

Research Project, 2011.

Analysis of an Extratropical Storm

Supervisor: Prof Peter Lynch

The aim is to construct a case-study of an extratropical storm that affects Ireland during the period January-July 2011.

The overall content should be similar to the study of Ackerman and Knox of the “Edmund Fitzgerald” storm over the Great Lakes in 1975 and “Xynthia” in France in February 2010.

All the available data should be considered:

- **SYNOP Reports**
- **Radiosonde Ascents**
- **Radar Images**
- **Analysis Charts**
- **Forecasts from HIRLAM, COSMO, UKMO, GFS, etc.**
- **Satellite Imagery (GEO and LEO)**
- **Any other relevant data.**

The dynamical processes that contribute to the development of the storm should be discussed: baroclinic instability, thermal advection, vorticity advection, upper level divergence, conveyor belts, etc.

A report should be written presenting the results.