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## Is rainfall from regional climate models better than reanalysis?

E. Kostopoulou (1), T.Holt (2), C. Giannakopoulos (1)

(1) National Observatory of Athens, Greece, (2) University of East Anglia, UK,

t.holt@uea.ac.uk / +44 1392 894255

Reanalysis rainfall from ERA-40 and NCEP does not incorporate observational data. When compared with rainfall from Regional Climate Models (RCMs) over Europe, the reanalysis data does not provide a good match over areas with complex terrain. This could be a function of the relatively high spatial resolution of the RCMs, particularly when compared with NCEP, or it could be that the RCMs overestimate rainfall in these areas.

This analysis uses data from three RCMs to compare with rainfall from the NCEP and ERA-40 reanalyses. The comparison is performed over the Mediterranean since this region is particularly vulnerable to summer drought, but also experiences intense rainfall episodes in winter. Extended to include the Alps, the Mediterranean also includes some of the most complex topography in Europe. The analysis concentrates on comparison of rainfall extremes, since these are the most likely to impact important economic sectors, particularly agriculture and tourism.