

TEACHER'S GUIDE II: USING STELLARIUM ON A COMPUTER

Stellarium can be used free-of-cost after downloading the free software on a computer or a mobile device. It can also be used online, on your web browser. In this Teacher's Guide, you will find a few basic steps to install and demonstrate the software to your students on a computer.

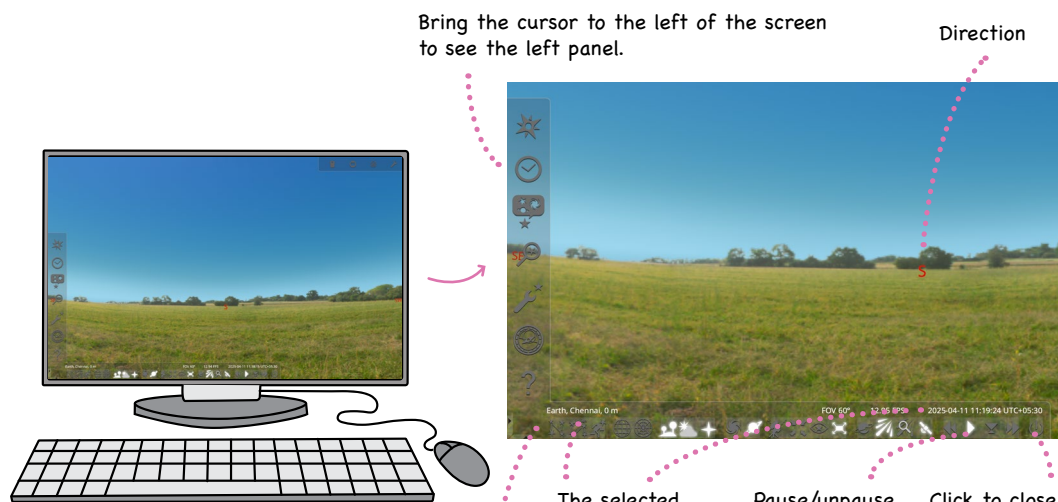
Step 1: Install Stellarium

Visit www.stellarium.org on your web browser. On the top of the page, click on the link that matches the operating system of your computer to start downloading Stellarium. Follow the steps that appear on the screen to install it. Open the software by clicking on its icon.



Choose your operating system from here to download and run the application.

Step 2: Familiarize yourself with the icons on the opening screen. Use the cursor to view the icons on the left and bottom panels.



Bring the cursor to the bottom of the screen to see the bottom panel.

Step 3: You can set the location using the 'Location window' on the left panel. Select your location using either Method 1 or Method 2.

Method 1: Step 1
Type the location of your interest.

Method 1: Step 2
Select the location from the list that appears on the screen.

Method 2:
Select your location by clicking on the map.

Location window [F6]

Icon on left panel

Current location information
Latitude: N 13° 5' 9.60"
Longitude: E 80° 16' 30.36"
Elevation: 0 m
Name/City: Chennai
Region: Southern Asia
Planet: Earth
Time zone: System default
 Get location from Network
 Use current location as default
 Auto-select landscapes
 Use custom time zone
 Enable daylight saving time
 Auto-enable atmosphere
Add to list Delete from list Return to default location

Step 4: You can set the date and time using the 'Date/time window' on the left panel.

Date/time window [F5]

Icon on left panel

Date and Time

2025 - 4 - 11 11 : 23 : 32

Use the arrows or type the number.

Step 5: You can now explore Stellarium to find out more about a celestial object (like its altitude from an observer on Earth)

The Sun as visible on the main screen

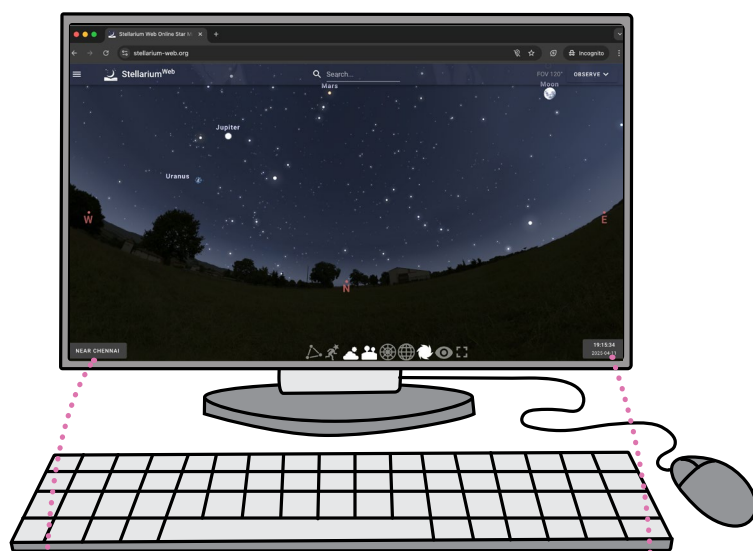
Sun

Step 1: Click on the object in the sky to get its details.

Step 2: Note down the value of altitude (Alt) in degrees.

Sun
Type: star
Magnitude: -26.75 (reduced to -25.02 by 13.19 Airmasses)
Absolute Magnitude: 4.83
Color Index (B-V): 0.66
RA/Dec (J2000.0): 0h26m31.30s/+2°51'48.5"
RA/Dec (on date): 0h27m49.12s/+3°00'12.2"
HA/Dec: 18h12m21.56s/+3°02'39.0" (apparent)
Az/Alt: +87°37'45.9"/+3°37'55.9" (apparent)
Gal. long./lat.: +110°38'09.2"/+59°24'43.6"
Supergal. long./lat.: +297°7'30.6"/+7°37'44.0"
Ecl. long./lat. (J2000.0): +7°13'11.3"/-0°00'07.8"
Ecl. long./lat. (on date): +7°34'21.1"/-0°00'05.3"
Ecliptic obliquity (on date): +23°26'19.3"
Mean Sidereal Time: 18h39m21.9s
Apparent Sidereal Time: 18h39m21.9s
Rise: 5h59m
Transit: 12h05m
Set: 18h11m
Morning twilight (h=-6.0°): 5h38m
Evening twilight (h=-6.0°): 18h32m

Web-version of Stellarium:



This is the **opening screen of the web version** on a computer.

Click to set location

Click to set date and time, and pause/unpause time

If you are unable to install Stellarium on your computer, but have a good internet connection, then try using Stellarium directly on the website <https://stellarium-web.org/>. The screen looks slightly different and simpler here:

- The icons to set the location, date and time are clearly visible on the screen and easy to identify.
- The icon to pause time is inside the date and time window.
- Spotting the altitude (Alt) of any celestial object is easier. Click on the object to see the information pop-up on the left side of the screen.

This website can also be viewed on your mobile phone, but the wider screen of a computer provides a better experience.



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