

KSIĘŻYC

d	Wsch.	Kulm.	Zach.	A _w	A _z	α	δ	D	F
	λ=0°		φ=50°			0 ^h UT			
LISTOPAD 2022									
	h m	h m	h m	-°	+°	h m s	° ' "	' "	
1	14 22	18 36	23 00	54	57	20 34 32	-24 06.2	32.3	0.47
2	14 46	19 29	—	63	—	21 32 49	-20 06.2	32.1	0.58
3	15 05	20 19	0 24	72	66	22 27 20	-15 01.7	31.9	0.69
4	15 21	21 05	1 46	81	76	23 18 36	- 9 14.9	31.7	0.79
5	15 36	21 51	3 05	91	86	0 07 34	- 3 06.3	31.5	0.87
6	15 50	22 36	4 22	101	96	0 55 20	3 05.7	31.3	0.93
7	16 06	23 21	5 38	110	106	1 42 56	9 04.3	31.0	0.98
8	16 24	—	6 55	118	115	2 31 15	14 34.0	30.7	1.00
9	16 47	0 09	8 11	126	123	3 20 57	19 20.0	30.4	-1.00
10	17 16	0 58	9 24	131	130	4 12 21	23 09.0	30.2	-0.98
11	17 53	1 49	10 32	135	134	5 05 17	25 50.2	29.9	-0.94
12	18 42	2 40	11 31	136	136	5 59 10	27 16.0	29.7	-0.88
13	19 40	3 32	12 18	134	135	6 53 04	27 23.7	29.6	-0.81
14	20 45	4 22	12 54	130	131	7 45 59	26 15.3	29.5	-0.73
15	21 55	5 11	13 22	124	126	8 37 11	23 56.8	29.5	-0.65
16	23 06	5 57	13 43	116	119	9 26 23	20 36.7	29.6	-0.55
17	—	6 41	14 00	—	111	10 13 42	16 24.0	29.9	-0.46
18	0 17	7 24	14 15	108	103	10 59 39	11 28.2	30.2	-0.36
19	1 29	8 07	14 29	99	94	11 45 00	5 58.6	30.5	-0.27
20	2 43	8 51	14 43	89	84	12 30 44	0 05.4	31.0	-0.18
21	4 00	9 36	14 58	79	75	13 17 54	- 5 59.1	31.4	-0.11
22	5 21	10 25	15 16	69	65	14 07 42	-11 59.0	31.9	-0.05
23	6 46	11 18	15 40	59	56	15 01 13	-17 33.5	32.3	-0.01
24	8 14	12 17	16 12	51	49	15 59 15	-22 16.8	32.6	0.00
25	9 38	13 20	16 59	46	45	17 01 45	-25 40.9	32.9	0.02
26	10 50	14 25	18 02	44	44	18 07 28	-27 21.0	32.9	0.06
27	11 45	15 30	19 20	46	48	19 13 57	-27 04.0	32.9	0.13
28	12 24	16 30	20 46	52	55	20 18 26	-24 53.8	32.7	0.22
29	12 52	17 26	22 12	60	63	21 19 01	-21 08.4	32.5	0.32
30	13 12	18 17	23 35	69	73	22 15 07	-16 13.0	32.2	0.43

pierwsza kwadra:	1 XI	6 ^h 37 ^m		1 XI	21.2 ^h	Saturn	4°N
pełnia:	8 XI	11 ^h 02 ^m		4 XI	8.4 ^h	Neptun	3°N
ostatnia kwadra:	16 XI	13 ^h 27 ^m		4 XI	20.4 ^h	Jowisz	2°N
nów:	23 XI	22 ^h 57 ^m		8 XI	13.2 ^h	Uran	0.8°S
pierwsza kwadra:	30 XI	14 ^h 37 ^m		11 XI	13.9 ^h	Mars	2.5°S
				24 XI	14.1 ^h	Wenus	2°N
apogeum:	14 XI	6 ^h 40 ^m		24 XI	15.1 ^h	Merkury	0.9°N
perygeum:	26 XI	1 ^h 34 ^m		29 XI	4.8 ^h	Saturn	4°N