Revisiting the Global and Regional Steric Sea-level Trends in the Satellite Era

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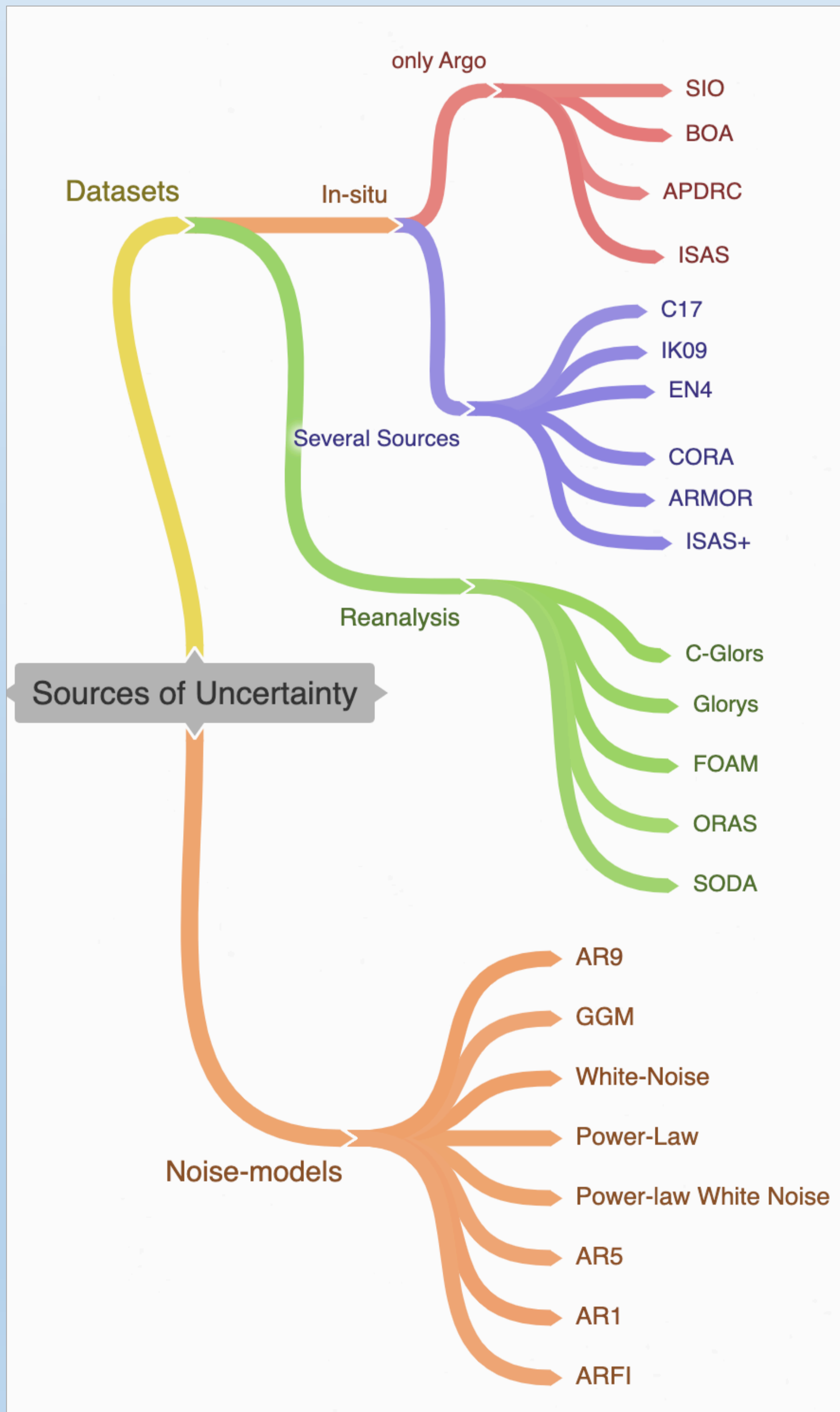
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Question

How does the steric sea-level trend depend on the choices of the dataset and noise model?

