

KSIEŹYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
LISTOPAD 2010									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	0 35	7 29	14 06	103	98	9 53 51	8 25.4	32.4	-0.34
2	1 57	8 19	14 27	93	88	10 46 52	2 38.7	32.6	-0.23
3	3 19	9 11	14 48	83	79	11 40 01	- 3 20.7	32.8	-0.14
4	4 42	10 03	15 12	74	70	12 34 11	- 9 11.2	32.8	-0.07
5	6 06	10 58	15 39	65	62	13 30 03	-14 30.3	32.7	-0.02
6	7 29	11 55	16 14	58	56	14 27 54	-18 55.6	32.5	-0.00
7	8 46	12 53	16 57	52	51	15 27 27	-22 08.0	32.2	0.01
8	9 53	13 52	17 50	50	50	16 27 40	-23 54.9	31.8	0.04
9	10 48	14 48	18 51	51	52	17 27 09	-24 13.0	31.3	0.10
10	11 30	15 42	19 59	54	55	18 24 29	-23 08.1	30.9	0.17
11	12 03	16 31	21 08	59	61	19 18 46	-20 52.5	30.5	0.25
12	12 28	17 18	22 16	65	68	20 09 42	-17 41.0	30.1	0.34
13	12 49	18 01	23 23	72	75	20 57 36	-13 48.0	29.8	0.44
14	13 07	18 42	—	79	—	21 43 05	- 9 26.0	29.6	0.53
15	13 24	19 23	0 29	87	83	22 27 00	- 4 45.4	29.5	0.62
16	13 40	20 03	1 34	94	90	23 10 13	0 04.8	29.5	0.71
17	13 57	20 45	2 40	102	98	23 53 39	4 56.1	29.6	0.79
18	14 16	21 28	3 47	109	106	0 38 11	9 39.5	29.8	0.87
19	14 38	22 15	4 55	116	113	1 24 39	14 04.6	30.0	0.92
20	15 06	23 04	6 05	122	120	2 13 44	17 58.9	30.3	0.97
21	15 41	23 57	7 15	127	125	3 05 50	21 08.2	30.6	0.99
22	16 26	—	8 21	129	129	4 00 55	23 17.3	30.9	-1.00
23	17 23	0 53	9 21	129	129	4 58 21	24 12.8	31.2	-0.98
24	18 31	1 50	10 10	126	128	5 56 59	23 45.9	31.4	-0.94
25	19 46	2 46	10 50	121	123	6 55 26	21 55.3	31.7	-0.88
26	21 04	3 41	11 22	114	117	7 52 34	18 47.2	31.9	-0.80
27	22 24	4 34	11 48	105	109	8 47 49	14 34.0	32.0	-0.71
28	23 43	5 25	12 10	96	100	9 41 15	9 31.7	32.2	-0.60
29	—	6 15	12 31	—	91	10 33 24	3 57.5	32.3	-0.49
30	1 03	7 04	12 52	87	82	11 25 07	- 1 50.5	32.3	-0.37

nów:	6 XI	4 ^h 51 ^m	4 XI	5.6 ^h	Saturn	8°N
pierwsza kwadra:	13 XI	16 ^h 39 ^m	5 XI	8.5 ^h	Wenus	0.2°N
pełnia:	21 XI	17 ^h 27 ^m	7 XI	4.5 ^h	Merkury	2°N
ostatnia kwadra:	28 XI	20 ^h 36 ^m	7 XI	22.3 ^h	Mars	2°N
			14 XI	5.6 ^h	Neptun	5°N
perygeum:	3 XI	17 ^h 23 ^m	16 XI	15.7 ^h	Jowisz	7°S
apogeum:	15 XI	11 ^h 48 ^m	16 XI	21.8 ^h	Uran	7°S
perygeum:	30 XI	19 ^h 10 ^m				