

Tue Aug 1, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.2		Mars +1.7	
	v = -0.6' d = 0.1'		v = 2.2' d = 0.1'		v = 2.6' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	219°19.3'	N 21°51.6'	113°40.1'	S 5°34.8'	48°47.5'	S 21°55.3'	179°41.4'	N 19°29.7'
1	234°18.7'	N 21°51.7'	128°42.3'	S 5°35.0'	63°50.1'	S 21°55.3'	194°42.2'	N 19°29.3'
2	249°18.0'	N 21°51.8'	143°44.4'	S 5°35.1'	78°52.6'	S 21°55.3'	209°43.1'	N 19°28.9'
3	264°17.4'	N 21°51.9'	158°46.6'	S 5°35.3'	93°55.2'	S 21°55.3'	224°43.9'	N 19°28.5'
4	279°16.7'	N 21°52.0'	173°48.7'	S 5°35.4'	108°57.7'	S 21°55.3'	239°44.7'	N 19°28.1'
5	294°16.1'	N 21°52.1'	188°50.9'	S 5°35.5'	124°00.3'	S 21°55.3'	254°45.5'	N 19°27.7'
6	309°15.4'	N 21°52.3'	203°53.0'	S 5°35.7'	139°02.9'	S 21°55.3'	269°46.3'	N 19°27.3'
7	324°14.8'	N 21°52.4'	218°55.2'	S 5°35.8'	154°05.4'	S 21°55.3'	284°47.1'	N 19°26.8'
8	339°14.1'	N 21°52.5'	233°57.3'	S 5°35.9'	169°08.0'	S 21°55.4'	299°48.0'	N 19°26.4'
9	354°13.5'	N 21°52.6'	248°59.5'	S 5°36.1'	184°10.6'	S 21°55.4'	314°48.8'	N 19°26.0'
10	9°12.9'	N 21°52.7'	264°01.6'	S 5°36.2'	199°13.1'	S 21°55.4'	329°49.6'	N 19°25.6'
11	24°12.2'	N 21°52.8'	279°03.8'	S 5°36.4'	214°15.7'	S 21°55.4'	344°50.4'	N 19°25.2'
12	39°11.6'	N 21°52.9'	294°06.0'	S 5°36.5'	229°18.3'	S 21°55.4'	359°51.2'	N 19°24.8'
13	54°10.9'	N 21°53.0'	309°08.1'	S 5°36.6'	244°20.8'	S 21°55.4'	14°52.0'	N 19°24.4'
14	69°10.3'	N 21°53.1'	324°10.3'	S 5°36.8'	259°23.4'	S 21°55.4'	29°52.9'	N 19°24.0'
15	84°09.6'	N 21°53.2'	339°12.4'	S 5°36.9'	274°26.0'	S 21°55.4'	44°53.7'	N 19°23.6'
16	99°09.0'	N 21°53.3'	354°14.6'	S 5°37.0'	289°28.5'	S 21°55.4'	59°54.5'	N 19°23.2'
17	114°08.3'	N 21°53.4'	9°16.7'	S 5°37.2'	304°31.1'	S 21°55.4'	74°55.3'	N 19°22.8'
18	129°07.7'	N 21°53.5'	24°18.9'	S 5°37.3'	319°33.6'	S 21°55.4'	89°56.1'	N 19°22.4'
19	144°07.0'	N 21°53.6'	39°21.0'	S 5°37.5'	334°36.2'	S 21°55.4'	104°57.0'	N 19°21.9'
20	159°06.4'	N 21°53.7'	54°23.2'	S 5°37.6'	349°38.8'	S 21°55.4'	119°57.8'	N 19°21.5'
21	174°05.7'	N 21°53.8'	69°25.3'	S 5°37.7'	4°41.3'	S 21°55.4'	134°58.6'	N 19°21.1'
22	189°05.1'	N 21°53.9'	84°27.5'	S 5°37.9'	19°43.9'	S 21°55.4'	149°59.4'	N 19°20.7'
23	204°04.4'	N 21°54.0'	99°29.6'	S 5°38.0'	34°46.5'	S 21°55.4'	165°00.2'	N 19°20.3'

Wed Aug 2, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.1'		v = 2.1' d = 0.1'		v = 2.6' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	219°03.8'	N 21°54.1'	114°31.8'	S 5°38.1'	49°49.0'	S 21°55.4'	180°01.1'	N 19°19.9'
1	234°03.1'	N 21°54.2'	129°33.9'	S 5°38.3'	64°51.6'	S 21°55.4'	195°01.9'	N 19°19.5'
2	249°02.5'	N 21°54.3'	144°36.1'	S 5°38.4'	79°54.1'	S 21°55.4'	210°02.7'	N 19°19.1'
3	264°01.8'	N 21°54.4'	159°38.2'	S 5°38.6'	94°56.7'	S 21°55.4'	225°03.5'	N 19°18.7'
4	279°01.2'	N 21°54.4'	174°40.4'	S 5°38.7'	109°59.3'	S 21°55.4'	240°04.3'	N 19°18.2'
5	294°00.5'	N 21°54.5'	189°42.5'	S 5°38.8'	125°01.8'	S 21°55.4'	255°05.2'	N 19°17.8'
6	308°59.9'	N 21°54.6'	204°44.7'	S 5°39.0'	140°04.4'	S 21°55.4'	270°06.0'	N 19°17.4'
7	323°59.2'	N 21°54.7'	219°46.8'	S 5°39.1'	155°06.9'	S 21°55.4'	285°06.8'	N 19°17.0'
8	338°58.6'	N 21°54.8'	234°49.0'	S 5°39.3'	170°09.5'	S 21°55.4'	300°07.6'	N 19°16.6'
9	353°57.9'	N 21°54.9'	249°51.1'	S 5°39.4'	185°12.1'	S 21°55.4'	315°08.4'	N 19°16.2'
10	8°57.3'	N 21°55.0'	264°53.3'	S 5°39.5'	200°14.6'	S 21°55.4'	330°09.3'	N 19°15.8'
11	23°56.6'	N 21°55.0'	279°55.4'	S 5°39.7'	215°17.2'	S 21°55.4'	345°10.1'	N 19°15.4'
12	38°56.0'	N 21°55.1'	294°57.5'	S 5°39.8'	230°19.7'	S 21°55.4'	0°10.9'	N 19°14.9'
13	53°55.3'	N 21°55.2'	309°59.7'	S 5°40.0'	245°22.3'	S 21°55.4'	15°11.7'	N 19°14.5'
14	68°54.7'	N 21°55.3'	325°01.8'	S 5°40.1'	260°24.9'	S 21°55.4'	30°12.6'	N 19°14.1'
15	83°54.0'	N 21°55.4'	340°04.0'	S 5°40.2'	275°27.4'	S 21°55.4'	45°13.4'	N 19°13.7'
16	98°53.4'	N 21°55.4'	355°06.1'	S 5°40.4'	290°30.0'	S 21°55.4'	60°14.2'	N 19°13.3'
17	113°52.7'	N 21°55.5'	10°08.3'	S 5°40.5'	305°32.5'	S 21°55.4'	75°15.0'	N 19°12.9'
18	128°52.0'	N 21°55.6'	25°10.4'	S 5°40.7'	320°35.1'	S 21°55.4'	90°15.8'	N 19°12.5'
19	143°51.4'	N 21°55.7'	40°12.6'	S 5°40.8'	335°37.7'	S 21°55.4'	105°16.7'	N 19°12.0'
20	158°50.7'	N 21°55.7'	55°14.7'	S 5°40.9'	350°40.2'	S 21°55.4'	120°17.5'	N 19°11.6'
21	173°50.1'	N 21°55.8'	70°16.9'	S 5°41.1'	5°42.8'	S 21°55.4'	135°18.3'	N 19°11.2'
22	188°49.4'	N 21°55.9'	85°19.0'	S 5°41.2'	20°45.3'	S 21°55.4'	150°19.1'	N 19°10.8'
23	203°48.8'	N 21°56.0'	100°21.2'	S 5°41.4'	35°47.9'	S 21°55.4'	165°20.0'	N 19°10.4'

Thu Aug 3, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.1'		v = 2.1' d = 0.1'		v = 2.6' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	218°48.1'	N 21°56.0'	115°23.3'	S 5°41.5'	50°50.5'	S 21°55.4'	180°20.8'	N 19°10.0'
1	233°47.5'	N 21°56.1'	130°25.5'	S 5°41.6'	65°53.0'	S 21°55.4'	195°21.6'	N 19°09.5'
2	248°46.8'	N 21°56.2'	145°27.6'	S 5°41.8'	80°55.6'	S 21°55.4'	210°22.4'	N 19°09.1'
3	263°46.1'	N 21°56.2'	160°29.7'	S 5°41.9'	95°58.1'	S 21°55.4'	225°23.3'	N 19°08.7'
4	278°45.5'	N 21°56.3'	175°31.9'	S 5°42.1'	111°00.7'	S 21°55.4'	240°24.1'	N 19°08.3'
5	293°44.8'	N 21°56.4'	190°34.0'	S 5°42.2'	126°03.2'	S 21°55.4'	255°24.9'	N 19°07.9'
6	308°44.2'	N 21°56.4'	205°36.2'	S 5°42.3'	141°05.8'	S 21°55.4'	270°25.7'	N 19°07.5'
7	323°43.5'	N 21°56.5'	220°38.3'	S 5°42.5'	156°08.4'	S 21°55.4'	285°26.6'	N 19°07.0'
8	338°42.9'	N 21°56.5'	235°40.5'	S 5°42.6'	171°10.9'	S 21°55.4'	300°27.4'	N 19°06.6'
9	353°42.2'	N 21°56.6'	250°42.6'	S 5°42.8'	186°13.5'	S 21°55.4'	315°28.2'	N 19°06.2'
10	8°41.5'	N 21°56.7'	265°44.8'	S 5°42.9'	201°16.0'	S 21°55.4'	330°29.0'	N 19°05.8'
11	23°40.9'	N 21°56.7'	280°46.9'	S 5°43.0'	216°18.6'	S 21°55.4'	345°29.9'	N 19°05.4'
12	38°40.2'	N 21°56.8'	295°49.0'	S 5°43.2'	231°21.1'	S 21°55.4'	0°30.7'	N 19°04.9'
13	53°39.6'	N 21°56.8'	310°51.2'	S 5°43.3'	246°23.7'	S 21°55.4'	15°31.5'	N 19°04.5'
14	68°38.9'	N 21°56.9'	325°53.3'	S 5°43.5'	261°26.3'	S 21°55.4'	30°32.3'	N 19°04.1'
15	83°38.2'	N 21°56.9'	340°55.5'	S 5°43.6'	276°28.8'	S 21°55.4'	45°33.2'	N 19°03.7'
16	98°37.6'	N 21°57.0'	355°57.6'	S 5°43.7'	291°31.4'	S 21°55.4'	60°34.0'	N 19°03.3'
17	113°36.9'	N 21°57.0'	10°59.8'	S 5°43.9'	306°33.9'	S 21°55.4'	75°34.8'	N 19°02.8'
18	128°36.3'	N 21°57.1'	26°01.9'	S 5°44.0'	321°36.5'	S 21°55.4'	90°35.7'	N 19°02.4'
19	143°35.6'	N 21°57.2'	41°04.0'	S 5°44.2'	336°39.0'	S 21°55.5'	105°36.5'	N 19°02.0'
20	158°34.9'	N 21°57.2'	56°06.2'	S 5°44.3'	351°41.6'	S 21°55.5'	120°37.3'	N 19°01.6'
21	173°34.3'	N 21°57.2'	71°08.3'	S 5°44.5'	6°44.1'	S 21°55.5'	135°38.1'	N 19°01.2'
22	188°33.6'	N 21°57.3'	86°10.5'	S 5°44.6'	21°46.7'	S 21°55.5'	150°39.0'	N 19°00.7'
23	203°33.0'	N 21°57.3'	101°12.6'	S 5°44.7'	36°49.3'	S 21°55.5'	165°39.8'	N 19°00.3'

Fri Aug 4, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.0'		v = 2.1' d = 0.1'		v = 2.6' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	218°32.3'	N 21°57.4'	116°14.7'	S 5°44.9'	51°51.8'	S 21°55.5'	180°40.6'	N 18°59.9'
1	233°31.6'	N 21°57.4'	131°16.9'	S 5°45.0'	66°54.4'	S 21°55.5'	195°41.4'	N 18°59.5'
2	248°31.0'	N 21°57.5'	146°19.0'	S 5°45.2'	81°56.9'	S 21°55.5'	210°42.3'	N 18°59.0'
3	263°30.3'	N 21°57.5'	161°21.2'	S 5°45.3'	96°59.5'	S 21°55.5'	225°43.1'	N 18°58.6'
4	278°29.7'	N 21°57.6'	176°23.3'	S 5°45.4'	112°02.0'	S 21°55.5'	240°43.9'	N 18°58.2'
5	293°29.0'	N 21°57.6'	191°25.4'	S 5°45.6'	127°04.6'	S 21°55.5'	255°44.8'	N 18°57.8'
6	308°28.3'	N 21°57.6'	206°27.6'	S 5°45.7'	142°07.1'	S 21°55.5'	270°45.6'	N 18°57.4'
7	323°27.7'	N 21°57.7'	221°29.7'	S 5°45.9'	157°09.7'	S 21°55.5'	285°46.4'	N 18°56.9'
8	338°27.0'	N 21°57.7'	236°31.9'	S 5°46.0'	172°12.2'	S 21°55.5'	300°47.3'	N 18°56.5'
9	353°26.3'	N 21°57.8'	251°34.0'	S 5°46.2'	187°14.8'	S 21°55.5'	315°48.1'	N 18°56.1'
10	8°25.7'	N 21°57.8'	266°36.1'	S 5°46.3'	202°17.3'	S 21°55.5'	330°48.9'	N 18°55.7'
11	23°25.0'	N 21°57.8'	281°38.3'	S 5°46.4'	217°19.9'	S 21°55.5'	345°49.7'	N 18°55.2'
12	38°24.4'	N 21°57.9'	296°40.4'	S 5°46.6'	232°22.4'	S 21°55.5'	0°50.6'	N 18°54.8'
13	53°23.7'	N 21°57.9'	311°42.6'	S 5°46.7'	247°25.0'	S 21°55.5'	15°51.4'	N 18°54.4'
14	68°23.0'	N 21°57.9'	326°44.7'	S 5°46.9'	262°27.6'	S 21°55.5'	30°52.2'	N 18°54.0'
15	83°22.4'	N 21°57.9'	341°46.8'	S 5°47.0'	277°30.1'	S 21°55.5'	45°53.1'	N 18°53.5'
16	98°21.7'	N 21°58.0'	356°49.0'	S 5°47.2'	292°32.7'	S 21°55.5'	60°53.9'	N 18°53.1'
17	113°21.0'	N 21°58.0'	11°51.1'	S 5°47.3'	307°35.2'	S 21°55.5'	75°54.7'	N 18°52.7'
18	128°20.4'	N 21°58.0'	26°53.2'	S 5°47.4'	322°37.8'	S 21°55.5'	90°55.6'	N 18°52.3'
19	143°19.7'	N 21°58.1'	41°55.4'	S 5°47.6'	337°40.3'	S 21°55.5'	105°56.4'	N 18°51.8'
20	158°19.0'	N 21°58.1'	56°57.5'	S 5°47.7'	352°42.9'	S 21°55.5'	120°57.2'	N 18°51.4'
21	173°18.4'	N 21°58.1'	71°59.7'	S 5°47.9'	7°45.4'	S 21°55.5'	135°58.0'	N 18°51.0'
22	188°17.7'	N 21°58.1'	87°01.8'	S 5°48.0'	22°48.0'	S 21°55.5'	150°58.9'	N 18°50.6'
23	203°17.0'	N 21°58.2'	102°03.9'	S 5°48.2'	37°50.5'	S 21°55.5'	165°59.7'	N 18°50.1'