Methods

- Steric height → TEOS-10, 0-2000m
- Trends and Uncertainties: *Hector*
- 2005-2015
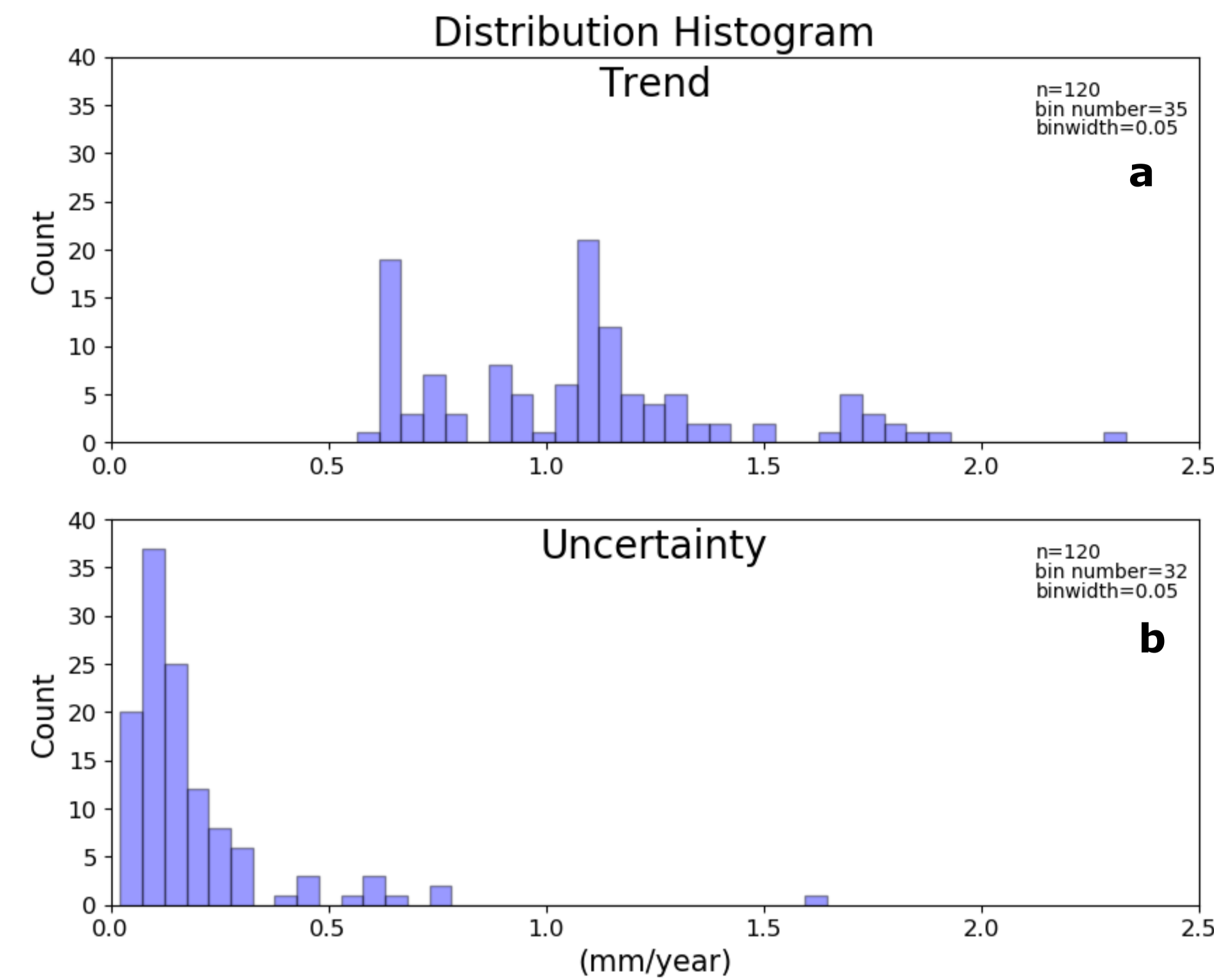- Goodness of fit: AIC, BIC and *ARMASA*

