Compatible Sea Surface Height Anomaly Records for TOPEX/Poseidon and Jason-1 Missions

Robert Berwin
JPL/Caltech
rwb@seaport.jpl.nasa.gov

Co-Authors:
Kelley Case, JPL/Caltech
Eric Rigor, JPL/Caltech
Robert Benada, JPL/Caltech

JPL PO.DAAC has developed two new products for sea level residual measurements. These are the sea surface height anomalies for TOPEX/Poseidon (TPSSHA) and for Jason-1 (J1SSHA). These residuals are calculated by editing the data from the PO.DAAC Merged GDR (MGDRB) for TOPEX/Poseidon and from the Jason-1 (I)GDR data series and are currently available through the JPL PO.DAAC web site http://podaac.jpl.nasa.gov.

To calculate the sea surface height anomaly, TPSSHA uses Jason-1 compatible tide, mean sea surface, electromagnetic bias, wet correction, and inverse barometer parameters.

Consequently, the entire data set for TOPEX/Poseidon, beginning in October, 1992, will be available with these Jason-1 compatible parameters to provide a long-standing data record.

In particular, the TPSSHA and J1SSHA will provide compatible measurements of the sea level residuals during the tandem TOPEX/Poseidon and Jason-1 missions, which began in mid September 2002.