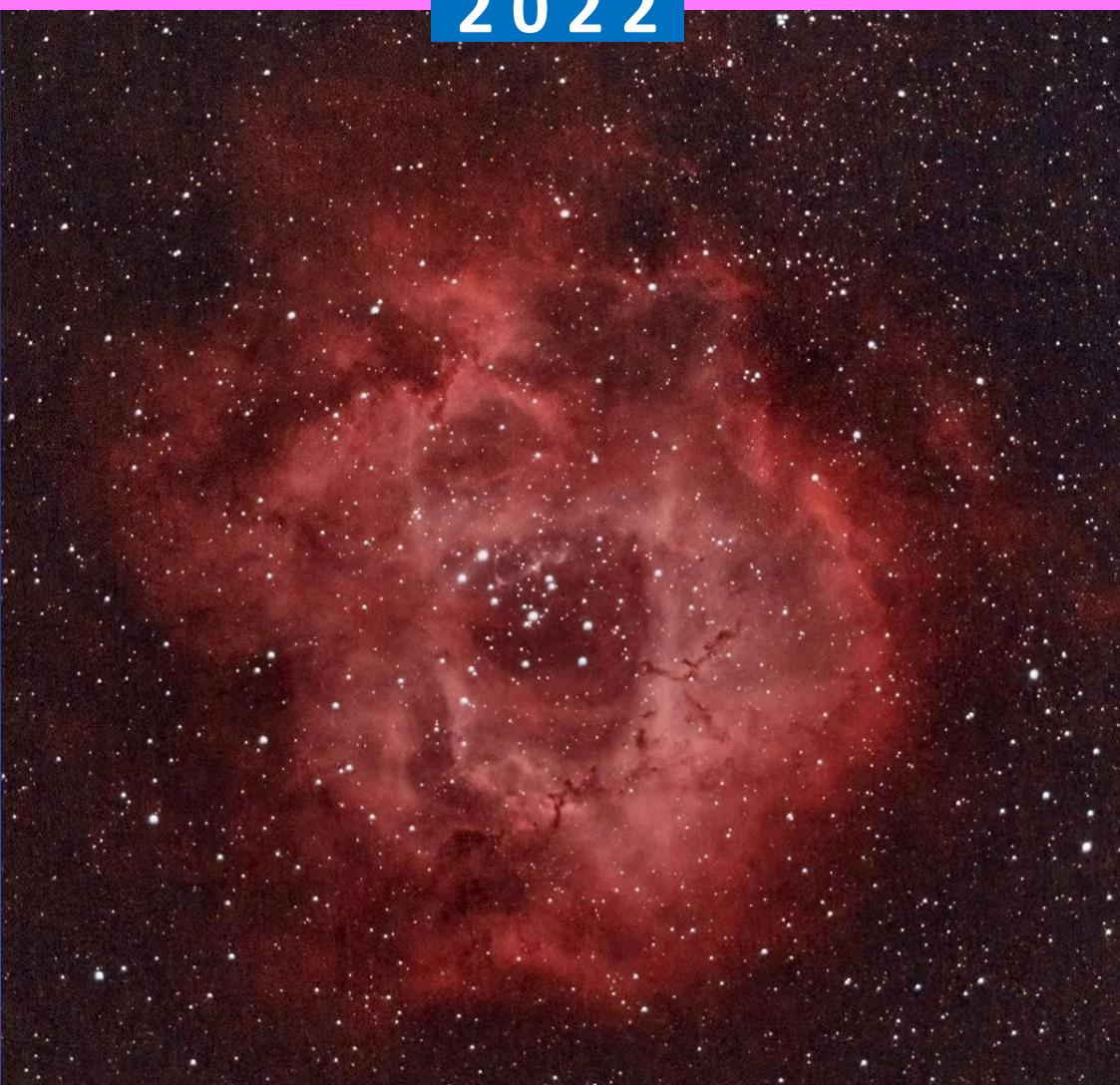
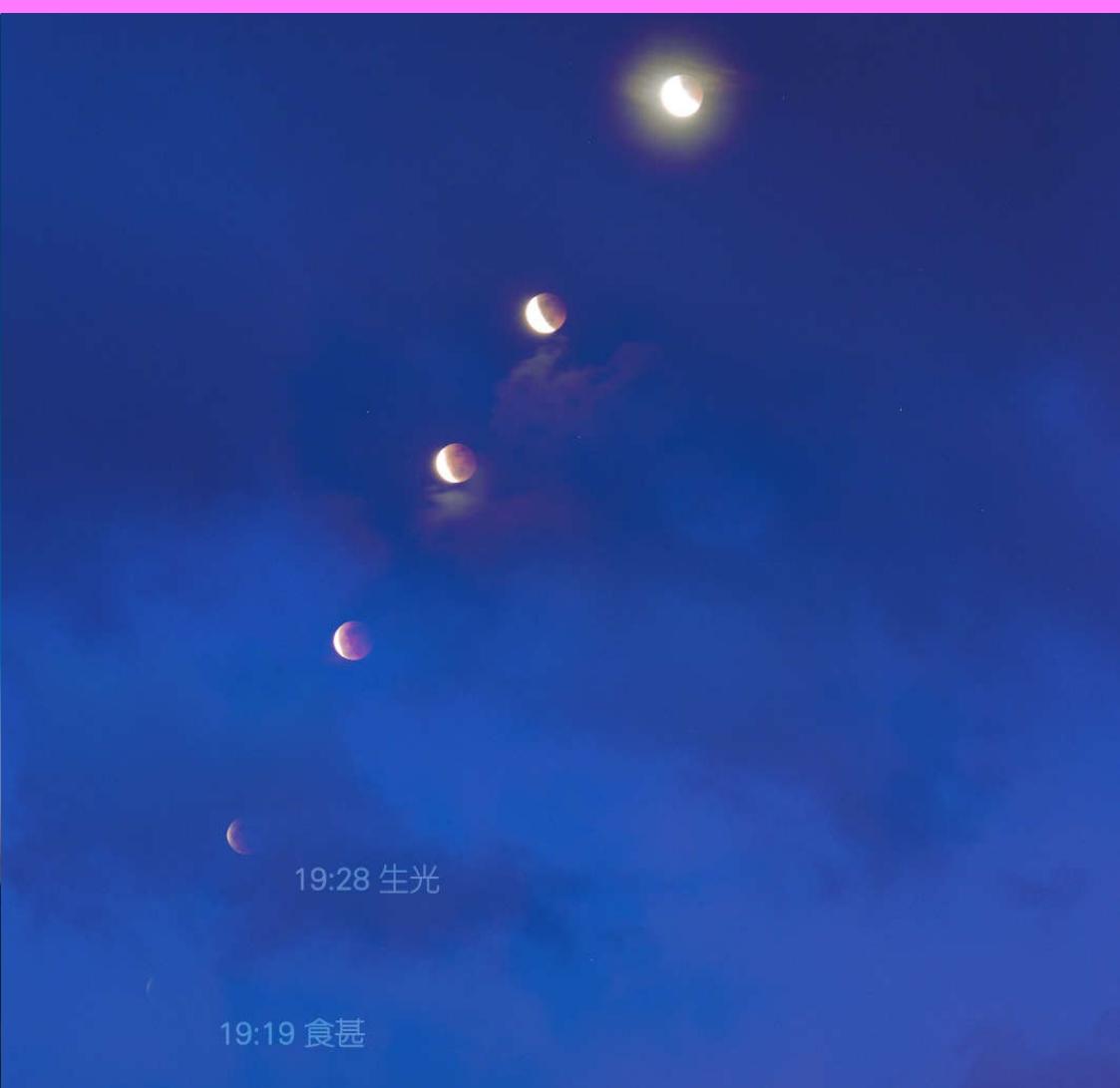


# 香港天文台年曆

Hong Kong Observatory Almanac

2022



**資訊網頁**  
**Information Webpages**

天文台開放數據集

[www.hko.gov.hk/tc/abouthko/opendata\\_intro.htm](http://www.hko.gov.hk/tc/abouthko/opendata_intro.htm)



HKO Observatory Open Data

[www.hko.gov.hk/en/abouthko/opendata\\_intro.htm](http://www.hko.gov.hk/en/abouthko/opendata_intro.htm)



我的天文台

[www.hko.gov.hk/tc/myobservatory.htm](http://www.hko.gov.hk/tc/myobservatory.htm)



MyObservatory

[www.hko.gov.hk/en/myobservatory.htm](http://www.hko.gov.hk/en/myobservatory.htm)



世界天氣信息服務網站

World Weather Information Service Website

[worldweather.wmo.int](http://worldweather.wmo.int)



惡劣天氣信息中心2.0網站

Severe Weather Information Centre 2.0 Website

[severeweather.wmo.int/v2/](http://severeweather.wmo.int/v2/)



2022年香港天文台年曆網上版

[www.hko.gov.hk/tc/gts/astron2022/almanac2022\\_index.htm](http://www.hko.gov.hk/tc/gts/astron2022/almanac2022_index.htm)



Hong Kong Observatory Almanac 2022 online version

[www.hko.gov.hk/en/gts/astron2022/almanac2022\\_index.htm](http://www.hko.gov.hk/en/gts/astron2022/almanac2022_index.htm)



天文觀測天氣資訊

[www.hko.gov.hk/tc/gts/astronomy/astro\\_portal.html](http://www.hko.gov.hk/tc/gts/astronomy/astro_portal.html)



Weather Information for Astronomical Observation

[www.hko.gov.hk/en/gts/astronomy/astro\\_portal.html](http://www.hko.gov.hk/en/gts/astronomy/astro_portal.html)



氣候資料服務

[www.hko.gov.hk/tc/cis/climat.htm](http://www.hko.gov.hk/tc/cis/climat.htm)



Climatological Information Services

[www.hko.gov.hk/en/cis/climat.htm](http://www.hko.gov.hk/en/cis/climat.htm)



**封面**

2021 年的玫瑰星雲。照片是由 39 張數碼照片所合成，每張以光圈 f/2.8、ISO 6400 及快門速度 60 秒在太平山頂拍攝。（照片由甄榮磊先生提供）

**封底**

2021 年 5 月 26 日在本港出現的月全食，照片是由 7 張數碼照片所合成，每張以光圈 f/5、ISO 500 及快門速度介乎 1/13 與 1.3 秒之間在大老山天氣雷達站拍攝。（照片由許浩強先生提供）

**Front cover**

Rosette Nebula captured in 2021 at Victoria Peak. The picture was a composite of 39 digital images captured with aperture f/2.8, ISO 6400 and exposure time of 60 seconds. (Photo courtesy of Mr. Edwin Wing-lui Ginn)

**Back cover**

"Total Lunar Eclipse" captured on 26 May 2021 at the Tate's Cairn Weather Radar Station. The picture was a composite of 7 digital images captured with aperture f/5 and an exposure time ranging from 1/13 to 1.3 seconds. (Photo courtesy of Mr. Kenneth Ho-keung Hui)

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## 引言

一九七二年前香港天文台的授時服務以世界時為基礎，世界時又稱為格林尼治平時（GMT）。由一九七二年一月一起香港的授時服務改以協調世界時（UTC）為基礎。這種時標現在成為全世界民用時間及報時信號的基礎，同時亦獲所有國家採納為官方時間基礎。在大多數實際用途方面，協調世界時與格林尼治平時無大差別。兩種時標在任何時間相差不超過0.9秒。

本年曆採用協調世界時加8小時為時標。

刊載於本年曆內的天文資料是根據英國皇家航海曆書局及美國海軍天文氣象台提供的天文數據計算，以香港天文台所在位置（北緯 $22^{\circ}18'7.3''$ ，東經 $114^{\circ}10'27.6''$ ）\* 的平均海平面高度為準。日出及日落時間為一名觀測員在香港天文台位置平均海平面高度上，於正常大氣情況下，在沒有障礙的地平線上見到日輪的上邊緣的時間。同樣地，月出及月落時間為該名觀測員於正常大氣情況下，在沒有障礙的地平線上見到月輪的上邊緣的時間。

潮汐資料以維多利亞港為準。潮水高度為海圖基準面以上高度，以米為單位。

### Introduction

Prior to 1972 the Hong Kong Time Service provided by the Observatory was based on Universal Time, or Greenwich Mean Time (GMT) as it is sometimes called. Since 1 January 1972 the Hong Kong Time Service has been based on Co-ordinated Universal Time (UTC). This time now forms the basis for civil time and time signals all over the world and has been recommended for adoption as the basis for official time in all countries. For most practical purposes, Co-ordinated Universal Time can be taken to be the same as Greenwich Mean Time. Their difference at any time of the year will not be more than 0.9 seconds.