Results

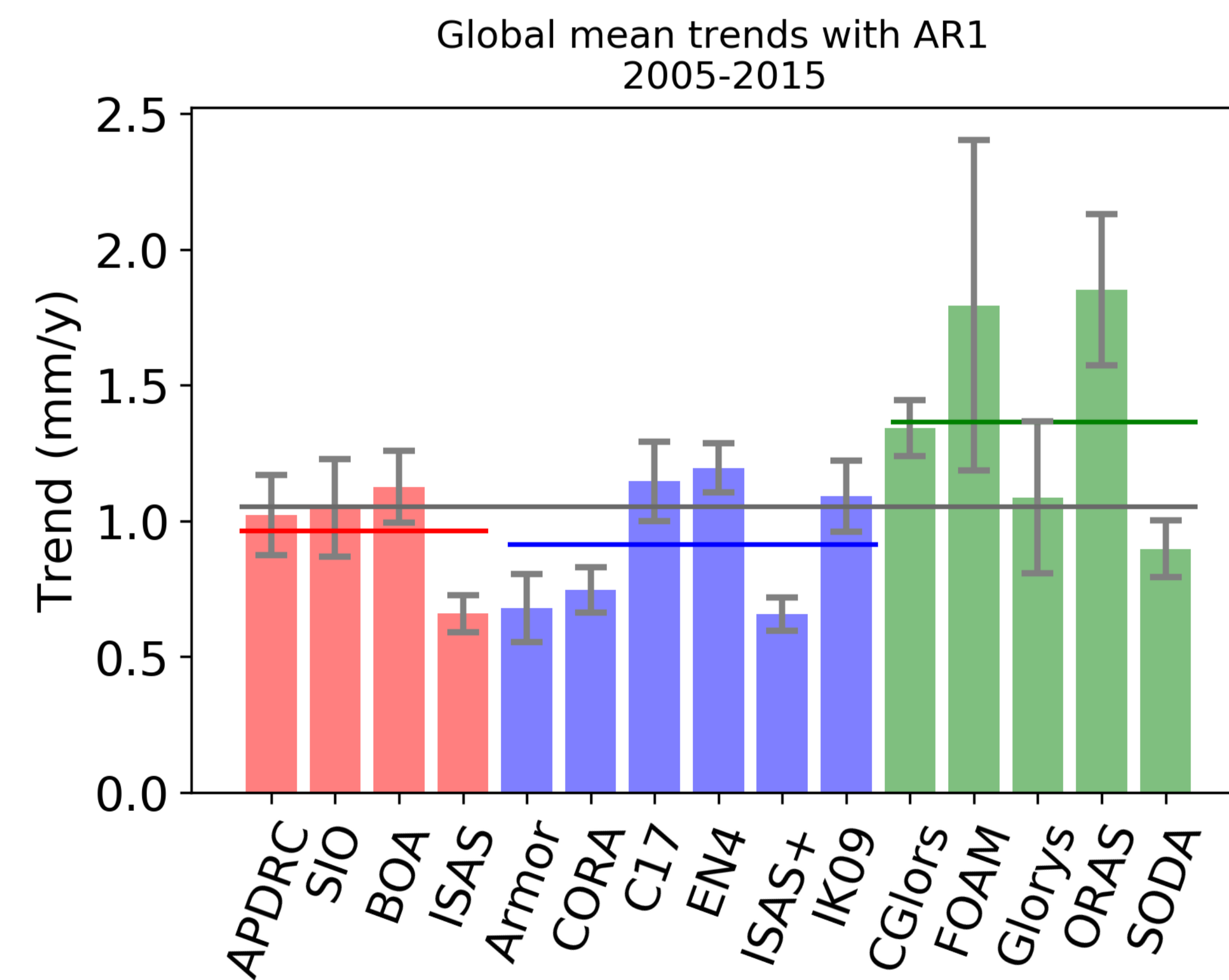Fig 1. Histogram of the (a) trend and (b) uncertainty when all datasets and noise models are used (n=120).

