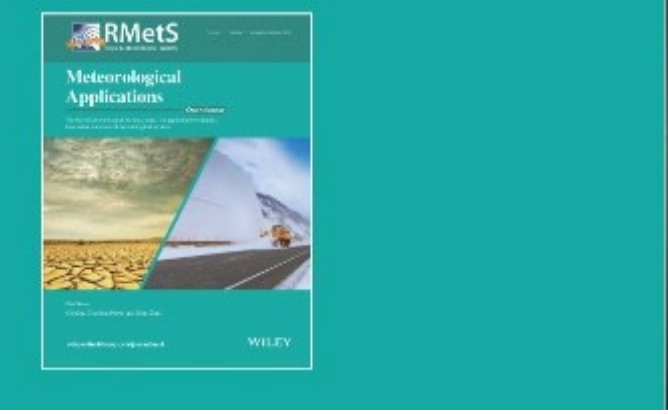


Speaker Abstracts and Biographies

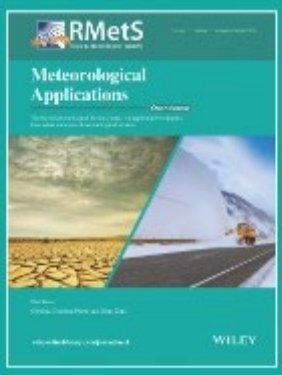
Chairing the Webinar
Dr Cristina Charlton-Perez, Senior Scientist, Met Office

Biography: Dr Cristina Charlton-Perez attained a Bachelor's degree in Mathematics from the University of North Carolina, Chapel Hill. She earned both her Masters of Science and PhD in Applied Mathematics from the University of Colorado, Boulder. Her initial research interests in climate, specifically ENSO and the MJO, led her to meteorology and eventually to working on data assimilation at the Met Office. Currently, Dr. Charlton-Perez works on land surface data assimilation and is interested in both observations and modelling of the land surface. She has been the co-Editor-in-Chief of *Meteorological Applications* since April 2019.

Linking Weather Patterns to regional extreme precipitation for highlighting potential flood events in medium- to long-range forecasts
Robert Neal, Research Scientist, Met Office

Abstract: A weather pattern can be described as one of many circulation types over a defined region, which differs in its characteristics from other weather patterns over the same region and varies on a daily basis. This presentation will show how such weather patterns over the UK correspond very well to precipitation variability. This climatological information can be applied to medium- to long-range probabilistic weather pattern forecasts to give hydro-meteorologists an earlier indication of periods most at risk of heavy rainfall. To illustrate the potential of this weather pattern-based prediction framework, a forecast guidance tool called Fluvial Decider is introduced.

Biography:
Robert works in the Verification, Impacts and Post-Processing Team at the Met Office. Here, Robert works with data from numerical models covering a range of forecast lead times out to a month in advance. His main research interests include post-processing of ensemble forecasts, communication and presentation of probabilistic weather forecasts and weather pattern forecasting applications for high impact weather.



Evaluation and Validation of TAMSAT-ALERT soil moisture and WRSI for use in Drought Anticipatory Action

Dr Vicky Boult, Research Scientist, Department of Meteorology, University of Reading

Abstract: Reliable information on the likelihood of drought is of crucial importance in agricultural planning and humanitarian decision-making. Acting based upon probabilistic forecasts of drought, rather than responding to prevailing drought conditions, has the potential to save lives, livelihoods and resources, but is accompanied by the risk of acting in vain. In this paper, we assessed the suitability of the TAMSAT-ALERT forecasting tool for anticipatory drought management. I'll talk you through our key findings and will happily answer any questions about the research or the publication process.

Biography: Vicky is interested in the application of TAMSAT-ALERT soil moisture forecasts to support anticipatory drought risk management in Africa's agricultural and humanitarian sectors. To do so, Vicky works closely with key actors in drought risk management. Notably, she is currently supporting the Kenyan Red Cross and National Drought Management Authority in developing and evaluating TAMSAT-ALERT triggers for early action. Vicky has a background in ecology and is currently exploring opportunities to improve the use of forecasts in conservation practice.