Throughout this almanac, the time scale used is eight hours ahead of Co-ordinated Universal Time.

Astronomical information in this almanac is calculated for mean sea level at the location of the Hong Kong Observatory (latitude  $22^{\circ}18'7.3''N$ , longitude  $114^{\circ}10'27.6''E$ ) \* based on astronomical data provided by the HM Nautical Almanac Office, United Kingdom and the United States Naval Observatory. The times of sunrise and sunset are the times at which the upper limb of the Sun's disc would be seen on a regular and unobstructed horizon, under normal atmospheric conditions, by an observer at mean sea level at the location of the Hong Kong Observatory. Similarly, the times of moonrise and moonset are the times at which the upper limb of the Moon's disc would be seen on a regular and unobstructed horizon, under normal atmospheric conditions, by such an observer.

Tidal predictions are for Victoria Harbour and tide heights are in metres above Chart Datum.

\* 香港天文台的位置參考點坐標為位於香港天文台總部內「零號」舊三角測量站的1984年世界大地坐標系統（WGS84）經緯度。

\* The coordinate of the reference point for the position of the Hong Kong Observatory is the latitude and longitude in World Geodetic System 1984 (WGS84) of the old Trig "Zero" station within the Hong Kong Observatory Headquarters.

## 曆法

格列高里曆，簡稱格曆，一般又稱為公曆，是目前世界上大多數國家所採用的官方曆法。格曆是根據地球圍繞太陽公轉的週期來訂定，公轉一週為一「回歸年」，平均為 365.2422 日。格曆中包括平年（一年共 365 日）和閏年（一年共 366 日），並規定公元年數可被 4 整除的是閏年，公元年數為 100 的倍數除外，但公元年數為 400 的倍數也是閏年。例如：1996、2000 和 2400 是閏年，1900 和 2100 是平年。格曆 400 年中有 97 個閏年及 303 個平年，所以每年平均長 365.2425 日，與回歸年的長度十分接近。格曆約 3300 年後才產生一日的誤差。

農曆是中國傳統所採用的曆法，是根據月球運行規律和太陽位置變化所訂定。農曆的基礎是「回歸年」和「朔望月」。「回歸年」是指太陽接連兩次通過春分點所需的時間（365.2422 日）。「朔望月」是月球接連兩次朔（新月）或兩次望（滿月）相隔的時間（29.5306 日）。農曆以朔為每個月的開端，這時月球和太陽的黃經相等。由於 12 個「朔望月」只有 354.3672 日，跟「回歸年」的 365.2422 日相差超過 10 日，把相差累積起來便成為閏月。農曆中每 19 年便有 7 個閏月。

## Calendar

The Gregorian calendar, commonly known as the western calendar, is currently the official calendar in most countries around the world. The Gregorian calendar is based on the Earth's revolution around the Sun. One complete revolution is a tropical year of 365.2422 days. The Gregorian calendar consists of ordinary years (365 days a year) and leap years (366 days a year). Years that are divisible by 4 are leap years except those which are also multiples of 100. However, years that are multiples of 400 are also leap years. For example, 1996, 2000 and 2400 are leap years while 1900 and 2100 are ordinary years. In the Gregorian calendar, there are 97 leap years and 303 ordinary years for every 400 years so that the mean Gregorian calendar year is 365.2425 days. This is very close to the length of the tropical year. In using the Gregorian calendar, there will only be an error of 1 day in around 3300 years.

The traditional Chinese calendar is known as Agricultural Calendar or Nongli. It is based on the movement of the Moon as well as that of the Sun. "Tropical year" and "synodic month" are the basic elements of the Agricultural Calendar. A tropical year is the time from a vernal equinox to the next, which is 365.2422 days. The time between two successive occurrences of new moon or full moon is called a synodic month, and equals 29.5306 days. Months in the Agricultural Calendar start with a new moon, which occurs when the Moon and the Sun move to the same longitude on the ecliptic. There are only 354.3672 days in 12 synodic months, more than 10 days shorter than a tropical year of 365.2422 days. The difference accumulates to give a leap month. There are 7 leap months in 19 years in the Agricultural Calendar.



## 季內節氣 Solar Terms in the quarter

小寒 Moderate cold	5/1
大寒 Severe cold	20/1
立春 Spring commences	4/2
雨水 Spring showers	19/2
驚蟄 Insects waken	5/3
春分 Vernal equinox	20/3

## 推介天文現象

### Highlight of astronomical events

象限儀座流星雨 (極大) Quadrantid Meteor Shower (Maximum)	4/1
水星東大距 Greatest Eastern Elongation of Mercury	7/1
水星西大距 Greatest Western Elongation of Mercury	17/2
金星西大距 Greatest Western Elongation of Venus	20/3

# 2022 January – March 一至三月

獅子山上的星流跡（照片由許浩強先生和曾展鈞先生提供）  
Star trails above Lion Rock  
(Photo courtesy of Mr. Kenneth Ho-keung Hui  
and Mr. Bartholomew Chin-kwan Tsang)









## 2022 April – June 四至六月

螢火蟲伴星流跡 (照片由許浩強先生提供)  
Fireflies under star trails  
(Photo courtesy of Mr. Kenneth Ho-keung Hui)

### 推介天文現象

### Highlight of astronomical events

天琴座流星雨 (極大)

Lyrid Meteor Shower (Maximum)

23/4

水星東大距

Greatest Eastern Elongation of Mercury

29/4

寶瓶座η流星雨 (極大)

η-Aquarid Meteor Shower (Maximum)

6/5

水星西大距

Greatest Western Elongation of Mercury

16/6

### 季內節氣 Solar Terms in the quarter

清明 Bright and clear

5/4

穀雨 Corn rain

20/4

立夏 Summer commences

5/5

小滿 Corn forms

21/5

芒種 Corn on ear

6/6

夏至 Summer solstice

21/6





2022

JUNE

六月

農曆 壬寅年 肖虎

五月大丙午

六月大丁未

星期一 日出 Moonrise  
Sunrise 月中天 Sun Transit  
日中天 Moon Transit  
日落 Moonset Sunset  
Sunset 潮水時間 Tide Time  
Tide Height

T 潮水時間 Tide Time Tide Height

W 潮水時間 Tide Time Tide Height

T 潮水時間 Tide Time Tide Height

星期五 日出 Moonrise  
Sunrise 月中天 Sun Transit  
日中天 Moon Transit  
日落 Moonset Sunset  
Sunset 潮水時間 Tide Time  
Tide Height

F 潮水時間 Tide Time Tide Height

S 潮水時間 Tide Time Tide Height

S 潮水時間 Tide Time Tide Height

節氣 Solar Terms

Corn on Ear 芒種  
初八 庚寅 0539 1107  
1222 1747  
1905  
2121 2.0m  
2105 0.6m

First Quarter 上弦  
初九 辛卯 0539 1200  
1222 1831  
1906 0022  
1324 1.9m  
2152 0.7m

初十 壬辰 0539 1253  
1222 1915  
1906 0057  
0547 1.5m  
0824 1.4m  
1500 1.7m  
2236 0.7m

十一 癸巳 0539 1348  
1222 1959  
1907 0131  
0556 1.6m  
1038 1.3m  
1646 1.6m  
2317 0.8m

十二 甲午 0539 1445  
1223 2046  
1907 0205  
0616 1.7m  
1153 1.1m  
1809 1.6m  
2356 0.8m

十三 乙未 0539 1545  
1223 2136  
1907 0241  
0641 1.9m  
1256 0.9m  
1929 1.5m

十四 丙申 0539 1649  
1223 2230  
1908 0322  
0034 0.9m  
0711 2.1m  
1351 0.6m  
2039 1.5m

月相 Phases of the Moon

十五 丁酉 0539 1757  
1223 2331  
1908 0408  
0111 1.0m  
0744 2.3m  
1444 0.4m  
2144 1.5m

十六 戊戌 0539 1908  
1224 0036  
1908 0501  
0149 1.1m  
0824 2.4m  
1536 0.2m  
2248 1.4m

十七 己亥 0539 2017  
1224 0036  
1909 0602  
0227 1.1m  
0911 2.5m  
1629 0.2m  
2347 1.4m

十八 庚子 0539 2121  
1224 0143  
1909 0709  
0307 1.2m  
1002 2.6m  
1725 0.1m

十九 辛丑 0539 2217  
1224 0249  
1909 0818  
0042 1.4m  
0350 1.2m  
1054 2.5m  
1823 0.2m

二十 壬寅 0540 2305  
1224 0350  
1909 0927  
0136 1.4m  
0441 1.2m  
1148 2.4m  
1919 0.3m

廿一 癸卯 0540 2346  
1225 0446  
1910 1031  
0230 1.4m  
0537 1.3m  
1245 2.3m  
2010 0.4m

上弦 First Quarter  
農曆五月初九日  
7 June 22:48

廿二 甲辰 0540 0536  
1225 0536  
1910 1131  
0326 1.4m  
0640 1.3m  
1349 2.1m  
2057 0.6m

廿三 乙巳 0540 0023  
1225 0623  
1910 1228  
0423 1.5m  
0757 1.3m  
1501 1.9m  
2142 0.7m

廿四 丙午 0540 0058  
1225 0707  
1910 1322  
0514 1.6m  
0945 1.3m  
1617 1.7m  
2223 0.8m

廿五 丁未 0541 0131  
1225 0750  
1910 1415  
0557 1.7m  
1123 1.1m  
1737 1.5m  
2302 1.0m

廿六 戊申 0541 0204  
1226 0833  
1911 1507  
0634 1.9m  
1235 1.0m  
1853 1.4m  
2337 1.0m

廿七 己酉 0541 0239  
1226 0917  
1911 1600  
0707 1.9m  
1333 0.8m  
2005 1.3m

廿八 庚戌 0541 0316  
1226 1003  
1911 1654  
0007 1.1m  
0735 2.0m  
1423 0.7m  
2115 1.3m