Sat Aug 5, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.0'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	218°16.4'	N 21°58.2'	117°06.1'	S 5°48.3'	52°53.1'	S 21°55.5'	181°00.5'	N 18°49.7'
1	233°15.7'	N 21°58.2'	132°08.2'	S 5°48.4'	67°55.6'	S 21°55.5'	196°01.4'	N 18°49.3'
2	248°15.0'	N 21°58.2'	147°10.3'	S 5°48.6'	82°58.2'	S 21°55.5'	211°02.2'	N 18°48.8'
3	263°14.4'	N 21°58.2'	162°12.5'	S 5°48.7'	98°00.7'	S 21°55.5'	226°03.0'	N 18°48.4'
4	278°13.7'	N 21°58.3'	177°14.6'	S 5°48.9'	113°03.3'	S 21°55.5'	241°03.9'	N 18°48.0'
5	293°13.0'	N 21°58.3'	192°16.7'	S 5°49.0'	128°05.8'	S 21°55.5'	256°04.7'	N 18°47.6'
6	308°12.4'	N 21°58.3'	207°18.9'	S 5°49.2'	143°08.4'	S 21°55.5'	271°05.5'	N 18°47.1'
7	323°11.7'	N 21°58.3'	222°21.0'	S 5°49.3'	158°10.9'	S 21°55.5'	286°06.4'	N 18°46.7'
8	338°11.0'	N 21°58.3'	237°23.2'	S 5°49.4'	173°13.5'	S 21°55.5'	301°07.2'	N 18°46.3'
9	353°10.4'	N 21°58.3'	252°25.3'	S 5°49.6'	188°16.0'	S 21°55.5'	316°08.0'	N 18°45.8'
10	8°09.7'	N 21°58.3'	267°27.4'	S 5°49.7'	203°18.6'	S 21°55.5'	331°08.9'	N 18°45.4'
11	23°09.0'	N 21°58.3'	282°29.6'	S 5°49.9'	218°21.1'	S 21°55.5'	346°09.7'	N 18°45.0'
12	38°08.4'	N 21°58.4'	297°31.7'	S 5°50.0'	233°23.7'	S 21°55.5'	1°10.5'	N 18°44.6'
13	53°07.7'	N 21°58.4'	312°33.8'	S 5°50.2'	248°26.2'	S 21°55.5'	16°11.4'	N 18°44.1'
14	68°07.0'	N 21°58.4'	327°36.0'	S 5°50.3'	263°28.8'	S 21°55.5'	31°12.2'	N 18°43.7'
15	83°06.3'	N 21°58.4'	342°38.1'	S 5°50.5'	278°31.3'	S 21°55.5'	46°13.0'	N 18°43.3'
16	98°05.7'	N 21°58.4'	357°40.2'	S 5°50.6'	293°33.8'	S 21°55.6'	61°13.9'	N 18°42.8'
17	113°05.0'	N 21°58.4'	12°42.4'	S 5°50.7'	308°36.4'	S 21°55.6'	76°14.7'	N 18°42.4'
18	128°04.3'	N 21°58.4'	27°44.5'	S 5°50.9'	323°38.9'	S 21°55.6'	91°15.5'	N 18°42.0'
19	143°03.7'	N 21°58.4'	42°46.6'	S 5°51.0'	338°41.5'	S 21°55.6'	106°16.4'	N 18°41.5'
20	158°03.0'	N 21°58.4'	57°48.8'	S 5°51.2'	353°44.0'	S 21°55.6'	121°17.2'	N 18°41.1'
21	173°02.3'	N 21°58.4'	72°50.9'	S 5°51.3'	8°46.6'	S 21°55.6'	136°18.1'	N 18°40.7'
22	188°01.7'	N 21°58.4'	87°53.0'	S 5°51.5'	23°49.1'	S 21°55.6'	151°18.9'	N 18°40.2'
23	203°01.0'	N 21°58.4'	102°55.2'	S 5°51.6'	38°51.7'	S 21°55.6'	166°19.7'	N 18°39.8'

Sun Aug 6, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.0'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	218°00.3'	N 21°58.4'	117°57.3'	S 5°51.8'	53°54.2'	S 21°55.6'	181°20.6'	N 18°39.4'
1	232°59.6'	N 21°58.4'	132°59.4'	S 5°51.9'	68°56.8'	S 21°55.6'	196°21.4'	N 18°38.9'
2	247°59.0'	N 21°58.4'	148°01.6'	S 5°52.0'	83°59.3'	S 21°55.6'	211°22.2'	N 18°38.5'
3	262°58.3'	N 21°58.4'	163°03.7'	S 5°52.2'	99°01.9'	S 21°55.6'	226°23.1'	N 18°38.1'
4	277°57.6'	N 21°58.4'	178°05.8'	S 5°52.3'	114°04.4'	S 21°55.6'	241°23.9'	N 18°37.6'
5	292°57.0'	N 21°58.4'	193°07.9'	S 5°52.5'	129°07.0'	S 21°55.6'	256°24.7'	N 18°37.2'
6	307°56.3'	N 21°58.3'	208°10.1'	S 5°52.6'	144°09.5'	S 21°55.6'	271°25.6'	N 18°36.8'
7	322°55.6'	N 21°58.3'	223°12.2'	S 5°52.8'	159°12.0'	S 21°55.6'	286°26.4'	N 18°36.3'
8	337°54.9'	N 21°58.3'	238°14.3'	S 5°52.9'	174°14.6'	S 21°55.6'	301°27.3'	N 18°35.9'
9	352°54.3'	N 21°58.3'	253°16.5'	S 5°53.1'	189°17.1'	S 21°55.6'	316°28.1'	N 18°35.5'
10	7°53.6'	N 21°58.3'	268°18.6'	S 5°53.2'	204°19.7'	S 21°55.6'	331°28.9'	N 18°35.0'
11	22°52.9'	N 21°58.3'	283°20.7'	S 5°53.4'	219°22.2'	S 21°55.6'	346°29.8'	N 18°34.6'
12	37°52.2'	N 21°58.3'	298°22.9'	S 5°53.5'	234°24.8'	S 21°55.6'	1°30.6'	N 18°34.2'
13	52°51.6'	N 21°58.3'	313°25.0'	S 5°53.6'	249°27.3'	S 21°55.6'	16°31.4'	N 18°33.7'
14	67°50.9'	N 21°58.2'	328°27.1'	S 5°53.8'	264°29.9'	S 21°55.6'	31°32.3'	N 18°33.3'
15	82°50.2'	N 21°58.2'	343°29.2'	S 5°53.9'	279°32.4'	S 21°55.6'	46°33.1'	N 18°32.9'
16	97°49.6'	N 21°58.2'	358°31.4'	S 5°54.1'	294°34.9'	S 21°55.6'	61°34.0'	N 18°32.4'
17	112°48.9'	N 21°58.2'	13°33.5'	S 5°54.2'	309°37.5'	S 21°55.6'	76°34.8'	N 18°32.0'
18	127°48.2'	N 21°58.2'	28°35.6'	S 5°54.4'	324°40.0'	S 21°55.6'	91°35.6'	N 18°31.6'
19	142°47.5'	N 21°58.1'	43°37.8'	S 5°54.5'	339°42.6'	S 21°55.6'	106°36.5'	N 18°31.1'
20	157°46.9'	N 21°58.1'	58°39.9'	S 5°54.7'	354°45.1'	S 21°55.6'	121°37.3'	N 18°30.7'
21	172°46.2'	N 21°58.1'	73°42.0'	S 5°54.8'	9°47.7'	S 21°55.6'	136°38.2'	N 18°30.2'
22	187°45.5'	N 21°58.1'	88°44.1'	S 5°55.0'	24°50.2'	S 21°55.6'	151°39.0'	N 18°29.8'
23	202°44.8'	N 21°58.0'	103°46.3'	S 5°55.1'	39°52.8'	S 21°55.6'	166°39.8'	N 18°29.4'

Mon Aug 7, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.0'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	217°44.2'	N 21°58.0'	118°48.4'	S 5°55.3'	54°55.3'	S 21°55.6'	181°40.7'	N 18°28.9'
1	232°43.5'	N 21°58.0'	133°50.5'	S 5°55.4'	69°57.8'	S 21°55.6'	196°41.5'	N 18°28.5'
2	247°42.8'	N 21°57.9'	148°52.7'	S 5°55.5'	85°00.4'	S 21°55.6'	211°42.4'	N 18°28.1'
3	262°42.1'	N 21°57.9'	163°54.8'	S 5°55.7'	100°02.9'	S 21°55.6'	226°43.2'	N 18°27.6'
4	277°41.5'	N 21°57.9'	178°56.9'	S 5°55.8'	115°05.5'	S 21°55.6'	241°44.0'	N 18°27.2'
5	292°40.8'	N 21°57.9'	193°59.0'	S 5°56.0'	130°08.0'	S 21°55.7'	256°44.9'	N 18°26.7'
6	307°40.1'	N 21°57.8'	209°01.2'	S 5°56.1'	145°10.5'	S 21°55.7'	271°45.7'	N 18°26.3'
7	322°39.4'	N 21°57.8'	224°03.3'	S 5°56.3'	160°13.1'	S 21°55.7'	286°46.6'	N 18°25.9'
8	337°38.7'	N 21°57.7'	239°05.4'	S 5°56.4'	175°15.6'	S 21°55.7'	301°47.4'	N 18°25.4'
9	352°38.1'	N 21°57.7'	254°07.5'	S 5°56.6'	190°18.2'	S 21°55.7'	316°48.2'	N 18°25.0'
10	7°37.4'	N 21°57.7'	269°09.7'	S 5°56.7'	205°20.7'	S 21°55.7'	331°49.1'	N 18°24.5'
11	22°36.7'	N 21°57.6'	284°11.8'	S 5°56.9'	220°23.3'	S 21°55.7'	346°49.9'	N 18°24.1'
12	37°36.0'	N 21°57.6'	299°13.9'	S 5°57.0'	235°25.8'	S 21°55.7'	1°50.8'	N 18°23.7'
13	52°35.4'	N 21°57.6'	314°16.0'	S 5°57.2'	250°28.3'	S 21°55.7'	16°51.6'	N 18°23.2'
14	67°34.7'	N 21°57.5'	329°18.2'	S 5°57.3'	265°30.9'	S 21°55.7'	31°52.4'	N 18°22.8'
15	82°34.0'	N 21°57.5'	344°20.3'	S 5°57.5'	280°33.4'	S 21°55.7'	46°53.3'	N 18°22.3'
16	97°33.3'	N 21°57.4'	359°22.4'	S 5°57.6'	295°36.0'	S 21°55.7'	61°54.1'	N 18°21.9'
17	112°32.7'	N 21°57.4'	14°24.5'	S 5°57.8'	310°38.5'	S 21°55.7'	76°55.0'	N 18°21.5'
18	127°32.0'	N 21°57.3'	29°26.7'	S 5°57.9'	325°41.0'	S 21°55.7'	91°55.8'	N 18°21.0'
19	142°31.3'	N 21°57.3'	44°28.8'	S 5°58.1'	340°43.6'	S 21°55.7'	106°56.7'	N 18°20.6'
20	157°30.6'	N 21°57.2'	59°30.9'	S 5°58.2'	355°46.1'	S 21°55.7'	121°57.5'	N 18°20.1'
21	172°29.9'	N 21°57.2'	74°33.0'	S 5°58.3'	10°48.7'	S 21°55.7'	136°58.3'	N 18°19.7'
22	187°29.3'	N 21°57.1'	89°35.2'	S 5°58.5'	25°51.2'	S 21°55.7'	151°59.2'	N 18°19.3'
23	202°28.6'	N 21°57.1'	104°37.3'	S 5°58.6'	40°53.7'	S 21°55.7'	167°00.0'	N 18°18.8'

Tue Aug 8, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.1'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 0.8' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	217°27.9'	N 21°57.0'	119°39.4'	S 5°58.8'	55°56.3'	S 21°55.7'	182°00.9'	N 18°18.4'
1	232°27.2'	N 21°57.0'	134°41.5'	S 5°58.9'	70°58.8'	S 21°55.7'	197°01.7'	N 18°17.9'
2	247°26.5'	N 21°56.9'	149°43.7'	S 5°59.1'	86°01.3'	S 21°55.7'	212°02.6'	N 18°17.5'
3	262°25.9'	N 21°56.9'	164°45.8'	S 5°59.2'	101°03.9'	S 21°55.7'	227°03.4'	N 18°17.0'
4	277°25.2'	N 21°56.8'	179°47.9'	S 5°59.4'	116°06.4'	S 21°55.7'	242°04.3'	N 18°16.6'
5	292°24.5'	N 21°56.8'	194°50.0'	S 5°59.5'	131°09.0'	S 21°55.7'	257°05.1'	N 18°16.2'
6	307°23.8'	N 21°56.7'	209°52.2'	S 5°59.7'	146°11.5'	S 21°55.7'	272°05.9'	N 18°15.7'
7	322°23.1'	N 21°56.6'	224°54.3'	S 5°59.8'	161°14.0'	S 21°55.7'	287°06.8'	N 18°15.3'
8	337°22.5'	N 21°56.6'	239°56.4'	S 5°60.0'	176°16.6'	S 21°55.7'	302°07.6'	N 18°14.8'
9	352°21.8'	N 21°56.5'	254°58.5'	S 6°00.1'	191°19.1'	S 21°55.7'	317°08.5'	N 18°14.4'
10	7°21.1'	N 21°56.5'	270°00.6'	S 6°00.3'	206°21.6'	S 21°55.7'	332°09.3'	N 18°13.9'
11	22°20.4'	N 21°56.4'	285°02.8'	S 6°00.4'	221°24.2'	S 21°55.7'	347°10.2'	N 18°13.5'
12	37°19.7'	N 21°56.3'	300°04.9'	S 6°00.6'	236°26.7'	S 21°55.7'	2°11.0'	N 18°13.0'
13	52°19.1'	N 21°56.3'	315°07.0'	S 6°00.7'	251°29.3'	S 21°55.7'	17°11.9'	N 18°12.6'
14	67°18.4'	N 21°56.2'	330°09.1'	S 6°00.9'	266°31.8'	S 21°55.8'	32°12.7'	N 18°12.1'
15	82°17.7'	N 21°56.1'	345°11.2'	S 6°01.0'	281°34.3'	S 21°55.8'	47°13.6'	N 18°11.7'
16	97°17.0'	N 21°56.1'	0°13.4'	S 6°01.2'	296°36.9'	S 21°55.8'	62°14.4'	N 18°11.3'
17	112°16.3'	N 21°56.0'	15°15.5'	S 6°01.3'	311°39.4'	S 21°55.8'	77°15.2'	N 18°10.8'
18	127°15.7'	N 21°55.9'	30°17.6'	S 6°01.5'	326°41.9'	S 21°55.8'	92°16.1'	N 18°10.4'
19	142°15.0'	N 21°55.9'	45°19.7'	S 6°01.6'	341°44.5'	S 21°55.8'	107°16.9'	N 18°09.9'
20	157°14.3'	N 21°55.8'	60°21.8'	S 6°01.8'	356°47.0'	S 21°55.8'	122°17.8'	N 18°09.5'
21	172°13.6'	N 21°55.7'	75°24.0'	S 6°01.9'	11°49.5'	S 21°55.8'	137°18.6'	N 18°09.0'
22	187°12.9'	N 21°55.6'	90°26.1'	S 6°02.1'	26°52.1'	S 21°55.8'	152°19.5'	N 18°08.6'
23	202°12.2'	N 21°55.6'	105°28.2'	S 6°02.2'	41°54.6'	S 21°55.8'	167°20.3'	N 18°08.1'

