

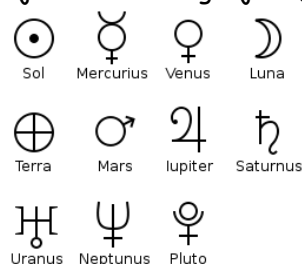
128	page	broj stranice
2014 JUNE 12,13,14 (THURS.,FRI.,SAT.) 2014 godina 6 mjesec 12,13,14 dan (četvrtak, petak, subota)		
UT	Universal Time	Svjetsko (univerzalno) vrijeme, nulta vremenska zona
ARIES	First point of Aries	Proljetna točka
VENUS - 3,9	Venera ♀	Magnituda planete Venera je - 3,9 za 2014 JUNE 12, 13, 14
MARS - 0,3	Mars ♂	Magnituda planeta Mars je - 0,7 za 2014 JUNE 12, 13, 14
JUPITER - 1,8	Jupiter ♃	Magnituda planeta Jupiter je - 2,4 za 2014 JUNE 12, 13, 14
SATURN + 0,3	Saturn ♄	Magnituda planeta Saturn je + 0,4 za 2014 JUNE 12, 13, 14
STARS		Zvijezde, popis 57 (najsjanijih) navigacijskih zvijezda
GHA	Greenwich Hour Angle	Greenwich-ki satni kut (S), za nulti (0°) meridijan
Dec	Declination	Deklinacija (δ) North +, South -
Name		Ime (zvijezde)
SHA	Sidereal Hour Angle	Surektascenzija (360 - α) ☾
Mer. Pass.	Merridian Passage	UT vrijeme prolaza nebeskog tijela kroz Greenwich meridijan 0° (Mer. Pass. Aries 6h 34m = UT vrijeme prolaza proljetne točke, kroz Greenwich-ki meridijan)
v	v - correction	± korekcija za drugi popravak Greenwich-kog satnog kuta (ΔII)
d	d - correction	± korekcija za drugi popravak deklinacije (ΔII)

129	page	broj stranice
SUN	☉	Sunce ☉
MOON	☾	Mjesec ☾
HP	Horizontal Parallax	Horizontska Paralaksa (π _H) Mjeseca, za 12, 13, 14 lipnja 2014.
Lat.	Latitude	geografska širina (φ)
Twilight		Sumrak
Naut.	Nautical Twilight	Nautički sumrak
Civil	Civil Twilight	Građanski sumrak
Sunrise		Izlazak Sunca (svitanje)
Sunset		Zalazak Sunca
Moonrise		Izlazak Mjeseca
Moonset		Zalazak Mjeseca
□	continously above the horizon	nebesko tijelo (Sunce ili Mjesec) je stalno iznad horizonta
■	continously below the horizon	nebesko tijelo (Sunce ili Mjesec) je stalno ispod horizonta
///	twilight lasts all night	sumrak traje cijelu noć
Eqn. of time	Equation of time	Jednadžba vremena (e) razlika pravog i srednjeg Sunčevog vremena - ako su brojevi zatomnjeni , vrijednost jednadžbe vremena je negativna ! - ako brojevi nisu zatomnjeni , vrijednost jednadžbe vremena je pozitivna !
Moon Mer. Pass. Upper		gornji prolaz Mjeseca kroz Greenwich meridijan
Moon Mer. Pass. Lower		donji prolaz Mjeseca kroz Greenwich meridijan
Age		doba, broj dana u sinodičkom ciklusu Mjeseca (traje 29,5 dana) ☉
Phase		faza Mjeseca, % postotak vidljivosti Mjeseca
SD	Semi Diametar	radijus (r) ili polumjer nebeskog tijela (Sunca, Mjeseca)

LHA	Local Hour Angle	Mjesni satni kut (lokalni satni kut - za meridijan opažača)
RA (RHA)	Right Ascension	Rektascenzija (α) ☽
Mag.	Magnitude	Magnituda (m) prividna vidljivost nebeskog tijela (mjenja se) !