下弦 Last Quarter  
農曆五月廿三日  
21 June 11:11

廿九 辛亥 0542 0356  
1226 1051  
1911 1748  
0033 1.1m  
0800 2.1m  
1509 0.5m  
2206 1.3m

三十 壬子 0542 0441  
1227 1140  
1911 1842  
0054 1.2m  
0826 2.2m  
1551 0.5m  
2247 1.3m

六月 初一 癸丑 0542 0529  
1227 1231  
1911 1933  
0117 1.2m  
0854 2.2m  
1630 0.4m  
2324 1.3m

初二 甲寅 0542 0621  
1227 1322  
1911 2021  
0147 1.2m  
0925 2.2m  
1707 0.4m

General Holiday  
Friday, 3 June (Tuen Ng Festival)

公眾假期  
六月三日星期五  
(端午節)

朔 New Moon  
農曆六月初一日  
29 June 10:52

## 季內節氣 Solar Terms in the quarter

小暑 Moderate heat	7/7
大暑 Great heat	23/7
立秋 Autumn commences	7/8
處暑 End of heat	23/8
白露 White dew	7/9
秋分 Autumnal equinox	23/9

## 2022 July – September 七月至九月

新月即將來臨 (照片由錢正榮先生提供)  
New moon is coming  
(Photos courtesy of Mr. Matthew Chin)

### 推介天文現象

### Highlight of astronomical events

英仙座流星雨 (極大) Perseid Meteor Shower (Maximum)	13/8
土星衝 Opposition of Saturn	15/8
水星東大距 Greatest Eastern Elongation of Mercury	28/8
木星衝 Opposition of Jupiter	27/9









## 2022 October – December 十至十二月

2021年11月8日的金星合月（照片由甄榮磊先生提供）  
Venus in conjunction with the Moon captured on 8 November 2021  
(Photo courtesy of Mr. Edwin Wing-lui Ginn)

### 推介天文現象 Highlight of astronomical events

水星西大距 Greatest Western Elongation of Mercury	9/10
月全食 Total eclipse of the Moon	8/11
火星衝 Opposition of Mars	8/12
雙子座流星雨(極大) Geminid Meteor Shower (Maximum)	14/12
水星東大距 Greatest Eastern Elongation of Mercury	21/12

### 季內節氣 Solar Terms in the quarter

寒露 Cold dew	8/10
霜降 Frost	23/10
立冬 Winter commences	7/11
小雪 Light snow	22/11
大雪 Heavy snow	7/12
冬至 Winter solstice	22/12











## 二十四節氣 24 Solar Terms

二十四節氣是中國曆法的重要部份，是長年累月透過觀測太陽週期運動、季節和物候規律，配合社會需要逐步改進而成的時間知識體系。節氣是近乎平均分佈於黃道上 24 個位置的時刻，一個循環歷時一年。二十四節氣是一個統稱，其中包括十二個「中氣」和十二個「節氣」，中氣和節氣相間地排列。2022 年內中氣的資料列於下表。

The “24 solar terms” form an integral part of the Chinese calendar. It is a time knowledge system progressively built upon the long-term observation of periodic movement of the Sun, seasonal march and phenology, and evolves in time to meet the needs of social development. The solar terms, almost evenly spread along the ecliptic, mark the moments when the Sun reaches these 24 pre-defined positions and form a one year cycle. The “24 solar terms” is a collective name of the system that comprises 12 “major solar terms” and 12 “minor solar terms” interlaced with each other. Information of major solar terms in 2022 is listed below.

太陽黃經 Sun's Longitude	日期 / 時間 Date/Time	中氣 Major Solar Terms	太陽直射點緯度圈 Latitude Circle of Subsolar Points	日出 Sunrise	上中天 Transit	日落 Sunset	
300	20/1 10:39	大寒 Severe Cold		112 -0°50'	180 48	249 -0°50'	方位角 Azimuth 仰角 Altitude
330	19/2 00:43	雨水 Spring Showers		102 -0°50'	180 56	258 -0°50'	方位角 Azimuth 仰角 Altitude
0	20/3 23:33	春分 Vernal Equinox	赤道 the Equator	90 -0°50'	180 68	270 -0°50'	方位角 Azimuth 仰角 Altitude
30	20/4 10:24	穀雨 Corn Rain		77 -0°50'	180 79	283 -0°50'	方位角 Azimuth 仰角 Altitude
60	21/5 09:23	小滿 Corn Forms		68 -0°50'	180 88	292 -0°50'	方位角 Azimuth 仰角 Altitude
90	21/6 17:14	夏至 Summer Solstice	北回歸線 the Tropic of Cancer	64 -0°50'	360 89	296 -0°50'	方位角 Azimuth 仰角 Altitude
120	23/7 04:07	大暑 Great Heat		68 -0°50'	180 88	292 -0°50'	方位角 Azimuth 仰角 Altitude
150	23/8 11:16	處暑 End of Heat		77 -0°50'	180 79	283 -0°50'	方位角 Azimuth 仰角 Altitude
180	23/9 09:04	秋分 Autumnal Equinox	赤道 the Equator	90 -0°50'	180 68	270 -0°50'	方位角 Azimuth 仰角 Altitude
210	23/10 18:36	霜降 Frost		102 -0°50'	180 56	258 -0°50'	方位角 Azimuth 仰角 Altitude
240	22/11 16:20	小雪 Light Snow		111 -0°50'	180 48	248 -0°50'	方位角 Azimuth 仰角 Altitude
270	22/12 05:48	冬至 Winter Solstice	南回歸線 the Tropic of Capricorn	115 -0°50'	180 44	245 -0°50'	方位角 Azimuth 仰角 Altitude

上述位置以日面之圓心為準。日出、日落時之仰角約為 -0°50'，實包含了日面視半徑及大氣折射的影響。

The above positions refer to the centre of the Sun's disc. The -0°50' in altitude at sunrise and sunset includes both the apparent radius of the Sun and the effect of atmospheric refraction.



二十四節氣文章  
[www.hko.gov.hk/tc/gts/time/24solarterms.htm](http://www.hko.gov.hk/tc/gts/time/24solarterms.htm)



Article on 24 Solar Terms  
[www.hko.gov.hk/en/gts/time/24solarterms.htm](http://www.hko.gov.hk/en/gts/time/24solarterms.htm)



未來 3 年二十四節氣  
[www.hko.gov.hk/tc/gts/](http://www.hko.gov.hk/tc/gts/)  
[www.hko.gov.hk/en/gts/](http://www.hko.gov.hk/en/gts/)



24 Solar Terms in next 3 years  
[www.hko.gov.hk/tc/gts/astronomy/Solar\\_Term.htm](http://www.hko.gov.hk/tc/gts/astronomy/Solar_Term.htm)  
[www.hko.gov.hk/en/gts/astronomy/Solar\\_Term.htm](http://www.hko.gov.hk/en/gts/astronomy/Solar_Term.htm)

年內每一刻的太陽方位角和仰角，可以從以下網上互動工具獲得。

The solar azimuth and altitude throughout the year can be obtained from the following online tool.



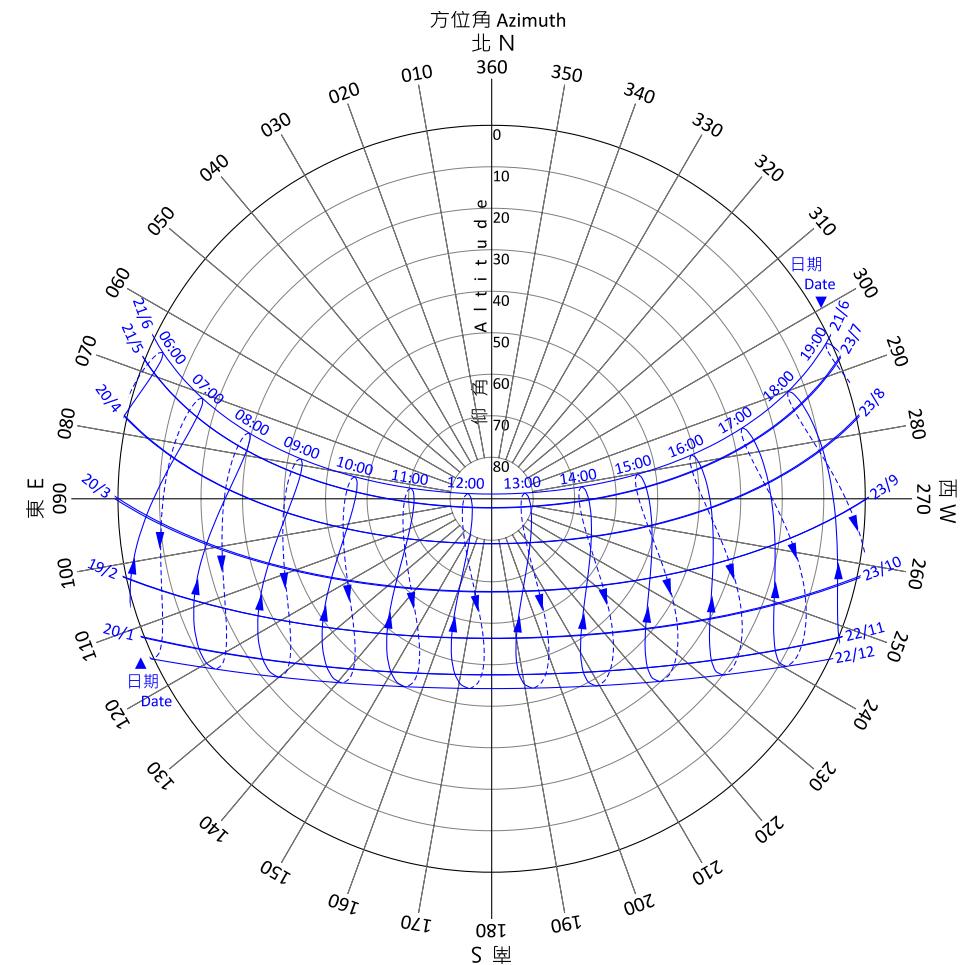
互動版太陽路徑圖  
[www.hko.gov.hk/tc/gts/astronomy/SunPathDay3\\_ue.htm](http://www.hko.gov.hk/tc/gts/astronomy/SunPathDay3_ue.htm)



Interactive Sun Path Diagram  
[www.hko.gov.hk/en/gts/astronomy/SunPathDay3\\_ue.htm](http://www.hko.gov.hk/en/gts/astronomy/SunPathDay3_ue.htm)

## 太陽周年路徑圖 ( 詳盡版 )

Paths of the Sun throughout the Year (Full version)

