

Award-winning paper in 2013

Papers published in *Water Management* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 17 October 2014, ICE president Geoff French presented an award to the following paper published in *Water Management* in 2013. The editorial panel nominated their best papers and an awards committee chaired by Quentin Leiper allocated the awards.

Robert Alfred Carr Prize

The Robert Alfred Carr Prize, presented for the best paper published in *Water Management*, was awarded to Duan *et al.* (2013).

Abstract

Drought risk assessment ideally requires long-term rainfall records especially where inter-annual droughts are of potential concern, and spatially consistent estimates of rainfall to support regional and inter-regional scale assessments. This paper addresses these challenges by developing a spatially consistent stochastic model of monthly rainfall for south-east UK. Conditioned on 50 gauged sites, the model infills the historic record from 1855–2011 in both space and time, and extends the record by synthesising droughts which are consistent with the observed rainfall statistics. The long record length allows more insight into the variability of rainfall and potentially a stronger basis for risk assessment than is generally possible. It is shown that, although localised biases exist in both space and time, the model results are generally consistent with the observed record including for a range of inter-annual droughts and spatial statistics. Simulations show that some of the most severe inter-annual droughts on the record may recur, despite a trend towards generally wetter winters.

REFERENCE

Duan J, McIntyre N and Onof C (2013) A rainfall model for drought risk analysis in south-east UK. *Proceedings of the Institution of Civil Engineers – Water Management* **166**(10): 519–535, <http://dx.doi.org/10.1680/wama.12.00012>.



Juan Duan receiving the Robert Alfred Carr Prize from ICE President Geoff French