

Sat Sep 1, 2018 UTC

UTC	Venus -4.4 v = 0.6' d = 1.1'		Jupiter -1.8 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.5' d = 0.0'		Mars -2.1 v = 2.3' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	139°34.4'	S 12°06.3'	115°09.4'	S 16°08.4'	67°19.6'	S 22°41.6'	37°57.3'	S 25°57.1'
1	154°35.0'	S 12°07.4'	130°11.5'	S 16°08.5'	82°22.1'	S 22°41.6'	52°59.7'	S 25°56.9'
2	169°35.7'	S 12°08.5'	145°13.6'	S 16°08.6'	97°24.5'	S 22°41.6'	68°02.0'	S 25°56.7'
3	184°36.3'	S 12°09.5'	160°15.7'	S 16°08.8'	112°27.0'	S 22°41.6'	83°04.3'	S 25°56.6'
4	199°36.9'	S 12°10.6'	175°17.9'	S 16°08.9'	127°29.5'	S 22°41.7'	98°06.7'	S 25°56.4'
5	214°37.5'	S 12°11.6'	190°20.0'	S 16°09.0'	142°32.0'	S 22°41.7'	113°09.0'	S 25°56.2'
6	229°38.2'	S 12°12.7'	205°22.1'	S 16°09.1'	157°34.5'	S 22°41.7'	128°11.3'	S 25°56.1'
7	244°38.8'	S 12°13.7'	220°24.2'	S 16°09.2'	172°37.0'	S 22°41.7'	143°13.6'	S 25°55.9'
8	259°39.4'	S 12°14.8'	235°26.4'	S 16°09.3'	187°39.5'	S 22°41.7'	158°16.0'	S 25°55.7'
9	274°40.0'	S 12°15.8'	250°28.5'	S 16°09.4'	202°42.0'	S 22°41.7'	173°18.3'	S 25°55.6'
10	289°40.7'	S 12°16.9'	265°30.6'	S 16°09.5'	217°44.4'	S 22°41.7'	188°20.6'	S 25°55.4'
11	304°41.3'	S 12°17.9'	280°32.7'	S 16°09.6'	232°46.9'	S 22°41.7'	203°22.9'	S 25°55.2'
12	319°41.9'	S 12°19.0'	295°34.8'	S 16°09.7'	247°49.4'	S 22°41.7'	218°25.3'	S 25°55.0'
13	334°42.6'	S 12°20.0'	310°37.0'	S 16°09.8'	262°51.9'	S 22°41.7'	233°27.6'	S 25°54.9'
14	349°43.2'	S 12°21.1'	325°39.1'	S 16°09.9'	277°54.4'	S 22°41.7'	248°29.9'	S 25°54.7'
15	4°43.8'	S 12°22.1'	340°41.2'	S 16°10.0'	292°56.9'	S 22°41.7'	263°32.2'	S 25°54.5'
16	19°44.5'	S 12°23.2'	355°43.3'	S 16°10.1'	307°59.4'	S 22°41.7'	278°34.5'	S 25°54.3'
17	34°45.1'	S 12°24.2'	10°45.4'	S 16°10.2'	323°01.8'	S 22°41.7'	293°36.8'	S 25°54.2'
18	49°45.7'	S 12°25.3'	25°47.6'	S 16°10.3'	338°04.3'	S 22°41.7'	308°39.1'	S 25°54.0'
19	64°46.4'	S 12°26.3'	40°49.7'	S 16°10.4'	353°06.8'	S 22°41.7'	323°41.4'	S 25°53.8'
20	79°47.0'	S 12°27.4'	55°51.8'	S 16°10.5'	8°09.3'	S 22°41.8'	338°43.8'	S 25°53.7'
21	94°47.6'	S 12°28.4'	70°53.9'	S 16°10.6'	23°11.8'	S 22°41.8'	353°46.1'	S 25°53.5'
22	109°48.3'	S 12°29.5'	85°56.1'	S 16°10.7'	38°14.3'	S 22°41.8'	8°48.4'	S 25°53.3'
23	124°48.9'	S 12°30.5'	100°58.2'	S 16°10.9'	53°16.7'	S 22°41.8'	23°50.7'	S 25°53.1'

Sun Sep 2, 2018 UTC

UTC	Venus -4.4 v = 0.7' d = 1.0'		Jupiter -1.8 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.5' d = 0.0'		Mars -2.1 v = 2.3' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	139°49.6'	S 12°31.6'	116°00.3'	S 16°11.0'	68°19.2'	S 22°41.8'	38°53.0'	S 25°53.0'
1	154°50.2'	S 12°32.6'	131°02.4'	S 16°11.1'	83°21.7'	S 22°41.8'	53°55.3'	S 25°52.8'
2	169°50.9'	S 12°33.7'	146°04.5'	S 16°11.2'	98°24.2'	S 22°41.8'	68°57.6'	S 25°52.6'
3	184°51.5'	S 12°34.7'	161°06.6'	S 16°11.3'	113°26.7'	S 22°41.8'	83°59.9'	S 25°52.4'
4	199°52.2'	S 12°35.7'	176°08.8'	S 16°11.4'	128°29.2'	S 22°41.8'	99°02.2'	S 25°52.2'
5	214°52.8'	S 12°36.8'	191°10.9'	S 16°11.5'	143°31.6'	S 22°41.8'	114°04.5'	S 25°52.1'
6	229°53.4'	S 12°37.8'	206°13.0'	S 16°11.6'	158°34.1'	S 22°41.8'	129°06.7'	S 25°51.9'
7	244°54.1'	S 12°38.9'	221°15.1'	S 16°11.7'	173°36.6'	S 22°41.8'	144°09.0'	S 25°51.7'
8	259°54.7'	S 12°39.9'	236°17.2'	S 16°11.8'	188°39.1'	S 22°41.8'	159°11.3'	S 25°51.5'
9	274°55.4'	S 12°40.9'	251°19.4'	S 16°11.9'	203°41.6'	S 22°41.8'	174°13.6'	S 25°51.3'
10	289°56.1'	S 12°42.0'	266°21.5'	S 16°12.0'	218°44.1'	S 22°41.8'	189°15.9'	S 25°51.2'
11	304°56.7'	S 12°43.0'	281°23.6'	S 16°12.1'	233°46.5'	S 22°41.9'	204°18.2'	S 25°51.0'
12	319°57.4'	S 12°44.1'	296°25.7'	S 16°12.2'	248°49.0'	S 22°41.9'	219°20.5'	S 25°50.8'
13	334°58.0'	S 12°45.1'	311°27.8'	S 16°12.3'	263°51.5'	S 22°41.9'	234°22.8'	S 25°50.6'
14	349°58.7'	S 12°46.1'	326°29.9'	S 16°12.4'	278°54.0'	S 22°41.9'	249°25.0'	S 25°50.4'
15	4°59.3'	S 12°47.2'	341°32.1'	S 16°12.5'	293°56.5'	S 22°41.9'	264°27.3'	S 25°50.3'
16	19°60.0'	S 12°48.2'	356°34.2'	S 16°12.7'	308°58.9'	S 22°41.9'	279°29.6'	S 25°50.1'
17	35°00.7'	S 12°49.3'	11°36.3'	S 16°12.8'	324°01.4'	S 22°41.9'	294°31.9'	S 25°49.9'
18	50°01.3'	S 12°50.3'	26°38.4'	S 16°12.9'	339°03.9'	S 22°41.9'	309°34.1'	S 25°49.7'
19	65°02.0'	S 12°51.3'	41°40.5'	S 16°13.0'	354°06.4'	S 22°41.9'	324°36.4'	S 25°49.5'
20	80°02.6'	S 12°52.4'	56°42.6'	S 16°13.1'	9°08.9'	S 22°41.9'	339°38.7'	S 25°49.3'
21	95°03.3'	S 12°53.4'	71°44.8'	S 16°13.2'	24°11.3'	S 22°41.9'	354°41.0'	S 25°49.2'
22	110°04.0'	S 12°54.4'	86°46.9'	S 16°13.3'	39°13.8'	S 22°41.9'	9°43.2'	S 25°49.0'
23	125°04.6'	S 12°55.5'	101°49.0'	S 16°13.4'	54°16.3'	S 22°41.9'	24°45.5'	S 25°48.8'

Mon Sep 3, 2018 UTC

UTC	Venus -4.4		Jupiter -1.8		Saturn +0.4		Mars -2.1	
	v = 0.7' d = 1.0'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 2.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	140°05.3'	S 12°56.5'	116°51.1'	S 16°13.5'	69°18.8'	S 22°41.9'	39°47.8'	S 25°48.6'
1	155°06.0'	S 12°57.5'	131°53.2'	S 16°13.6'	84°21.3'	S 22°41.9'	54°50.0'	S 25°48.4'
2	170°06.6'	S 12°58.5'	146°55.3'	S 16°13.7'	99°23.7'	S 22°41.9'	69°52.3'	S 25°48.2'
3	185°07.3'	S 12°59.6'	161°57.4'	S 16°13.8'	114°26.2'	S 22°42.0'	84°54.5'	S 25°48.1'
4	200°08.0'	S 13°00.6'	176°59.6'	S 16°13.9'	129°28.7'	S 22°42.0'	99°56.8'	S 25°47.9'
5	215°08.7'	S 13°01.6'	192°01.7'	S 16°14.0'	144°31.2'	S 22°42.0'	114°59.1'	S 25°47.7'
6	230°09.3'	S 13°02.7'	207°03.8'	S 16°14.1'	159°33.7'	S 22°42.0'	130°01.3'	S 25°47.5'
7	245°10.0'	S 13°03.7'	222°05.9'	S 16°14.3'	174°36.1'	S 22°42.0'	145°03.6'	S 25°47.3'
8	260°10.7'	S 13°04.7'	237°08.0'	S 16°14.4'	189°38.6'	S 22°42.0'	160°05.8'	S 25°47.1'
9	275°11.4'	S 13°05.7'	252°10.1'	S 16°14.5'	204°41.1'	S 22°42.0'	175°08.1'	S 25°46.9'
10	290°12.0'	S 13°06.8'	267°12.2'	S 16°14.6'	219°43.6'	S 22°42.0'	190°10.3'	S 25°46.7'
11	305°12.7'	S 13°07.8'	282°14.3'	S 16°14.7'	234°46.0'	S 22°42.0'	205°12.6'	S 25°46.5'
12	320°13.4'	S 13°08.8'	297°16.5'	S 16°14.8'	249°48.5'	S 22°42.0'	220°14.8'	S 25°46.4'
13	335°14.1'	S 13°09.8'	312°18.6'	S 16°14.9'	264°51.0'	S 22°42.0'	235°17.1'	S 25°46.2'
14	350°14.8'	S 13°10.9'	327°20.7'	S 16°15.0'	279°53.5'	S 22°42.0'	250°19.3'	S 25°46.0'
15	5°15.4'	S 13°11.9'	342°22.8'	S 16°15.1'	294°56.0'	S 22°42.0'	265°21.6'	S 25°45.8'
16	20°16.1'	S 13°12.9'	357°24.9'	S 16°15.2'	309°58.4'	S 22°42.0'	280°23.8'	S 25°45.6'
17	35°16.8'	S 13°13.9'	12°27.0'	S 16°15.3'	325°00.9'	S 22°42.0'	295°26.1'	S 25°45.4'
18	50°17.5'	S 13°15.0'	27°29.1'	S 16°15.4'	340°03.4'	S 22°42.0'	310°28.3'	S 25°45.2'
19	65°18.2'	S 13°16.0'	42°31.2'	S 16°15.5'	355°05.9'	S 22°42.1'	325°30.5'	S 25°45.0'
20	80°18.9'	S 13°17.0'	57°33.3'	S 16°15.6'	10°08.3'	S 22°42.1'	340°32.8'	S 25°44.8'
21	95°19.6'	S 13°18.0'	72°35.5'	S 16°15.8'	25°10.8'	S 22°42.1'	355°35.0'	S 25°44.6'
22	110°20.3'	S 13°19.0'	87°37.6'	S 16°15.9'	40°13.3'	S 22°42.1'	10°37.2'	S 25°44.4'
23	125°20.9'	S 13°20.1'	102°39.7'	S 16°16.0'	55°15.8'	S 22°42.1'	25°39.5'	S 25°44.3'

Tue Sep 4, 2018 UTC

UTC	Venus -4.4		Jupiter -1.8		Saturn +0.4		Mars -2.0	
	v = 0.7' d = 1.0'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 2.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	140°21.6'	S 13°21.1'	117°41.8'	S 16°16.1'	70°18.2'	S 22°42.1'	40°41.7'	S 25°44.1'
1	155°22.3'	S 13°22.1'	132°43.9'	S 16°16.2'	85°20.7'	S 22°42.1'	55°43.9'	S 25°43.9'
2	170°23.0'	S 13°23.1'	147°46.0'	S 16°16.3'	100°23.2'	S 22°42.1'	70°46.2'	S 25°43.7'
3	185°23.7'	S 13°24.1'	162°48.1'	S 16°16.4'	115°25.7'	S 22°42.1'	85°48.4'	S 25°43.5'
4	200°24.4'	S 13°25.1'	177°50.2'	S 16°16.5'	130°28.1'	S 22°42.1'	100°50.6'	S 25°43.3'
5	215°25.1'	S 13°26.2'	192°52.3'	S 16°16.6'	145°30.6'	S 22°42.1'	115°52.8'	S 25°43.1'
6	230°25.8'	S 13°27.2'	207°54.4'	S 16°16.7'	160°33.1'	S 22°42.1'	130°55.1'	S 25°42.9'
7	245°26.5'	S 13°28.2'	222°56.5'	S 16°16.8'	175°35.6'	S 22°42.1'	145°57.3'	S 25°42.7'
8	260°27.2'	S 13°29.2'	237°58.6'	S 16°16.9'	190°38.0'	S 22°42.1'	160°59.5'	S 25°42.5'
9	275°27.9'	S 13°30.2'	253°00.8'	S 16°17.0'	205°40.5'	S 22°42.1'	176°01.7'	S 25°42.3'
10	290°28.6'	S 13°31.2'	268°02.9'	S 16°17.2'	220°43.0'	S 22°42.1'	191°03.9'	S 25°42.1'
11	305°29.3'	S 13°32.2'	283°05.0'	S 16°17.3'	235°45.4'	S 22°42.2'	206°06.1'	S 25°41.9'
12	320°30.0'	S 13°33.2'	298°07.1'	S 16°17.4'	250°47.9'	S 22°42.2'	221°08.4'	S 25°41.7'
13	335°30.8'	S 13°34.3'	313°09.2'	S 16°17.5'	265°50.4'	S 22°42.2'	236°10.6'	S 25°41.5'
14	350°31.5'	S 13°35.3'	328°11.3'	S 16°17.6'	280°52.9'	S 22°42.2'	251°12.8'	S 25°41.3'
15	5°32.2'	S 13°36.3'	343°13.4'	S 16°17.7'	295°55.3'	S 22°42.2'	266°15.0'	S 25°41.1'
16	20°32.9'	S 13°37.3'	358°15.5'	S 16°17.8'	310°57.8'	S 22°42.2'	281°17.2'	S 25°40.9'
17	35°33.6'	S 13°38.3'	13°17.6'	S 16°17.9'	326°00.3'	S 22°42.2'	296°19.4'	S 25°40.7'
18	50°34.3'	S 13°39.3'	28°19.7'	S 16°18.0'	341°02.8'	S 22°42.2'	311°21.6'	S 25°40.5'
19	65°35.0'	S 13°40.3'	43°21.8'	S 16°18.1'	356°05.2'	S 22°42.2'	326°23.8'	S 25°40.3'
20	80°35.7'	S 13°41.3'	58°23.9'	S 16°18.2'	11°07.7'	S 22°42.2'	341°26.0'	S 25°40.1'
21	95°36.5'	S 13°42.3'	73°26.0'	S 16°18.4'	26°10.2'	S 22°42.2'	356°28.2'	S 25°39.9'
22	110°37.2'	S 13°43.3'	88°28.1'	S 16°18.5'	41°12.6'	S 22°42.2'	11°30.4'	S 25°39.7'
23	125°37.9'	S 13°44.3'	103°30.2'	S 16°18.6'	56°15.1'	S 22°42.2'	26°32.6'	S 25°39.5'

