

KSIEŻYC

d	Wsch.	Kulm.	Zach.	A _W	A _Z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
LIPIEC 2012									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	17 56	22 13	1 33	55	56	15 55 57	-20 42.6	32.9	0.89
2	18 57	23 16	2 30	55	55	16 59 25	-21 41.1	33.0	0.95
3	19 47	—	3 37	58	56	18 03 01	-21 09.1	32.9	0.99
4	20 26	0 16	4 51	63	60	19 04 58	-19 11.3	32.6	-1.00
5	20 58	1 13	6 08	70	66	20 03 56	-16 02.3	32.3	-0.98
6	21 25	2 06	7 24	77	73	20 59 26	-12 02.1	31.9	-0.93
7	21 48	2 56	8 38	85	81	21 51 38	- 7 30.9	31.4	-0.87
8	22 09	3 43	9 49	92	89	22 41 09	- 2 46.7	30.9	-0.79
9	22 31	4 27	10 58	99	96	23 28 46	1 56.3	30.5	-0.70
10	22 53	5 11	12 04	106	103	0 15 21	6 26.9	30.1	-0.61
11	23 17	5 55	13 09	112	110	1 01 40	10 35.9	29.8	-0.51
12	23 44	6 39	14 13	117	115	1 48 24	14 15.6	29.6	-0.41
13	—	7 25	15 15	—	120	2 36 05	17 18.7	29.5	-0.32
14	0 17	8 12	16 14	121	123	3 25 02	19 38.1	29.5	-0.24
15	0 55	9 00	17 08	124	125	4 15 19	21 07.1	29.6	-0.16
16	1 41	9 49	17 56	125	124	5 06 44	21 39.9	29.7	-0.10
17	2 35	10 39	18 38	124	122	5 58 52	21 12.8	29.9	-0.05
18	3 35	11 29	19 14	121	118	6 51 09	19 44.8	30.1	-0.02
19	4 41	12 19	19 45	116	113	7 43 04	17 18.6	30.4	-0.00
20	5 50	13 07	20 12	110	107	8 34 20	14 00.2	30.7	0.01
21	7 01	13 55	20 36	103	99	9 24 51	9 58.5	31.0	0.04
22	8 13	14 43	20 59	96	92	10 14 54	5 24.7	31.2	0.09
23	9 26	15 31	21 23	88	84	11 04 57	0 31.5	31.5	0.16
24	10 41	16 20	21 47	80	76	11 55 39	- 4 27.4	31.7	0.25
25	11 57	17 11	22 15	72	69	12 47 43	- 9 16.6	32.0	0.35
26	13 14	18 05	22 48	65	62	13 41 51	-13 39.9	32.2	0.46
27	14 29	19 02	23 29	59	58	14 38 29	-17 20.0	32.3	0.57
28	15 41	20 01	—	56	—	15 37 40	-19 59.7	32.5	0.68
29	16 44	21 01	0 19	55	55	16 38 48	-21 24.4	32.5	0.79
30	17 38	22 01	1 20	57	55	17 40 44	-21 25.3	32.5	0.87
31	18 21	22 59	2 29	61	58	18 41 59	-20 02.0	32.4	0.94

pełnia:	3 VII	18 ^h 52 ^m	7 VII	13.8 ^h	Neptun	6°S
ostatnia kwadra:	11 VII	1 ^h 48 ^m	10 VII	8.9 ^h	Uran	5°S
nów	19 VII	4 ^h 24 ^m	15 VII	3.1 ^h	Jowisz	0.5°S
pierwsza kwadra	26 VII	8 ^h 56 ^m	15 VII	15.5 ^h	Wenus	4°S
			20 VII	7.9 ^h	Merkury	0.6°N
perygeum:	1 VII	18 ^h 02 ^m	24 VII	22.2 ^h	Mars	4°N
apogeum:	13 VII	16 ^h 48 ^m	25 VII	19.2 ^h	Saturn	6°N
perygeum:	29 VII	8 ^h 31 ^m				