NOAA Archive Services for Jason-2/OSTM
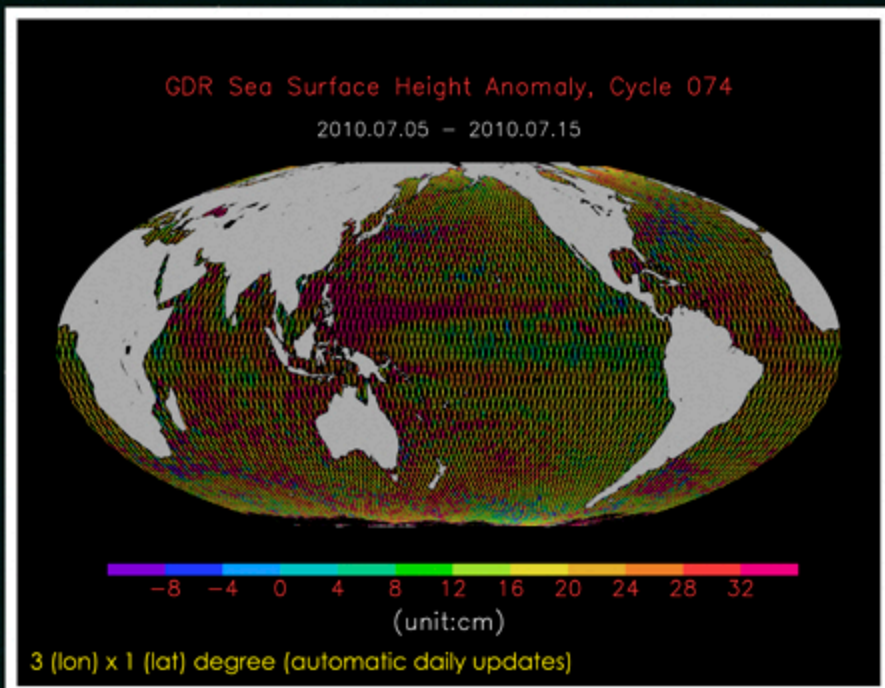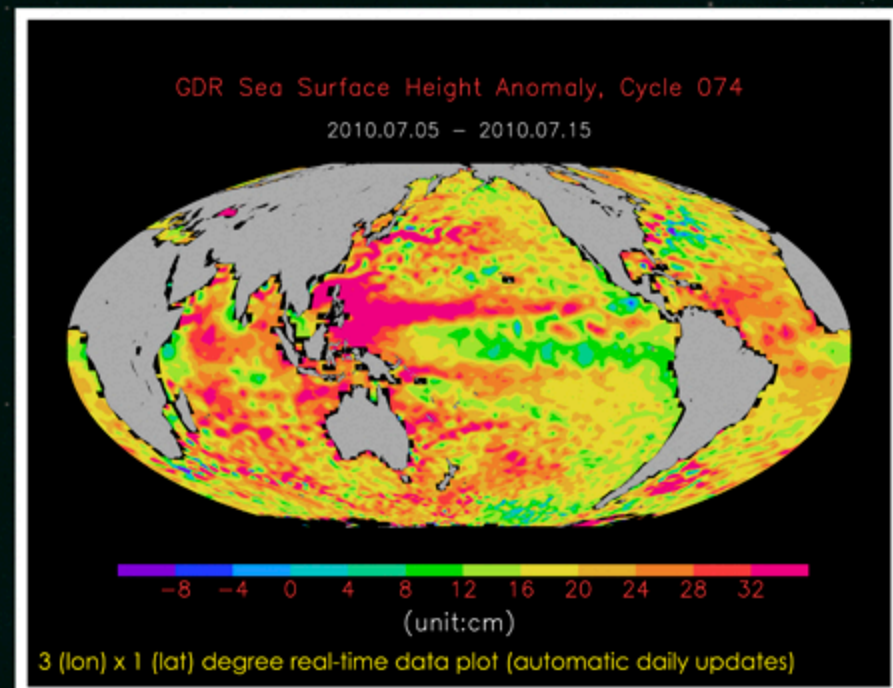
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INTRODUCTION

The NOAA National Oceanographic Data Center (NODC) provides near real-time and delayed-mode product distribution, rigorous archival services, and long-term data stewardship for the Jason-2/Ocean Surface Topography Mission (OSTM). In association with this effort, NODC is implementing a quality monitoring system known as the Rich Inventory which tracks multiple statistics and attributes for over twenty Jason-2 parameters in GDR and IGDR granules, and makes the results available to data managers and public users via a web interface in both graphical and numerical representations.