Wed Sep 5, 2018 UTC

UTC	Venus -4.4 v = 0.7' d = 1.0'		Jupiter -1.8 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.5' d = 0.0'		Mars -2.0 v = 2.2' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	140°38.6'	S 13°45.3'	118°32.3'	S 16°18.7'	71°17.6'	S 22°42.2'	41°34.8'	S 25°39.3'
1	155°39.3'	S 13°46.3'	133°34.4'	S 16°18.8'	86°20.1'	S 22°42.2'	56°37.0'	S 25°39.1'
2	170°40.1'	S 13°47.3'	148°36.5'	S 16°18.9'	101°22.5'	S 22°42.2'	71°39.2'	S 25°38.9'
3	185°40.8'	S 13°48.3'	163°38.7'	S 16°19.0'	116°25.0'	S 22°42.3'	86°41.4'	S 25°38.7'
4	200°41.5'	S 13°49.3'	178°40.8'	S 16°19.1'	131°27.5'	S 22°42.3'	101°43.6'	S 25°38.5'
5	215°42.2'	S 13°50.3'	193°42.9'	S 16°19.2'	146°29.9'	S 22°42.3'	116°45.8'	S 25°38.3'
6	230°43.0'	S 13°51.3'	208°45.0'	S 16°19.3'	161°32.4'	S 22°42.3'	131°48.0'	S 25°38.1'
7	245°43.7'	S 13°52.3'	223°47.1'	S 16°19.4'	176°34.9'	S 22°42.3'	146°50.1'	S 25°37.9'
8	260°44.4'	S 13°53.3'	238°49.2'	S 16°19.5'	191°37.3'	S 22°42.3'	161°52.3'	S 25°37.7'
9	275°45.1'	S 13°54.3'	253°51.3'	S 16°19.7'	206°39.8'	S 22°42.3'	176°54.5'	S 25°37.5'
10	290°45.9'	S 13°55.3'	268°53.4'	S 16°19.8'	221°42.3'	S 22°42.3'	191°56.7'	S 25°37.3'
11	305°46.6'	S 13°56.3'	283°55.5'	S 16°19.9'	236°44.7'	S 22°42.3'	206°58.9'	S 25°37.1'
12	320°47.3'	S 13°57.3'	298°57.6'	S 16°20.0'	251°47.2'	S 22°42.3'	222°01.1'	S 25°36.8'
13	335°48.1'	S 13°58.3'	313°59.7'	S 16°20.1'	266°49.7'	S 22°42.3'	237°03.2'	S 25°36.6'
14	350°48.8'	S 13°59.3'	329°01.8'	S 16°20.2'	281°52.1'	S 22°42.3'	252°05.4'	S 25°36.4'
15	5°49.6'	S 14°00.3'	344°03.9'	S 16°20.3'	296°54.6'	S 22°42.3'	267°07.6'	S 25°36.2'
16	20°50.3'	S 14°01.3'	359°06.0'	S 16°20.4'	311°57.1'	S 22°42.3'	282°09.8'	S 25°36.0'
17	35°51.0'	S 14°02.3'	14°08.1'	S 16°20.5'	326°59.6'	S 22°42.3'	297°11.9'	S 25°35.8'
18	50°51.8'	S 14°03.3'	29°10.2'	S 16°20.6'	342°02.0'	S 22°42.3'	312°14.1'	S 25°35.6'
19	65°52.5'	S 14°04.3'	44°12.3'	S 16°20.8'	357°04.5'	S 22°42.4'	327°16.3'	S 25°35.4'
20	80°53.3'	S 14°05.3'	59°14.4'	S 16°20.9'	12°07.0'	S 22°42.4'	342°18.4'	S 25°35.2'
21	95°54.0'	S 14°06.3'	74°16.5'	S 16°21.0'	27°09.4'	S 22°42.4'	357°20.6'	S 25°35.0'
22	110°54.7'	S 14°07.3'	89°18.6'	S 16°21.1'	42°11.9'	S 22°42.4'	12°22.8'	S 25°34.8'
23	125°55.5'	S 14°08.3'	104°20.7'	S 16°21.2'	57°14.4'	S 22°42.4'	27°24.9'	S 25°34.5'

Thu Sep 6, 2018 UTC

UTC	Venus -4.4 v = 0.8' d = 1.0'		Jupiter -1.8 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.5' d = 0.0'		Mars -2.0 v = 2.1' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	140°56.2'	S 14°09.2'	119°22.8'	S 16°21.3'	72°16.8'	S 22°42.4'	42°27.1'	S 25°34.3'
1	155°57.0'	S 14°10.2'	134°24.9'	S 16°21.4'	87°19.3'	S 22°42.4'	57°29.2'	S 25°34.1'
2	170°57.7'	S 14°11.2'	149°27.0'	S 16°21.5'	102°21.8'	S 22°42.4'	72°31.4'	S 25°33.9'
3	185°58.5'	S 14°12.2'	164°29.1'	S 16°21.6'	117°24.2'	S 22°42.4'	87°33.6'	S 25°33.7'
4	200°59.2'	S 14°13.2'	179°31.2'	S 16°21.7'	132°26.7'	S 22°42.4'	102°35.7'	S 25°33.5'
5	215°60.0'	S 14°14.2'	194°33.3'	S 16°21.9'	147°29.1'	S 22°42.4'	117°37.9'	S 25°33.3'
6	231°00.8'	S 14°15.2'	209°35.4'	S 16°22.0'	162°31.6'	S 22°42.4'	132°40.0'	S 25°33.1'
7	246°01.5'	S 14°16.1'	224°37.5'	S 16°22.1'	177°34.1'	S 22°42.4'	147°42.2'	S 25°32.9'
8	261°02.3'	S 14°17.1'	239°39.6'	S 16°22.2'	192°36.5'	S 22°42.4'	162°44.3'	S 25°32.6'
9	276°03.0'	S 14°18.1'	254°41.7'	S 16°22.3'	207°39.0'	S 22°42.4'	177°46.5'	S 25°32.4'
10	291°03.8'	S 14°19.1'	269°43.8'	S 16°22.4'	222°41.5'	S 22°42.4'	192°48.6'	S 25°32.2'
11	306°04.6'	S 14°20.1'	284°45.9'	S 16°22.5'	237°43.9'	S 22°42.5'	207°50.8'	S 25°32.0'
12	321°05.3'	S 14°21.1'	299°48.0'	S 16°22.6'	252°46.4'	S 22°42.5'	222°52.9'	S 25°31.8'
13	336°06.1'	S 14°22.0'	314°50.1'	S 16°22.7'	267°48.9'	S 22°42.5'	237°55.1'	S 25°31.6'
14	351°06.8'	S 14°23.0'	329°52.2'	S 16°22.8'	282°51.3'	S 22°42.5'	252°57.2'	S 25°31.4'
15	6°07.6'	S 14°24.0'	344°54.2'	S 16°23.0'	297°53.8'	S 22°42.5'	267°59.3'	S 25°31.1'
16	21°08.4'	S 14°25.0'	359°56.3'	S 16°23.1'	312°56.3'	S 22°42.5'	283°01.5'	S 25°30.9'
17	36°09.1'	S 14°26.0'	14°58.4'	S 16°23.2'	327°58.7'	S 22°42.5'	298°03.6'	S 25°30.7'
18	51°09.9'	S 14°26.9'	30°00.5'	S 16°23.3'	343°01.2'	S 22°42.5'	313°05.8'	S 25°30.5'
19	66°10.7'	S 14°27.9'	45°02.6'	S 16°23.4'	358°03.6'	S 22°42.5'	328°07.9'	S 25°30.3'
20	81°11.5'	S 14°28.9'	60°04.7'	S 16°23.5'	13°06.1'	S 22°42.5'	343°10.0'	S 25°30.1'
21	96°12.2'	S 14°29.9'	75°06.8'	S 16°23.6'	28°08.6'	S 22°42.5'	358°12.2'	S 25°29.8'
22	111°13.0'	S 14°30.8'	90°08.9'	S 16°23.7'	43°11.0'	S 22°42.5'	13°14.3'	S 25°29.6'
23	126°13.8'	S 14°31.8'	105°11.0'	S 16°23.8'	58°13.5'	S 22°42.5'	28°16.4'	S 25°29.4'

Fri Sep 7, 2018 UTC

UTC	Venus -4.4		Jupiter -1.8		Saturn +0.4		Mars -1.9	
	v = 0.8' d = 1.0'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 2.1' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	141°14.6'	S 14°32.8'	120°13.1'	S 16°23.9'	73°16.0'	S 22°42.5'	43°18.5'	S 25°29.2'
1	156°15.3'	S 14°33.8'	135°15.2'	S 16°24.1'	88°18.4'	S 22°42.5'	58°20.7'	S 25°29.0'
2	171°16.1'	S 14°34.7'	150°17.3'	S 16°24.2'	103°20.9'	S 22°42.5'	73°22.8'	S 25°28.7'
3	186°16.9'	S 14°35.7'	165°19.4'	S 16°24.3'	118°23.3'	S 22°42.6'	88°24.9'	S 25°28.5'
4	201°17.7'	S 14°36.7'	180°21.5'	S 16°24.4'	133°25.8'	S 22°42.6'	103°27.0'	S 25°28.3'
5	216°18.5'	S 14°37.6'	195°23.6'	S 16°24.5'	148°28.3'	S 22°42.6'	118°29.2'	S 25°28.1'
6	231°19.3'	S 14°38.6'	210°25.7'	S 16°24.6'	163°30.7'	S 22°42.6'	133°31.3'	S 25°27.9'
7	246°20.0'	S 14°39.6'	225°27.8'	S 16°24.7'	178°33.2'	S 22°42.6'	148°33.4'	S 25°27.6'
8	261°20.8'	S 14°40.6'	240°29.9'	S 16°24.8'	193°35.6'	S 22°42.6'	163°35.5'	S 25°27.4'
9	276°21.6'	S 14°41.5'	255°31.9'	S 16°24.9'	208°38.1'	S 22°42.6'	178°37.6'	S 25°27.2'
10	291°22.4'	S 14°42.5'	270°34.0'	S 16°25.1'	223°40.6'	S 22°42.6'	193°39.7'	S 25°27.0'
11	306°23.2'	S 14°43.5'	285°36.1'	S 16°25.2'	238°43.0'	S 22°42.6'	208°41.9'	S 25°26.7'
12	321°24.0'	S 14°44.4'	300°38.2'	S 16°25.3'	253°45.5'	S 22°42.6'	223°44.0'	S 25°26.5'
13	336°24.8'	S 14°45.4'	315°40.3'	S 16°25.4'	268°47.9'	S 22°42.6'	238°46.1'	S 25°26.3'
14	351°25.6'	S 14°46.4'	330°42.4'	S 16°25.5'	283°50.4'	S 22°42.6'	253°48.2'	S 25°26.1'
15	6°26.4'	S 14°47.3'	345°44.5'	S 16°25.6'	298°52.9'	S 22°42.6'	268°50.3'	S 25°25.9'
16	21°27.2'	S 14°48.3'	0°46.6'	S 16°25.7'	313°55.3'	S 22°42.6'	283°52.4'	S 25°25.6'
17	36°28.0'	S 14°49.2'	15°48.7'	S 16°25.8'	328°57.8'	S 22°42.6'	298°54.5'	S 25°25.4'
18	51°28.8'	S 14°50.2'	30°50.8'	S 16°26.0'	344°00.2'	S 22°42.6'	313°56.6'	S 25°25.2'
19	66°29.6'	S 14°51.2'	45°52.9'	S 16°26.1'	359°02.7'	S 22°42.6'	328°58.7'	S 25°25.0'
20	81°30.4'	S 14°52.1'	60°54.9'	S 16°26.2'	14°05.1'	S 22°42.7'	344°00.8'	S 25°24.7'
21	96°31.2'	S 14°53.1'	75°57.0'	S 16°26.3'	29°07.6'	S 22°42.7'	359°02.9'	S 25°24.5'
22	111°32.0'	S 14°54.0'	90°59.1'	S 16°26.4'	44°10.1'	S 22°42.7'	14°05.0'	S 25°24.3'
23	126°32.8'	S 14°55.0'	106°01.2'	S 16°26.5'	59°12.5'	S 22°42.7'	29°07.1'	S 25°24.0'