Wed Aug 9, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.1'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.8' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	217°11.6'	N 21°55.5'	120°30.3'	S 6°02.4'	56°57.1'	S 21°55.8'	182°21.2'	N 18°07.7'
1	232°10.9'	N 21°55.4'	135°32.4'	S 6°02.5'	71°59.7'	S 21°55.8'	197°22.0'	N 18°07.2'
2	247°10.2'	N 21°55.3'	150°34.6'	S 6°02.7'	87°02.2'	S 21°55.8'	212°22.9'	N 18°06.8'
3	262°09.5'	N 21°55.2'	165°36.7'	S 6°02.8'	102°04.7'	S 21°55.8'	227°23.7'	N 18°06.3'
4	277°08.8'	N 21°55.2'	180°38.8'	S 6°03.0'	117°07.3'	S 21°55.8'	242°24.6'	N 18°05.9'
5	292°08.1'	N 21°55.1'	195°40.9'	S 6°03.1'	132°09.8'	S 21°55.8'	257°25.4'	N 18°05.4'
6	307°07.5'	N 21°55.0'	210°43.0'	S 6°03.3'	147°12.4'	S 21°55.8'	272°26.3'	N 18°05.0'
7	322°06.8'	N 21°54.9'	225°45.2'	S 6°03.4'	162°14.9'	S 21°55.8'	287°27.1'	N 18°04.5'
8	337°06.1'	N 21°54.8'	240°47.3'	S 6°03.6'	177°17.4'	S 21°55.8'	302°28.0'	N 18°04.1'
9	352°05.4'	N 21°54.7'	255°49.4'	S 6°03.7'	192°20.0'	S 21°55.8'	317°28.8'	N 18°03.6'
10	7°04.7'	N 21°54.7'	270°51.5'	S 6°03.9'	207°22.5'	S 21°55.8'	332°29.7'	N 18°03.2'
11	22°04.0'	N 21°54.6'	285°53.6'	S 6°04.0'	222°25.0'	S 21°55.8'	347°30.5'	N 18°02.7'
12	37°03.4'	N 21°54.5'	300°55.7'	S 6°04.2'	237°27.5'	S 21°55.8'	2°31.4'	N 18°02.3'
13	52°02.7'	N 21°54.4'	315°57.9'	S 6°04.3'	252°30.1'	S 21°55.8'	17°32.2'	N 18°01.8'
14	67°02.0'	N 21°54.3'	330°60.0'	S 6°04.5'	267°32.6'	S 21°55.8'	32°33.1'	N 18°01.4'
15	82°01.3'	N 21°54.2'	346°02.1'	S 6°04.6'	282°35.1'	S 21°55.8'	47°33.9'	N 18°00.9'
16	97°00.6'	N 21°54.1'	1°04.2'	S 6°04.8'	297°37.7'	S 21°55.8'	62°34.8'	N 18°00.5'
17	111°59.9'	N 21°54.0'	16°06.3'	S 6°04.9'	312°40.2'	S 21°55.8'	77°35.6'	N 18°00.0'
18	126°59.3'	N 21°53.9'	31°08.4'	S 6°05.1'	327°42.7'	S 21°55.8'	92°36.5'	N 17°59.6'
19	141°58.6'	N 21°53.8'	46°10.6'	S 6°05.2'	342°45.3'	S 21°55.9'	107°37.3'	N 17°59.1'
20	156°57.9'	N 21°53.7'	61°12.7'	S 6°05.4'	357°47.8'	S 21°55.9'	122°38.2'	N 17°58.7'
21	171°57.2'	N 21°53.6'	76°14.8'	S 6°05.5'	12°50.3'	S 21°55.9'	137°39.0'	N 17°58.2'
22	186°56.5'	N 21°53.5'	91°16.9'	S 6°05.7'	27°52.9'	S 21°55.9'	152°39.9'	N 17°57.8'
23	201°55.8'	N 21°53.4'	106°19.0'	S 6°05.8'	42°55.4'	S 21°55.9'	167°40.7'	N 17°57.3'

Thu Aug 10, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.1'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	216°55.2'	N 21°53.3'	121°21.1'	S 6°06.0'	57°57.9'	S 21°55.9'	182°41.6'	N 17°56.9'
1	231°54.5'	N 21°53.2'	136°23.3'	S 6°06.1'	73°00.5'	S 21°55.9'	197°42.4'	N 17°56.4'
2	246°53.8'	N 21°53.1'	151°25.4'	S 6°06.3'	88°03.0'	S 21°55.9'	212°43.3'	N 17°56.0'
3	261°53.1'	N 21°53.0'	166°27.5'	S 6°06.4'	103°05.5'	S 21°55.9'	227°44.1'	N 17°55.5'
4	276°52.4'	N 21°52.9'	181°29.6'	S 6°06.6'	118°08.0'	S 21°55.9'	242°45.0'	N 17°55.1'
5	291°51.7'	N 21°52.8'	196°31.7'	S 6°06.7'	133°10.6'	S 21°55.9'	257°45.8'	N 17°54.6'
6	306°51.0'	N 21°52.7'	211°33.8'	S 6°06.9'	148°13.1'	S 21°55.9'	272°46.7'	N 17°54.2'
7	321°50.4'	N 21°52.6'	226°35.9'	S 6°07.0'	163°15.6'	S 21°55.9'	287°47.5'	N 17°53.7'
8	336°49.7'	N 21°52.5'	241°38.1'	S 6°07.2'	178°18.2'	S 21°55.9'	302°48.4'	N 17°53.2'
9	351°49.0'	N 21°52.4'	256°40.2'	S 6°07.3'	193°20.7'	S 21°55.9'	317°49.2'	N 17°52.8'
10	6°48.3'	N 21°52.3'	271°42.3'	S 6°07.5'	208°23.2'	S 21°55.9'	332°50.1'	N 17°52.3'
11	21°47.6'	N 21°52.1'	286°44.4'	S 6°07.6'	223°25.8'	S 21°55.9'	347°50.9'	N 17°51.9'
12	36°46.9'	N 21°52.0'	301°46.5'	S 6°07.8'	238°28.3'	S 21°55.9'	2°51.8'	N 17°51.4'
13	51°46.2'	N 21°51.9'	316°48.6'	S 6°07.9'	253°30.8'	S 21°55.9'	17°52.6'	N 17°51.0'
14	66°45.5'	N 21°51.8'	331°50.7'	S 6°08.1'	268°33.3'	S 21°55.9'	32°53.5'	N 17°50.5'
15	81°44.9'	N 21°51.7'	346°52.8'	S 6°08.2'	283°35.9'	S 21°55.9'	47°54.3'	N 17°50.1'
16	96°44.2'	N 21°51.6'	1°55.0'	S 6°08.4'	298°38.4'	S 21°55.9'	62°55.2'	N 17°49.6'
17	111°43.5'	N 21°51.4'	16°57.1'	S 6°08.5'	313°40.9'	S 21°55.9'	77°56.1'	N 17°49.1'
18	126°42.8'	N 21°51.3'	31°59.2'	S 6°08.7'	328°43.5'	S 21°55.9'	92°56.9'	N 17°48.7'
19	141°42.1'	N 21°51.2'	47°01.3'	S 6°08.8'	343°46.0'	S 21°55.9'	107°57.8'	N 17°48.2'
20	156°41.4'	N 21°51.1'	62°03.4'	S 6°09.0'	358°48.5'	S 21°55.9'	122°58.6'	N 17°47.8'
21	171°40.7'	N 21°51.0'	77°05.5'	S 6°09.2'	13°51.0'	S 21°55.9'	137°59.5'	N 17°47.3'
22	186°40.1'	N 21°50.8'	92°07.6'	S 6°09.3'	28°53.6'	S 21°56.0'	153°00.3'	N 17°46.9'
23	201°39.4'	N 21°50.7'	107°09.7'	S 6°09.5'	43°56.1'	S 21°56.0'	168°01.2'	N 17°46.4'

Fri Aug 11, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.1'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	216°38.7'	N 21°50.6'	122°11.8'	S 6°09.6'	58°58.6'	S 21°56.0'	183°02.0'	N 17°45.9'
1	231°38.0'	N 21°50.5'	137°14.0'	S 6°09.8'	74°01.1'	S 21°56.0'	198°02.9'	N 17°45.5'
2	246°37.3'	N 21°50.3'	152°16.1'	S 6°09.9'	89°03.7'	S 21°56.0'	213°03.7'	N 17°45.0'
3	261°36.6'	N 21°50.2'	167°18.2'	S 6°10.1'	104°06.2'	S 21°56.0'	228°04.6'	N 17°44.6'
4	276°35.9'	N 21°50.1'	182°20.3'	S 6°10.2'	119°08.7'	S 21°56.0'	243°05.5'	N 17°44.1'
5	291°35.2'	N 21°49.9'	197°22.4'	S 6°10.4'	134°11.2'	S 21°56.0'	258°06.3'	N 17°43.7'
6	306°34.6'	N 21°49.8'	212°24.5'	S 6°10.5'	149°13.8'	S 21°56.0'	273°07.2'	N 17°43.2'
7	321°33.9'	N 21°49.7'	227°26.6'	S 6°10.7'	164°16.3'	S 21°56.0'	288°08.0'	N 17°42.7'
8	336°33.2'	N 21°49.5'	242°28.7'	S 6°10.8'	179°18.8'	S 21°56.0'	303°08.9'	N 17°42.3'
9	351°32.5'	N 21°49.4'	257°30.8'	S 6°11.0'	194°21.3'	S 21°56.0'	318°09.7'	N 17°41.8'
10	6°31.8'	N 21°49.3'	272°32.9'	S 6°11.1'	209°23.9'	S 21°56.0'	333°10.6'	N 17°41.4'
11	21°31.1'	N 21°49.1'	287°35.1'	S 6°11.3'	224°26.4'	S 21°56.0'	348°11.5'	N 17°40.9'
12	36°30.4'	N 21°49.0'	302°37.2'	S 6°11.4'	239°28.9'	S 21°56.0'	3°12.3'	N 17°40.4'
13	51°29.7'	N 21°48.8'	317°39.3'	S 6°11.6'	254°31.4'	S 21°56.0'	18°13.2'	N 17°40.0'
14	66°29.0'	N 21°48.7'	332°41.4'	S 6°11.7'	269°34.0'	S 21°56.0'	33°14.0'	N 17°39.5'
15	81°28.4'	N 21°48.6'	347°43.5'	S 6°11.9'	284°36.5'	S 21°56.0'	48°14.9'	N 17°39.1'
16	96°27.7'	N 21°48.4'	2°45.6'	S 6°12.1'	299°39.0'	S 21°56.0'	63°15.7'	N 17°38.6'
17	111°27.0'	N 21°48.3'	17°47.7'	S 6°12.2'	314°41.5'	S 21°56.0'	78°16.6'	N 17°38.1'
18	126°26.3'	N 21°48.1'	32°49.8'	S 6°12.4'	329°44.1'	S 21°56.0'	93°17.5'	N 17°37.7'
19	141°25.6'	N 21°48.0'	47°51.9'	S 6°12.5'	344°46.6'	S 21°56.0'	108°18.3'	N 17°37.2'
20	156°24.9'	N 21°47.8'	62°54.0'	S 6°12.7'	359°49.1'	S 21°56.0'	123°19.2'	N 17°36.7'
21	171°24.2'	N 21°47.7'	77°56.1'	S 6°12.8'	14°51.6'	S 21°56.0'	138°20.0'	N 17°36.3'
22	186°23.5'	N 21°47.5'	92°58.2'	S 6°13.0'	29°54.2'	S 21°56.0'	153°20.9'	N 17°35.8'
23	201°22.8'	N 21°47.4'	108°00.4'	S 6°13.1'	44°56.7'	S 21°56.0'	168°21.7'	N 17°35.4'

Sat Aug 12, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.2'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	216°22.2'	N 21°47.2'	123°02.5'	S 6°13.3'	59°59.2'	S 21°56.1'	183°22.6'	N 17°34.9'
1	231°21.5'	N 21°47.1'	138°04.6'	S 6°13.4'	75°01.7'	S 21°56.1'	198°23.5'	N 17°34.4'
2	246°20.8'	N 21°46.9'	153°06.7'	S 6°13.6'	90°04.2'	S 21°56.1'	213°24.3'	N 17°34.0'
3	261°20.1'	N 21°46.8'	168°08.8'	S 6°13.7'	105°06.8'	S 21°56.1'	228°25.2'	N 17°33.5'
4	276°19.4'	N 21°46.6'	183°10.9'	S 6°13.9'	120°09.3'	S 21°56.1'	243°26.0'	N 17°33.0'
5	291°18.7'	N 21°46.5'	198°13.0'	S 6°14.1'	135°11.8'	S 21°56.1'	258°26.9'	N 17°32.6'
6	306°18.0'	N 21°46.3'	213°15.1'	S 6°14.2'	150°14.3'	S 21°56.1'	273°27.8'	N 17°32.1'
7	321°17.3'	N 21°46.1'	228°17.2'	S 6°14.4'	165°16.9'	S 21°56.1'	288°28.6'	N 17°31.7'
8	336°16.6'	N 21°46.0'	243°19.3'	S 6°14.5'	180°19.4'	S 21°56.1'	303°29.5'	N 17°31.2'
9	351°16.0'	N 21°45.8'	258°21.4'	S 6°14.7'	195°21.9'	S 21°56.1'	318°30.3'	N 17°30.7'
10	6°15.3'	N 21°45.7'	273°23.5'	S 6°14.8'	210°24.4'	S 21°56.1'	333°31.2'	N 17°30.3'
11	21°14.6'	N 21°45.5'	288°25.6'	S 6°15.0'	225°26.9'	S 21°56.1'	348°32.1'	N 17°29.8'
12	36°13.9'	N 21°45.3'	303°27.7'	S 6°15.1'	240°29.5'	S 21°56.1'	3°32.9'	N 17°29.3'
13	51°13.2'	N 21°45.2'	318°29.8'	S 6°15.3'	255°32.0'	S 21°56.1'	18°33.8'	N 17°28.9'
14	66°12.5'	N 21°45.0'	333°31.9'	S 6°15.4'	270°34.5'	S 21°56.1'	33°34.6'	N 17°28.4'
15	81°11.8'	N 21°44.8'	348°34.0'	S 6°15.6'	285°37.0'	S 21°56.1'	48°35.5'	N 17°27.9'
16	96°11.1'	N 21°44.7'	3°36.1'	S 6°15.8'	300°39.5'	S 21°56.1'	63°36.4'	N 17°27.5'
17	111°10.4'	N 21°44.5'	18°38.3'	S 6°15.9'	315°42.1'	S 21°56.1'	78°37.2'	N 17°27.0'
18	126°09.7'	N 21°44.3'	33°40.4'	S 6°16.1'	330°44.6'	S 21°56.1'	93°38.1'	N 17°26.5'
19	141°09.1'	N 21°44.2'	48°42.5'	S 6°16.2'	345°47.1'	S 21°56.1'	108°38.9'	N 17°26.1'
20	156°08.4'	N 21°44.0'	63°44.6'	S 6°16.4'	0°49.6'	S 21°56.1'	123°39.8'	N 17°25.6'
21	171°07.7'	N 21°43.8'	78°46.7'	S 6°16.5'	15°52.1'	S 21°56.1'	138°40.7'	N 17°25.1'
22	186°07.0'	N 21°43.6'	93°48.8'	S 6°16.7'	30°54.6'	S 21°56.1'	153°41.5'	N 17°24.7'
23	201°06.3'	N 21°43.5'	108°50.9'	S 6°16.8'	45°57.2'	S 21°56.2'	168°42.4'	N 17°24.2'

