

# ASTRONOMICAL INFORMATION SHEET No. 105



Prepared by

HM Nautical Almanac Office

**THE UNITED KINGDOM HYDROGRAPHIC OFFICE**

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## ASTRONOMICAL AND CALENDARIAL DATA SHEET FOR 2018

### PHASES OF THE MOON

New Moon			First Quarter			Full Moon			Last Quarter		
d	h	m	d	h	m	d	h	m	d	h	m
Jan.	17	02	17	Jan.	24	22	20	Jan.	2	02	24
Feb.	15	21	05	Feb.	23	08	09	Jan.	31	13	27
Mar.	17	13	12	Mar.	24	15	35	Mar.	2	00	51
Apr.	16	01	57	Mar.	24	15	35	Mar.	31	12	37
May	15	11	48	Apr.	22	21	46	Apr.	30	00	58
June	13	19	43	Apr.	22	03	49	Apr.	29	14	20
July	13	02	48	May	22	10	51	May	29	04	53
Aug.	11	09	58	May	20	19	52	May	27	20	20
Sept.	9	18	01	July	19	07	49	July	26	11	56
Oct.	9	03	47	Aug.	18	23	15	Aug.	25	02	52
Nov.	7	16	02	Sept.	16	18	02	Sept.	24	16	45
Dec.	7	07	20	Oct.	15	14	54	Oct.	23	05	39
				Dec.	15	11	49	Nov.	22	17	49
								Dec.	29	09	34

### SEASONS

		d	h	m
Vernal Equinox	— Spring begins	Mar.	20	16 15
Summer Solstice	— Summer begins	June	21	10 07
Autumnal Equinox	— Autumn begins	Sept.	23	01 54
Winter Solstice	— Winter begins	Dec.	21	22 23

### SUMMER TIME\*

In the United Kingdom BST, one hour in advance of GMT, will be kept from March 25<sup>d</sup> 01<sup>h</sup> to October 28<sup>d</sup> 01<sup>h</sup> GMT.\*

### ECLIPSES

Eclipses Online Portal—<http://astro.ukho.gov.uk/eclbin/query.cgi?year=2018>

1. A total eclipse of the Moon on January 31 is visible from North America except the eastern part, Oceania, Russia, Asia except the western part and northern Scandinavia. The umbral phase begins at 11<sup>h</sup> 48<sup>m</sup> and ends at 15<sup>h</sup> 12<sup>m</sup>. Totality lasts from 12<sup>h</sup> 51<sup>m</sup> to 14<sup>h</sup> 08<sup>m</sup>.
2. A partial eclipse of the Sun on February 15 is visible from Antarctica except Wilkes Land and the southern part of South America. The eclipse begins at 18<sup>h</sup> 56<sup>m</sup> and ends at 22<sup>h</sup> 47<sup>m</sup>. The time of greatest eclipse is 20<sup>h</sup> 51<sup>m</sup>, when 0.60 of the Sun's diameter is obscured.
3. A partial eclipse of the Sun on July 13 is visible from the tip of Wilkes Land in Antarctica, Tasmania and the southernmost part of South Australia. The eclipse begins at 01<sup>h</sup> 48<sup>m</sup> and ends at 04<sup>h</sup> 14<sup>m</sup>. The time of greatest eclipse is 03<sup>h</sup> 01<sup>m</sup>, when 0.34 of the Sun's diameter is obscured.
4. A total eclipse of the Moon on July 27 is visible from Antarctica, Australasia, central Asia, Africa, Scandinavia, Europe including the British Isles and the easternmost part of South America. The umbral phase begins at 18<sup>h</sup> 24<sup>m</sup> and ends at 22<sup>h</sup> 19<sup>m</sup>. Totality lasts from 19<sup>h</sup> 30<sup>m</sup> to 21<sup>h</sup> 14<sup>m</sup>.
5. A partial eclipse of the Sun on August 11 is visible from northernmost Canada, Greenland, Iceland, Scandinavia, most of Russia, most of Kazakhstan, Mongolia and most of China. The eclipse begins at 08<sup>h</sup> 02<sup>m</sup> and ends at 11<sup>h</sup> 31<sup>m</sup>. The time of greatest eclipse is 09<sup>h</sup> 46<sup>m</sup>, when 0.74 of the Sun's diameter is obscured.

All times are in GMT (UT, i.e. UT1)

\*[www.gov.uk/when-do-the-clocks-change](http://www.gov.uk/when-do-the-clocks-change)

CYH/SGN/SAB

2012 December

At the time this sheet was produced, HMNAO believes the information to be accurate.

