DORIS status

F. Lemoine (NASA/GSFC)
-Flawless launch from VAFB, June 20, 2008, at ~00:40 PDT.

-With the Jason-2 launch, the number of usable DORIS satellites for EOP & Station Positioning Determination is now five (instead of four).
Future Missions

- CryoSat-2 (ESA)
  - Late 2009

- SARAL/Alti-KA (CNES/ISRO) - Remains on schedule for ~2010.

- Hy2 (CNSA/CNES)
  - June 2010?

- SENTINEL 3 (ESA)
  - November 2012

- Jason-3 (NOAA/EUMETSAT/CNES/NASA)
  - End 2012?? Funding debates between ESA & these entities makes the continuity of this mission uncertain at present. Politics seems to be threatening the continuity of the TOPEX/Jason-1/Jason-2 altimetric time series. Hopefully these issues will be resolved.
IDS tomorrow: Satellites

- SPOT-2
- TOPEX-POSEIDON
- SPOT-3
- SPOT-4
- JASON-1
- ENVISAT
- SPOT-5
- JASON-2
- CRYOSAT
- SARAL
- HY2
- JASON-3
- SENTINEL-3

DORIS status
Possible Missions

- **CEMIT (NASA Small Explorer program)**
  - Dallas and Colorado universities proposal: spatial environment (iono)
  - Possible CNES proposal for DORIS + accelerometers: thermosphere
  - Accelerometers beyond CHAMP and GRACE: 2012?

- **EarthCARE (ESA)**
  - DORIS + GPS - 2013? 3+ years

- **GRASP (Y. Bar Sever - JPL)**
  - On-board colocation (SLR + DORIS + GPS + VLBI)
Analysis Activities

IDS Analysis Working Group Meetings, Workshop

- March 13-14, 2008, AWG (Paris)
- June 5-6, 2008, AWG (Paris)
- November 12-14, 2008 Workshop (Nice)

New Analysis Centers are now participating in DORIS analyses.

=> IGN (Pascal Willis), LCA (Laurent Soudarin & colleagues);
INASAN (Sergei Kuzin) (were previous AC’s that submitted to ITRF2005)

1. GOP - Geodetic Observatory Pecny (Petr Stepanek), is new analysis center using BERNESE.
2. ESA - (ESOC, European Space Operations Center) (Michiel Otten).
3. GAU - Geoscience Australia (Ramesh Govind) has submitted an IDS SINEX series (2003-2008), using NASA/GEODYN software.
4. UNC - University of Newcastle (Phil Moore). SINEX series under testing.
5. GSC - NASA GSFC will also submit a solution to the IDS - as a normal equation - whereas GAU will submit a SINEX solution (covariance matrix).
Analysis Activities

 ➨ Combination Center is CLS (Toulouse) with Jean-Jacques Valette.

Renewal of Governing Board

 ➨ Gilles Tavernier (CNES) has moved to a new post at the CNES (outreach)
 ➨ Pascale Ferrage (Pascale.Ferrage@cnes.fr), replacement designated by CNES.
 ➨ The steps to renew the GB have nearly been completed: Re-elected by peers: (Carey Noll; Pascal Willis); Elected by GB (Herve Fagard, Pascale Ferrage, John Ries, F. Lemoine); The follow members were appointed by IAG and IERS; IAG Rep,: (Michiel Otten, ESA). IERS Rep. Ron Noomen.

 ➨ GB Chairman: - To be completed by email by the New Year.
1. As a group we feel the schedule (Delivery of Combined and Validated Product by January 2009) will be a challenge.

2. Summary of Progress and Plans of AC’s:
   - IGN & LCA, will likely have a full series (1993-2008) by early 2008.
   - LCA - must handle atmospheric loading in its time series.
   - GOP - Will have reprocessed all the 1998-2008 by mid-January deadline.
   - INA - experienced a set back - had to go back to reanalyze data with elevation cutoff - and some other enhancements that had not been included. New series submitted by Sergei week of AGU.
   - GAU - SINEX delivery from 2003-2008 has been completed; Preliminary validation completed.
   - ESA - Delivery of a validated series by early 2008 for 1998-2008 is a reasonable goal;
   - NCL- SINEX files still need to be validated; Orbit comparisons look reasonable.
DORIS Special Issue

- Will include some papers from the November workshop, but other contributions will be solicited.
- We considered but rejected using Journal of Geodesy for this special issue - since they imposed unacceptable conditions.
- The journal “Advances in Space Research” has agreed to host the special issue. Pascal Willis will be guest editor, and as before all papers will face peer review with 3-4 reviews per paper.
- Submissions will be open from February - May 2009.
New DORIS Stations

Riyadh station provides colocation with SLR;

Need clarification for Tamanrasset (Algeria). Groundwater pumping apparently causing subsidence of several cm/year; GPS nearby is not part of IGS.
Relocation of Fairbanks Station

- Need to relocate the DORIS station - since the facility at Fairbanks is no longer available due to closure of VLBI and building housing equipment by the host agency;

- A new station further to the South - in the Aleutians - would fill in coverage; However logistical site constraints have so far prevented us from finding a suitable site; Adak was under consideration for a while - but this did not work out.

- A new possible candidate site is Cold Bay is being considered by Herve Fagard. We would need assistance or advice from NOAA (possibly Dru Smith?) to take action on this recommendation.