Clement
Ubelmann
JPL/CALTECH
Oral
Satellite altimeter observations of sea surface height (SSH) have wide-ranging applications. Many of them require the knowledge of the measurement errors, not only their magnitudes but also distribution of variance in wavenumber space. For instance, such wavenumber spectrum is needed for optimal constraint in state estimation via data assimilation by models. We analyzed the tandem mission observations from Jason-1 and Jason-2 for estimating the random errors. The POD error was estimated from the difference between the Jason-2 GDR D orbit and the JPL GPS orbit. We also estimated the errors in the corrections from the media effects of the wet troposphere, the ionosphere, and the dry troposphere, as well as the correction for the sea-state bias. The estimated wavenumber spectrum for the total uncertainty of SSH will be presented.
OSTS session
Quantifying Errors and Uncertainties in Altimetry Data
Meeting name
Ocean Surface Topography Science Team (OSTST) Meeting
Download to PDF