Sat Sep 8, 2018 UTC

UTC	Venus -4.4		Jupiter -1.7		Saturn +0.4		Mars -1.9	
	v = 0.8' d = 0.9'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 2.1' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	141°33.6'	S 14°56.0'	121°03.3'	S 16°26.6'	74°15.0'	S 22°42.7'	44°09.2'	S 25°23.8'
1	156°34.4'	S 14°56.9'	136°05.4'	S 16°26.7'	89°17.4'	S 22°42.7'	59°11.3'	S 25°23.6'
2	171°35.2'	S 14°57.9'	151°07.5'	S 16°26.8'	104°19.9'	S 22°42.7'	74°13.4'	S 25°23.4'
3	186°36.0'	S 14°58.8'	166°09.6'	S 16°27.0'	119°22.3'	S 22°42.7'	89°15.5'	S 25°23.1'
4	201°36.9'	S 14°59.8'	181°11.7'	S 16°27.1'	134°24.8'	S 22°42.7'	104°17.5'	S 25°22.9'
5	216°37.7'	S 15°00.7'	196°13.8'	S 16°27.2'	149°27.3'	S 22°42.7'	119°19.6'	S 25°22.7'
6	231°38.5'	S 15°01.7'	211°15.8'	S 16°27.3'	164°29.7'	S 22°42.7'	134°21.7'	S 25°22.5'
7	246°39.3'	S 15°02.6'	226°17.9'	S 16°27.4'	179°32.2'	S 22°42.7'	149°23.8'	S 25°22.2'
8	261°40.1'	S 15°03.6'	241°20.0'	S 16°27.5'	194°34.6'	S 22°42.7'	164°25.9'	S 25°22.0'
9	276°40.9'	S 15°04.6'	256°22.1'	S 16°27.6'	209°37.1'	S 22°42.7'	179°28.0'	S 25°21.8'
10	291°41.8'	S 15°05.5'	271°24.2'	S 16°27.7'	224°39.5'	S 22°42.7'	194°30.0'	S 25°21.5'
11	306°42.6'	S 15°06.5'	286°26.3'	S 16°27.9'	239°42.0'	S 22°42.7'	209°32.1'	S 25°21.3'
12	321°43.4'	S 15°07.4'	301°28.4'	S 16°28.0'	254°44.5'	S 22°42.8'	224°34.2'	S 25°21.1'
13	336°44.2'	S 15°08.4'	316°30.5'	S 16°28.1'	269°46.9'	S 22°42.8'	239°36.3'	S 25°20.8'
14	351°45.1'	S 15°09.3'	331°32.5'	S 16°28.2'	284°49.4'	S 22°42.8'	254°38.3'	S 25°20.6'
15	6°45.9'	S 15°10.2'	346°34.6'	S 16°28.3'	299°51.8'	S 22°42.8'	269°40.4'	S 25°20.4'
16	21°46.7'	S 15°11.2'	1°36.7'	S 16°28.4'	314°54.3'	S 22°42.8'	284°42.5'	S 25°20.1'
17	36°47.6'	S 15°12.1'	16°38.8'	S 16°28.5'	329°56.7'	S 22°42.8'	299°44.6'	S 25°19.9'
18	51°48.4'	S 15°13.1'	31°40.9'	S 16°28.6'	344°59.2'	S 22°42.8'	314°46.6'	S 25°19.7'
19	66°49.2'	S 15°14.0'	46°43.0'	S 16°28.8'	0°01.6'	S 22°42.8'	329°48.7'	S 25°19.4'
20	81°50.1'	S 15°15.0'	61°45.1'	S 16°28.9'	15°04.1'	S 22°42.8'	344°50.8'	S 25°19.2'
21	96°50.9'	S 15°15.9'	76°47.1'	S 16°29.0'	30°06.5'	S 22°42.8'	359°52.8'	S 25°19.0'
22	111°51.7'	S 15°16.9'	91°49.2'	S 16°29.1'	45°09.0'	S 22°42.8'	14°54.9'	S 25°18.7'
23	126°52.6'	S 15°17.8'	106°51.3'	S 16°29.2'	60°11.4'	S 22°42.8'	29°56.9'	S 25°18.5'

Sun Sep 9, 2018 UTC

UTC	Venus -4.4		Jupiter -1.7		Saturn +0.4		Mars -1.9	
	v = 0.9' d = 0.9'		v = 2.1' d = 0.1'		v = 2.5' d = 0.0'		v = 2.0' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	141°53.4'	S 15°18.7'	121°53.4'	S 16°29.3'	75°13.9'	S 22°42.8'	44°59.0'	S 25°18.3'
1	156°54.3'	S 15°19.7'	136°55.5'	S 16°29.4'	90°16.4'	S 22°42.8'	60°01.1'	S 25°18.0'
2	171°55.1'	S 15°20.6'	151°57.6'	S 16°29.5'	105°18.8'	S 22°42.8'	75°03.1'	S 25°17.8'
3	186°55.9'	S 15°21.6'	166°59.6'	S 16°29.7'	120°21.3'	S 22°42.8'	90°05.2'	S 25°17.6'
4	201°56.8'	S 15°22.5'	182°01.7'	S 16°29.8'	135°23.7'	S 22°42.8'	105°07.2'	S 25°17.3'
5	216°57.6'	S 15°23.4'	197°03.8'	S 16°29.9'	150°26.2'	S 22°42.9'	120°09.3'	S 25°17.1'
6	231°58.5'	S 15°24.4'	212°05.9'	S 16°30.0'	165°28.6'	S 22°42.9'	135°11.3'	S 25°16.9'
7	246°59.3'	S 15°25.3'	227°08.0'	S 16°30.1'	180°31.1'	S 22°42.9'	150°13.4'	S 25°16.6'
8	262°00.2'	S 15°26.3'	242°10.1'	S 16°30.2'	195°33.5'	S 22°42.9'	165°15.4'	S 25°16.4'
9	277°01.0'	S 15°27.2'	257°12.1'	S 16°30.3'	210°36.0'	S 22°42.9'	180°17.5'	S 25°16.1'
10	292°01.9'	S 15°28.1'	272°14.2'	S 16°30.4'	225°38.4'	S 22°42.9'	195°19.5'	S 25°15.9'
11	307°02.8'	S 15°29.1'	287°16.3'	S 16°30.6'	240°40.9'	S 22°42.9'	210°21.6'	S 25°15.7'
12	322°03.6'	S 15°30.0'	302°18.4'	S 16°30.7'	255°43.3'	S 22°42.9'	225°23.6'	S 25°15.4'
13	337°04.5'	S 15°30.9'	317°20.5'	S 16°30.8'	270°45.8'	S 22°42.9'	240°25.7'	S 25°15.2'
14	352°05.3'	S 15°31.9'	332°22.6'	S 16°30.9'	285°48.2'	S 22°42.9'	255°27.7'	S 25°14.9'
15	7°06.2'	S 15°32.8'	347°24.6'	S 16°31.0'	300°50.7'	S 22°42.9'	270°29.7'	S 25°14.7'
16	22°07.1'	S 15°33.7'	2°26.7'	S 16°31.1'	315°53.1'	S 22°42.9'	285°31.8'	S 25°14.5'
17	37°07.9'	S 15°34.6'	17°28.8'	S 16°31.2'	330°55.6'	S 22°42.9'	300°33.8'	S 25°14.2'
18	52°08.8'	S 15°35.6'	32°30.9'	S 16°31.3'	345°58.0'	S 22°42.9'	315°35.9'	S 25°14.0'
19	67°09.7'	S 15°36.5'	47°33.0'	S 16°31.5'	1°00.5'	S 22°42.9'	330°37.9'	S 25°13.7'
20	82°10.5'	S 15°37.4'	62°35.0'	S 16°31.6'	16°02.9'	S 22°42.9'	345°39.9'	S 25°13.5'
21	97°11.4'	S 15°38.4'	77°37.1'	S 16°31.7'	31°05.4'	S 22°42.9'	0°41.9'	S 25°13.3'
22	112°12.3'	S 15°39.3'	92°39.2'	S 16°31.8'	46°07.8'	S 22°43.0'	15°44.0'	S 25°13.0'
23	127°13.1'	S 15°40.2'	107°41.3'	S 16°31.9'	61°10.3'	S 22°43.0'	30°46.0'	S 25°12.8'

Mon Sep 10, 2018 UTC

UTC	Venus -4.4		Jupiter -1.7		Saturn +0.4		Mars -1.9	
	v = 0.9' d = 0.9'		v = 2.1' d = 0.1'		v = 2.4' d = 0.0'		v = 2.0' d = 0.2'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	142°14.0'	S 15°41.1'	122°43.4'	S 16°32.0'	76°12.7'	S 22°43.0'	45°48.0'	S 25°12.5'
1	157°14.9'	S 15°42.0'	137°45.4'	S 16°32.1'	91°15.2'	S 22°43.0'	60°50.1'	S 25°12.3'
2	172°15.8'	S 15°43.0'	152°47.5'	S 16°32.3'	106°17.6'	S 22°43.0'	75°52.1'	S 25°12.0'
3	187°16.6'	S 15°43.9'	167°49.6'	S 16°32.4'	121°20.1'	S 22°43.0'	90°54.1'	S 25°11.8'
4	202°17.5'	S 15°44.8'	182°51.7'	S 16°32.5'	136°22.5'	S 22°43.0'	105°56.1'	S 25°11.6'
5	217°18.4'	S 15°45.7'	197°53.8'	S 16°32.6'	151°25.0'	S 22°43.0'	120°58.1'	S 25°11.3'
6	232°19.3'	S 15°46.7'	212°55.8'	S 16°32.7'	166°27.4'	S 22°43.0'	136°00.2'	S 25°11.1'
7	247°20.2'	S 15°47.6'	227°57.9'	S 16°32.8'	181°29.8'	S 22°43.0'	151°02.2'	S 25°10.8'
8	262°21.1'	S 15°48.5'	242°60.0'	S 16°32.9'	196°32.3'	S 22°43.0'	166°04.2'	S 25°10.6'
9	277°21.9'	S 15°49.4'	258°02.1'	S 16°33.1'	211°34.7'	S 22°43.0'	181°06.2'	S 25°10.3'
10	292°22.8'	S 15°50.3'	273°04.1'	S 16°33.2'	226°37.2'	S 22°43.0'	196°08.2'	S 25°10.1'
11	307°23.7'	S 15°51.2'	288°06.2'	S 16°33.3'	241°39.6'	S 22°43.0'	211°10.2'	S 25°09.8'
12	322°24.6'	S 15°52.2'	303°08.3'	S 16°33.4'	256°42.1'	S 22°43.0'	226°12.3'	S 25°09.6'
13	337°25.5'	S 15°53.1'	318°10.4'	S 16°33.5'	271°44.5'	S 22°43.0'	241°14.3'	S 25°09.3'
14	352°26.4'	S 15°54.0'	333°12.5'	S 16°33.6'	286°47.0'	S 22°43.0'	256°16.3'	S 25°09.1'
15	7°27.3'	S 15°54.9'	348°14.5'	S 16°33.7'	301°49.4'	S 22°43.1'	271°18.3'	S 25°08.9'
16	22°28.2'	S 15°55.8'	3°16.6'	S 16°33.9'	316°51.9'	S 22°43.1'	286°20.3'	S 25°08.6'
17	37°29.1'	S 15°56.7'	18°18.7'	S 16°34.0'	331°54.3'	S 22°43.1'	301°22.3'	S 25°08.4'
18	52°30.0'	S 15°57.6'	33°20.8'	S 16°34.1'	346°56.8'	S 22°43.1'	316°24.3'	S 25°08.1'
19	67°30.9'	S 15°58.5'	48°22.8'	S 16°34.2'	1°59.2'	S 22°43.1'	331°26.3'	S 25°07.9'
20	82°31.8'	S 15°59.5'	63°24.9'	S 16°34.3'	17°01.6'	S 22°43.1'	346°28.3'	S 25°07.6'
21	97°32.7'	S 16°00.4'	78°27.0'	S 16°34.4'	32°04.1'	S 22°43.1'	1°30.3'	S 25°07.4'
22	112°33.6'	S 16°01.3'	93°29.1'	S 16°34.5'	47°06.5'	S 22°43.1'	16°32.3'	S 25°07.1'
23	127°34.5'	S 16°02.2'	108°31.1'	S 16°34.7'	62°09.0'	S 22°43.1'	31°34.3'	S 25°06.9'

Tue Sep 11, 2018 UTC

UTC	Venus -4.4		Jupiter -1.7		Saturn +0.4		Mars -1.8	
	v = 0.9' d = 0.9'		v = 2.1' d = 0.1'		v = 2.4' d = 0.0'		v = 2.0' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	142°35.4'	S 16°03.1'	123°33.2'	S 16°34.8'	77°11.4'	S 22°43.1'	46°36.3'	S 25°06.6'
1	157°36.4'	S 16°04.0'	138°35.3'	S 16°34.9'	92°13.9'	S 22°43.1'	61°38.3'	S 25°06.4'
2	172°37.3'	S 16°04.9'	153°37.4'	S 16°35.0'	107°16.3'	S 22°43.1'	76°40.3'	S 25°06.1'
3	187°38.2'	S 16°05.8'	168°39.4'	S 16°35.1'	122°18.7'	S 22°43.1'	91°42.2'	S 25°05.9'
4	202°39.1'	S 16°06.7'	183°41.5'	S 16°35.2'	137°21.2'	S 22°43.1'	106°44.2'	S 25°05.6'
5	217°40.0'	S 16°07.6'	198°43.6'	S 16°35.3'	152°23.6'	S 22°43.1'	121°46.2'	S 25°05.4'
6	232°40.9'	S 16°08.5'	213°45.7'	S 16°35.5'	167°26.1'	S 22°43.1'	136°48.2'	S 25°05.1'
7	247°41.9'	S 16°09.4'	228°47.7'	S 16°35.6'	182°28.5'	S 22°43.1'	151°50.2'	S 25°04.8'
8	262°42.8'	S 16°10.3'	243°49.8'	S 16°35.7'	197°31.0'	S 22°43.1'	166°52.2'	S 25°04.6'
9	277°43.7'	S 16°11.2'	258°51.9'	S 16°35.8'	212°33.4'	S 22°43.2'	181°54.2'	S 25°04.3'
10	292°44.6'	S 16°12.1'	273°54.0'	S 16°35.9'	227°35.8'	S 22°43.2'	196°56.1'	S 25°04.1'
11	307°45.6'	S 16°13.0'	288°56.0'	S 16°36.0'	242°38.3'	S 22°43.2'	211°58.1'	S 25°03.8'
12	322°46.5'	S 16°13.9'	303°58.1'	S 16°36.1'	257°40.7'	S 22°43.2'	227°00.1'	S 25°03.6'
13	337°47.4'	S 16°14.8'	319°00.2'	S 16°36.3'	272°43.2'	S 22°43.2'	242°02.1'	S 25°03.3'
14	352°48.4'	S 16°15.7'	334°02.2'	S 16°36.4'	287°45.6'	S 22°43.2'	257°04.1'	S 25°03.1'
15	7°49.3'	S 16°16.6'	349°04.3'	S 16°36.5'	302°48.1'	S 22°43.2'	272°06.0'	S 25°02.8'
16	22°50.2'	S 16°17.5'	4°06.4'	S 16°36.6'	317°50.5'	S 22°43.2'	287°08.0'	S 25°02.6'
17	37°51.2'	S 16°18.4'	19°08.5'	S 16°36.7'	332°52.9'	S 22°43.2'	302°10.0'	S 25°02.3'
18	52°52.1'	S 16°19.3'	34°10.5'	S 16°36.8'	347°55.4'	S 22°43.2'	317°11.9'	S 25°02.0'
19	67°53.0'	S 16°20.2'	49°12.6'	S 16°36.9'	2°57.8'	S 22°43.2'	332°13.9'	S 25°01.8'
20	82°54.0'	S 16°21.1'	64°14.7'	S 16°37.1'	18°00.3'	S 22°43.2'	347°15.9'	S 25°01.5'
21	97°54.9'	S 16°22.0'	79°16.7'	S 16°37.2'	33°02.7'	S 22°43.2'	2°17.8'	S 25°01.3'
22	112°55.9'	S 16°22.8'	94°18.8'	S 16°37.3'	48°05.1'	S 22°43.2'	17°19.8'	S 25°01.0'
23	127°56.8'	S 16°23.7'	109°20.9'	S 16°37.4'	63°07.6'	S 22°43.2'	32°21.8'	S 25°00.8'

