S 23°33.6'	11°56.4'	S 15°56.8'	325°16.3'	S 22°31.8'	14°07.2'	S 15°29.3'
10	330°44.2'	S 23°33.4'	26°58.5'	S 15°56.9'	340°18.5'	S 22°31.8'	29°08.1'	S 15°29.8'
11	345°43.3'	S 23°33.3'	42°00.5'	S 15°57.1'	355°20.6'	S 22°31.8'	44°09.0'	S 15°30.3'
12	0°42.3'	S 23°33.1'	57°02.6'	S 15°57.2'	10°22.8'	S 22°31.8'	59°09.9'	S 15°30.7'
13	15°41.4'	S 23°33.0'	72°04.6'	S 15°57.3'	25°24.9'	S 22°31.8'	74°10.9'	S 15°31.2'
14	30°40.4'	S 23°32.8'	87°06.7'	S 15°57.4'	40°27.1'	S 22°31.8'	89°11.8'	S 15°31.7'
15	45°39.4'	S 23°32.7'	102°08.7'	S 15°57.5'	55°29.2'	S 22°31.8'	104°12.7'	S 15°32.1'
16	60°38.5'	S 23°32.5'	117°10.8'	S 15°57.6'	70°31.4'	S 22°31.8'	119°13.6'	S 15°32.6'
17	75°37.5'	S 23°32.3'	132°12.8'	S 15°57.7'	85°33.5'	S 22°31.8'	134°14.6'	S 15°33.1'
18	90°36.5'	S 23°32.2'	147°14.9'	S 15°57.9'	100°35.7'	S 22°31.8'	149°15.5'	S 15°33.6'
19	105°35.6'	S 23°32.0'	162°16.9'	S 15°58.0'	115°37.8'	S 22°31.8'	164°16.4'	S 15°34.0'
20	120°34.6'	S 23°31.9'	177°19.0'	S 15°58.1'	130°40.0'	S 22°31.8'	179°17.3'	S 15°34.5'
21	135°33.6'	S 23°31.7'	192°21.0'	S 15°58.2'	145°42.1'	S 22°31.8'	194°18.2'	S 15°35.0'
22	150°32.7'	S 23°31.5'	207°23.1'	S 15°58.3'	160°44.3'	S 22°31.8'	209°19.2'	S 15°35.4'
23	165°31.7'	S 23°31.4'	222°25.1'	S 15°58.4'	175°46.4'	S 22°31.8'	224°20.1'	S 15°35.9'

Wed Jan 3, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.5	
	v = -1.0' d = 0.2'		v = 2.1' d = 0.1'		v = 2.1' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	180°30.8'	S 23°31.2'	237°27.2'	S 15°58.5'	190°48.6'	S 22°31.8'	239°21.0'	S 15°36.4'
1	195°29.8'	S 23°31.0'	252°29.2'	S 15°58.6'	205°50.7'	S 22°31.8'	254°21.9'	S 15°36.8'
2	210°28.8'	S 23°30.8'	267°31.3'	S 15°58.8'	220°52.9'	S 22°31.8'	269°22.8'	S 15°37.3'
3	225°27.9'	S 23°30.7'	282°33.3'	S 15°58.9'	235°55.0'	S 22°31.8'	284°23.8'	S 15°37.8'
4	240°26.9'	S 23°30.5'	297°35.4'	S 15°59.0'	250°57.2'	S 22°31.8'	299°24.7'	S 15°38.2'
5	255°25.9'	S 23°30.3'	312°37.4'	S 15°59.1'	265°59.3'	S 22°31.8'	314°25.6'	S 15°38.7'
6	270°25.0'	S 23°30.1'	327°39.5'	S 15°59.2'	281°01.5'	S 22°31.8'	329°26.5'	S 15°39.2'
7	285°24.0'	S 23°30.0'	342°41.5'	S 15°59.3'	296°03.6'	S 22°31.8'	344°27.4'	S 15°39.6'
8	300°23.1'	S 23°29.8'	357°43.6'	S 15°59.4'	311°05.7'	S 22°31.8'	359°28.4'	S 15°40.1'
9	315°22.1'	S 23°29.6'	12°45.6'	S 15°59.5'	326°07.9'	S 22°31.8'	14°29.3'	S 15°40.6'
10	330°21.1'	S 23°29.4'	27°47.7'	S 15°59.6'	341°10.0'	S 22°31.8'	29°30.2'	S 15°41.0'
11	345°20.2'	S 23°29.2'	42°49.7'	S 15°59.8'	356°12.2'	S 22°31.8'	44°31.1'	S 15°41.5'
12	0°19.2'	S 23°29.1'	57°51.8'	S 15°59.9'	11°14.3'	S 22°31.8'	59°32.0'	S 15°42.0'
13	15°18.3'	S 23°28.9'	72°53.8'	S 15°60.0'	26°16.5'	S 22°31.8'	74°33.0'	S 15°42.4'
14	30°17.3'	S 23°28.7'	87°55.9'	S 16°00.1'	41°18.6'	S 22°31.8'	89°33.9'	S 15°42.9'
15	45°16.3'	S 23°28.5'	102°57.9'	S 16°00.2'	56°20.8'	S 22°31.8'	104°34.8'	S 15°43.3'
16	60°15.4'	S 23°28.3'	117°60.0'	S 16°00.3'	71°22.9'	S 22°31.8'	119°35.7'	S 15°43.8'
17	75°14.4'	S 23°28.1'	133°02.0'	S 16°00.4'	86°25.1'	S 22°31.8'	134°36.6'	S 15°44.3'
18	90°13.5'	S 23°27.9'	148°04.1'	S 16°00.5'	101°27.2'	S 22°31.8'	149°37.6'	S 15°44.7'
19	105°12.5'	S 23°27.7'	163°06.2'	S 16°00.6'	116°29.4'	S 22°31.8'	164°38.5'	S 15°45.2'
20	120°11.5'	S 23°27.5'	178°08.2'	S 16°00.8'	131°31.5'	S 22°31.8'	179°39.4'	S 15°45.7'
21	135°10.6'	S 23°27.4'	193°10.3'	S 16°00.9'	146°33.7'	S 22°31.8'	194°40.3'	S 15°46.1'
22	150°09.6'	S 23°27.2'	208°12.3'	S 16°01.0'	161°35.8'	S 22°31.8'	209°41.2'	S 15°46.6'
23	165°08.7'	S 23°27.0'	223°14.4'	S 16°01.1'	176°38.0'	S 22°31.8'	224°42.2'	S 15°47.1'

Thu Jan 4, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.5	
	v = -1.0' d = 0.2'		v = 2.1' d = 0.1'		v = 2.1' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	180°07.7'	S 23°26.8'	238°16.4'	S 16°01.2'	191°40.1'	S 22°31.8'	239°43.1'	S 15°47.5'
1	195°06.7'	S 23°26.6'	253°18.5'	S 16°01.3'	206°42.3'	S 22°31.8'	254°44.0'	S 15°48.0'
2	210°05.8'	S 23°26.4'	268°20.5'	S 16°01.4'	221°44.4'	S 22°31.8'	269°44.9'	S 15°48.4'
3	225°04.8'	S 23°26.2'	283°22.6'	S 16°01.5'	236°46.6'	S 22°31.8'	284°45.8'	S 15°48.9'
4	240°03.9'	S 23°25.9'	298°24.6'	S 16°01.6'	251°48.7'	S 22°31.8'	299°46.8'	S 15°49.4'
5	255°02.9'	S 23°25.7'	313°26.7'	S 16°01.8'	266°50.9'	S 22°31.8'	314°47.7'	S 15°49.8'
6	270°02.0'	S 23°25.5'	328°28.7'	S 16°01.9'	281°53.0'	S 22°31.8'	329°48.6'	S 15°50.3'
7	285°01.0'	S 23°25.3'	343°30.8'	S 16°02.0'	296°55.2'	S 22°31.8'	344°49.5'	S 15°50.8'
8	300°00.0'	S 23°25.1'	358°32.9'	S 16°02.1'	311°57.3'	S 22°31.8'	359°50.4'	S 15°51.2'
9	314°59.1'	S 23°24.9'	13°34.9'	S 16°02.2'	326°59.5'	S 22°31.7'	14°51.3'	S 15°51.7'
10	329°58.1'	S 23°24.7'	28°37.0'	S 16°02.3'	342°01.6'	S 22°31.7'	29°52.3'	S 15°52.1'
11	344°57.2'	S 23°24.5'	43°39.0'	S 16°02.4'	357°03.8'	S 22°31.7'	44°53.2'	S 15°52.6'
12	359°56.2'	S 23°24.3'	58°41.1'	S 16°02.5'	12°05.9'	S 22°31.7'	59°54.1'	S 15°53.1'
13	14°55.3'	S 23°24.1'	73°43.1'	S 16°02.6'	27°08.1'	S 22°31.7'	74°55.0'	S 15°53.5'
14	29°54.3'	S 23°23.8'	88°45.2'	S 16°02.7'	42°10.2'	S 22°31.7'	89°55.9'	S 15°54.0'
15	44°53.3'	S 23°23.6'	103°47.2'	S 16°02.9'	57°12.4'	S 22°31.7'	104°56.8'	S 15°54.4'
16	59°52.4'	S 23°23.4'	118°49.3'	S 16°03.0'	72°14.5'	S 22°31.7'	119°57.8'	S 15°54.9'
17	74°51.4'	S 23°23.2'	133°51.4'	S 16°03.1'	87°16.7'	S 22°31.7'	134°58.7'	S 15°55.4'
18	89°50.5'	S 23°23.0'	148°53.4'	S 16°03.2'	102°18.8'	S 22°31.7'	149°59.6'	S 15°55.8'
19	104°49.5'	S 23°22.7'	163°55.5'	S 16°03.3'	117°21.0'	S 22°31.7'	165°00.5'	S 15°56.3'
20	119°48.6'	S 23°22.5'	178°57.5'	S 16°03.4'	132°23.1'	S 22°31.7'	180°01.4'	S 15°56.7'
21	134°47.6'	S 23°22.3'	193°59.6'	S 16°03.5'	147°25.3'	S 22°31.7'	195°02.3'	S 15°57.2'
22	149°46.7'	S 23°22.1'	209°01.6'	S 16°03.6'	162°27.4'	S 22°31.7'	210°03.3'	S 15°57.7'
23	164°45.7'	S 23°21.8'	224°03.7'	S 16°03.7'	177°29.6'	S 22°31.7'	225°04.2'	S 15°58.1'

Fri Jan 5, 2018 UTC

UTC	Venus -3.8 v = -1.0' d = 0.2'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +1.4 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	179°44.7'	S 23°21.6'	239°05.8'	S 16°03.8'	192°31.7'	S 22°31.7'	240°05.1'	S 15°58.6'
1	194°43.8'	S 23°21.4'	254°07.8'	S 16°04.0'	207°33.9'	S 22°31.7'	255°06.0'	S 15°59.0'
2	209°42.8'	S 23°21.1'	269°09.9'	S 16°04.1'	222°36.0'	S 22°31.7'	270°06.9'	S 15°59.5'
3	224°41.9'	S 23°20.9'	284°11.9'	S 16°04.2'	237°38.2'	S 22°31.7'	285°07.8'	S 15°60.0'
4	239°40.9'	S 23°20.7'	299°14.0'	S 16°04.3'	252°40.3'	S 22°31.7'	300°08.8'	S 16°00.4'
5	254°40.0'	S 23°20.4'	314°16.1'	S 16°04.4'	267°42.5'	S 22°31.7'	315°09.7'	S 16°00.9'
6	269°39.0'	S 23°20.2'	329°18.1'	S 16°04.5'	282°44.6'	S 22°31.7'	330°10.6'	S 16°01.3'
7	284°38.1'	S 23°20.0'	344°20.2'	S 16°04.6'	297°46.8'	S 22°31.7'	345°11.5'	S 16°01.8'
8	299°37.1'	S 23°19.7'	359°22.2'	S 16°04.7'	312°48.9'	S 22°31.7'	0°12.4'	S 16°02.2'
9	314°36.2'	S 23°19.5'	14°24.3'	S 16°04.8'	327°51.1'	S 22°31.7'	15°13.3'	S 16°02.7'
10	329°35.2'	S 23°19.2'	29°26.3'	S 16°04.9'	342°53.2'	S 22°31.7'	30°14.3'	S 16°03.2'
11	344°34.3'	S 23°19.0'	44°28.4'	S 16°05.0'	357°55.4'	S 22°31.7'	45°15.2'	S 16°03.6'
12	359°33.3'	S 23°18.8'	59°30.5'	S 16°05.1'	12°57.5'	S 22°31.7'	60°16.1'	S 16°04.1'
13	14°32.4'	S 23°18.5'	74°32.5'	S 16°05.3'	27°59.7'	S 22°31.7'	75°17.0'	S 16°04.5'
14	29°31.4'	S 23°18.3'	89°34.6'	S 16°05.4'	43°01.8'	S 22°31.7'	90°17.9'	S 16°05.0'
15	44°30.5'	S 23°18.0'	104°36.6'	S 16°05.5'	58°04.0'	S 22°31.7'	105°18.8'	S 16°05.4'
16	59°29.5'	S 23°17.8'	119°38.7'	S 16°05.6'	73°06.1'	S 22°31.7'	120°19.7'	S 16°05.9'
17	74°28.6'	S 23°17.5'	134°40.8'	S 16°05.7'	88°08.3'	S 22°31.7'	135°20.7'	S 16°06.3'
18	89°27.6'	S 23°17.3'	149°42.8'	S 16°05.8'	103°10.4'	S 22°31.7'	150°21.6'	S 16°06.8'
19	104°26.7'	S 23°17.0'	164°44.9'	S 16°05.9'	118°12.6'	S 22°31.7'	165°22.5'	S 16°07.3'
20	119°25.7'	S 23°16.8'	179°47.0'	S 16°06.0'	133°14.7'	S 22°31.7'	180°23.4'	S 16°07.7'
21	134°24.8'	S 23°16.5'	194°49.0'	S 16°06.1'	148°16.9'	S 22°31.7'	195°24.3'	S 16°08.2'
22	149°23.8'	S 23°16.2'	209°51.1'	S 16°06.2'	163°19.0'	S 22°31.7'	210°25.2'	S 16°08.6'
23	164°22.9'	S 23°16.0'	224°53.1'	S 16°06.3'	178°21.2'	S 22°31.7'	225°26.2'	S 16°09.1'

