Science Support for Adaptation and Mitigation

Problem: Policy making, mitigation, and adaptation in the face of large, and mostly unreducable uncertainties

Contribution of the Scientist:

- understand and respect the uncertainties (type, quantity, predictability)
- map the range of plausible futures,
  * use reductionism where appropriate;
  * use ensemble and scenario approach where necessary;
- monitor emerging characteristics and components that are not predictable;
- develop assimilation models with limited (in time) predictive capabilities to support rapid response to new developments (forecasting)

Towards Forecasting of Local Sea Level Changes:

- Monitor the main reservoirs in the global water cycle;
- Develop models that can predict reservoirs on decadal time scales;
- Develop models that can relate reservoir changes to LSL;
- aim for five to ten years and more. ...