Sunce ☉
Mjesec ☾
Venera ♀

Mars ♂
Jupiter ♃ (kombinacija brojeva 2 i 4)
Saturn ♄



UT	ARIES	VENUS -3.9	MARS -0.3	JUPITER -1.8	SATURN +0.3	STARS
d h	GHA	GHA	GHA	GHA	GHA	SHA
	Dec	Dec	Dec	Dec	Dec	Dec
1200	260 14.7	215 47.3 N14 53.2	69 06.8 S 4 47.2	145 48.4 N21 53.0	34 12.3 S14 48.5	315 18.2 S40 14.8
01	275 17.2	230 46.9 54.1	84 10.7 47.5	160 50.4 52.9	49 14.9 48.5	335 26.7 S57 09.6
02	290 19.6	245 46.4 55.0	90 10.6 47.8	175 52.3 52.8	64 17.5 48.5	373 08.2 S63 11.1
03	305 22.1	260 46.0 55.8	114 12.5 48.2	190 54.2 52.7	79 20.1 48.4	405 19.3 S28 59.8
04	320 24.6	275 45.5 56.7	129 14.4 48.5	205 56.1 52.7	94 22.7 48.4	430 30.4 S16 32.1
05	335 27.0	290 45.1 57.6	144 16.3 48.8	220 58.0 52.6	109 25.3 48.4	455 41.9 S11 59.8
06	350 29.5	305 44.6 N14 58.4	159 18.2 S 4 49.1	235 59.9 N21 52.5	124 27.9 S14 48.3	480 53.1 N26 40.2
07	3 32.0	320 44.2 14 59.3	174 20.1 49.4	251 01.9 52.4	139 30.5 48.3	505 58.2 N49 14.7
08	19 34.4	335 43.7 15 00.2	189 22.0 49.7	266 03.8 52.3	154 33.1 48.3	530 58.2 S46 53.1
09	35 36.9	350 43.3 01.1	204 23.9 50.1	281 05.7 52.3	169 35.7 48.2	555 46.0 S 111.8
10	50 39.3	5 42.8 01.9	219 25.8 50.4	296 07.6 52.2	184 38.3 48.2	580 55.6 S 8 43.5
11	65 41.8	20 42.4 02.8	234 27.7 50.7	311 09.5 52.1	199 40.9 48.2	605 64.9 S19 06.6
12	80 44.3	35 41.9 N15 03.7	249 29.6 S 4 51.0	326 11.5 N21 52.0	214 43.5 S14 48.1	630 74.2 N26 40.2
13	95 46.7	50 41.4 04.5	264 31.5 51.3	341 13.4 51.9	229 46.1 48.1	655 82.8 N29 10.1
14	110 49.2	65 41.0 05.4	279 33.4 51.6	356 15.3 51.8	244 48.8 48.1	680 91.6 S49 03.1
15	125 51.7	80 40.5 06.3	294 35.3 52.0	371 17.2 51.8	259 51.4 48.1	705 100.4 S54 26.7
16	140 54.1	95 40.1 07.2	309 37.2 52.3	386 19.1 51.7	274 54.0 48.0	730 109.2 S63 27.7
17	155 56.6	110 39.6 08.0	324 39.1 52.6	401 21.0 51.6	289 56.6 48.0	755 118.0 S72 28.7
18	170 59.1	125 39.2 N15 08.9	339 41.0 S 4 52.9	416 22.9 51.5	304 59.2 S14 48.0	780 126.8 N19 06.6
19	186 01.5	140 38.7 09.8	354 42.8 53.2	431 24.9 51.4	320 01.8 47.9	805 135.6 S69 03.1
20	201 04.0	155 38.3 10.6	369 44.7 53.6	446 26.8 51.3	335 04.4 47.9	830 144.4 S78 00.0
21	216 06.5	170 37.8 11.5	384 46.6 53.9	461 28.7 51.3	350 07.0 47.9	855 153.2 S86 53.7
22	231 08.9	185 37.3 12.3	399 48.5 54.2	476 30.6 51.2	365 09.6 47.8	880 162.0 N9 24.4
23	246 11.4	200 36.9 13.0	414 50.4 54.5	491 32.5 51.1	380 12.2 47.8	905 170.8 S19 06.6
1300	261 13.8	215 36.4 N15 14.1	69 52.3 S 4 56.8	146 34.4 N21 51.0	35 14.8 S14 47.8	263 56.4 S32 42.5
01	276 16.3	230 36.0 14.9	84 54.2 55.2	161 36.4 50.9	50 17.4 47.7	288 64.9 N46 00.0
02	291 18.8	245 35.5 15.8	99 56.1 55.5	176 38.3 50.9	65 20.0 47.7	313 73.6 N54 19.9
03	306 21.2	260 35.0 16.7	114 57.9 55.8	191 40.2 50.8	80 22.6 47.7	338 82.8 N63 29.5
04	321 23.7	275 34.6 17.5	129 59.8 56.1	206 42.1 50.7	95 25.2 47.7	363 92.0 N72 39.9
05	336 26.2	290 34.1 18.4	145 01.7 56.5	221 44.0 50.6	110 27.8 47.6	388 101.2 S29 32.5
06	351 28.6	305 33.7 N15 19.2	160 03.6 S 4 56.8	236 45.9 N21 50.5	125 30.4 S14 47.6	413 110.0 N38 42.5
07	6 31.1	320 33.2 20.1	175 05.5 57.1	251 47.9 50.4	140 33.0 47.6	438 118.8 N47 52.6
08	21 33.6	335 32.7 21.0	190 07.4 57.4	266 49.8 50.4	155 35.6 47.5	463 127.6 N56 03.1
09	36 36.0	350 32.3 21.8	205 09.2 57.8	281 51.7 50.3	170 38.2 47.5	488 136.4 N64 13.9
10	51 38.5	365 31.8 22.5	220 11.1 58.1	296 53.6 50.2	185 40.8 47.5	513 145.2 N72 24.4
11	66 41.0	380 31.3 23.3	235 13.0 58.4	311 55.5 50.1	200 43.4 47.4	538 154.0 N80 35.1