CALENDAR 2018

CHRONOLOGICAL CYCLES AND ERAS

Dominical Letter	G	Julian Period (year of)	6731		
Epact	13	Roman Indiction	11		
Golden Number (Lunar Cycle)	V	Solar Cycle	11		
Era	Year	Begins	Era	Year	Begins
Byzantine	7527	Sept. 14	Grecian (Seleucidæ)	2330	Sept. 14
Roman (AUC)	2771	Jan. 14			(or Oct. 14)
Nabonassar	2767	Apr. 19	Saka (Indian)	1940	Mar. 22
Japanese	2678	Jan. 1	Diocletian (Coptic)	1735	Sept. 11

RELIGIOUS CALENDARS

Epiphany	Jan. 6	Low Sunday	Apr. 8
Septuagesima Sunday	Jan. 28	Rogation Sunday	May 6
Quinquagesima Sunday	Feb. 11	Ascension Day—Holy Thursday	May 10
Ash Wednesday	Feb. 14	Whit Sunday—Pentecost	May 20
Quadragesima Sunday	Feb. 18	Trinity Sunday	May 27
Fourth Sunday in Lent—Mothering Sunday	Mar. 11	Corpus Christi	May 31
Palm Sunday	Mar. 25	First Sunday in Advent	Dec. 2
Good Friday	Mar. 30	Christmas Day (Tuesday)	Dec. 25
Easter Day	Apr. 1		
First Day of Passover (Pesach)	Mar. 31	Day of Atonement (Yom Kippur)	Sept. 19
Feast of Weeks (Shavuot)	May 20	First day of Tabernacles (Succoth)	Sept. 24
Jewish New Year (Rosh Hashanah)	5779 Sept. 10		
First day of Ramadân	May 16	Islamic New Year	1440 Sept. 12

All Jewish and Islamic dates above are tabular dates, which begin at sunset on the previous evening and end at sunset on the date tabulated. In practice, the dates of Islamic fasts and festivals are determined by an actual sighting of the appropriate new Moon.

CIVIL CALENDAR—UNITED KINGDOM

Accession of Queen Elizabeth II	Feb. 6	Coronation Day	June 2
St David (Wales)	Mar. 1	The Queen's Official Birthday*	June 9
Commonwealth Day	Mar. 12	Birthday of Prince Philip, Duke of Edinburgh	June 10
St Patrick (Ireland)	Mar. 17	Remembrance Sunday	Nov. 11
Birthday of Queen Elizabeth II	Apr. 21	Birthday of the Prince of Wales	Nov. 14
St George (England)	Apr. 23	St Andrew (Scotland)	Nov. 30

\*Date subject to confirmation

HOLIDAYS IN THE UNITED KINGDOM

The following list contains bank holidays, (compiled from the *Banking and Financial Dealings Act 1971*), common law holidays and days to be given in lieu for holidays which fall on a weekend. Dates given in *italic* are those which are subject to Royal proclamation or for Northern Ireland proclamation by the Secretary of State. There is no statutory requirement for a day to be given in lieu if one of the days falls at the weekend and is not covered by the act. In such cases probable dates are given in *italic* when they have not yet been authorised. Consult our web site at <http://astro.ukho.gov.uk/nao/online/index.html#calendar> for various UK Government links which will give the latest details.

	<b>England and Wales</b>	<b>Northern Ireland</b>	<b>Scotland</b>
New Year	<i>Jan. 1</i>	<i>Jan. 1</i>	Jan. 1 Jan. 2
St Patrick	—	<i>Mar. 19</i>	—
Good Friday	Mar. 30 ‡	Mar. 30 ‡	Mar. 30
Easter Monday	Apr. 2	Apr. 2	—
Early (Spring) May	<i>May 7</i>	<i>May 7</i>	May 7
Spring	May 28	May 28	<i>May 28</i>
Battle of the Boyne	—	<i>July 12</i>	—
Summer	Aug. 27	Aug. 27	Aug. 6
Christmas	Dec. 25 ‡	Dec. 25 ‡	Dec. 25 ‡
Boxing Day	Dec. 26	Dec. 26	<i>Dec. 26</i>

‡ Common Law Holiday # Holiday falls on a Saturday † Holiday falls on a Sunday

**Warning:** Clauses in the *Banking and Financial Dealings Act* allow the Government to alter dates at short notice.