



Eclipse 2. App – Quick start

Eclipse is an app to know the details of all past and future solar and lunar eclipses, as well as planetary transits, during the 20th and 21st centuries.

- 1) Select the type of event: Solar eclipses, Lunar eclipses or Planetary transits.
- 2) If you want to list all the events for a given period of time, choose Search by event. If you want to list only the events visible from a given place, choose Search by location.

2a) Search by event: enter the period of time (between 1900 and 2100) and press Compute. The app will show all the events for the chosen period.

2b) Search by location: select a locality from the data base, or enter a new one using the interactive Map or from their coordinates. The app will show all the events visible from this locality.

- 3) Click an item on the list to see:

3a) The General Circumstances if we have chosen Search by event. From here we have access to an interactive Map to know its visibility and to the Local Circumstances to know how the event looks from a given place. For the solar eclipses we can also see a chart of the Sky during totality, the effect of the lunar limb profile and the Bailey's beads.

3b) The Local Circumstances if we have chosen Search by location. We will have access to a interactive Simulation and to a Countdown with the time remaining/elapsed to/from the eclipse or transit. For the solar eclipses we can

also see a chart of the Skyduring totality, the effect of the lunar limb profile and the Baily's beads from the locality.

Notes:

- It is possible to choose the Time Zone used to show the time from the Configuration.
- Both *Search by event* and *Search by location* allow to select Only future events.
- In the simulation and in the figure of the lunar limb profile, put the zenith or the celestial nord at the top of the figure by clicking the N / Z button.
- The data base of localities can be managed (enter a new one, edit or delete) from the Places editor option in the Menu of the initial screen.
- Turn on the GPS to enter a new place with your current location.
- If the option Tracking is selected, the position and the corresponding Local Circumstances will be automatically updated. This option can be selected when we choose Current Location, and it deactivates automatically when we select a locality from the data base.
- The computation of all the eclipses and transits visibles from a given location can take some time, depend on the device. Be patient!
- The maps of visibilty for the planetary transits are not available.
- Use the back key (<-) to navigate through the app.
- The Delta T values are pre-computed for each eclipse, but it is possible to change its value from the General Circumstances screen.

- The effect of the atmospheric refraction has not been taken into account anywhere.
- All the computations are based on DE430 ephemeris from JPL.