

KSIĘŻYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
LISTOPAD 2011									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	12 34	17 12	21 58	61	64	19 15 46	-19 25.9	31.4	0.33
2	13 03	18 01	23 08	67	70	20 09 31	-16 15.7	30.9	0.43
3	13 27	18 46	—	74	—	20 59 47	-12 24.5	30.5	0.53
4	13 47	19 30	0 17	81	77	21 47 15	- 8 07.0	30.1	0.63
5	14 06	20 11	1 23	88	85	22 32 43	- 3 35.3	29.8	0.72
6	14 25	20 53	2 28	96	92	23 17 04	1 00.6	29.6	0.80
7	14 44	21 34	3 33	103	99	0 01 07	5 31.5	29.5	0.87
8	15 05	22 17	4 37	109	106	0 45 39	9 49.0	29.4	0.93
9	15 29	23 01	5 42	115	113	1 31 16	13 44.0	29.4	0.97
10	15 57	23 48	6 46	120	118	2 18 28	17 07.0	29.5	0.99
11	16 31	—	7 48	124	123	3 07 30	19 48.5	29.6	-1.00
12	17 13	0 36	8 47	126	126	3 58 19	21 38.9	29.7	-0.99
13	18 04	1 27	9 41	126	126	4 50 36	22 30.3	29.9	-0.96
14	19 02	2 17	10 28	124	125	5 43 44	22 17.7	30.1	-0.91
15	20 07	3 09	11 07	120	122	6 37 03	20 59.2	30.4	-0.85
16	21 16	3 59	11 40	115	117	7 29 55	18 37.4	30.7	-0.77
17	22 29	4 49	12 08	108	111	8 22 04	15 17.6	31.0	-0.67
18	23 44	5 38	12 33	100	103	9 13 33	11 08.3	31.4	-0.57
19	—	6 27	12 56	—	95	10 04 44	6 19.9	31.8	-0.46
20	1 00	7 16	13 19	91	87	10 56 18	1 04.7	32.2	-0.35
21	2 20	8 07	13 43	82	78	11 49 04	- 4 22.1	32.6	-0.25
22	3 41	9 01	14 10	73	70	12 43 52	- 9 42.0	32.9	-0.15
23	5 05	9 58	14 42	65	63	13 41 25	-14 33.3	33.1	-0.08
24	6 27	10 58	15 23	59	57	14 41 56	-18 32.0	33.2	-0.02
25	7 45	12 00	16 13	54	54	15 44 53	-21 15.9	33.1	-0.00
26	8 52	13 03	17 15	53	53	16 48 54	-22 29.4	32.9	0.01
27	9 47	14 03	18 24	55	56	17 52 04	-22 09.0	32.5	0.04
28	10 29	15 00	19 38	59	61	18 52 36	-20 22.9	32.0	0.10
29	11 02	15 52	20 51	65	67	19 49 28	-17 27.8	31.5	0.18
30	11 29	16 40	22 02	71	74	20 42 27	-13 43.1	31.0	0.27

pierwsza kwadra:	2 XI	16 ^h 38 ^m	4 XI	7.8 ^h	Neptun	6°S
pełnia:	10 XI	20 ^h 16 ^m	7 XI	2.3 ^h	Uran	6°S
ostatnia kwadra:	18 XI	15 ^h 09 ^m	9 XI	18.8 ^h	Jowisz	5°S
nów:	25 XI	6 ^h 10 ^m	19 XI	10.3 ^h	Mars	8°N
			22 XI	21.6 ^h	Saturn	7°N
apogeum:	8 XI	13 ^h 21 ^m	26 XI	9.9 ^h	Merkury	2°S
perygeum:	23 XI	23 ^h 25 ^m	27 XI	4.5 ^h	Wenus	3°S