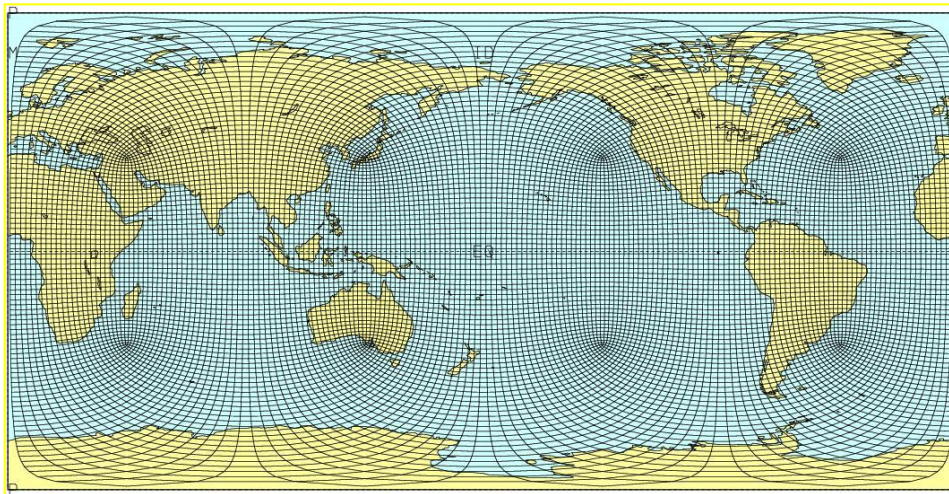
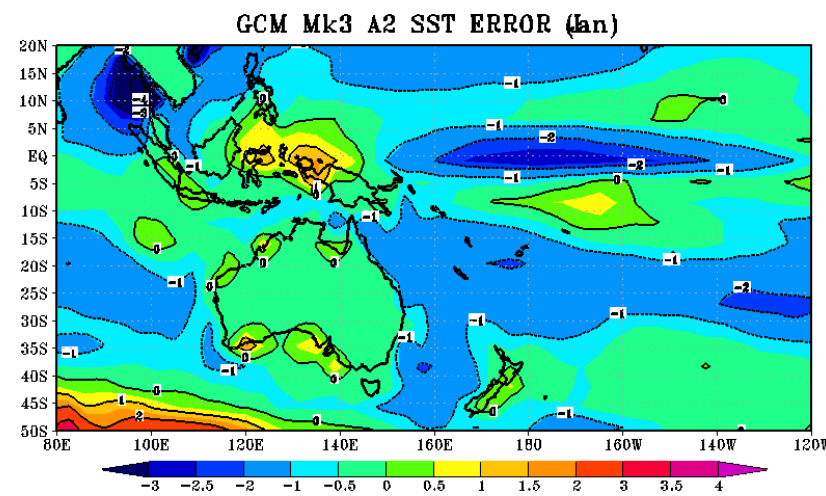
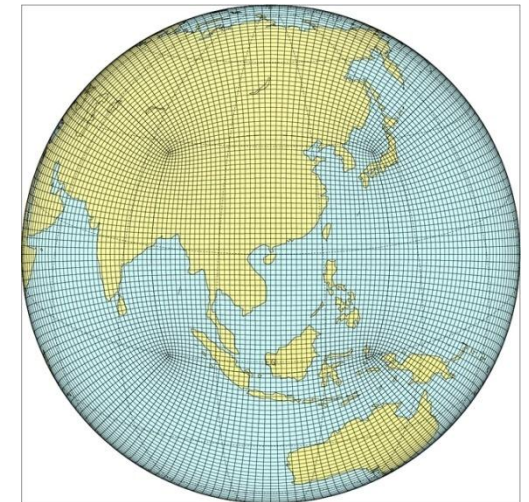


# Preferred CCAM downscaling methodology

- Coupled GCMs have coarse resolution, but also possess Sea Surface Temperature (SST) biases
- A common bias is the equatorial “cold tongue”
- Our preferred methodology is to first run a quasi-uniform 200 km CCAM run driven by the bias-corrected SSTs
- The 200 km run is then downscaled to 50 km (or finer) by running CCAM with a stretched grid, but applying a digital filter every 6 h to preserve large-scale patterns of the 200 km run



Quasi-uniform C48 CCAM grid with resolution about 200 km



Stretched C96 grid (every 2<sup>nd</sup> point) with resolution about 50 km over S Asia

# Percentage change in ANN rainfall CCAM/ECHAM5

