

ASTRONOMICAL INFORMATION SHEET No. 90



Prepared by

HM Nautical Almanac Office

THE UNITED KINGDOM HYDROGRAPHIC OFFICE

Admiralty Way, Taunton, Somerset, TA1 2DN



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ASTRONOMICAL AND CALENDARIAL DATA SHEET FOR 2009

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.	26	07 55	Jan.	4	11 56	Jan.	11	03 27	Jan.	18	02 46
Feb.	25	01 35	Feb.	2	23 13	Feb.	9	14 49	Feb.	16	21 37
Mar.	26	16 06	Mar.	4	07 46	Mar.	11	02 38	Mar.	18	17 47
Apr.	25	03 23	Apr.	2	14 34	Apr.	9	14 56	Apr.	17	13 36
May	24	12 11	May	1	20 44	May	9	04 01	May	17	07 26
June	22	19 35	May	31	03 22	June	7	18 12	June	15	22 15
July	22	02 35	June	29	11 28	July	7	09 21	July	15	09 53
Aug.	20	10 02	July	28	22 00	Aug.	6	00 55	Aug.	13	18 55
Sept.	18	18 44	Aug.	27	11 42	Sept.	4	16 03	Sept.	12	02 16
Oct.	18	05 33	Sept.	26	04 50	Oct.	4	06 10	Oct.	11	08 56
Nov.	16	19 14	Oct.	26	00 42	Nov.	2	19 14	Nov.	9	15 56
Dec.	16	12 02	Nov.	24	21 39	Dec.	2	07 30	Dec.	9	00 13
			Dec.	24	17 36	Dec.	31	19 13			

SEASONS

			d	h	m
Vernal Equinox	—	Spring begins	Mar.	20	11 44
Summer Solstice	—	Summer begins	June	21	05 46
Autumnal Equinox	—	Autumn begins	Sept.	22	21 19
Winter Solstice	—	Winter begins	Dec.	21	17 47

SUMMER TIME*

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

ECLIPSES

1. An annular eclipse of the Sun on January 26. The path of annularity begins over the South Atlantic Ocean, crosses the Indian Ocean, southern Sumatra, the western tip of Java, Borneo, the southern tip of Sarawak and ends north of Sulawesi. The partial phase is visible from southern Africa, part of Antarctica, southern and eastern India, south-east Asia, Indonesia and Australia except Tasmania. The eclipse begins at 04^h 57^m and ends at 11^h 01^m; the annular phase begins at 06^h 05^m and ends at 09^h 53^m. The maximum duration of annularity is 7^m 51^s.

2. A total eclipse of the Sun on July 21-22. The path of totality begins over western India, crosses south-eastern Nepal, northern Bangladesh, Bhutan, the northern tip of Myanmar, China, the Ryukyu Islands, the Marshall Islands, Kiribati and ends north of the Cook Islands. The partial phase is visible from south and east Asia, Japan, northern Indonesia, the Philippines and the western and central Pacific Ocean. The eclipse begins at 23^h 58^m on July 21 and ends at 05^h 12^m on July 22; the total phase begins at 00^h 53^m on July 22 and ends at 04^h 18^m on July 22. The maximum duration of totality is 6^m 44^s.

3. A partial eclipse of the Moon on December 31 is visible from northern Canada, Alaska, Australia, Indonesia, Asia, Africa, Europe including the British Isles and the Arctic regions. The umbral eclipse begins at 18^h 52^m and ends at 19^h 54^m. The time of maximum eclipse is 19^h 23^m when 0.08 of the Moon's diameter is obscured.

All times are in GMT (UT)

* www.berr.gov.uk/employment/bank-public-holidays/bst/page12528.html

CYH/SAB

2005 March
Updated 2008 May

CALENDAR 2009

CHRONOLOGICAL CYCLES AND ERAS

Dominical Letter	D	Julian Period (year of)	6722
Epact	3	Roman Indiction	2
Golden Number (Lunar Cycle)	XV	Solar Cycle	2

Era	Year	Begins	Era	Year	Begins
Byzantine	7518	Sept. 14	Grecian (Seleucidæ)	2321	Sept. 14
Roman (AUC)	2762	Jan. 14			(or Oct. 14)
Nabonassar	2758	Apr. 21	Indian (Saka)	1931	Mar. 22
Japanese	2669	Jan. 1	Diocletian	1726	Sept. 11

RELIGIOUS CALENDARS

Epiphany	Jan. 6	Low Sunday	Apr. 19
Septuagesima Sunday	Feb. 8	Rogation Sunday	May 17
Quinquagesima Sunday	Feb. 22	Ascension Day—Holy Thursday	May 21
Ash Wednesday	Feb. 25	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)	5770 Sept. 19		
First day of Ramadân	Aug. 22	Islamic New Year	1431 Dec. 18

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 the Department of Trade and Industry, www.berr.gov.uk/employment/bank-public-holidays, or the Scottish Executive, www.scotland.gov.uk/Publications/2005/01/bankholidays, 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. 10 ‡	Apr. 10 ‡	Apr. 10
Easter Monday	Apr. 13	Apr. 13	—
Early Spring	<i>May 4</i>	<i>May 4</i>	May 4
Spring	May 25	May 25	<i>May 25</i>
Battle of the Boyne	—	July 13	—
Summer	Aug. 31	Aug. 31	Aug. 3
Christmas	Dec. 25 ‡	Dec. 25 ‡	Dec. 25
Boxing Day	Dec. 26# <i>Dec. 28</i>	Dec. 26# <i>Dec. 28</i>	Dec. 26# <i>Dec. 28</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.