

KSIĘŻYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
STYCZEŃ 2016									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	1 00	5 17	11 25	92	89	11 48 09	1 27.6	29.7	-0.62
2	0 01	5 59	11 49	86	83	12 33 14	-2 16.7	29.6	-0.52
3	1 02	6 42	12 14	80	78	13 18 23	-5 55.0	29.6	-0.43
4	2 03	7 25	12 40	75	73	14 04 18	-9 20.3	29.7	-0.34
5	3 05	8 11	13 11	70	68	14 51 35	-12 25.0	29.8	-0.25
6	4 06	8 58	13 46	65	64	15 40 43	-15 00.9	30.1	-0.17
7	5 06	9 48	14 27	62	61	16 32 00	-16 58.6	30.4	-0.10
8	6 04	10 40	15 15	61	60	17 25 25	-18 08.8	30.8	-0.05
9	6 57	11 34	16 12	61	61	18 20 36	-18 23.3	31.1	-0.02
10	7 45	12 29	17 16	63	64	19 16 57	-17 36.9	31.5	-0.00
11	8 28	13 23	18 25	66	68	20 13 41	-15 49.0	31.8	0.01
12	9 05	14 17	19 38	71	74	21 10 04	-13 04.4	32.0	0.05
13	9 38	15 10	20 53	77	80	22 05 42	-9 32.8	32.2	0.11
14	10 08	16 03	22 08	84	88	23 00 29	-5 27.4	32.3	0.19
15	10 38	16 54	23 23	91	95	23 54 37	-1 03.3	32.3	0.28
16	11 07	17 46	—	98	—	0 48 32	3 23.9	32.3	0.39
17	11 39	18 39	0 37	105	102	1 42 46	7 38.9	32.2	0.50
18	12 13	19 33	1 51	111	108	2 37 43	11 27.0	32.1	0.62
19	12 52	20 27	3 02	115	113	3 33 40	14 34.8	32.0	0.72
20	13 37	21 23	4 10	118	117	4 30 31	16 50.9	31.8	0.82
21	14 28	22 18	5 12	119	119	5 27 52	18 07.1	31.6	0.89
22	15 26	23 12	6 07	118	119	6 25 00	18 19.7	31.4	0.95
23	16 28	—	6 54	116	117	7 21 06	17 30.2	31.1	0.99
24	17 32	0 05	7 34	112	114	8 15 30	15 45.1	30.8	1.00
25	18 37	0 55	8 08	107	109	9 07 47	13 14.1	30.5	-0.99
26	19 41	1 42	8 37	101	104	9 57 52	10 08.5	30.3	-0.96
27	20 44	2 28	9 04	95	98	10 45 58	6 39.7	30.0	-0.92
28	21 46	3 11	9 29	89	92	11 32 32	2 58.0	29.8	-0.85
29	22 48	3 54	9 53	83	86	12 18 07	-0 47.4	29.6	-0.78
30	23 49	4 37	10 17	77	80	13 03 19	-4 28.6	29.5	-0.70
31	—	5 20	10 42	—	75	13 48 47	-7 58.5	29.6	-0.61

ostatnia kwadra:	2 I	5 ^h 30 ^m	3 I	18.8 ^h	Mars	1.5°S
nów:	10 I	1 ^h 30 ^m	7 I	0.0 ^h	Wenus	3°S
pierwsza kwadra:	16 I	23 ^h 26 ^m	7 I	4.6 ^h	Saturn	3°S
pełnia:	24 I	1 ^h 46 ^m	10 I	18.4 ^h	Merkury	2°S
			13 I	14.8 ^h	Neptun	2°S
apogeum:	2 I	11 ^h 54 ^m	16 I	6.3 ^h	Uran	1.5°N
perygeum:	15 I	2 ^h 11 ^m	28 I	1.3 ^h	Jowisz	1.4°N
apogeum:	30 I	9 ^h 11 ^m				