

Stellarium Introduction

Vitural Tour of the Night Skies over Ballycroy National Park

The **Mayo Dark Skies Community Group**, in collaboration with the **Dublin Institution of Technology**, is pleased to launch a digital virtual experience of the Mayo Dark Sky Park. Following its designation as an International Dark Sky Park (Gold Tier), it is now possible to experience a part of this magnificent and pristine skyscape on your computer. This has been made possible using open source software (Stellarium <http://www.stellarium.org/>) and a specially commissioned digital panorama of the horizon surrounding the Ballycroy National Park Visitor Centre.

A customised landscape file for Ballycroy (Ballycroy.zip) and a display poster of the panorama surrounding the Visitor Centre are now hosted as free downloads available at

www.mayodarkskypark.ie

Stellarium is an open source planetarium for your computer and shows a fully realistic digital sky. The customised landscape file for Stellarium has been specially developed for this collaborative project. Once installed on your computer, this situates your viewpoint at the summit directly above the Visitor Centre.

Real horizons are seen on the screen and, for the first time, the changing skylscapes throughout the year can be experienced and enjoyed. User control over the programme's location, time and direction settings provides an incredibly powerful educational tool to learn practical astronomy.

Stellarium Installation Instructions

Stellarium v. 0.16.1 Customised for Ballycroy Visitor Centre INSTALLATION INSTRUCTIONS

The following will show you how to:

1. **Download & install** the latest version of Stellarium 0.16.1 or later (if you already have an earlier version, you must replace it with this version)
2. **Import and save** the Ballycroy.zip file in the Stellarium directory
3. **Set your location** to make Ballycroy the default location every time you open the programme
4. Install the **Ballycroy Landscape** zip file into Stellarium
5. Access the **instruction manual** (this comes with the programme).



Figure 1 A screen grab from Stellarium for Ballycroy showing the menu bars which are activated by hovering the mouse pointer on the left and lower margins of the visible area. Every function is interpreted on the screen making the program very user-friendly. Prominent hills and mountains are identified with labels along with their elevations above mean sea level.

Stellarium Installation Instructions

1. Download & install Stellarium v.0.16.1 or later

Use your browser (Google, Internet Explorer etc.) to key/paste **www.stellarium.org** into the search window. Open the Stellarium webpage & see



Select your operating system (typically Mac or Windows). This will activate the download process – see Stellarium.exe located in the bottom left of your screen as the download proceeds.

Next, double-click the stellarium.exe file to begin the installation. Accept the default location to save the program (normally c:\programme files). The file size is 181 mb so this may take a while and is dependent on your internet speed. Security warnings may appear on your screen but the program Stellarium.exe is safe.

Run the .exe file and accept the default questions. Once installed, a desktop icon will appear on your screen (as shown on left side of banner above). Double-click the Stellarium icon on your Desktop screen to start the programme.

2. Import & save Ballycroy.zip on your computer (this contains the Ballycroy Landscape data)

Go to **www.mayodarkskypark.ie** and copy the file Ballycroy.zip. Next, save this file to your computer in a place where you can easily locate it (make a note of this). **Do not UNZIP this file – just copy and paste it.**

[for MAC Users, your files may automatically unzip. In which case, compress the contents again into a zipped file and save it as above].

Stellarium Installation Instructions

3. Set your location to Ballycroy Visitor Centre

In Stellarium, click on the top icon on the menu bar on the left side of the program menu 'LOCATION WINDOW' in Figure 1. This opens up the Location window (Figure 2). The default location may be set for Dublin or Galway, or wherever, so now overwrite all of the data in the 'Current Location Window' with the information for Ballycroy exactly as shown in Figure 2. **Accuracy here is critical so check it!!!**

- Type 'Ballycroy' in the Name/Town box (you will overwrite whatever town is shown).
- Type in the latitude, longitude & elevation values for Ballycroy as shown
- Tick the 'use current location as default' box so that each time you open Stellarium you are located in Ballycroy. You can of course go to any other of the hundreds of locations listed in the directory of locations.
- Press the 'Add to List' button. This will add Ballycroy to the List.

