



Moving to Impact-Based Forecasting - challenges in Met Eireann

Gerry Murphy (1), Joan Blackburn (1), Shane Finnegan (2), Morgan Geraghty (3), Alan Hally (4), Marita Hickey (4), Willemien Phelan (5), Siobhan Ryan (1), and Sean Venn (1)

(1) Met Eireann, Forecast Division, Glasnevin, Dublin (gerry.murphy@met.ie), (2) Met Eireann, Aviation Services Division, Shannon Airport, Co Clare, (3) Met Eireann, Aviation Services Division, Dublin Airport, (4) Met Eireann, Research, Applications and Environment Division, Glasnevin, Dublin, (5) Met Eireann, Climatology and Observations Division, Glasnevin, Dublin

At present, Met Éireann, the Irish Meteorological Service produces and communicates warnings of severe weather using warning criteria based on meteorological thresholds. While these warnings are very useful, they do not take into account vulnerabilities of particular locations or groups of people, or the potential impacts of a weather event on a location or group.

In early 2017, a task team in Met Éireann examined in detail what would be required to move to an Impact based decision making system for the production and communication of forecasts and warnings.

Five strategic goals were developed. These are:

1. Develop partnerships with stakeholders
2. Put in place suitable technical infrastructure and forecaster tools
3. Optimize organizational and operational structures
4. Implement training, outreach and communication
5. Engage in relevant meteorological and climatological research

In this presentation, threshold and impact based warnings systems are compared using examples from recent significant Irish weather events. The strategic goals necessary to produce and communicate impact based forecasts and warnings are described.