



**Barcelona
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Strategies to reduce the initial shock



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Reduce initial shock?

- Less data, less shock, but less skill.
- Observation information = (1) phase/amp of natural variability + (2) discrepancy from model climate (→ initial shock/drift)
- Strategy?
 1. Reduce model bias
 - Identify sources of error. Needs mileage, but make it a science.
 - NB: Observation info has considerable diversity.
 - Use information from Data Assim. (DA) increments
 2. Correct bias
 - Flux-correction, 3D versions etc., but budget problems...
 3. DA schemes to achieve more balanced states?
 - Use the same model for DA & prediction
 - Coupled DA? Weak, loose, x-component, strong... depend on system
 - Anomaly/full DA? Be aware of pros & cons
 - Filter observation? (cf. (1) 'predictable' & (2) 'adjustment' components)

- Synthesized data set (eg., Long Range Forecast Transient Intercomparison Project) facilitate & promote community efforts toward prediction science
- Consolidated meetings under Working Group on Seasonal to Interdecadal Prediction (WGSIP)
- Promote intercomparison studies on model drift, model error, and predictability
- Promote dialogue among centres performing prediction, generating initial conditions, and developing models