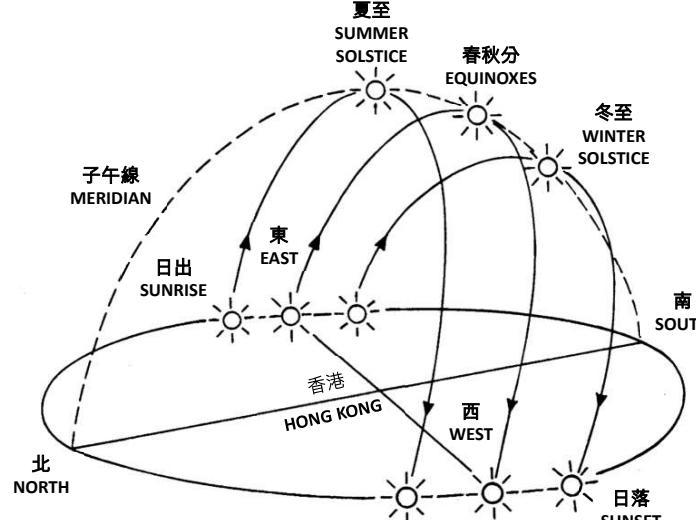


以上的太陽路徑圖方便讀者找尋年內不同時刻的太陽方位角和仰角。藍色弧形線標誌著十二個中氣當天不同時刻的太陽位置。十二個中氣按順時針方向排列，依次序由東側的大寒 (20/1) 開始，經過春分 (20/3)、夏至 (21/6)，轉到西側的大暑 (23/7)，最後於冬至 (22/12) 終結。最上方藍色弧形線上標誌了夏至日由 06:00 至 19:00 香港時間的整鐘點。由這些時間標籤，向下延伸了兩組藍色曲線呈閉合的「8」字形，實線標誌了上半年直到夏至期間各天的整鐘點；虛線則適用於夏至及冬至期間。按照定好的日子和時間查看，就可以分別從放射線及同心圓環線讀取方位角和仰角。

The above Sun Path Diagram can be used to read the solar azimuth and altitude for Hong Kong throughout the year. The blue arcs mark the Sun's positions on 12 major Solar Terms with date sequence in clockwise direction starting from Severe Cold (20/1) labelled on the eastern flank, moving upward to Vernal Equinox (20/3), Summer Solstice (21/6), then Great Heat (23/7) labelled on the western flank, and ending at the Winter Solstice (22/12). The uppermost blue arc is marked with clock hour from 06:00 to 19:00 HKT. There are two sets of blue curves extending from these time labels, forming closed loops with the shape of "8". The solid curves mark the clock hour for the first half of the year up to Summer Solstice, and the dotted curves for the period between Summer Solstice and Winter Solstice. Once the date and time are located, the azimuth can then be read off from the radial lines and the altitude from the concentric circles.

# 太陽周年路徑圖（簡略版）

Paths of the Sun throughout the Year (Simplified version)



2022年，太陽在6月3日12時21分及7月9日12時29分最接近香港天頂。

In 2022, the Sun is nearest to being directly overhead at Hong Kong at 12:21 on 3 June and again at 12:29 on 9 July.



日上中天的時間、  
方位及仰角  
[www.hko.gov.hk/tc/gts/  
astronomy/Sun\\_Transit.htm](http://www.hko.gov.hk/tc/gts/astronomy/Sun_Transit.htm)

Time, Direction and Elevation  
of Sun Transit  
[www.hko.gov.hk/en/gts/  
astronomy/Sun\\_Transit.htm](http://www.hko.gov.hk/en/gts/astronomy/Sun_Transit.htm)

太陽視赤經  
與視赤緯  
[www.hko.gov.hk/tc/gts/  
astronomy/sun\\_ra\\_dec.htm](http://www.hko.gov.hk/tc/gts/astronomy/sun_ra_dec.htm)

The Apparent Right Ascension and  
Apparent Declination of the Sun  
[www.hko.gov.hk/en/gts/  
astronomy/sun\\_ra\\_dec.htm](http://www.hko.gov.hk/en/gts/astronomy/sun_ra_dec.htm)

## 曙暮光

## TWILIGHT

民用曙暮光指黃昏時從日落至太陽中心移到地平下6度的一段時段或最早太陽中心由地平下6度上升至日出的時段。航海及天文曙暮光分別為太陽中心在地平下12和18度至日出及日落至太陽中心在地平下12和18度的時段。

The duration of civil twilight is the interval in the evening from sunset until the time when the centre of the Sun is 6 degrees below the horizon or the corresponding interval in the morning from the time when the centre of the Sun is 6 degrees below horizon until sunrise. The durations of nautical and astronomical twilight are, respectively, the intervals between sunrise or sunset and the times at which the centre of the Sun is 12 and 18 degrees below the horizon.

太陽在不同俯角的照明度無法準確描述，況且照亮度同時受到其他因素，如月光及天氣狀況等的影響。大致來說，在民用曙暮光期間，如果沒有燈光照明，一般的戶外活動將較為困難，但對於那些祇需認清物件輪廓的大規模操作來說，光線還是足夠的。這時候最光亮的行星及恒星（一等亮度）肉眼可以看見。天文曙暮光標記著除了月光和星光外，再沒有其他的自然光的黑夜的界限。航海曙暮光的照亮度則在前兩者之間，在這段期間雖然再不易清楚辨認地平線，但物件的一般輪廓仍可見到。需要顧及事物細節的活動不能進行。所有較為光亮的星星都可以見到。

## 香港各月份曙暮光的持續時間（以分鐘計）

Duration of Twilight (in minutes) in Hong Kong  
before Sunrise and after Sunset for Each Month

日期 Date	民用曙暮光 Civil Twilight			航海曙暮光 Nautical Twilight			天文曙暮光 Astronomical Twilight		
	分 min			分 min			分 min		
一月 1 JAN 10 20	24	52	80	24	52	79	24	51	78
七月 1 JUL 10 20	25	55	86	25	54	85	24	54	84
二月 1 FEB 10 20	23	50	77	23	50	76	23	49	75
八月 1 AUG 10 20	24	52	82	24	51	80	23	50	78
三月 1 MAR 10 20	23	49	74	22	48	74	22	48	75
九月 1 SEP 10 20	23	49	76	23	49	75	22	48	75
四月 1 APR 10 20	22	49	75	23	49	76	23	50	75
十月 1 OCT 10 20	22	48	74	22	48	74	23	49	75
五月 1 MAY 10 20	23	51	79	24	52	81	24	53	83
十一月 1 NOV 10 20	23	50	76	23	50	77	24	51	78
六月 1 JUN 10 20	25	54	85	25	55	86	24	52	80
十二月 1 DEC 10 20	24	52	79	24	52	80	24	52	80

## 視太陽時的計算方法

視太陽時是以太陽每日正午橫越本地子午線而制訂的時間，多以日晷來測定。

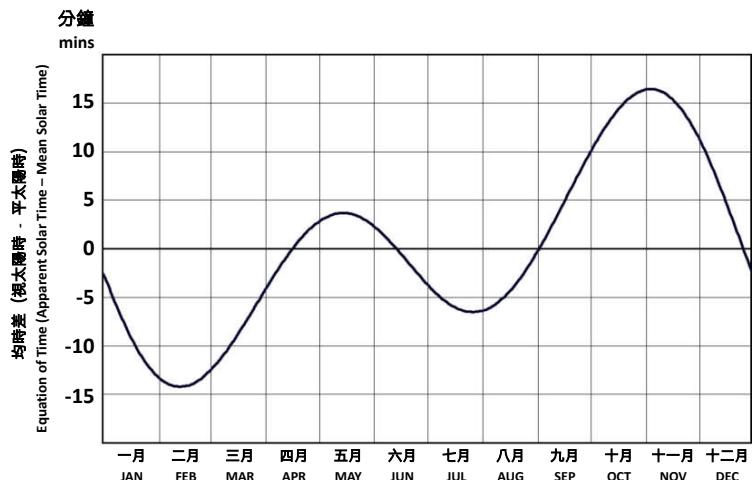
地球按橢圓軌道環繞太陽運行，速度隨地球在軌道上的位置而變化。同時，地球自轉軸與地球環繞太陽公轉的平面成傾角，以致太陽在地球自轉方向投影的移動速度因季節而不同。因此，一年之中太陽的視運動速度都在變化，視太陽時的時間長度並不均勻。

**平太陽時**是利用在天球上以均勻速度運動的虛擬太陽來定義的時間，與視太陽時的平均相符。視太陽時與平太陽時的差稱為**均時差**，其在一年間的變化見於本頁圖示。

香港標準時間（即協調世界時加8小時）是相對於東經120°的平太陽時。根據香港天文台的子午線東經 $114^{\circ}10'27.6''$ 計算，香港標準時間與香港平太陽時相距經度 $5^{\circ}49'32.4''$ ，即相差時間23分18.16秒。於是：

$$\begin{aligned}\text{香港視太陽時} \\ &= \text{香港平太陽時} + \text{均時差} \\ &= \text{香港標準時間} - 23 \text{ 分 } 18.16 \text{ 秒} \\ &\quad + \text{均時差}\end{aligned}$$

此方程式亦可用来把由日晷測得的視太陽時換算為香港標準時間。



## Determination of Apparent Solar Time

**Apparent solar time** is derived from the passage of the Sun through the local meridian at noon each day. It is mostly measured using sundials.

The Earth revolves around the Sun in an elliptical orbit, at a speed that depends on its position on the orbit. On the other hand, due to inclination of the Earth's rotation axis to the plane of revolution around the Sun, the Sun's projection along the direction of the Earth's rotation moves at different speeds through the seasons. Hence, speed of the apparent motion of the Sun varies through the year and apparent solar time is non-uniform.

**Mean solar time** is defined by the uniform motion of a fictitious Sun on the celestial sphere and agrees with the averaged apparent solar time. The difference between apparent solar time and mean solar time is known as the **Equation of Time**. Its variation in a year is shown on the graph on this page.

