

# Rainfall observing with SEPA – School education project 2016

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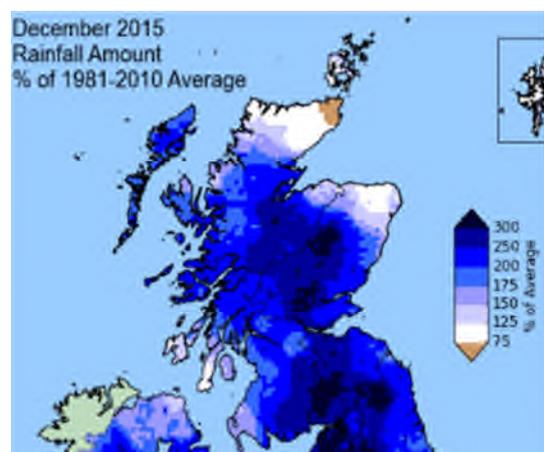
## Project Overview



SEPA is looking to expand its existing volunteer rainfall observer program. This work includes the development of an online data entry portal and data visualisation facility. To complement this work, SEPA is piloting collaboration with around 40 schools nationally. For the pilot we would like a good mix of both primary and secondary educators. As well as providing useful data for SEPA and the Met Office, the project will hopefully develop a variety of skills and educational opportunities

## Why SEPA records rainfall

Volunteer rainfall observers and SEPA's automated intensity raingauges are the primary source of data contributing to the national rainfall network. The role of the network is to provide sufficient coverage of spot measurement to accurately capture the distribution of rainfall across Scotland and how the pattern changes through time. The data is archived by the Met Office and used to develop a number of useful products such as the rainfall summary maps.



## Rainfall Observer (School) Briefing Note



### What's involved?

SEPA will supply a raingauge and the school will be required to find an optimal location within the school grounds. The raingauge is supplied with a bracket that will need to be attached to a wooden post using screws and a screw driver. Each morning as close to 9am GMT as possible, someone from the school is required to record the rainfall that has accumulated in the gauge. The rainfall measurement can then be entered in the data entry website whenever it is convenient. Although it is most beneficial for us to have a measurement be taken every day, it is OK to have some periods of no measurement such as over weekends and holidays so long as the next entry made reflects that it is a cumulative reading. The value of the data record increases with age and so ideally we would like our volunteer schools to view this as a long term, ongoing

venture. More detailed information will be disseminated to schools taking part. The data entry website can be viewed at <https://envscot-csportal.org.uk/rainfallobs/> .

### Educational projects and outcomes:

Here at SEPA we are keen to bring the sciences, and the work we do, alive for all young people. To this end, our website has been developed to allow you to access all the data entered by our rainfall observers. We hope that this will provide an exciting context for learning with real time weather data. Whilst we have no doubt that you can think many ways that this may fit into your own curriculum plans here are a few ideas that we have thought of:

- Measuring and recording environmental data
- Analysing data
  - Chart interpretation
  - Spreadsheet analysis
- Links to climate change
- Linking data to local flood events
- Writing reports to describe data
- Compare data from around Scotland and understand rainfall patterns across Scotland.
- Introduction to the water cycle
- Support your school's Green Flag application. Sustainable Development Goal 13: Climate Action
- Integrate environmental hazards into Health and Wellbeing
- Links to Community Resilience, building responsible citizens and effective contributors by understanding that their data can help us plan for and respond to flood events.

**If you are interested in taking part please contact Cordelia Menmuir at:**

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