Sun Aug 13, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.2'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	216°05.6'	N 21°43.3'	123°53.0'	S 6°17.0'	60°59.7'	S 21°56.2'	183°43.3'	N 17°23.7'
1	231°04.9'	N 21°43.1'	138°55.1'	S 6°17.1'	76°02.2'	S 21°56.2'	198°44.1'	N 17°23.3'
2	246°04.2'	N 21°42.9'	153°57.2'	S 6°17.3'	91°04.7'	S 21°56.2'	213°45.0'	N 17°22.8'
3	261°03.5'	N 21°42.8'	168°59.3'	S 6°17.5'	106°07.2'	S 21°56.2'	228°45.8'	N 17°22.3'
4	276°02.8'	N 21°42.6'	184°01.4'	S 6°17.6'	121°09.8'	S 21°56.2'	243°46.7'	N 17°21.9'
5	291°02.1'	N 21°42.4'	199°03.5'	S 6°17.8'	136°12.3'	S 21°56.2'	258°47.6'	N 17°21.4'
6	306°01.5'	N 21°42.2'	214°05.6'	S 6°17.9'	151°14.8'	S 21°56.2'	273°48.4'	N 17°20.9'
7	321°00.8'	N 21°42.0'	229°07.7'	S 6°18.1'	166°17.3'	S 21°56.2'	288°49.3'	N 17°20.5'
8	336°00.1'	N 21°41.8'	244°09.8'	S 6°18.2'	181°19.8'	S 21°56.2'	303°50.2'	N 17°20.0'
9	350°59.4'	N 21°41.7'	259°11.9'	S 6°18.4'	196°22.3'	S 21°56.2'	318°51.0'	N 17°19.5'
10	5°58.7'	N 21°41.5'	274°14.0'	S 6°18.5'	211°24.9'	S 21°56.2'	333°51.9'	N 17°19.1'
11	20°58.0'	N 21°41.3'	289°16.1'	S 6°18.7'	226°27.4'	S 21°56.2'	348°52.8'	N 17°18.6'
12	35°57.3'	N 21°41.1'	304°18.2'	S 6°18.9'	241°29.9'	S 21°56.2'	3°53.6'	N 17°18.1'
13	50°56.6'	N 21°40.9'	319°20.3'	S 6°19.0'	256°32.4'	S 21°56.2'	18°54.5'	N 17°17.6'
14	65°55.9'	N 21°40.7'	334°22.4'	S 6°19.2'	271°34.9'	S 21°56.2'	33°55.3'	N 17°17.2'
15	80°55.2'	N 21°40.5'	349°24.5'	S 6°19.3'	286°37.4'	S 21°56.2'	48°56.2'	N 17°16.7'
16	95°54.5'	N 21°40.3'	4°26.6'	S 6°19.5'	301°40.0'	S 21°56.2'	63°57.1'	N 17°16.2'
17	110°53.9'	N 21°40.1'	19°28.7'	S 6°19.6'	316°42.5'	S 21°56.2'	78°57.9'	N 17°15.8'
18	125°53.2'	N 21°39.9'	34°30.8'	S 6°19.8'	331°45.0'	S 21°56.2'	93°58.8'	N 17°15.3'
19	140°52.5'	N 21°39.7'	49°32.9'	S 6°20.0'	346°47.5'	S 21°56.2'	108°59.7'	N 17°14.8'
20	155°51.8'	N 21°39.5'	64°35.0'	S 6°20.1'	1°50.0'	S 21°56.2'	124°00.5'	N 17°14.4'
21	170°51.1'	N 21°39.3'	79°37.1'	S 6°20.3'	16°52.5'	S 21°56.2'	139°01.4'	N 17°13.9'
22	185°50.4'	N 21°39.1'	94°39.2'	S 6°20.4'	31°55.0'	S 21°56.3'	154°02.3'	N 17°13.4'
23	200°49.7'	N 21°38.9'	109°41.3'	S 6°20.6'	46°57.6'	S 21°56.3'	169°03.1'	N 17°12.9'

Mon Aug 14, 2017 UTC

UTC	Venus -3.9		Jupiter -1.7		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.2'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	215°49.0'	N 21°38.7'	124°43.4'	S 6°20.7'	62°00.1'	S 21°56.3'	184°04.0'	N 17°12.5'
1	230°48.3'	N 21°38.5'	139°45.5'	S 6°20.9'	77°02.6'	S 21°56.3'	199°04.9'	N 17°12.0'
2	245°47.6'	N 21°38.3'	154°47.6'	S 6°21.0'	92°05.1'	S 21°56.3'	214°05.7'	N 17°11.5'
3	260°46.9'	N 21°38.1'	169°49.7'	S 6°21.2'	107°07.6'	S 21°56.3'	229°06.6'	N 17°11.0'
4	275°46.3'	N 21°37.9'	184°51.8'	S 6°21.4'	122°10.1'	S 21°56.3'	244°07.5'	N 17°10.6'
5	290°45.6'	N 21°37.7'	199°53.9'	S 6°21.5'	137°12.6'	S 21°56.3'	259°08.3'	N 17°10.1'
6	305°44.9'	N 21°37.5'	214°56.0'	S 6°21.7'	152°15.2'	S 21°56.3'	274°09.2'	N 17°09.6'
7	320°44.2'	N 21°37.3'	229°58.1'	S 6°21.8'	167°17.7'	S 21°56.3'	289°10.1'	N 17°09.2'
8	335°43.5'	N 21°37.1'	245°00.2'	S 6°22.0'	182°20.2'	S 21°56.3'	304°10.9'	N 17°08.7'
9	350°42.8'	N 21°36.9'	260°02.3'	S 6°22.1'	197°22.7'	S 21°56.3'	319°11.8'	N 17°08.2'
10	5°42.1'	N 21°36.7'	275°04.4'	S 6°22.3'	212°25.2'	S 21°56.3'	334°12.7'	N 17°07.7'
11	20°41.4'	N 21°36.5'	290°06.5'	S 6°22.5'	227°27.7'	S 21°56.3'	349°13.5'	N 17°07.3'
12	35°40.7'	N 21°36.3'	305°08.6'	S 6°22.6'	242°30.2'	S 21°56.3'	4°14.4'	N 17°06.8'
13	50°40.0'	N 21°36.0'	320°10.7'	S 6°22.8'	257°32.7'	S 21°56.3'	19°15.3'	N 17°06.3'
14	65°39.3'	N 21°35.8'	335°12.8'	S 6°22.9'	272°35.3'	S 21°56.3'	34°16.1'	N 17°05.8'
15	80°38.6'	N 21°35.6'	350°14.9'	S 6°23.1'	287°37.8'	S 21°56.3'	49°17.0'	N 17°05.4'
16	95°38.0'	N 21°35.4'	5°17.0'	S 6°23.2'	302°40.3'	S 21°56.3'	64°17.9'	N 17°04.9'
17	110°37.3'	N 21°35.2'	20°19.0'	S 6°23.4'	317°42.8'	S 21°56.3'	79°18.7'	N 17°04.4'
18	125°36.6'	N 21°34.9'	35°21.1'	S 6°23.6'	332°45.3'	S 21°56.3'	94°19.6'	N 17°03.9'
19	140°35.9'	N 21°34.7'	50°23.2'	S 6°23.7'	347°47.8'	S 21°56.4'	109°20.5'	N 17°03.5'
20	155°35.2'	N 21°34.5'	65°25.3'	S 6°23.9'	2°50.3'	S 21°56.4'	124°21.4'	N 17°03.0'
21	170°34.5'	N 21°34.3'	80°27.4'	S 6°24.0'	17°52.8'	S 21°56.4'	139°22.2'	N 17°02.5'
22	185°33.8'	N 21°34.1'	95°29.5'	S 6°24.2'	32°55.3'	S 21°56.4'	154°23.1'	N 17°02.0'
23	200°33.1'	N 21°33.8'	110°31.6'	S 6°24.4'	47°57.9'	S 21°56.4'	169°24.0'	N 17°01.6'

Tue Aug 15, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.2'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	215°32.4'	N 21°33.6'	125°33.7'	S 6°24.5'	63°00.4'	S 21°56.4'	184°24.8'	N 17°01.1'
1	230°31.7'	N 21°33.4'	140°35.8'	S 6°24.7'	78°02.9'	S 21°56.4'	199°25.7'	N 17°00.6'
2	245°31.0'	N 21°33.2'	155°37.9'	S 6°24.8'	93°05.4'	S 21°56.4'	214°26.6'	N 17°00.1'
3	260°30.3'	N 21°32.9'	170°40.0'	S 6°25.0'	108°07.9'	S 21°56.4'	229°27.4'	N 16°59.6'
4	275°29.7'	N 21°32.7'	185°42.1'	S 6°25.1'	123°10.4'	S 21°56.4'	244°28.3'	N 16°59.2'
5	290°29.0'	N 21°32.5'	200°44.2'	S 6°25.3'	138°12.9'	S 21°56.4'	259°29.2'	N 16°58.7'
6	305°28.3'	N 21°32.2'	215°46.3'	S 6°25.5'	153°15.4'	S 21°56.4'	274°30.1'	N 16°58.2'
7	320°27.6'	N 21°32.0'	230°48.4'	S 6°25.6'	168°17.9'	S 21°56.4'	289°30.9'	N 16°57.7'
8	335°26.9'	N 21°31.8'	245°50.5'	S 6°25.8'	183°20.4'	S 21°56.4'	304°31.8'	N 16°57.3'
9	350°26.2'	N 21°31.5'	260°52.6'	S 6°25.9'	198°22.9'	S 21°56.4'	319°32.7'	N 16°56.8'
10	5°25.5'	N 21°31.3'	275°54.7'	S 6°26.1'	213°25.5'	S 21°56.4'	334°33.5'	N 16°56.3'
11	20°24.8'	N 21°31.1'	290°56.7'	S 6°26.3'	228°28.0'	S 21°56.4'	349°34.4'	N 16°55.8'
12	35°24.1'	N 21°30.8'	305°58.8'	S 6°26.4'	243°30.5'	S 21°56.4'	4°35.3'	N 16°55.3'
13	50°23.4'	N 21°30.6'	321°00.9'	S 6°26.6'	258°33.0'	S 21°56.4'	19°36.2'	N 16°54.9'
14	65°22.7'	N 21°30.3'	336°03.0'	S 6°26.7'	273°35.5'	S 21°56.4'	34°37.0'	N 16°54.4'
15	80°22.0'	N 21°30.1'	351°05.1'	S 6°26.9'	288°38.0'	S 21°56.5'	49°37.9'	N 16°53.9'
16	95°21.4'	N 21°29.8'	6°07.2'	S 6°27.0'	303°40.5'	S 21°56.5'	64°38.8'	N 16°53.4'
17	110°20.7'	N 21°29.6'	21°09.3'	S 6°27.2'	318°43.0'	S 21°56.5'	79°39.6'	N 16°52.9'
18	125°20.0'	N 21°29.4'	36°11.4'	S 6°27.4'	333°45.5'	S 21°56.5'	94°40.5'	N 16°52.5'
19	140°19.3'	N 21°29.1'	51°13.5'	S 6°27.5'	348°48.0'	S 21°56.5'	109°41.4'	N 16°52.0'
20	155°18.6'	N 21°28.9'	66°15.6'	S 6°27.7'	3°50.5'	S 21°56.5'	124°42.3'	N 16°51.5'
21	170°17.9'	N 21°28.6'	81°17.7'	S 6°27.8'	18°53.0'	S 21°56.5'	139°43.1'	N 16°51.0'
22	185°17.2'	N 21°28.4'	96°19.8'	S 6°28.0'	33°55.5'	S 21°56.5'	154°44.0'	N 16°50.5'
23	200°16.5'	N 21°28.1'	111°21.9'	S 6°28.2'	48°58.0'	S 21°56.5'	169°44.9'	N 16°50.1'

Wed Aug 16, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.3'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	215°15.8'	N 21°27.9'	126°23.9'	S 6°28.3'	64°00.5'	S 21°56.5'	184°45.7'	N 16°49.6'
1	230°15.1'	N 21°27.6'	141°26.0'	S 6°28.5'	79°03.1'	S 21°56.5'	199°46.6'	N 16°49.1'
2	245°14.4'	N 21°27.4'	156°28.1'	S 6°28.6'	94°05.6'	S 21°56.5'	214°47.5'	N 16°48.6'
3	260°13.7'	N 21°27.1'	171°30.2'	S 6°28.8'	109°08.1'	S 21°56.5'	229°48.4'	N 16°48.1'
4	275°13.1'	N 21°26.9'	186°32.3'	S 6°29.0'	124°10.6'	S 21°56.5'	244°49.2'	N 16°47.7'
5	290°12.4'	N 21°26.6'	201°34.4'	S 6°29.1'	139°13.1'	S 21°56.5'	259°50.1'	N 16°47.2'
6	305°11.7'	N 21°26.3'	216°36.5'	S 6°29.3'	154°15.6'	S 21°56.5'	274°51.0'	N 16°46.7'
7	320°11.0'	N 21°26.1'	231°38.6'	S 6°29.4'	169°18.1'	S 21°56.5'	289°51.9'	N 16°46.2'
8	335°10.3'	N 21°25.8'	246°40.7'	S 6°29.6'	184°20.6'	S 21°56.5'	304°52.7'	N 16°45.7'
9	350°09.6'	N 21°25.6'	261°42.8'	S 6°29.8'	199°23.1'	S 21°56.5'	319°53.6'	N 16°45.2'
10	5°08.9'	N 21°25.3'	276°44.8'	S 6°29.9'	214°25.6'	S 21°56.6'	334°54.5'	N 16°44.8'
11	20°08.2'	N 21°25.0'	291°46.9'	S 6°30.1'	229°28.1'	S 21°56.6'	349°55.4'	N 16°44.3'
12	35°07.5'	N 21°24.8'	306°49.0'	S 6°30.2'	244°30.6'	S 21°56.6'	4°56.2'	N 16°43.8'
13	50°06.8'	N 21°24.5'	321°51.1'	S 6°30.4'	259°33.1'	S 21°56.6'	19°57.1'	N 16°43.3'
14	65°06.1'	N 21°24.2'	336°53.2'	S 6°30.6'	274°35.6'	S 21°56.6'	34°58.0'	N 16°42.8'
15	80°05.4'	N 21°24.0'	351°55.3'	S 6°30.7'	289°38.1'	S 21°56.6'	49°58.9'	N 16°42.3'
16	95°04.8'	N 21°23.7'	6°57.4'	S 6°30.9'	304°40.6'	S 21°56.6'	64°59.7'	N 16°41.9'
17	110°04.1'	N 21°23.4'	21°59.5'	S 6°31.0'	319°43.1'	S 21°56.6'	80°00.6'	N 16°41.4'
18	125°03.4'	N 21°23.2'	37°01.6'	S 6°31.2'	334°45.6'	S 21°56.6'	95°01.5'	N 16°40.9'
19	140°02.7'	N 21°22.9'	52°03.6'	S 6°31.4'	349°48.1'	S 21°56.6'	110°02.4'	N 16°40.4'
20	155°02.0'	N 21°22.6'	67°05.7'	S 6°31.5'	4°50.6'	S 21°56.6'	125°03.2'	N 16°39.9'
21	170°01.3'	N 21°22.4'	82°07.8'	S 6°31.7'	19°53.1'	S 21°56.6'	140°04.1'	N 16°39.4'
22	185°00.6'	N 21°22.1'	97°09.9'	S 6°31.8'	34°55.6'	S 21°56.6'	155°05.0'	N 16°38.9'
23	199°59.9'	N 21°21.8'	112°12.0'	S 6°32.0'	49°58.1'	S 21°56.6'	170°05.9'	N 16°38.5'



