THE PHOTOGRAPHER'S EPHEMERIS
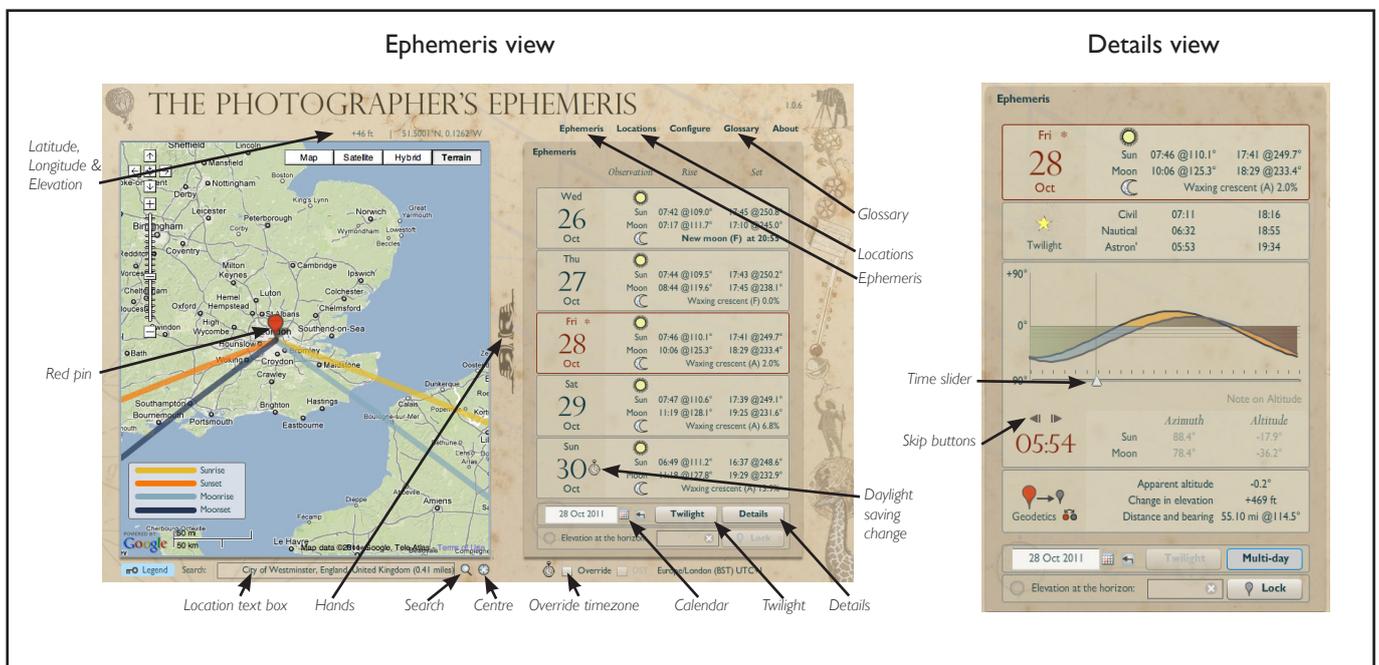
Quick Start Guide

1) Find a location by panning around the map, or drag and drop the **red pin.** Click the **centre** button to centre the red pin on the map or shift-click to centre the map on the red pin location. The rise and set lines for both sun and moon are always displayed on the map.

2) The **Ephemeris** shows sunrise/sunset/moonrise/moonset times (plus azimuths and phase of moon). Click the **Twilight** button to see twilight times instead.

3) To choose the date use the **hands** or select a different date from the **calendar**.

4) The time zone of the location is displayed automatically. Click **override** to select time zone manually.

5) **Latitude**, **longitude** and **elevation** above sea level of the current red pin position are displayed at the top of the map.

6) To find the nearest place name of the red pin location, click the **search** button.

7) To search for a place name, click in the **location text box** and type the name of the place. If Google can find it, the red pin will move to that location and the map will centre on the red pin.

8) Click **Locations** and then + (plus) to save your current location. Click on a saved location and then - (hyphen) to delete it from the list. Click on a saved location name and then 'Go' to centre the red pin and the map on that location.

9) Labelled terms throughout the program have **Glossary** entries. Any label that turns red when you mouse-over may be clicked to display the corresponding glossary entry.

10) Click **Details** to see sun and moon positions throughout the day and night at the selected location. Drag the **time slider**, and see azimuth and elevation angle information displayed numerically. Click the **skip buttons** to skip to the day's various celestial events. The graph shows the apparent altitude for sun and moon throughout the day. The three horizontal lines below the 0° line represent the elevation angle of the sun at the various twilight stages: -6° civil, -12° nautical and -18° astronomical.

Ephemeris view

Details view

Latitude, Longitude & Elevation

Red pin

Glossary

Locations

Ephemeris

Daylight saving change

Location text box   Hands   Search   Centre   Override timezone   Calendar   Twilight   Details

Time slider

Skip buttons

Keyboard shortcuts

E to view the Ephemeris
L to go to Locations
P or **-** (hyphen) for the previous day.
N or **=** (equals) for the next day
T to toggle display of Twilight information
D to toggle display of Details information
S to swap the positions of the red and grey pins
C to place the red pin at the centre of the current map display
Shift-**C** to pan the map to place the marker at the centre of the display
Ctrl **+** (plus) and *Ctrl* **-** (hyphen) to zoom in and out of the map
Shift **+** (plus) to add new location
Left and **right cursor** keys to move the Details View slider control in one minute increments – click the slider first
Shift Hold down this key to extend the azimuth lines on the map through the marker location. This is helpful for aligning particular landmarks, your shooting location and the direction of the sun/moon. (Only avaialble when sufficiently zoomed in, as extended azimuth lines could otherwise be inaccurate and misleading.)

Configuration options

Units of Distance: for location elevation (metres or feet) and distance to nearest known place (km or miles)

Default location names: select format for displayed location name and default name provided when saving a location

Service timeout (seconds): determines the default timeout when querying the GeoNames web services for time zone, elevation and place name. Increase service timeout value if you see "Request timeout – retrying" or "Request timed out" messages. (The specified value is used for time zone and altitude queries, but is doubled internally for reverse geocoding as this service can normally take longer to respond, particularly if the nearest known place name is some distance from your current specified location.)

Timezone management: not user editable. Checked if the timezone management database is correctly installed.

Azimuth lines: user selectable colours for the lines shown on the map indicating direction of sunrise/sunset & moonrise/moonset. The same colours are used in the Details display.