GDR Sea Surface Height Anomaly, Cycle 074
2010.07.05 – 2010.07.15
(unit:cm)
3 (lon) x 1 (lat) degree real-time data plot (automatic daily updates)

GDR Sea Surface Height Anomaly, Cycle 074
2010.07.05 – 2010.07.15
(unit:cm)
3 (lon) x 1 (lat) degree (automatic daily updates)

DATA ARCHIVE

The archive strategy developed by NODC utilizes the NOAA Comprehensive Large Array-data Stewardship System (CLASS) to provide the information technology infrastructure to support ingestion, archival storage, and basic access to the Jason-2 data. NODC has also established ftp, http, and OPeNDAP servers to provide complementary ways to access all Level-2 O/I/GDRs. The NODC has produced highly detailed and comprehensive Federal Geographic Data Committee (FGDC) Remote Sensing Profile metadata which now serve the CLASS system for OSTM/Jason-2 data distribution. These records are also serving as the base records for NODC's first efforts to create quality metadata as International Organization for Standardization (ISO) 19115 records (see http://www.nodc.noaa.gov/SatelliteData/Jason2/).

ARCHIVE QUALITY ASSURANCE

The NODC Jason-2 Rich Inventory uses a distributed database maintained by partners at NOAA's National Geophysical Data Center.
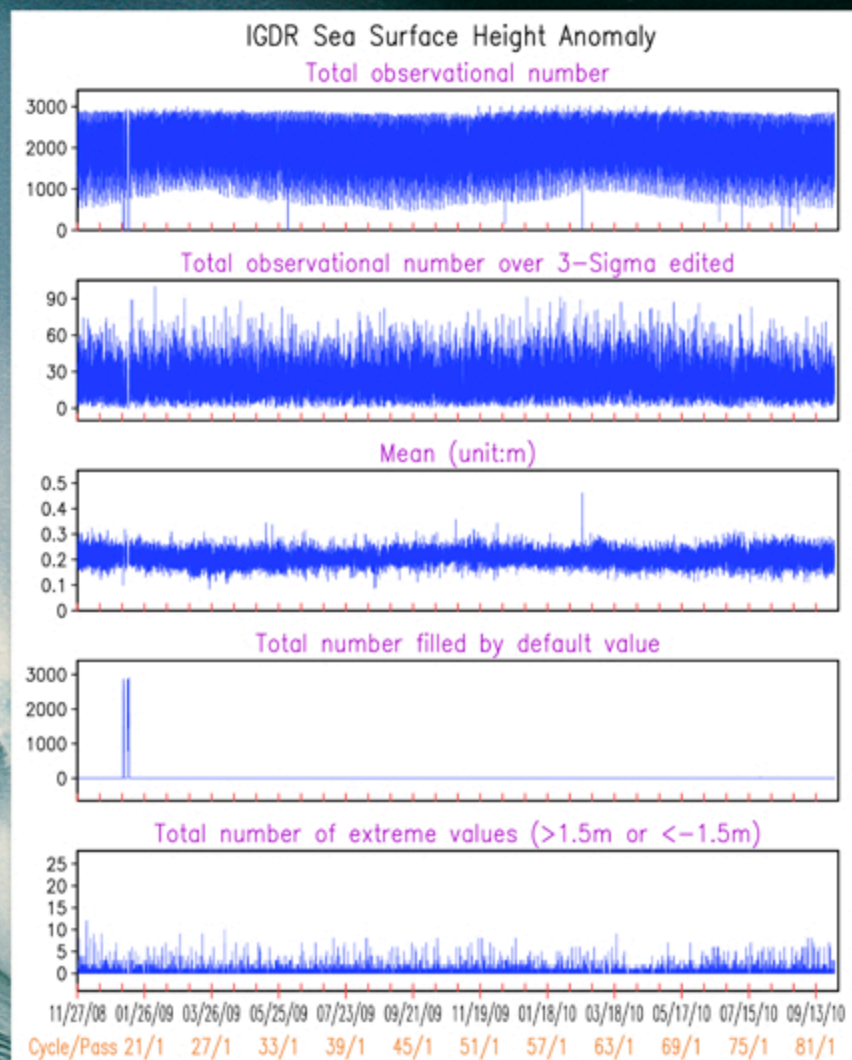

IGDR Sea Surface Height Anomaly
Total observational number
Total observational number over 3−Sigma edited
Mean (unit:m)
Total number filled by default value
Total number of extreme values (>1.5m or <−1.5m)

The figure shows statistics of the total observation number, observation number with a value over 3 times the standard deviation, number filled by default values, and number of extreme values in each data file in an ascending or descending pass. The x-coordinate represents the time frame and corresponding cycle number.

ARCHIVE QUALITY ASSURANCE WEB PAGES AND VISUALIZATIONS

The NODC will also soon provide visualizations of the Rich Inventory statistical values and access to them via a Live Access Server and OPeNDAP, as well as the real-time visualizations for the observations for some parameters.

IGDR Sea Surface Height Anomaly, Cycle 082
2010.09.23 – 2010.09.29
(unit:cm)
¼ degree

IGDR Sea Surface Height Anomaly, Cycle 082
2010.09.23 – 2010.09.29
(unit:cm)
¼ degree