

NOAA Solar Calculator

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

Show:	O World Cities	U.S. Cities	○ GML Observat	tories	O GML Data Sites	O SurfRad & Solrad	
Drag the	e large red pin to the desi	red location and enter t	he date an	d time at which	ch to calculate the sun	position.	
	Proof Plwy					Anth-Comm	
lan		Leaflet Po	owered by Esri			i, HERE, Garmin, INCREMENT P, NGA, USGS	
Location				Locati	on of the Mem	orial	
Latitude	: ②	Longitude: ②		Time Zone:	<u> </u>		
33.863	335	-112.13674		America/I	Phoenix	~	
				UTC Offset:	3		
Save L	ocation			-07:00			
Date:						Veterans Da	ay
Day:		Month:			Year:		
11		∨ Nov			v 2022		
Local	Гime:						
11	: 11 : 11 D PM	Use Current Time					
Result							
Equation (minut							
Solar D	Declination ① V	Vhen is the sam	ie declii	nation an	d azimuth as \	/eterans Day?	
-17.5	56						

12:12:30	
Apparent Sunrise ② hh:mm):	
06:57	
☐ Show Sunrise <a>②	
Apparent Sunset <u>②</u> hh:mm):	
17:28	
Show Sunset <a>O	
Az/El ② Wher	is the same declination and azimuth as Veterans Day?
161.7	36.56

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 <u>solar calculation details</u> 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.

Ouestions?

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
- <u>Solar Calculator Glossary</u>
- Calculation Details
- <u>Time Zone Table</u>



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	Show:	O World Cities	U.S. Cities	○ GML Observate	ories	O GML Data Sites	O SurfRad & Solrad	
	Drag the	e large red pin to the des	ired location and a	enter the date and	d time at whi	ch to calculate the sun	nosition	
	37	St Pkwy						Anth Comm Par
	lan p		Le	eaflet Powered by Esri	City of Phoenix, B	ureau of Land Management, Esr	i, HERE, Garmin, INCREMENT P,	NGA, USGS
	Location	:		, [Same	location of the	Memorial	
	Latitude	: <u>(?)</u>	Longitude: <a>②	K	Time Zone:	<u> </u>		
(33.863	335	-112.13674		America/	Phoenix		~
	Cove	ocation			UTC Offset:	3		
	Save L	ocation			-07:00			
	Date:				Aligi	nment will be o	n this date & tin	ne.
	Day:		Мо	nth:		Year:		
_	30		→ J	lan		v 2024		
	Local 7	Гime:						
_	11	: 40 : 20 □ PM	1 Use Current	Time				
	Result							
		1						
	Equation (minute	on of Time ② es):						
	-13.2	2.5						
	Solar D	Declination ①	Approximate	same decl	ination a	nd azimuth as	Veterans Day.	
	-17.6	14						

Solar Noon ② (hh:mm:ss):	
12:41:43	
Apparent Sunrise ③ (hh:mm):	
07:27	
☐ Show Sunrise ②	
Apparent Sunset ② (hh:mm):	
17:57	
☐ Show Sunset ②	
Az/El ③ (in °) at Local Time:	Approximate same declination and azimuth as Veterans Day.
161.7	36.47
☑ Show Azimuth ②	

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