Wed Sep 12, 2018 UTC

UTC	Venus -4.4		Jupiter -1.7		Saturn +0.4		Mars -1.8	
	v = 1.0' d = 0.9'		v = 2.1' d = 0.1'		v = 2.4' d = 0.0'		v = 1.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	142°57.8'	S 16°24.6'	124°23.0'	S 16°37.5'	78°10.0'	S 22°43.2'	47°23.7'	S 25°00.5'
1	157°58.7'	S 16°25.5'	139°25.0'	S 16°37.6'	93°12.5'	S 22°43.2'	62°25.7'	S 25°00.2'
2	172°59.7'	S 16°26.4'	154°27.1'	S 16°37.8'	108°14.9'	S 22°43.2'	77°27.7'	S 24°60.0'
3	188°00.6'	S 16°27.3'	169°29.2'	S 16°37.9'	123°17.3'	S 22°43.3'	92°29.6'	S 24°59.7'
4	203°01.6'	S 16°28.2'	184°31.2'	S 16°38.0'	138°19.8'	S 22°43.3'	107°31.6'	S 24°59.5'
5	218°02.5'	S 16°29.0'	199°33.3'	S 16°38.1'	153°22.2'	S 22°43.3'	122°33.5'	S 24°59.2'
6	233°03.5'	S 16°29.9'	214°35.4'	S 16°38.2'	168°24.7'	S 22°43.3'	137°35.5'	S 24°58.9'
7	248°04.4'	S 16°30.8'	229°37.4'	S 16°38.3'	183°27.1'	S 22°43.3'	152°37.4'	S 24°58.7'
8	263°05.4'	S 16°31.7'	244°39.5'	S 16°38.4'	198°29.5'	S 22°43.3'	167°39.4'	S 24°58.4'
9	278°06.4'	S 16°32.6'	259°41.6'	S 16°38.6'	213°32.0'	S 22°43.3'	182°41.3'	S 24°58.2'
10	293°07.3'	S 16°33.5'	274°43.7'	S 16°38.7'	228°34.4'	S 22°43.3'	197°43.3'	S 24°57.9'
11	308°08.3'	S 16°34.3'	289°45.7'	S 16°38.8'	243°36.8'	S 22°43.3'	212°45.2'	S 24°57.6'
12	323°09.3'	S 16°35.2'	304°47.8'	S 16°38.9'	258°39.3'	S 22°43.3'	227°47.2'	S 24°57.4'
13	338°10.2'	S 16°36.1'	319°49.9'	S 16°39.0'	273°41.7'	S 22°43.3'	242°49.1'	S 24°57.1'
14	353°11.2'	S 16°37.0'	334°51.9'	S 16°39.1'	288°44.2'	S 22°43.3'	257°51.1'	S 24°56.9'
15	8°12.2'	S 16°37.8'	349°54.0'	S 16°39.3'	303°46.6'	S 22°43.3'	272°53.0'	S 24°56.6'
16	23°13.1'	S 16°38.7'	4°56.1'	S 16°39.4'	318°49.0'	S 22°43.3'	287°55.0'	S 24°56.3'
17	38°14.1'	S 16°39.6'	19°58.1'	S 16°39.5'	333°51.5'	S 22°43.3'	302°56.9'	S 24°56.1'
18	53°15.1'	S 16°40.5'	35°00.2'	S 16°39.6'	348°53.9'	S 22°43.3'	317°58.8'	S 24°55.8'
19	68°16.1'	S 16°41.3'	50°02.3'	S 16°39.7'	3°56.3'	S 22°43.3'	333°00.8'	S 24°55.5'
20	83°17.1'	S 16°42.2'	65°04.3'	S 16°39.8'	18°58.8'	S 22°43.4'	348°02.7'	S 24°55.3'
21	98°18.0'	S 16°43.1'	80°06.4'	S 16°40.0'	34°01.2'	S 22°43.4'	3°04.6'	S 24°55.0'
22	113°19.0'	S 16°44.0'	95°08.5'	S 16°40.1'	49°03.6'	S 22°43.4'	18°06.6'	S 24°54.7'
23	128°20.0'	S 16°44.8'	110°10.5'	S 16°40.2'	64°06.1'	S 22°43.4'	33°08.5'	S 24°54.5'

Thu Sep 13, 2018 UTC

UTC	Venus -4.5 v = 1.0' d = 0.9'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.4' d = 0.0'		Mars -1.8 v = 1.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	143°21.0'	S 16°45.7'	125°12.6'	S 16°40.3'	79°08.5'	S 22°43.4'	48°10.4'	S 24°54.2'
1	158°22.0'	S 16°46.6'	140°14.7'	S 16°40.4'	94°10.9'	S 22°43.4'	63°12.4'	S 24°53.9'
2	173°23.0'	S 16°47.4'	155°16.7'	S 16°40.5'	109°13.4'	S 22°43.4'	78°14.3'	S 24°53.7'
3	188°24.0'	S 16°48.3'	170°18.8'	S 16°40.6'	124°15.8'	S 22°43.4'	93°16.2'	S 24°53.4'
4	203°25.0'	S 16°49.2'	185°20.9'	S 16°40.8'	139°18.3'	S 22°43.4'	108°18.1'	S 24°53.1'
5	218°26.0'	S 16°50.0'	200°22.9'	S 16°40.9'	154°20.7'	S 22°43.4'	123°20.1'	S 24°52.9'
6	233°27.0'	S 16°50.9'	215°25.0'	S 16°41.0'	169°23.1'	S 22°43.4'	138°22.0'	S 24°52.6'
7	248°28.0'	S 16°51.8'	230°27.0'	S 16°41.1'	184°25.6'	S 22°43.4'	153°23.9'	S 24°52.3'
8	263°29.0'	S 16°52.6'	245°29.1'	S 16°41.2'	199°28.0'	S 22°43.4'	168°25.8'	S 24°52.1'
9	278°30.0'	S 16°53.5'	260°31.2'	S 16°41.3'	214°30.4'	S 22°43.4'	183°27.8'	S 24°51.8'
10	293°31.0'	S 16°54.3'	275°33.2'	S 16°41.5'	229°32.9'	S 22°43.4'	198°29.7'	S 24°51.5'
11	308°32.0'	S 16°55.2'	290°35.3'	S 16°41.6'	244°35.3'	S 22°43.4'	213°31.6'	S 24°51.3'
12	323°33.0'	S 16°56.1'	305°37.4'	S 16°41.7'	259°37.7'	S 22°43.4'	228°33.5'	S 24°51.0'
13	338°34.0'	S 16°56.9'	320°39.4'	S 16°41.8'	274°40.2'	S 22°43.4'	243°35.4'	S 24°50.7'
14	353°35.0'	S 16°57.8'	335°41.5'	S 16°41.9'	289°42.6'	S 22°43.5'	258°37.3'	S 24°50.5'
15	8°36.0'	S 16°58.6'	350°43.6'	S 16°42.0'	304°45.0'	S 22°43.5'	273°39.2'	S 24°50.2'
16	23°37.0'	S 16°59.5'	5°45.6'	S 16°42.2'	319°47.4'	S 22°43.5'	288°41.2'	S 24°49.9'
17	38°38.0'	S 17°00.3'	20°47.7'	S 16°42.3'	334°49.9'	S 22°43.5'	303°43.1'	S 24°49.6'
18	53°39.1'	S 17°01.2'	35°49.7'	S 16°42.4'	349°52.3'	S 22°43.5'	318°45.0'	S 24°49.4'
19	68°40.1'	S 17°02.1'	50°51.8'	S 16°42.5'	4°54.7'	S 22°43.5'	333°46.9'	S 24°49.1'
20	83°41.1'	S 17°02.9'	65°53.9'	S 16°42.6'	19°57.2'	S 22°43.5'	348°48.8'	S 24°48.8'
21	98°42.1'	S 17°03.8'	80°55.9'	S 16°42.7'	34°59.6'	S 22°43.5'	3°50.7'	S 24°48.6'
22	113°43.1'	S 17°04.6'	95°58.0'	S 16°42.9'	50°02.0'	S 22°43.5'	18°52.6'	S 24°48.3'
23	128°44.2'	S 17°05.5'	111°00.1'	S 16°43.0'	65°04.5'	S 22°43.5'	33°54.5'	S 24°48.0'

Fri Sep 14, 2018 UTC

UTC	Venus -4.5 v = 1.1' d = 0.8'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.4' d = 0.0'		Mars -1.8 v = 1.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	143°45.2'	S 17°06.3'	126°02.1'	S 16°43.1'	80°06.9'	S 22°43.5'	48°56.4'	S 24°47.7'
1	158°46.2'	S 17°07.2'	141°04.2'	S 16°43.2'	95°09.3'	S 22°43.5'	63°58.3'	S 24°47.5'
2	173°47.3'	S 17°08.0'	156°06.2'	S 16°43.3'	110°11.8'	S 22°43.5'	79°00.2'	S 24°47.2'
3	188°48.3'	S 17°08.9'	171°08.3'	S 16°43.4'	125°14.2'	S 22°43.5'	94°02.1'	S 24°46.9'
4	203°49.3'	S 17°09.7'	186°10.4'	S 16°43.6'	140°16.6'	S 22°43.5'	109°04.0'	S 24°46.6'
5	218°50.4'	S 17°10.5'	201°12.4'	S 16°43.7'	155°19.0'	S 22°43.5'	124°05.9'	S 24°46.4'
6	233°51.4'	S 17°11.4'	216°14.5'	S 16°43.8'	170°21.5'	S 22°43.5'	139°07.8'	S 24°46.1'
7	248°52.4'	S 17°12.2'	231°16.5'	S 16°43.9'	185°23.9'	S 22°43.5'	154°09.7'	S 24°45.8'
8	263°53.5'	S 17°13.1'	246°18.6'	S 16°44.0'	200°26.3'	S 22°43.5'	169°11.5'	S 24°45.5'
9	278°54.5'	S 17°13.9'	261°20.7'	S 16°44.1'	215°28.8'	S 22°43.6'	184°13.4'	S 24°45.3'
10	293°55.6'	S 17°14.8'	276°22.7'	S 16°44.3'	230°31.2'	S 22°43.6'	199°15.3'	S 24°45.0'
11	308°56.6'	S 17°15.6'	291°24.8'	S 16°44.4'	245°33.6'	S 22°43.6'	214°17.2'	S 24°44.7'
12	323°57.7'	S 17°16.4'	306°26.8'	S 16°44.5'	260°36.1'	S 22°43.6'	229°19.1'	S 24°44.4'
13	338°58.7'	S 17°17.3'	321°28.9'	S 16°44.6'	275°38.5'	S 22°43.6'	244°21.0'	S 24°44.2'
14	353°59.8'	S 17°18.1'	336°31.0'	S 16°44.7'	290°40.9'	S 22°43.6'	259°22.9'	S 24°43.9'
15	9°00.8'	S 17°18.9'	351°33.0'	S 16°44.9'	305°43.3'	S 22°43.6'	274°24.7'	S 24°43.6'
16	24°01.9'	S 17°19.8'	6°35.1'	S 16°45.0'	320°45.8'	S 22°43.6'	289°26.6'	S 24°43.3'
17	39°03.0'	S 17°20.6'	21°37.1'	S 16°45.1'	335°48.2'	S 22°43.6'	304°28.5'	S 24°43.1'
18	54°04.0'	S 17°21.5'	36°39.2'	S 16°45.2'	350°50.6'	S 22°43.6'	319°30.4'	S 24°42.8'
19	69°05.1'	S 17°22.3'	51°41.2'	S 16°45.3'	5°53.0'	S 22°43.6'	334°32.2'	S 24°42.5'
20	84°06.1'	S 17°23.1'	66°43.3'	S 16°45.4'	20°55.5'	S 22°43.6'	349°34.1'	S 24°42.2'
21	99°07.2'	S 17°23.9'	81°45.4'	S 16°45.6'	35°57.9'	S 22°43.6'	4°36.0'	S 24°41.9'
22	114°08.3'	S 17°24.8'	96°47.4'	S 16°45.7'	51°00.3'	S 22°43.6'	19°37.9'	S 24°41.7'
23	129°09.4'	S 17°25.6'	111°49.5'	S 16°45.8'	66°02.8'	S 22°43.6'	34°39.7'	S 24°41.4'

Sat Sep 15, 2018 UTC

UTC	Venus -4.5 v = 1.1' d = 0.8'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.4' d = 0.0'		Mars -1.7 v = 1.9' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	144°10.4'	S 17°26.4'	126°51.5'	S 16°45.9'	81°05.2'	S 22°43.6'	49°41.6'	S 24°41.1'
1	159°11.5'	S 17°27.3'	141°53.6'	S 16°46.0'	96°07.6'	S 22°43.6'	64°43.5'	S 24°40.8'
2	174°12.6'	S 17°28.1'	156°55.6'	S 16°46.1'	111°10.0'	S 22°43.6'	79°45.3'	S 24°40.5'
3	189°13.7'	S 17°28.9'	171°57.7'	S 16°46.3'	126°12.5'	S 22°43.7'	94°47.2'	S 24°40.3'
4	204°14.7'	S 17°29.7'	186°59.8'	S 16°46.4'	141°14.9'	S 22°43.7'	109°49.1'	S 24°40.0'
5	219°15.8'	S 17°30.6'	202°01.8'	S 16°46.5'	156°17.3'	S 22°43.7'	124°50.9'	S 24°39.7'
6	234°16.9'	S 17°31.4'	217°03.9'	S 16°46.6'	171°19.7'	S 22°43.7'	139°52.8'	S 24°39.4'
7	249°18.0'	S 17°32.2'	232°05.9'	S 16°46.7'	186°22.2'	S 22°43.7'	154°54.7'	S 24°39.1'
8	264°19.1'	S 17°33.0'	247°08.0'	S 16°46.9'	201°24.6'	S 22°43.7'	169°56.5'	S 24°38.8'
9	279°20.2'	S 17°33.9'	262°10.0'	S 16°47.0'	216°27.0'	S 22°43.7'	184°58.4'	S 24°38.6'
10	294°21.2'	S 17°34.7'	277°12.1'	S 16°47.1'	231°29.4'	S 22°43.7'	200°00.2'	S 24°38.3'
11	309°22.3'	S 17°35.5'	292°14.1'	S 16°47.2'	246°31.9'	S 22°43.7'	215°02.1'	S 24°38.0'
12	324°23.4'	S 17°36.3'	307°16.2'	S 16°47.3'	261°34.3'	S 22°43.7'	230°03.9'	S 24°37.7'
13	339°24.5'	S 17°37.1'	322°18.3'	S 16°47.4'	276°36.7'	S 22°43.7'	245°05.8'	S 24°37.4'
14	354°25.6'	S 17°37.9'	337°20.3'	S 16°47.6'	291°39.1'	S 22°43.7'	260°07.7'	S 24°37.1'
15	9°26.7'	S 17°38.8'	352°22.4'	S 16°47.7'	306°41.5'	S 22°43.7'	275°09.5'	S 24°36.9'
16	24°27.8'	S 17°39.6'	7°24.4'	S 16°47.8'	321°44.0'	S 22°43.7'	290°11.4'	S 24°36.6'
17	39°28.9'	S 17°40.4'	22°26.5'	S 16°47.9'	336°46.4'	S 22°43.7'	305°13.2'	S 24°36.3'
18	54°30.0'	S 17°41.2'	37°28.5'	S 16°48.0'	351°48.8'	S 22°43.7'	320°15.1'	S 24°36.0'
19	69°31.2'	S 17°42.0'	52°30.6'	S 16°48.1'	6°51.2'	S 22°43.7'	335°16.9'	S 24°35.7'
20	84°32.3'	S 17°42.8'	67°32.6'	S 16°48.3'	21°53.7'	S 22°43.7'	350°18.7'	S 24°35.4'
21	99°33.4'	S 17°43.6'	82°34.7'	S 16°48.4'	36°56.1'	S 22°43.7'	5°20.6'	S 24°35.1'
22	114°34.5'	S 17°44.4'	97°36.7'	S 16°48.5'	51°58.5'	S 22°43.8'	20°22.4'	S 24°34.9'
23	129°35.6'	S 17°45.3'	112°38.8'	S 16°48.6'	67°00.9'	S 22°43.8'	35°24.3'	S 24°34.6'

