Wide-ranging Discussion

- Broad agreement on the utility of using non-tidal loading models
- Varied opinions on what should be removed, as opposed to remove-compute-restore
- Assuming zero (no model) is also a model assumption
- Removal of some effect can cause inconsistencies if that effect is not removed from all products
- There is a clear need for better information about what is included (or not) in various models
  - Need more communication with modelers

Take-Away Messages 1

- To apply atmospheric/oceanic correction (the most precise models), the optimal approach should be through a separation between the "long-term" component of the model (wrt to the temporal resolution of the solution) and the stochastic part of the geophysical model (atmosphere & ocean).
  - The long-term part can be restored afterwards if desired. In this case, the "mean field" (linked to the scale) is not fundamental.
  - It appears to be more important to focus on the "high frequency" part (the one aliased) ; geodetic data are a tool to investigate long term hydrology/cryosphere changes.
- It is important to have a realistic estimate of the full covariance of the geophysical models.

Take-away Messages 2

- It is important to have different models available.
  - Difficult to identify a best model, which may depend on the application.
  - Users need to be able to introduce various models in their geodetic data processing and see how it improves (or not) the solution.
- When combining different timescales (from sub-daily atmospheric to thousands of years for GIA), the consistency of the Earth model should be considered (rheology). The geophysical corrections being (at least) a combination of a Earth model and a mass load model