

GLOBE Cloud Observations

Activity: Identify clouds and share your results with GLOBE

Age: Primary or Secondary

Purpose: Familiarise students with the atmosphere, and local weather patterns. This can be a stand-alone project (without taking part in the Air Quality Campaign) or can be used to kick-start your weather observations as part of the GLOBE Air Quality campaign

Tools required: [GLOBE Observer App](#)



Supporting documents: [GLOBE Cloud Identification chart](#)



Download the app, sign-in with your GLOBE account details or if you are new to GLOBE, simply register with an email address and start observing!

Introduction

The **GLOBE Observer: Clouds** is an app-based tool that will help you document what you see in the sky. Once you have [downloaded the app](#) and created an account, the Clouds tool (including the [Clouds Wizard](#) if you wish to use it) will guide you through the observation process. Apart from this being a great learning activity for students to participate in, students are contributing to a real citizen science programme. Studying clouds gives important insight into the Earth's energy budget. NASA satellites only have a 'top-down' view of clouds, they need a 'bottom-up' view to fully understand cloud formation and occurrence. That is why your ground-based observations matter! In Ireland, we are very familiar with clouds, particularly the low atmosphere level and moisture-laden variety! By studying the shapes, colour, and amount of cloud coverage, we can understand more about our atmosphere and our local weather patterns.

Clouds Observation Method:

1. Open the Observer app, choose the Clouds Protocol
2. Choose an open area where you have a good view of the sky (i.e. away from buildings)
3. If you wish, the Clouds protocol has a wizard that will guide you through your observation
4. It can help to split the sky into 4 quadrants and begin by observing clouds in each quadrant, for example, for percentage (%) cloud cover, examine cloud cover in each quadrant and record your estimation, complete for all four quads and then calculate the average for overall cloud cover %
5. For more tips, check out the GLOBE observer Clouds [tips](#)