



# Starting up with Stellarium

## Material List:

A computer

If available: a chorded mouse with a scroller wheel.

Stellarium (download and install, <https://stellarium.org/>)

## Outline

In this activity, you are taught the basics in how to operate Stellarium. This activity comes together with several others, where you are given instructions on how to simulate given phenomena, complete selected tasks or just to find specific objects.

## Procedure

**1**

### Download and install

Visit <https://stellarium.org/> and look at the top row of the page for the operating system on your computer. If you are on a windows-machine, you will most likely need the 64-bit version. Install the program and run it.

**2**

### Start up

Open Stellarium. The window will look something like this. Make sure that the location at the bottom menu (to the left) is somewhere near (somewhere within your own country is usually good enough). The heaven is computer generated from your given location and time. Grab the sky with your mouse, or use the keyboard arrows to look around.



3

## Menus and controlpanels



The bottom menu contains information on where you are and what time it is. If you place your mouse over this menu, it will expand to show several controls. You can enable/disable constellation, labels, coordinate-grids, simulate an equatorial mount or the eyepiece of your telescope, or decide what time you wish to observe

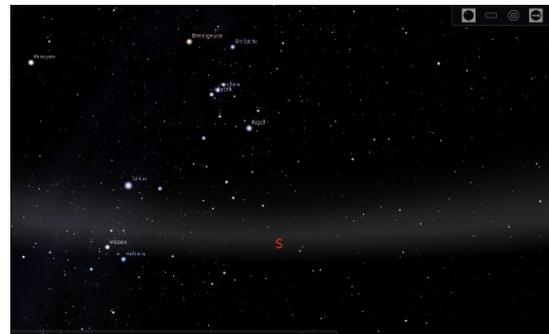
If you drag your mouse to the left, the left menu will appear. Here you can adjust your location, set the time, change your display, search for objects and general setting.



4

## See all of the sky at once

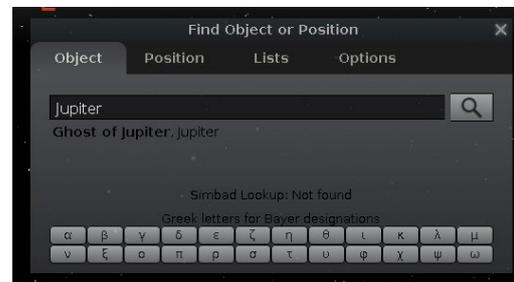
In the lower menu, you can make the ground and atmosphere transparent. This way, you can explore all of the hemisphere. Click  and  to try it out. When you do, a grey line will tell you where the horizon would be, together with the N,S,E and W-markings.



5

## Search and select

In your left menu, click on the search- icon to open the search dialog. Here you can type the name or catalogue number of any object. Try e.g. Jupiter or M31.



6

## Zoom in and out

Once you have selected an object (you know this when you see the red markers rotating around a point on the screen), you can zoom in and out. Try using the scroller wheel on the mouse (if you have a corded mouse, and not a mousepad on a laptop), or use the "Page up" and "Page down" keys.





7

## Adjust time



You can adjust the time of your observation on both the left and bottom menu. On the bottom menu, you can use the Play/Pause/Forward/Backward-buttons. In addition, you have the two triangles on top of each other that lets you set time to “Now”.

Remember that if you use the FastForward or FastBackward, the time will keep going at a different pace until you click Play or the opposite way you have clicked. By clicking one of the directions many times, you will notice that the time goes faster and faster every time you click.

8

## Have fun!

Play around in Stellarium and see if you can discover something new. All the planets are there, and maybe if you remember the time and date of an eclipse, you can see it again in Stellarium. You can also find satellites, and even the International Space Station. And yes, they are there for real, so if you have clear skies outside you could go out and see these objects in real life as well.

Enjoy!

## Further Resources/Activities:

### Assessment:

1. Are you able to adjust time both ways, and also go from fast forward/backwards back to normal pace?
2. Can you find any constellations you know, and how to enable or disable the constellation graphics in Stellarium?
3. Can you set the time and date to the day you were born, and see where all the planets (and sun) were then?
4. Search up several Messier objects, by writing M followed by a number between 1 and 104. Zoom in on each one and tell your fellow students which is your favourite.