Sat Jan 6, 2018 UTC

UTC	Venus -3.8 v = -0.9' d = 0.3'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +1.4 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	179°21.9'	S 23°15.7'	239°55.2'	S 16°06.4'	193°23.3'	S 22°31.7'	240°27.1'	S 16°09.5'
1	194°21.0'	S 23°15.5'	254°57.3'	S 16°06.5'	208°25.5'	S 22°31.7'	255°28.0'	S 16°10.0'
2	209°20.0'	S 23°15.2'	269°59.3'	S 16°06.7'	223°27.6'	S 22°31.7'	270°28.9'	S 16°10.4'
3	224°19.1'	S 23°14.9'	285°01.4'	S 16°06.8'	238°29.8'	S 22°31.7'	285°29.8'	S 16°10.9'
4	239°18.1'	S 23°14.7'	300°03.5'	S 16°06.9'	253°31.9'	S 22°31.7'	300°30.7'	S 16°11.3'
5	254°17.2'	S 23°14.4'	315°05.5'	S 16°07.0'	268°34.1'	S 22°31.7'	315°31.6'	S 16°11.8'
6	269°16.2'	S 23°14.1'	330°07.6'	S 16°07.1'	283°36.2'	S 22°31.7'	330°32.5'	S 16°12.2'
7	284°15.3'	S 23°13.9'	345°09.6'	S 16°07.2'	298°38.4'	S 22°31.7'	345°33.5'	S 16°12.7'
8	299°14.3'	S 23°13.6'	0°11.7'	S 16°07.3'	313°40.5'	S 22°31.6'	0°34.4'	S 16°13.1'
9	314°13.4'	S 23°13.3'	15°13.8'	S 16°07.4'	328°42.7'	S 22°31.6'	15°35.3'	S 16°13.6'
10	329°12.4'	S 23°13.1'	30°15.8'	S 16°07.5'	343°44.8'	S 22°31.6'	30°36.2'	S 16°14.0'
11	344°11.5'	S 23°12.8'	45°17.9'	S 16°07.6'	358°47.0'	S 22°31.6'	45°37.1'	S 16°14.5'
12	359°10.5'	S 23°12.5'	60°20.0'	S 16°07.7'	13°49.1'	S 22°31.6'	60°38.0'	S 16°15.0'
13	14°09.6'	S 23°12.2'	75°22.0'	S 16°07.8'	28°51.3'	S 22°31.6'	75°38.9'	S 16°15.4'
14	29°08.6'	S 23°12.0'	90°24.1'	S 16°07.9'	43°53.4'	S 22°31.6'	90°39.9'	S 16°15.9'
15	44°07.7'	S 23°11.7'	105°26.2'	S 16°08.0'	58°55.6'	S 22°31.6'	105°40.8'	S 16°16.3'
16	59°06.8'	S 23°11.4'	120°28.2'	S 16°08.2'	73°57.7'	S 22°31.6'	120°41.7'	S 16°16.8'
17	74°05.8'	S 23°11.1'	135°30.3'	S 16°08.3'	88°59.9'	S 22°31.6'	135°42.6'	S 16°17.2'
18	89°04.9'	S 23°10.8'	150°32.3'	S 16°08.4'	104°02.0'	S 22°31.6'	150°43.5'	S 16°17.7'
19	104°03.9'	S 23°10.6'	165°34.4'	S 16°08.5'	119°04.2'	S 22°31.6'	165°44.4'	S 16°18.1'
20	119°03.0'	S 23°10.3'	180°36.5'	S 16°08.6'	134°06.3'	S 22°31.6'	180°45.3'	S 16°18.6'
21	134°02.0'	S 23°10.0'	195°38.5'	S 16°08.7'	149°08.5'	S 22°31.6'	195°46.2'	S 16°19.0'
22	149°01.1'	S 23°09.7'	210°40.6'	S 16°08.8'	164°10.6'	S 22°31.6'	210°47.2'	S 16°19.5'
23	164°00.1'	S 23°09.4'	225°42.7'	S 16°08.9'	179°12.8'	S 22°31.6'	225°48.1'	S 16°19.9'

Sun Jan 7, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.3'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	178°59.2'	S 23°09.1'	240°44.7'	S 16°09.0'	194°14.9'	S 22°31.6'	240°49.0'	S 16°20.4'
1	193°58.3'	S 23°08.8'	255°46.8'	S 16°09.1'	209°17.1'	S 22°31.6'	255°49.9'	S 16°20.8'
2	208°57.3'	S 23°08.5'	270°48.9'	S 16°09.2'	224°19.2'	S 22°31.6'	270°50.8'	S 16°21.3'
3	223°56.4'	S 23°08.3'	285°50.9'	S 16°09.3'	239°21.4'	S 22°31.6'	285°51.7'	S 16°21.7'
4	238°55.4'	S 23°08.0'	300°53.0'	S 16°09.4'	254°23.5'	S 22°31.6'	300°52.6'	S 16°22.1'
5	253°54.5'	S 23°07.7'	315°55.1'	S 16°09.5'	269°25.7'	S 22°31.6'	315°53.5'	S 16°22.6'
6	268°53.6'	S 23°07.4'	330°57.1'	S 16°09.6'	284°27.8'	S 22°31.6'	330°54.4'	S 16°23.0'
7	283°52.6'	S 23°07.1'	345°59.2'	S 16°09.7'	299°30.0'	S 22°31.6'	345°55.4'	S 16°23.5'
8	298°51.7'	S 23°06.8'	1°01.3'	S 16°09.8'	314°32.1'	S 22°31.6'	0°56.3'	S 16°23.9'
9	313°50.7'	S 23°06.5'	16°03.3'	S 16°10.0'	329°34.3'	S 22°31.6'	15°57.2'	S 16°24.4'
10	328°49.8'	S 23°06.2'	31°05.4'	S 16°10.1'	344°36.4'	S 22°31.6'	30°58.1'	S 16°24.8'
11	343°48.8'	S 23°05.9'	46°07.5'	S 16°10.2'	359°38.6'	S 22°31.6'	45°59.0'	S 16°25.3'
12	358°47.9'	S 23°05.6'	61°09.5'	S 16°10.3'	14°40.8'	S 22°31.6'	60°59.9'	S 16°25.7'
13	13°47.0'	S 23°05.3'	76°11.6'	S 16°10.4'	29°42.9'	S 22°31.6'	76°00.8'	S 16°26.2'
14	28°46.0'	S 23°05.0'	91°13.7'	S 16°10.5'	44°45.1'	S 22°31.6'	91°01.7'	S 16°26.6'
15	43°45.1'	S 23°04.6'	106°15.8'	S 16°10.6'	59°47.2'	S 22°31.6'	106°02.6'	S 16°27.1'
16	58°44.2'	S 23°04.3'	121°17.8'	S 16°10.7'	74°49.4'	S 22°31.6'	121°03.6'	S 16°27.5'
17	73°43.2'	S 23°04.0'	136°19.9'	S 16°10.8'	89°51.5'	S 22°31.6'	136°04.5'	S 16°28.0'
18	88°42.3'	S 23°03.7'	151°22.0'	S 16°10.9'	104°53.7'	S 22°31.6'	151°05.4'	S 16°28.4'
19	103°41.3'	S 23°03.4'	166°24.0'	S 16°11.0'	119°55.8'	S 22°31.6'	166°06.3'	S 16°28.9'
20	118°40.4'	S 23°03.1'	181°26.1'	S 16°11.1'	134°58.0'	S 22°31.6'	181°07.2'	S 16°29.3'
21	133°39.5'	S 23°02.8'	196°28.2'	S 16°11.2'	150°00.1'	S 22°31.6'	196°08.1'	S 16°29.7'
22	148°38.5'	S 23°02.5'	211°30.2'	S 16°11.3'	165°02.3'	S 22°31.5'	211°09.0'	S 16°30.2'
23	163°37.6'	S 23°02.1'	226°32.3'	S 16°11.4'	180°04.4'	S 22°31.5'	226°09.9'	S 16°30.6'

Mon Jan 8, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.3'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	178°36.6'	S 23°01.8'	241°34.4'	S 16°11.5'	195°06.6'	S 22°31.5'	241°10.8'	S 16°31.1'
1	193°35.7'	S 23°01.5'	256°36.5'	S 16°11.6'	210°08.7'	S 22°31.5'	256°11.7'	S 16°31.5'
2	208°34.8'	S 23°01.2'	271°38.5'	S 16°11.7'	225°10.9'	S 22°31.5'	271°12.7'	S 16°32.0'
3	223°33.8'	S 23°00.9'	286°40.6'	S 16°11.8'	240°13.0'	S 22°31.5'	286°13.6'	S 16°32.4'
4	238°32.9'	S 23°00.5'	301°42.7'	S 16°11.9'	255°15.2'	S 22°31.5'	301°14.5'	S 16°32.9'
5	253°32.0'	S 23°00.2'	316°44.7'	S 16°12.0'	270°17.3'	S 22°31.5'	316°15.4'	S 16°33.3'
6	268°31.0'	S 22°59.9'	331°46.8'	S 16°12.1'	285°19.5'	S 22°31.5'	331°16.3'	S 16°33.7'
7	283°30.1'	S 22°59.6'	346°48.9'	S 16°12.3'	300°21.6'	S 22°31.5'	346°17.2'	S 16°34.2'
8	298°29.2'	S 22°59.2'	1°50.9'	S 16°12.4'	315°23.8'	S 22°31.5'	1°18.1'	S 16°34.6'
9	313°28.2'	S 22°58.9'	16°53.0'	S 16°12.5'	330°25.9'	S 22°31.5'	16°19.0'	S 16°35.1'
10	328°27.3'	S 22°58.6'	31°55.1'	S 16°12.6'	345°28.1'	S 22°31.5'	31°19.9'	S 16°35.5'
11	343°26.4'	S 22°58.2'	46°57.2'	S 16°12.7'	0°30.3'	S 22°31.5'	46°20.8'	S 16°35.9'
12	358°25.4'	S 22°57.9'	61°59.2'	S 16°12.8'	15°32.4'	S 22°31.5'	61°21.7'	S 16°36.4'
13	13°24.5'	S 22°57.6'	77°01.3'	S 16°12.9'	30°34.6'	S 22°31.5'	76°22.7'	S 16°36.8'
14	28°23.6'	S 22°57.2'	92°03.4'	S 16°13.0'	45°36.7'	S 22°31.5'	91°23.6'	S 16°37.3'
15	43°22.6'	S 22°56.9'	107°05.5'	S 16°13.1'	60°38.9'	S 22°31.5'	106°24.5'	S 16°37.7'
16	58°21.7'	S 22°56.6'	122°07.5'	S 16°13.2'	75°41.0'	S 22°31.5'	121°25.4'	S 16°38.2'
17	73°20.8'	S 22°56.2'	137°09.6'	S 16°13.3'	90°43.2'	S 22°31.5'	136°26.3'	S 16°38.6'
18	88°19.8'	S 22°55.9'	152°11.7'	S 16°13.4'	105°45.3'	S 22°31.5'	151°27.2'	S 16°39.0'
19	103°18.9'	S 22°55.5'	167°13.8'	S 16°13.5'	120°47.5'	S 22°31.5'	166°28.1'	S 16°39.5'
20	118°18.0'	S 22°55.2'	182°15.8'	S 16°13.6'	135°49.6'	S 22°31.5'	181°29.0'	S 16°39.9'
21	133°17.0'	S 22°54.8'	197°17.9'	S 16°13.7'	150°51.8'	S 22°31.5'	196°29.9'	S 16°40.4'
22	148°16.1'	S 22°54.5'	212°20.0'	S 16°13.8'	165°53.9'	S 22°31.5'	211°30.8'	S 16°40.8'
23	163°15.2'	S 22°54.2'	227°22.0'	S 16°13.9'	180°56.1'	S 22°31.5'	226°31.7'	S 16°41.2'

Tue Jan 9, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.4'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	178°14.2'	S 22°53.8'	242°24.1'	S 16°14.0'	195°58.2'	S 22°31.5'	241°32.6'	S 16°41.7'
1	193°13.3'	S 22°53.5'	257°26.2'	S 16°14.1'	211°00.4'	S 22°31.5'	256°33.5'	S 16°42.1'
2	208°12.4'	S 22°53.1'	272°28.3'	S 16°14.2'	226°02.5'	S 22°31.5'	271°34.5'	S 16°42.6'
3	223°11.5'	S 22°52.8'	287°30.3'	S 16°14.3'	241°04.7'	S 22°31.5'	286°35.4'	S 16°43.0'
4	238°10.5'	S 22°52.4'	302°32.4'	S 16°14.4'	256°06.8'	S 22°31.5'	301°36.3'	S 16°43.4'
5	253°09.6'	S 22°52.0'	317°34.5'	S 16°14.5'	271°09.0'	S 22°31.5'	316°37.2'	S 16°43.9'
6	268°08.7'	S 22°51.7'	332°36.6'	S 16°14.6'	286°11.2'	S 22°31.4'	331°38.1'	S 16°44.3'
7	283°07.7'	S 22°51.3'	347°38.7'	S 16°14.7'	301°13.3'	S 22°31.4'	346°39.0'	S 16°44.8'
8	298°06.8'	S 22°51.0'	2°40.7'	S 16°14.8'	316°15.5'	S 22°31.4'	1°39.9'	S 16°45.2'
9	313°05.9'	S 22°50.6'	17°42.8'	S 16°14.9'	331°17.6'	S 22°31.4'	16°40.8'	S 16°45.6'
10	328°05.0'	S 22°50.3'	32°44.9'	S 16°15.0'	346°19.8'	S 22°31.4'	31°41.7'	S 16°46.1'
11	343°04.0'	S 22°49.9'	47°47.0'	S 16°15.1'	1°21.9'	S 22°31.4'	46°42.6'	S 16°46.5'
12	358°03.1'	S 22°49.5'	62°49.0'	S 16°15.2'	16°24.1'	S 22°31.4'	61°43.5'	S 16°46.9'
13	13°02.2'	S 22°49.2'	77°51.1'	S 16°15.3'	31°26.2'	S 22°31.4'	76°44.4'	S 16°47.4'
14	28°01.3'	S 22°48.8'	92°53.2'	S 16°15.4'	46°28.4'	S 22°31.4'	91°45.3'	S 16°47.8'
15	43°00.3'	S 22°48.4'	107°55.3'	S 16°15.5'	61°30.5'	S 22°31.4'	106°46.2'	S 16°48.3'
16	57°59.4'	S 22°48.1'	122°57.3'	S 16°15.6'	76°32.7'	S 22°31.4'	121°47.1'	S 16°48.7'
17	72°58.5'	S 22°47.7'	137°59.4'	S 16°15.7'	91°34.8'	S 22°31.4'	136°48.1'	S 16°49.1'
18	87°57.6'	S 22°47.3'	153°01.5'	S 16°15.8'	106°37.0'	S 22°31.4'	151°49.0'	S 16°49.6'
19	102°56.6'	S 22°47.0'	168°03.6'	S 16°15.9'	121°39.2'	S 22°31.4'	166°49.9'	S 16°50.0'
20	117°55.7'	S 22°46.6'	183°05.7'	S 16°16.0'	136°41.3'	S 22°31.4'	181°50.8'	S 16°50.4'
21	132°54.8'	S 22°46.2'	198°07.7'	S 16°16.1'	151°43.5'	S 22°31.4'	196°51.7'	S 16°50.9'
22	147°53.9'	S 22°45.8'	213°09.8'	S 16°16.2'	166°45.6'	S 22°31.4'	211°52.6'	S 16°51.3'
23	162°52.9'	S 22°45.5'	228°11.9'	S 16°16.3'	181°47.8'	S 22°31.4'	226°53.5'	S 16°51.7'

