Discussion Session
1. Global Observations and Predictions

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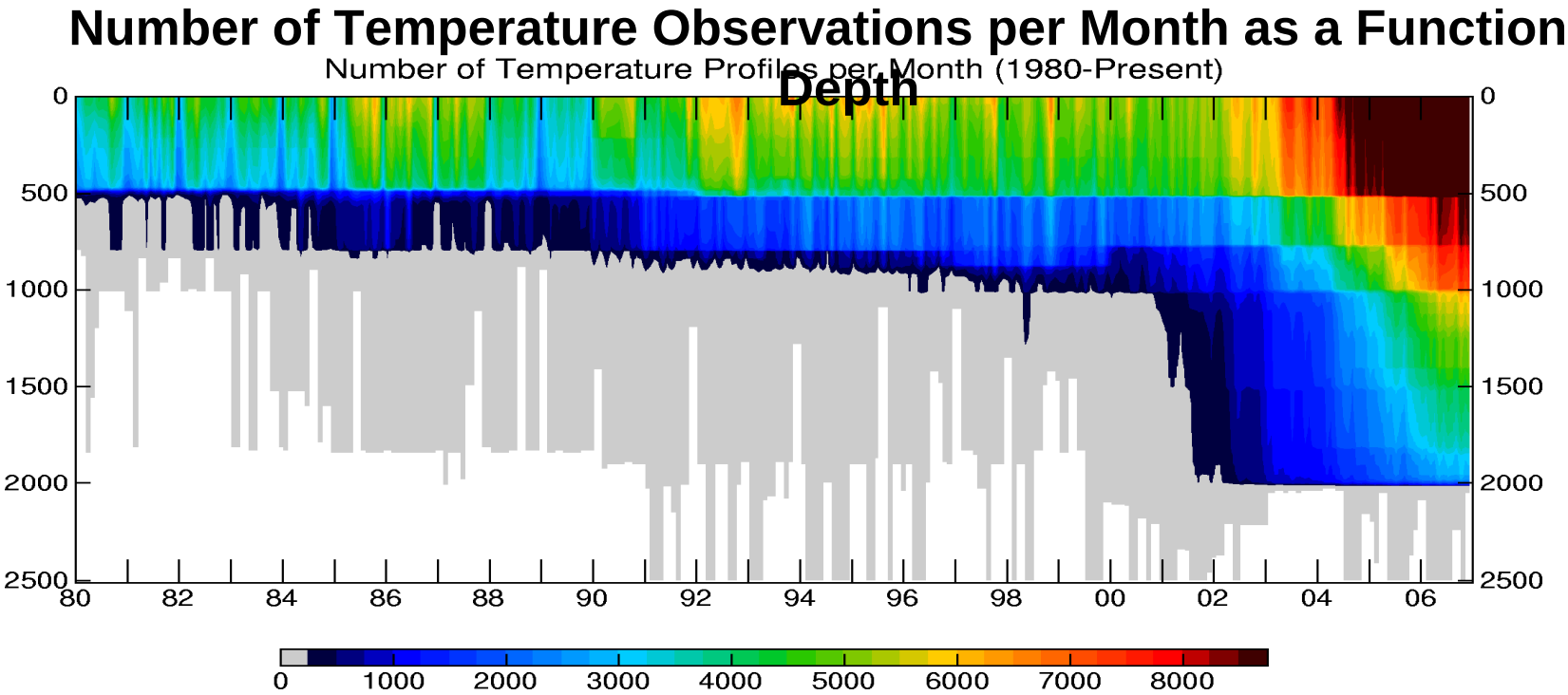
What is the link between observations and predictions?

1. Initializing the prediction

2. Verify a certain predictions with help observations



1) Initialization

- The impact of atmospheric initialization on decadal prediction skill is typically lost after about one seasonal cycle
- The impact of ocean initialization is on the prediction skill has been shown to persist over several years
  - There are regional differences in the importance of the initialization -> as such there are regions where an improved observational network, and as such

2) Verification

- Data used for verification must be as much independent as possible from the prediction
- Data always must come with uncertainties
- Models often lack reproducing the hydrographic fields – how important is this? Is that only .
- More research need to be invested in obvious model problems (e.g. cold bias in

Vision

- General:
  - What is needed to come up with significantly improvement for CMIP6 (compared to CMIP5)?
  - Observations:
  - Sustainability of long term observations (Time series, Argo, satellites, other for other model applications…)
  - Backward extension of atmospheric observation data base (digitizing log books)
  - Models: