

KSIEŻYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
LIPIEC 2009									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	15 01	19 36	—	61	—	13 35 06	-15 33.1	30.6	0.66
2	16 13	20 24	0 02	54	58	14 24 53	-19 50.1	30.3	0.75
3	17 22	21 14	0 29	49	52	15 16 06	-23 09.6	30.0	0.83
4	18 23	22 06	1 03	46	48	16 08 40	-25 22.8	29.8	0.90
5	19 15	22 57	1 47	46	46	17 02 01	-26 23.8	29.6	0.95
6	19 56	23 47	2 41	49	47	17 55 19	-26 10.4	29.5	0.98
7	20 27	—	3 42	53	50	18 47 36	-24 44.9	29.4	1.00
8	20 52	0 35	4 49	59	55	19 38 07	-22 13.9	29.4	-1.00
9	21 12	1 21	5 58	66	61	20 26 32	-18 46.9	29.4	-0.98
10	21 28	2 04	7 07	74	69	21 12 56	-14 34.4	29.5	-0.94
11	21 43	2 46	8 16	82	77	21 57 45	- 9 47.3	29.7	-0.89
12	21 57	3 27	9 25	90	86	22 41 40	- 4 35.8	29.9	-0.82
13	22 12	4 09	10 34	99	95	23 25 31	0 50.1	30.1	-0.74
14	22 28	4 51	11 46	108	104	0 10 19	6 20.1	30.5	-0.65
15	22 47	5 36	13 01	116	113	0 57 09	11 42.5	30.9	-0.54
16	23 12	6 24	14 19	124	121	1 47 08	16 43.0	31.3	-0.44
17	23 46	7 18	15 40	130	128	2 41 16	21 03.4	31.8	-0.33
18	—	8 16	16 58	—	132	3 40 07	24 21.2	32.3	-0.23
19	0 34	9 19	18 06	133	134	4 43 19	26 12.3	32.8	-0.14
20	1 39	10 25	19 01	133	131	5 49 19	26 16.6	33.1	-0.07
21	3 00	11 29	19 41	129	125	6 55 37	24 26.0	33.4	-0.02
22	4 29	12 30	20 11	122	116	7 59 47	20 49.0	33.4	-0.00
23	6 00	13 27	20 34	113	107	9 00 18	15 48.1	33.3	0.01
24	7 28	14 19	20 53	102	97	9 56 55	9 52.8	33.0	0.05
25	8 52	15 09	21 10	92	87	10 50 16	3 32.3	32.6	0.12
26	10 12	15 57	21 27	81	77	11 41 21	- 2 48.2	32.1	0.21
27	11 31	16 44	21 45	72	68	12 31 17	- 8 48.5	31.6	0.30
28	12 48	17 32	22 06	63	60	13 21 03	-14 12.9	31.1	0.41
29	14 02	18 21	22 31	56	54	14 11 26	-18 49.0	30.7	0.51
30	15 13	19 11	23 03	50	49	15 02 53	-22 26.7	30.3	0.61
31	16 17	20 02	23 44	47	46	15 55 27	-24 57.8	30.0	0.70

pełnia: 7 VII 9^h21^m
 III kwadra: 15 VII 9^h53^m
 nów: 22 VII 2^h35^m
 I kwadra: 28 VII 22^h00^m

apogeum 7 VII 21^h40^m
 perygeum 21 VII 20^h17^m

10 VII 21.8^h Neptun 3°S
 10 VII 22.2^h Jowisz 4°S
 13 VII 12.5^h Uran 6°S
 18 VII 11.7^h Mars 5°S
 19 VII 5.3^h Wenus 6°S
 22 VII 20.4^h Merkury 3°N
 25 VII 14.6^h Saturn 7°N