Thu Aug 17, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.3'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	214°59.2'	N 21°21.5'	127°14.1'	S 6°32.2'	65°00.6'	S 21°56.6'	185°06.8'	N 16°38.0'
1	229°58.5'	N 21°21.3'	142°16.2'	S 6°32.3'	80°03.1'	S 21°56.6'	200°07.6'	N 16°37.5'
2	244°57.8'	N 21°21.0'	157°18.3'	S 6°32.5'	95°05.6'	S 21°56.6'	215°08.5'	N 16°37.0'
3	259°57.2'	N 21°20.7'	172°20.3'	S 6°32.6'	110°08.1'	S 21°56.6'	230°09.4'	N 16°36.5'
4	274°56.5'	N 21°20.4'	187°22.4'	S 6°32.8'	125°10.6'	S 21°56.6'	245°10.3'	N 16°36.0'
5	289°55.8'	N 21°20.1'	202°24.5'	S 6°33.0'	140°13.1'	S 21°56.7'	260°11.1'	N 16°35.5'
6	304°55.1'	N 21°19.9'	217°26.6'	S 6°33.1'	155°15.6'	S 21°56.7'	275°12.0'	N 16°35.1'
7	319°54.4'	N 21°19.6'	232°28.7'	S 6°33.3'	170°18.1'	S 21°56.7'	290°12.9'	N 16°34.6'
8	334°53.7'	N 21°19.3'	247°30.8'	S 6°33.4'	185°20.6'	S 21°56.7'	305°13.8'	N 16°34.1'
9	349°53.0'	N 21°19.0'	262°32.9'	S 6°33.6'	200°23.1'	S 21°56.7'	320°14.6'	N 16°33.6'
10	4°52.3'	N 21°18.7'	277°34.9'	S 6°33.8'	215°25.6'	S 21°56.7'	335°15.5'	N 16°33.1'
11	19°51.6'	N 21°18.4'	292°37.0'	S 6°33.9'	230°28.1'	S 21°56.7'	350°16.4'	N 16°32.6'
12	34°50.9'	N 21°18.1'	307°39.1'	S 6°34.1'	245°30.6'	S 21°56.7'	5°17.3'	N 16°32.1'
13	49°50.3'	N 21°17.8'	322°41.2'	S 6°34.2'	260°33.1'	S 21°56.7'	20°18.2'	N 16°31.6'
14	64°49.6'	N 21°17.6'	337°43.3'	S 6°34.4'	275°35.6'	S 21°56.7'	35°19.0'	N 16°31.2'
15	79°48.9'	N 21°17.3'	352°45.4'	S 6°34.6'	290°38.1'	S 21°56.7'	50°19.9'	N 16°30.7'
16	94°48.2'	N 21°17.0'	7°47.5'	S 6°34.7'	305°40.6'	S 21°56.7'	65°20.8'	N 16°30.2'
17	109°47.5'	N 21°16.7'	22°49.5'	S 6°34.9'	320°43.1'	S 21°56.7'	80°21.7'	N 16°29.7'
18	124°46.8'	N 21°16.4'	37°51.6'	S 6°35.1'	335°45.6'	S 21°56.7'	95°22.6'	N 16°29.2'
19	139°46.1'	N 21°16.1'	52°53.7'	S 6°35.2'	350°48.1'	S 21°56.7'	110°23.4'	N 16°28.7'
20	154°45.4'	N 21°15.8'	67°55.8'	S 6°35.4'	5°50.6'	S 21°56.7'	125°24.3'	N 16°28.2'
21	169°44.7'	N 21°15.5'	82°57.9'	S 6°35.5'	20°53.1'	S 21°56.7'	140°25.2'	N 16°27.7'
22	184°44.0'	N 21°15.2'	97°60.0'	S 6°35.7'	35°55.6'	S 21°56.7'	155°26.1'	N 16°27.2'
23	199°43.4'	N 21°14.9'	113°02.0'	S 6°35.9'	50°58.1'	S 21°56.8'	170°27.0'	N 16°26.7'

Fri Aug 18, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.3		Mars +1.7	
	v = -0.7' d = 0.3'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	214°42.7'	N 21°14.6'	128°04.1'	S 6°36.0'	66°00.6'	S 21°56.8'	185°27.8'	N 16°26.3'
1	229°42.0'	N 21°14.3'	143°06.2'	S 6°36.2'	81°03.1'	S 21°56.8'	200°28.7'	N 16°25.8'
2	244°41.3'	N 21°14.0'	158°08.3'	S 6°36.3'	96°05.6'	S 21°56.8'	215°29.6'	N 16°25.3'
3	259°40.6'	N 21°13.7'	173°10.4'	S 6°36.5'	111°08.1'	S 21°56.8'	230°30.5'	N 16°24.8'
4	274°39.9'	N 21°13.4'	188°12.5'	S 6°36.7'	126°10.6'	S 21°56.8'	245°31.4'	N 16°24.3'
5	289°39.2'	N 21°13.1'	203°14.5'	S 6°36.8'	141°13.1'	S 21°56.8'	260°32.2'	N 16°23.8'
6	304°38.5'	N 21°12.8'	218°16.6'	S 6°37.0'	156°15.6'	S 21°56.8'	275°33.1'	N 16°23.3'
7	319°37.8'	N 21°12.5'	233°18.7'	S 6°37.2'	171°18.1'	S 21°56.8'	290°34.0'	N 16°22.8'
8	334°37.1'	N 21°12.2'	248°20.8'	S 6°37.3'	186°20.6'	S 21°56.8'	305°34.9'	N 16°22.3'
9	349°36.5'	N 21°11.8'	263°22.9'	S 6°37.5'	201°23.1'	S 21°56.8'	320°35.8'	N 16°21.8'
10	4°35.8'	N 21°11.5'	278°24.9'	S 6°37.6'	216°25.6'	S 21°56.8'	335°36.7'	N 16°21.3'
11	19°35.1'	N 21°11.2'	293°27.0'	S 6°37.8'	231°28.1'	S 21°56.8'	350°37.5'	N 16°20.9'
12	34°34.4'	N 21°10.9'	308°29.1'	S 6°38.0'	246°30.6'	S 21°56.8'	5°38.4'	N 16°20.4'
13	49°33.7'	N 21°10.6'	323°31.2'	S 6°38.1'	261°33.1'	S 21°56.8'	20°39.3'	N 16°19.9'
14	64°33.0'	N 21°10.3'	338°33.3'	S 6°38.3'	276°35.6'	S 21°56.8'	35°40.2'	N 16°19.4'
15	79°32.3'	N 21°10.0'	353°35.4'	S 6°38.5'	291°38.1'	S 21°56.8'	50°41.1'	N 16°18.9'
16	94°31.6'	N 21°09.6'	8°37.4'	S 6°38.6'	306°40.6'	S 21°56.9'	65°41.9'	N 16°18.4'
17	109°30.9'	N 21°09.3'	23°39.5'	S 6°38.8'	321°43.0'	S 21°56.9'	80°42.8'	N 16°17.9'
18	124°30.3'	N 21°09.0'	38°41.6'	S 6°38.9'	336°45.5'	S 21°56.9'	95°43.7'	N 16°17.4'
19	139°29.6'	N 21°08.7'	53°43.7'	S 6°39.1'	351°48.0'	S 21°56.9'	110°44.6'	N 16°16.9'
20	154°28.9'	N 21°08.4'	68°45.8'	S 6°39.3'	6°50.5'	S 21°56.9'	125°45.5'	N 16°16.4'
21	169°28.2'	N 21°08.0'	83°47.8'	S 6°39.4'	21°53.0'	S 21°56.9'	140°46.4'	N 16°15.9'
22	184°27.5'	N 21°07.7'	98°49.9'	S 6°39.6'	36°55.5'	S 21°56.9'	155°47.2'	N 16°15.4'
23	199°26.8'	N 21°07.4'	113°52.0'	S 6°39.8'	51°58.0'	S 21°56.9'	170°48.1'	N 16°14.9'

Sat Aug 19, 2017 UTC

UTC	Venus -3.9 v = -0.7' d = 0.3'		Jupiter -1.6 v = 2.1' d = 0.2'		Saturn +0.3 v = 2.5' d = 0.0'		Mars +1.7 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	214°26.1'	N 21°07.1'	128°54.1'	S 6°39.9'	67°00.5'	S 21°56.9'	185°49.0'	N 16°14.4'
1	229°25.4'	N 21°06.7'	143°56.2'	S 6°40.1'	82°03.0'	S 21°56.9'	200°49.9'	N 16°13.9'
2	244°24.8'	N 21°06.4'	158°58.2'	S 6°40.3'	97°05.5'	S 21°56.9'	215°50.8'	N 16°13.5'
3	259°24.1'	N 21°06.1'	174°00.3'	S 6°40.4'	112°08.0'	S 21°56.9'	230°51.7'	N 16°13.0'
4	274°23.4'	N 21°05.8'	189°02.4'	S 6°40.6'	127°10.5'	S 21°56.9'	245°52.5'	N 16°12.5'
5	289°22.7'	N 21°05.4'	204°04.5'	S 6°40.7'	142°13.0'	S 21°56.9'	260°53.4'	N 16°12.0'
6	304°22.0'	N 21°05.1'	219°06.6'	S 6°40.9'	157°15.5'	S 21°56.9'	275°54.3'	N 16°11.5'
7	319°21.3'	N 21°04.8'	234°08.6'	S 6°41.1'	172°17.9'	S 21°56.9'	290°55.2'	N 16°11.0'
8	334°20.6'	N 21°04.4'	249°10.7'	S 6°41.2'	187°20.4'	S 21°56.9'	305°56.1'	N 16°10.5'
9	349°19.9'	N 21°04.1'	264°12.8'	S 6°41.4'	202°22.9'	S 21°57.0'	320°57.0'	N 16°10.0'
10	4°19.3'	N 21°03.8'	279°14.9'	S 6°41.6'	217°25.4'	S 21°57.0'	335°57.9'	N 16°09.5'
11	19°18.6'	N 21°03.4'	294°16.9'	S 6°41.7'	232°27.9'	S 21°57.0'	350°58.7'	N 16°09.0'
12	34°17.9'	N 21°03.1'	309°19.0'	S 6°41.9'	247°30.4'	S 21°57.0'	5°59.6'	N 16°08.5'
13	49°17.2'	N 21°02.7'	324°21.1'	S 6°42.1'	262°32.9'	S 21°57.0'	21°00.5'	N 16°08.0'
14	64°16.5'	N 21°02.4'	339°23.2'	S 6°42.2'	277°35.4'	S 21°57.0'	36°01.4'	N 16°07.5'
15	79°15.8'	N 21°02.1'	354°25.3'	S 6°42.4'	292°37.9'	S 21°57.0'	51°02.3'	N 16°07.0'
16	94°15.1'	N 21°01.7'	9°27.3'	S 6°42.5'	307°40.4'	S 21°57.0'	66°03.2'	N 16°06.5'
17	109°14.4'	N 21°01.4'	24°29.4'	S 6°42.7'	322°42.9'	S 21°57.0'	81°04.1'	N 16°06.0'
18	124°13.8'	N 21°01.0'	39°31.5'	S 6°42.9'	337°45.3'	S 21°57.0'	96°04.9'	N 16°05.5'
19	139°13.1'	N 21°00.7'	54°33.6'	S 6°43.0'	352°47.8'	S 21°57.0'	111°05.8'	N 16°05.0'
20	154°12.4'	N 21°00.3'	69°35.6'	S 6°43.2'	7°50.3'	S 21°57.0'	126°06.7'	N 16°04.5'
21	169°11.7'	N 20°60.0'	84°37.7'	S 6°43.4'	22°52.8'	S 21°57.0'	141°07.6'	N 16°04.0'
22	184°11.0'	N 20°59.6'	99°39.8'	S 6°43.5'	37°55.3'	S 21°57.0'	156°08.5'	N 16°03.5'
23	199°10.3'	N 20°59.3'	114°41.9'	S 6°43.7'	52°57.8'	S 21°57.0'	171°09.4'	N 16°03.0'