Sun Sep 16, 2018 UTC

UTC	Venus -4.5 v = 1.1' d = 0.8'		Jupiter -1.7 v = 2.1' d = 0.1'		Saturn +0.4 v = 2.4' d = 0.0'		Mars -1.7 v = 1.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	144°36.7'	S 17°46.1'	127°40.8'	S 16°48.7'	82°03.4'	S 22°43.8'	50°26.1'	S 24°34.3'
1	159°37.8'	S 17°46.9'	142°42.9'	S 16°48.9'	97°05.8'	S 22°43.8'	65°28.0'	S 24°34.0'
2	174°39.0'	S 17°47.7'	157°44.9'	S 16°49.0'	112°08.2'	S 22°43.8'	80°29.8'	S 24°33.7'
3	189°40.1'	S 17°48.5'	172°47.0'	S 16°49.1'	127°10.6'	S 22°43.8'	95°31.6'	S 24°33.4'
4	204°41.2'	S 17°49.3'	187°49.0'	S 16°49.2'	142°13.0'	S 22°43.8'	110°33.5'	S 24°33.1'
5	219°42.3'	S 17°50.1'	202°51.1'	S 16°49.3'	157°15.5'	S 22°43.8'	125°35.3'	S 24°32.8'
6	234°43.5'	S 17°50.9'	217°53.1'	S 16°49.5'	172°17.9'	S 22°43.8'	140°37.1'	S 24°32.6'
7	249°44.6'	S 17°51.7'	232°55.2'	S 16°49.6'	187°20.3'	S 22°43.8'	155°39.0'	S 24°32.3'
8	264°45.7'	S 17°52.5'	247°57.3'	S 16°49.7'	202°22.7'	S 22°43.8'	170°40.8'	S 24°32.0'
9	279°46.9'	S 17°53.3'	262°59.3'	S 16°49.8'	217°25.1'	S 22°43.8'	185°42.6'	S 24°31.7'
10	294°48.0'	S 17°54.1'	278°01.4'	S 16°49.9'	232°27.6'	S 22°43.8'	200°44.4'	S 24°31.4'
11	309°49.1'	S 17°54.9'	293°03.4'	S 16°50.0'	247°30.0'	S 22°43.8'	215°46.3'	S 24°31.1'
12	324°50.3'	S 17°55.7'	308°05.5'	S 16°50.2'	262°32.4'	S 22°43.8'	230°48.1'	S 24°30.8'
13	339°51.4'	S 17°56.5'	323°07.5'	S 16°50.3'	277°34.8'	S 22°43.8'	245°49.9'	S 24°30.5'
14	354°52.6'	S 17°57.3'	338°09.6'	S 16°50.4'	292°37.2'	S 22°43.8'	260°51.7'	S 24°30.2'
15	9°53.7'	S 17°58.1'	353°11.6'	S 16°50.5'	307°39.7'	S 22°43.8'	275°53.6'	S 24°29.9'
16	24°54.9'	S 17°58.9'	8°13.7'	S 16°50.6'	322°42.1'	S 22°43.8'	290°55.4'	S 24°29.6'
17	39°56.0'	S 17°59.6'	23°15.7'	S 16°50.8'	337°44.5'	S 22°43.9'	305°57.2'	S 24°29.4'
18	54°57.2'	S 18°00.4'	38°17.8'	S 16°50.9'	352°46.9'	S 22°43.9'	320°59.0'	S 24°29.1'
19	69°58.3'	S 18°01.2'	53°19.8'	S 16°51.0'	7°49.3'	S 22°43.9'	336°00.8'	S 24°28.8'
20	84°59.5'	S 18°02.0'	68°21.8'	S 16°51.1'	22°51.7'	S 22°43.9'	351°02.7'	S 24°28.5'
21	100°00.6'	S 18°02.8'	83°23.9'	S 16°51.2'	37°54.2'	S 22°43.9'	6°04.5'	S 24°28.2'
22	115°01.8'	S 18°03.6'	98°25.9'	S 16°51.4'	52°56.6'	S 22°43.9'	21°06.3'	S 24°27.9'
23	130°03.0'	S 18°04.4'	113°28.0'	S 16°51.5'	67°59.0'	S 22°43.9'	36°08.1'	S 24°27.6'

Mon Sep 17, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.4		Mars -1.7	
	v = 1.2' d = 0.8'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	145°04.1'	S 18°05.2'	128°30.0'	S 16°51.6'	83°01.4'	S 22°43.9'	51°09.9'	S 24°27.3'
1	160°05.3'	S 18°05.9'	143°32.1'	S 16°51.7'	98°03.8'	S 22°43.9'	66°11.7'	S 24°27.0'
2	175°06.5'	S 18°06.7'	158°34.1'	S 16°51.8'	113°06.3'	S 22°43.9'	81°13.5'	S 24°26.7'
3	190°07.6'	S 18°07.5'	173°36.2'	S 16°51.9'	128°08.7'	S 22°43.9'	96°15.3'	S 24°26.4'
4	205°08.8'	S 18°08.3'	188°38.2'	S 16°52.1'	143°11.1'	S 22°43.9'	111°17.1'	S 24°26.1'
5	220°10.0'	S 18°09.1'	203°40.3'	S 16°52.2'	158°13.5'	S 22°43.9'	126°19.0'	S 24°25.8'
6	235°11.2'	S 18°09.9'	218°42.3'	S 16°52.3'	173°15.9'	S 22°43.9'	141°20.8'	S 24°25.5'
7	250°12.4'	S 18°10.6'	233°44.4'	S 16°52.4'	188°18.3'	S 22°43.9'	156°22.6'	S 24°25.2'
8	265°13.5'	S 18°11.4'	248°46.4'	S 16°52.5'	203°20.8'	S 22°43.9'	171°24.4'	S 24°24.9'
9	280°14.7'	S 18°12.2'	263°48.5'	S 16°52.7'	218°23.2'	S 22°43.9'	186°26.2'	S 24°24.6'
10	295°15.9'	S 18°13.0'	278°50.5'	S 16°52.8'	233°25.6'	S 22°43.9'	201°28.0'	S 24°24.3'
11	310°17.1'	S 18°13.7'	293°52.6'	S 16°52.9'	248°28.0'	S 22°43.9'	216°29.8'	S 24°24.0'
12	325°18.3'	S 18°14.5'	308°54.6'	S 16°53.0'	263°30.4'	S 22°43.9'	231°31.6'	S 24°23.7'
13	340°19.5'	S 18°15.3'	323°56.7'	S 16°53.1'	278°32.8'	S 22°44.0'	246°33.4'	S 24°23.5'
14	355°20.7'	S 18°16.1'	338°58.7'	S 16°53.3'	293°35.2'	S 22°44.0'	261°35.2'	S 24°23.2'
15	10°21.9'	S 18°16.8'	354°00.7'	S 16°53.4'	308°37.7'	S 22°44.0'	276°36.9'	S 24°22.9'
16	25°23.1'	S 18°17.6'	9°02.8'	S 16°53.5'	323°40.1'	S 22°44.0'	291°38.7'	S 24°22.6'
17	40°24.3'	S 18°18.4'	24°04.8'	S 16°53.6'	338°42.5'	S 22°44.0'	306°40.5'	S 24°22.3'
18	55°25.5'	S 18°19.1'	39°06.9'	S 16°53.7'	353°44.9'	S 22°44.0'	321°42.3'	S 24°22.0'
19	70°26.7'	S 18°19.9'	54°08.9'	S 16°53.9'	8°47.3'	S 22°44.0'	336°44.1'	S 24°21.7'
20	85°27.9'	S 18°20.7'	69°11.0'	S 16°54.0'	23°49.7'	S 22°44.0'	351°45.9'	S 24°21.4'
21	100°29.1'	S 18°21.4'	84°13.0'	S 16°54.1'	38°52.1'	S 22°44.0'	6°47.7'	S 24°21.1'
22	115°30.3'	S 18°22.2'	99°15.1'	S 16°54.2'	53°54.6'	S 22°44.0'	21°49.5'	S 24°20.8'
23	130°31.5'	S 18°23.0'	114°17.1'	S 16°54.3'	68°57.0'	S 22°44.0'	36°51.3'	S 24°20.5'

Tue Sep 18, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.4		Mars -1.6	
	v = 1.2' d = 0.7'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.8' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	145°32.7'	S 18°23.7'	129°19.1'	S 16°54.5'	83°59.4'	S 22°44.0'	51°53.0'	S 24°20.2'
1	160°34.0'	S 18°24.5'	144°21.2'	S 16°54.6'	99°01.8'	S 22°44.0'	66°54.8'	S 24°19.9'
2	175°35.2'	S 18°25.2'	159°23.2'	S 16°54.7'	114°04.2'	S 22°44.0'	81°56.6'	S 24°19.5'
3	190°36.4'	S 18°26.0'	174°25.3'	S 16°54.8'	129°06.6'	S 22°44.0'	96°58.4'	S 24°19.2'
4	205°37.6'	S 18°26.8'	189°27.3'	S 16°54.9'	144°09.0'	S 22°44.0'	112°00.2'	S 24°18.9'
5	220°38.8'	S 18°27.5'	204°29.4'	S 16°55.1'	159°11.4'	S 22°44.0'	127°01.9'	S 24°18.6'
6	235°40.1'	S 18°28.3'	219°31.4'	S 16°55.2'	174°13.9'	S 22°44.0'	142°03.7'	S 24°18.3'
7	250°41.3'	S 18°29.0'	234°33.4'	S 16°55.3'	189°16.3'	S 22°44.0'	157°05.5'	S 24°18.0'
8	265°42.5'	S 18°29.8'	249°35.5'	S 16°55.4'	204°18.7'	S 22°44.1'	172°07.3'	S 24°17.7'
9	280°43.8'	S 18°30.5'	264°37.5'	S 16°55.5'	219°21.1'	S 22°44.1'	187°09.0'	S 24°17.4'
10	295°45.0'	S 18°31.3'	279°39.6'	S 16°55.7'	234°23.5'	S 22°44.1'	202°10.8'	S 24°17.1'
11	310°46.2'	S 18°32.0'	294°41.6'	S 16°55.8'	249°25.9'	S 22°44.1'	217°12.6'	S 24°16.8'
12	325°47.5'	S 18°32.8'	309°43.7'	S 16°55.9'	264°28.3'	S 22°44.1'	232°14.3'	S 24°16.5'
13	340°48.7'	S 18°33.5'	324°45.7'	S 16°56.0'	279°30.7'	S 22°44.1'	247°16.1'	S 24°16.2'
14	355°50.0'	S 18°34.3'	339°47.7'	S 16°56.1'	294°33.1'	S 22°44.1'	262°17.9'	S 24°15.9'
15	10°51.2'	S 18°35.0'	354°49.8'	S 16°56.3'	309°35.6'	S 22°44.1'	277°19.6'	S 24°15.6'
16	25°52.5'	S 18°35.8'	9°51.8'	S 16°56.4'	324°38.0'	S 22°44.1'	292°21.4'	S 24°15.3'
17	40°53.7'	S 18°36.5'	24°53.9'	S 16°56.5'	339°40.4'	S 22°44.1'	307°23.2'	S 24°15.0'
18	55°55.0'	S 18°37.3'	39°55.9'	S 16°56.6'	354°42.8'	S 22°44.1'	322°24.9'	S 24°14.7'
19	70°56.2'	S 18°38.0'	54°57.9'	S 16°56.7'	9°45.2'	S 22°44.1'	337°26.7'	S 24°14.4'
20	85°57.5'	S 18°38.8'	69°60.0'	S 16°56.9'	24°47.6'	S 22°44.1'	352°28.5'	S 24°14.1'
21	100°58.8'	S 18°39.5'	85°02.0'	S 16°57.0'	39°50.0'	S 22°44.1'	7°30.2'	S 24°13.8'
22	116°00.0'	S 18°40.2'	100°04.1'	S 16°57.1'	54°52.4'	S 22°44.1'	22°32.0'	S 24°13.5'
23	131°01.3'	S 18°41.0'	115°06.1'	S 16°57.2'	69°54.8'	S 22°44.1'	37°33.7'	S 24°13.1'

Wed Sep 19, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.6	
	v = 1.3' d = 0.7'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	146°02.6'	S 18°41.7'	130°08.1'	S 16°57.3'	84°57.2'	S 22°44.1'	52°35.5'	S 24°12.8'
1	161°03.8'	S 18°42.4'	145°10.2'	S 16°57.5'	99°59.6'	S 22°44.1'	67°37.2'	S 24°12.5'
2	176°05.1'	S 18°43.2'	160°12.2'	S 16°57.6'	115°02.1'	S 22°44.1'	82°39.0'	S 24°12.2'
3	191°06.4'	S 18°43.9'	175°14.3'	S 16°57.7'	130°04.5'	S 22°44.1'	97°40.8'	S 24°11.9'
4	206°07.7'	S 18°44.7'	190°16.3'	S 16°57.8'	145°06.9'	S 22°44.2'	112°42.5'	S 24°11.6'
5	221°08.9'	S 18°45.4'	205°18.3'	S 16°57.9'	160°09.3'	S 22°44.2'	127°44.3'	S 24°11.3'
6	236°10.2'	S 18°46.1'	220°20.4'	S 16°58.1'	175°11.7'	S 22°44.2'	142°46.0'	S 24°11.0'
7	251°11.5'	S 18°46.9'	235°22.4'	S 16°58.2'	190°14.1'	S 22°44.2'	157°47.8'	S 24°10.7'
8	266°12.8'	S 18°47.6'	250°24.5'	S 16°58.3'	205°16.5'	S 22°44.2'	172°49.5'	S 24°10.4'
9	281°14.1'	S 18°48.3'	265°26.5'	S 16°58.4'	220°18.9'	S 22°44.2'	187°51.2'	S 24°10.1'
10	296°15.4'	S 18°49.0'	280°28.5'	S 16°58.5'	235°21.3'	S 22°44.2'	202°53.0'	S 24°09.7'
11	311°16.7'	S 18°49.8'	295°30.6'	S 16°58.7'	250°23.7'	S 22°44.2'	217°54.7'	S 24°09.4'
12	326°18.0'	S 18°50.5'	310°32.6'	S 16°58.8'	265°26.1'	S 22°44.2'	232°56.5'	S 24°09.1'
13	341°19.3'	S 18°51.2'	325°34.6'	S 16°58.9'	280°28.5'	S 22°44.2'	247°58.2'	S 24°08.8'
14	356°20.6'	S 18°51.9'	340°36.7'	S 16°59.0'	295°30.9'	S 22°44.2'	262°60.0'	S 24°08.5'
15	11°21.9'	S 18°52.7'	355°38.7'	S 16°59.1'	310°33.3'	S 22°44.2'	278°01.7'	S 24°08.2'
16	26°23.2'	S 18°53.4'	10°40.8'	S 16°59.3'	325°35.8'	S 22°44.2'	293°03.4'	S 24°07.9'
17	41°24.5'	S 18°54.1'	25°42.8'	S 16°59.4'	340°38.2'	S 22°44.2'	308°05.2'	S 24°07.6'
18	56°25.8'	S 18°54.8'	40°44.8'	S 16°59.5'	355°40.6'	S 22°44.2'	323°06.9'	S 24°07.2'
19	71°27.1'	S 18°55.5'	55°46.9'	S 16°59.6'	10°43.0'	S 22°44.2'	338°08.6'	S 24°06.9'
20	86°28.4'	S 18°56.3'	70°48.9'	S 16°59.7'	25°45.4'	S 22°44.2'	353°10.4'	S 24°06.6'
21	101°29.7'	S 18°57.0'	85°50.9'	S 16°59.9'	40°47.8'	S 22°44.2'	8°12.1'	S 24°06.3'
22	116°31.0'	S 18°57.7'	100°53.0'	S 16°60.0'	55°50.2'	S 22°44.2'	23°13.8'	S 24°06.0'
23	131°32.4'	S 18°58.4'	115°55.0'	S 17°00.1'	70°52.6'	S 22°44.2'	38°15.6'	S 24°05.7'

