



Australian Government

Geoscience Australia

Towards ITRF2008:- Status of DORIS Data Processing

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GEOSCIENCE AUSTRALIA

Activity since November 2008

- Backward Data Processing to 2000
- SINEX submissions (wd06, wd07)
- Investigating Scale Offset
- Benchmark submission
- Re-computation (wd08)

Status

Global DORIS (+SLR) Data Processed

Spot-2	000102 –081227	Weekly Arcs
Spot-4	000102 –081227	Weekly Arcs
Spot-5	020616 – 081227	Weekly Arcs
Jason-1	020324 – 081227	Weekly Arcs
Envisat	020623 – 081227	Weekly Arcs
Jason-1 (SLR)	020106 – 081227	Weekly Arcs
Envisat (SLR)	020623 – 081227	Weekly Arcs

Backward Data Processing -- SINEX

- SINEX “wd05” -- 40mm Scale offset with ITRF 2005 (November 2008) – CoM offsets applied in Geodyn runs
- November 2008 – Implemented CoM offset correction in the DORIS data pre-processor using the CoM offset values in the data files
- Provided new SINEX files 2003 - 2008 -- “wd06”
- Default Refraction Model -- Hopfield
- Improved scale offset ~20 mm

Backward Data Processing -- SINEX

- Submitted 2002 SINEX files “wd07”
 - “wd06” + Hopfield refraction model
 - + Neil Mapping Function
 - awaiting test results
- Preparing “wd07” SINEX files 2000 / 2001
- Re-computation 2002 – 2008 “wd07” under way

Backward Data Processing – Orbit Comparisons

- Orbit Comparisons
 - GSFC/GAU
 - 2002 - 2008
 - SPOT-2, SPOT-4, SPOT-5, Envisat, Jason-1
 - FGL Report

First Benchmark – December 2004

- Benchmark Orbit and SINEX files submitted
- SPOT-2, SPOT-3, TOPEX
- “wd07” solutions
- Current Activity
 - Recomputation “wd08” (2000-2008)