

2010 - October

Calendar for Mauna Kea - Hawai'i

2010 - 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 | Set | | Astr. Twil. | Naut. Twil. | Civil Twil. | Rise | Set | Civil Twil. | Naut. Twil. | Astr. Twil. | |
| | | | h m | h m | | h m | h m | h m | h m | h m | h m | h m | h m | h m |
| Fri 1 | 5470.5 | 14 16 38 | | 13 44 | +21 55 | 0.44 | 05 00 | 05 25 | 05 51 | 06 03 | 18 20 | 18 32 | 18 57 | 19 23 |
| Sat 2 | 5471.5 | 14 20 34 | 00 48 | 14 32 | +18 19 | 0.33 | 05 00 | 05 25 | 05 51 | 06 03 | 18 19 | 18 31 | 18 56 | 19 22 |
| Sun 3 | 5472.5 | 14 24 31 | 01 50 | 15 18 | +13 28 | 0.22 | 05 00 | 05 26 | 05 51 | 06 03 | 18 18 | 18 30 | 18 56 | 19 21 |
| Mon 4 | 5473.5 | 14 28 27 | 02 53 | 16 02 | +07 38 | 0.13 | 05 00 | 05 26 | 05 51 | 06 04 | 18 17 | 18 29 | 18 55 | 19 20 |
| Tues 5 | 5474.5 | 14 32 24 | 03 55 | 16 45 | +01 13 | 0.06 | 05 01 | 05 26 | 05 52 | 06 04 | 18 16 | 18 28 | 18 54 | 19 19 |
| Wed 6 | 5475.5 | 14 36 20 | 04 58 | 17 28 | -05 21 | 0.01 | 05 01 | 05 26 | 05 52 | 06 04 | 18 15 | 18 28 | 18 53 | 19 19 |
| Thur 7 | 5476.5 | 14 40 17 | 06 01 | 18 14 | -11 34 | 0.00 | 05 01 | 05 27 | 05 52 | 06 04 | 18 14 | 18 27 | 18 52 | 19 18 |
| Fri 8 | 5477.5 | 14 44 14 | 07 04 | 19 02 | -16 59 | 0.02 | 05 01 | 05 27 | 05 52 | 06 05 | 18 14 | 18 26 | 18 51 | 19 17 |
| Sat 9 | 5478.5 | 14 48 10 | 08 08 | 19 53 | -21 12 | 0.07 | 05 02 | 05 27 | 05 53 | 06 05 | 18 13 | 18 25 | 18 51 | 19 16 |
| Sun 10 | 5479.5 | 14 52 07 | 09 11 | 20 46 | -23 56 | 0.14 | 05 02 | 05 27 | 05 53 | 06 05 | 18 12 | 18 24 | 18 50 | 19 15 |
| Mon 11 | 5480.5 | 14 56 03 | 10 11 | 21 42 | -25 05 | 0.23 | 05 02 | 05 28 | 05 53 | 06 06 | 18 11 | 18 23 | 18 49 | 19 15 |
| Tues 12 | 5481.5 | 15 00 00 | 11 07 | 22 38 | -24 41 | 0.33 | 05 02 | 05 28 | 05 54 | 06 06 | 18 10 | 18 23 | 18 48 | 19 14 |
| Wed 13 | 5482.5 | 15 03 56 | 11 58 | 23 34 | -22 56 | 0.43 | 05 03 | 05 28 | 05 54 | 06 06 | 18 10 | 18 22 | 18 48 | 19 13 |
| Thur 14 | 5483.5 | 15 07 53 | 12 43 | | -20 04 | 0.53 | 05 03 | 05 28 | 05 54 | 06 06 | 18 09 | 18 21 | 18 47 | 19 12 |