Wed Jan 10, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.4'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	177°52.0'	S 22°45.1'	243°14.0'	S 16°16.4'	196°49.9'	S 22°31.4'	241°54.4'	S 16°52.2'
1	192°51.1'	S 22°44.7'	258°16.1'	S 16°16.6'	211°52.1'	S 22°31.4'	256°55.3'	S 16°52.6'
2	207°50.2'	S 22°44.3'	273°18.1'	S 16°16.7'	226°54.2'	S 22°31.4'	271°56.2'	S 16°53.0'
3	222°49.3'	S 22°43.9'	288°20.2'	S 16°16.8'	241°56.4'	S 22°31.4'	286°57.1'	S 16°53.5'
4	237°48.3'	S 22°43.6'	303°22.3'	S 16°16.9'	256°58.5'	S 22°31.4'	301°58.0'	S 16°53.9'
5	252°47.4'	S 22°43.2'	318°24.4'	S 16°17.0'	272°00.7'	S 22°31.4'	316°58.9'	S 16°54.3'
6	267°46.5'	S 22°42.8'	333°26.5'	S 16°17.1'	287°02.8'	S 22°31.4'	331°59.8'	S 16°54.8'
7	282°45.6'	S 22°42.4'	348°28.5'	S 16°17.2'	302°05.0'	S 22°31.4'	347°00.7'	S 16°55.2'
8	297°44.7'	S 22°42.0'	3°30.6'	S 16°17.3'	317°07.2'	S 22°31.4'	2°01.6'	S 16°55.6'
9	312°43.7'	S 22°41.6'	18°32.7'	S 16°17.4'	332°09.3'	S 22°31.4'	17°02.5'	S 16°56.1'
10	327°42.8'	S 22°41.2'	33°34.8'	S 16°17.5'	347°11.5'	S 22°31.4'	32°03.4'	S 16°56.5'
11	342°41.9'	S 22°40.8'	48°36.9'	S 16°17.6'	2°13.6'	S 22°31.3'	47°04.3'	S 16°56.9'
12	357°41.0'	S 22°40.5'	63°38.9'	S 16°17.7'	17°15.8'	S 22°31.3'	62°05.3'	S 16°57.4'
13	12°40.1'	S 22°40.1'	78°41.0'	S 16°17.8'	32°17.9'	S 22°31.3'	77°06.2'	S 16°57.8'
14	27°39.1'	S 22°39.7'	93°43.1'	S 16°17.9'	47°20.1'	S 22°31.3'	92°07.1'	S 16°58.2'
15	42°38.2'	S 22°39.3'	108°45.2'	S 16°18.0'	62°22.2'	S 22°31.3'	107°08.0'	S 16°58.7'
16	57°37.3'	S 22°38.9'	123°47.3'	S 16°18.1'	77°24.4'	S 22°31.3'	122°08.9'	S 16°59.1'
17	72°36.4'	S 22°38.5'	138°49.3'	S 16°18.2'	92°26.5'	S 22°31.3'	137°09.8'	S 16°59.5'
18	87°35.5'	S 22°38.1'	153°51.4'	S 16°18.3'	107°28.7'	S 22°31.3'	152°10.7'	S 16°60.0'
19	102°34.6'	S 22°37.7'	168°53.5'	S 16°18.4'	122°30.9'	S 22°31.3'	167°11.6'	S 17°00.4'
20	117°33.6'	S 22°37.3'	183°55.6'	S 16°18.5'	137°33.0'	S 22°31.3'	182°12.5'	S 17°00.8'
21	132°32.7'	S 22°36.9'	198°57.7'	S 16°18.6'	152°35.2'	S 22°31.3'	197°13.4'	S 17°01.3'
22	147°31.8'	S 22°36.5'	213°59.8'	S 16°18.7'	167°37.3'	S 22°31.3'	212°14.3'	S 17°01.7'
23	162°30.9'	S 22°36.1'	229°01.8'	S 16°18.8'	182°39.5'	S 22°31.3'	227°15.2'	S 17°02.1'

Thu Jan 11, 2018 UTC

UTC	Venus -3.8 v = -0.9' d = 0.4'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +1.4 v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	177°30.0'	S 22°35.7'	244°03.9'	S 16°18.9'	197°41.6'	S 22°31.3'	242°16.1'	S 17°02.5'
1	192°29.1'	S 22°35.3'	259°06.0'	S 16°19.0'	212°43.8'	S 22°31.3'	257°17.0'	S 17°03.0'
2	207°28.1'	S 22°34.8'	274°08.1'	S 16°19.1'	227°45.9'	S 22°31.3'	272°17.9'	S 17°03.4'
3	222°27.2'	S 22°34.4'	289°10.2'	S 16°19.2'	242°48.1'	S 22°31.3'	287°18.8'	S 17°03.8'
4	237°26.3'	S 22°34.0'	304°12.3'	S 16°19.3'	257°50.2'	S 22°31.3'	302°19.7'	S 17°04.3'
5	252°25.4'	S 22°33.6'	319°14.4'	S 16°19.3'	272°52.4'	S 22°31.3'	317°20.6'	S 17°04.7'
6	267°24.5'	S 22°33.2'	334°16.4'	S 16°19.4'	287°54.6'	S 22°31.3'	332°21.5'	S 17°05.1'
7	282°23.6'	S 22°32.8'	349°18.5'	S 16°19.5'	302°56.7'	S 22°31.3'	347°22.4'	S 17°05.6'
8	297°22.7'	S 22°32.4'	4°20.6'	S 16°19.6'	317°58.9'	S 22°31.3'	2°23.3'	S 17°06.0'
9	312°21.8'	S 22°32.0'	19°22.7'	S 16°19.7'	333°01.0'	S 22°31.3'	17°24.2'	S 17°06.4'
10	327°20.9'	S 22°31.5'	34°24.8'	S 16°19.8'	348°03.2'	S 22°31.3'	32°25.1'	S 17°06.8'
11	342°19.9'	S 22°31.1'	49°26.9'	S 16°19.9'	3°05.3'	S 22°31.3'	47°26.0'	S 17°07.3'
12	357°19.0'	S 22°30.7'	64°28.9'	S 16°20.0'	18°07.5'	S 22°31.3'	62°26.9'	S 17°07.7'
13	12°18.1'	S 22°30.3'	79°31.0'	S 16°20.1'	33°09.6'	S 22°31.2'	77°27.8'	S 17°08.1'
14	27°17.2'	S 22°29.8'	94°33.1'	S 16°20.2'	48°11.8'	S 22°31.2'	92°28.7'	S 17°08.5'
15	42°16.3'	S 22°29.4'	109°35.2'	S 16°20.3'	63°14.0'	S 22°31.2'	107°29.6'	S 17°09.0'
16	57°15.4'	S 22°29.0'	124°37.3'	S 16°20.4'	78°16.1'	S 22°31.2'	122°30.5'	S 17°09.4'
17	72°14.5'	S 22°28.6'	139°39.4'	S 16°20.5'	93°18.3'	S 22°31.2'	137°31.4'	S 17°09.8'
18	87°13.6'	S 22°28.1'	154°41.5'	S 16°20.6'	108°20.4'	S 22°31.2'	152°32.3'	S 17°10.3'
19	102°12.7'	S 22°27.7'	169°43.6'	S 16°20.7'	123°22.6'	S 22°31.2'	167°33.2'	S 17°10.7'
20	117°11.8'	S 22°27.3'	184°45.6'	S 16°20.8'	138°24.7'	S 22°31.2'	182°34.1'	S 17°11.1'
21	132°10.9'	S 22°26.9'	199°47.7'	S 16°20.9'	153°26.9'	S 22°31.2'	197°35.0'	S 17°11.5'
22	147°09.9'	S 22°26.4'	214°49.8'	S 16°21.0'	168°29.0'	S 22°31.2'	212°35.9'	S 17°12.0'
23	162°09.0'	S 22°26.0'	229°51.9'	S 16°21.1'	183°31.2'	S 22°31.2'	227°36.8'	S 17°12.4'

Fri Jan 12, 2018 UTC

UTC	Venus -3.8 v = -0.9' d = 0.5'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.5 v = 2.2' d = 0.0'		Mars +1.4 v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	177°08.1'	S 22°25.6'	244°54.0'	S 16°21.2'	198°33.4'	S 22°31.2'	242°37.7'	S 17°12.8'
1	192°07.2'	S 22°25.1'	259°56.1'	S 16°21.3'	213°35.5'	S 22°31.2'	257°38.6'	S 17°13.2'
2	207°06.3'	S 22°24.7'	274°58.2'	S 16°21.4'	228°37.7'	S 22°31.2'	272°39.6'	S 17°13.7'
3	222°05.4'	S 22°24.2'	290°00.3'	S 16°21.5'	243°39.8'	S 22°31.2'	287°40.5'	S 17°14.1'
4	237°04.5'	S 22°23.8'	305°02.4'	S 16°21.6'	258°42.0'	S 22°31.2'	302°41.4'	S 17°14.5'
5	252°03.6'	S 22°23.4'	320°04.4'	S 16°21.7'	273°44.1'	S 22°31.2'	317°42.3'	S 17°14.9'
6	267°02.7'	S 22°22.9'	335°06.5'	S 16°21.8'	288°46.3'	S 22°31.2'	332°43.2'	S 17°15.3'
7	282°01.8'	S 22°22.5'	350°08.6'	S 16°21.9'	303°48.5'	S 22°31.2'	347°44.1'	S 17°15.8'
8	297°00.9'	S 22°22.0'	5°10.7'	S 16°22.0'	318°50.6'	S 22°31.2'	2°45.0'	S 17°16.2'
9	311°60.0'	S 22°21.6'	20°12.8'	S 16°22.1'	333°52.8'	S 22°31.2'	17°45.9'	S 17°16.6'
10	326°59.1'	S 22°21.1'	35°14.9'	S 16°22.2'	348°54.9'	S 22°31.2'	32°46.8'	S 17°17.0'
11	341°58.2'	S 22°20.7'	50°17.0'	S 16°22.3'	3°57.1'	S 22°31.2'	47°47.7'	S 17°17.5'
12	356°57.3'	S 22°20.2'	65°19.1'	S 16°22.4'	18°59.2'	S 22°31.2'	62°48.6'	S 17°17.9'
13	11°56.4'	S 22°19.8'	80°21.2'	S 16°22.5'	34°01.4'	S 22°31.2'	77°49.5'	S 17°18.3'
14	26°55.5'	S 22°19.3'	95°23.3'	S 16°22.6'	49°03.5'	S 22°31.1'	92°50.4'	S 17°18.7'
15	41°54.6'	S 22°18.9'	110°25.3'	S 16°22.7'	64°05.7'	S 22°31.1'	107°51.3'	S 17°19.2'
16	56°53.7'	S 22°18.4'	125°27.4'	S 16°22.8'	79°07.9'	S 22°31.1'	122°52.2'	S 17°19.6'
17	71°52.8'	S 22°18.0'	140°29.5'	S 16°22.9'	94°10.0'	S 22°31.1'	137°53.1'	S 17°20.0'
18	86°51.9'	S 22°17.5'	155°31.6'	S 16°23.0'	109°12.2'	S 22°31.1'	152°54.0'	S 17°20.4'
19	101°51.0'	S 22°17.1'	170°33.7'	S 16°23.1'	124°14.3'	S 22°31.1'	167°54.9'	S 17°20.8'
20	116°50.1'	S 22°16.6'	185°35.8'	S 16°23.2'	139°16.5'	S 22°31.1'	182°55.8'	S 17°21.3'
21	131°49.2'	S 22°16.1'	200°37.9'	S 16°23.3'	154°18.6'	S 22°31.1'	197°56.7'	S 17°21.7'
22	146°48.3'	S 22°15.7'	215°40.0'	S 16°23.4'	169°20.8'	S 22°31.1'	212°57.6'	S 17°22.1'
23	161°47.4'	S 22°15.2'	230°42.1'	S 16°23.4'	184°23.0'	S 22°31.1'	227°58.5'	S 17°22.5'

Sat Jan 13, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.5'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	176°46.5'	S 22°14.8'	245°44.2'	S 16°23.5'	199°25.1'	S 22°31.1'	242°59.4'	S 17°22.9'
1	191°45.6'	S 22°14.3'	260°46.3'	S 16°23.6'	214°27.3'	S 22°31.1'	258°00.3'	S 17°23.4'
2	206°44.7'	S 22°13.8'	275°48.4'	S 16°23.7'	229°29.4'	S 22°31.1'	273°01.1'	S 17°23.8'
3	221°43.8'	S 22°13.4'	290°50.5'	S 16°23.8'	244°31.6'	S 22°31.1'	288°02.0'	S 17°24.2'
4	236°42.9'	S 22°12.9'	305°52.5'	S 16°23.9'	259°33.7'	S 22°31.1'	303°02.9'	S 17°24.6'
5	251°42.0'	S 22°12.4'	320°54.6'	S 16°24.0'	274°35.9'	S 22°31.1'	318°03.8'	S 17°25.0'
6	266°41.1'	S 22°12.0'	335°56.7'	S 16°24.1'	289°38.1'	S 22°31.1'	333°04.7'	S 17°25.5'
7	281°40.2'	S 22°11.5'	350°58.8'	S 16°24.2'	304°40.2'	S 22°31.1'	348°05.6'	S 17°25.9'
8	296°39.3'	S 22°11.0'	6°00.9'	S 16°24.3'	319°42.4'	S 22°31.1'	3°06.5'	S 17°26.3'
9	311°38.4'	S 22°10.5'	21°03.0'	S 16°24.4'	334°44.5'	S 22°31.1'	18°07.4'	S 17°26.7'
10	326°37.5'	S 22°10.1'	36°05.1'	S 16°24.5'	349°46.7'	S 22°31.1'	33°08.3'	S 17°27.1'
11	341°36.7'	S 22°09.6'	51°07.2'	S 16°24.6'	4°48.8'	S 22°31.1'	48°09.2'	S 17°27.5'
12	356°35.8'	S 22°09.1'	66°09.3'	S 16°24.7'	19°51.0'	S 22°31.1'	63°10.1'	S 17°28.0'
13	11°34.9'	S 22°08.6'	81°11.4'	S 16°24.8'	34°53.2'	S 22°31.0'	78°11.0'	S 17°28.4'
14	26°34.0'	S 22°08.2'	96°13.5'	S 16°24.9'	49°55.3'	S 22°31.0'	93°11.9'	S 17°28.8'
15	41°33.1'	S 22°07.7'	111°15.6'	S 16°25.0'	64°57.5'	S 22°31.0'	108°12.8'	S 17°29.2'
16	56°32.2'	S 22°07.2'	126°17.7'	S 16°25.1'	79°59.6'	S 22°31.0'	123°13.7'	S 17°29.6'
17	71°31.3'	S 22°06.7'	141°19.8'	S 16°25.2'	95°01.8'	S 22°31.0'	138°14.6'	S 17°30.0'
18	86°30.4'	S 22°06.2'	156°21.9'	S 16°25.3'	110°04.0'	S 22°31.0'	153°15.5'	S 17°30.5'
19	101°29.5'	S 22°05.7'	171°24.0'	S 16°25.4'	125°06.1'	S 22°31.0'	168°16.4'	S 17°30.9'
20	116°28.6'	S 22°05.2'	186°26.1'	S 16°25.5'	140°08.3'	S 22°31.0'	183°17.3'	S 17°31.3'
21	131°27.7'	S 22°04.8'	201°28.2'	S 16°25.5'	155°10.4'	S 22°31.0'	198°18.2'	S 17°31.7'
22	146°26.9'	S 22°04.3'	216°30.3'	S 16°25.6'	170°12.6'	S 22°31.0'	213°19.1'	S 17°32.1'
23	161°26.0'	S 22°03.8'	231°32.4'	S 16°25.7'	185°14.7'	S 22°31.0'	228°20.0'	S 17°32.5'

