

# SKYTRACK

## Diary of Astronomical Events 2011

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

### January

#### d h

02	15	Mercury 4° N of Moon
04	09	NEW MOOM (Partial Solar Eclipse not visible from Singapore)
08	16	Venus greatest elongation W (47°)
09	15	Mercury greatest elongation W (23°)
10	17	Jupiter 7° S of Moon
12	12	FIRST QUARTER
15	22	Venus 8° N of Antares
19	21	FULL MOON
25	10	Saturn 8° N of Moon
26	13	LAST QUARTER
27	08	Saturn stationary
30	04	Venus 3° N of Moon

### February

#### d h

01	18	Mercury 4° S of Moon
03	03	NEW MOON
04	17	Mars in conjunction with Sun
07	10	Jupiter 7° S of Moon
11	07	FIRST QUARTER
18	09	FULL MOON
21	17	Saturn 8° N of Moon
24	23	LAST QUARTER
25	09	Mercury in superior conjunction

### March

#### d h

01	04	Venus 1.6° S of Moon
04	21	NEW MOON
07	05	Jupiter 7° S of Moon
13	00	FIRST QUARTER
16	17	Mercury 2° N of Jupiter

19 18 FULL MOON  
 20 23 Equinox  
 21 00 Saturn 8° N of Moon  
 23 01 Mercury greatest elongation E (19°)  
 26 12 LAST QUARTER  
 27 01 Venus 0.2° S of Neptune  
 30 17 Mercury stationary  
 31 13 Venus 6° S of Moon

## April

### d h

03 15 NEW MOON  
 04 00 Saturn at opposition  
 06 15 Jupiter at conjunction with Sun  
 09 20 Mercury in inferior conjunction  
 11 12 FIRST QUARTER  
 17 08 Saturn 8° N of Moon  
 18 03 FULL MOON  
 19 08 Mercury 0.8° N of Mars  
 22 05 Mercury stationary  
 25 03 LAST QUARTER  
 30 23 Venus 7° S of Moon

## May

### d h

01 07 Mercury 8° S of Moon  
 01 11 Mars 0.4° N of Jupiter  
 01 19 Jupiter 6° S of Moon  
 01 20 Mars 6° S of Moon  
 03 07 NEW MOON  
 07 19 Mercury greatest elongation W (27°)  
 10 21 FIRST QUARTER  
 10 23 Mercury 2° S of Jupiter  
 11 09 Venus 0.6° S of Jupiter  
 14 15 Saturn 8° N of Moon  
 17 11 FULL MOON  
 20 01 Mercury 2° S of Mars  
 22 15 Venus 1.1° S of Mars  
 24 19 LAST QUARTER  
 29 15 Jupiter 6° S of Moon  
 30 20 Mars 4° S of Moon  
 31 04 Venus 4° S of Moon

## June

### d h

01	21	NEW MOON	(Partial Solar Eclipse not visible from Singapore)
09	02	FIRST QUARTER	
10	21	Saturn 8° N of Moon	
13	00	Mercury in superior conjunction	
14	05	Saturn stationary	
15	20	FULL MOON	(Total Lunar Eclipse visible from Singapore)†
18	08	Venus 5° N of Aldebaran	
21	17	Solstice	
23	12	LAST QUARTER	
26	09	Jupiter 5° S of Moon	
28	19	Mars 1.7° S of Moon	
28	22	Mercury 5° S of Pollux	

†*The total lunar eclipse is visible in the early morning of Jun16 . The Moon enters the Earth's umbra at 02 23 h Singapore Standard (Local) Time. Mid-eclipse is at 04 13 h. The Moon leaves the Earth's umbra at 06 02 h. The umbral magnitude (defined as the fraction on the Moon's diameter immersed in the Earth's umbra at maximum lunar eclipse) is 1.70.*

## July

### d h

01	09	NEW MOON	(Partial Solar Eclipse not visible from Singapore)
03	02	Mercury 5° N of Moon	
06	07	Mars 5° N of Aldebaran	
08	04	Saturn 8° N of Moon	
08	06	FIRST QUARTER	
15	07	FULL MOON	
20	05	Mercury greatest elongation E (27°)	
23	05	LAST QUARTER	
24	01	Jupiter 5° S of Moon	
27	17	Mars 0.5° N of Moon	
30	19	NEW MOON	

## August

### d h

01	11	Mercury 1.5° N of Moon	
02	07	Mercury stationary	
04	12	Saturn 8° N of Moon	

06 11 FIRST QUARTER  
 13 19 FULL MOON  
 16 12 Venus in superior conjunction  
 17 01 Mercury in inferior conjunction  
 20 12 Jupiter 5° S of Moon  
 21 22 LAST QUARTER  
 25 14 Mars 3° N of Moon  
 26 04 Mercury stationary  
 28 01 Mercury 3° N of Moon  
 29 03 NEW MOON  
 30 17 Jupiter stationary  
 31 23 Saturn 7° N of Moon

## September

### d h

03 06 Mercury greatest elongation W (18°)  
 04 18 FIRST QUARTER  
 09 02 Mercury 0.7° N of Regulus  
 10 02 Mars 6° S of Pollux  
 12 09 FULL MOON  
 16 18 Jupiter 5° S of Moon  
 20 14 LAST QUARTER  
 23 08 Mars 5° N of Moon  
 23 09 Equinox  
 27 11 NEW MOON  
 28 20 Mercury in superior conjunction

## October

### d h

03 12 Venus 3° N of Spica  
 04 03 FIRST QUARTER  
 12 02 FULL MOON  
 13 20 Jupiter 5° S of Moon  
 13 21 Saturn in conjunction with Sun  
 20 04 LAST QUARTER  
 22 00 Mars 6° N of Moon  
 26 20 NEW MOON  
 28 02 Mercury 0.2° N of Moon  
 28 05 Venus 1.8° N of Moon  
 29 02 Jupiter at opposition  
 31 05 Saturn 5° N of Spica

## November

### d h

02	17	FIRST QUARTER	
09	19	Jupiter 5° S of Moon	
09	21	Venus 4° N of Antares	
10	05	Mars 1.4° N of Regulus	
10	05	Mercury 1.9° N of Antares	
10	20	FULL MOON	
14	09	Mercury greatest elongation E (23°)	
18	15	LAST QUARTER	
19	10	Mars 8° N of Moon	
22	22	Saturn 7° N of Moon	
24	10	Mercury stationary	
25	06	NEW MOON	(Partial Solar Eclipse not visible from Singapore)
26	10	Mercury 1.7° S of Moon	
27	04	Venus 3° S of Moon	

## December

### d h

02	10	FIRST QUARTER	
04	09	Mercury in inferior conjunction	
06	20	Jupiter 5° S of Moon	
10	15	FULL MOON	(Total Lunar Eclipse visible from Singapore)‡
14	02	Mercury stationary	
17	13	Mars 8° N of Moon	
18	01	LAST QUARTER	
20	10	Saturn 7° N of Moon	
22	06	Solstice	
22	20	Mercury 7° N of Antares	
23	03	Mercury greatest elongation W (22°)	
23	04	Mercury 3° N of Moon	
24	18	NEW MOON	
26	11	Jupiter stationary	
27	11	Venus 6° S of Moon	

‡*The total lunar eclipse is visible in the evening of Dec 10. The Moon enters the Earth's umbra at 20 45 h Singapore Standard (Local) Time. Mid-eclipse is at 22 32 h. The Moon leaves the Earth's umbra at 00 18 h of Dec 11. The umbral magnitude (defined as the fraction on the Moon's diameter immersed in the Earth's umbra at maximum lunar eclipse) is 1.106.*