

KSIĘZYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
LIPIEC 2010									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	22 19	3 31	9 10	84	80	22 00 39	- 8 00.8	29.5	-0.82
2	22 34	4 11	10 16	92	88	22 43 58	- 3 07.4	29.5	-0.74
3	22 50	4 51	11 22	100	96	23 26 57	1 53.0	29.6	-0.65
4	23 07	5 32	12 29	108	105	0 10 31	6 51.8	29.8	-0.56
5	23 28	6 15	13 38	115	112	0 55 39	11 39.6	30.1	-0.46
6	23 53	7 01	14 50	122	119	1 43 18	16 05.3	30.4	-0.36
7	—	7 51	16 03	—	125	2 34 18	19 55.4	30.8	-0.27
8	0 27	8 45	17 14	127	130	3 29 13	22 52.9	31.3	-0.18
9	1 11	9 44	18 19	130	131	4 27 56	24 39.5	31.8	-0.10
10	2 10	10 45	19 13	131	129	5 29 33	24 58.2	32.3	-0.05
11	3 23	11 46	19 56	128	124	6 32 26	23 39.0	32.6	-0.01
12	4 45	12 46	20 29	122	117	7 34 39	20 43.1	32.9	0.00
13	6 12	13 43	20 55	114	108	8 34 46	16 23.6	33.1	0.02
14	7 38	14 37	21 17	104	99	9 32 11	11 02.2	33.1	0.07
15	9 03	15 28	21 38	94	89	10 27 07	5 04.1	32.9	0.14
16	10 25	16 18	21 57	84	80	11 20 18	- 1 05.8	32.7	0.24
17	11 46	17 09	22 18	74	71	12 12 40	- 7 05.2	32.3	0.34
18	13 06	17 59	22 42	66	63	13 05 08	-12 35.0	32.0	0.45
19	14 24	18 51	23 11	58	56	13 58 25	-17 18.8	31.6	0.56
20	15 37	19 45	23 47	53	51	14 52 53	-21 02.9	31.2	0.67
21	16 44	20 39	—	49	—	15 48 28	-23 36.6	30.9	0.76
22	17 40	21 33	0 32	49	49	16 44 34	-24 53.3	30.6	0.85
23	18 26	22 25	1 26	51	49	17 40 14	-24 51.3	30.3	0.91
24	19 01	23 15	2 28	55	52	18 34 30	-23 34.6	30.1	0.96
25	19 29	—	3 35	60	56	19 26 34	-21 11.6	29.8	0.99
26	19 51	0 02	4 43	67	63	20 16 05	-17 53.9	29.7	1.00
27	20 10	0 46	5 51	74	70	21 03 09	-13 53.9	29.5	-0.99
28	20 26	1 28	6 58	82	77	21 48 10	- 9 23.7	29.5	-0.97
29	20 41	2 09	8 04	89	85	22 31 47	- 4 34.4	29.4	-0.92
30	20 57	2 49	9 10	97	93	23 14 43	0 24.0	29.5	-0.87
31	21 13	3 30	10 16	105	101	23 57 49	5 22.3	29.6	-0.79

ostatnia kwadra:	4 VII	14 ^h 35 ^m	1 VII	1.4 ^h	Neptun	5°S
nów:	11 VII	19 ^h 40 ^m	3 VII	20.1 ^h	Uran	7°S
pierwsza kwadra:	18 VII	10 ^h 11 ^m	4 VII	1.0 ^h	Jowisz	7°S
pełnia:	26 VII	1 ^h 36 ^m	13 VII	0.8 ^h	Merkury	4°N
			15 VII	1.2 ^h	Wenus	6°N
apogeum:	1 VII	10 ^h 13 ^m	16 VII	4.8 ^h	Mars	6°N
perygeum:	13 VII	11 ^h 22 ^m	16 VII	19.2 ^h	Saturn	8°N
apogeum:	28 VII	23 ^h 51 ^m	31 VII	21.4 ^h	Jowisz	10°S