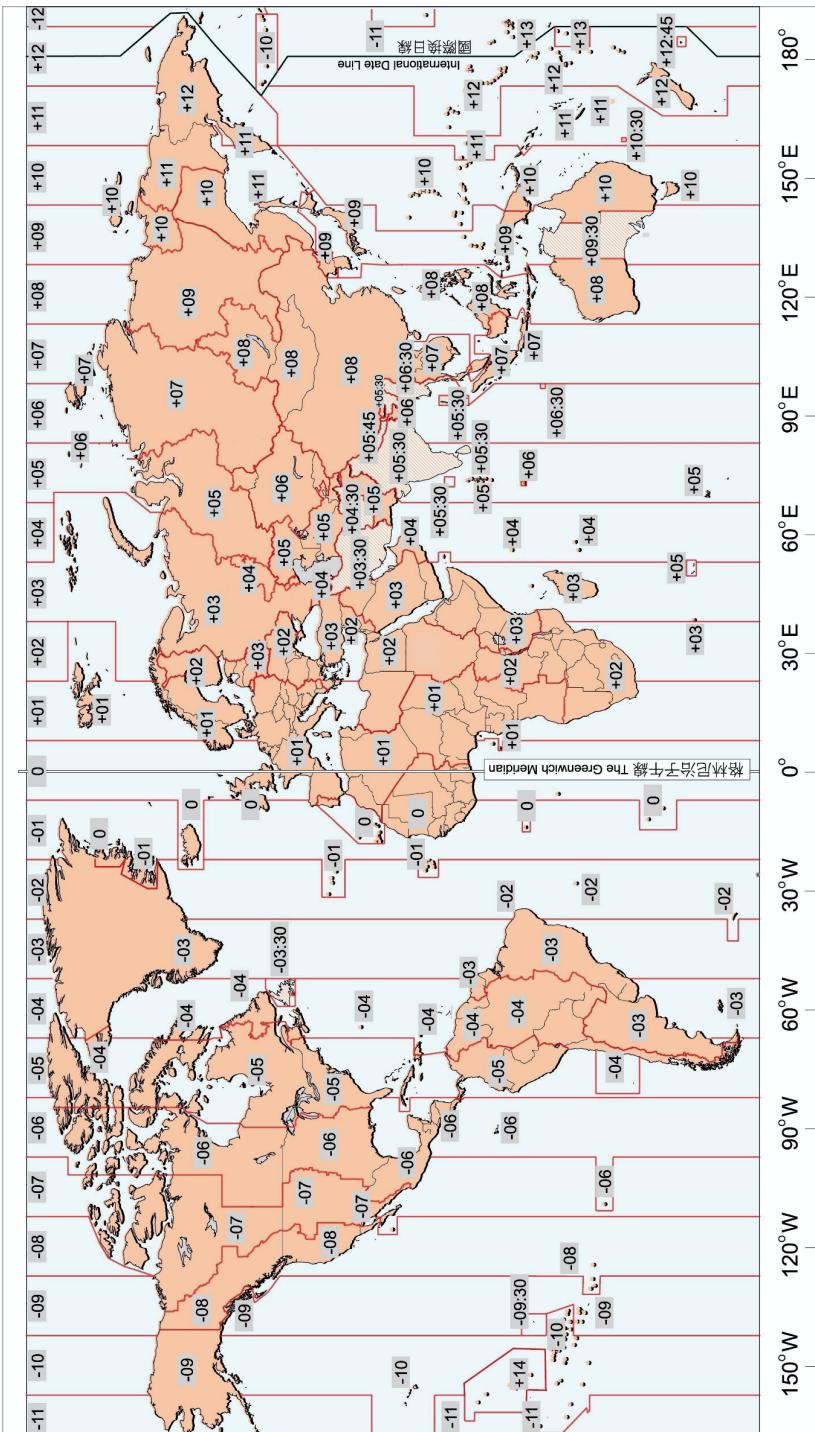
Hong Kong Standard Time (HKST), defined by Universal Coordinated Time plus 8 hours, is the mean solar time at 120°E longitude. With reference to the Hong Kong Observatory's meridian of  $114^{\circ}10'27.6''$  E longitude, there is a difference of  $5^{\circ}49'32.4''$  in longitude or 23 minutes 18.16 seconds in time between HKST and the mean solar time at Hong Kong. Hence,

$$\begin{aligned}\text{Apparent solar time at Hong Kong} \\ &= \text{Mean solar time at Hong Kong} + \text{Equation of Time} \\ &= \text{Hong Kong Standard Time} - 23 \text{ min } 18.16 \text{ sec} \\ &\quad + \text{Equation of Time}\end{aligned}$$

The equation can also be used to convert apparent solar time measured by sundials to Hong Kong Standard Time.

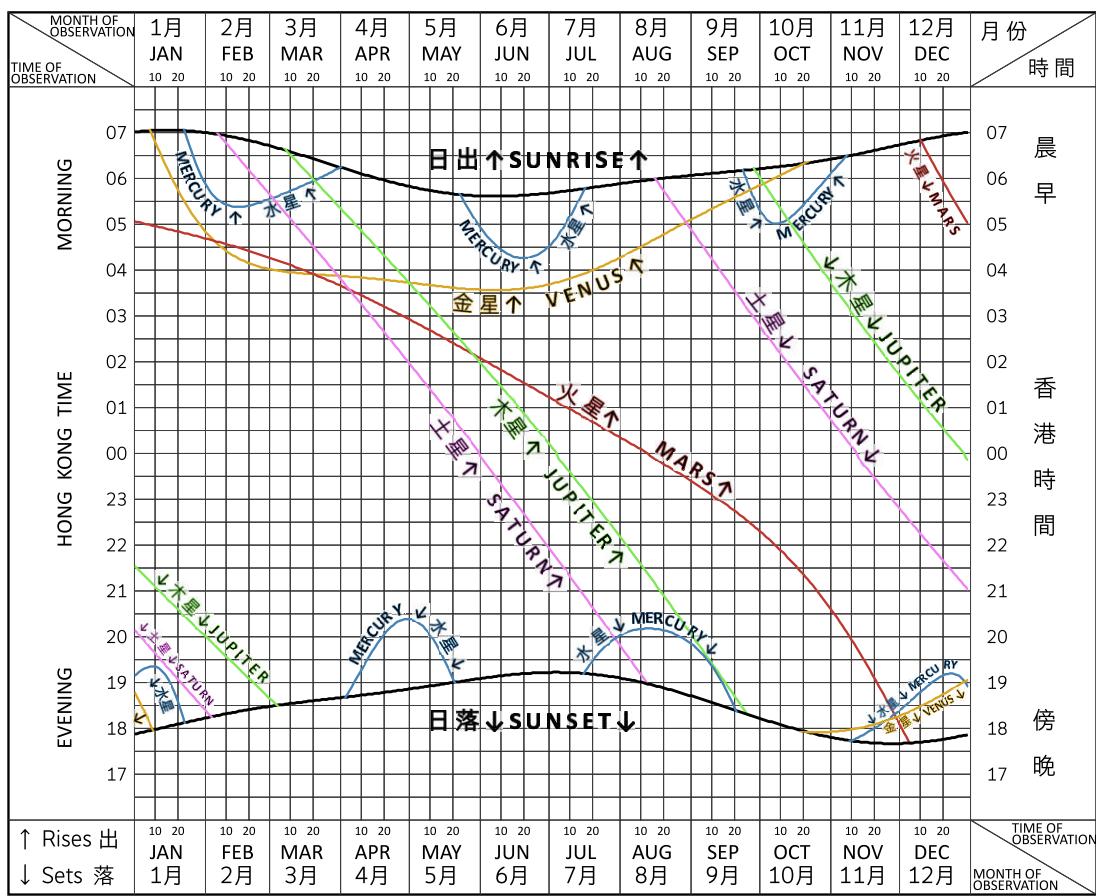
## 世界時區圖 WORLD MAP OF TIME ZONES

Standard Time = Universal Time + value from figure  
Universal Time = Standard Time - value from figure

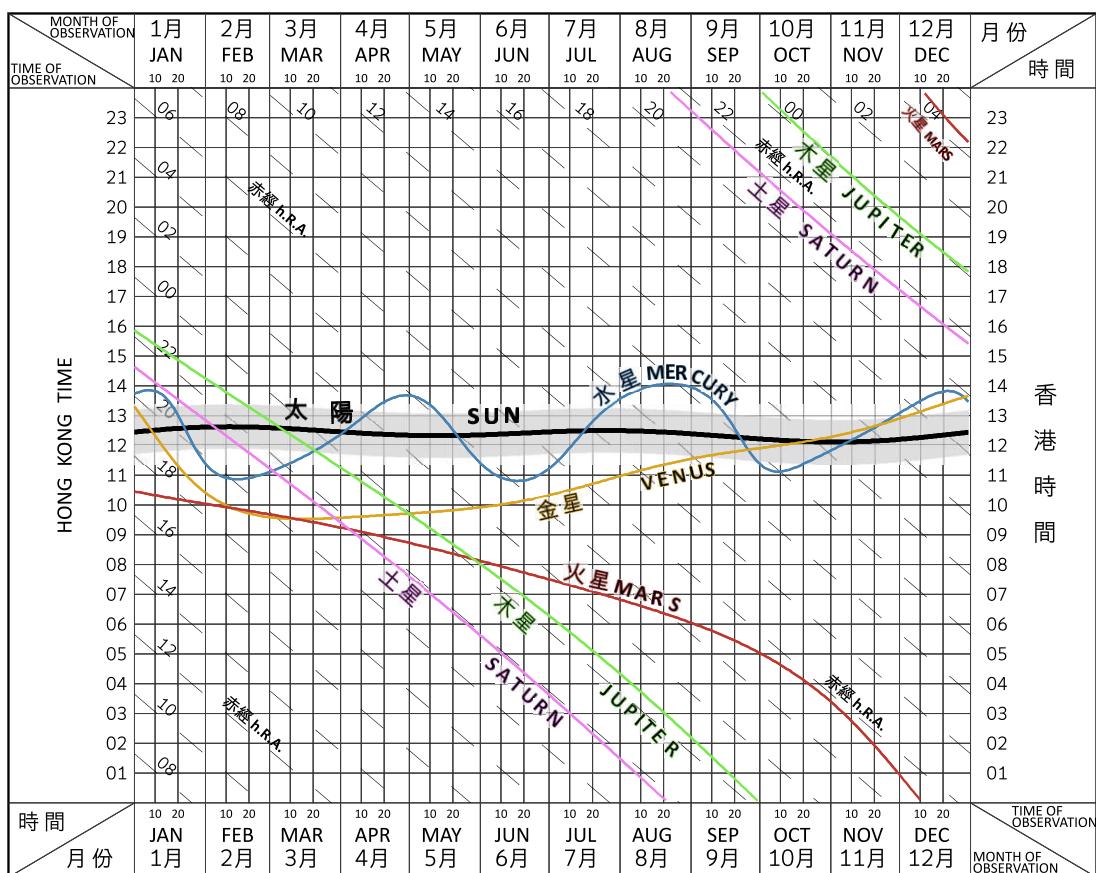




2022年太陽及行星在香港出沒的時間  
Times of Rise and Set of the Sun and Planets at Hong Kong 2022



2022年行星在香港中天的時間  
Times of Meridian Passage of the Planets at Hong Kong 2022





## 二零二二年香港一至三月夜空

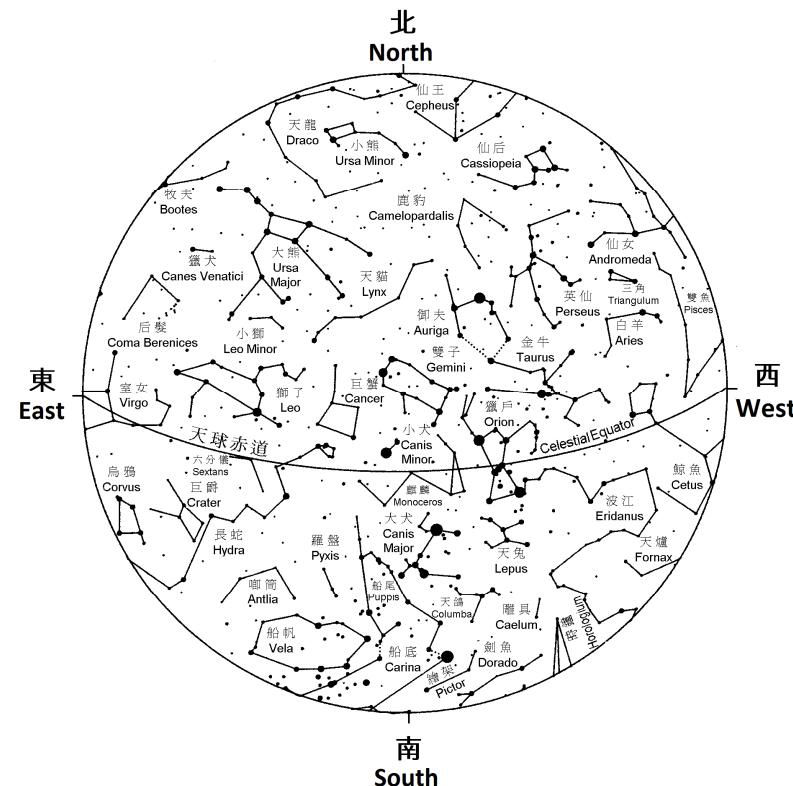
Night Sky in Hong Kong, January to March 2022

