

Extremes in precipitation over Ireland in station data

Question: How extreme was the precipitation in November 2009 compared to the record?

November 2009 saw heavy flooding in parts of Ireland. You will analyse station data from Met Eireann to assess how far out of the ordinary the precipitation for that period was.

- Background study:
 - Key concepts and tools: Extreme events, return periods, python language, NetCDF data format.
- Data analysis:
 - You will extract data for precipitation from the Met Eireann database, determine return periods for each station and season, and put the November 2009 precipitation in that context.
- Prepare report, including introduction to the problem, review of previous studies, description of datasets and methods, presentation and discussion of data analysis results, conclusions.
- Prepare 10 minute oral presentation summarizing the topic and the work you have done.