

IDS GB meeting

San Francisco, AGU fall meeting,
December 14, 2009

AGENDA:

- Election of Network representative
- B. Garayt: Network status
- P. Ferrage : update on DORIS instruments and satellites
- L. Soudarin: Central Bureau & IDS web
- F. Lemoine : IDS combination/ITRF2008
- P. Willis : DORIS Special Issue
- P. Willis : GGOS/IERS UAW meeting
- F. Lemoine : IDS station selection group
- P. Willis : DORIS ionospheric product (how to generate users?)
- P. Willis: DPOD2005
- C. Noll: Data centers: DORIS data, products
- P. Willis: CITRIS
- P. Willis : IDS terms of reference (do we need to prepare a revision?)
- P. Willis : STCD format
- P. Ferrage: IDS workshop in Lisbon
- F. Lemoine : AC meetings in 2010
- P. Willis : next IDS GB meeting
- L. Soudarin : review of previous list of actions

MAIN DECISIONS :

ATTENDEES:

Chopo Ma, Pascale Ferrage, Carey Noll, Frank Lemoine, Laurent Soudarin, Pascal Willis,
John Ries
Excused Michiel Otten

Election of Network representative	B. Garayt is unanimous elected as network representative within the IDS Governing Board	
DORIS Network	<p>Fairbanks: this station is to be relocated in summer 2010.</p> <p>Coldbay is a possible replacement site (better visibility/coverage, no masking). The host agency is the US Coast Guard. A verbal agreement for the installation has been given.</p> <p>On the other side, the host agency in Fairbanks would like to keep a DORIS station in Fairbanks.</p> <p>There is no interest to have both stations.</p> <p>➔ The choice is under discussion:</p> <p>Co-location in Fairbanks: GPS (IGS), VLBI closed for 5 years, no information for a new NG VLBI station there.</p> <p>Co-location in Coldbay: GPS (not IGS)</p> <p>Riyadh: it is forbidden to broadcast in 2GHz in Saudia Arabia.</p> <p>Discussion shall continue at a higher level, Bruno Garayt is still confident. As soon as the authorization is given, the station can be installed. The host</p>	



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	<p>agency would like to implement an analysis center there.</p> <p>Tamanrasset: On the good way, should be installed in 2010. Host agency: INCT, agreement in progress. Co-location: Absolute gravimeter.</p> <p>Russian beacons; Badary and Krasnoyarsk have started again, Yuzhno is expected for the beginning of 2010</p> <ul style="list-style-type: none"> - Papeete has been the 4th master beacon since November 27 2009 - 20 Remote control PC (Iridium PC) will be deployed in 2010 - Beacon 3.1 will be the new baseline (mid 2010): reliability improvement thanks to simplified functioning. - Beacon 3.2: longer cable length up to 100-200m: deported amplifier, useful to reduce masking and multipath, reserved for specific sites. Also available mid 2010 	
<p>Update on DORIS instruments and satellites</p>	<p>Future missions:</p> <p>CRYOSAT-2 (ESA) – Launch: <u>February 25, 2010</u>, Dniepr; Life time: 3.5 years; Tracking systems: DGXX + LRA</p> <p>→ Pascale to check when DORIS data will be available at IDS DC.</p> <p>Answer: DORIS 1.0 (RINEX) files should be available about 15 days after launch (end of LEOP), DORIS 1B 3 weeks later.</p> <p>PLEIADES (DGA) - Launch: <u>Nov 2010</u> (2nd Soyouz launch in Kourou), 2nd satellite launched 10-18 months later. DORIS data will not be available for IDS.</p> <p>SARAL/ALTI-KA (ISRO) - Launch: <u>expected for mid 2011</u>, (official date is September 2010); Life time: 5 years; Tracking systems: DGXX + LRA + GPS</p> <p>HY2A (CNESA) – Launch: <u>expected March 2011</u> (official date is Dec 2010); Life time: 3 years; Tracking systems: DGXX+LRA+GPS;... then HY2B, 2C, 2D... to be confirmed</p> <p>SENTINEL3A (GMES) – Launch: <u>2013</u>; Life time: 7 years; Tracking systems: DGXX+LRA+GPS; Sentinel 3B: 2017, ... 3C, 3D: to be confirmed</p> <p>JASON3 (Eumetsat/NOAA/CNES): just confirmed at CNES level, deadline extended for Jason funds; Launch: <u>foreseen for end 2013</u>; Tracking systems: DGXX+LRA+GPS</p> <p>SWOT (Surface Water Ocean Topography) - Launch: <u>2018</u>; Tracking systems: DGXX+LRA+GPS</p>	
<p>CB news and IDS web</p>	<p>-5 persons in the CB:</p> <p>Laurent Soudarin (CLS, chair), Pascale Ferrage (CNES), Pascal Willis (IGN), Jérôme Saunier (IGN), Jean-Jacques Valette (CLS)</p> <ul style="list-style-type: none"> - New web adress: ids-doris.org to be used right now in documentations, papers... - IDS combination page: update in progress (IDS3/ITRF2008) - POE statistics with global rms for each satellite will be available in January 2010. - New table: station events (data gap or corrupted data). This table is automatically updated with corresponding emails (Dorisstation). <p>About discontinuity events detected on MOE residuals, P. Willis wishes to be first informed, and then he will give agreement to send a Dorisstation mail.</p> <ul style="list-style-type: none"> - IDS web: new editor allowing simplified updates. End of migration planned for 	





