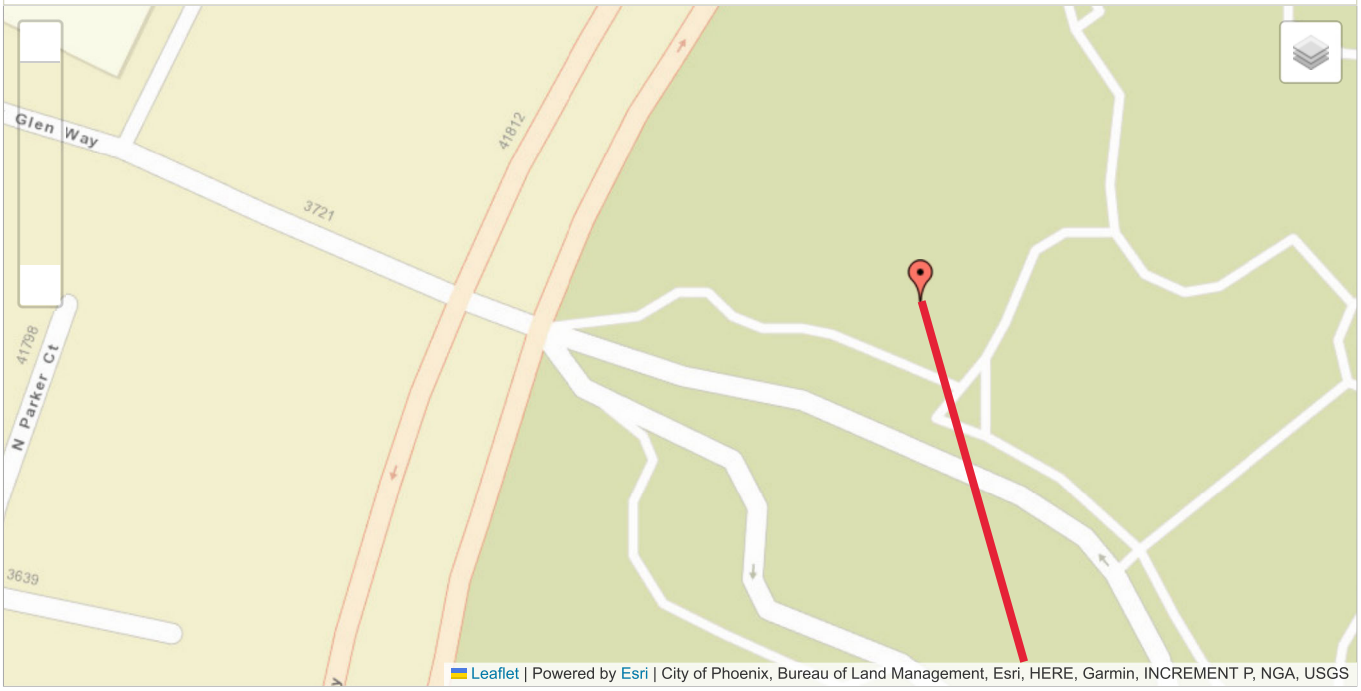
Global Monitoring Laboratory

NOAA Solar Calculator

Find Sunrise, Sunset, Solar Noon and Solar Position for Any Place on Earth

Show: ○ World Cities ◉ U.S. Cities ○ GML Observatories ○ GML Data Sites ○ SurfRad & Solrad

Drag the large red pin with the dot to the desired location and enter the date and time at which to calculate the sun position.



Location:

Location of the Memorial

Latitude: 33.863324

Longitude: -112.13674

Time Zone: America/Phoenix

Save Location

UTC Offset: -07:00

Date:

Veterans Day

Day: 11

Month: Nov

Year: 2025

Local Time: 11 : 11 : 11 ☐ PM Use Current Time

Result

Equation of Time (minutes): 15.96

Solar Declination (in°):

-17.64

Solar Noon
(hh:mm:ss):

12:12:32

Apparent Sunrise
(hh:mm):

06:57

Show Sunrise

When is the same elevation and azimuth as Veterans Day?

Apparent Sunset
(hh:mm):

17:27

Show Sunset

Az/El
(in °) at Local Time:

161.72 | 36.49

Show Azimuth

Sunrise/Sunset Tables

Tables with times of sunrise, sunset and solar noon for each day of the year for the location and year specified in the form above can be created by clicking on the button below.

Create Sunrise/Sunset Tables for the Year

Tables will open up in a new tab/window

Interested in Doing Your Own Calculations?

Details about the calculations and spreadsheets that can be used to calculate solar data are available on the **solar calculation details** page.

Having Trouble?

- Check your Time Zone – Is the time zone set correctly for this location? Our calculator attempts to determine the correct time zone for the given location and date, but because time zones and the start and end dates of Daylight Saving Time sometimes change, this value may not be accurate for historical or future dates.
- Click the Show Sunrise, Show Sunset and Show Azimuth checkboxes to display color-coded lines on the map indicating the direction of sunrise, sunset and solar position based on the Local Time and Date entered.
- This solar calculator is provided for research and entertainment purposes only. Due to variable atmospheric conditions and uncertainty inherent in the algorithms used, the actual observed values of sunrise, sunset and solar position may differ from the results presented here.

Questions?

Feel free to write to us with any questions or comments at Webmaster.

Solar Calculation Resources:

- NOAA Solar Calculator
- Old Sunrise Calculator
- Old Solar Pos Calculator
- Solar Calculator Links
- Solar Calculator Glossary
- Calculation Details
- Time Zone Table

Global Monitoring Laboratory

Important Notice: NOAA/GML Solar Calculator
Please be advised that the NOAA/GML Solar Calculator is no longer actively supported or maintained by our team. While the calculator remains available for use, we cannot guarantee its accuracy or functionality and will not be providing updates or technical support. We apologize for any inconvenience this may cause and appreciate your understanding.

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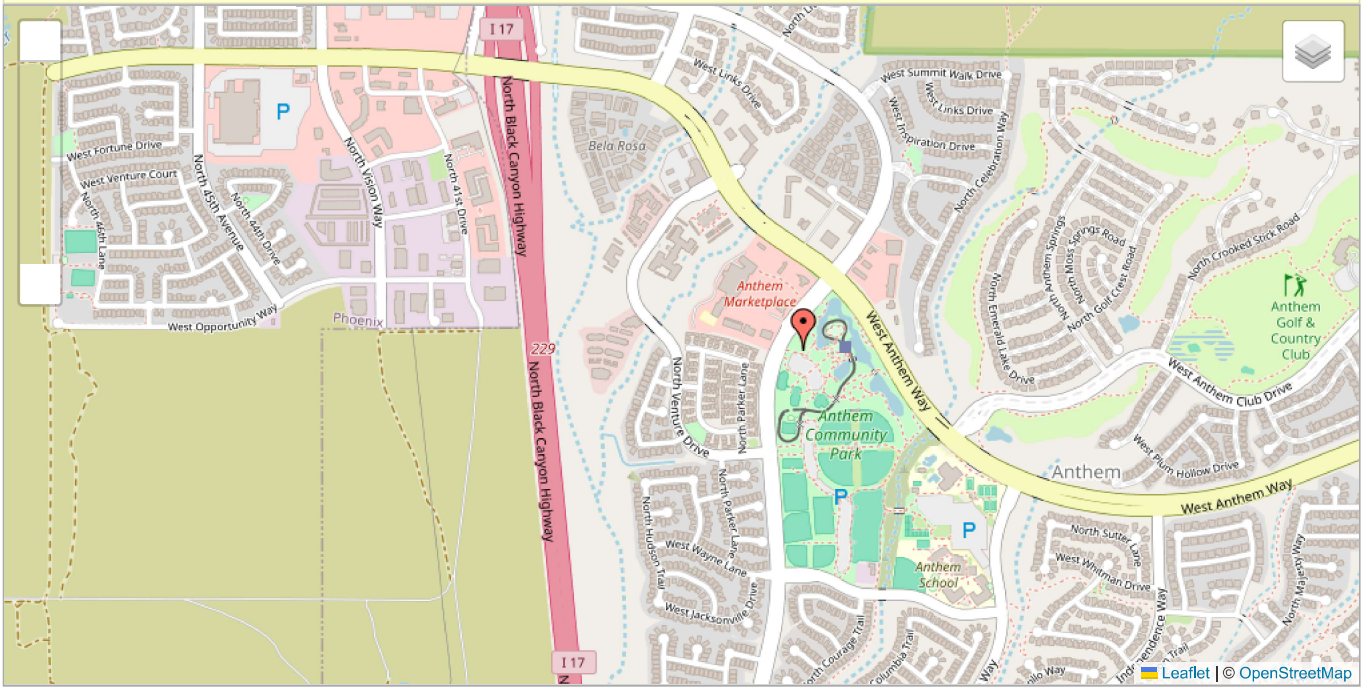

Location:

Latitude: 33.863324

Longitude: -112.13674

Time Zone: America/Phoenix

Save Location

UTC Offset: -07:00

Date:

Day: 30

Month: Jan

Year: 2027

Local Time: 11 : 40 : 32 ☐ PM Use Current Time

Next Year

Result

Equation of Time (minutes):

Sunrise/Sunset Tables

Tables with times of sunrise, sunset and solar noon for each day of the year for the location and year specified in the form above can be created by clicking on the button below.

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