Sun Jan 14, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.5'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	176°25.1'	S 22°03.3'	246°34.5'	S 16°25.8'	200°16.9'	S 22°31.0'	243°20.9'	S 17°33.0'
1	191°24.2'	S 22°02.8'	261°36.6'	S 16°25.9'	215°19.1'	S 22°31.0'	258°21.8'	S 17°33.4'
2	206°23.3'	S 22°02.3'	276°38.7'	S 16°26.0'	230°21.2'	S 22°31.0'	273°22.7'	S 17°33.8'
3	221°22.4'	S 22°01.8'	291°40.8'	S 16°26.1'	245°23.4'	S 22°31.0'	288°23.6'	S 17°34.2'
4	236°21.5'	S 22°01.3'	306°42.9'	S 16°26.2'	260°25.5'	S 22°31.0'	303°24.5'	S 17°34.6'
5	251°20.7'	S 22°00.8'	321°45.0'	S 16°26.3'	275°27.7'	S 22°31.0'	318°25.4'	S 17°35.0'
6	266°19.8'	S 22°00.3'	336°47.1'	S 16°26.4'	290°29.9'	S 22°31.0'	333°26.3'	S 17°35.4'
7	281°18.9'	S 21°59.8'	351°49.2'	S 16°26.5'	305°32.0'	S 22°31.0'	348°27.2'	S 17°35.9'
8	296°18.0'	S 21°59.3'	6°51.3'	S 16°26.6'	320°34.2'	S 22°31.0'	3°28.1'	S 17°36.3'
9	311°17.1'	S 21°58.8'	21°53.4'	S 16°26.7'	335°36.3'	S 22°31.0'	18°29.0'	S 17°36.7'
10	326°16.2'	S 21°58.3'	36°55.5'	S 16°26.8'	350°38.5'	S 22°31.0'	33°29.9'	S 17°37.1'
11	341°15.3'	S 21°57.8'	51°57.6'	S 16°26.9'	5°40.6'	S 22°30.9'	48°30.8'	S 17°37.5'
12	356°14.5'	S 21°57.3'	66°59.7'	S 16°27.0'	20°42.8'	S 22°30.9'	63°31.7'	S 17°37.9'
13	11°13.6'	S 21°56.8'	82°01.8'	S 16°27.0'	35°45.0'	S 22°30.9'	78°32.6'	S 17°38.3'
14	26°12.7'	S 21°56.3'	97°03.9'	S 16°27.1'	50°47.1'	S 22°30.9'	93°33.5'	S 17°38.7'
15	41°11.8'	S 21°55.8'	112°06.0'	S 16°27.2'	65°49.3'	S 22°30.9'	108°34.4'	S 17°39.2'
16	56°10.9'	S 21°55.3'	127°08.1'	S 16°27.3'	80°51.4'	S 22°30.9'	123°35.3'	S 17°39.6'
17	71°10.1'	S 21°54.8'	142°10.2'	S 16°27.4'	95°53.6'	S 22°30.9'	138°36.1'	S 17°40.0'
18	86°09.2'	S 21°54.3'	157°12.3'	S 16°27.5'	110°55.8'	S 22°30.9'	153°37.0'	S 17°40.4'
19	101°08.3'	S 21°53.7'	172°14.4'	S 16°27.6'	125°57.9'	S 22°30.9'	168°37.9'	S 17°40.8'
20	116°07.4'	S 21°53.2'	187°16.5'	S 16°27.7'	141°00.1'	S 22°30.9'	183°38.8'	S 17°41.2'
21	131°06.5'	S 21°52.7'	202°18.6'	S 16°27.8'	156°02.2'	S 22°30.9'	198°39.7'	S 17°41.6'
22	146°05.7'	S 21°52.2'	217°20.7'	S 16°27.9'	171°04.4'	S 22°30.9'	213°40.6'	S 17°42.0'
23	161°04.8'	S 21°51.7'	232°22.8'	S 16°28.0'	186°06.6'	S 22°30.9'	228°41.5'	S 17°42.4'

Mon Jan 15, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.5'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	176°03.9'	S 21°51.2'	247°24.9'	S 16°28.1'	201°08.7'	S 22°30.9'	243°42.4'	S 17°42.9'
1	191°03.0'	S 21°50.6'	262°27.0'	S 16°28.2'	216°10.9'	S 22°30.9'	258°43.3'	S 17°43.3'
2	206°02.1'	S 21°50.1'	277°29.1'	S 16°28.3'	231°13.0'	S 22°30.9'	273°44.2'	S 17°43.7'
3	221°01.3'	S 21°49.6'	292°31.2'	S 16°28.4'	246°15.2'	S 22°30.9'	288°45.1'	S 17°44.1'
4	236°00.4'	S 21°49.1'	307°33.3'	S 16°28.4'	261°17.4'	S 22°30.9'	303°46.0'	S 17°44.5'
5	250°59.5'	S 21°48.5'	322°35.4'	S 16°28.5'	276°19.5'	S 22°30.9'	318°46.9'	S 17°44.9'
6	265°58.6'	S 21°48.0'	337°37.5'	S 16°28.6'	291°21.7'	S 22°30.9'	333°47.8'	S 17°45.3'
7	280°57.8'	S 21°47.5'	352°39.6'	S 16°28.7'	306°23.8'	S 22°30.9'	348°48.7'	S 17°45.7'
8	295°56.9'	S 21°47.0'	7°41.7'	S 16°28.8'	321°26.0'	S 22°30.8'	3°49.6'	S 17°46.1'
9	310°56.0'	S 21°46.4'	22°43.8'	S 16°28.9'	336°28.2'	S 22°30.8'	18°50.5'	S 17°46.5'
10	325°55.1'	S 21°45.9'	37°45.9'	S 16°29.0'	351°30.3'	S 22°30.8'	33°51.4'	S 17°46.9'
11	340°54.3'	S 21°45.4'	52°48.0'	S 16°29.1'	6°32.5'	S 22°30.8'	48°52.3'	S 17°47.3'
12	355°53.4'	S 21°44.8'	67°50.1'	S 16°29.2'	21°34.6'	S 22°30.8'	63°53.2'	S 17°47.8'
13	10°52.5'	S 21°44.3'	82°52.2'	S 16°29.3'	36°36.8'	S 22°30.8'	78°54.0'	S 17°48.2'
14	25°51.7'	S 21°43.8'	97°54.3'	S 16°29.4'	51°39.0'	S 22°30.8'	93°54.9'	S 17°48.6'
15	40°50.8'	S 21°43.2'	112°56.4'	S 16°29.5'	66°41.1'	S 22°30.8'	108°55.8'	S 17°49.0'
16	55°49.9'	S 21°42.7'	127°58.5'	S 16°29.5'	81°43.3'	S 22°30.8'	123°56.7'	S 17°49.4'
17	70°49.0'	S 21°42.2'	143°00.6'	S 16°29.6'	96°45.4'	S 22°30.8'	138°57.6'	S 17°49.8'
18	85°48.2'	S 21°41.6'	158°02.8'	S 16°29.7'	111°47.6'	S 22°30.8'	153°58.5'	S 17°50.2'
19	100°47.3'	S 21°41.1'	173°04.9'	S 16°29.8'	126°49.8'	S 22°30.8'	168°59.4'	S 17°50.6'
20	115°46.4'	S 21°40.5'	188°07.0'	S 16°29.9'	141°51.9'	S 22°30.8'	184°00.3'	S 17°51.0'
21	130°45.6'	S 21°40.0'	203°09.1'	S 16°30.0'	156°54.1'	S 22°30.8'	199°01.2'	S 17°51.4'
22	145°44.7'	S 21°39.5'	218°11.2'	S 16°30.1'	171°56.2'	S 22°30.8'	214°02.1'	S 17°51.8'
23	160°43.8'	S 21°38.9'	233°13.3'	S 16°30.2'	186°58.4'	S 22°30.8'	229°03.0'	S 17°52.2'

Tue Jan 16, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.4	
	v = -0.9' d = 0.6'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	175°43.0'	S 21°38.4'	248°15.4'	S 16°30.3'	202°00.6'	S 22°30.8'	244°03.9'	S 17°52.6'
1	190°42.1'	S 21°37.8'	263°17.5'	S 16°30.4'	217°02.7'	S 22°30.8'	259°04.8'	S 17°53.0'
2	205°41.2'	S 21°37.3'	278°19.6'	S 16°30.5'	232°04.9'	S 22°30.8'	274°05.7'	S 17°53.4'
3	220°40.4'	S 21°36.7'	293°21.7'	S 16°30.5'	247°07.0'	S 22°30.8'	289°06.6'	S 17°53.8'
4	235°39.5'	S 21°36.2'	308°23.8'	S 16°30.6'	262°09.2'	S 22°30.7'	304°07.5'	S 17°54.2'
5	250°38.6'	S 21°35.6'	323°25.9'	S 16°30.7'	277°11.4'	S 22°30.7'	319°08.3'	S 17°54.6'
6	265°37.8'	S 21°35.1'	338°28.0'	S 16°30.8'	292°13.5'	S 22°30.7'	334°09.2'	S 17°55.1'
7	280°36.9'	S 21°34.5'	353°30.2'	S 16°30.9'	307°15.7'	S 22°30.7'	349°10.1'	S 17°55.5'
8	295°36.0'	S 21°33.9'	8°32.3'	S 16°31.0'	322°17.8'	S 22°30.7'	4°11.0'	S 17°55.9'
9	310°35.2'	S 21°33.4'	23°34.4'	S 16°31.1'	337°20.0'	S 22°30.7'	19°11.9'	S 17°56.3'
10	325°34.3'	S 21°32.8'	38°36.5'	S 16°31.2'	352°22.2'	S 22°30.7'	34°12.8'	S 17°56.7'
11	340°33.5'	S 21°32.3'	53°38.6'	S 16°31.3'	7°24.3'	S 22°30.7'	49°13.7'	S 17°57.1'
12	355°32.6'	S 21°31.7'	68°40.7'	S 16°31.4'	22°26.5'	S 22°30.7'	64°14.6'	S 17°57.5'
13	10°31.7'	S 21°31.2'	83°42.8'	S 16°31.5'	37°28.7'	S 22°30.7'	79°15.5'	S 17°57.9'
14	25°30.9'	S 21°30.6'	98°44.9'	S 16°31.5'	52°30.8'	S 22°30.7'	94°16.4'	S 17°58.3'
15	40°30.0'	S 21°30.0'	113°47.0'	S 16°31.6'	67°33.0'	S 22°30.7'	109°17.3'	S 17°58.7'
16	55°29.1'	S 21°29.5'	128°49.1'	S 16°31.7'	82°35.1'	S 22°30.7'	124°18.2'	S 17°59.1'
17	70°28.3'	S 21°28.9'	143°51.3'	S 16°31.8'	97°37.3'	S 22°30.7'	139°19.1'	S 17°59.5'
18	85°27.4'	S 21°28.3'	158°53.4'	S 16°31.9'	112°39.5'	S 22°30.7'	154°19.9'	S 17°59.9'
19	100°26.6'	S 21°27.8'	173°55.5'	S 16°32.0'	127°41.6'	S 22°30.7'	169°20.8'	S 18°00.3'
20	115°25.7'	S 21°27.2'	188°57.6'	S 16°32.1'	142°43.8'	S 22°30.7'	184°21.7'	S 18°00.7'
21	130°24.9'	S 21°26.6'	203°59.7'	S 16°32.2'	157°45.9'	S 22°30.7'	199°22.6'	S 18°01.1'
22	145°24.0'	S 21°26.1'	219°01.8'	S 16°32.3'	172°48.1'	S 22°30.7'	214°23.5'	S 18°01.5'
23	160°23.1'	S 21°25.5'	234°03.9'	S 16°32.4'	187°50.3'	S 22°30.6'	229°24.4'	S 18°01.9'



