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Detecting anthropogenic influence on tropical Atlantic sea surface temperatures

N. P. Gillett (1) and P. A. Stott (2)

(1) CRU, School of Environmental Sciences, University of East Anglia, UK, (2) Hadley Centre for Climate Prediction and Research, Met Office, UK (n.gillett@uea.ac.uk / Fax: +44 1603 507784)

In view of its influence on North Atlantic hurricanes, much attention has recently focussed on the warming of the tropical Atlantic and its possible causes. We use a detection and attribution framework to compare observed changes in sea surface temperature over the region and season where hurricanes form in the North Atlantic with changes simulated by the third Hadley Centre coupled model in response to natural and anthropogenic forcings. After verifying the model's internal variability, we go on to find that the warming in the latter half of the twentieth century is largely attributable to anthropogenic influence, and inconsistent with simulated internal variability.