星圖顯示於下列時間在香港  
見到的恒星和行星的位置：

一月中 — 午夜零時  
二月中 — 晚上十時  
三月中 — 晚上八時

The star map shows the positions  
of the stars and planets seen in  
Hong Kong around :

midnight — middle of January  
10 p.m. — middle of February  
8 p.m. — middle of March



恒星星等 Stellar Magnitudes	● -1	● 0	● 1	● 2	● 3	● 4	● 5
行星 Planets	Mercury 水	Venus 金	Mars 火	Jupiter 木	Saturn 土		

每月星圖可參閱：

Monthly star map can be found at:



2022 年年曆網上版

[www.hko.gov.hk/tc/gts/astron2022/  
almanac2022\\_index.htm](http://www.hko.gov.hk/tc/gts/astron2022/almanac2022_index.htm)



Almanac 2022 online version

[www.hko.gov.hk/en/gts/astron2022/  
almanac2022\\_index.htm](http://www.hko.gov.hk/en/gts/astron2022/almanac2022_index.htm)

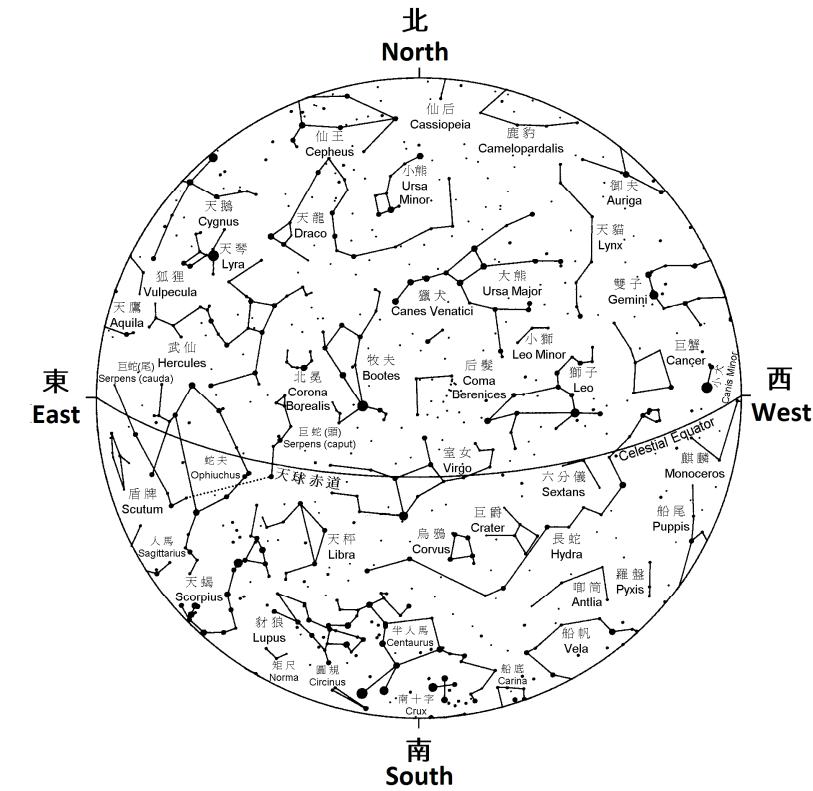
## 二零二二年香港四至六月夜空

Night Sky in Hong Kong, April to June 2022

星圖顯示於下列時間在香港  
見到的恒星和行星的位置：

四月中 — 午夜零時  
五月中 — 晚上十時  
六月中 — 晚上八時

midnight — middle of April  
10 p.m. — middle of May  
8 p.m. — middle of June



恒星星等 Stellar Magnitudes	● -1	● 0	● 1	● 2	● 3	● 4	● 5
行星 Planets	Mercury 水	Venus 金	Mars 火	Jupiter 木	Saturn 土		

每月星圖可參閱：

Monthly star map can be found at:



2022 年年曆網上版

[www.hko.gov.hk/tc/gts/astron2022/  
almanac2022\\_index.htm](http://www.hko.gov.hk/tc/gts/astron2022/almanac2022_index.htm)

Almanac 2022 online version

[www.hko.gov.hk/en/gts/astron2022/  
almanac2022\\_index.htm](http://www.hko.gov.hk/en/gts/astron2022/almanac2022_index.htm)

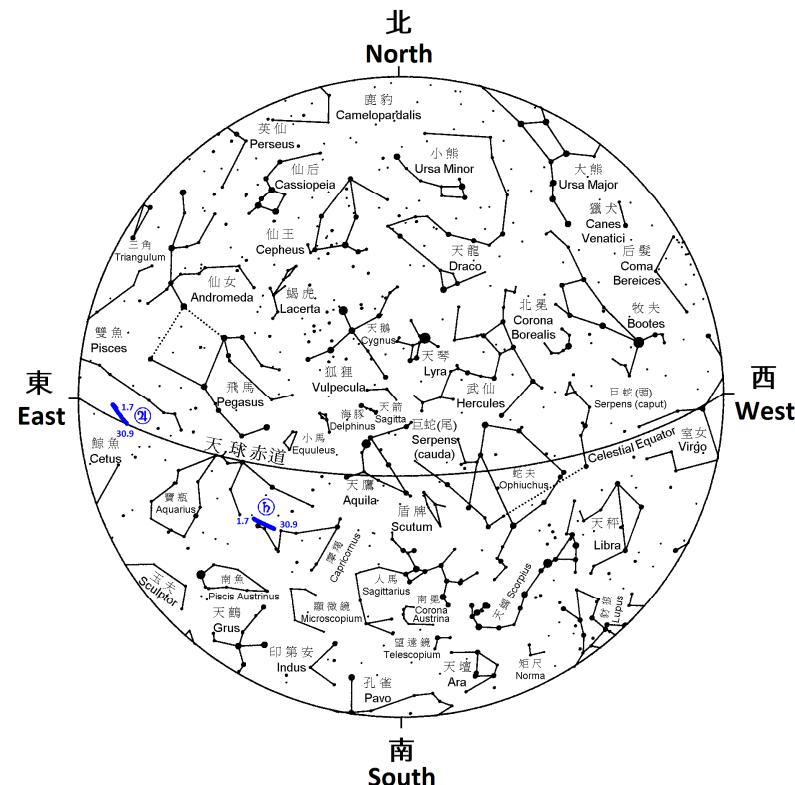
## 二零二二年香港七至九月夜空 Night Sky in Hong Kong, July to September 2022

星圖顯示於下列時間在香港  
見到的恒星和行星的位置：

七月 中 — 午夜零時  
八月 中 — 晚上十時  
九月 中 — 晚上八時

The star map shows the positions  
of the stars and planets seen in  
Hong Kong around :

midnight — middle of July  
10 p.m. — middle of August  
8 p.m. — middle of September



恒星星等 Stellar Magnitudes	● ● ● ● ● ●	行星 Planets	☿ Mercury 水 Water	♀ Venus 金 Metal	♂ Mars 火 Fire	♃ Jupiter 木 Wood	♄ Saturn 土 Earth
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每月星圖可參閱：  
Monthly star map can be found at:



2022 年年曆網上版  
[www.hko.gov.hk/tc/gts/astron2022/almanac2022\\_index.htm](http://www.hko.gov.hk/tc/gts/astron2022/almanac2022_index.htm)



Almanac 2022 online version  
[www.hko.gov.hk/en/gts/astron2022/almanac2022\\_index.htm](http://www.hko.gov.hk/en/gts/astron2022/almanac2022_index.htm)

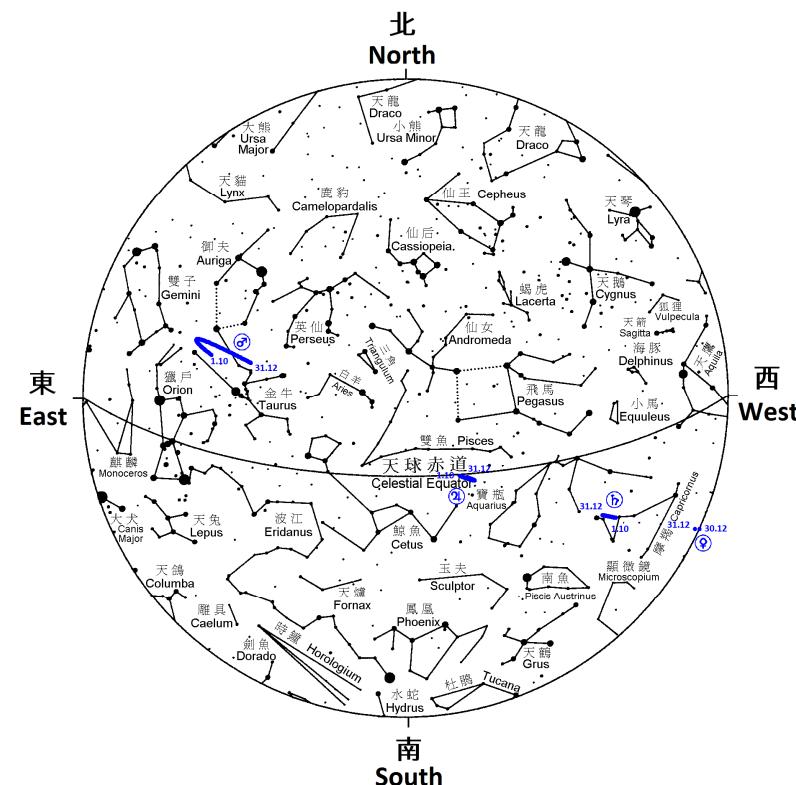
## 二零二二年香港十至十二月夜空 Night Sky in Hong Kong, October to December 2022

星圖顯示於下列時間在香港  
見到的恒星和行星的位置：

十月 中 — 午夜零時  
十一月 中 — 晚上十時  
十二月 中 — 晚上八時

The star map shows the positions  
of the stars and planets seen in  
Hong Kong around :

midnight — middle of October  
10 p.m. — middle of November  
8 p.m. — middle of December



恒星星等 Stellar Magnitudes	● ● ● ● ● ●	行星 Planets	☿ Mercury 水 Water	♀ Venus 金 Metal	♂ Mars 火 Fire	♃ Jupiter 木 Wood	♄ Saturn 土 Earth
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每月星圖可參閱：  
Monthly star map can be found at:



2022 年年曆網上版  
[www.hko.gov.hk/tc/gts/astron2022/almanac2022\\_index.htm](http://www.hko.gov.hk/tc/gts/astron2022/almanac2022_index.htm)

Almanac 2022 online version  
[www.hko.gov.hk/en/gts/astron2022/almanac2022\\_index.htm](http://www.hko.gov.hk/en/gts/astron2022/almanac2022_index.htm)

## 何謂「雙春兼閏月」？

曆法是根據天象並配合人們日常生活需要而制訂的計算時間的方法。中國是農業大國，農業從業員依賴曆法來計算季節的更替，因此中國採用的曆法又稱為農曆。

農曆是涵蓋月球運行規律及太陽位置變化的陰陽曆。根據月球環繞地球運行所訂的曆法稱為陰曆；根據太陽在不同季節的位置變化所訂的曆法稱為陽曆。

農曆的基礎是「回歸年」和「朔望月」。「回歸年」是太陽接連兩次通過春分點所需的時間，即 365.2422 日（365 日 5 小時 48 分 46 秒）。「朔望月」是月球接連兩次朔（新月）或兩次望（滿月）相隔的時間，即 29.5306 日（29 日 12 小時 44 分 3 秒）。

要協調陽曆跟陰曆日數的差異，每二至三年需添置一個陰曆閏月。

有閏月的農曆年（即是農曆的閏年），會由原來只有約 354 天增加至約 384 天，該農曆年的第一個月和最後一個月都會包含「立春」節氣，即所謂雙春，一般人稱之為「雙春兼閏月」。其實按照現行曆法的計算，雙春的一年必定有閏月，有閏月的一年亦必定有雙春，所以「雙春兼閏月」的「兼」字並非指兩者碰巧同時出現，而只是加強語氣而已。

## What is "Double 'Spring Commences' and Leap Month"?

A calendar is a system of arranging days according to astronomical events for regulating everyday life. China is a big agricultural country. The traditional Chinese calendar is known as the Agricultural Calendar or Nongli, as the calendar divides the year into seasons for agriculture.

