

ASTRONOMICAL INFORMATION SHEET No. 84



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 2003

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.	2	20 23	Jan.	10	13 15	Jan.	18	10 48	Jan.	25	08 33
Feb.	1	10 48	Feb.	9	11 11	Feb.	16	23 51	Feb.	23	16 46
Mar.	3	02 35	Mar.	11	07 15	Mar.	18	10 35	Mar.	25	01 51
Apr.	1	19 19	Apr.	9	23 40	Apr.	16	19 36	Apr.	23	12 18
May	1	12 15	May	9	11 53	May	16	03 36	May	23	00 31
May	31	04 20	June	7	20 28	June	14	11 16	June	21	14 45
June	29	18 39	July	7	02 32	July	13	19 21	July	21	07 01
July	29	06 53	Aug.	5	07 28	Aug.	12	04 48	Aug.	20	00 48
Aug.	27	17 26	Sept.	3	12 34	Sept.	10	16 36	Sept.	18	19 03
Sept.	26	03 09	Oct.	2	19 09	Oct.	10	07 27	Oct.	18	12 31
Oct.	25	12 50	Nov.	1	04 25	Nov.	9	01 13	Nov.	17	04 15
Nov.	23	22 59	Nov.	30	17 16	Dec.	8	20 37	Dec.	16	17 42
Dec.	23	09 43	Dec.	30	10 03						

SEASONS

			d	h	m
Vernal Equinox	—	Spring begins	Mar.	21	01 00
Summer Solstice	—	Summer begins	June	21	19 10
Autumnal Equinox	—	Autumn begins	Sept.	23	10 47
Winter Solstice	—	Winter begins	Dec.	22	07 04

SUMMER TIME

In the United Kingdom BST, one hour in advance of GMT, will be kept from March 30^d 01^h to October 26^d 01^h GMT.

ECLIPSES

1. A total eclipse of the Moon on May 16 is visible from part of Antarctica, Africa except the north-east and northern Madagascar, western Europe including the British Isles but excluding Scandinavia, southern Greenland, Atlantic Ocean, The Americas except north-west Canada and Alaska, and east Pacific Ocean. The eclipse begins at 02^h 02^m and ends at 05^h 17^m. Totality lasts from 03^h 13^m to 04^h 06^m.
2. An annular eclipse of the Sun on May 31 is visible as a partial eclipse from NE Africa, the British Isles except Ireland and extreme west of England and Wales, central and eastern Europe, northern Asia, Greenland except the south, Arctic Ocean and northern Canada. The eclipse begins at 01^h 46^m and ends at 06^h 30^m. The annular phase begins in north Scotland at 03^h 45^m, crosses Iceland and ends at 04^h 31^m in central Greenland. The maximum duration of the annular phase is 3^m 37^s.
3. A total eclipse of the Moon on November 8-9 is visible from western and central parts of Asia, west Indian Ocean, Africa, Europe including the British Isles, Atlantic Ocean, part of Antarctica, Greenland, The Americas except western Alaska, and east Pacific Ocean. The eclipse begins on November 8 at 23^h 32^m and ends on November 9 at 03^h 04^m. Totality is on November 9 and lasts from 01^h 06^m to 01^h 30^m.
4. A total eclipse of the Sun on November 23-24. The path of totality begins in the south Indian Ocean and ends in Antarctica. The partial phase is visible from Australia excluding the extreme north, south-east Indian Ocean, New Zealand except the northern half of North Island, Antarctica, south Pacific Ocean, Falkland Islands and southern tip of S America. The eclipse begins on November 23 at 20^h 46^m and ends on November 24 at 00^h 52^m; the total phase on November 23 begins at 22^h 19^m and ends at 23^h 19^m. The maximum duration of totality is 1^m 57^s.

All times are in GMT

CYH/SAB

2000 January
Updated 2002 March

CALENDAR 2003

CHRONOLOGICAL CYCLES AND ERAS

Dominical Letter	E	Julian Period (year of)	6716
Epact	27	Roman Indiction	11
Golden Number (Lunar Cycle)	IX	Solar Cycle	24

Era	Year	Begins	Era	Year	Begins
Byzantine	7512	Sept. 14	Grecian (Seleucidæ)	2315	Sept. 14
Roman (AUC)	2756	Jan. 14			(or Oct. 14)
Nabonassar	2752	Apr. 23	Indian (Saka)	1925	Mar. 22
Japanese	2663	Jan. 1	Diocletian	1720	Sept. 12

RELIGIOUS CALENDARS

Epiphany	Jan. 6	Low Sunday	Apr. 27
Septuagesima Sunday	Feb. 16	Rogation Sunday	May 25
Quinquagesima Sunday	Mar. 2	Ascension Day—Holy Thursday	May 29
Ash Wednesday	Mar. 5	Whit Sunday—Pentecost	June 8
Quadragesima Sunday	Mar. 9	Trinity Sunday	June 15
Fourth Sunday in Lent—Mothering Sunday	Mar. 30	Corpus Christi	June 19
Palm Sunday	Apr. 13	First Sunday in Advent	Nov. 30
Good Friday	Apr. 18	Christmas Day (Thursday)	Dec. 25
Easter Day	Apr. 20		
First Day of Passover (Pesach)	Apr. 17	Day of Atonement (Yom Kippur)	Oct. 6
Feast of Weeks (Shavuot)	June 6	First day of Tabernacles (Succoth)	Oct. 11
Jewish New Year (Rosh Hashanah)	5764 Sept. 27		
Islamic New Year	1424 Mar. 5	First day of Ramadân	Oct. 27

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. 10	The Queen's Official Birthday*	June 14
St Patrick (Ireland)	Mar. 17	Remembrance Sunday	Nov. 9
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 The Department of Trade and Industry (www.dti.gov.uk/er/bankhol.htm) or the Scottish Executive (telephone 0131 244 2180) or www.scotland.gov.uk/faq/bankhol.asp) for the latest details.

	England and Wales	Northern Ireland	Scotland
New Year	<i>Jan. 1</i>	<i>Jan. 1</i>	Jan. 1 Jan. 2
St Patrick	—	Mar. 17	—
Good Friday	Apr. 18 ‡	Apr. 18 ‡	Apr. 18
Easter Monday	Apr. 21	Apr. 21	—
Early May	<i>May 5</i>	<i>May 5</i>	May 5
Spring	May 26	May 26	<i>May 26</i>
Battle of the Boyne	—	July 12# <i>July 14</i>	—
Summer	Aug. 25	Aug. 25	Aug. 4
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.