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Teleconnections and extreme ocean states in the North Atlantic using the EC-Earth and WaveWatchIII models

Emily Gleeson (1), Sarah Gallagher (1,2), Colm Clancy (1), and Frederic Dias (2)

(1) Met Éireann, Glasnevin Hill, Dublin D09 Y921, Ireland (emily.gleeson@met.ie), (2) University College Dublin, School of Mathematics and Statistics, Science Centre – North, Belfield Dublin 4

We carried out a statistical analysis of large scale oscillations such as the North Atlantic Oscillation (NAO) and East Atlantic teleconnection pattern (EA) from an ensemble of EC-Earth global climate simulations compared to observations and their projected changes by the end of the century under the RCP4.5 and RCP8.5 forcing scenarios. In addition, EC-Earth model fields were used to drive the WaveWatch III wave model over the North Atlantic basin to create the highest resolution wave projection dataset currently available for Ireland. Using this dataset we analysed the correlations between teleconnections and a range of wave parameters with a particular focus on extreme ocean states.