

# AWG Meeting – Venice – 2012/09/26

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## List of expected participants

Richard Biancale (CNES/GRGS)  
Hugues Capdeville (CLS)  
Luca Cerri (CNES)  
Pascale Ferrage (CNES)  
Sergey Kuzin (INASAN)  
Jean-Michel Lemoine (CNES/GRGS)  
Guilhem Moreaux (CLS)  
Michiel Otten (ESA/ESOC)  
Sergei Rudenko (GFZ)  
Jérôme Saunier (IGN)  
Laurent Soudarin (CLS)  
Carlos Rodriguez-Solano (IAPG ?)  
Cédric Tourain (CNES)  
Pascal Willis (IPGP/IGN)  
Nikita Zelensky (GSFC)

## Declined / Not able to attend

Ramesh Govind (Geosciences Australia)  
Frank Lemoine (GSFC)  
Petr Stepanek (VUGTK)

## STAREC Antenna Calibration Results

Presentation from L. Soudarin

According to CNES reference documents available on IDS web site, the distance between red ring (400MHz phase center) and 2HGz phase center is equal to 487mm

Up to now, the phase correction law given in the reference document is not applied by any AC.

New calibration RF characteristics provided by CNES for the STAREC antenna:

→ distance of the 2GHz phase center relatively to the red ring = 470mm

→ new phase correction law

Since all the performed tests are done with respect to either ITRF2008 or DPOD2008 which were constructed with old configuration and which include possible erroneous tie vectors (as they refer to the red ring), results only show that ITRF2008 and DPOD2008 are consistent with DORIS data when 487mm distance is used.

**Action 1 (Pascal Willis): Ask Zuheir Altamimi to produce a new ITRF after taking into account the 17mm offset either in the SINEX (in the local vertical) or in the tie vectors**

**Action 2 (Cedric Tourain): Produce phase correction in Antex format to make easier its use by all the ACs.**

**Action 3 (to all the ACs & SOD): Test phase law impact on new antennas (in terms of weekly repeatability). Test period = 2009.**

## RINEX format

J.M. Lemoine shows in his presentation at the IDS workshop different scale factors obtained when using DORIS 2.2 or DORIS RINEX.

**Action 4 (ESA, LCA): Test Doppler RINEX over the first 6 months of 2012 before next AWG.**

The CNES (P. Ferrage) recalls that the DORIS RINEX 3.0 format has been delivered since 2008 (Jason2) on IDS request. She points out that the old format DORIS2.2 will not be available on the future missions planned in 2014 (Jason3, Sentinel3) and following.

## ITRF2013

- Reported options and plans:
  - ESA: see M. Otten's presentation at IDS workshop
  - Other ACs: no news
- Time variable gravity fields:
  - Two options to go in the past from EIGEN-6: GSC (4-by-4 for the 90s) or CNES (extrapolation before 2002 up to deg. 50; new field will be made available at EGU 2013)
  - **Action 4 (all ACs): Fill Excel file analysis\_summary-ITRF2013 sent by Laurent on September 20<sup>th</sup> by e-mail.**
  - **Action 5 (Frank Lemoine): Analyze gravity field part of the excel file to see if there is a best compromise over all the ACs. If not and if nothing new from CNES on EIGEN-6 until January 2013, we could decide to use the same models as ITRF2008.**
- Atmospheric loading: to be not taken into account for ITRF2013
- Jason-2 macromodel performed by GRGS and used by LCA will be made available by LCA
- Satellites corrupted by SAA; strategy to use them in the multi-satellite combination

- 4 options:
  - not used at all (ex: as done for Jason-1)
  - included but data from stations in SAA area not used in analysis processing (Arequipa, Santiago, Kourou and Cachoiera – as done by IGN and ESA for Spot-5)
  - SAA model applied; satellite included with contribution of stations in SAA area
  - SAA model applied; satellite included but without contribution of stations in SAA area (data used but SAA stations not included in NEQ neither solutions)
  
- **Action 6 (Hugues Capdeville): Produce Spot-5 and Jason-1 DORIS 2.2 data files corrected over 2011 as soon as possible.**
- **Action 7 (all the ACs): Deliver to IDS DCs multi-satellite solutions with different strategies on both Jason-1 and Spot-5.**
- **Action 8 (all ACs): Deliver for IDS CC evaluation and combination tests multi-satellite solutions. Test years = 1995 (Spot-2, Spot-3 and T/P included), 2002 and 2011 (Jason-2, Cryosat-2 and HY-2A included + tests on Spot-5 and Jason-1).**

## Other Points

- IDS 2010 Campaign:
  - **Action 9 (Guilhem Moreaux): summarize main results and opened questions from IDS CC until end of the year.**
- New single satellite campaign: 1995 for Spot-2, Spot-3 and Topex and 2011 for Cryosat-2, HY-2A. **Action 10 (all the ACs): deliver as soon as possible single satellite solutions to IDS DCs.**

## Previous actions

- DORIS orbits in sp3 format: ESA agrees to provide orbit in Sp3 format to IDS DCs

## Next AWGs

In Prague, 2 AWGs have been proposed in 2013: one in March in Toulouse and one in October in Washington.

**Action 11 (Central Bureau): organize a DOODLE to set days of March for the first AWG. Closed**

**Action 12 (Central Bureau): ask Frank which meeting he had in mind to be linked with the second 2013 AWG. Closed**