

Sunrise Calculator

Version 1.4.1

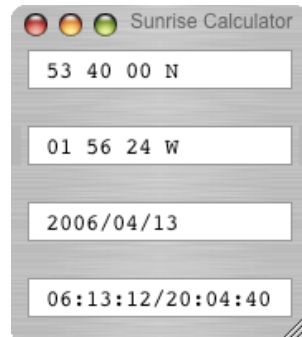
30 April 2006

Summary

Sunrise Calculator computes and displays the times of sunrise and sunset, given a latitude, a longitude and a date. This new version also computes and displays the times of moonrise and moonset.

Description

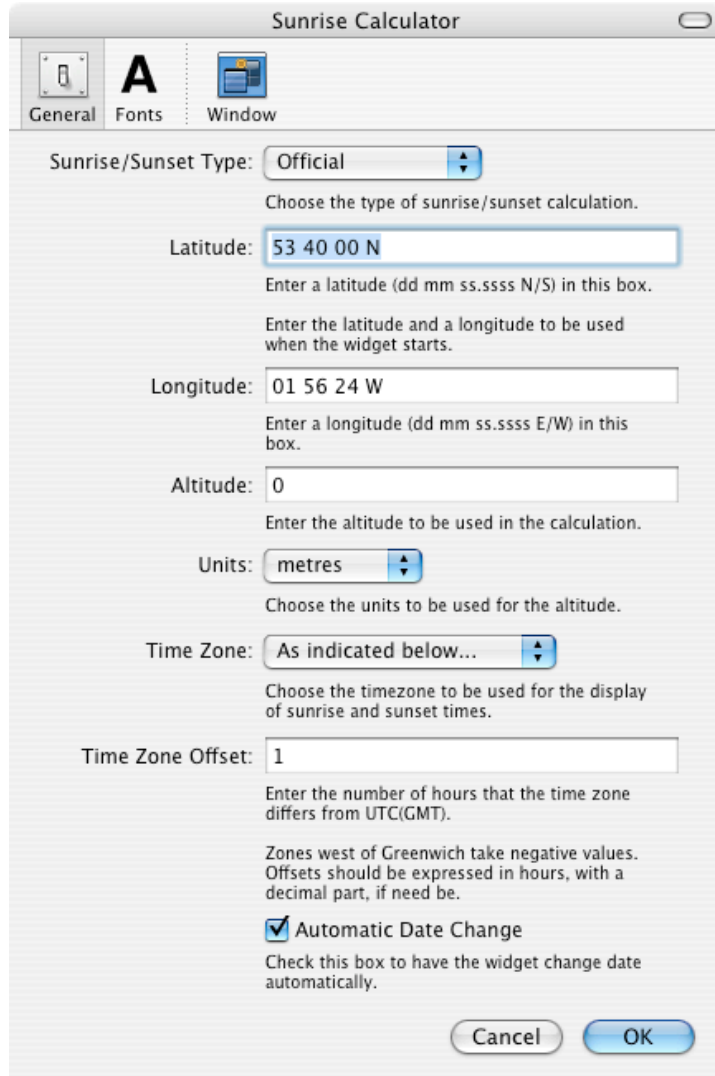
The widget has four text boxes.



The first two boxes are used to enter a latitude and a longitude. The third box is for the entry of a date.

Press RETURN or ENTER to compute the sunrise and sunset times, which are displayed in the fourth box. Moonrise/moonset times are displayed to the right of the sunrise/sunset times.

Preferences



Sunrise Calculator

General Fonts Window

Sunrise/Sunset Type: **Official**
Choose the type of sunrise/sunset calculation.

Latitude: **53 40 00 N**
Enter a latitude (dd mm ss.ssss N/S) in this box.
Enter the latitude and a longitude to be used when the widget starts.

Longitude: **01 56 24 W**
Enter a longitude (dd mm ss.ssss E/W) in this box.

Altitude: **0**
Enter the altitude to be used in the calculation.

Units: **metres**
Choose the units to be used for the altitude.

Time Zone: **As indicated below...**
Choose the timezone to be used for the display of sunrise and sunset times.

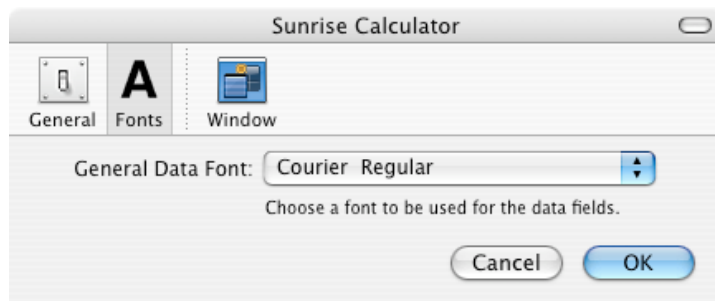
Time Zone Offset: **1**
Enter the number of hours that the time zone differs from UTC(GMT).
Zones west of Greenwich take negative values. Offsets should be expressed in hours, with a decimal part, if need be.

☒ **Automatic Date Change**
Check this box to have the widget change date automatically.

Cancel OK

The widget can make allowances for altitudes of up to 15,240 metres (50,000 feet). The altitude compensation calculation, performed by the widget, is not part of the published algorithm, on which the main sunrise/sunset calculation is based, **and should be treated with caution**.

N.B. No altitude compensation is done for the moonrise/moonset calculations.



Sunrise Calculator

General Fonts Window

General Data Font: **Courier Regular**
Choose a font to be used for the data fields.

Cancel OK

Credits

The main sunrise/sunset calculation is based on an algorithm published by the US Nautical Almanac Office.

Almanac for Computers, 1990, published by Nautical Almanac Office, United States Naval Observatory, Washington, DC 20392.

The moonrise/moonset calculation is based on code by Stephen R. Schmitt published at

http://home.att.net/~srschmitt/script_moon_rise_set.html .

The license window was designed by Ricky Romero.

Widget Design and Coding

The moonrise/moonset code is Copyright © 2004 Stephen R. Schmitt.

The rest of the code and associated documentation is Copyright © 2006 Harry Whitfield.

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Licenses

Sunrise Calculator - A Sunrise and Sunset Calculator

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Moonrise Calculation Code

Copyright © 2004, Stephen R. Schmitt

The moonrise and moonset code module is a modified version of the Moonrise, Moonset solver by Stephen R. Schmitt and is made available on these conditions:

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