Fig 2. Bar plot of the global mean AR1 trends and 1 σ uncertainty. Colors indicate the datasets groups, and lines the group mean. Grey horizontal line is the ensemble mean.
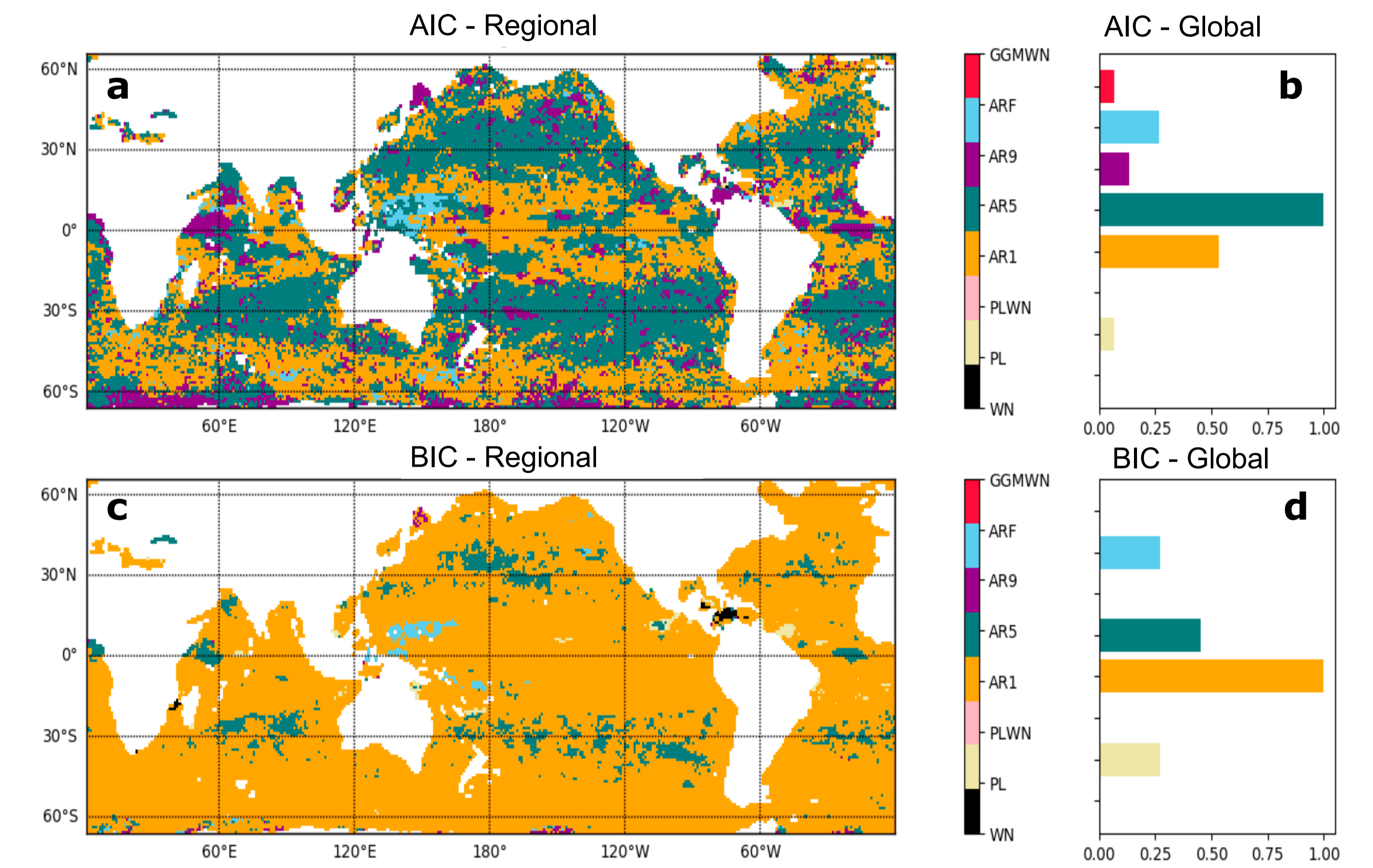