Thu Sep 20, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.6	
	v = 1.4' d = 0.7'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	146°33.7'	S 18°59.1'	130°57.0'	S 17°00.2'	85°55.0'	S 22°44.3'	53°17.3'	S 24°05.4'
1	161°35.0'	S 18°59.8'	145°59.1'	S 17°00.4'	100°57.4'	S 22°44.3'	68°19.0'	S 24°05.0'
2	176°36.3'	S 19°00.5'	161°01.1'	S 17°00.5'	115°59.8'	S 22°44.3'	83°20.8'	S 24°04.7'
3	191°37.7'	S 19°01.3'	176°03.1'	S 17°00.6'	131°02.2'	S 22°44.3'	98°22.5'	S 24°04.4'
4	206°39.0'	S 19°02.0'	191°05.2'	S 17°00.7'	146°04.6'	S 22°44.3'	113°24.2'	S 24°04.1'
5	221°40.3'	S 19°02.7'	206°07.2'	S 17°00.8'	161°07.0'	S 22°44.3'	128°25.9'	S 24°03.8'
6	236°41.7'	S 19°03.4'	221°09.2'	S 17°01.0'	176°09.4'	S 22°44.3'	143°27.7'	S 24°03.5'
7	251°43.0'	S 19°04.1'	236°11.3'	S 17°01.1'	191°11.8'	S 22°44.3'	158°29.4'	S 24°03.1'
8	266°44.4'	S 19°04.8'	251°13.3'	S 17°01.2'	206°14.2'	S 22°44.3'	173°31.1'	S 24°02.8'
9	281°45.7'	S 19°05.5'	266°15.4'	S 17°01.3'	221°16.6'	S 22°44.3'	188°32.8'	S 24°02.5'
10	296°47.0'	S 19°06.2'	281°17.4'	S 17°01.4'	236°19.0'	S 22°44.3'	203°34.5'	S 24°02.2'
11	311°48.4'	S 19°06.9'	296°19.4'	S 17°01.6'	251°21.4'	S 22°44.3'	218°36.2'	S 24°01.9'
12	326°49.7'	S 19°07.6'	311°21.5'	S 17°01.7'	266°23.8'	S 22°44.3'	233°38.0'	S 24°01.6'
13	341°51.1'	S 19°08.3'	326°23.5'	S 17°01.8'	281°26.2'	S 22°44.3'	248°39.7'	S 24°01.2'
14	356°52.5'	S 19°09.0'	341°25.5'	S 17°01.9'	296°28.6'	S 22°44.3'	263°41.4'	S 24°00.9'
15	11°53.8'	S 19°09.7'	356°27.6'	S 17°02.0'	311°31.0'	S 22°44.3'	278°43.1'	S 24°00.6'
16	26°55.2'	S 19°10.4'	11°29.6'	S 17°02.2'	326°33.4'	S 22°44.3'	293°44.8'	S 24°00.3'
17	41°56.5'	S 19°11.1'	26°31.6'	S 17°02.3'	341°35.8'	S 22°44.3'	308°46.5'	S 23°60.0'
18	56°57.9'	S 19°11.8'	41°33.6'	S 17°02.4'	356°38.2'	S 22°44.3'	323°48.2'	S 23°59.6'
19	71°59.3'	S 19°12.5'	56°35.7'	S 17°02.5'	11°40.6'	S 22°44.3'	338°49.9'	S 23°59.3'
20	87°00.6'	S 19°13.2'	71°37.7'	S 17°02.7'	26°43.0'	S 22°44.3'	353°51.7'	S 23°59.0'
21	102°02.0'	S 19°13.8'	86°39.7'	S 17°02.8'	41°45.4'	S 22°44.4'	8°53.4'	S 23°58.7'
22	117°03.4'	S 19°14.5'	101°41.8'	S 17°02.9'	56°47.8'	S 22°44.4'	23°55.1'	S 23°58.4'
23	132°04.8'	S 19°15.2'	116°43.8'	S 17°03.0'	71°50.2'	S 22°44.4'	38°56.8'	S 23°58.0'

Fri Sep 21, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.6	
	v = 1.4' d = 0.7'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	147°06.2'	S 19°15.9'	131°45.8'	S 17°03.1'	86°52.6'	S 22°44.4'	53°58.5'	S 23°57.7'
1	162°07.5'	S 19°16.6'	146°47.9'	S 17°03.3'	101°55.0'	S 22°44.4'	69°00.2'	S 23°57.4'
2	177°08.9'	S 19°17.3'	161°49.9'	S 17°03.4'	116°57.4'	S 22°44.4'	84°01.9'	S 23°57.1'
3	192°10.3'	S 19°18.0'	176°51.9'	S 17°03.5'	131°59.8'	S 22°44.4'	99°03.6'	S 23°56.8'
4	207°11.7'	S 19°18.7'	191°54.0'	S 17°03.6'	147°02.2'	S 22°44.4'	114°05.3'	S 23°56.4'
5	222°13.1'	S 19°19.3'	206°56.0'	S 17°03.7'	162°04.6'	S 22°44.4'	129°07.0'	S 23°56.1'
6	237°14.5'	S 19°20.0'	221°58.0'	S 17°03.9'	177°07.0'	S 22°44.4'	144°08.7'	S 23°55.8'
7	252°15.9'	S 19°20.7'	237°00.1'	S 17°04.0'	192°09.4'	S 22°44.4'	159°10.4'	S 23°55.5'
8	267°17.3'	S 19°21.4'	252°02.1'	S 17°04.1'	207°11.8'	S 22°44.4'	174°12.1'	S 23°55.1'
9	282°18.7'	S 19°22.0'	267°04.1'	S 17°04.2'	222°14.2'	S 22°44.4'	189°13.8'	S 23°54.8'
10	297°20.1'	S 19°22.7'	282°06.1'	S 17°04.4'	237°16.6'	S 22°44.4'	204°15.4'	S 23°54.5'
11	312°21.5'	S 19°23.4'	297°08.2'	S 17°04.5'	252°19.0'	S 22°44.4'	219°17.1'	S 23°54.2'
12	327°22.9'	S 19°24.1'	312°10.2'	S 17°04.6'	267°21.4'	S 22°44.4'	234°18.8'	S 23°53.8'
13	342°24.3'	S 19°24.7'	327°12.2'	S 17°04.7'	282°23.8'	S 22°44.4'	249°20.5'	S 23°53.5'
14	357°25.7'	S 19°25.4'	342°14.3'	S 17°04.8'	297°26.2'	S 22°44.4'	264°22.2'	S 23°53.2'
15	12°27.2'	S 19°26.1'	357°16.3'	S 17°05.0'	312°28.6'	S 22°44.4'	279°23.9'	S 23°52.9'
16	27°28.6'	S 19°26.8'	12°18.3'	S 17°05.1'	327°31.0'	S 22°44.4'	294°25.6'	S 23°52.5'
17	42°30.0'	S 19°27.4'	27°20.3'	S 17°05.2'	342°33.4'	S 22°44.4'	309°27.3'	S 23°52.2'
18	57°31.4'	S 19°28.1'	42°22.4'	S 17°05.3'	357°35.8'	S 22°44.5'	324°29.0'	S 23°51.9'
19	72°32.9'	S 19°28.8'	57°24.4'	S 17°05.5'	12°38.2'	S 22°44.5'	339°30.6'	S 23°51.6'
20	87°34.3'	S 19°29.4'	72°26.4'	S 17°05.6'	27°40.6'	S 22°44.5'	354°32.3'	S 23°51.2'
21	102°35.7'	S 19°30.1'	87°28.5'	S 17°05.7'	42°43.0'	S 22°44.5'	9°34.0'	S 23°50.9'
22	117°37.2'	S 19°30.7'	102°30.5'	S 17°05.8'	57°45.4'	S 22°44.5'	24°35.7'	S 23°50.6'
23	132°38.6'	S 19°31.4'	117°32.5'	S 17°05.9'	72°47.8'	S 22°44.5'	39°37.4'	S 23°50.2'

Sat Sep 22, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.5	
	v = 1.5' d = 0.6'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.7' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	147°40.0'	S 19°32.1'	132°34.5'	S 17°06.1'	87°50.2'	S 22°44.5'	54°39.0'	S 23°49.9'
1	162°41.5'	S 19°32.7'	147°36.6'	S 17°06.2'	102°52.6'	S 22°44.5'	69°40.7'	S 23°49.6'
2	177°42.9'	S 19°33.4'	162°38.6'	S 17°06.3'	117°55.0'	S 22°44.5'	84°42.4'	S 23°49.3'
3	192°44.4'	S 19°34.0'	177°40.6'	S 17°06.4'	132°57.4'	S 22°44.5'	99°44.1'	S 23°48.9'
4	207°45.8'	S 19°34.7'	192°42.6'	S 17°06.5'	147°59.8'	S 22°44.5'	114°45.7'	S 23°48.6'
5	222°47.3'	S 19°35.4'	207°44.7'	S 17°06.7'	163°02.2'	S 22°44.5'	129°47.4'	S 23°48.3'
6	237°48.7'	S 19°36.0'	222°46.7'	S 17°06.8'	178°04.5'	S 22°44.5'	144°49.1'	S 23°47.9'
7	252°50.2'	S 19°36.7'	237°48.7'	S 17°06.9'	193°06.9'	S 22°44.5'	159°50.8'	S 23°47.6'
8	267°51.6'	S 19°37.3'	252°50.8'	S 17°07.0'	208°09.3'	S 22°44.5'	174°52.4'	S 23°47.3'
9	282°53.1'	S 19°38.0'	267°52.8'	S 17°07.2'	223°11.7'	S 22°44.5'	189°54.1'	S 23°47.0'
10	297°54.6'	S 19°38.6'	282°54.8'	S 17°07.3'	238°14.1'	S 22°44.5'	204°55.8'	S 23°46.6'
11	312°56.0'	S 19°39.3'	297°56.8'	S 17°07.4'	253°16.5'	S 22°44.5'	219°57.4'	S 23°46.3'
12	327°57.5'	S 19°39.9'	312°58.9'	S 17°07.5'	268°18.9'	S 22°44.5'	234°59.1'	S 23°46.0'
13	342°59.0'	S 19°40.6'	328°00.9'	S 17°07.6'	283°21.3'	S 22°44.5'	250°00.8'	S 23°45.6'
14	358°00.5'	S 19°41.2'	343°02.9'	S 17°07.8'	298°23.7'	S 22°44.5'	265°02.4'	S 23°45.3'
15	13°01.9'	S 19°41.8'	358°04.9'	S 17°07.9'	313°26.1'	S 22°44.6'	280°04.1'	S 23°45.0'
16	28°03.4'	S 19°42.5'	13°07.0'	S 17°08.0'	328°28.5'	S 22°44.6'	295°05.7'	S 23°44.6'
17	43°04.9'	S 19°43.1'	28°09.0'	S 17°08.1'	343°30.9'	S 22°44.6'	310°07.4'	S 23°44.3'
18	58°06.4'	S 19°43.8'	43°11.0'	S 17°08.3'	358°33.3'	S 22°44.6'	325°09.1'	S 23°44.0'
19	73°07.9'	S 19°44.4'	58°13.0'	S 17°08.4'	13°35.7'	S 22°44.6'	340°10.7'	S 23°43.6'
20	88°09.4'	S 19°45.0'	73°15.1'	S 17°08.5'	28°38.1'	S 22°44.6'	355°12.4'	S 23°43.3'
21	103°10.9'	S 19°45.7'	88°17.1'	S 17°08.6'	43°40.4'	S 22°44.6'	10°14.0'	S 23°43.0'
22	118°12.4'	S 19°46.3'	103°19.1'	S 17°08.8'	58°42.8'	S 22°44.6'	25°15.7'	S 23°42.6'
23	133°13.9'	S 19°46.9'	118°21.1'	S 17°08.9'	73°45.2'	S 22°44.6'	40°17.4'	S 23°42.3'

Sun Sep 23, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.5	
	v = 1.5' d = 0.6'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.6' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	148°15.4'	S 19°47.6'	133°23.1'	S 17°09.0'	88°47.6'	S 22°44.6'	55°19.0'	S 23°42.0'
1	163°16.9'	S 19°48.2'	148°25.2'	S 17°09.1'	103°50.0'	S 22°44.6'	70°20.7'	S 23°41.6'
2	178°18.4'	S 19°48.8'	163°27.2'	S 17°09.2'	118°52.4'	S 22°44.6'	85°22.3'	S 23°41.3'
3	193°19.9'	S 19°49.5'	178°29.2'	S 17°09.4'	133°54.8'	S 22°44.6'	100°24.0'	S 23°41.0'
4	208°21.4'	S 19°50.1'	193°31.2'	S 17°09.5'	148°57.2'	S 22°44.6'	115°25.6'	S 23°40.6'
5	223°22.9'	S 19°50.7'	208°33.3'	S 17°09.6'	163°59.6'	S 22°44.6'	130°27.3'	S 23°40.3'
6	238°24.5'	S 19°51.3'	223°35.3'	S 17°09.7'	179°02.0'	S 22°44.6'	145°28.9'	S 23°39.9'
7	253°26.0'	S 19°52.0'	238°37.3'	S 17°09.9'	194°04.4'	S 22°44.6'	160°30.6'	S 23°39.6'
8	268°27.5'	S 19°52.6'	253°39.3'	S 17°10.0'	209°06.7'	S 22°44.6'	175°32.2'	S 23°39.3'
9	283°29.0'	S 19°53.2'	268°41.3'	S 17°10.1'	224°09.1'	S 22°44.6'	190°33.8'	S 23°38.9'
10	298°30.6'	S 19°53.8'	283°43.4'	S 17°10.2'	239°11.5'	S 22°44.6'	205°35.5'	S 23°38.6'
11	313°32.1'	S 19°54.4'	298°45.4'	S 17°10.3'	254°13.9'	S 22°44.6'	220°37.1'	S 23°38.3'
12	328°33.6'	S 19°55.1'	313°47.4'	S 17°10.5'	269°16.3'	S 22°44.6'	235°38.8'	S 23°37.9'
13	343°35.2'	S 19°55.7'	328°49.4'	S 17°10.6'	284°18.7'	S 22°44.7'	250°40.4'	S 23°37.6'
14	358°36.7'	S 19°56.3'	343°51.5'	S 17°10.7'	299°21.1'	S 22°44.7'	265°42.1'	S 23°37.2'
15	13°38.3'	S 19°56.9'	358°53.5'	S 17°10.8'	314°23.5'	S 22°44.7'	280°43.7'	S 23°36.9'
16	28°39.8'	S 19°57.5'	13°55.5'	S 17°11.0'	329°25.9'	S 22°44.7'	295°45.3'	S 23°36.6'
17	43°41.3'	S 19°58.1'	28°57.5'	S 17°11.1'	344°28.2'	S 22°44.7'	310°47.0'	S 23°36.2'
18	58°42.9'	S 19°58.7'	43°59.5'	S 17°11.2'	359°30.6'	S 22°44.7'	325°48.6'	S 23°35.9'
19	73°44.5'	S 19°59.4'	59°01.6'	S 17°11.3'	14°33.0'	S 22°44.7'	340°50.2'	S 23°35.6'
20	88°46.0'	S 19°60.0'	74°03.6'	S 17°11.5'	29°35.4'	S 22°44.7'	355°51.9'	S 23°35.2'
21	103°47.6'	S 20°00.6'	89°05.6'	S 17°11.6'	44°37.8'	S 22°44.7'	10°53.5'	S 23°34.9'
22	118°49.1'	S 20°01.2'	104°07.6'	S 17°11.7'	59°40.2'	S 22°44.7'	25°55.1'	S 23°34.5'
23	133°50.7'	S 20°01.8'	119°09.6'	S 17°11.8'	74°42.6'	S 22°44.7'	40°56.8'	S 23°34.2'

