

## INSTALL:

Download software and user guide (MacOS, Windows, Linux): <https://www.stellarium.org/>  
Install and open the app. On both MacOS and Windows you will need to approve security warnings to allow the application to launch.

**WARNING:** If you are doing a major version update, you should backup your previous "config.ini" file (e.g. to "config\_save.ini"). Stellarium when launched will create a new config with all the new available options. You can then safely edit the new file to restore any special settings from before. (I often make the lines wider and darker and the labels larger, for example).

## WHERE IS the config.ini?

Win: C:\Users\username\AppData\Roaming\Stellarium  
(NOTE: AppData is hidden by default)

Mac: HD:Users:username:Library:Application Support:Stellarium:config.ini

## SETUP:

GUI control popouts appear when you move your cursor over the left and bottom of the window lower left corner.

The top one on the left sets your location. Many locations can be set by typing a name in the question box below the list of cities and selecting from the search results. Or manually enter your lat/lon coordinates. Then select checkbox "Use current location as default".

When you exit Stellarium, it will update your "config.ini" file with your settings. Once it has created it for you, you can edit the config with a text editor (or replace with a file given to you). It's best to let it create one first, especially on major updates.

## ADDING COLOR CONSTELLATIONS:

Get them at: <https://mst.rice.edu/ASTR530/materials/stellarium-modern-color-art.zip>

Unzip the archive and copy (replace) the images in the "skycultures\modern" folder

Win: C:\Program Files\Stellarium\skycultures\modern\

Mac: HD:Applications:Stellarium.app:Contents:Resources:skycultures:modern:  
(NOTE: to access the contents, CTRL+click the app to "Show Package Contents")

Any time you update Stellarium, you will need to move back in the color images, but it should save your config file.

## ADDING OBJECTS (e.g. new comets):

1. Open "Configuration" window, and select "Plugins" and then "Solar System Editor" from the list
2. Be sure "Load at startup" is checked otherwise select it and restart. Then hit "configure" button.
3. In "Solar System Objects" window, select "Minor Solar System objects" tab, then "Import orbital elements in MPC format..." button at the bottom.
4. Select "Comets" checkbox.
5. Select the "Download a list..." checkbox and from the "Select bookmark" popdown choose "MPC's list of observable comets" from the list. Then select "Get orbital elements" button.
6. Select the checkbox of the object you want (e.g. C/2023 E3 (ATLAS)) and hit "Add objects" button.
7. Object should now be available to find using the Search Window via the left popout.

## BASIC CONTROLS:

CTRL+q = quit

If you want to save your current settings for next time, go to Configuration (the wrench icon on left popout), then in the Main tab select "Save View" and "Save Settings" and it will update your config.ini when you close.

You can zoom in and out by using two fingers on the track pad. You can slide up, down, left and right by click and drag. Or you can use "page up" to zoom in and "page down" to zoom out.

## KEYBOARD SHORTCUTS:

Select "?" on the left panel popout to access the extensive list of keyboard shortcuts.

Below are just some of the shortcuts I use the most. Note that most are on/off toggles.

## DATE AND TIME:

<b>K</b>	time forward at diurnal rate	<b>8</b>	return to now
<b>L</b>	time forward faster (3 taps)	<b>= / -</b>	add (subtract) one solar day (add option/alt for sidereal day)
<b>J</b>	time backwards faster	<b>[ / ]</b>	add (subtract) one solar week (add option/alt for sidereal week)

## DISPLAY:

<b>A</b>	atmosphere on/off	<b>N</b>	nebula labels on/off
<b>B</b>	constellation boundaries on/off	<b>P</b>	planet labels on/off
<b>C</b>	constellation lines on/off	<b>Q</b>	cardinal points (N,S,E,W) on/off
<b>D</b>	Deep-sky objects on/off	<b>R</b>	constellation art on/off
<b>E</b>	equatorial grid on/off	<b>S</b>	stars on/off
<b>F</b>	fog on/off	<b>V</b>	constellation labels on/off
<b>G</b>	ground on/off (invisible Earth)	<b>Z</b>	azimuthal grid on/off
<b>.</b>	equator line on/off	<b>,</b>	ecliptic line on/off

## FIELD OF VIEW:

<b>Space bar</b>	center on selected object
<b>two fingers slide trackpad down/up</b>	zoom in/out
<b>/</b>	zoom into selected object
<b>\</b>	zoom back out (to original FOV if chosen in config)
<b>cursor click and drag</b>	move sky and horizon view
<b>Win: Ctrl+Alt+1</b> <b>Mac: Cmd+Opt+1</b>	go to 180° field of view