Fig 3. Noise model selection based on (a,b) AIC and (c,d) on BIC for the (a,c) regional and (b,d) global mean steric trends.
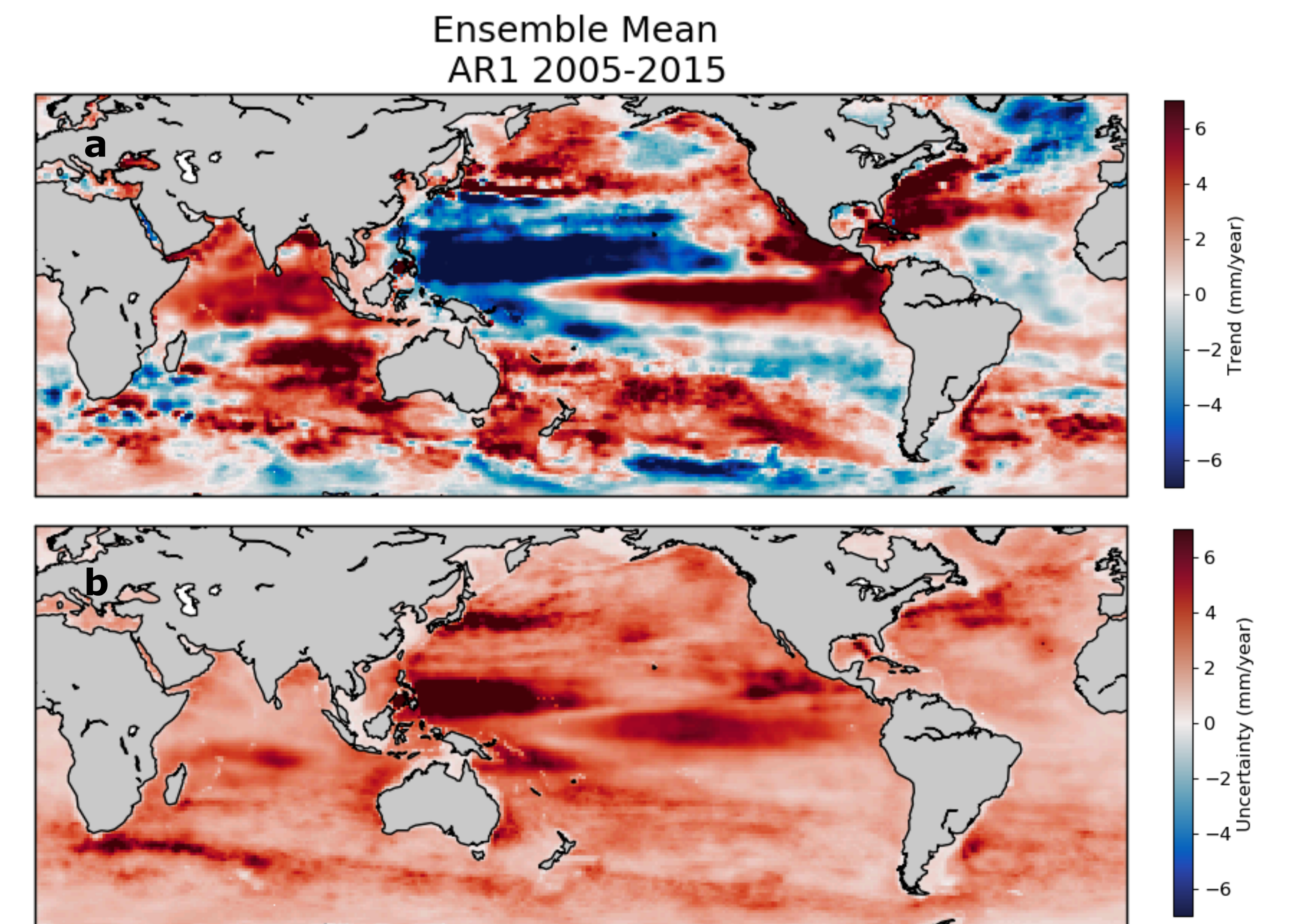

Fig 4. Steric sea-level (a) trend and (b) uncertainty with AR1 for the ensemble mean from 2005-2015.