

Title

Extreme Climatic Events: Impacts for Ireland

Abstract

In this talk we show how the framework of statistical Extreme Value Theory can be used to monitor changes in extreme temperature behaviour over Ireland. We outline two of the main methods used to evaluate extremes; the Generalised Extreme Value distribution and the Generalised Pareto Distribution, and how they lead to return level plots which provide a direct estimate of extreme temperature. We run these methods on a national gridded data set obtained from Met Éireann over the last 50 years which enables us to evaluate how climate extremes have changed. We then discuss methods for using regional climate models to predict how these extremes might change in the future.