Wed Jan 17, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.3	
	v = -0.9' d = 0.6'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	175°22.3'	S 21°24.9'	249°06.0'	S 16°32.4'	202°52.4'	S 22°30.6'	244°25.3'	S 18°02.3'
1	190°21.4'	S 21°24.3'	264°08.2'	S 16°32.5'	217°54.6'	S 22°30.6'	259°26.2'	S 18°02.7'
2	205°20.6'	S 21°23.8'	279°10.3'	S 16°32.6'	232°56.8'	S 22°30.6'	274°27.1'	S 18°03.1'
3	220°19.7'	S 21°23.2'	294°12.4'	S 16°32.7'	247°58.9'	S 22°30.6'	289°28.0'	S 18°03.5'
4	235°18.9'	S 21°22.6'	309°14.5'	S 16°32.8'	263°01.1'	S 22°30.6'	304°28.9'	S 18°03.9'
5	250°18.0'	S 21°22.0'	324°16.6'	S 16°32.9'	278°03.2'	S 22°30.6'	319°29.8'	S 18°04.3'
6	265°17.1'	S 21°21.5'	339°18.7'	S 16°33.0'	293°05.4'	S 22°30.6'	334°30.6'	S 18°04.7'
7	280°16.3'	S 21°20.9'	354°20.8'	S 16°33.1'	308°07.6'	S 22°30.6'	349°31.5'	S 18°05.1'
8	295°15.4'	S 21°20.3'	9°23.0'	S 16°33.2'	323°09.7'	S 22°30.6'	4°32.4'	S 18°05.5'
9	310°14.6'	S 21°19.7'	24°25.1'	S 16°33.2'	338°11.9'	S 22°30.6'	19°33.3'	S 18°05.9'
10	325°13.7'	S 21°19.1'	39°27.2'	S 16°33.3'	353°14.1'	S 22°30.6'	34°34.2'	S 18°06.3'
11	340°12.9'	S 21°18.5'	54°29.3'	S 16°33.4'	8°16.2'	S 22°30.6'	49°35.1'	S 18°06.7'
12	355°12.0'	S 21°18.0'	69°31.4'	S 16°33.5'	23°18.4'	S 22°30.6'	64°36.0'	S 18°07.1'
13	10°11.2'	S 21°17.4'	84°33.5'	S 16°33.6'	38°20.5'	S 22°30.6'	79°36.9'	S 18°07.4'
14	25°10.3'	S 21°16.8'	99°35.6'	S 16°33.7'	53°22.7'	S 22°30.6'	94°37.8'	S 18°07.8'
15	40°09.5'	S 21°16.2'	114°37.8'	S 16°33.8'	68°24.9'	S 22°30.6'	109°38.7'	S 18°08.2'
16	55°08.6'	S 21°15.6'	129°39.9'	S 16°33.9'	83°27.0'	S 22°30.6'	124°39.6'	S 18°08.6'
17	70°07.8'	S 21°15.0'	144°42.0'	S 16°33.9'	98°29.2'	S 22°30.5'	139°40.4'	S 18°09.0'
18	85°06.9'	S 21°14.4'	159°44.1'	S 16°34.0'	113°31.4'	S 22°30.5'	154°41.3'	S 18°09.4'
19	100°06.1'	S 21°13.8'	174°46.2'	S 16°34.1'	128°33.5'	S 22°30.5'	169°42.2'	S 18°09.8'
20	115°05.2'	S 21°13.2'	189°48.3'	S 16°34.2'	143°35.7'	S 22°30.5'	184°43.1'	S 18°10.2'
21	130°04.4'	S 21°12.6'	204°50.5'	S 16°34.3'	158°37.9'	S 22°30.5'	199°44.0'	S 18°10.6'
22	145°03.5'	S 21°12.0'	219°52.6'	S 16°34.4'	173°40.0'	S 22°30.5'	214°44.9'	S 18°11.0'
23	160°02.7'	S 21°11.4'	234°54.7'	S 16°34.5'	188°42.2'	S 22°30.5'	229°45.8'	S 18°11.4'

Thu Jan 18, 2018 UTC

UTC	Venus -3.8		Jupiter -1.7		Saturn +0.5		Mars +1.3	
	v = -0.8' d = 0.6'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	175°01.9'	S 21°10.8'	249°56.8'	S 16°34.6'	203°44.3'	S 22°30.5'	244°46.7'	S 18°11.8'
1	190°01.0'	S 21°10.2'	264°58.9'	S 16°34.6'	218°46.5'	S 22°30.5'	259°47.6'	S 18°12.2'
2	205°00.2'	S 21°09.6'	280°01.0'	S 16°34.7'	233°48.7'	S 22°30.5'	274°48.4'	S 18°12.6'
3	219°59.3'	S 21°09.0'	295°03.2'	S 16°34.8'	248°50.8'	S 22°30.5'	289°49.3'	S 18°13.0'
4	234°58.5'	S 21°08.4'	310°05.3'	S 16°34.9'	263°53.0'	S 22°30.5'	304°50.2'	S 18°13.4'
5	249°57.6'	S 21°07.8'	325°07.4'	S 16°35.0'	278°55.2'	S 22°30.5'	319°51.1'	S 18°13.8'
6	264°56.8'	S 21°07.2'	340°09.5'	S 16°35.1'	293°57.3'	S 22°30.5'	334°52.0'	S 18°14.2'
7	279°56.0'	S 21°06.6'	355°11.6'	S 16°35.2'	308°59.5'	S 22°30.5'	349°52.9'	S 18°14.6'
8	294°55.1'	S 21°06.0'	10°13.8'	S 16°35.3'	324°01.7'	S 22°30.5'	4°53.8'	S 18°14.9'
9	309°54.3'	S 21°05.4'	25°15.9'	S 16°35.3'	339°03.8'	S 22°30.5'	19°54.7'	S 18°15.3'
10	324°53.4'	S 21°04.8'	40°18.0'	S 16°35.4'	354°06.0'	S 22°30.5'	34°55.6'	S 18°15.7'
11	339°52.6'	S 21°04.2'	55°20.1'	S 16°35.5'	9°08.1'	S 22°30.4'	49°56.5'	S 18°16.1'
12	354°51.7'	S 21°03.5'	70°22.2'	S 16°35.6'	24°10.3'	S 22°30.4'	64°57.3'	S 18°16.5'
13	9°50.9'	S 21°02.9'	85°24.4'	S 16°35.7'	39°12.5'	S 22°30.4'	79°58.2'	S 18°16.9'
14	24°50.1'	S 21°02.3'	100°26.5'	S 16°35.8'	54°14.6'	S 22°30.4'	94°59.1'	S 18°17.3'
15	39°49.2'	S 21°01.7'	115°28.6'	S 16°35.9'	69°16.8'	S 22°30.4'	110°00.0'	S 18°17.7'
16	54°48.4'	S 21°01.1'	130°30.7'	S 16°36.0'	84°19.0'	S 22°30.4'	125°00.9'	S 18°18.1'
17	69°47.6'	S 21°00.5'	145°32.8'	S 16°36.0'	99°21.1'	S 22°30.4'	140°01.8'	S 18°18.5'
18	84°46.7'	S 20°59.8'	160°35.0'	S 16°36.1'	114°23.3'	S 22°30.4'	155°02.7'	S 18°18.9'
19	99°45.9'	S 20°59.2'	175°37.1'	S 16°36.2'	129°25.5'	S 22°30.4'	170°03.6'	S 18°19.2'
20	114°45.0'	S 20°58.6'	190°39.2'	S 16°36.3'	144°27.6'	S 22°30.4'	185°04.4'	S 18°19.6'
21	129°44.2'	S 20°58.0'	205°41.3'	S 16°36.4'	159°29.8'	S 22°30.4'	200°05.3'	S 18°20.0'
22	144°43.4'	S 20°57.4'	220°43.5'	S 16°36.5'	174°32.0'	S 22°30.4'	215°06.2'	S 18°20.4'
23	159°42.5'	S 20°56.7'	235°45.6'	S 16°36.6'	189°34.1'	S 22°30.4'	230°07.1'	S 18°20.8'

Fri Jan 19, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.5		Mars +1.3	
	v = -0.8' d = 0.6'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	174°41.7'	S 20°56.1'	250°47.7'	S 16°36.6'	204°36.3'	S 22°30.4'	245°08.0'	S 18°21.2'
1	189°40.9'	S 20°55.5'	265°49.8'	S 16°36.7'	219°38.5'	S 22°30.4'	260°08.9'	S 18°21.6'
2	204°40.0'	S 20°54.9'	280°51.9'	S 16°36.8'	234°40.6'	S 22°30.4'	275°09.8'	S 18°22.0'
3	219°39.2'	S 20°54.2'	295°54.1'	S 16°36.9'	249°42.8'	S 22°30.4'	290°10.7'	S 18°22.4'
4	234°38.4'	S 20°53.6'	310°56.2'	S 16°37.0'	264°44.9'	S 22°30.4'	305°11.6'	S 18°22.7'
5	249°37.5'	S 20°53.0'	325°58.3'	S 16°37.1'	279°47.1'	S 22°30.3'	320°12.4'	S 18°23.1'
6	264°36.7'	S 20°52.3'	341°00.4'	S 16°37.2'	294°49.3'	S 22°30.3'	335°13.3'	S 18°23.5'
7	279°35.9'	S 20°51.7'	356°02.6'	S 16°37.2'	309°51.4'	S 22°30.3'	350°14.2'	S 18°23.9'
8	294°35.0'	S 20°51.1'	11°04.7'	S 16°37.3'	324°53.6'	S 22°30.3'	5°15.1'	S 18°24.3'
9	309°34.2'	S 20°50.4'	26°06.8'	S 16°37.4'	339°55.8'	S 22°30.3'	20°16.0'	S 18°24.7'
10	324°33.4'	S 20°49.8'	41°08.9'	S 16°37.5'	354°57.9'	S 22°30.3'	35°16.9'	S 18°25.1'
11	339°32.6'	S 20°49.2'	56°11.1'	S 16°37.6'	10°00.1'	S 22°30.3'	50°17.8'	S 18°25.5'
12	354°31.7'	S 20°48.5'	71°13.2'	S 16°37.7'	25°02.3'	S 22°30.3'	65°18.7'	S 18°25.8'
13	9°30.9'	S 20°47.9'	86°15.3'	S 16°37.8'	40°04.4'	S 22°30.3'	80°19.5'	S 18°26.2'
14	24°30.1'	S 20°47.2'	101°17.4'	S 16°37.8'	55°06.6'	S 22°30.3'	95°20.4'	S 18°26.6'
15	39°29.2'	S 20°46.6'	116°19.6'	S 16°37.9'	70°08.8'	S 22°30.3'	110°21.3'	S 18°27.0'
16	54°28.4'	S 20°46.0'	131°21.7'	S 16°38.0'	85°10.9'	S 22°30.3'	125°22.2'	S 18°27.4'
17	69°27.6'	S 20°45.3'	146°23.8'	S 16°38.1'	100°13.1'	S 22°30.3'	140°23.1'	S 18°27.8'
18	84°26.8'	S 20°44.7'	161°26.0'	S 16°38.2'	115°15.3'	S 22°30.3'	155°24.0'	S 18°28.2'
19	99°25.9'	S 20°44.0'	176°28.1'	S 16°38.3'	130°17.4'	S 22°30.3'	170°24.9'	S 18°28.5'
20	114°25.1'	S 20°43.4'	191°30.2'	S 16°38.3'	145°19.6'	S 22°30.3'	185°25.7'	S 18°28.9'
21	129°24.3'	S 20°42.7'	206°32.3'	S 16°38.4'	160°21.8'	S 22°30.2'	200°26.6'	S 18°29.3'
22	144°23.5'	S 20°42.1'	221°34.5'	S 16°38.5'	175°23.9'	S 22°30.2'	215°27.5'	S 18°29.7'
23	159°22.7'	S 20°41.4'	236°36.6'	S 16°38.6'	190°26.1'	S 22°30.2'	230°28.4'	S 18°30.1'

Sat Jan 20, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.5		Mars +1.3	
	v = -0.8' d = 0.7'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	174°21.8'	S 20°40.8'	251°38.7'	S 16°38.7'	205°28.3'	S 22°30.2'	245°29.3'	S 18°30.5'
1	189°21.0'	S 20°40.1'	266°40.8'	S 16°38.8'	220°30.4'	S 22°30.2'	260°30.2'	S 18°30.8'
2	204°20.2'	S 20°39.5'	281°43.0'	S 16°38.8'	235°32.6'	S 22°30.2'	275°31.1'	S 18°31.2'
3	219°19.4'	S 20°38.8'	296°45.1'	S 16°38.9'	250°34.8'	S 22°30.2'	290°32.0'	S 18°31.6'
4	234°18.5'	S 20°38.2'	311°47.2'	S 16°39.0'	265°36.9'	S 22°30.2'	305°32.8'	S 18°32.0'
5	249°17.7'	S 20°37.5'	326°49.4'	S 16°39.1'	280°39.1'	S 22°30.2'	320°33.7'	S 18°32.4'
6	264°16.9'	S 20°36.8'	341°51.5'	S 16°39.2'	295°41.3'	S 22°30.2'	335°34.6'	S 18°32.8'
7	279°16.1'	S 20°36.2'	356°53.6'	S 16°39.3'	310°43.4'	S 22°30.2'	350°35.5'	S 18°33.1'
8	294°15.3'	S 20°35.5'	11°55.8'	S 16°39.3'	325°45.6'	S 22°30.2'	5°36.4'	S 18°33.5'
9	309°14.4'	S 20°34.9'	26°57.9'	S 16°39.4'	340°47.8'	S 22°30.2'	20°37.3'	S 18°33.9'
10	324°13.6'	S 20°34.2'	42°00.0'	S 16°39.5'	355°49.9'	S 22°30.2'	35°38.2'	S 18°34.3'
11	339°12.8'	S 20°33.5'	57°02.1'	S 16°39.6'	10°52.1'	S 22°30.2'	50°39.0'	S 18°34.7'
12	354°12.0'	S 20°32.9'	72°04.3'	S 16°39.7'	25°54.3'	S 22°30.2'	65°39.9'	S 18°35.0'
13	9°11.2'	S 20°32.2'	87°06.4'	S 16°39.8'	40°56.4'	S 22°30.2'	80°40.8'	S 18°35.4'
14	24°10.4'	S 20°31.5'	102°08.5'	S 16°39.8'	55°58.6'	S 22°30.1'	95°41.7'	S 18°35.8'
15	39°09.6'	S 20°30.9'	117°10.7'	S 16°39.9'	71°00.8'	S 22°30.1'	110°42.6'	S 18°36.2'
16	54°08.7'	S 20°30.2'	132°12.8'	S 16°40.0'	86°02.9'	S 22°30.1'	125°43.5'	S 18°36.6'
17	69°07.9'	S 20°29.5'	147°14.9'	S 16°40.1'	101°05.1'	S 22°30.1'	140°44.3'	S 18°36.9'
18	84°07.1'	S 20°28.9'	162°17.1'	S 16°40.2'	116°07.3'	S 22°30.1'	155°45.2'	S 18°37.3'
19	99°06.3'	S 20°28.2'	177°19.2'	S 16°40.3'	131°09.4'	S 22°30.1'	170°46.1'	S 18°37.7'
20	114°05.5'	S 20°27.5'	192°21.3'	S 16°40.3'	146°11.6'	S 22°30.1'	185°47.0'	S 18°38.1'
21	129°04.7'	S 20°26.8'	207°23.5'	S 16°40.4'	161°13.8'	S 22°30.1'	200°47.9'	S 18°38.5'
22	144°03.9'	S 20°26.2'	222°25.6'	S 16°40.5'	176°15.9'	S 22°30.1'	215°48.8'	S 18°38.8'
23	159°03.1'	S 20°25.5'	237°27.7'	S 16°40.6'	191°18.1'	S 22°30.1'	230°49.7'	S 18°39.2'

