

SKYTRACK

Diary of Astronomical Events 2012

(All times listed are UT); Singapore Standard (Local) Time = UT + 8 h

January

d h

01 06 FIRST QUARTER
03 03 Jupiter 5 °S of Moon
09 08 FULL MOON
14 07 Mars 9 °N of Moon
16 09 LAST QUARTER
16 19 Saturn 6 °N of Moon
23 08 NEW MOON
25 01 Mars stationary
26 19 Venus 7 °S of Moon
30 15 Jupiter 5 °S of Moon
31 04 FIRST QUARTER

February

d h

07 09 Mercury in superior conjunction
07 22 FULL MOON
08 12 Saturn stationary
10 12 Mars 10 °N of Moon
13 01 Saturn 6 °N of Moon
14 17 LAST QUARTER
21 23 NEW MOON
25 22 Venus 3 °S of Moon
27 06 Jupiter 4 °S of Moon

March

d h

01 01 FIRST QUARTER
03 20 Mars at opposition
05 10 Mercury greatest elongation E (18 °)
05 17 Mars closest approach
08 06 Mars 10 °N of Moon
08 10 FULL MOON

11 07 Saturn 6 °N of Moon
 11 21 Mercury stationary
 15 01 LAST QUARTER
 15 11 Venus 3 °N of Jupiter
 20 05 Equinox
 21 19 Mercury in inferior conjunction
 22 15 NEW MOON
 26 00 Jupiter 3 °S of Moon
 26 18 Venus 1.8 °N of Moon
 27 08 Venus greatest elongation E (46 °)
 30 20 FIRST QUARTER

April

d h

03 06 Mercury stationary
 04 03 Mars 9 °N of Moon
 06 19 FULL MOON
 07 14 Saturn 6 °N of Moon
 13 11 LAST QUARTER
 15 12 Mars stationary
 15 18 Saturn at opposition
 17 01 Venus 10 °N of Aldebaran
 18 17 Mercury greatest elongation W (27 °)
 19 02 Mercury 8 °S of Moon
 21 07 NEW MOON
 22 19 Jupiter 2 °S of Moon
 25 02 Venus 6 °N of Moon
 29 10 FIRST QUARTER
 30 08 Venus greatest illuminated extent

May

d h

01 14 Mars 8 °N of Moon
 04 22 Saturn 4 °N of Jupiter
 06 04 FULL MOON
 12 22 LAST QUARTER
 13 13 Jupiter in conjunction with Sun
 15 17 Venus stationary
 21 00 NEW MOON (Annular Solar Eclipse not visible from Singapore)
 22 21 Venus 5 °N of Moon
 27 11 Mercury in superior conjunction
 28 20 FIRST QUARTER
 29 11 Mars 7 °N of Moon

June

d h

01	05	Saturn 7 °N of Moon	
04	11	FULL MOON	(Partial Lunar Eclipse visible from Singapore)†
06	01	Venus in inferior conjunction	(Transit of Venus over Sun visible from Singapore) §
11	11	LAST QUARTER	
15	06	Venus 4 °N of Aldebaran	
17	08	Jupiter 1.1 °S of Moon	
18	01	Venus 2 °S of Moon	
19	15	NEW MOON	
20	23	Solstice	
21	18	Mercury 5 °S of Pollux	
21	19	Mercury 6 °N of Moon	
26	09	Saturn stationary	
26	15	Mars 6 °N of Moon	
27	04	FIRST QUARTER	
27	04	Venus stationary	
28	12	Saturn 6 °N of Moon	

†*The umbral phase of the partial lunar eclipse begins before moonrise. (Moon rises at about 19 07 h on June 4 in Singapore.) The Moon enters the Earth's umbra at 18 00 h Singapore Standard (Local) Time. Mid-eclipse is at 19 03 h. The Moon leaves the Earth's umbra at 20 06 h. In other words, the umbral phase of the partial lunar eclipse will end 59 minutes after moonrise. The umbral magnitude (defined as the fraction on the Moon's diameter immersed in the Earth's umbra at maximum lunar eclipse) is 0.37.*

§*The transit of Venus starts before sunrise on June 6. (Sun rises at about 06 58 h on June 6 in Singapore.) Greatest transit of Venus is at 09 33 h Singapore Standard (Local) Time. The transit visible from Singapore ends at 12 49 h. The next transit of Venus will be in December 2117.*

Warning: Looking directly at the Sun without proper solar filter or protection would cause permanent blindness. You may view the Sun directly only through a special filter made for safe solar viewing. Never look directly through telescopes, binoculars or cameras towards the Sun without proper solar filters.

