

# Sunrise Calculator

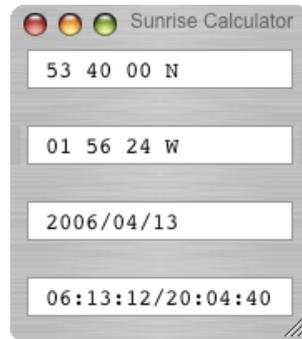
Version 1.4.1      30 April 2006

## 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

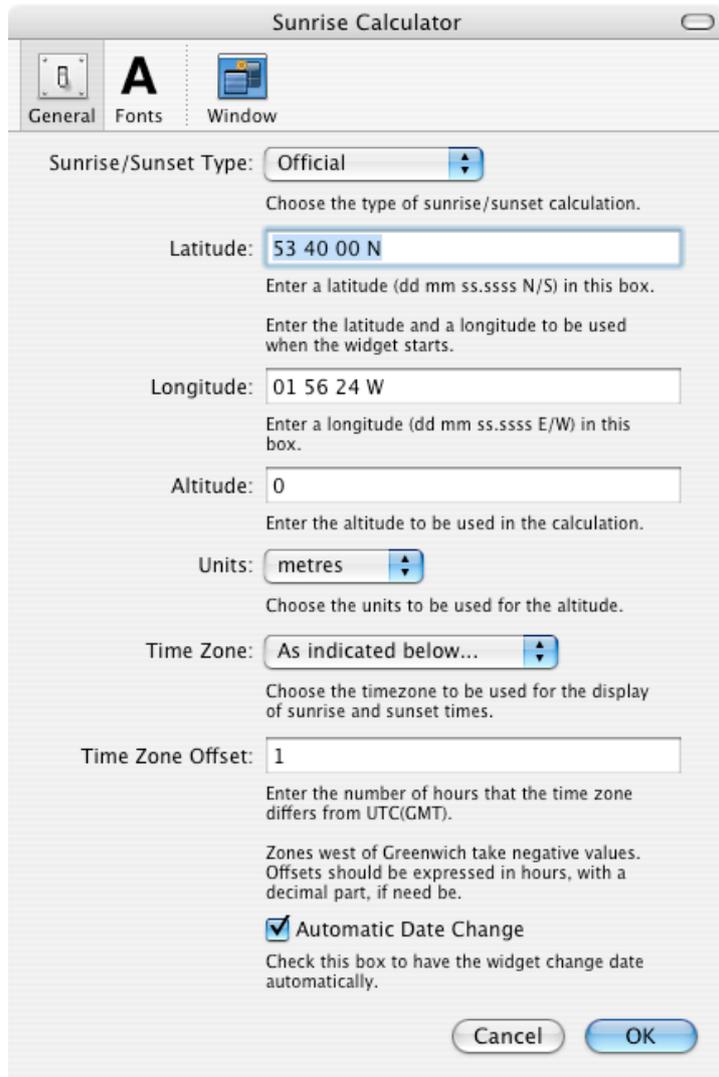
The widget has four text boxes.



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

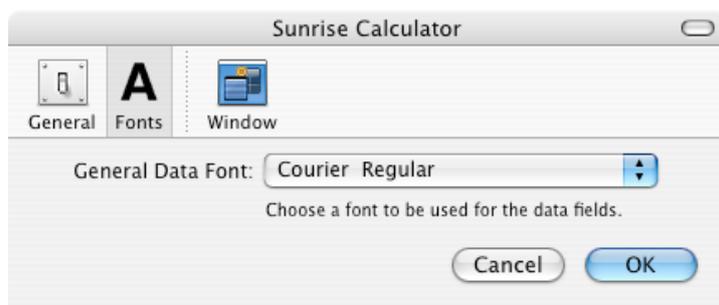
Press RETURN or ENTER to compute the sunrise and sunset times, which are displayed in the fourth box. Moonrise/moonset times are displayed to the right of the sunrise/sunset times.

## Preferences



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.**



### 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](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**

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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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