Sun Jan 21, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.5		Mars +1.3	
	v = -0.8' d = 0.7'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	174°02.2'	S 20°24.8'	252°29.9'	S 16°40.7'	206°20.3'	S 22°30.1'	245°50.5'	S 18°39.6'
1	189°01.4'	S 20°24.1'	267°32.0'	S 16°40.8'	221°22.5'	S 22°30.1'	260°51.4'	S 18°40.0'
2	204°00.6'	S 20°23.5'	282°34.1'	S 16°40.8'	236°24.6'	S 22°30.1'	275°52.3'	S 18°40.4'
3	218°59.8'	S 20°22.8'	297°36.3'	S 16°40.9'	251°26.8'	S 22°30.1'	290°53.2'	S 18°40.7'
4	233°59.0'	S 20°22.1'	312°38.4'	S 16°41.0'	266°29.0'	S 22°30.1'	305°54.1'	S 18°41.1'
5	248°58.2'	S 20°21.4'	327°40.5'	S 16°41.1'	281°31.1'	S 22°30.1'	320°55.0'	S 18°41.5'
6	263°57.4'	S 20°20.7'	342°42.7'	S 16°41.2'	296°33.3'	S 22°30.0'	335°55.8'	S 18°41.9'
7	278°56.6'	S 20°20.1'	357°44.8'	S 16°41.3'	311°35.5'	S 22°30.0'	350°56.7'	S 18°42.2'
8	293°55.8'	S 20°19.4'	12°46.9'	S 16°41.3'	326°37.6'	S 22°30.0'	5°57.6'	S 18°42.6'
9	308°55.0'	S 20°18.7'	27°49.1'	S 16°41.4'	341°39.8'	S 22°30.0'	20°58.5'	S 18°43.0'
10	323°54.2'	S 20°18.0'	42°51.2'	S 16°41.5'	356°42.0'	S 22°30.0'	35°59.4'	S 18°43.4'
11	338°53.4'	S 20°17.3'	57°53.4'	S 16°41.6'	11°44.1'	S 22°30.0'	51°00.3'	S 18°43.7'
12	353°52.6'	S 20°16.6'	72°55.5'	S 16°41.7'	26°46.3'	S 22°30.0'	66°01.2'	S 18°44.1'
13	8°51.8'	S 20°15.9'	87°57.6'	S 16°41.7'	41°48.5'	S 22°30.0'	81°02.0'	S 18°44.5'
14	23°50.9'	S 20°15.2'	102°59.8'	S 16°41.8'	56°50.6'	S 22°30.0'	96°02.9'	S 18°44.9'
15	38°50.1'	S 20°14.5'	118°01.9'	S 16°41.9'	71°52.8'	S 22°30.0'	111°03.8'	S 18°45.2'
16	53°49.3'	S 20°13.8'	133°04.0'	S 16°42.0'	86°55.0'	S 22°30.0'	126°04.7'	S 18°45.6'
17	68°48.5'	S 20°13.2'	148°06.2'	S 16°42.1'	101°57.1'	S 22°30.0'	141°05.6'	S 18°46.0'
18	83°47.7'	S 20°12.5'	163°08.3'	S 16°42.1'	116°59.3'	S 22°30.0'	156°06.5'	S 18°46.4'
19	98°46.9'	S 20°11.8'	178°10.4'	S 16°42.2'	132°01.5'	S 22°30.0'	171°07.3'	S 18°46.7'
20	113°46.1'	S 20°11.1'	193°12.6'	S 16°42.3'	147°03.7'	S 22°30.0'	186°08.2'	S 18°47.1'
21	128°45.3'	S 20°10.4'	208°14.7'	S 16°42.4'	162°05.8'	S 22°30.0'	201°09.1'	S 18°47.5'
22	143°44.5'	S 20°09.7'	223°16.9'	S 16°42.5'	177°08.0'	S 22°29.9'	216°10.0'	S 18°47.9'
23	158°43.7'	S 20°09.0'	238°19.0'	S 16°42.5'	192°10.2'	S 22°29.9'	231°10.9'	S 18°48.2'

Mon Jan 22, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.5		Mars +1.3	
	v = -0.8' d = 0.7'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	173°42.9'	S 20°08.3'	253°21.1'	S 16°42.6'	207°12.3'	S 22°29.9'	246°11.8'	S 18°48.6'
1	188°42.1'	S 20°07.6'	268°23.3'	S 16°42.7'	222°14.5'	S 22°29.9'	261°12.6'	S 18°49.0'
2	203°41.3'	S 20°06.9'	283°25.4'	S 16°42.8'	237°16.7'	S 22°29.9'	276°13.5'	S 18°49.4'
3	218°40.6'	S 20°06.2'	298°27.6'	S 16°42.9'	252°18.8'	S 22°29.9'	291°14.4'	S 18°49.7'
4	233°39.8'	S 20°05.4'	313°29.7'	S 16°43.0'	267°21.0'	S 22°29.9'	306°15.3'	S 18°50.1'
5	248°39.0'	S 20°04.7'	328°31.8'	S 16°43.0'	282°23.2'	S 22°29.9'	321°16.2'	S 18°50.5'
6	263°38.2'	S 20°04.0'	343°34.0'	S 16°43.1'	297°25.4'	S 22°29.9'	336°17.0'	S 18°50.8'
7	278°37.4'	S 20°03.3'	358°36.1'	S 16°43.2'	312°27.5'	S 22°29.9'	351°17.9'	S 18°51.2'
8	293°36.6'	S 20°02.6'	13°38.3'	S 16°43.3'	327°29.7'	S 22°29.9'	6°18.8'	S 18°51.6'
9	308°35.8'	S 20°01.9'	28°40.4'	S 16°43.4'	342°31.9'	S 22°29.9'	21°19.7'	S 18°52.0'
10	323°35.0'	S 20°01.2'	43°42.5'	S 16°43.4'	357°34.0'	S 22°29.9'	36°20.6'	S 18°52.3'
11	338°34.2'	S 20°00.5'	58°44.7'	S 16°43.5'	12°36.2'	S 22°29.9'	51°21.5'	S 18°52.7'
12	353°33.4'	S 19°59.8'	73°46.8'	S 16°43.6'	27°38.4'	S 22°29.9'	66°22.3'	S 18°53.1'
13	8°32.6'	S 19°59.1'	88°49.0'	S 16°43.7'	42°40.5'	S 22°29.8'	81°23.2'	S 18°53.4'
14	23°31.8'	S 19°58.3'	103°51.1'	S 16°43.7'	57°42.7'	S 22°29.8'	96°24.1'	S 18°53.8'
15	38°31.0'	S 19°57.6'	118°53.3'	S 16°43.8'	72°44.9'	S 22°29.8'	111°25.0'	S 18°54.2'
16	53°30.2'	S 19°56.9'	133°55.4'	S 16°43.9'	87°47.1'	S 22°29.8'	126°25.9'	S 18°54.5'
17	68°29.5'	S 19°56.2'	148°57.5'	S 16°44.0'	102°49.2'	S 22°29.8'	141°26.8'	S 18°54.9'
18	83°28.7'	S 19°55.5'	163°59.7'	S 16°44.1'	117°51.4'	S 22°29.8'	156°27.6'	S 18°55.3'
19	98°27.9'	S 19°54.7'	179°01.8'	S 16°44.1'	132°53.6'	S 22°29.8'	171°28.5'	S 18°55.6'
20	113°27.1'	S 19°54.0'	194°04.0'	S 16°44.2'	147°55.7'	S 22°29.8'	186°29.4'	S 18°56.0'
21	128°26.3'	S 19°53.3'	209°06.1'	S 16°44.3'	162°57.9'	S 22°29.8'	201°30.3'	S 18°56.4'
22	143°25.5'	S 19°52.6'	224°08.3'	S 16°44.4'	178°00.1'	S 22°29.8'	216°31.2'	S 18°56.8'
23	158°24.7'	S 19°51.8'	239°10.4'	S 16°44.5'	193°02.3'	S 22°29.8'	231°32.0'	S 18°57.1'

Tue Jan 23, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.6		Mars +1.3	
	v = -0.8' d = 0.7'		v = 2.1' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	173°23.9'	S 19°51.1'	254°12.5'	S 16°44.5'	208°04.4'	S 22°29.8'	246°32.9'	S 18°57.5'
1	188°23.2'	S 19°50.4'	269°14.7'	S 16°44.6'	223°06.6'	S 22°29.8'	261°33.8'	S 18°57.9'
2	203°22.4'	S 19°49.7'	284°16.8'	S 16°44.7'	238°08.8'	S 22°29.8'	276°34.7'	S 18°58.2'
3	218°21.6'	S 19°48.9'	299°19.0'	S 16°44.8'	253°10.9'	S 22°29.8'	291°35.6'	S 18°58.6'
4	233°20.8'	S 19°48.2'	314°21.1'	S 16°44.9'	268°13.1'	S 22°29.7'	306°36.4'	S 18°59.0'
5	248°20.0'	S 19°47.5'	329°23.3'	S 16°44.9'	283°15.3'	S 22°29.7'	321°37.3'	S 18°59.3'
6	263°19.2'	S 19°46.7'	344°25.4'	S 16°45.0'	298°17.5'	S 22°29.7'	336°38.2'	S 18°59.7'
7	278°18.5'	S 19°46.0'	359°27.6'	S 16°45.1'	313°19.6'	S 22°29.7'	351°39.1'	S 19°00.1'
8	293°17.7'	S 19°45.3'	14°29.7'	S 16°45.2'	328°21.8'	S 22°29.7'	6°40.0'	S 19°00.4'
9	308°16.9'	S 19°44.5'	29°31.9'	S 16°45.2'	343°24.0'	S 22°29.7'	21°40.9'	S 19°00.8'
10	323°16.1'	S 19°43.8'	44°34.0'	S 16°45.3'	358°26.1'	S 22°29.7'	36°41.7'	S 19°01.1'
11	338°15.3'	S 19°43.1'	59°36.2'	S 16°45.4'	13°28.3'	S 22°29.7'	51°42.6'	S 19°01.5'
12	353°14.6'	S 19°42.3'	74°38.3'	S 16°45.5'	28°30.5'	S 22°29.7'	66°43.5'	S 19°01.9'
13	8°13.8'	S 19°41.6'	89°40.5'	S 16°45.6'	43°32.7'	S 22°29.7'	81°44.4'	S 19°02.2'
14	23°13.0'	S 19°40.9'	104°42.6'	S 16°45.6'	58°34.8'	S 22°29.7'	96°45.3'	S 19°02.6'
15	38°12.2'	S 19°40.1'	119°44.7'	S 16°45.7'	73°37.0'	S 22°29.7'	111°46.1'	S 19°03.0'
16	53°11.4'	S 19°39.4'	134°46.9'	S 16°45.8'	88°39.2'	S 22°29.7'	126°47.0'	S 19°03.3'
17	68°10.7'	S 19°38.6'	149°49.0'	S 16°45.9'	103°41.4'	S 22°29.7'	141°47.9'	S 19°03.7'
18	83°09.9'	S 19°37.9'	164°51.2'	S 16°45.9'	118°43.5'	S 22°29.6'	156°48.8'	S 19°04.1'
19	98°09.1'	S 19°37.1'	179°53.3'	S 16°46.0'	133°45.7'	S 22°29.6'	171°49.7'	S 19°04.4'
20	113°08.3'	S 19°36.4'	194°55.5'	S 16°46.1'	148°47.9'	S 22°29.6'	186°50.5'	S 19°04.8'
21	128°07.6'	S 19°35.6'	209°57.6'	S 16°46.2'	163°50.0'	S 22°29.6'	201°51.4'	S 19°05.1'
22	143°06.8'	S 19°34.9'	224°59.8'	S 16°46.3'	178°52.2'	S 22°29.6'	216°52.3'	S 19°05.5'
23	158°06.0'	S 19°34.2'	240°01.9'	S 16°46.3'	193°54.4'	S 22°29.6'	231°53.2'	S 19°05.9'

Wed Jan 24, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.6		Mars +1.3	
	v = -0.8' d = 0.8'		v = 2.2' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	173°05.2'	S 19°33.4'	255°04.1'	S 16°46.4'	208°56.6'	S 22°29.6'	246°54.1'	S 19°06.2'
1	188°04.5'	S 19°32.7'	270°06.2'	S 16°46.5'	223°58.7'	S 22°29.6'	261°54.9'	S 19°06.6'
2	203°03.7'	S 19°31.9'	285°08.4'	S 16°46.6'	239°00.9'	S 22°29.6'	276°55.8'	S 19°07.0'
3	218°02.9'	S 19°31.1'	300°10.5'	S 16°46.6'	254°03.1'	S 22°29.6'	291°56.7'	S 19°07.3'
4	233°02.2'	S 19°30.4'	315°12.7'	S 16°46.7'	269°05.3'	S 22°29.6'	306°57.6'	S 19°07.7'
5	248°01.4'	S 19°29.6'	330°14.8'	S 16°46.8'	284°07.4'	S 22°29.6'	321°58.5'	S 19°08.0'
6	263°00.6'	S 19°28.9'	345°17.0'	S 16°46.9'	299°09.6'	S 22°29.6'	336°59.3'	S 19°08.4'
7	277°59.9'	S 19°28.1'	0°19.1'	S 16°46.9'	314°11.8'	S 22°29.6'	352°00.2'	S 19°08.8'
8	292°59.1'	S 19°27.4'	15°21.3'	S 16°47.0'	329°14.0'	S 22°29.6'	7°01.1'	S 19°09.1'
9	307°58.3'	S 19°26.6'	30°23.5'	S 16°47.1'	344°16.1'	S 22°29.5'	22°02.0'	S 19°09.5'
10	322°57.5'	S 19°25.8'	45°25.6'	S 16°47.2'	359°18.3'	S 22°29.5'	37°02.8'	S 19°09.8'
11	337°56.8'	S 19°25.1'	60°27.8'	S 16°47.3'	14°20.5'	S 22°29.5'	52°03.7'	S 19°10.2'
12	352°56.0'	S 19°24.3'	75°29.9'	S 16°47.3'	29°22.6'	S 22°29.5'	67°04.6'	S 19°10.6'
13	7°55.2'	S 19°23.6'	90°32.1'	S 16°47.4'	44°24.8'	S 22°29.5'	82°05.5'	S 19°10.9'
14	22°54.5'	S 19°22.8'	105°34.2'	S 16°47.5'	59°27.0'	S 22°29.5'	97°06.4'	S 19°11.3'
15	37°53.7'	S 19°22.0'	120°36.4'	S 16°47.6'	74°29.2'	S 22°29.5'	112°07.2'	S 19°11.6'
16	52°53.0'	S 19°21.3'	135°38.5'	S 16°47.6'	89°31.3'	S 22°29.5'	127°08.1'	S 19°12.0'
17	67°52.2'	S 19°20.5'	150°40.7'	S 16°47.7'	104°33.5'	S 22°29.5'	142°09.0'	S 19°12.3'
18	82°51.4'	S 19°19.7'	165°42.8'	S 16°47.8'	119°35.7'	S 22°29.5'	157°09.9'	S 19°12.7'
19	97°50.7'	S 19°19.0'	180°45.0'	S 16°47.9'	134°37.9'	S 22°29.5'	172°10.8'	S 19°13.1'
20	112°49.9'	S 19°18.2'	195°47.1'	S 16°47.9'	149°40.0'	S 22°29.5'	187°11.6'	S 19°13.4'
21	127°49.1'	S 19°17.4'	210°49.3'	S 16°48.0'	164°42.2'	S 22°29.5'	202°12.5'	S 19°13.8'
22	142°48.4'	S 19°16.7'	225°51.5'	S 16°48.1'	179°44.4'	S 22°29.5'	217°13.4'	S 19°14.1'
23	157°47.6'	S 19°15.9'	240°53.6'	S 16°48.2'	194°46.6'	S 22°29.4'	232°14.3'	S 19°14.5'