The Agricultural Calendar is an integrated lunar-solar calendar (Yinyangli) as it embraces the movement of the Moon and the Sun. Calendars that are based on the Moon's orbit around the Earth are known as lunar calendars (Yinli), while solar calendars (Yangli) are based on the positions of the Sun through the seasons.

"Tropical year" and "synodic month" are the basic elements of the Agricultural Calendar. A tropical year is the time from a vernal equinox to the next, which is 365.2422 days (365 days 5 hours 48 minutes and 46 seconds). The time between two successive occurrences of new moon or full moon is called a synodic month, and equals 29.5306 days (29 days 12 hours 44 minutes 3 seconds).

To harmonize the lunar and solar calendars, a leap lunar month needs to be added every 2 to 3 years.

In a Chinese Agricultural Calendar year with leap lunar month (commonly known as Chinese leap year), there are 384 days, against 354 days in a normal year. Therefore "Spring Commences" appear both in the first and the last month of a Chinese leap year. One may notice that a year with two "Spring Commences" must coincide with a year with leap month. The so-called "Double 'Spring Commences' and Leap Month" is just a result of the Chinese calendar system, but nothing about the rarity.

年份 Year	農曆年 Nongli Year	農曆初一 Lunar New Year	第一個立春 1st Spring Commences	閏月 Leap Month	第二個立春 2nd Spring Commences	下一個農曆初一 Next Lunar New Year
2001	辛巳 Xin-si	24/01/2001	04/02/2001	四月 4th Lunar Month	04/02/2002	12/02/2002
2004	甲申 Jia-shen	22/01/2004	04/02/2004	二月 2nd Lunar Month	04/02/2005	09/02/2005
2006	丙戌 Bing-xu	29/01/2006	04/02/2006	七月 7th Lunar Month	04/02/2007	18/02/2007
2009	己丑 Ji-chou	26/01/2009	04/02/2009	五月 5th Lunar Month	04/02/2010	14/02/2010
2012	壬辰 Ren-chen	23/01/2012	04/02/2012	四月 4th Lunar Month	04/02/2013	10/02/2013
2014	甲午 Jia-wu	31/01/2014	04/02/2014	九月 9th Lunar Month	04/02/2015	19/02/2015
2017	丁酉 Ding-You	28/01/2017	03/02/2017	六月 6th Lunar Month	04/02/2018	16/02/2018
2020	庚子 Geng-zi	25/01/2020	04/02/2020	四月 4th Lunar Month	03/02/2021	12/02/2021

自 2000 年起的「雙春兼閏月」的農曆年份  
Chinese calendar year with "Double 'Spring Commences' and Leap Month" since 2000

如果你想知道下一個「雙春兼閏月」年會在何時出現？歡迎瀏覽天文台網頁的公曆與農曆對照表。

If you wish to know when will be the next "Double 'Spring Commences' and Leap Month", please visit the Hong Kong Observatory's webpage for Gregorian-Lunar Calendar Conversion Table.

## 相關連結：

Relevant links:



Cool Met Stuff (in Chinese only)  
[youtu.be/t\\_AtooW4Z2U?list=PLBdhEGSPvUGVuK7fZUxHKzv51Y\\_2hy\\_hw](https://youtu.be/t_AtooW4Z2U?list=PLBdhEGSPvUGVuK7fZUxHKzv51Y_2hy_hw)



Weather Notes (in Chinese only)  
[www.hko.gov.hk/tc/](http://www.hko.gov.hk/tc/)  
[天氣隨筆/100585/雙春兼閏月](http://www.hko.gov.hk/tc/100585/雙春兼閏月)



公曆與農曆對照表  
[www.hko.gov.hk/tc/gts/time/conversion.htm](http://www.hko.gov.hk/tc/gts/time/conversion.htm)



Gregorian-Lunar Calendar Conversion Table  
[www.hko.gov.hk/en/gts/time/conversion.htm](http://www.hko.gov.hk/en/gts/time/conversion.htm)

## 天文與二十四節氣的關係

### 節氣和天文的淵源

二十四節氣是中國曆法的重要部份，是透過長年累月觀測太陽週期運動、季節和物候 [1] 規律，配合社會需要逐步改進而成的時間知識體系，古時應用於發源地黃河流域，隨後普及全國以至周邊國家。

地球圍繞著太陽作橢圓形公轉，其自轉軸並非垂直於公轉面，而是傾斜約23度。從地球上觀察，太陽相對遙遠恆星的軌跡被稱為「黃道」。概念上，節氣是近乎均勻分佈於「黃道」上24個位置的時刻。一個循環歷時一年，更精確地說是一個「回歸年」。

二十四節氣是統稱，內含「中氣」和「節氣」各12個。以春分為第一個「中氣」，接著是「節氣」和「中氣」相間排列，以驚蟄為最後一個「節氣」。

### 「曆」史

完整一套二十四節氣名稱首見於漢朝初期《淮南子》，其中第三章《天文訓》簡要地介紹了天文學和物候學。二十四節氣隨即被納入《太初曆》，以冬至為首，把「黃道」以日數平分24氣，兩氣相隔15日多，此法稱為「平氣」或「恒氣」。

明朝末年開始，隨著西方文化傳入，傳統天文、數學及曆法均受影響。到清朝初年西方耶穌會傳教士更主管曆法機關，改革曆法，在公元1645年正式頒行《時憲曆》，按天文計算以春分為首，把黃道按360度平分24氣，兩氣相隔15度，相當於14.71至15.74日 [2]，這方法沿用至今並稱為「定氣」。

中國曆法是陰陽合曆，12個陰曆月共長約354日，陽曆的「回歸年」則長365.2422日。要協調兩者日數的差異，每二至三年需添置一個陰曆閏月。以不含中氣的陰曆月份定為閏月始於漢朝初期，這項「無中置閏」法則至今在一般情況下仍然適用。

## Links Between the "24 Solar Terms" and Astronomy

### Astronomy and the Chinese Calendar

The "24 Solar Terms" form an integral part of the Chinese calendar. This is a "time knowledge system", progressively built upon long-term observation of the periodic movement of the sun, of the march of the seasons, and on phenology. [1] It has evolved over the centuries to meet the different needs of social development. Originating in the Huanghe (Yellow River) basin in ancient times, the "24 Solar Terms" were widely adopted in other places in China, as well as in neighbouring countries.

The earth orbits around the sun along an elliptical path. Its axis of rotation is not perpendicular to the plane of the orbit but is tilted at about 23 degrees. An observer on earth, looking at the apparent movement of the sun against remote stars, can define a path called the "ecliptic". The "Solar Terms", evenly spread conceptually along the "ecliptic", mark the moments when the sun reaches its 24 pre-defined positions, thus forming a cycle that corresponds exactly to one year and, more, precisely one "tropical year".

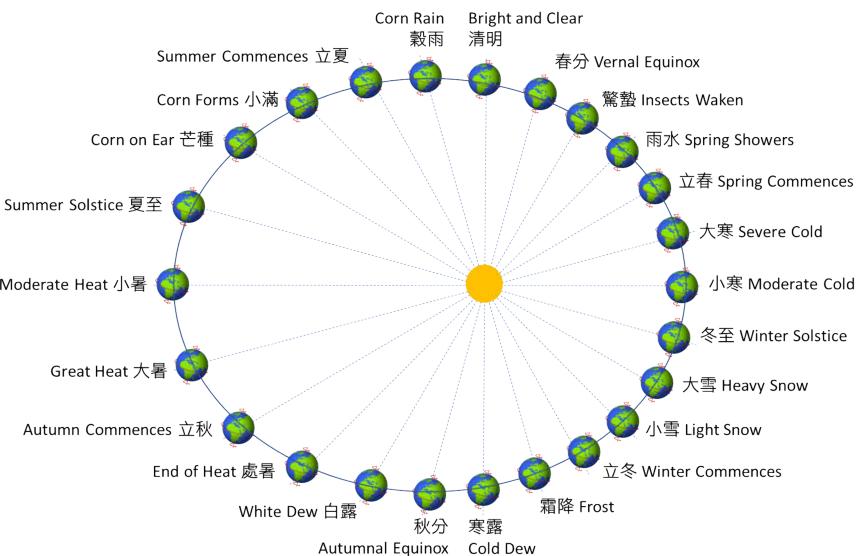
The "24 Solar Terms" is a collective name for this system. It comprises 12 "Major Solar Terms" and 12 "Minor Solar Terms". The first "Major Solar Term" is the "Vernal Equinox", which followed by the rest of the minor and major solar terms alternating with each other, with the cycle ending with "Insects Waken".

### History of the Chinese Calendar

The first complete set of the "24 Solar Terms" appeared in the early Han Dynasty in an ancient book, the *Huainanzi*, whose third chapter gives a concise description of astronomy and phenology. These "24 Solar Terms" were soon absorbed into the *Tai Chu Li*, the first well documented calendar in the history of China. At that time, the "24 Solar Terms" began at the "Winter Solstice", and were evenly marked on the "ecliptic" with a constant time interval of about 15 days.

Towards the end of the Ming Dynasty, traditional astronomy, mathematics and the calendar were ameliorated by coming into contact with western science and technology. In the early Qing Dynasty, when the authoritative organisation for compiling the calendar was under the charge of the Jesuits, a major reform of the calendar was conducted. The official *Shi Xian Li Calendar (State Calendar)* was published in 1645 and the "Vernal Equinox" was adopted as the first Solar Term. Positions of all the "24 Solar Terms" were fixed at pre-defined longitudes at an "ecliptic" coordinate with a constant angular separation of 15 degrees, corresponding to a period of 14.71 to 15.74 days. [2] This practice is still in use today.

The so-called "Chinese Agricultural Calendar" is a combination of the lunar and solar calendar systems. There are 365.2422 days in one "tropical year", while 12 lunar months add up to 354 days. To harmonise the lunar and solar calendars, a leap lunar month needs to be added every two to three years. Since the early Han Dynasty, a lunar month without major solar term has been adopted as a leap month. For most situations, this practice has generally remained in use until today.