Mon Sep 24, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.5	
	v = 1.6' d = 0.6'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.6' d = 0.3'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	148°52.3'	S 20°02.4'	134°11.7'	S 17°11.9'	89°45.0'	S 22°44.7'	55°58.4'	S 23°33.8'
1	163°53.8'	S 20°03.0'	149°13.7'	S 17°12.1'	104°47.3'	S 22°44.7'	71°00.0'	S 23°33.5'
2	178°55.4'	S 20°03.6'	164°15.7'	S 17°12.2'	119°49.7'	S 22°44.7'	86°01.7'	S 23°33.2'
3	193°57.0'	S 20°04.2'	179°17.7'	S 17°12.3'	134°52.1'	S 22°44.7'	101°03.3'	S 23°32.8'
4	208°58.6'	S 20°04.8'	194°19.7'	S 17°12.4'	149°54.5'	S 22°44.7'	116°04.9'	S 23°32.5'
5	224°00.1'	S 20°05.4'	209°21.8'	S 17°12.6'	164°56.9'	S 22°44.7'	131°06.5'	S 23°32.1'
6	239°01.7'	S 20°06.0'	224°23.8'	S 17°12.7'	179°59.3'	S 22°44.7'	146°08.2'	S 23°31.8'
7	254°03.3'	S 20°06.6'	239°25.8'	S 17°12.8'	195°01.7'	S 22°44.7'	161°09.8'	S 23°31.5'
8	269°04.9'	S 20°07.2'	254°27.8'	S 17°12.9'	210°04.0'	S 22°44.7'	176°11.4'	S 23°31.1'
9	284°06.5'	S 20°07.8'	269°29.8'	S 17°13.1'	225°06.4'	S 22°44.7'	191°13.0'	S 23°30.8'
10	299°08.1'	S 20°08.3'	284°31.8'	S 17°13.2'	240°08.8'	S 22°44.7'	206°14.6'	S 23°30.4'
11	314°09.7'	S 20°08.9'	299°33.9'	S 17°13.3'	255°11.2'	S 22°44.7'	221°16.3'	S 23°30.1'
12	329°11.3'	S 20°09.5'	314°35.9'	S 17°13.4'	270°13.6'	S 22°44.8'	236°17.9'	S 23°29.7'
13	344°12.9'	S 20°10.1'	329°37.9'	S 17°13.5'	285°16.0'	S 22°44.8'	251°19.5'	S 23°29.4'
14	359°14.5'	S 20°10.7'	344°39.9'	S 17°13.7'	300°18.4'	S 22°44.8'	266°21.1'	S 23°29.0'
15	14°16.1'	S 20°11.3'	359°41.9'	S 17°13.8'	315°20.7'	S 22°44.8'	281°22.7'	S 23°28.7'
16	29°17.7'	S 20°11.9'	14°43.9'	S 17°13.9'	330°23.1'	S 22°44.8'	296°24.3'	S 23°28.4'
17	44°19.4'	S 20°12.4'	29°46.0'	S 17°14.0'	345°25.5'	S 22°44.8'	311°26.0'	S 23°28.0'
18	59°21.0'	S 20°13.0'	44°48.0'	S 17°14.2'	0°27.9'	S 22°44.8'	326°27.6'	S 23°27.7'
19	74°22.6'	S 20°13.6'	59°50.0'	S 17°14.3'	15°30.3'	S 22°44.8'	341°29.2'	S 23°27.3'
20	89°24.2'	S 20°14.2'	74°52.0'	S 17°14.4'	30°32.7'	S 22°44.8'	356°30.8'	S 23°27.0'
21	104°25.8'	S 20°14.8'	89°54.0'	S 17°14.5'	45°35.0'	S 22°44.8'	11°32.4'	S 23°26.6'
22	119°27.5'	S 20°15.3'	104°56.0'	S 17°14.7'	60°37.4'	S 22°44.8'	26°34.0'	S 23°26.3'
23	134°29.1'	S 20°15.9'	119°58.1'	S 17°14.8'	75°39.8'	S 22°44.8'	41°35.6'	S 23°25.9'

Tue Sep 25, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.5	
	v = 1.7' d = 0.6'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.6' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	149°30.7'	S 20°16.5'	135°00.1'	S 17°14.9'	90°42.2'	S 22°44.8'	56°37.2'	S 23°25.6'
1	164°32.4'	S 20°17.0'	150°02.1'	S 17°15.0'	105°44.6'	S 22°44.8'	71°38.8'	S 23°25.2'
2	179°34.0'	S 20°17.6'	165°04.1'	S 17°15.1'	120°47.0'	S 22°44.8'	86°40.4'	S 23°24.9'
3	194°35.7'	S 20°18.2'	180°06.1'	S 17°15.3'	135°49.3'	S 22°44.8'	101°42.0'	S 23°24.5'
4	209°37.3'	S 20°18.8'	195°08.1'	S 17°15.4'	150°51.7'	S 22°44.8'	116°43.6'	S 23°24.2'
5	224°39.0'	S 20°19.3'	210°10.1'	S 17°15.5'	165°54.1'	S 22°44.8'	131°45.2'	S 23°23.8'
6	239°40.6'	S 20°19.9'	225°12.2'	S 17°15.6'	180°56.5'	S 22°44.8'	146°46.8'	S 23°23.5'
7	254°42.3'	S 20°20.4'	240°14.2'	S 17°15.8'	195°58.9'	S 22°44.8'	161°48.4'	S 23°23.1'
8	269°43.9'	S 20°21.0'	255°16.2'	S 17°15.9'	211°01.2'	S 22°44.8'	176°50.0'	S 23°22.8'
9	284°45.6'	S 20°21.6'	270°18.2'	S 17°16.0'	226°03.6'	S 22°44.8'	191°51.6'	S 23°22.4'
10	299°47.3'	S 20°22.1'	285°20.2'	S 17°16.1'	241°06.0'	S 22°44.8'	206°53.2'	S 23°22.1'
11	314°48.9'	S 20°22.7'	300°22.2'	S 17°16.3'	256°08.4'	S 22°44.9'	221°54.8'	S 23°21.7'
12	329°50.6'	S 20°23.2'	315°24.2'	S 17°16.4'	271°10.8'	S 22°44.9'	236°56.4'	S 23°21.4'
13	344°52.3'	S 20°23.8'	330°26.3'	S 17°16.5'	286°13.1'	S 22°44.9'	251°58.0'	S 23°21.0'
14	359°54.0'	S 20°24.4'	345°28.3'	S 17°16.6'	301°15.5'	S 22°44.9'	266°59.6'	S 23°20.7'
15	14°55.6'	S 20°24.9'	0°30.3'	S 17°16.8'	316°17.9'	S 22°44.9'	282°01.2'	S 23°20.3'
16	29°57.3'	S 20°25.5'	15°32.3'	S 17°16.9'	331°20.3'	S 22°44.9'	297°02.8'	S 23°20.0'
17	44°59.0'	S 20°26.0'	30°34.3'	S 17°17.0'	346°22.7'	S 22°44.9'	312°04.4'	S 23°19.6'
18	60°00.7'	S 20°26.6'	45°36.3'	S 17°17.1'	1°25.0'	S 22°44.9'	327°06.0'	S 23°19.3'
19	75°02.4'	S 20°27.1'	60°38.3'	S 17°17.2'	16°27.4'	S 22°44.9'	342°07.6'	S 23°18.9'
20	90°04.1'	S 20°27.7'	75°40.4'	S 17°17.4'	31°29.8'	S 22°44.9'	357°09.2'	S 23°18.6'
21	105°05.8'	S 20°28.2'	90°42.4'	S 17°17.5'	46°32.2'	S 22°44.9'	12°10.7'	S 23°18.2'
22	120°07.5'	S 20°28.7'	105°44.4'	S 17°17.6'	61°34.6'	S 22°44.9'	27°12.3'	S 23°17.9'
23	135°09.2'	S 20°29.3'	120°46.4'	S 17°17.7'	76°36.9'	S 22°44.9'	42°13.9'	S 23°17.5'

Wed Sep 26, 2018 UTC

UTC	Venus -4.5		Jupiter -1.7		Saturn +0.5		Mars -1.4	
	v = 1.7' d = 0.5'		v = 2.0' d = 0.1'		v = 2.4' d = 0.0'		v = 1.6' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	150°10.9'	S 20°29.8'	135°48.4'	S 17°17.9'	91°39.3'	S 22°44.9'	57°15.5'	S 23°17.2'
1	165°12.6'	S 20°30.4'	150°50.4'	S 17°18.0'	106°41.7'	S 22°44.9'	72°17.1'	S 23°16.8'
2	180°14.3'	S 20°30.9'	165°52.4'	S 17°18.1'	121°44.1'	S 22°44.9'	87°18.7'	S 23°16.4'
3	195°16.0'	S 20°31.4'	180°54.4'	S 17°18.2'	136°46.5'	S 22°44.9'	102°20.3'	S 23°16.1'
4	210°17.7'	S 20°32.0'	195°56.4'	S 17°18.4'	151°48.8'	S 22°44.9'	117°21.8'	S 23°15.7'
5	225°19.5'	S 20°32.5'	210°58.5'	S 17°18.5'	166°51.2'	S 22°44.9'	132°23.4'	S 23°15.4'
6	240°21.2'	S 20°33.0'	226°00.5'	S 17°18.6'	181°53.6'	S 22°44.9'	147°25.0'	S 23°15.0'
7	255°22.9'	S 20°33.6'	241°02.5'	S 17°18.7'	196°56.0'	S 22°44.9'	162°26.6'	S 23°14.7'
8	270°24.6'	S 20°34.1'	256°04.5'	S 17°18.9'	211°58.3'	S 22°44.9'	177°28.1'	S 23°14.3'
9	285°26.4'	S 20°34.6'	271°06.5'	S 17°19.0'	227°00.7'	S 22°44.9'	192°29.7'	S 23°14.0'
10	300°28.1'	S 20°35.2'	286°08.5'	S 17°19.1'	242°03.1'	S 22°44.9'	207°31.3'	S 23°13.6'
11	315°29.9'	S 20°35.7'	301°10.5'	S 17°19.2'	257°05.5'	S 22°45.0'	222°32.9'	S 23°13.2'
12	330°31.6'	S 20°36.2'	316°12.5'	S 17°19.4'	272°07.8'	S 22°45.0'	237°34.4'	S 23°12.9'
13	345°33.3'	S 20°36.7'	331°14.5'	S 17°19.5'	287°10.2'	S 22°45.0'	252°36.0'	S 23°12.5'
14	0°35.1'	S 20°37.3'	346°16.5'	S 17°19.6'	302°12.6'	S 22°45.0'	267°37.6'	S 23°12.2'
15	15°36.8'	S 20°37.8'	1°18.6'	S 17°19.7'	317°15.0'	S 22°45.0'	282°39.2'	S 23°11.8'
16	30°38.6'	S 20°38.3'	16°20.6'	S 17°19.9'	332°17.3'	S 22°45.0'	297°40.7'	S 23°11.5'
17	45°40.4'	S 20°38.8'	31°22.6'	S 17°20.0'	347°19.7'	S 22°45.0'	312°42.3'	S 23°11.1'
18	60°42.1'	S 20°39.3'	46°24.6'	S 17°20.1'	2°22.1'	S 22°45.0'	327°43.9'	S 23°10.7'
19	75°43.9'	S 20°39.8'	61°26.6'	S 17°20.2'	17°24.5'	S 22°45.0'	342°45.4'	S 23°10.4'
20	90°45.6'	S 20°40.4'	76°28.6'	S 17°20.3'	32°26.8'	S 22°45.0'	357°47.0'	S 23°10.0'
21	105°47.4'	S 20°40.9'	91°30.6'	S 17°20.5'	47°29.2'	S 22°45.0'	12°48.6'	S 23°09.7'
22	120°49.2'	S 20°41.4'	106°32.6'	S 17°20.6'	62°31.6'	S 22°45.0'	27°50.1'	S 23°09.3'
23	135°51.0'	S 20°41.9'	121°34.6'	S 17°20.7'	77°34.0'	S 22°45.0'	42°51.7'	S 23°08.9'