| Fri 15 | 5484.5 | 15 11 49 | 13 25 | 00 27 | -16 22 | 0.63 | 05 03 | 05 29 | 05 54 | 06 07 | 18 08 | 18 20 | 18 46 | 19 12 |
| Sat 16 | 5485.5 | 15 15 46 | 14 02 | 01 18 | -12 02 | 0.72 | 05 03 | 05 29 | 05 55 | 06 07 | 18 07 | 18 20 | 18 45 | 19 11 |
| Sun 17 | 5486.5 | 15 19 43 | 14 37 | 02 08 | -07 17 | 0.80 | 05 04 | 05 29 | 05 55 | 06 07 | 18 07 | 18 19 | 18 45 | 19 10 |
| Mon 18 | 5487.5 | 15 23 39 | 15 10 | 02 56 | -02 16 | 0.87 | 05 04 | 05 30 | 05 55 | 06 08 | 18 06 | 18 18 | 18 44 | 19 10 |
| Tues 19 | 5488.5 | 15 27 36 | 15 43 | 03 44 | +02 51 | 0.93 | 05 04 | 05 30 | 05 56 | 06 08 | 18 05 | 18 18 | 18 43 | 19 09 |
| Wed 20 | 5489.5 | 15 31 32 | 16 17 | 04 32 | +07 54 | 0.97 | 05 05 | 05 30 | 05 56 | 06 08 | 18 05 | 18 17 | 18 43 | 19 08 |
| Thur 21 | 5490.5 | 15 35 29 | 16 52 | 05 22 | +12 40 | 0.99 | 05 05 | 05 31 | 05 56 | 06 09 | 18 04 | 18 16 | 18 42 | 19 08 |
| Fri 22 | 5491.5 | 15 39 25 | 17 30 | 06 13 | | | 05 05 | 05 31 | 05 57 | 06 09 | 18 03 | 18 16 | 18 41 | 19 07 |
| Sat 23 | 5492.5 | 15 43 22 | 18 11 | 07 06 | +16 57 | 1.00 | 05 05 | 05 31 | 05 57 | 06 09 | 18 03 | 18 15 | 18 41 | 19 07 |
| Sun 24 | 5493.5 | 15 47 18 | 18 57 | 08 01 | +20 30 | 0.98 | 05 06 | 05 32 | 05 57 | 06 10 | 18 02 | 18 14 | 18 40 | 19 06 |
| Mon 25 | 5494.5 | 15 51 15 | 19 47 | 08 57 | +23 01 | 0.94 | 05 06 | 05 32 | 05 58 | 06 10 | 18 01 | 18 14 | 18 40 | 19 05 |
| Tues 26 | 5495.5 | 15 55 11 | 20 42 | 09 53 | +24 18 | 0.88 | 05 06 | 05 32 | 05 58 | 06 11 | 18 01 | 18 13 | 18 39 | 19 05 |
| Wed 27 | 5496.5 | 15 59 08 | 21 40 | 10 48 | +24 08 | 0.80 | 05 07 | 05 33 | 05 59 | 06 11 | 18 00 | 18 13 | 18 39 | 19 04 |
| Thur 28 | 5497.5 | 16 03 05 | 22 40 | 11 40 | +22 29 | 0.71 | 05 07 | 05 33 | 05 59 | 06 11 | 18 00 | 18 12 | 18 38 | 19 04 |
| Fri 29 | 5498.5 | 16 07 01 | 23 41 | 12 28 | +19 24 | 0.60 | 05 07 | 05 33 | 05 59 | 06 12 | 17 59 | 18 12 | 18 38 | 19 03 |
| Sat 30 | 5499.5 | 16 10 58 | | 13 13 | +15 04 | 0.48 | 05 08 | 05 34 | 06 00 | 06 12 | 17 59 | 18 11 | 18 37 | 19 03 |
| Sun 31 | 5500.5 | 16 14 54 | 00 42 | 13 56 | +09 46 | 0.37 | 05 08 | 05 34 | 06 00 | 06 13 | 17 58 | 18 11 | 18 37 | 19 03 |