Quantification of GCM performance at simulating the spatial variability of SE Asian rainfall

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In the past, many applied GCM studies compare qualitatively the modelled climate with observed data, while some also include a semi-quantitative difference plots as model evaluation. Some workers such as Whetton et al. (1996) have attempted to assess models more quantitatively, by plotting RMS error of modelled and observed rainfall against correlation coefficient. To assess model performance more robustly, Legates & McCabe (1999), state that at least one goodness-of-fit or relative error estimate, one or more absolute error estimate and additional information such as comparisons between modeled and observed means and standard deviations is required.

This poster aims to provide a quantitative assessment of the performance of a range of GCMs, examining both their ability to simulate the annual mean and 3-month average DJF, MAM, JJA & SON rainfall for SE Asia. Model ability will be assessed against a reference data set such as that of Legates & Willmott (1990). This analysis will include the methods recommended by Legates & McCabe (1999) and an analysis of geo-statistical structure. This will enable us to give an objective assessment of model strengths and weaknesses at the regional and sub-regional scales.

Meteorology (Poster)