Thu Sep 27, 2018 UTC

UTC	Venus -4.5 v = 1.8' d = 0.5'		Jupiter -1.7 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.4' d = 0.0'		Mars -1.4 v = 1.6' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	150°52.7'	S 20°42.4'	136°36.6'	S 17°20.8'	92°36.3'	S 22°45.0'	57°53.3'	S 23°08.6'
1	165°54.5'	S 20°42.9'	151°38.6'	S 17°21.0'	107°38.7'	S 22°45.0'	72°54.8'	S 23°08.2'
2	180°56.3'	S 20°43.4'	166°40.6'	S 17°21.1'	122°41.1'	S 22°45.0'	87°56.4'	S 23°07.9'
3	195°58.1'	S 20°43.9'	181°42.7'	S 17°21.2'	137°43.5'	S 22°45.0'	102°57.9'	S 23°07.5'
4	210°59.9'	S 20°44.4'	196°44.7'	S 17°21.3'	152°45.8'	S 22°45.0'	117°59.5'	S 23°07.1'
5	226°01.7'	S 20°44.9'	211°46.7'	S 17°21.5'	167°48.2'	S 22°45.0'	133°01.1'	S 23°06.8'
6	241°03.5'	S 20°45.4'	226°48.7'	S 17°21.6'	182°50.6'	S 22°45.0'	148°02.6'	S 23°06.4'
7	256°05.3'	S 20°45.9'	241°50.7'	S 17°21.7'	197°53.0'	S 22°45.0'	163°04.2'	S 23°06.0'
8	271°07.1'	S 20°46.4'	256°52.7'	S 17°21.8'	212°55.3'	S 22°45.0'	178°05.7'	S 23°05.7'
9	286°08.9'	S 20°46.9'	271°54.7'	S 17°22.0'	227°57.7'	S 22°45.0'	193°07.3'	S 23°05.3'
10	301°10.7'	S 20°47.4'	286°56.7'	S 17°22.1'	243°00.1'	S 22°45.0'	208°08.8'	S 23°05.0'
11	316°12.5'	S 20°47.9'	301°58.7'	S 17°22.2'	258°02.5'	S 22°45.1'	223°10.4'	S 23°04.6'
12	331°14.3'	S 20°48.4'	317°00.7'	S 17°22.3'	273°04.8'	S 22°45.1'	238°11.9'	S 23°04.2'
13	346°16.2'	S 20°48.9'	332°02.7'	S 17°22.5'	288°07.2'	S 22°45.1'	253°13.5'	S 23°03.9'
14	1°18.0'	S 20°49.4'	347°04.7'	S 17°22.6'	303°09.6'	S 22°45.1'	268°15.0'	S 23°03.5'
15	16°19.8'	S 20°49.9'	2°06.7'	S 17°22.7'	318°11.9'	S 22°45.1'	283°16.6'	S 23°03.1'
16	31°21.6'	S 20°50.3'	17°08.7'	S 17°22.8'	333°14.3'	S 22°45.1'	298°18.1'	S 23°02.8'
17	46°23.5'	S 20°50.8'	32°10.7'	S 17°23.0'	348°16.7'	S 22°45.1'	313°19.7'	S 23°02.4'
18	61°25.3'	S 20°51.3'	47°12.7'	S 17°23.1'	3°19.1'	S 22°45.1'	328°21.2'	S 23°02.0'
19	76°27.1'	S 20°51.8'	62°14.8'	S 17°23.2'	18°21.4'	S 22°45.1'	343°22.8'	S 23°01.7'
20	91°29.0'	S 20°52.3'	77°16.8'	S 17°23.3'	33°23.8'	S 22°45.1'	358°24.3'	S 23°01.3'
21	106°30.8'	S 20°52.7'	92°18.8'	S 17°23.5'	48°26.2'	S 22°45.1'	13°25.9'	S 23°00.9'
22	121°32.7'	S 20°53.2'	107°20.8'	S 17°23.6'	63°28.5'	S 22°45.1'	28°27.4'	S 23°00.6'
23	136°34.5'	S 20°53.7'	122°22.8'	S 17°23.7'	78°30.9'	S 22°45.1'	43°28.9'	S 23°00.2'

Fri Sep 28, 2018 UTC

UTC	Venus -4.5 v = 1.9' d = 0.5'		Jupiter -1.7 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.4' d = 0.0'		Mars -1.4 v = 1.5' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	151°36.4'	S 20°54.2'	137°24.8'	S 17°23.8'	93°33.3'	S 22°45.1'	58°30.5'	S 22°59.8'
1	166°38.2'	S 20°54.6'	152°26.8'	S 17°24.0'	108°35.6'	S 22°45.1'	73°32.0'	S 22°59.5'
2	181°40.1'	S 20°55.1'	167°28.8'	S 17°24.1'	123°38.0'	S 22°45.1'	88°33.6'	S 22°59.1'
3	196°42.0'	S 20°55.6'	182°30.8'	S 17°24.2'	138°40.4'	S 22°45.1'	103°35.1'	S 22°58.7'
4	211°43.8'	S 20°56.0'	197°32.8'	S 17°24.3'	153°42.8'	S 22°45.1'	118°36.6'	S 22°58.4'
5	226°45.7'	S 20°56.5'	212°34.8'	S 17°24.5'	168°45.1'	S 22°45.1'	133°38.2'	S 22°58.0'
6	241°47.6'	S 20°57.0'	227°36.8'	S 17°24.6'	183°47.5'	S 22°45.1'	148°39.7'	S 22°57.6'
7	256°49.5'	S 20°57.4'	242°38.8'	S 17°24.7'	198°49.9'	S 22°45.1'	163°41.3'	S 22°57.3'
8	271°51.3'	S 20°57.9'	257°40.8'	S 17°24.8'	213°52.2'	S 22°45.1'	178°42.8'	S 22°56.9'
9	286°53.2'	S 20°58.4'	272°42.8'	S 17°25.0'	228°54.6'	S 22°45.1'	193°44.3'	S 22°56.5'
10	301°55.1'	S 20°58.8'	287°44.8'	S 17°25.1'	243°57.0'	S 22°45.1'	208°45.9'	S 22°56.2'
11	316°57.0'	S 20°59.3'	302°46.8'	S 17°25.2'	258°59.3'	S 22°45.1'	223°47.4'	S 22°55.8'
12	331°58.9'	S 20°59.7'	317°48.8'	S 17°25.3'	274°01.7'	S 22°45.1'	238°48.9'	S 22°55.4'
13	347°00.8'	S 21°00.2'	332°50.8'	S 17°25.5'	289°04.1'	S 22°45.2'	253°50.4'	S 22°55.0'
14	2°02.7'	S 21°00.6'	347°52.8'	S 17°25.6'	304°06.4'	S 22°45.2'	268°52.0'	S 22°54.7'
15	17°04.6'	S 21°01.1'	2°54.8'	S 17°25.7'	319°08.8'	S 22°45.2'	283°53.5'	S 22°54.3'
16	32°06.5'	S 21°01.5'	17°56.8'	S 17°25.8'	334°11.2'	S 22°45.2'	298°55.0'	S 22°53.9'
17	47°08.4'	S 21°02.0'	32°58.8'	S 17°26.0'	349°13.5'	S 22°45.2'	313°56.6'	S 22°53.6'
18	62°10.3'	S 21°02.4'	48°00.8'	S 17°26.1'	4°15.9'	S 22°45.2'	328°58.1'	S 22°53.2'
19	77°12.2'	S 21°02.9'	63°02.8'	S 17°26.2'	19°18.3'	S 22°45.2'	343°59.6'	S 22°52.8'
20	92°14.2'	S 21°03.3'	78°04.8'	S 17°26.3'	34°20.6'	S 22°45.2'	359°01.1'	S 22°52.5'
21	107°16.1'	S 21°03.8'	93°06.8'	S 17°26.5'	49°23.0'	S 22°45.2'	14°02.7'	S 22°52.1'
22	122°18.0'	S 21°04.2'	108°08.8'	S 17°26.6'	64°25.4'	S 22°45.2'	29°04.2'	S 22°51.7'
23	137°19.9'	S 21°04.7'	123°10.8'	S 17°26.7'	79°27.7'	S 22°45.2'	44°05.7'	S 22°51.3'

Sat Sep 29, 2018 UTC

UTC	Venus -4.5 v = 2.0' d = 0.4'		Jupiter -1.7 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.4' d = 0.0'		Mars -1.4 v = 1.5' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	152°21.9'	S 21°05.1'	138°12.8'	S 17°26.8'	94°30.1'	S 22°45.2'	59°07.2'	S 22°51.0'
1	167°23.8'	S 21°05.5'	153°14.8'	S 17°27.0'	109°32.5'	S 22°45.2'	74°08.7'	S 22°50.6'
2	182°25.7'	S 21°06.0'	168°16.8'	S 17°27.1'	124°34.8'	S 22°45.2'	89°10.3'	S 22°50.2'
3	197°27.7'	S 21°06.4'	183°18.8'	S 17°27.2'	139°37.2'	S 22°45.2'	104°11.8'	S 22°49.8'
4	212°29.6'	S 21°06.8'	198°20.8'	S 17°27.3'	154°39.6'	S 22°45.2'	119°13.3'	S 22°49.5'
5	227°31.6'	S 21°07.3'	213°22.8'	S 17°27.5'	169°41.9'	S 22°45.2'	134°14.8'	S 22°49.1'
6	242°33.5'	S 21°07.7'	228°24.8'	S 17°27.6'	184°44.3'	S 22°45.2'	149°16.3'	S 22°48.7'
7	257°35.5'	S 21°08.1'	243°26.8'	S 17°27.7'	199°46.7'	S 22°45.2'	164°17.8'	S 22°48.3'
8	272°37.5'	S 21°08.5'	258°28.8'	S 17°27.8'	214°49.0'	S 22°45.2'	179°19.4'	S 22°48.0'
9	287°39.4'	S 21°09.0'	273°30.8'	S 17°28.0'	229°51.4'	S 22°45.2'	194°20.9'	S 22°47.6'
10	302°41.4'	S 21°09.4'	288°32.8'	S 17°28.1'	244°53.7'	S 22°45.2'	209°22.4'	S 22°47.2'
11	317°43.4'	S 21°09.8'	303°34.8'	S 17°28.2'	259°56.1'	S 22°45.2'	224°23.9'	S 22°46.8'
12	332°45.3'	S 21°10.2'	318°36.8'	S 17°28.3'	274°58.5'	S 22°45.2'	239°25.4'	S 22°46.5'
13	347°47.3'	S 21°10.6'	333°38.8'	S 17°28.5'	290°00.8'	S 22°45.2'	254°26.9'	S 22°46.1'
14	2°49.3'	S 21°11.1'	348°40.8'	S 17°28.6'	305°03.2'	S 22°45.2'	269°28.4'	S 22°45.7'
15	17°51.3'	S 21°11.5'	3°42.8'	S 17°28.7'	320°05.6'	S 22°45.3'	284°29.9'	S 22°45.3'
16	32°53.3'	S 21°11.9'	18°44.8'	S 17°28.8'	335°07.9'	S 22°45.3'	299°31.4'	S 22°45.0'
17	47°55.2'	S 21°12.3'	33°46.8'	S 17°29.0'	350°10.3'	S 22°45.3'	314°32.9'	S 22°44.6'
18	62°57.2'	S 21°12.7'	48°48.8'	S 17°29.1'	5°12.7'	S 22°45.3'	329°34.5'	S 22°44.2'
19	77°59.2'	S 21°13.1'	63°50.8'	S 17°29.2'	20°15.0'	S 22°45.3'	344°36.0'	S 22°43.8'
20	93°01.2'	S 21°13.5'	78°52.8'	S 17°29.3'	35°17.4'	S 22°45.3'	359°37.5'	S 22°43.4'
21	108°03.2'	S 21°13.9'	93°54.8'	S 17°29.5'	50°19.7'	S 22°45.3'	14°39.0'	S 22°43.1'
22	123°05.2'	S 21°14.3'	108°56.8'	S 17°29.6'	65°22.1'	S 22°45.3'	29°40.5'	S 22°42.7'
23	138°07.2'	S 21°14.7'	123°58.8'	S 17°29.7'	80°24.5'	S 22°45.3'	44°42.0'	S 22°42.3'

Sun Sep 30, 2018 UTC

UTC	Venus -4.5 v = 2.1' d = 0.4'		Jupiter -1.6 v = 2.0' d = 0.1'		Saturn +0.5 v = 2.4' d = 0.0'		Mars -1.3 v = 1.5' d = 0.4'	
	GHA	dec	GHA	dec	GHA	dec	GHA	dec
0	153°09.3'	S 21°15.1'	139°00.8'	S 17°29.8'	95°26.8'	S 22°45.3'	59°43.5'	S 22°41.9'
1	168°11.3'	S 21°15.5'	154°02.8'	S 17°30.0'	110°29.2'	S 22°45.3'	74°45.0'	S 22°41.5'
2	183°13.3'	S 21°15.9'	169°04.8'	S 17°30.1'	125°31.5'	S 22°45.3'	89°46.5'	S 22°41.2'
3	198°15.3'	S 21°16.3'	184°06.8'	S 17°30.2'	140°33.9'	S 22°45.3'	104°48.0'	S 22°40.8'
4	213°17.3'	S 21°16.7'	199°08.8'	S 17°30.3'	155°36.3'	S 22°45.3'	119°49.5'	S 22°40.4'
5	228°19.4'	S 21°17.1'	214°10.8'	S 17°30.5'	170°38.6'	S 22°45.3'	134°51.0'	S 22°40.0'
6	243°21.4'	S 21°17.5'	229°12.8'	S 17°30.6'	185°41.0'	S 22°45.3'	149°52.5'	S 22°39.6'
7	258°23.4'	S 21°17.9'	244°14.8'	S 17°30.7'	200°43.3'	S 22°45.3'	164°53.9'	S 22°39.3'
8	273°25.5'	S 21°18.3'	259°16.8'	S 17°30.8'	215°45.7'	S 22°45.3'	179°55.4'	S 22°38.9'
9	288°27.5'	S 21°18.7'	274°18.8'	S 17°31.0'	230°48.1'	S 22°45.3'	194°56.9'	S 22°38.5'
10	303°29.6'	S 21°19.1'	289°20.8'	S 17°31.1'	245°50.4'	S 22°45.3'	209°58.4'	S 22°38.1'
11	318°31.6'	S 21°19.4'	304°22.7'	S 17°31.2'	260°52.8'	S 22°45.3'	224°59.9'	S 22°37.7'
12	333°33.7'	S 21°19.8'	319°24.7'	S 17°31.3'	275°55.1'	S 22°45.3'	240°01.4'	S 22°37.4'
13	348°35.7'	S 21°20.2'	334°26.7'	S 17°31.5'	290°57.5'	S 22°45.3'	255°02.9'	S 22°37.0'
14	3°37.8'	S 21°20.6'	349°28.7'	S 17°31.6'	305°59.9'	S 22°45.3'	270°04.4'	S 22°36.6'
15	18°39.9'	S 21°21.0'	4°30.7'	S 17°31.7'	321°02.2'	S 22°45.3'	285°05.9'	S 22°36.2'
16	33°41.9'	S 21°21.3'	19°32.7'	S 17°31.8'	336°04.6'	S 22°45.3'	300°07.4'	S 22°35.8'
17	48°44.0'	S 21°21.7'	34°34.7'	S 17°32.0'	351°06.9'	S 22°45.3'	315°08.9'	S 22°35.4'
18	63°46.1'	S 21°22.1'	49°36.7'	S 17°32.1'	6°09.3'	S 22°45.3'	330°10.3'	S 22°35.1'
19	78°48.2'	S 21°22.5'	64°38.7'	S 17°32.2'	21°11.7'	S 22°45.4'	345°11.8'	S 22°34.7'
20	93°50.2'	S 21°22.8'	79°40.7'	S 17°32.3'	36°14.0'	S 22°45.4'	0°13.3'	S 22°34.3'
21	108°52.3'	S 21°23.2'	94°42.7'	S 17°32.5'	51°16.4'	S 22°45.4'	15°14.8'	S 22°33.9'
22	123°54.4'	S 21°23.6'	109°44.7'	S 17°32.6'	66°18.7'	S 22°45.4'	30°16.3'	S 22°33.5'
23	138°56.5'	S 21°23.9'	124°46.7'	S 17°32.7'	81°21.1'	S 22°45.4'	45°17.8'	S 22°33.1'