橢圓形的地球公轉軌道及二十四節氣位置

The elliptical Earth's orbit and positions of "24 Solar Terms"

### 應用及文化層面

### Related Applications and Customs

其他的曆法只有黑夜最長的冬至、白晝最長的夏至 [3]、晝夜平分的春分及秋分，相比之下中國二十四節氣內容更豐富。二十四節氣是農耕時間表，例子有「芒種插秧穀滿尖」和「寒露麥，霜降豆」，又是中國詩人常用的題材，例如杜牧的《清明》、杜甫的《小至》和陸游的《大寒》。

時至今日，城市人依舊保留一些相關習俗，例如「冬至大過年」、「冬至吃餃子，立春吃春卷」等。隨著文化交流，二十四節氣廣傳世界，於2016年被聯合國教科文組織列入「人類非物質文化遺產代表作品名錄」，可謂實至名歸。

### 註：

- [1] 物候學研究週期性植物和動物生命週期事件，這些事件如何受季節和年際氣候變化以及棲息地因素(例如海拔高度)的影響。
- [2] 地球作橢圓形公轉，相同角距的不同節段對應時間有異。
- [3] 在北半球，一年之中，黑夜最長是冬至，白晝最長是夏至。

### Notes:

- [1] Phenology is the study of periodic plant and animal life cycle events and how these are influenced by seasonal and inter-annual variations in climate, as well as habitat factors, such as elevation.
- [2] Along the Earth's elliptical orbit, different segments with the same angular distance correspond to different time spans.
- [3] In the northern hemisphere, daytime is longest at "Summer Solstice" and shortest at "Winter Solstice".



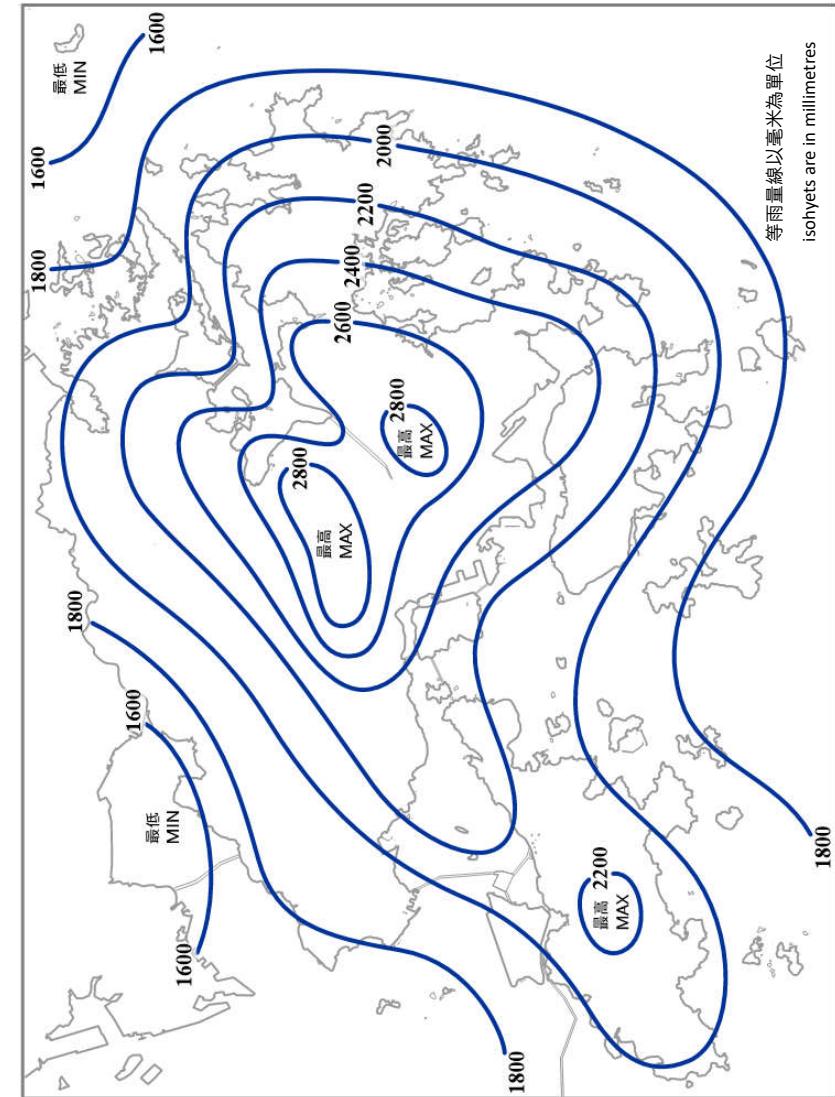
1884-1939 年與 1947-2021\*年香港天文台錄得之氣溫及雨量的極端值

Extreme Air Temperatures and Rainfall Recorded at the  
Hong Kong Observatory for the Period 1884-1939 and 1947-2021\*

月份 Month	氣溫 Air Temperature				雨量 Rainfall				
	絕對最高 Absolute Maximum	絕對最低 Absolute Minimum	最高時雨量 Hourly Maximum	最高日雨量 Daily Maximum	最高月/年雨量 Monthly / Annual Maximum				
一月 January	攝氏 °C	日期 Date	攝氏 °C	日期 Date	毫米 mm	日期 Date	毫米 mm	日期 Date	年 Year
二月 February	26.9	29.1.1959	0.0	18.1.1893	37.0	5.1.2016	99.8	26.1.1887	2016
三月 March	28.3	25.2.2009	2.4	11.2.1957	31.9	23.2.1990	94.1	7.2.2010	1983
四月 April	30.1	31.3.1973	4.8	1.3.1986	56.0	30.3.2014	130.0	23.3.2002	1983
五月 May	33.4	27.4.1956	9.9	5.4.1969	92.4	30.4.1975	237.4	19.4.2008	2000
六月 June	36.1	23.5.2021	15.4	1.5.1917	109.9	8.5.1992	520.6	30.5.1889	1889
七月 July	35.6	1.6.1963	19.2	2.6.1926	145.5	7.6.2008	411.3	9.6.1998	2008
八月 August	35.7	25.7.1968	21.7	30.7.1989	115.1	16.7.2006	534.1	19.7.1926	1994
九月 September	36.6	22.8.2017	21.6	3.8.1955	82.1	2.8.1979	334.2	16.8.1982	1995
十月 October	35.2	5.9.1963	18.4	26.9.1935	84.0	22.9.1948	325.5	27.9.1965	1952
十一月 November	34.3	12.10.1890	13.5	30.10.1978	78.7	19.10.2016	329.7	8.10.2021	1974
十二月 December	31.8	19.11.1959	6.5	26.11.1922	46.6	3.11.2008	149.2	17.11.1897	1914
年值 Year	28.7	1.12.1953	4.3	14.12.1975	51.7	9.12.1931	177.3	2.12.1974	1974
	36.6	22.8.2017	0.0	18.1.1893	145.5	7.6.2008	534.1	19.7.1926	1997

\* 更新至 2021 年 10 月 31 日  
updated up to 31 October 2021

Distribution of Mean Annual Rainfall in Hong Kong 1991 – 2020



**描述風力的常用術語**  
Descriptive Terms of Wind Speeds

描述風力術語 Description	蒲福氏風級 Beaufort Force	風速(公里每小時) Wind Speed (km/h)
輕微 Light	1 - 2	2 - 12
和緩 Moderate	3 - 4	13 - 30
清勁 Fresh	5	31 - 40
強風 Strong	6 - 7	41 - 62
烈風 Gale	8 - 9	63 - 87
暴風 Storm	10 - 11	88 - 117
颶風 Hurricane	12	≥ 118

**根據最高持續風速而劃分的各類熱帶氣旋**  
Classification of Tropical Cyclones  
According to Maximum Sustained Winds

熱帶氣旋種類 Class of Tropical Cyclone	中心附近之最高持續風速 (公里每小時) Maximum Sustained Winds near the Centre (km/h)
熱帶低氣壓 Tropical Depression	41 - 62
熱帶風暴 Tropical Storm	63 - 87
強烈熱帶風暴 Severe Tropical Storm	88 - 117
颶風 Typhoon	118 - 149
強颶風 Severe Typhoon	150 - 184
超強颶風 Super Typhoon	≥ 185

- 強烈季候風信號用以警告源自冬季或夏季季候風而超過每小時 40 公里的風力。在十分空曠的地區，風力可能超過每小時 70 公里。

**熱帶氣旋警告信號所表示的風力**  
Winds Associated with  
Tropical Cyclone Warning Signals

信號 Signal	預料會出現或已經出現的持續風速(公里每小時) Sustained Wind Speed Expected or Blowing (km/h)	陣風可能超過(公里每小時) Gust may Exceed (km/h)
戒備 Standby	1	—
強風 Strong Wind	3	41 - 62
西北 烈風或暴風 NW'ly Gale or Storm	8 西北 NW	110
西南 烈風或暴風 SW'ly Gale or Storm	8 西南 SW	63 - 117
東北 烈風或暴風 NE'ly Gale or Storm	8 東北 NE	180
東南 烈風或暴風 SE'ly Gale or Storm	8 東南 SE	
烈風或暴風 風力增強 Increasing Gale or Storm	9	烈風或暴風的風力現正或預料會顯著加強 Gale or storm force wind is increasing or expected to increase significantly in strength
颶風 Hurricane	10	≥ 118
		220

187 8200 「打電話問天氣」資料查詢系統 (24 小時熱線)  
187 8200 "Dial-a-Weather" Information Enquiry System (24-hour hotline)

廣東話按 1 字，普通話按 2 字，英語按 3 字。

Press 1 for Cantonese, 2 for Putonghua, 3 for English.

查詢其他項目再按以下號碼：Press the numbers below for other information:

<u>查詢項目</u>	<u>Description</u>	<u>再按 then press</u>
天氣警告簡報	Weather Warning Summary	3 1
本港天氣預報	Local Weather Forecast	1 1
九天天氣預報	9-day Weather Forecast	1 2
紫外線指數預測	Ultraviolet Index Forecast	1 3
華南海域天氣報告	Weather Information for South China Coastal Waters	5 1
潮汐資料	Tidal Information	5 5
香港標準時間	Hong Kong Standard Time	6 1
天文現象	Astronomical Events	6 3

**查詢天文台服務的電話號碼**  
Telephone Numbers for Enquiries on the Hong Kong Observatory Services

<u>查詢項目</u>	<u>Description</u>	<u>電話號碼 Tel. No.</u>
熱帶氣旋警告信號查詢 (民政事務總署)	Tropical Cyclone Warning Signals Enquiries (Home Affairs Department)	2835 1473
航空天氣查詢	Aviation Weather Enquiries	2910 6920
海洋資料查詢	Oceanographic Enquiries	2926 8447
地球物理及地震資料	Geophysics & Earthquakes	2926 8432
天文台刊物	Publications	2926 8247
資源中心	Resource Centre	2926 8250
供法律訴訟用之正式文件	Official Documents for Litigation	2926 8448
氣候資料	Climatology	2926 8444
特殊氣象服務	Special Weather Services	2926 8440
公眾氣象服務	Public Weather Services	2926 8375
投訴及意見	Complaints and Suggestions	2926 8468
一般查詢	General Enquiries	2926 8200

- Strong Monsoon Signal is used to warn winds in excess of 40 km/h due to the winter or summer monsoon. These winds may exceed 70 km/h in very exposed places.