GDR Status

CNES, NASA, NOAA, EUMETSAT

OSTST meeting

From all 4 MSEs
• Topex still in MGDR format defined in 1996.

• Jason-1 GDR_C since 2006, “past” mission since June 2013.

• Jason-2 GDR_D since March 2013. The importance of the 4 partners expertise has been emphasized during this phase, in particular the support from NASA/JPL is very important (POD, radiometer monitoring & algorithms, routine CalVal, …).

• Jason-3 to come soon …

• We have so a not homogeneous time series of GDR products.
• Jason-3 will be based on GDR_E, pretty close to GDR_D - main evolutions are:
  – Orbit (ITRF 2013, geoid, …)
  – Geophysical fields: Tides (FES 2014, GOT), MSS (DTU and CNES&CLS_2012), MDT (CNES&CLS_2013)
  – Numerical retracking solution – to be implemented in parallel with current MLE4 – to support OSTST in depth analysis of both retracking solutions.
  – SSB solution based on Jason-2 2012

• Jason-2 shall be aligned with this standard to ease the CalVal analysis:
  – Orbit based on ITRF 2013
  – Same geophysical fields
  – New AMR calibration
  – SSB 2012 solution
  – But Not the numerical retracking solution
Jason-1 GDR_C since 2006. There is the need to improve the consistency with Jason-2 mission. We will prepare a new reprocessing in 2014 to account for:

- Time tag bias and range bias correction
- New orbit (GDR_D or GDR_E – depending on the schedule)
- Geophysical fields: Tides (FES 2014, GOT), MSS (DTU and CNES&CLS_2012), MDT (CNES&CLS_2013)
- Additional correction that may be useful for long term studies (ERA Interim, Mog2D…)

- Netcdf format compliant to the one used on Jason-2&3

- A dedicated tool will be developed to perform this, using current S-GDR products files, together with additional static or dynamic auxiliary files. This tool will ease further reprocessing.

- Project will prepare in the coming weeks a technical note to describe the foreseen evolutions. OSTST feedbacks will be much appreciated.
Topex GDR Status

• **Topex reprocessing is the top priority**
  – Efforts are ongoing on JPL side to analyze the retracking, this shall be done in close cooperation with CNES in order to assess the long term stability of the retracking estimates.
  
  – But we shall address also the COG correction, 60 days signals, radiometer processing, …
  
  – The tool to be developed for Jason-1 reprocessing will be used also for the Topex reprocessing. This will insure a good consistency with Jason-1.