Thu Jan 25, 2018 UTC

UTC	Venus -3.8 v = -0.8' d = 0.8'		Jupiter -1.8 v = 2.2' d = 0.1'		Saturn +0.6 v = 2.2' d = 0.0'		Mars +1.3 v = 0.9' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	172°46.9'	S 19°15.1'	255°55.8'	S 16°48.2'	209°48.7'	S 22°29.4'	247°15.1'	S 19°14.8'
1	187°46.1'	S 19°14.3'	270°57.9'	S 16°48.3'	224°50.9'	S 22°29.4'	262°16.0'	S 19°15.2'
2	202°45.3'	S 19°13.6'	286°00.1'	S 16°48.4'	239°53.1'	S 22°29.4'	277°16.9'	S 19°15.6'
3	217°44.6'	S 19°12.8'	301°02.2'	S 16°48.5'	254°55.3'	S 22°29.4'	292°17.8'	S 19°15.9'
4	232°43.8'	S 19°12.0'	316°04.4'	S 16°48.5'	269°57.4'	S 22°29.4'	307°18.7'	S 19°16.3'
5	247°43.1'	S 19°11.2'	331°06.5'	S 16°48.6'	284°59.6'	S 22°29.4'	322°19.5'	S 19°16.6'
6	262°42.3'	S 19°10.5'	346°08.7'	S 16°48.7'	300°01.8'	S 22°29.4'	337°20.4'	S 19°17.0'
7	277°41.6'	S 19°09.7'	1°10.9'	S 16°48.8'	315°04.0'	S 22°29.4'	352°21.3'	S 19°17.3'
8	292°40.8'	S 19°08.9'	16°13.0'	S 16°48.8'	330°06.1'	S 22°29.4'	7°22.2'	S 19°17.7'
9	307°40.0'	S 19°08.1'	31°15.2'	S 16°48.9'	345°08.3'	S 22°29.4'	22°23.1'	S 19°18.0'
10	322°39.3'	S 19°07.3'	46°17.3'	S 16°49.0'	0°10.5'	S 22°29.4'	37°23.9'	S 19°18.4'
11	337°38.5'	S 19°06.5'	61°19.5'	S 16°49.1'	15°12.7'	S 22°29.4'	52°24.8'	S 19°18.7'
12	352°37.8'	S 19°05.8'	76°21.7'	S 16°49.1'	30°14.8'	S 22°29.4'	67°25.7'	S 19°19.1'
13	7°37.0'	S 19°05.0'	91°23.8'	S 16°49.2'	45°17.0'	S 22°29.3'	82°26.6'	S 19°19.5'
14	22°36.3'	S 19°04.2'	106°26.0'	S 16°49.3'	60°19.2'	S 22°29.3'	97°27.4'	S 19°19.8'
15	37°35.5'	S 19°03.4'	121°28.1'	S 16°49.4'	75°21.4'	S 22°29.3'	112°28.3'	S 19°20.2'
16	52°34.8'	S 19°02.6'	136°30.3'	S 16°49.4'	90°23.6'	S 22°29.3'	127°29.2'	S 19°20.5'
17	67°34.0'	S 19°01.8'	151°32.5'	S 16°49.5'	105°25.7'	S 22°29.3'	142°30.1'	S 19°20.9'
18	82°33.3'	S 19°01.0'	166°34.6'	S 16°49.6'	120°27.9'	S 22°29.3'	157°30.9'	S 19°21.2'
19	97°32.5'	S 19°00.2'	181°36.8'	S 16°49.7'	135°30.1'	S 22°29.3'	172°31.8'	S 19°21.6'
20	112°31.8'	S 18°59.4'	196°38.9'	S 16°49.7'	150°32.3'	S 22°29.3'	187°32.7'	S 19°21.9'
21	127°31.0'	S 18°58.6'	211°41.1'	S 16°49.8'	165°34.4'	S 22°29.3'	202°33.6'	S 19°22.3'
22	142°30.3'	S 18°57.9'	226°43.3'	S 16°49.9'	180°36.6'	S 22°29.3'	217°34.5'	S 19°22.6'
23	157°29.5'	S 18°57.1'	241°45.4'	S 16°49.9'	195°38.8'	S 22°29.3'	232°35.3'	S 19°23.0'

Fri Jan 26, 2018 UTC

UTC	Venus -3.8 v = -0.7' d = 0.8'		Jupiter -1.8 v = 2.2' d = 0.1'		Saturn +0.6 v = 2.2' d = 0.0'		Mars +1.2 v = 0.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	172°28.8'	S 18°56.3'	256°47.6'	S 16°50.0'	210°41.0'	S 22°29.3'	247°36.2'	S 19°23.3'
1	187°28.0'	S 18°55.5'	271°49.7'	S 16°50.1'	225°43.1'	S 22°29.3'	262°37.1'	S 19°23.7'
2	202°27.3'	S 18°54.7'	286°51.9'	S 16°50.2'	240°45.3'	S 22°29.2'	277°38.0'	S 19°24.0'
3	217°26.5'	S 18°53.9'	301°54.1'	S 16°50.2'	255°47.5'	S 22°29.2'	292°38.8'	S 19°24.4'
4	232°25.8'	S 18°53.1'	316°56.2'	S 16°50.3'	270°49.7'	S 22°29.2'	307°39.7'	S 19°24.7'
5	247°25.1'	S 18°52.3'	331°58.4'	S 16°50.4'	285°51.8'	S 22°29.2'	322°40.6'	S 19°25.1'
6	262°24.3'	S 18°51.5'	347°00.6'	S 16°50.5'	300°54.0'	S 22°29.2'	337°41.5'	S 19°25.4'
7	277°23.6'	S 18°50.7'	2°02.7'	S 16°50.5'	315°56.2'	S 22°29.2'	352°42.3'	S 19°25.8'
8	292°22.8'	S 18°49.9'	17°04.9'	S 16°50.6'	330°58.4'	S 22°29.2'	7°43.2'	S 19°26.1'
9	307°22.1'	S 18°49.1'	32°07.0'	S 16°50.7'	346°00.6'	S 22°29.2'	22°44.1'	S 19°26.5'
10	322°21.3'	S 18°48.2'	47°09.2'	S 16°50.7'	1°02.7'	S 22°29.2'	37°45.0'	S 19°26.8'
11	337°20.6'	S 18°47.4'	62°11.4'	S 16°50.8'	16°04.9'	S 22°29.2'	52°45.8'	S 19°27.2'
12	352°19.9'	S 18°46.6'	77°13.5'	S 16°50.9'	31°07.1'	S 22°29.2'	67°46.7'	S 19°27.5'
13	7°19.1'	S 18°45.8'	92°15.7'	S 16°51.0'	46°09.3'	S 22°29.2'	82°47.6'	S 19°27.9'
14	22°18.4'	S 18°45.0'	107°17.9'	S 16°51.0'	61°11.4'	S 22°29.2'	97°48.5'	S 19°28.2'
15	37°17.6'	S 18°44.2'	122°20.0'	S 16°51.1'	76°13.6'	S 22°29.1'	112°49.3'	S 19°28.6'
16	52°16.9'	S 18°43.4'	137°22.2'	S 16°51.2'	91°15.8'	S 22°29.1'	127°50.2'	S 19°28.9'
17	67°16.2'	S 18°42.6'	152°24.4'	S 16°51.3'	106°18.0'	S 22°29.1'	142°51.1'	S 19°29.2'
18	82°15.4'	S 18°41.8'	167°26.5'	S 16°51.3'	121°20.2'	S 22°29.1'	157°52.0'	S 19°29.6'
19	97°14.7'	S 18°41.0'	182°28.7'	S 16°51.4'	136°22.3'	S 22°29.1'	172°52.9'	S 19°29.9'
20	112°14.0'	S 18°40.1'	197°30.9'	S 16°51.5'	151°24.5'	S 22°29.1'	187°53.7'	S 19°30.3'
21	127°13.2'	S 18°39.3'	212°33.0'	S 16°51.5'	166°26.7'	S 22°29.1'	202°54.6'	S 19°30.6'
22	142°12.5'	S 18°38.5'	227°35.2'	S 16°51.6'	181°28.9'	S 22°29.1'	217°55.5'	S 19°31.0'
23	157°11.7'	S 18°37.7'	242°37.4'	S 16°51.7'	196°31.0'	S 22°29.1'	232°56.4'	S 19°31.3'

Sat Jan 27, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.6		Mars +1.2	
	v = -0.7' d = 0.8'		v = 2.2' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	172°11.0'	S 18°36.9'	257°39.5'	S 16°51.8'	211°33.2'	S 22°29.1'	247°57.2'	S 19°31.7'
1	187°10.3'	S 18°36.1'	272°41.7'	S 16°51.8'	226°35.4'	S 22°29.1'	262°58.1'	S 19°32.0'
2	202°09.5'	S 18°35.2'	287°43.9'	S 16°51.9'	241°37.6'	S 22°29.1'	277°59.0'	S 19°32.4'
3	217°08.8'	S 18°34.4'	302°46.0'	S 16°52.0'	256°39.8'	S 22°29.1'	292°59.9'	S 19°32.7'
4	232°08.1'	S 18°33.6'	317°48.2'	S 16°52.0'	271°41.9'	S 22°29.1'	308°00.7'	S 19°33.0'
5	247°07.4'	S 18°32.8'	332°50.4'	S 16°52.1'	286°44.1'	S 22°29.0'	323°01.6'	S 19°33.4'
6	262°06.6'	S 18°31.9'	347°52.5'	S 16°52.2'	301°46.3'	S 22°29.0'	338°02.5'	S 19°33.7'
7	277°05.9'	S 18°31.1'	2°54.7'	S 16°52.3'	316°48.5'	S 22°29.0'	353°03.4'	S 19°34.1'
8	292°05.2'	S 18°30.3'	17°56.9'	S 16°52.3'	331°50.7'	S 22°29.0'	8°04.2'	S 19°34.4'
9	307°04.4'	S 18°29.5'	32°59.0'	S 16°52.4'	346°52.8'	S 22°29.0'	23°05.1'	S 19°34.8'
10	322°03.7'	S 18°28.6'	48°01.2'	S 16°52.5'	1°55.0'	S 22°29.0'	38°06.0'	S 19°35.1'
11	337°03.0'	S 18°27.8'	63°03.4'	S 16°52.5'	16°57.2'	S 22°29.0'	53°06.9'	S 19°35.4'
12	352°02.2'	S 18°27.0'	78°05.6'	S 16°52.6'	31°59.4'	S 22°29.0'	68°07.7'	S 19°35.8'
13	7°01.5'	S 18°26.1'	93°07.7'	S 16°52.7'	47°01.6'	S 22°29.0'	83°08.6'	S 19°36.1'
14	22°00.8'	S 18°25.3'	108°09.9'	S 16°52.8'	62°03.7'	S 22°29.0'	98°09.5'	S 19°36.5'
15	37°00.1'	S 18°24.5'	123°12.1'	S 16°52.8'	77°05.9'	S 22°29.0'	113°10.3'	S 19°36.8'
16	51°59.3'	S 18°23.6'	138°14.2'	S 16°52.9'	92°08.1'	S 22°29.0'	128°11.2'	S 19°37.2'
17	66°58.6'	S 18°22.8'	153°16.4'	S 16°53.0'	107°10.3'	S 22°29.0'	143°12.1'	S 19°37.5'
18	81°57.9'	S 18°22.0'	168°18.6'	S 16°53.0'	122°12.5'	S 22°28.9'	158°13.0'	S 19°37.8'
19	96°57.2'	S 18°21.1'	183°20.8'	S 16°53.1'	137°14.6'	S 22°28.9'	173°13.8'	S 19°38.2'
20	111°56.5'	S 18°20.3'	198°22.9'	S 16°53.2'	152°16.8'	S 22°28.9'	188°14.7'	S 19°38.5'
21	126°55.7'	S 18°19.5'	213°25.1'	S 16°53.2'	167°19.0'	S 22°28.9'	203°15.6'	S 19°38.9'
22	141°55.0'	S 18°18.6'	228°27.3'	S 16°53.3'	182°21.2'	S 22°28.9'	218°16.5'	S 19°39.2'
23	156°54.3'	S 18°17.8'	243°29.4'	S 16°53.4'	197°23.4'	S 22°28.9'	233°17.3'	S 19°39.5'