Sun Aug 20, 2017 UTC

UTC	Venus -3.9 v = -0.7' d = 0.4'		Jupiter -1.6 v = 2.1' d = 0.2'		Saturn +0.4 v = 2.5' d = 0.0'		Mars +1.7 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	214°09.6'	N 20°58.9'	129°43.9'	S 6°43.9'	68°00.3'	S 21°57.0'	186°10.3'	N 16°02.5'
1	229°09.0'	N 20°58.6'	144°46.0'	S 6°44.0'	83°02.8'	S 21°57.1'	201°11.2'	N 16°02.0'
2	244°08.3'	N 20°58.2'	159°48.1'	S 6°44.2'	98°05.3'	S 21°57.1'	216°12.0'	N 16°01.5'
3	259°07.6'	N 20°57.9'	174°50.2'	S 6°44.3'	113°07.7'	S 21°57.1'	231°12.9'	N 16°01.0'
4	274°06.9'	N 20°57.5'	189°52.2'	S 6°44.5'	128°10.2'	S 21°57.1'	246°13.8'	N 16°00.5'
5	289°06.2'	N 20°57.2'	204°54.3'	S 6°44.7'	143°12.7'	S 21°57.1'	261°14.7'	N 16°00.0'
6	304°05.5'	N 20°56.8'	219°56.4'	S 6°44.8'	158°15.2'	S 21°57.1'	276°15.6'	N 15°59.5'
7	319°04.8'	N 20°56.5'	234°58.5'	S 6°45.0'	173°17.7'	S 21°57.1'	291°16.5'	N 15°59.0'
8	334°04.2'	N 20°56.1'	250°00.5'	S 6°45.2'	188°20.2'	S 21°57.1'	306°17.4'	N 15°58.5'
9	349°03.5'	N 20°55.7'	265°02.6'	S 6°45.3'	203°22.7'	S 21°57.1'	321°18.3'	N 15°58.0'
10	4°02.8'	N 20°55.4'	280°04.7'	S 6°45.5'	218°25.2'	S 21°57.1'	336°19.2'	N 15°57.5'
11	19°02.1'	N 20°55.0'	295°06.8'	S 6°45.7'	233°27.6'	S 21°57.1'	351°20.0'	N 15°57.0'
12	34°01.4'	N 20°54.7'	310°08.8'	S 6°45.8'	248°30.1'	S 21°57.1'	6°20.9'	N 15°56.5'
13	49°00.7'	N 20°54.3'	325°10.9'	S 6°46.0'	263°32.6'	S 21°57.1'	21°21.8'	N 15°56.0'
14	64°00.0'	N 20°53.9'	340°13.0'	S 6°46.2'	278°35.1'	S 21°57.1'	36°22.7'	N 15°55.5'
15	78°59.4'	N 20°53.6'	355°15.1'	S 6°46.3'	293°37.6'	S 21°57.1'	51°23.6'	N 15°55.0'
16	93°58.7'	N 20°53.2'	10°17.1'	S 6°46.5'	308°40.1'	S 21°57.2'	66°24.5'	N 15°54.5'
17	108°58.0'	N 20°52.8'	25°19.2'	S 6°46.7'	323°42.6'	S 21°57.2'	81°25.4'	N 15°54.0'
18	123°57.3'	N 20°52.5'	40°21.3'	S 6°46.8'	338°45.0'	S 21°57.2'	96°26.3'	N 15°53.5'
19	138°56.6'	N 20°52.1'	55°23.4'	S 6°47.0'	353°47.5'	S 21°57.2'	111°27.2'	N 15°53.0'
20	153°55.9'	N 20°51.7'	70°25.4'	S 6°47.2'	8°50.0'	S 21°57.2'	126°28.0'	N 15°52.5'
21	168°55.3'	N 20°51.4'	85°27.5'	S 6°47.3'	23°52.5'	S 21°57.2'	141°28.9'	N 15°52.0'
22	183°54.6'	N 20°51.0'	100°29.6'	S 6°47.5'	38°55.0'	S 21°57.2'	156°29.8'	N 15°51.5'
23	198°53.9'	N 20°50.6'	115°31.6'	S 6°47.6'	53°57.5'	S 21°57.2'	171°30.7'	N 15°51.0'

Mon Aug 21, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.7	
	v = -0.7' d = 0.4'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	213°53.2'	N 20°50.2'	130°33.7'	S 6°47.8'	68°60.0'	S 21°57.2'	186°31.6'	N 15°50.5'
1	228°52.5'	N 20°49.9'	145°35.8'	S 6°48.0'	84°02.4'	S 21°57.2'	201°32.5'	N 15°50.0'
2	243°51.8'	N 20°49.5'	160°37.9'	S 6°48.1'	99°04.9'	S 21°57.2'	216°33.4'	N 15°49.5'
3	258°51.2'	N 20°49.1'	175°39.9'	S 6°48.3'	114°07.4'	S 21°57.2'	231°34.3'	N 15°49.0'
4	273°50.5'	N 20°48.7'	190°42.0'	S 6°48.5'	129°09.9'	S 21°57.2'	246°35.2'	N 15°48.5'
5	288°49.8'	N 20°48.3'	205°44.1'	S 6°48.6'	144°12.4'	S 21°57.2'	261°36.1'	N 15°48.0'
6	303°49.1'	N 20°48.0'	220°46.1'	S 6°48.8'	159°14.9'	S 21°57.2'	276°37.0'	N 15°47.5'
7	318°48.4'	N 20°47.6'	235°48.2'	S 6°49.0'	174°17.3'	S 21°57.2'	291°37.9'	N 15°47.0'
8	333°47.7'	N 20°47.2'	250°50.3'	S 6°49.1'	189°19.8'	S 21°57.3'	306°38.7'	N 15°46.5'
9	348°47.1'	N 20°46.8'	265°52.4'	S 6°49.3'	204°22.3'	S 21°57.3'	321°39.6'	N 15°46.0'
10	3°46.4'	N 20°46.4'	280°54.4'	S 6°49.5'	219°24.8'	S 21°57.3'	336°40.5'	N 15°45.5'
11	18°45.7'	N 20°46.0'	295°56.5'	S 6°49.6'	234°27.3'	S 21°57.3'	351°41.4'	N 15°45.0'
12	33°45.0'	N 20°45.7'	310°58.6'	S 6°49.8'	249°29.7'	S 21°57.3'	6°42.3'	N 15°44.4'
13	48°44.3'	N 20°45.3'	326°00.6'	S 6°50.0'	264°32.2'	S 21°57.3'	21°43.2'	N 15°43.9'
14	63°43.7'	N 20°44.9'	341°02.7'	S 6°50.1'	279°34.7'	S 21°57.3'	36°44.1'	N 15°43.4'
15	78°43.0'	N 20°44.5'	356°04.8'	S 6°50.3'	294°37.2'	S 21°57.3'	51°45.0'	N 15°42.9'
16	93°42.3'	N 20°44.1'	11°06.9'	S 6°50.5'	309°39.7'	S 21°57.3'	66°45.9'	N 15°42.4'
17	108°41.6'	N 20°43.7'	26°08.9'	S 6°50.6'	324°42.2'	S 21°57.3'	81°46.8'	N 15°41.9'
18	123°40.9'	N 20°43.3'	41°11.0'	S 6°50.8'	339°44.6'	S 21°57.3'	96°47.7'	N 15°41.4'
19	138°40.2'	N 20°42.9'	56°13.1'	S 6°51.0'	354°47.1'	S 21°57.3'	111°48.6'	N 15°40.9'
20	153°39.6'	N 20°42.5'	71°15.1'	S 6°51.1'	9°49.6'	S 21°57.3'	126°49.5'	N 15°40.4'
21	168°38.9'	N 20°42.1'	86°17.2'	S 6°51.3'	24°52.1'	S 21°57.3'	141°50.4'	N 15°39.9'
22	183°38.2'	N 20°41.7'	101°19.3'	S 6°51.5'	39°54.6'	S 21°57.3'	156°51.2'	N 15°39.4'
23	198°37.5'	N 20°41.3'	116°21.3'	S 6°51.6'	54°57.0'	S 21°57.4'	171°52.1'	N 15°38.9'

Tue Aug 22, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.7	
	v = -0.7' d = 0.4'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	213°36.8'	N 20°40.9'	131°23.4'	S 6°51.8'	69°59.5'	S 21°57.4'	186°53.0'	N 15°38.4'
1	228°36.2'	N 20°40.5'	146°25.5'	S 6°52.0'	85°02.0'	S 21°57.4'	201°53.9'	N 15°37.9'
2	243°35.5'	N 20°40.1'	161°27.5'	S 6°52.1'	100°04.5'	S 21°57.4'	216°54.8'	N 15°37.4'
3	258°34.8'	N 20°39.7'	176°29.6'	S 6°52.3'	115°07.0'	S 21°57.4'	231°55.7'	N 15°36.9'
4	273°34.1'	N 20°39.3'	191°31.7'	S 6°52.5'	130°09.4'	S 21°57.4'	246°56.6'	N 15°36.3'
5	288°33.4'	N 20°38.9'	206°33.7'	S 6°52.6'	145°11.9'	S 21°57.4'	261°57.5'	N 15°35.8'
6	303°32.8'	N 20°38.5'	221°35.8'	S 6°52.8'	160°14.4'	S 21°57.4'	276°58.4'	N 15°35.3'
7	318°32.1'	N 20°38.1'	236°37.9'	S 6°53.0'	175°16.9'	S 21°57.4'	291°59.3'	N 15°34.8'
8	333°31.4'	N 20°37.7'	251°39.9'	S 6°53.1'	190°19.4'	S 21°57.4'	307°00.2'	N 15°34.3'
9	348°30.7'	N 20°37.3'	266°42.0'	S 6°53.3'	205°21.8'	S 21°57.4'	322°01.1'	N 15°33.8'
10	3°30.1'	N 20°36.9'	281°44.1'	S 6°53.5'	220°24.3'	S 21°57.4'	337°02.0'	N 15°33.3'
11	18°29.4'	N 20°36.5'	296°46.2'	S 6°53.6'	235°26.8'	S 21°57.4'	352°02.9'	N 15°32.8'
12	33°28.7'	N 20°36.1'	311°48.2'	S 6°53.8'	250°29.3'	S 21°57.4'	7°03.8'	N 15°32.3'
13	48°28.0'	N 20°35.7'	326°50.3'	S 6°54.0'	265°31.7'	S 21°57.5'	22°04.7'	N 15°31.8'
14	63°27.3'	N 20°35.2'	341°52.4'	S 6°54.1'	280°34.2'	S 21°57.5'	37°05.6'	N 15°31.3'
15	78°26.7'	N 20°34.8'	356°54.4'	S 6°54.3'	295°36.7'	S 21°57.5'	52°06.5'	N 15°30.7'
16	93°26.0'	N 20°34.4'	11°56.5'	S 6°54.5'	310°39.2'	S 21°57.5'	67°07.4'	N 15°30.2'
17	108°25.3'	N 20°34.0'	26°58.5'	S 6°54.6'	325°41.7'	S 21°57.5'	82°08.3'	N 15°29.7'
18	123°24.6'	N 20°33.6'	42°00.6'	S 6°54.8'	340°44.1'	S 21°57.5'	97°09.2'	N 15°29.2'
19	138°23.9'	N 20°33.2'	57°02.7'	S 6°55.0'	355°46.6'	S 21°57.5'	112°10.1'	N 15°28.7'
20	153°23.3'	N 20°32.7'	72°04.7'	S 6°55.1'	10°49.1'	S 21°57.5'	127°11.0'	N 15°28.2'
21	168°22.6'	N 20°32.3'	87°06.8'	S 6°55.3'	25°51.6'	S 21°57.5'	142°11.9'	N 15°27.7'
22	183°21.9'	N 20°31.9'	102°08.9'	S 6°55.5'	40°54.0'	S 21°57.5'	157°12.7'	N 15°27.2'
23	198°21.2'	N 20°31.5'	117°10.9'	S 6°55.6'	55°56.5'	S 21°57.5'	172°13.6'	N 15°26.7'

Wed Aug 23, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.7' d = 0.4'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	213°20.6'	N 20°31.1'	132°13.0'	S 6°55.8'	70°59.0'	S 21°57.5'	187°14.5'	N 15°26.2'
1	228°19.9'	N 20°30.6'	147°15.1'	S 6°56.0'	86°01.5'	S 21°57.5'	202°15.4'	N 15°25.6'
2	243°19.2'	N 20°30.2'	162°17.1'	S 6°56.1'	101°03.9'	S 21°57.5'	217°16.3'	N 15°25.1'
3	258°18.5'	N 20°29.8'	177°19.2'	S 6°56.3'	116°06.4'	S 21°57.6'	232°17.2'	N 15°24.6'
4	273°17.9'	N 20°29.4'	192°21.3'	S 6°56.5'	131°08.9'	S 21°57.6'	247°18.1'	N 15°24.1'
5	288°17.2'	N 20°28.9'	207°23.3'	S 6°56.6'	146°11.4'	S 21°57.6'	262°19.0'	N 15°23.6'
6	303°16.5'	N 20°28.5'	222°25.4'	S 6°56.8'	161°13.8'	S 21°57.6'	277°19.9'	N 15°23.1'
7	318°15.8'	N 20°28.1'	237°27.5'	S 6°57.0'	176°16.3'	S 21°57.6'	292°20.8'	N 15°22.6'
8	333°15.2'	N 20°27.6'	252°29.5'	S 6°57.2'	191°18.8'	S 21°57.6'	307°21.7'	N 15°22.1'
9	348°14.5'	N 20°27.2'	267°31.6'	S 6°57.3'	206°21.3'	S 21°57.6'	322°22.6'	N 15°21.5'
10	3°13.8'	N 20°26.8'	282°33.7'	S 6°57.5'	221°23.7'	S 21°57.6'	337°23.5'	N 15°21.0'
11	18°13.1'	N 20°26.3'	297°35.7'	S 6°57.7'	236°26.2'	S 21°57.6'	352°24.4'	N 15°20.5'
12	33°12.5'	N 20°25.9'	312°37.8'	S 6°57.8'	251°28.7'	S 21°57.6'	7°25.3'	N 15°20.0'
13	48°11.8'	N 20°25.5'	327°39.8'	S 6°58.0'	266°31.2'	S 21°57.6'	22°26.2'	N 15°19.5'
14	63°11.1'	N 20°25.0'	342°41.9'	S 6°58.2'	281°33.6'	S 21°57.6'	37°27.1'	N 15°19.0'
15	78°10.4'	N 20°24.6'	357°44.0'	S 6°58.3'	296°36.1'	S 21°57.6'	52°28.0'	N 15°18.5'
16	93°09.8'	N 20°24.1'	12°46.0'	S 6°58.5'	311°38.6'	S 21°57.6'	67°28.9'	N 15°18.0'
17	108°09.1'	N 20°23.7'	27°48.1'	S 6°58.7'	326°41.0'	S 21°57.7'	82°29.8'	N 15°17.4'
18	123°08.4'	N 20°23.3'	42°50.2'	S 6°58.8'	341°43.5'	S 21°57.7'	97°30.7'	N 15°16.9'
19	138°07.7'	N 20°22.8'	57°52.2'	S 6°59.0'	356°46.0'	S 21°57.7'	112°31.6'	N 15°16.4'
20	153°07.1'	N 20°22.4'	72°54.3'	S 6°59.2'	11°48.5'	S 21°57.7'	127°32.5'	N 15°15.9'
21	168°06.4'	N 20°21.9'	87°56.3'	S 6°59.3'	26°50.9'	S 21°57.7'	142°33.4'	N 15°15.4'
22	183°05.7'	N 20°21.5'	102°58.4'	S 6°59.5'	41°53.4'	S 21°57.7'	157°34.3'	N 15°14.9'
23	198°05.0'	N 20°21.0'	118°00.5'	S 6°59.7'	56°55.9'	S 21°57.7'	172°35.2'	N 15°14.4'

