

2003 - October

Calendar for Mauna Kea - Hawai'i

2003 - October

Longitude: W 155 28  
Latitude : N 19 50

Height: 4215m  
Time Zone: -10h 00m

Zone Time = UT - 10h 00m

Date	J.D. at Oh UT 245	LMST at Oh UT h m s	Moon		Moon Transit Dec. Phase o ' o	Morning			Sun		Evening			
			Rise h m	Set h m		Astr. Twil. h m	Naut. Twil. h m	Civil Twil. h m	Rise h m	Set h m	Civil Twil. h m	Naut. Twil. h m	Astr. Twil. h m	
Wed 1	2913.5	14 15 24	11 58	23 23	-27 24	0.43	05 00	05 25	05 51	06 03	18 20	18 32	18 58	19 23
Thur 2	2914.5	14 19 20	13 00	.. ..	-27 28	0.54	05 00	05 25	05 51	06 03	18 19	18 31	18 57	19 22
Fri 3	2915.5	14 23 17	13 56	00 24	-25 45	0.66	05 00	05 26	05 51	06 03	18 18	18 30	18 56	19 21
Sat 4	2916.5	14 27 13	14 47	01 25	-22 32	0.76	05 00	05 26	05 51	06 04	18 17	18 29	18 55	19 20
Sun 5	2917.5	14 31 10	15 32	02 25	-18 10	0.84	05 01	05 26	05 52	06 04	18 16	18 29	18 54	19 20
Mon 6	2918.5	14 35 07	16 11	03 22	-13 02	0.91	05 01	05 26	05 52	06 04	18 16	18 28	18 53	19 19
Tues 7	2919.5	14 39 03	16 48	04 16	-07 24	0.96	05 01	05 27	05 52	06 04	18 15	18 27	18 52	19 18
Wed 8	2920.5	14 43 00	17 21	05 07	-01 34	0.99	05 01	05 27	05 52	06 05	18 14	18 26	18 52	19 17
Thur 9	2921.5	14 46 56	17 54	05 57	.. ..	....	05 02	05 27	05 53	06 05	18 13	18 25	18 51	19 16
Fri 10	2922.5	14 50 53	18 26	06 47	+04 14	1.00	05 02	05 27	05 53	06 05	18 12	18 25	18 50	19 16
Sat 11	2923.5	14 54 49	19 00	07 37	+09 47	0.99	05 02	05 28	05 53	06 05	18 11	18 24	18 49	19 15
Sun 12	2924.5	14 58 46	19 36	08 27	+14 54	0.96	05 02	05 28	05 53	06 06	18 11	18 23	18 49	19 14
Mon 13	2925.5	15 02 42	20 14	09 19	+19 23	0.91	05 03	05 28	05 54	06 06	18 10	18 22	18 48	19 13
Tues 14	2926.5	15 06 39	20 56	10 12	+23 01	0.85	05 03	05 28	05 54	06 06	18 09	18 21	18 47	19 13
Wed 15	2927.5	15 10 35	21 43	11 05	+25 37	0.77	05 03	05 29	05 54	06 07	18 08	18 21	18 46	19 12
Thur 16	2928.5	15 14 32	22 34	11 58	+26 59	0.68	05 03	05 29	05 55	06 07	18 08	18 20	18 46	19 11
Fri 17	2929.5	15 18 29	23 28	12 49	+27 00	0.58	05 04	05 29	05 55	06 07	18 07	18 19	18 45	19 11
Sat 18	2930.5	15 22 25	.. ..	13 38	+25 36	0.48	05 04	05 30	05 55	06 08	18 06	18 19	18 44	19 10
Sun 19	2931.5	15 26 22	00 25	14 24	+22 47	0.38	05 04	05 30	05 56	06 08	18 05	18 18	18 44	19 09
Mon 20	2932.5	15 30 18	01 23	15 06	+18 38	0.28	05 04	05 30	05 56	06 08	18 05	18 17	18 43	19 09
Tues 21	2933.5	15 34 15	02 22	15 47	+13 20	0.18	05 05	05 30	05 56	06 09	18 04	18 16	18 42	19 08
Wed 22	2934.5	15 38 11	03 21	16 26	+07 07	0.10	05 05	05 31	05 57	06 09	18 03	18 16	18 42	19 07
Thur 23	2935.5	15 42 08	04 20	17 06	+00 17	0.04	05 05	05 31	05 57	06 09	18 03	18 15	18 41	19 07
Fri 24	2936.5	15 46 04	05 21	17 47	-06 45	0.01	05 06	05 31	05 57	06 10	18 02	18 15	18 40	19 06
Sat 25	2937.5	15 50 01	06 24	18 31	-13 33	0.00	05 06	05 32	05 58	06 10	18 02	18 14	18 40	19 06
Sun 26	2938.5	15 53 58	07 29	19 19	-19 32	0.03	05 06	05 32	05 58	06 11	18 01	18 13	18 39	19 05
Mon 27	2939.5	15 57 54	08 37	20 13	-24 10	0.09	05 07	05 32	05 58	06 11	18 00	18 13	18 39	19 05
Tues 28	2940.5	16 01 51	09 45	21 12	-27 00	0.17	05 07	05 33	05 59	06 11	18 00	18 12	18 38	19 04
Wed 29	2941.5	16 05 47	10 51	22 15	-27 48	0.28	05 07	05 33	05 59	06 12	17 59	18 12	18 38	19 04
Thur 30	2942.5	16 09 44	11 51	23 18	-26 38	0.39	05 08	05 34	06 00	06 12	17 59	18 11	18 37	19 03
Fri 31	2943.5	16 13 40	12 45	.. ..	-23 48	0.50	05 08	05 34	06 00	06 13	17 58	18 11	18 37	19 03