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GDR-D orbit standards were defined at the San Diego OSTST meeting in October 2011, including for the first time in the operational precise orbits of several altimeter missions a GRACE-based linear model to account for the long-term variations of the geopotential.
We assess the status of the current solutions for the Jason-2 and Saral missions, and indicate what are the prospects for the subsequent generation of orbits foreseen for next year. While waiting for the next release of the International Terrestrial Reference Frame (ITRF2013), several improvements are already available and have been tested on Jason-2, including: a calibrated solar radiation pressure model; the EIGEN6S2 gravity field, that makes use of more GRACE data and accounts for the interannual variability of non-tidal gravity; improved parameterization techniques to mitigate force model errors in the operational orbits, those due to time varying gravity in particular.
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Precision Orbit Determination
Meeting name
Ocean Surface Topography Science Team (OSTST) Meeting
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