Research Project, 2010.

Study of the EC-Earth Simulations for Ireland Supervisor: Peter Lynch/Ray McGrath/Tido Semmler

This project involves a study of the EC-EARTH T511L62 and T511L91 simulations for 1961-1990.

The T511L62 simulation was done by Shiyu Wang for his study on blocking

The T511L91 simulation is the one Tido Semmler performed over Christmas 2009 to see if the higher vertical resolution in the stratosphere has an impact on the large scale circulation - these need to be evaluated.

- Mean sea level pressure, 500 hPa temperature and geopotential heights should be compared to investigate how well the mean circulation is represented in both vertical resolutions.
- The variability of these parameters in different time scales (days, months, decades) should be evaluated.
- Percentiles of rainfall and temperature should be calculated for Ireland and Europe.
- As a reference the ENSEMBLES observation dataset (E-OBS) may be used.
- Percentile values of rainfall, temperature and wind speed are to be calculated.
- A report is to be written describing the research and results.

Further details will be provided as appropriate.