12	81 43.4	395 30.9 N15 24.4	250 14.9 S 4 58.7	326 57.4 N21 50.0	215 46.0 S14 47.4	563 162.8 N88 46.1
13	96 45.9	50 30.4 25.2	265 16.7 59.1	341 59.4 49.9	230 48.6 47.4	588 171.6 N96 56.6
14	111 48.3	65 29.9 26.1	280 18.6 59.4	357 01.3 49.9	245 51.2 47.4	613 180.4 N104 67.1
15	126 50.8	80 29.5 27.0	295 20.5 59.7	372 03.2 49.8	260 53.8 47.3	638 189.2 N112 77.6
16	141 53.3	95 29.0 27.8	310 22.4 59.9	387 05.1 49.7	275 56.4 47.3	663 198.0 N120 88.1
17	156 55.7	110 28.5 28.7	325 24.2 60.0	402 07.0 49.6	290 59.0 47.3	688 206.8 N128 98.6
18	171 58.2	125 28.1 N15 29.5	340 26.1 S 0 0.7	417 08.9 N21 49.5	306 01.6 S14 47.2	713 215.6 N136 109.1
19	187 00.6	140 27.6 30.4	355 28.0 60.1	432 10.8 49.4	321 04.2 47.2	738 224.4 N144 119.6
20	202 03.1	155 27.1 31.2	370 29.8 60.3	447 12.8 49.4	336 06.8 47.1	763 233.2 N152 130.1
21	217 05.6	170 26.7 32.1	385 31.7 60.5	462 14.7 49.3	351 09.4 47.1	788 242.0 N160 140.6
22	232 08.1	185 26.2 32.9	400 33.6 60.7	477 16.6 49.2	366 12.0 47.1	813 250.8 N168 151.1
23	247 10.5	200 25.7 33.8	415 35.5 60.9	492 18.5 49.1	381 14.6 47.1	838 259.6 N176 161.6
1400	262 13.0	215 25.3 N15 34.6	70 37.3 S 5 02.7	147 30.4 N21 49.0	36 17.2 S14 47.1	308 39.8 N49 54.5
01	277 15.5	230 24.8 35.5	85 39.2 03.0	162 32.3 48.9	51 19.8 47.0	333 48.6 N58 04.5
02	292 17.9	245 24.3 36.3	100 41.0 03.3	177 34.2 48.8	66 22.4 47.0	358 57.4 N66 14.9
03	307 20.3	260 23.8 37.2	115 42.9 03.6	192 36.1 48.7	81 25.6 47.0	383 66.2 N74 25.4
04	322 22.8	275 23.4 38.0	130 44.8 04.0	207 38.0 48.6	96 27.6 46.9	408 75.0 N82 35.9
05	337 25.3	290 22.9 38.9	145 46.6 04.3	222 39.0 48.5	111 30.2 46.9	433 83.8 N90 46.4
06	352 27.8	305 22.4 N15 39.7	160 48.5 S 0 0.4	237 40.9 N21 48.5	126 32.8 S14 46.9	458 92.6 N98 56.9
07	3 30.2	320 21.9 40.6	175 50.4 05.0	252 42.8 48.4	141 35.4 46.8	483 101.4 N106 67.4
08	18 32.7	335 21.5 41.4	190 52.2 05.3	267 44.7 48.3	156 38.0 46.8	508 110.2 N114 77.9
09	33 35.2	350 21.0 42.2	205 54.1 05.6	282 46.6 48.2	171 40.6 46.8	533 119.0 N122 88.4
10	48 37.7	5 20.5 43.1	220 55.9 06.0	297 48.5 48.1	186 43.2 46.8	558 127.8 N130 98.9
11	63 40.1	20 20.0 43.9	235 57.8 06.3	312 50.4 48.0	201 45.8 46.7	583 136.6 N138 109.4
12	78 42.6	35 19.6 N15 44.8	250 59.6 S 0 0.6	327 52.3 N21 48.0	216 48.4 S14 46.7	608 145.4 N146 119.9
13	93 45.0	50 19.1 45.6	265 61.5 07.0	342 54.2 47.9	231 51.0 46.7	633 154.2 N154 130.4
14	108 47.5	65 18.6 46.2	280 63.4 07.3	357 56.1 47.8	246 53.6 46.6	658 163.0 N162 140.9
15	123 50.0	80 18.1 47.0	295 65.3 07.6	372 58.0 47.7	261 56.2 46.6	683 171.8 N170 151.4
16	138 52.4	95 17.7 47.8	310 67.2 07.9	387 59.9 47.6	276 58.8 46.6	708 180.6 N178 161.9
17	153 54.9	110 17.2 49.0	325 69.1 08.3	402 61.8 47.5	291 01.4 46.6	733 189.4 N186 172.4
18	168 57.3	125 16.7 N15 49.8	340 71.0 08.6	417 63.7 47.4	306 04.0 S14 46.5	758 198.2 N194 182.9
19	183 59.8	140 16.2 50.7	355 72.9 08.9	432 65.6 47.3	321 06.6 46.5	783 207.0 N202 193.4
20	203 02.3	155 15.7 51.5	370 74.8 09.2	447 67.5 47.2	336 09.2 46.4	808 215.8 N210 203.9
21	218 04.7	170 15.3 52.3	385 76.7 09.5	462 69.4 47.1	351 11.8 46.4	833 224.6 N218 214.4
22	233 07.2	185 14.8 53.2	400 78.6 09.8	477 71.3 47.0	366 14.4 46.4	858 233.4 N226 224.9
23	248 09.7	200 14.3 54.0	415 80.5 10.0	492 73.2 47.0	381 17.0 46.4	883 242.2 N234 235.4
Mer. Pass.	h m	v -0.5 d 0.9	v 1.9 d 0.3	v 1.9 d 0.1	v 2.6 d 0.0	SHA Mer. Pass. h m
						80 38.1 N38 48.0
						137 04.4 S16 06.1
						245 20.6 14 12
						314 22.6 9 38
						168 38.4 19 18
						245 20.6 14 12
						134 00.9 21 35