Sun Jan 28, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.6		Mars +1.2	
	v = -0.7' d = 0.9'		v = 2.2' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	171°53.6'	S 18°16.9'	258°31.6'	S 16°53.5'	212°25.5'	S 22°28.9'	248°18.2'	S 19°39.9'
1	186°52.8'	S 18°16.1'	273°33.8'	S 16°53.5'	227°27.7'	S 22°28.9'	263°19.1'	S 19°40.2'
2	201°52.1'	S 18°15.3'	288°36.0'	S 16°53.6'	242°29.9'	S 22°28.9'	278°20.0'	S 19°40.6'
3	216°51.4'	S 18°14.4'	303°38.1'	S 16°53.7'	257°32.1'	S 22°28.9'	293°20.8'	S 19°40.9'
4	231°50.7'	S 18°13.6'	318°40.3'	S 16°53.7'	272°34.3'	S 22°28.9'	308°21.7'	S 19°41.2'
5	246°50.0'	S 18°12.7'	333°42.5'	S 16°53.8'	287°36.4'	S 22°28.9'	323°22.6'	S 19°41.6'
6	261°49.3'	S 18°11.9'	348°44.7'	S 16°53.9'	302°38.6'	S 22°28.9'	338°23.5'	S 19°41.9'
7	276°48.5'	S 18°11.0'	3°46.8'	S 16°53.9'	317°40.8'	S 22°28.8'	353°24.3'	S 19°42.2'
8	291°47.8'	S 18°10.2'	18°49.0'	S 16°54.0'	332°43.0'	S 22°28.8'	8°25.2'	S 19°42.6'
9	306°47.1'	S 18°09.3'	33°51.2'	S 16°54.1'	347°45.2'	S 22°28.8'	23°26.1'	S 19°42.9'
10	321°46.4'	S 18°08.5'	48°53.4'	S 16°54.2'	2°47.3'	S 22°28.8'	38°26.9'	S 19°43.3'
11	336°45.7'	S 18°07.6'	63°55.5'	S 16°54.2'	17°49.5'	S 22°28.8'	53°27.8'	S 19°43.6'
12	351°45.0'	S 18°06.8'	78°57.7'	S 16°54.3'	32°51.7'	S 22°28.8'	68°28.7'	S 19°43.9'
13	6°44.2'	S 18°05.9'	93°59.9'	S 16°54.4'	47°53.9'	S 22°28.8'	83°29.6'	S 19°44.3'
14	21°43.5'	S 18°05.1'	109°02.1'	S 16°54.4'	62°56.1'	S 22°28.8'	98°30.4'	S 19°44.6'
15	36°42.8'	S 18°04.2'	124°04.2'	S 16°54.5'	77°58.3'	S 22°28.8'	113°31.3'	S 19°44.9'
16	51°42.1'	S 18°03.4'	139°06.4'	S 16°54.6'	93°00.4'	S 22°28.8'	128°32.2'	S 19°45.3'
17	66°41.4'	S 18°02.5'	154°08.6'	S 16°54.6'	108°02.6'	S 22°28.8'	143°33.1'	S 19°45.6'
18	81°40.7'	S 18°01.7'	169°10.8'	S 16°54.7'	123°04.8'	S 22°28.8'	158°33.9'	S 19°45.9'
19	96°40.0'	S 18°00.8'	184°13.0'	S 16°54.8'	138°07.0'	S 22°28.7'	173°34.8'	S 19°46.3'
20	111°39.3'	S 17°59.9'	199°15.1'	S 16°54.8'	153°09.2'	S 22°28.7'	188°35.7'	S 19°46.6'
21	126°38.6'	S 17°59.1'	214°17.3'	S 16°54.9'	168°11.3'	S 22°28.7'	203°36.5'	S 19°46.9'
22	141°37.8'	S 17°58.2'	229°19.5'	S 16°55.0'	183°13.5'	S 22°28.7'	218°37.4'	S 19°47.3'
23	156°37.1'	S 17°57.4'	244°21.7'	S 16°55.0'	198°15.7'	S 22°28.7'	233°38.3'	S 19°47.6'

Mon Jan 29, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.6		Mars +1.2	
	v = -0.7' d = 0.9'		v = 2.2' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	171°36.4'	S 17°56.5'	259°23.9'	S 16°55.1'	213°17.9'	S 22°28.7'	248°39.2'	S 19°47.9'
1	186°35.7'	S 17°55.6'	274°26.0'	S 16°55.2'	228°20.1'	S 22°28.7'	263°40.0'	S 19°48.3'
2	201°35.0'	S 17°54.8'	289°28.2'	S 16°55.2'	243°22.3'	S 22°28.7'	278°40.9'	S 19°48.6'
3	216°34.3'	S 17°53.9'	304°30.4'	S 16°55.3'	258°24.4'	S 22°28.7'	293°41.8'	S 19°48.9'
4	231°33.6'	S 17°53.0'	319°32.6'	S 16°55.4'	273°26.6'	S 22°28.7'	308°42.7'	S 19°49.3'
5	246°32.9'	S 17°52.2'	334°34.8'	S 16°55.5'	288°28.8'	S 22°28.7'	323°43.5'	S 19°49.6'
6	261°32.2'	S 17°51.3'	349°36.9'	S 16°55.5'	303°31.0'	S 22°28.7'	338°44.4'	S 19°49.9'
7	276°31.5'	S 17°50.4'	4°39.1'	S 16°55.6'	318°33.2'	S 22°28.7'	353°45.3'	S 19°50.3'
8	291°30.8'	S 17°49.6'	19°41.3'	S 16°55.7'	333°35.4'	S 22°28.6'	8°46.1'	S 19°50.6'
9	306°30.1'	S 17°48.7'	34°43.5'	S 16°55.7'	348°37.5'	S 22°28.6'	23°47.0'	S 19°50.9'
10	321°29.4'	S 17°47.8'	49°45.7'	S 16°55.8'	3°39.7'	S 22°28.6'	38°47.9'	S 19°51.3'
11	336°28.7'	S 17°47.0'	64°47.8'	S 16°55.9'	18°41.9'	S 22°28.6'	53°48.8'	S 19°51.6'
12	351°28.0'	S 17°46.1'	79°50.0'	S 16°55.9'	33°44.1'	S 22°28.6'	68°49.6'	S 19°51.9'
13	6°27.3'	S 17°45.2'	94°52.2'	S 16°56.0'	48°46.3'	S 22°28.6'	83°50.5'	S 19°52.3'
14	21°26.6'	S 17°44.3'	109°54.4'	S 16°56.1'	63°48.5'	S 22°28.6'	98°51.4'	S 19°52.6'
15	36°25.9'	S 17°43.5'	124°56.6'	S 16°56.1'	78°50.6'	S 22°28.6'	113°52.2'	S 19°52.9'
16	51°25.2'	S 17°42.6'	139°58.8'	S 16°56.2'	93°52.8'	S 22°28.6'	128°53.1'	S 19°53.3'
17	66°24.5'	S 17°41.7'	155°00.9'	S 16°56.3'	108°55.0'	S 22°28.6'	143°54.0'	S 19°53.6'
18	81°23.8'	S 17°40.8'	170°03.1'	S 16°56.3'	123°57.2'	S 22°28.6'	158°54.9'	S 19°53.9'
19	96°23.1'	S 17°40.0'	185°05.3'	S 16°56.4'	138°59.4'	S 22°28.6'	173°55.7'	S 19°54.2'
20	111°22.4'	S 17°39.1'	200°07.5'	S 16°56.5'	154°01.6'	S 22°28.5'	188°56.6'	S 19°54.6'
21	126°21.7'	S 17°38.2'	215°09.7'	S 16°56.5'	169°03.7'	S 22°28.5'	203°57.5'	S 19°54.9'
22	141°21.0'	S 17°37.3'	230°11.9'	S 16°56.6'	184°05.9'	S 22°28.5'	218°58.3'	S 19°55.2'
23	156°20.3'	S 17°36.4'	245°14.0'	S 16°56.7'	199°08.1'	S 22°28.5'	233°59.2'	S 19°55.6'

Tue Jan 30, 2018 UTC

UTC	Venus -3.8		Jupiter -1.8		Saturn +0.6		Mars +1.2	
	v = -0.7' d = 0.9'		v = 2.2' d = 0.1'		v = 2.2' d = 0.0'		v = 0.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	171°19.6'	S 17°35.5'	260°16.2'	S 16°56.7'	214°10.3'	S 22°28.5'	249°00.1'	S 19°55.9'
1	186°18.9'	S 17°34.7'	275°18.4'	S 16°56.8'	229°12.5'	S 22°28.5'	264°00.9'	S 19°56.2'
2	201°18.2'	S 17°33.8'	290°20.6'	S 16°56.9'	244°14.7'	S 22°28.5'	279°01.8'	S 19°56.5'
3	216°17.5'	S 17°32.9'	305°22.8'	S 16°56.9'	259°16.8'	S 22°28.5'	294°02.7'	S 19°56.9'
4	231°16.8'	S 17°32.0'	320°25.0'	S 16°57.0'	274°19.0'	S 22°28.5'	309°03.6'	S 19°57.2'
5	246°16.1'	S 17°31.1'	335°27.2'	S 16°57.1'	289°21.2'	S 22°28.5'	324°04.4'	S 19°57.5'
6	261°15.5'	S 17°30.2'	350°29.3'	S 16°57.1'	304°23.4'	S 22°28.5'	339°05.3'	S 19°57.8'
7	276°14.8'	S 17°29.3'	5°31.5'	S 16°57.2'	319°25.6'	S 22°28.5'	354°06.2'	S 19°58.2'
8	291°14.1'	S 17°28.4'	20°33.7'	S 16°57.3'	334°27.8'	S 22°28.4'	9°07.0'	S 19°58.5'
9	306°13.4'	S 17°27.6'	35°35.9'	S 16°57.3'	349°30.0'	S 22°28.4'	24°07.9'	S 19°58.8'
10	321°12.7'	S 17°26.7'	50°38.1'	S 16°57.4'	4°32.1'	S 22°28.4'	39°08.8'	S 19°59.2'
11	336°12.0'	S 17°25.8'	65°40.3'	S 16°57.4'	19°34.3'	S 22°28.4'	54°09.7'	S 19°59.5'
12	351°11.3'	S 17°24.9'	80°42.5'	S 16°57.5'	34°36.5'	S 22°28.4'	69°10.5'	S 19°59.8'
13	6°10.6'	S 17°24.0'	95°44.7'	S 16°57.6'	49°38.7'	S 22°28.4'	84°11.4'	S 20°00.1'
14	21°09.9'	S 17°23.1'	110°46.8'	S 16°57.6'	64°40.9'	S 22°28.4'	99°12.3'	S 20°00.5'
15	36°09.3'	S 17°22.2'	125°49.0'	S 16°57.7'	79°43.1'	S 22°28.4'	114°13.1'	S 20°00.8'
16	51°08.6'	S 17°21.3'	140°51.2'	S 16°57.8'	94°45.3'	S 22°28.4'	129°14.0'	S 20°01.1'
17	66°07.9'	S 17°20.4'	155°53.4'	S 16°57.8'	109°47.4'	S 22°28.4'	144°14.9'	S 20°01.4'
18	81°07.2'	S 17°19.5'	170°55.6'	S 16°57.9'	124°49.6'	S 22°28.4'	159°15.7'	S 20°01.7'
19	96°06.5'	S 17°18.6'	185°57.8'	S 16°58.0'	139°51.8'	S 22°28.4'	174°16.6'	S 20°02.1'
20	111°05.8'	S 17°17.7'	200°60.0'	S 16°58.0'	154°54.0'	S 22°28.4'	189°17.5'	S 20°02.4'
21	126°05.2'	S 17°16.8'	216°02.2'	S 16°58.1'	169°56.2'	S 22°28.3'	204°18.3'	S 20°02.7'
22	141°04.5'	S 17°15.9'	231°04.4'	S 16°58.2'	184°58.4'	S 22°28.3'	219°19.2'	S 20°03.0'
23	156°03.8'	S 17°15.0'	246°06.6'	S 16°58.2'	200°00.6'	S 22°28.3'	234°20.1'	S 20°03.4'

Wed Jan 31, 2018 UTC

UTC	Venus -3.8 v = -0.7' d = 0.9'		Jupiter -1.8 v = 2.2' d = 0.1'		Saturn +0.6 v = 2.2' d = 0.0'		Mars +1.2 v = 0.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	171°03.1'	S 17°14.1'	261°08.7'	S 16°58.3'	215°02.7'	S 22°28.3'	249°21.0'	S 20°03.7'
1	186°02.4'	S 17°13.2'	276°10.9'	S 16°58.4'	230°04.9'	S 22°28.3'	264°21.8'	S 20°04.0'
2	201°01.7'	S 17°12.3'	291°13.1'	S 16°58.4'	245°07.1'	S 22°28.3'	279°22.7'	S 20°04.3'
3	216°01.1'	S 17°11.4'	306°15.3'	S 16°58.5'	260°09.3'	S 22°28.3'	294°23.6'	S 20°04.6'
4	231°00.4'	S 17°10.5'	321°17.5'	S 16°58.5'	275°11.5'	S 22°28.3'	309°24.4'	S 20°05.0'
5	245°59.7'	S 17°09.6'	336°19.7'	S 16°58.6'	290°13.7'	S 22°28.3'	324°25.3'	S 20°05.3'
6	260°59.0'	S 17°08.7'	351°21.9'	S 16°58.7'	305°15.9'	S 22°28.3'	339°26.2'	S 20°05.6'
7	275°58.4'	S 17°07.7'	6°24.1'	S 16°58.7'	320°18.1'	S 22°28.3'	354°27.0'	S 20°05.9'
8	290°57.7'	S 17°06.8'	21°26.3'	S 16°58.8'	335°20.2'	S 22°28.3'	9°27.9'	S 20°06.3'
9	305°57.0'	S 17°05.9'	36°28.5'	S 16°58.9'	350°22.4'	S 22°28.2'	24°28.8'	S 20°06.6'
10	320°56.3'	S 17°05.0'	51°30.7'	S 16°58.9'	5°24.6'	S 22°28.2'	39°29.6'	S 20°06.9'
11	335°55.7'	S 17°04.1'	66°32.9'	S 16°59.0'	20°26.8'	S 22°28.2'	54°30.5'	S 20°07.2'
12	350°55.0'	S 17°03.2'	81°35.1'	S 16°59.1'	35°29.0'	S 22°28.2'	69°31.4'	S 20°07.5'
13	5°54.3'	S 17°02.3'	96°37.3'	S 16°59.1'	50°31.2'	S 22°28.2'	84°32.3'	S 20°07.9'
14	20°53.6'	S 17°01.4'	111°39.5'	S 16°59.2'	65°33.4'	S 22°28.2'	99°33.1'	S 20°08.2'
15	35°53.0'	S 17°00.4'	126°41.6'	S 16°59.3'	80°35.6'	S 22°28.2'	114°34.0'	S 20°08.5'
16	50°52.3'	S 16°59.5'	141°43.8'	S 16°59.3'	95°37.7'	S 22°28.2'	129°34.9'	S 20°08.8'
17	65°51.6'	S 16°58.6'	156°46.0'	S 16°59.4'	110°39.9'	S 22°28.2'	144°35.7'	S 20°09.1'
18	80°50.9'	S 16°57.7'	171°48.2'	S 16°59.4'	125°42.1'	S 22°28.2'	159°36.6'	S 20°09.4'
19	95°50.3'	S 16°56.8'	186°50.4'	S 16°59.5'	140°44.3'	S 22°28.2'	174°37.5'	S 20°09.8'
20	110°49.6'	S 16°55.8'	201°52.6'	S 16°59.6'	155°46.5'	S 22°28.2'	189°38.3'	S 20°10.1'
21	125°48.9'	S 16°54.9'	216°54.8'	S 16°59.6'	170°48.7'	S 22°28.1'	204°39.2'	S 20°10.4'
22	140°48.3'	S 16°54.0'	231°57.0'	S 16°59.7'	185°50.9'	S 22°28.1'	219°40.1'	S 20°10.7'
23	155°47.6'	S 16°53.1'	246°59.2'	S 16°59.8'	200°53.1'	S 22°28.1'	234°40.9'	S 20°11.0'