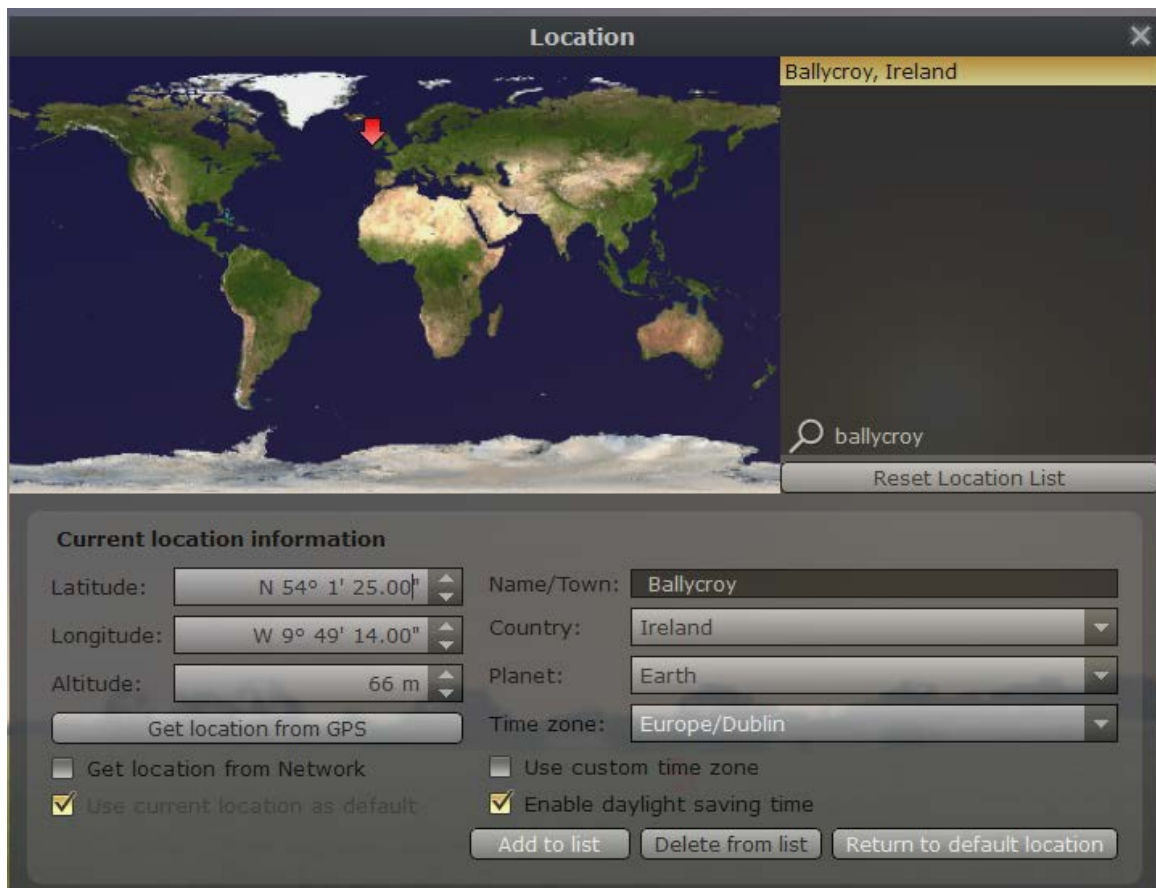


Figure 2 Set your location to Ballycroy Visitor Centre (tick 'Use current location as default')

Stellarium Installation Instructions

4. Install Ballycroy.zip into Stellarium (a specially commissioned poster is also available here)

Click on the 'Sky & Viewing Options Window' (Figure 3).



Figure 3 The screen menu tools

This opens a new window as shown in Figure 4a

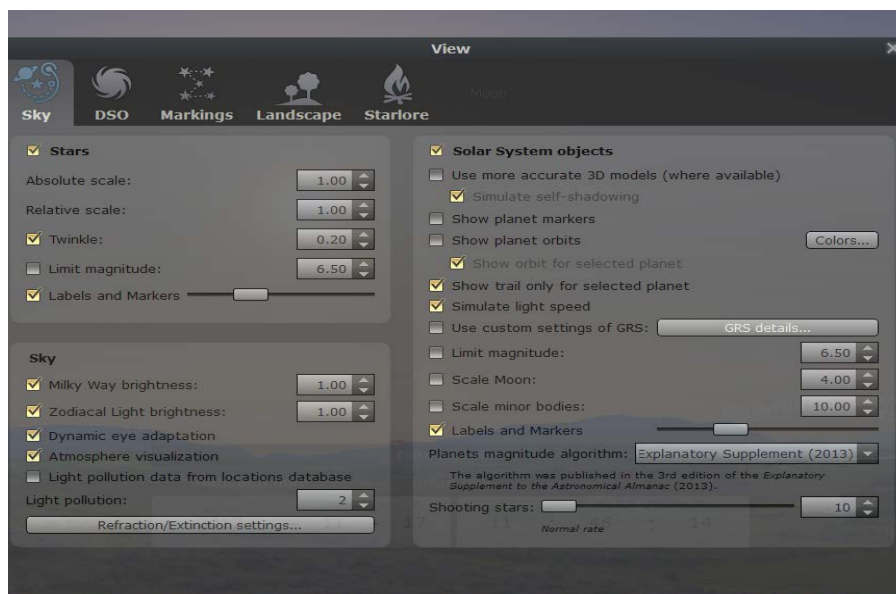


Figure 4a Installing the Ballycroy Landscape zip file into Stellarium

Stellarium Installation Instructions

Click on 'Landscape' and this opens a new window (Figure 4b) listing all the available landscapes (Ballycroy will not yet be listed here but will be after you have installed it - next step).