UT	SUN	MOON	SUNRISE	MOONRISE
d h	GHA	GHA	h m	h m
	Dec	Dec		
1200	180 03.9 N23 07.7	16 29.5 6.1 S18 03.1	22 37	23 27
01	195 03.7 07.8	30 54.6 6.0 18 06.9	21 42	22 37
02	210 03.7 08.0	45 19.6 6.0 18 10.5	21 08	22 06
03	225 03.5 08.2	59 44.5 5.8 18 14.0	20 44	21 42
04	240 03.4 08.3	74 09.5 5.8 18 17.4	20 25	21 24
05	255 03.3 08.5	88 34.3 5.8 18 20.7	20 09	21 08
06	270 03.2 N23 08.6	102 59.1 5.7 S18 23.9	02 57	20 55
07	285 03.0 08.8	117 23.8 5.7 18 26.9	02 12	20 42
08	299 02.8 08.9	131 48.5 5.6 18 29.8	02 34	20 34
09	313 02.8 09.1	146 13.1 5.6 18 32.6	03 00	20 25
10	327 02.6 09.3	160 37.7 5.4 18 35.5	03 28	20 17
11	341 02.5 09.4	175 02.1 5.5 18 38.2	04 00	20 09
12	0 02.4 N23 09.6	189 26.6 5.4 S18 40.3	04 31	19 46
13	15 02.1 10.5	203 51.0 5.3 18 42.6	04 58	19 34
14	30 02.1 10.8	218 15.3 5.3 18 44.7	05 24	19 24
15	45 02.0 10.9	232 39.6 5.2 18 46.8	05 50	19 16
16	60 01.9 11.1	247 03.9 5.2 18 48.7	06 15	19 08
17	75 01.7 11.2	261 28.1 5.1 18 50.5	06 40	19 00
18	90 01.6 N23 11.4	275 52.2 5.1 S18 52.2	06 14	18 52
19	105 01.6 11.5	290 26.3 5.1 18 53.7	06 32	18 44
20	120 01.4 11.7	304 40.4 5.0 18 55.1	06 53	18 36
21	135 01.2 11.8	318 54.4 5.0 18 56.4	07 15	18 28
22	150 01.1 11.9	333 28.4 4.9 18 57.5	07 37	18 20
23	165 01.0 12.1	347 52.3 4.9 18 58.6	08 00	18 12