Thu Aug 24, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.7' d = 0.5'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	213°04.4'	N 20°20.6'	133°02.5'	S 6°59.8'	71°58.3'	S 21°57.7'	187°36.1'	N 15°13.8'
1	228°03.7'	N 20°20.1'	148°04.6'	S 7°00.0'	87°00.8'	S 21°57.7'	202°37.0'	N 15°13.3'
2	243°03.0'	N 20°19.7'	163°06.7'	S 7°00.2'	102°03.3'	S 21°57.7'	217°37.9'	N 15°12.8'
3	258°02.4'	N 20°19.2'	178°08.7'	S 7°00.4'	117°05.8'	S 21°57.7'	232°38.8'	N 15°12.3'
4	273°01.7'	N 20°18.8'	193°10.8'	S 7°00.5'	132°08.2'	S 21°57.7'	247°39.7'	N 15°11.8'
5	288°01.0'	N 20°18.3'	208°12.8'	S 7°00.7'	147°10.7'	S 21°57.7'	262°40.6'	N 15°11.3'
6	303°00.3'	N 20°17.9'	223°14.9'	S 7°00.9'	162°13.2'	S 21°57.7'	277°41.5'	N 15°10.7'
7	317°59.7'	N 20°17.4'	238°17.0'	S 7°01.0'	177°15.6'	S 21°57.8'	292°42.5'	N 15°10.2'
8	332°59.0'	N 20°17.0'	253°19.0'	S 7°01.2'	192°18.1'	S 21°57.8'	307°43.4'	N 15°09.7'
9	347°58.3'	N 20°16.5'	268°21.1'	S 7°01.4'	207°20.6'	S 21°57.8'	322°44.3'	N 15°09.2'
10	2°57.7'	N 20°16.1'	283°23.1'	S 7°01.5'	222°23.1'	S 21°57.8'	337°45.2'	N 15°08.7'
11	17°57.0'	N 20°15.6'	298°25.2'	S 7°01.7'	237°25.5'	S 21°57.8'	352°46.1'	N 15°08.2'
12	32°56.3'	N 20°15.1'	313°27.3'	S 7°01.9'	252°28.0'	S 21°57.8'	7°47.0'	N 15°07.6'
13	47°55.6'	N 20°14.7'	328°29.3'	S 7°02.0'	267°30.5'	S 21°57.8'	22°47.9'	N 15°07.1'
14	62°55.0'	N 20°14.2'	343°31.4'	S 7°02.2'	282°32.9'	S 21°57.8'	37°48.8'	N 15°06.6'
15	77°54.3'	N 20°13.8'	358°33.4'	S 7°02.4'	297°35.4'	S 21°57.8'	52°49.7'	N 15°06.1'
16	92°53.6'	N 20°13.3'	13°35.5'	S 7°02.6'	312°37.9'	S 21°57.8'	67°50.6'	N 15°05.6'
17	107°53.0'	N 20°12.8'	28°37.6'	S 7°02.7'	327°40.3'	S 21°57.8'	82°51.5'	N 15°05.1'
18	122°52.3'	N 20°12.4'	43°39.6'	S 7°02.9'	342°42.8'	S 21°57.8'	97°52.4'	N 15°04.5'
19	137°51.6'	N 20°11.9'	58°41.7'	S 7°03.1'	357°45.3'	S 21°57.8'	112°53.3'	N 15°04.0'
20	152°50.9'	N 20°11.4'	73°43.7'	S 7°03.2'	12°47.7'	S 21°57.9'	127°54.2'	N 15°03.5'
21	167°50.3'	N 20°11.0'	88°45.8'	S 7°03.4'	27°50.2'	S 21°57.9'	142°55.1'	N 15°03.0'
22	182°49.6'	N 20°10.5'	103°47.8'	S 7°03.6'	42°52.7'	S 21°57.9'	157°56.0'	N 15°02.5'
23	197°48.9'	N 20°10.0'	118°49.9'	S 7°03.7'	57°55.1'	S 21°57.9'	172°56.9'	N 15°01.9'

Fri Aug 25, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.7' d = 0.5'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	212°48.3'	N 20°09.6'	133°52.0'	S 7°03.9'	72°57.6'	S 21°57.9'	187°57.8'	N 15°01.4'
1	227°47.6'	N 20°09.1'	148°54.0'	S 7°04.1'	88°00.1'	S 21°57.9'	202°58.7'	N 15°00.9'
2	242°46.9'	N 20°08.6'	163°56.1'	S 7°04.3'	103°02.5'	S 21°57.9'	217°59.6'	N 15°00.4'
3	257°46.3'	N 20°08.1'	178°58.1'	S 7°04.4'	118°05.0'	S 21°57.9'	233°00.5'	N 14°59.9'
4	272°45.6'	N 20°07.7'	194°00.2'	S 7°04.6'	133°07.5'	S 21°57.9'	248°01.4'	N 14°59.3'
5	287°44.9'	N 20°07.2'	209°02.3'	S 7°04.8'	148°09.9'	S 21°57.9'	263°02.3'	N 14°58.8'
6	302°44.3'	N 20°06.7'	224°04.3'	S 7°04.9'	163°12.4'	S 21°57.9'	278°03.2'	N 14°58.3'
7	317°43.6'	N 20°06.2'	239°06.4'	S 7°05.1'	178°14.9'	S 21°57.9'	293°04.2'	N 14°57.8'
8	332°42.9'	N 20°05.8'	254°08.4'	S 7°05.3'	193°17.3'	S 21°57.9'	308°05.1'	N 14°57.3'
9	347°42.3'	N 20°05.3'	269°10.5'	S 7°05.4'	208°19.8'	S 21°58.0'	323°06.0'	N 14°56.7'
10	2°41.6'	N 20°04.8'	284°12.5'	S 7°05.6'	223°22.3'	S 21°58.0'	338°06.9'	N 14°56.2'
11	17°40.9'	N 20°04.3'	299°14.6'	S 7°05.8'	238°24.7'	S 21°58.0'	353°07.8'	N 14°55.7'
12	32°40.3'	N 20°03.8'	314°16.7'	S 7°06.0'	253°27.2'	S 21°58.0'	8°08.7'	N 14°55.2'
13	47°39.6'	N 20°03.3'	329°18.7'	S 7°06.1'	268°29.7'	S 21°58.0'	23°09.6'	N 14°54.7'
14	62°38.9'	N 20°02.9'	344°20.8'	S 7°06.3'	283°32.1'	S 21°58.0'	38°10.5'	N 14°54.1'
15	77°38.3'	N 20°02.4'	359°22.8'	S 7°06.5'	298°34.6'	S 21°58.0'	53°11.4'	N 14°53.6'
16	92°37.6'	N 20°01.9'	14°24.9'	S 7°06.6'	313°37.0'	S 21°58.0'	68°12.3'	N 14°53.1'
17	107°36.9'	N 20°01.4'	29°26.9'	S 7°06.8'	328°39.5'	S 21°58.0'	83°13.2'	N 14°52.6'
18	122°36.3'	N 20°00.9'	44°29.0'	S 7°07.0'	343°42.0'	S 21°58.0'	98°14.1'	N 14°52.1'
19	137°35.6'	N 20°00.4'	59°31.0'	S 7°07.2'	358°44.4'	S 21°58.0'	113°15.0'	N 14°51.5'
20	152°34.9'	N 19°59.9'	74°33.1'	S 7°07.3'	13°46.9'	S 21°58.0'	128°15.9'	N 14°51.0'
21	167°34.3'	N 19°59.4'	89°35.2'	S 7°07.5'	28°49.4'	S 21°58.0'	143°16.8'	N 14°50.5'
22	182°33.6'	N 19°58.9'	104°37.2'	S 7°07.7'	43°51.8'	S 21°58.1'	158°17.8'	N 14°50.0'
23	197°32.9'	N 19°58.4'	119°39.3'	S 7°07.8'	58°54.3'	S 21°58.1'	173°18.7'	N 14°49.4'

Sat Aug 26, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.7' d = 0.5'		v = 2.1' d = 0.2'		v = 2.5' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	212°32.3'	N 19°57.9'	134°41.3'	S 7°08.0'	73°56.8'	S 21°58.1'	188°19.6'	N 14°48.9'
1	227°31.6'	N 19°57.5'	149°43.4'	S 7°08.2'	88°59.2'	S 21°58.1'	203°20.5'	N 14°48.4'
2	242°31.0'	N 19°57.0'	164°45.4'	S 7°08.3'	104°01.7'	S 21°58.1'	218°21.4'	N 14°47.9'
3	257°30.3'	N 19°56.5'	179°47.5'	S 7°08.5'	119°04.1'	S 21°58.1'	233°22.3'	N 14°47.4'
4	272°29.6'	N 19°56.0'	194°49.5'	S 7°08.7'	134°06.6'	S 21°58.1'	248°23.2'	N 14°46.8'
5	287°29.0'	N 19°55.5'	209°51.6'	S 7°08.9'	149°09.1'	S 21°58.1'	263°24.1'	N 14°46.3'
6	302°28.3'	N 19°55.0'	224°53.6'	S 7°09.0'	164°11.5'	S 21°58.1'	278°25.0'	N 14°45.8'
7	317°27.6'	N 19°54.5'	239°55.7'	S 7°09.2'	179°14.0'	S 21°58.1'	293°25.9'	N 14°45.3'
8	332°27.0'	N 19°54.0'	254°57.8'	S 7°09.4'	194°16.4'	S 21°58.1'	308°26.8'	N 14°44.7'
9	347°26.3'	N 19°53.4'	269°59.8'	S 7°09.5'	209°18.9'	S 21°58.1'	323°27.8'	N 14°44.2'
10	2°25.7'	N 19°52.9'	285°01.9'	S 7°09.7'	224°21.4'	S 21°58.2'	338°28.7'	N 14°43.7'
11	17°25.0'	N 19°52.4'	300°03.9'	S 7°09.9'	239°23.8'	S 21°58.2'	353°29.6'	N 14°43.2'
12	32°24.3'	N 19°51.9'	315°06.0'	S 7°10.1'	254°26.3'	S 21°58.2'	8°30.5'	N 14°42.6'
13	47°23.7'	N 19°51.4'	330°08.0'	S 7°10.2'	269°28.8'	S 21°58.2'	23°31.4'	N 14°42.1'
14	62°23.0'	N 19°50.9'	345°10.1'	S 7°10.4'	284°31.2'	S 21°58.2'	38°32.3'	N 14°41.6'
15	77°22.4'	N 19°50.4'	0°12.1'	S 7°10.6'	299°33.7'	S 21°58.2'	53°33.2'	N 14°41.1'
16	92°21.7'	N 19°49.9'	15°14.2'	S 7°10.7'	314°36.1'	S 21°58.2'	68°34.1'	N 14°40.5'
17	107°21.0'	N 19°49.4'	30°16.2'	S 7°10.9'	329°38.6'	S 21°58.2'	83°35.0'	N 14°40.0'
18	122°20.4'	N 19°48.9'	45°18.3'	S 7°11.1'	344°41.0'	S 21°58.2'	98°35.9'	N 14°39.5'
19	137°19.7'	N 19°48.4'	60°20.3'	S 7°11.3'	359°43.5'	S 21°58.2'	113°36.9'	N 14°39.0'
20	152°19.1'	N 19°47.8'	75°22.4'	S 7°11.4'	14°46.0'	S 21°58.2'	128°37.8'	N 14°38.4'
21	167°18.4'	N 19°47.3'	90°24.4'	S 7°11.6'	29°48.4'	S 21°58.2'	143°38.7'	N 14°37.9'
22	182°17.7'	N 19°46.8'	105°26.5'	S 7°11.8'	44°50.9'	S 21°58.2'	158°39.6'	N 14°37.4'
23	197°17.1'	N 19°46.3'	120°28.5'	S 7°11.9'	59°53.3'	S 21°58.3'	173°40.5'	N 14°36.9'

Sun Aug 27, 2017 UTC

UTC	Venus -3.9 v = -0.7' d = 0.5'		Jupiter -1.6 v = 2.0' d = 0.2'		Saturn +0.4 v = 2.5' d = 0.0'		Mars +1.8 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	212°16.4'	N 19°45.8'	135°30.6'	S 7°12.1'	74°55.8'	S 21°58.3'	188°41.4'	N 14°36.3'
1	227°15.8'	N 19°45.3'	150°32.6'	S 7°12.3'	89°58.3'	S 21°58.3'	203°42.3'	N 14°35.8'
2	242°15.1'	N 19°44.7'	165°34.7'	S 7°12.5'	105°00.7'	S 21°58.3'	218°43.2'	N 14°35.3'
3	257°14.4'	N 19°44.2'	180°36.7'	S 7°12.6'	120°03.2'	S 21°58.3'	233°44.1'	N 14°34.7'
4	272°13.8'	N 19°43.7'	195°38.8'	S 7°12.8'	135°05.6'	S 21°58.3'	248°45.1'	N 14°34.2'
5	287°13.1'	N 19°43.2'	210°40.8'	S 7°13.0'	150°08.1'	S 21°58.3'	263°46.0'	N 14°33.7'
6	302°12.5'	N 19°42.6'	225°42.9'	S 7°13.2'	165°10.5'	S 21°58.3'	278°46.9'	N 14°33.2'
7	317°11.8'	N 19°42.1'	240°45.0'	S 7°13.3'	180°13.0'	S 21°58.3'	293°47.8'	N 14°32.6'
8	332°11.1'	N 19°41.6'	255°47.0'	S 7°13.5'	195°15.5'	S 21°58.3'	308°48.7'	N 14°32.1'
9	347°10.5'	N 19°41.1'	270°49.1'	S 7°13.7'	210°17.9'	S 21°58.3'	323°49.6'	N 14°31.6'
10	2°09.8'	N 19°40.5'	285°51.1'	S 7°13.8'	225°20.4'	S 21°58.3'	338°50.5'	N 14°31.1'
11	17°09.2'	N 19°40.0'	300°53.2'	S 7°14.0'	240°22.8'	S 21°58.4'	353°51.4'	N 14°30.5'
12	32°08.5'	N 19°39.5'	315°55.2'	S 7°14.2'	255°25.3'	S 21°58.4'	8°52.4'	N 14°30.0'
13	47°07.9'	N 19°38.9'	330°57.3'	S 7°14.4'	270°27.7'	S 21°58.4'	23°53.3'	N 14°29.5'
14	62°07.2'	N 19°38.4'	345°59.3'	S 7°14.5'	285°30.2'	S 21°58.4'	38°54.2'	N 14°28.9'
15	77°06.6'	N 19°37.9'	1°01.4'	S 7°14.7'	300°32.7'	S 21°58.4'	53°55.1'	N 14°28.4'
16	92°05.9'	N 19°37.3'	16°03.4'	S 7°14.9'	315°35.1'	S 21°58.4'	68°56.0'	N 14°27.9'
17	107°05.2'	N 19°36.8'	31°05.4'	S 7°15.0'	330°37.6'	S 21°58.4'	83°56.9'	N 14°27.3'
18	122°04.6'	N 19°36.3'	46°07.5'	S 7°15.2'	345°40.0'	S 21°58.4'	98°57.8'	N 14°26.8'
19	137°03.9'	N 19°35.7'	61°09.5'	S 7°15.4'	0°42.5'	S 21°58.4'	113°58.8'	N 14°26.3'
20	152°03.3'	N 19°35.2'	76°11.6'	S 7°15.6'	15°44.9'	S 21°58.4'	128°59.7'	N 14°25.8'
21	167°02.6'	N 19°34.7'	91°13.6'	S 7°15.7'	30°47.4'	S 21°58.4'	144°00.6'	N 14°25.2'
22	182°02.0'	N 19°34.1'	106°15.7'	S 7°15.9'	45°49.8'	S 21°58.4'	159°01.5'	N 14°24.7'
23	197°01.3'	N 19°33.6'	121°17.7'	S 7°16.1'	60°52.3'	S 21°58.5'	174°02.4'	N 14°24.2'

