

Looking For Jupiter

Key Stage 3

Topics covered: ICT, planning observations, solar system, constellations

Watch the "Looking for Jupiter" video, <https://vimeo.com/64555987>

What do I need?

Stellarium is a computer programme that allows you to search for things in the sky and can be downloaded for free at <http://www.stellarium.org/> (runs on Windows, Mac OSX and Linux computers).

Stellarium is like having your own personal planetarium, you and your students can plan a night's observing whether you're equipped with a telescope, binoculars or just your eyes.

Alternatively, you can take advantage of Stellarium as a virtual night sky to talk about constellations, planets, nebulae and galaxies during school hours. It will show you a spectacular image of your chosen object when you zoom in.



How do I get started?

When you open Stellarium for the first time, it will start you off at your current computer date and time in Paris, France. Before changing your location, you can get a feel for controlling your view using the mouse.

Action	How to
Move around the sky	Hold left click and drag.
Zoom in and out	Mouse wheel (or use page up/ down keys).
Select an object in the sky	Left click.
Centre on an object	Press the spacebar.



To change your location:

- Move your mouse to the lower left of the screen.
- Click on the compass icon on the top.
- Click on the map or search for a nearby town/ city or be as precise as possible by entering your current longitude and latitude.

The other icons that you see on the left give you access to lots of options but the most frequently used are probably going to be the date/ time window and the search window.

To search for an object:

- Click the search icon (magnifying glass with star.)
- Type the name of the object and hit enter.
- The view will move to the object, but sometimes your chosen object may not be visible as it's below the horizon for your current time.

What about the bottom icons?

Out of these there are some particularly useful buttons to be aware of:

Constellation buttons

From left to right they are:

- Display/ hide the lines between the stars



- Display/ hide the constellation labels
- Display/ hide artwork for constellations

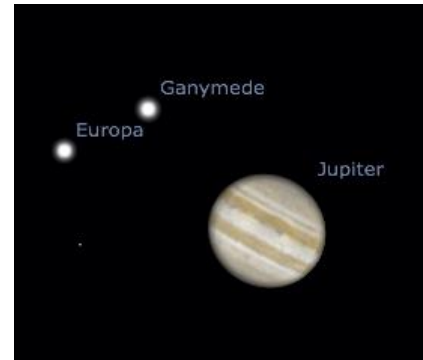
Location and time buttons



The third block of icons includes two options to remove location and time specific issues:

- Display/ hide ground: Look at objects that are not above the horizon for your time and location.
- Display/ hide compass points.
- Display/ hide atmosphere: See where objects are during the day.

The final important set of features to highlight is the time control section on the right. Here you can speed up, slow down and rewind time as you desire or alternatively use the keys l, j and k respectively.



What could I try out?

Why not start off by looking for a planet by using the search function just like in our '[Looking for Jupiter](#)' video? Saturn is the best replacement for Jupiter in the coming months (see below).

Or you could:

- Explore the sky as seen from another planet in the Solar System (in 'Set Your Location')!
- Change your location to somewhere in the Southern hemisphere to see how different the sky looks.
- Visit somewhere on the equator, and speed up time to see how the stars move over the course of the night.
- Search for and centre on one of the more famous deep sky objects (such as the Andromeda Galaxy or the Orion Nebula) and then zoom in to reveal how it looks through a powerful telescope!
- Visit the 'Starlore' section in "Sky and viewing options" in the sidebar, and take a look at asterisms (star patterns) from a number of different civilisations. There are many similarities, as well as differences.