

KSIĘŻYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
WRZESIEŃ 2013									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	1 09	8 51	16 24	118	115	7 15 27	17 33.2	29.6	-0.19
2	2 09	9 37	16 55	114	111	8 04 19	15 15.7	29.7	-0.12
3	3 12	10 22	17 22	108	105	8 52 33	12 17.4	29.8	-0.06
4	4 17	11 08	17 47	102	99	9 40 20	8 45.0	30.1	-0.02
5	5 23	11 53	18 11	96	92	10 28 00	4 46.7	30.3	-0.00
6	6 31	12 39	18 35	89	85	11 15 57	0 31.9	30.6	0.00
7	7 40	13 25	19 01	82	79	12 04 42	-3 48.6	30.9	0.03
8	8 50	14 14	19 29	75	72	12 54 47	-8 02.7	31.2	0.07
9	10 01	15 05	20 01	69	66	13 46 40	-11 56.8	31.4	0.13
10	11 12	15 59	20 40	64	62	14 40 44	-15 16.8	31.7	0.21
11	12 20	16 55	21 26	60	59	15 37 05	-17 48.4	31.9	0.31
12	13 23	17 52	22 21	58	58	16 35 26	-19 19.0	32.1	0.42
13	14 19	18 51	23 25	59	60	17 35 08	-19 39.1	32.3	0.53
14	15 07	19 49	—	62	—	18 35 13	-18 44.8	32.4	0.65
15	15 48	20 45	0 36	67	63	19 34 45	-16 38.8	32.5	0.75
16	16 22	21 40	1 51	73	69	20 32 57	-13 30.1	32.5	0.85
17	16 53	22 33	3 08	80	76	21 29 28	-9 32.9	32.4	0.92
18	17 21	23 24	4 24	87	83	22 24 19	-5 04.1	32.3	0.97
19	17 48	—	5 40	95	91	23 17 45	-0 21.8	32.0	1.00
20	18 15	0 15	6 54	102	99	0 10 12	4 16.5	31.7	-1.00
21	18 43	1 04	8 05	108	105	1 02 04	8 35.6	31.3	-0.97
22	19 15	1 53	9 14	113	111	1 53 41	12 22.4	30.9	-0.93
23	19 50	2 43	10 20	118	116	2 45 14	15 27.3	30.5	-0.86
24	20 30	3 32	11 20	120	119	3 36 46	17 43.3	30.2	-0.79
25	21 14	4 21	12 15	121	121	4 28 08	19 06.7	29.9	-0.70
26	22 05	5 09	13 04	121	121	5 19 10	19 35.9	29.7	-0.61
27	22 59	5 57	13 46	119	120	6 09 36	19 12.0	29.6	-0.52
28	23 58	6 44	14 22	115	117	6 59 17	17 57.4	29.6	-0.42
29	—	7 30	14 54	—	112	7 48 10	15 56.1	29.6	-0.33
30	0 59	8 16	15 22	110	107	8 36 21	13 13.0	29.8	-0.24

nów	5 IX	11 ^h 36 ^m	2 IX	9.7 ^h	Mars	6°N
pierwsza kwadra	12 IX	17 ^h 08 ^m	6 IX	14.2 ^h	Merkury	5°N
pełnia:	19 IX	11 ^h 13 ^m	8 IX	21.1 ^h	Wenus	0.4°N
ostatnia kwadra:	27 IX	3 ^h 56 ^m	9 IX	17.2 ^h	Saturn	2°N
			17 IX	23.1 ^h	Neptun	6°S
perygeum:	15 IX	16 ^h 35 ^m	20 IX	14.6 ^h	Uran	3°S
apogeum:	27 IX	18 ^h 18 ^m				