July

d h

01	02	Mercury greatest elongation E (26 °)	
03	19	FULL MOON	
09	19	Venus 0.9 °N of Aldebaran	
11	02	LAST QUARTER	

12 16 Venus greatest illuminated extent
 14 05 Mercury stationary
 15 03 Jupiter 0.5 °S of Moon
 15 15 Venus 4 °S of Moon
 19 04 NEW MOON
 24 22 Mars 4 °N of Moon
 25 17 Spica 1.2 °N of Moon
 25 19 Saturn 6 °N of Moon
 26 09 FIRST QUARTER
 28 20 Mercury in inferior conjunction

August

d h

02 03 FULL MOON
 03 05 Jupiter 5 °N of Aldebaran
 07 17 Mercury stationary
 09 19 LAST QUARTER
 11 21 Jupiter 0.1 °N of Moon
 13 00 Mars 1.9 °N of Spica
 13 20 Venus 0.6 °S of Moon
 15 09 Venus greatest elongation W (46 °)
 16 05 Mercury 4 °N of Moon
 16 12 Mercury greatest elongation W (19 °)
 17 09 Mars 3 °S of Saturn
 17 16 NEW MOON
 21 22 Spica 1 °N of Moon
 22 03 Saturn 5 °N of Moon
 22 08 Mars 2 °N of Spica
 24 14 FIRST QUARTER
 31 14 FULL MOON

September

d h

01 22 Venus 9 °S of Pollux
 08 11 Jupiter 0.6 °N of Moon
 08 13 LAST QUARTER
 10 13 Mercury in superior conjunction
 12 17 Venus 4 °N of Moon
 16 02 NEW MOON
 18 05 Spica 0.8 °N of Moon
 18 14 Saturn 5 °N of Moon
 19 21 Mars 0.2 °N of Moon
 21 15 Equinox

22 20 FIRST QUARTER
30 03 FULL MOON

October

d h

01 02 Mercury 1.8 °N of Spica
03 08 Venus 0.1 °S of Regulus
04 14 Jupiter stationary
05 21 Jupiter 0.9 °N of Moon
06 07 Mercury 3 °S of Saturn
08 08 LAST QUARTER
12 19 Venus 6 °N of Moon
15 12 NEW MOON
17 02 Mercury 1.3 °S of Moon
18 13 Mars 2 °S of Moon
20 06 Mars 4 °N of Antares
22 04 FIRST QUARTER
25 09 Saturn in conjunction with Sun
26 22 Mercury greatest elongation E (24 °)
29 20 FULL MOON

November

d h

02 01 Jupiter 0.9 °N of Moon
07 01 LAST QUARTER
07 04 Mercury Stationary
11 18 Venus 5 °N of Moon
12 02 Spica 0.8 °N of Moon
12 21 Saturn 4 °N of Moon
13 22 NEW MOON (Total Solar Eclipse not visible from Singapore)
15 23 Venus 4 °N of Spica
16 10 Mars 4 °S of Moon
17 16 Mercury in inferior conjunction
20 15 FIRST QUARTER
26 20 Mercury stationary
27 05 Venus 0.6 °S of Saturn
28 15 FULL MOON (Penumbral Lunar Eclipse)*
29 01 Jupiter 0.6 °N of Moon

**A penumbral eclipse occurs when the Moon passes through the Earth's penumbra.
This penumbral eclipse begins at 20 15 h Singapore Standard (Local) Time on Nov 28*

as the Moon enters the Earth's penumbra. The penumbral eclipse ends at 00 51 h on Nov 29 as the Moon leaves the Earth's penumbra. The penumbral magnitude of 0.92. Shadow of the Earth in the penumbral region is not dark enough to cause a very obvious change in the illumination of the Moon. Hence penumbral eclipses are of only academic interest because they are subtle and hard to be detected by the human eye.

December

d h

03 02 Jupiter at opposition
04 23 Mercury greatest elongation W (21 °)
06 16 LAST QUARTER
07 20 Jupiter 5 °N of Aldebaran
09 12 Spica 0.8 °N of Moon
10 12 Saturn 4 °N of Moon
11 14 Venus 1.6 °N of Moon
12 01 Mercury 1.1 °N of Moon
13 09 NEW MOON
15 10 Mars 6 °S of Moon
17 15 Mercury 6 °N of Antares
20 05 FIRST QUARTER
21 11 Solstice
23 11 Venus 6 °N of Antares
26 00 Jupiter 0.4 °N of Moon
28 10 FULL MOON