Figure 4b How to install the Ballycroy Landscape zip file into Stellarium

Now click on the Add/Remove Landscape bar and next click on the 'Install a new landscape from a Zip archive' (Figure 4c).

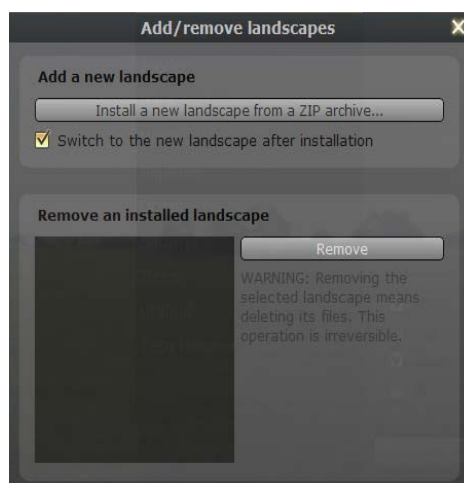


Figure 4c How to install the Ballycroy Landscape zip file into Stellarium

Stellarium Installation Instructions

This will allow you to **select** the Ballycroy (zip file) from the location where you saved this file (here it was saved in C: Temp) as shown in Figure 4d. Once selected and opened, the file is automatically installed into Stellarium in the Landscape Folder of the program located in your C:/Programme Files.

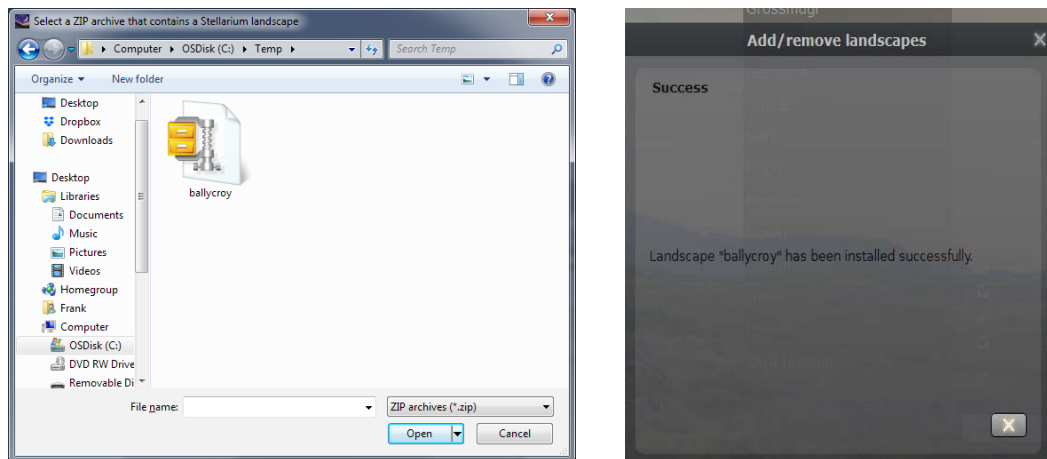


Figure 4d How to install the Ballycroy Landscape zip file into Stellarium

'Ballycroy' should now be installed as a Landscape File in Stellarium and each time you run the program you will be located there by default.

Stellarium Guide

Stellarium Guide

The User Guide is located in the Stellarium folder as a .pdf document file on your C drive at
C:\Program Files\Stellarium\guide.

The Guide is very comprehensive and provides a wealth of detail
on using the programme at a basic and advanced level.

Download the poster of the Ballycroy Horizon

In addition to the Stellarium Landscape File, a specially commissioned poster
can also be downloaded at www.mayodarkskypark.ie

This is a high-resolution product and can be printed at up to A0 paper size
841 x 1189 mm or 33.1 x 46.8 in.

Now enjoy and learn more about the wonders of your local sky!

With the compliments of the **Mayo Dark Skies Community Group**

This project is a collaboration with Friends of Mayo Dark Skies Community Group
and funded by Mayo County Council via Local Agenda 21 Programme.

Project Manager: Georgia MacMillan

Contact: mayodarksky@gmail.com



Dr Frank Prendergast FRICS FSCSI
College of Engineering & Built Environment
Dublin Institute of Technology

