



## **Developing a robust methodology for assessing the value of weather/climate services**

Justin Krijnen, Nicola Golding, and Carlo Buontempo  
Met Office, Exeter, United Kingdom (carlo.buontempo@metoffice.gov.uk)

Increasingly, scientists involved in providing weather and climate services are expected to demonstrate the value of their work for end users in order to justify the costs of developing and delivering these services. This talk will outline different approaches that can be used to assess the socio-economic benefits of weather and climate services, including, among others, willingness to pay and avoided costs. The advantages and limitations of these methods will be discussed and relevant case-studies will be used to illustrate each approach.

The choice of valuation method may be influenced by different factors, such as resource and time constraints and the end purposes of the study. In addition, there are important methodological differences which will affect the value assessed. For instance the ultimate value of a weather/climate forecast to a decision-maker will not only depend on forecast accuracy but also on other factors, such as how the forecast is communicated to and consequently interpreted by the end-user. Thus, excluding these additional factors may result in inaccurate socio-economic value estimates.

In order to reduce the inaccuracies in this valuation process we propose an approach that assesses how the initial weather/climate forecast information can be incorporated within the value chain of a given sector, taking into account value gains and losses at each stage of the delivery process. By this we aim to more accurately depict the socio-economic benefits of a weather/climate forecast to decision-makers.