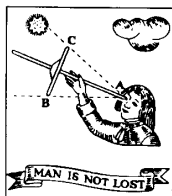


# ASTRONOMICAL INFORMATION SHEET No. 107



Prepared by

HM Nautical Almanac Office

**THE UNITED KINGDOM HYDROGRAPHIC OFFICE**

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## ASTRONOMICAL AND CALENDARIAL DATA SHEET FOR 2020

### 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.	24	21	42	Jan.	3	04	45	Jan.	10	19	21	Jan.	17	12	58
Feb.	23	15	32	Feb.	2	01	42	Feb.	9	07	33	Feb.	15	22	17
Mar.	24	09	28	Mar.	2	19	57	Mar.	9	17	48	Mar.	16	09	34
Apr.	23	02	26	Apr.	1	10	21	Apr.	8	02	35	Apr.	14	22	56
May	22	17	39	Apr.	30	20	38	May	7	10	45	May	14	14	03
June	21	06	41	May	30	03	30	June	5	19	12	June	13	06	24
July	20	17	33	June	28	08	16	July	5	04	44	July	12	23	29
Aug.	19	02	42	July	27	12	33	Aug.	3	15	59	Aug.	11	16	45
Sept.	17	11	00	Aug.	25	17	58	Sept.	2	05	22	Sept.	10	09	26
Oct.	16	19	31	Sept.	24	01	55	Oct.	1	21	05	Oct.	10	00	40
Nov.	15	05	07	Oct.	23	13	23	Oct.	31	14	49	Nov.	8	13	46
Dec.	14	16	17	Nov.	22	04	45	Nov.	30	09	30	Dec.	8	00	37
				Dec.	21	23	41	Dec.	30	03	28				

### SEASONS

			d	h	m
Vernal Equinox	—	Spring begins	Mar.	20	03 50
Summer Solstice	—	Summer begins	June	20	21 44
Autumnal Equinox	—	Autumn begins	Sept.	22	13 31
Winter Solstice	—	Winter begins	Dec.	21	10 02

### SUMMER TIME\*

In the United Kingdom BST, one hour in advance of GMT, will be kept from March 29<sup>d</sup> 01<sup>h</sup> to October 25<sup>d</sup> 01<sup>h</sup> GMT.\*

### ECLIPSES

Eclipses Online Portal—<http://astro.ukho.gov.uk/eclbin/query.cgi?year=2020>

1. A penumbral eclipse of the Moon on January 10.
2. A penumbral eclipse of the Moon on June 5.
3. An annular eclipse of the Sun on June 21. The path of annularity begins over the north-eastern part of Congo and crosses the north-western part of the Democratic Republic of Congo, the south-eastern tip of the Central African Republic, South Sudan, northern Ethiopia, Eritrea, Yemen, the south-eastern tip of Saudi Arabia, north-eastern Oman, Pakistan, the northernmost part of India, southern China, Taiwan and ends south-east of Guam. The partial phase is visible from most of Africa, northern Madagascar, south-east Europe, most of Asia except the northernmost part, western parts of Micronesia and Melanesia, and northern Australia. The eclipse begins at 03<sup>h</sup> 46<sup>m</sup> and ends at 09<sup>h</sup> 34<sup>m</sup>; the annular phase begins at 04<sup>h</sup> 48<sup>m</sup> and ends at 08<sup>h</sup> 32<sup>m</sup>. The maximum duration of annularity is 1<sup>m</sup> 18<sup>s</sup>.
4. A penumbral eclipse of the Moon on July 5.
5. A penumbral eclipse of the Moon on November 30.
6. A total eclipse of the Sun on December 14. The path of totality begins over the north-eastern part of French Polynesia and passes over the south-eastern Pacific Ocean, the central part of Chile and Argentina, the South Atlantic Ocean and ends just off the coast of central Namibia. The partial phase is visible from the south-eastern Pacific basin including French Polynesia, most of South America except the northern part, parts of Antarctica, the South Atlantic Ocean and the south-western part of Africa. The eclipse begins at 13<sup>h</sup> 34<sup>m</sup> and ends at 18<sup>h</sup> 53<sup>m</sup>; the total phase begins at 14<sup>h</sup> 33<sup>m</sup> and ends at 17<sup>h</sup> 54<sup>m</sup>. The maximum duration of totality is 2<sup>m</sup> 14<sup>s</sup>.

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)

SAB/PSP/SGN

2015 September  
Updated 2019 June

CALENDAR 2020

CHRONOLOGICAL CYCLES AND ERAS

Dominical Letter	ED	Julian Period (year of)	6733		
Epact	5	Roman Indiction	13		
Golden Number (Lunar Cycle)	VII	Solar Cycle	13		
Era	Year	Begins	Era	Year	Begins
Byzantine	7529	Sept. 14	Grecian (Seleucidæ)	2332	Sept. 14
Roman (AUC)	2773	Jan. 14			(or Oct. 14)
Nabonassar	2769	Apr. 18	Saka (Indian)	1942	Mar. 21
Japanese	2680	Jan. 1	Diocletian (Coptic)	1737	Sept. 11

RELIGIOUS CALENDARS

Epiphany	Jan. 6	Low Sunday	Apr. 19
Septuagesima Sunday	Feb. 9	Rogation Sunday	May 17
Quinquagesima Sunday	Feb. 23	Ascension Day—Holy Thursday	May 21
Ash Wednesday	Feb. 26	Whit Sunday—Pentecost	May 31
Quadragesima Sunday	Mar. 1	Trinity Sunday	June 7
Fourth Sunday in Lent—Mothering Sunday	Mar. 22	Corpus Christi	June 11
Palm Sunday	Apr. 5	First Sunday in Advent	Nov. 29
Good Friday	Apr. 10	Christmas Day (Friday)	Dec. 25
Easter Day	Apr. 12		
First Day of Passover (Pesach)	Apr. 9	Day of Atonement (Yom Kippur)	Sept. 28
Feast of Weeks (Shavuot)	May 29	First day of Tabernacles (Succoth)	Oct. 3
Jewish New Year (Rosh Hashanah)	5781 Sept. 19		
First day of Ramadân	Apr. 24	Islamic New Year	1442 Aug. 20

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	Birthday of Prince Philip, Duke of Edinburgh	June 10
Commonwealth Day	Mar. 9	The Queen's Official Birthday*	June 13
St Patrick (Ireland)	Mar. 17	Remembrance Sunday	Nov. 8
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.

	England and Wales	Northern Ireland	Scotland
New Year	Jan. 1	Jan. 1	Jan. 1 Jan. 2
St Patrick	—	Mar. 17	—
Good Friday	Apr. 10‡	Apr. 10‡	Apr. 10
Easter Monday	Apr. 13	Apr. 13	—
Early (Spring) May (VE Day Anniversary)	May 8	May 8	May 8
Spring	May 25	May 25	May 25
Battle of the Boyne	—	July 12† July 13	—
Summer	Aug. 31	Aug. 31	Aug. 3
Christmas	Dec. 25‡	Dec. 25‡	Dec. 25‡
Boxing Day	Dec. 26# Dec. 28	Dec. 26# Dec. 28	Dec. 26# Dec. 28

‡ 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.