

# ASTRONOMICAL INFORMATION SHEET No. 79



Prepared by

**HM Nautical Almanac Office**

Rutherford Appleton Laboratory, Chilton, Didcot, OX11 0QX  
Council for the Central Laboratory of the Research Councils



## ASTRONOMICAL AND CALENDARIAL DATA SHEET FOR 2002

### 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.	13	13	29	Jan.	21	17	46	Jan.	28	22	50	Jan.	6	03	55
Feb.	12	07	41	Feb.	20	12	02	Feb.	27	09	17	Feb.	4	13	33
Mar.	14	02	02	Mar.	22	02	28	Mar.	28	18	25	Mar.	6	01	24
Apr.	12	19	21	Apr.	20	12	48	Apr.	27	03	00	Apr.	4	15	29
May	12	10	45	May	19	19	42	May	26	11	51	May	4	07	16
June	10	23	46	June	18	00	29	June	24	21	42	June	3	00	05
July	10	10	26	July	17	04	47	July	24	09	07	July	2	17	19
Aug.	8	19	15	Aug.	15	10	12	Aug.	22	22	29	Aug.	1	10	22
Sept.	7	03	10	Sept.	13	18	08	Sept.	21	13	59	Aug.	31	02	31
Oct.	6	11	18	Oct.	13	05	33	Oct.	21	07	20	Sept.	29	17	03
Nov.	4	20	34	Nov.	11	20	52	Nov.	20	01	34	Oct.	29	05	28
Dec.	4	07	34	Dec.	11	15	49	Dec.	19	19	10	Nov.	27	15	46
				Dec.								Dec.	27	00	31

### SEASONS

			d	h	m	
Vernal Equinox	—	Spring begins	Mar.	20	19	16
Summer Solstice	—	Summer begins	June	21	13	24
Autumnal Equinox	—	Autumn begins	Sept.	23	04	55
Winter Solstice	—	Winter begins	Dec.	22	01	14

### SUMMER TIME

In the United Kingdom BST, one hour in advance of GMT, will be kept from March 31<sup>d</sup> 01<sup>h</sup> to October 27<sup>d</sup> 01<sup>h</sup> GMT.\*

### ECLIPSES

1. An annular eclipse of the Sun on June 10–11 is visible as a partial eclipse from eastern Asia, Japan, Indonesia, northern Australia, Pacific Ocean, northern Mexico, U.S.A. and Canada except the extreme north-east. The eclipse begins on June 10 at 20<sup>h</sup> 52<sup>m</sup> and ends on June 11 at 02<sup>h</sup> 37<sup>m</sup>. The annular phase begins in the South China Sea on June 10 at 21<sup>h</sup> 54<sup>m</sup>, crosses the central Pacific Ocean and ends on June 11 at 01<sup>h</sup> 34<sup>m</sup> off the western coast of Mexico. The maximum duration of the annular phase is 1<sup>m</sup> 09<sup>s</sup>.

2. A total eclipse of the Sun on December 4. The path of totality begins in the South Atlantic Ocean passes through Angola, northern Botswana, southern Zimbabwe, Mozambique, central Indian Ocean and ends in South Australia. The partial phase is visible from Africa except the north, S.E. Atlantic Ocean, central Indian Ocean, part of Antarctica, Indonesia, Australia and South Island of New Zealand. The eclipse begins at 04<sup>h</sup> 51<sup>m</sup> and ends at 10<sup>h</sup> 11<sup>m</sup>; the total phase begins at 05<sup>h</sup> 50<sup>m</sup> and ends at 09<sup>h</sup> 12<sup>m</sup>. The maximum duration of totality is 2<sup>m</sup> 08<sup>s</sup>.

All times are in GMT

\*Subject to confirmation

CYH/SAB

1998 January

Updated 2000 November 24

Copyright is reserved on this material. Permission must be granted to reproduce this material. The following acknowledgement should be given in any publication in which it is reproduced: "... reproduced, with permission, from data supplied by HM Nautical Almanac Office © Council for the Central Laboratory of the Research Councils". The CCLRC does not accept any responsibility for loss or damage arising from the use of information contained in any of its reports or in any communication about its tests or investigations.

CALENDAR 2002

CHRONOLOGICAL CYCLES AND ERAS

Dominical Letter	F	Julian Period (year of)	6715
Epact	16	Roman Indiction	10
Golden Number (Lunar Cycle)	VIII	Solar Cycle	23

  

Era	Year	Begins	Era	Year	Begins
Byzantine	7511	Sept. 14	Grecian (Seleucidæ)	2314	Sept. 14
Roman (AUC)	2755	Jan. 14			(or Oct. 14)
Nabonassar	2751	Apr. 23	Indian (Saka)	1924	Mar. 22
Japanese	2662	Jan. 1	Diocletian	1719	Sept. 11

RELIGIOUS CALENDARS

Epiphany	Jan. 6	Low Sunday	Apr. 7
Septuagesima Sunday	Jan. 27	Rogation Sunday	May 5
Quinquagesima Sunday	Feb. 10	Ascension Day—Holy Thursday	May 9
Ash Wednesday	Feb. 13	Whit Sunday—Pentecost	May 19
Quadragesima Sunday	Feb. 17	Trinity Sunday	May 26
Fourth Sunday in Lent—Mothering Sunday	Mar. 10	Corpus Christi	May 30
Palm Sunday	Mar. 24	First Sunday in Advent	Dec. 1
Good Friday	Mar. 29	Christmas Day (Wednesday)	Dec. 25
Easter Day	Mar. 31		
First Day of Passover (Pesach)	Mar. 28	Day of Atonement (Yom Kippur)	Sept. 16
Feast of Weeks (Shavuot)	May 17	First day of Tabernacles (Succoth)	Sept. 21
Jewish New Year (Rosh Hashanah)	5763 Sept. 7		
Islamic New Year	1423 Mar. 15	First day of Ramadân	Nov. 6

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 8
Commonwealth Day	Mar. 11	Birthday of Prince Philip, Duke of Edinburgh	June 10
St Patrick (Ireland)	Mar. 17	Remembrance Sunday	Nov. 10
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. 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 The Department of Trade and Industry ([www.dti.gov.uk/er/bankhol.htm](http://www.dti.gov.uk/er/bankhol.htm)) or the Scottish Executive (telephone 0131 244 2180) or [www.scotland.gov.uk/faq/bankhol.asp](http://www.scotland.gov.uk/faq/bankhol.asp) for the latest details.

	England and Wales	Northern Ireland	Scotland
New Year	Jan. 1	Jan. 1	Jan. 1 Jan. 2
St Patrick	—	Mar. 18	—
Good Friday	Mar. 29 ‡	Mar. 29 ‡	Mar. 29
Easter Monday	Apr. 1	Apr. 1	—
Early May	May 6	May 6	May 6
Queen's Golden Jubilee	June 3	June 3	June 3
Spring	June 4	June 4	June 4
Battle of the Boyne	—	July 12	—
Summer	Aug. 26	Aug. 26	Aug. 5
Christmas	Dec. 25 ‡	Dec. 25 ‡	Dec. 25 ‡
Boxing Day	Dec. 26	Dec. 26	Dec. 26

‡ 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.