Mon Aug 28, 2017 UTC

UTC	Venus -3.9 v = -0.7' d = 0.6'		Jupiter -1.6 v = 2.0' d = 0.2'		Saturn +0.4 v = 2.5' d = 0.0'		Mars +1.8 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	212°00.7'	N 19°33.0'	136°19.8'	S 7°16.3'	75°54.7'	S 21°58.5'	189°03.3'	N 14°23.6'
1	227°00.0'	N 19°32.5'	151°21.8'	S 7°16.4'	90°57.2'	S 21°58.5'	204°04.2'	N 14°23.1'
2	241°59.4'	N 19°31.9'	166°23.9'	S 7°16.6'	105°59.6'	S 21°58.5'	219°05.2'	N 14°22.6'
3	256°58.7'	N 19°31.4'	181°25.9'	S 7°16.8'	121°02.1'	S 21°58.5'	234°06.1'	N 14°22.0'
4	271°58.1'	N 19°30.9'	196°28.0'	S 7°16.9'	136°04.6'	S 21°58.5'	249°07.0'	N 14°21.5'
5	286°57.4'	N 19°30.3'	211°30.0'	S 7°17.1'	151°07.0'	S 21°58.5'	264°07.9'	N 14°21.0'
6	301°56.7'	N 19°29.8'	226°32.1'	S 7°17.3'	166°09.5'	S 21°58.5'	279°08.8'	N 14°20.5'
7	316°56.1'	N 19°29.2'	241°34.1'	S 7°17.5'	181°11.9'	S 21°58.5'	294°09.7'	N 14°19.9'
8	331°55.4'	N 19°28.7'	256°36.2'	S 7°17.6'	196°14.4'	S 21°58.5'	309°10.7'	N 14°19.4'
9	346°54.8'	N 19°28.1'	271°38.2'	S 7°17.8'	211°16.8'	S 21°58.5'	324°11.6'	N 14°18.9'
10	1°54.1'	N 19°27.6'	286°40.3'	S 7°18.0'	226°19.3'	S 21°58.5'	339°12.5'	N 14°18.3'
11	16°53.5'	N 19°27.0'	301°42.3'	S 7°18.2'	241°21.7'	S 21°58.6'	354°13.4'	N 14°17.8'
12	31°52.8'	N 19°26.5'	316°44.4'	S 7°18.3'	256°24.2'	S 21°58.6'	9°14.3'	N 14°17.3'
13	46°52.2'	N 19°25.9'	331°46.4'	S 7°18.5'	271°26.6'	S 21°58.6'	24°15.2'	N 14°16.7'
14	61°51.5'	N 19°25.3'	346°48.5'	S 7°18.7'	286°29.1'	S 21°58.6'	39°16.2'	N 14°16.2'
15	76°50.9'	N 19°24.8'	1°50.5'	S 7°18.9'	301°31.5'	S 21°58.6'	54°17.1'	N 14°15.7'
16	91°50.2'	N 19°24.2'	16°52.5'	S 7°19.0'	316°34.0'	S 21°58.6'	69°18.0'	N 14°15.1'
17	106°49.6'	N 19°23.7'	31°54.6'	S 7°19.2'	331°36.4'	S 21°58.6'	84°18.9'	N 14°14.6'
18	121°48.9'	N 19°23.1'	46°56.6'	S 7°19.4'	346°38.9'	S 21°58.6'	99°19.8'	N 14°14.1'
19	136°48.3'	N 19°22.6'	61°58.7'	S 7°19.6'	1°41.3'	S 21°58.6'	114°20.7'	N 14°13.5'
20	151°47.6'	N 19°22.0'	77°00.7'	S 7°19.7'	16°43.8'	S 21°58.6'	129°21.7'	N 14°13.0'
21	166°47.0'	N 19°21.4'	92°02.8'	S 7°19.9'	31°46.2'	S 21°58.6'	144°22.6'	N 14°12.5'
22	181°46.3'	N 19°20.9'	107°04.8'	S 7°20.1'	46°48.7'	S 21°58.7'	159°23.5'	N 14°11.9'
23	196°45.7'	N 19°20.3'	122°06.9'	S 7°20.2'	61°51.1'	S 21°58.7'	174°24.4'	N 14°11.4'

Tue Aug 29, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.6'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	211°45.0'	N 19°19.7'	137°08.9'	S 7°20.4'	76°53.6'	S 21°58.7'	189°25.3'	N 14°10.9'
1	226°44.4'	N 19°19.2'	152°11.0'	S 7°20.6'	91°56.0'	S 21°58.7'	204°26.2'	N 14°10.3'
2	241°43.7'	N 19°18.6'	167°13.0'	S 7°20.8'	106°58.5'	S 21°58.7'	219°27.2'	N 14°09.8'
3	256°43.1'	N 19°18.0'	182°15.0'	S 7°20.9'	122°00.9'	S 21°58.7'	234°28.1'	N 14°09.3'
4	271°42.5'	N 19°17.5'	197°17.1'	S 7°21.1'	137°03.4'	S 21°58.7'	249°29.0'	N 14°08.7'
5	286°41.8'	N 19°16.9'	212°19.1'	S 7°21.3'	152°05.8'	S 21°58.7'	264°29.9'	N 14°08.2'
6	301°41.2'	N 19°16.3'	227°21.2'	S 7°21.5'	167°08.3'	S 21°58.7'	279°30.8'	N 14°07.7'
7	316°40.5'	N 19°15.8'	242°23.2'	S 7°21.6'	182°10.7'	S 21°58.7'	294°31.8'	N 14°07.1'
8	331°39.9'	N 19°15.2'	257°25.3'	S 7°21.8'	197°13.2'	S 21°58.7'	309°32.7'	N 14°06.6'
9	346°39.2'	N 19°14.6'	272°27.3'	S 7°22.0'	212°15.6'	S 21°58.7'	324°33.6'	N 14°06.1'
10	1°38.6'	N 19°14.0'	287°29.4'	S 7°22.2'	227°18.1'	S 21°58.8'	339°34.5'	N 14°05.5'
11	16°37.9'	N 19°13.5'	302°31.4'	S 7°22.3'	242°20.5'	S 21°58.8'	354°35.4'	N 14°05.0'
12	31°37.3'	N 19°12.9'	317°33.4'	S 7°22.5'	257°23.0'	S 21°58.8'	9°36.4'	N 14°04.4'
13	46°36.6'	N 19°12.3'	332°35.5'	S 7°22.7'	272°25.4'	S 21°58.8'	24°37.3'	N 14°03.9'
14	61°36.0'	N 19°11.7'	347°37.5'	S 7°22.9'	287°27.8'	S 21°58.8'	39°38.2'	N 14°03.4'
15	76°35.4'	N 19°11.2'	2°39.6'	S 7°23.0'	302°30.3'	S 21°58.8'	54°39.1'	N 14°02.8'
16	91°34.7'	N 19°10.6'	17°41.6'	S 7°23.2'	317°32.7'	S 21°58.8'	69°40.0'	N 14°02.3'
17	106°34.1'	N 19°10.0'	32°43.7'	S 7°23.4'	332°35.2'	S 21°58.8'	84°41.0'	N 14°01.8'
18	121°33.4'	N 19°09.4'	47°45.7'	S 7°23.6'	347°37.6'	S 21°58.8'	99°41.9'	N 14°01.2'
19	136°32.8'	N 19°08.8'	62°47.7'	S 7°23.7'	2°40.1'	S 21°58.8'	114°42.8'	N 14°00.7'
20	151°32.1'	N 19°08.2'	77°49.8'	S 7°23.9'	17°42.5'	S 21°58.8'	129°43.7'	N 14°00.2'
21	166°31.5'	N 19°07.7'	92°51.8'	S 7°24.1'	32°45.0'	S 21°58.9'	144°44.6'	N 13°59.6'
22	181°30.8'	N 19°07.1'	107°53.9'	S 7°24.3'	47°47.4'	S 21°58.9'	159°45.6'	N 13°59.1'
23	196°30.2'	N 19°06.5'	122°55.9'	S 7°24.4'	62°49.9'	S 21°58.9'	174°46.5'	N 13°58.5'

Wed Aug 30, 2017 UTC

UTC	Venus -3.9		Jupiter -1.6		Saturn +0.4		Mars +1.8	
	v = -0.6' d = 0.6'		v = 2.0' d = 0.2'		v = 2.4' d = 0.0'		v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	211°29.6'	N 19°05.9'	137°58.0'	S 7°24.6'	77°52.3'	S 21°58.9'	189°47.4'	N 13°58.0'
1	226°28.9'	N 19°05.3'	152°60.0'	S 7°24.8'	92°54.8'	S 21°58.9'	204°48.3'	N 13°57.5'
2	241°28.3'	N 19°04.7'	168°02.0'	S 7°25.0'	107°57.2'	S 21°58.9'	219°49.3'	N 13°56.9'
3	256°27.6'	N 19°04.1'	183°04.1'	S 7°25.1'	122°59.6'	S 21°58.9'	234°50.2'	N 13°56.4'
4	271°27.0'	N 19°03.5'	198°06.1'	S 7°25.3'	138°02.1'	S 21°58.9'	249°51.1'	N 13°55.9'
5	286°26.4'	N 19°02.9'	213°08.2'	S 7°25.5'	153°04.5'	S 21°58.9'	264°52.0'	N 13°55.3'
6	301°25.7'	N 19°02.4'	228°10.2'	S 7°25.7'	168°07.0'	S 21°58.9'	279°52.9'	N 13°54.8'
7	316°25.1'	N 19°01.8'	243°12.2'	S 7°25.8'	183°09.4'	S 21°58.9'	294°53.9'	N 13°54.2'
8	331°24.4'	N 19°01.2'	258°14.3'	S 7°26.0'	198°11.9'	S 21°59.0'	309°54.8'	N 13°53.7'
9	346°23.8'	N 19°00.6'	273°16.3'	S 7°26.2'	213°14.3'	S 21°59.0'	324°55.7'	N 13°53.2'
10	1°23.2'	N 18°60.0'	288°18.4'	S 7°26.4'	228°16.7'	S 21°59.0'	339°56.6'	N 13°52.6'
11	16°22.5'	N 18°59.4'	303°20.4'	S 7°26.5'	243°19.2'	S 21°59.0'	354°57.6'	N 13°52.1'
12	31°21.9'	N 18°58.8'	318°22.4'	S 7°26.7'	258°21.6'	S 21°59.0'	9°58.5'	N 13°51.5'
13	46°21.2'	N 18°58.2'	333°24.5'	S 7°26.9'	273°24.1'	S 21°59.0'	24°59.4'	N 13°51.0'
14	61°20.6'	N 18°57.6'	348°26.5'	S 7°27.1'	288°26.5'	S 21°59.0'	40°00.3'	N 13°50.5'
15	76°20.0'	N 18°57.0'	3°28.6'	S 7°27.2'	303°29.0'	S 21°59.0'	55°01.2'	N 13°49.9'
16	91°19.3'	N 18°56.4'	18°30.6'	S 7°27.4'	318°31.4'	S 21°59.0'	70°02.2'	N 13°49.4'
17	106°18.7'	N 18°55.8'	33°32.6'	S 7°27.6'	333°33.8'	S 21°59.0'	85°03.1'	N 13°48.8'
18	121°18.0'	N 18°55.2'	48°34.7'	S 7°27.8'	348°36.3'	S 21°59.0'	100°04.0'	N 13°48.3'
19	136°17.4'	N 18°54.6'	63°36.7'	S 7°27.9'	3°38.7'	S 21°59.1'	115°04.9'	N 13°47.8'
20	151°16.8'	N 18°54.0'	78°38.8'	S 7°28.1'	18°41.2'	S 21°59.1'	130°05.9'	N 13°47.2'
21	166°16.1'	N 18°53.3'	93°40.8'	S 7°28.3'	33°43.6'	S 21°59.1'	145°06.8'	N 13°46.7'
22	181°15.5'	N 18°52.7'	108°42.8'	S 7°28.5'	48°46.1'	S 21°59.1'	160°07.7'	N 13°46.1'
23	196°14.9'	N 18°52.1'	123°44.9'	S 7°28.6'	63°48.5'	S 21°59.1'	175°08.6'	N 13°45.6'

Thu Aug 31, 2017 UTC

UTC	Venus -3.9 v = -0.6' d = 0.6'		Jupiter -1.6 v = 2.0' d = 0.2'		Saturn +0.4 v = 2.4' d = 0.0'		Mars +1.8 v = 0.9' d = 0.5'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	211°14.2'	N 18°51.5'	138°46.9'	S 7°28.8'	78°50.9'	S 21°59.1'	190°09.6'	N 13°45.1'
1	226°13.6'	N 18°50.9'	153°49.0'	S 7°29.0'	93°53.4'	S 21°59.1'	205°10.5'	N 13°44.5'
2	241°13.0'	N 18°50.3'	168°51.0'	S 7°29.2'	108°55.8'	S 21°59.1'	220°11.4'	N 13°44.0'
3	256°12.3'	N 18°49.7'	183°53.0'	S 7°29.3'	123°58.3'	S 21°59.1'	235°12.3'	N 13°43.4'
4	271°11.7'	N 18°49.1'	198°55.1'	S 7°29.5'	139°00.7'	S 21°59.1'	250°13.3'	N 13°42.9'
5	286°11.0'	N 18°48.5'	213°57.1'	S 7°29.7'	154°03.1'	S 21°59.1'	265°14.2'	N 13°42.4'
6	301°10.4'	N 18°47.8'	228°59.2'	S 7°29.9'	169°05.6'	S 21°59.2'	280°15.1'	N 13°41.8'
7	316°09.8'	N 18°47.2'	244°01.2'	S 7°30.0'	184°08.0'	S 21°59.2'	295°16.0'	N 13°41.3'
8	331°09.1'	N 18°46.6'	259°03.2'	S 7°30.2'	199°10.5'	S 21°59.2'	310°17.0'	N 13°40.7'
9	346°08.5'	N 18°46.0'	274°05.3'	S 7°30.4'	214°12.9'	S 21°59.2'	325°17.9'	N 13°40.2'
10	1°07.9'	N 18°45.4'	289°07.3'	S 7°30.6'	229°15.3'	S 21°59.2'	340°18.8'	N 13°39.6'
11	16°07.2'	N 18°44.7'	304°09.3'	S 7°30.7'	244°17.8'	S 21°59.2'	355°19.7'	N 13°39.1'
12	31°06.6'	N 18°44.1'	319°11.4'	S 7°30.9'	259°20.2'	S 21°59.2'	10°20.7'	N 13°38.6'
13	46°06.0'	N 18°43.5'	334°13.4'	S 7°31.1'	274°22.6'	S 21°59.2'	25°21.6'	N 13°38.0'
14	61°05.3'	N 18°42.9'	349°15.5'	S 7°31.3'	289°25.1'	S 21°59.2'	40°22.5'	N 13°37.5'
15	76°04.7'	N 18°42.3'	4°17.5'	S 7°31.5'	304°27.5'	S 21°59.2'	55°23.4'	N 13°36.9'
16	91°04.1'	N 18°41.6'	19°19.5'	S 7°31.6'	319°30.0'	S 21°59.2'	70°24.4'	N 13°36.4'
17	106°03.5'	N 18°41.0'	34°21.6'	S 7°31.8'	334°32.4'	S 21°59.3'	85°25.3'	N 13°35.8'
18	121°02.8'	N 18°40.4'	49°23.6'	S 7°32.0'	349°34.8'	S 21°59.3'	100°26.2'	N 13°35.3'
19	136°02.2'	N 18°39.7'	64°25.6'	S 7°32.2'	4°37.3'	S 21°59.3'	115°27.2'	N 13°34.8'
20	151°01.6'	N 18°39.1'	79°27.7'	S 7°32.3'	19°39.7'	S 21°59.3'	130°28.1'	N 13°34.2'
21	166°00.9'	N 18°38.5'	94°29.7'	S 7°32.5'	34°42.1'	S 21°59.3'	145°29.0'	N 13°33.7'
22	181°00.3'	N 18°37.9'	109°31.7'	S 7°32.7'	49°44.6'	S 21°59.3'	160°29.9'	N 13°33.1'
23	195°59.7'	N 18°37.2'	124°33.8'	S 7°32.9'	64°47.0'	S 21°59.3'	175°30.9'	N 13°32.6'