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	mid January.	
ITRF2008/ IDS combination	<p>The IDS combination for ITRF2008 was performed in 3 steps:</p> <p>IDS1 (Fev 09): scale issue for GAU and GSF</p> <p>IDS2 (May 09): 2001-2002 re-processing, problem with periodic signals (annual and 120 days) for LCA & INA</p> <p>IDS3 (Sep09): final combination, good exercise, improvements observed, but 2 critical points must be still improved:</p> <ul style="list-style-type: none"> - TZ signal correlated to solar cycle → necessity to update radiation pressure model - Troposphere model shall be upgraded (GMF recommended) <p>Nevertheless the IDS3 combination is an excellent result with the contribution of 7 analysis centers. None of them perturbs the IDS combination which is better than each individual solution.</p> <p>About IDS operational combination:</p> <ul style="list-style-type: none"> - an AWG meeting is planned for April, at ESOC in Darmstadt if confirmed by M. Otten. Frank Lemoine will send an email to the AWG. - Works on CATREF are in progress at CLS/CNES. The objective is to improve the IHM, the pre-processing, the sorting of the input solutions, increase the number of error messages and their level of detail... The use of a shared configuration management tool allows maintaining a unique version of CATREF. - Pascal Willis suggests that ACs provide their new SINEX of the 6 first months of 2009. 	<p style="text-align: center;">F. Lemoine</p> <p style="text-align: center;">ACs</p>
DORIS special issue 2009 in Advances in Space Research	<p>26 papers have been submitted, 4 are accepted, 1 rejected. 4 others are going to be accepted in January, the others are still reviewed.</p> <p>The printed Doris special issue is expected before summer 2010.</p>	
GGOS/IERS UAW meeting	<ul style="list-style-type: none"> - Slow progress of the portal. - Discussion between technics led to common agreements to use compatible models. - People are preparing the next ITRF (2015?): discussion on how to make parameterization more extensive, modelling improved... - New IERS working group on SINEX to be created 	
IDS station selection group	<p>Pascal Willis suggests closing this group (in 2010) until the situation of beacon availability is stabilized at CNES. Indeed no order is planned until mid 2010 and a manufacturing schedule will be established later.</p> <p style="background-color: yellow;">The objective is to re-start the discussion about IDS station in Lisbon (Oct 2010) during the IDS workshop:</p> <ul style="list-style-type: none"> - New information about beacons availability, - Define a new strategy (more detailed application form, ask for budget 	



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	contribution, scientific feedback...)	
DORIS ionosphere product	<p>The objective is to have other groups using IDS iono products. Pascal Willis has contacted JPL, Berne, IGS iono group... but they didn't show a big interest.</p> <p>However, the topic could be reconsidered if the TEC is included in the DORIS/RINEX files (short delivery delay, GPS-like format).</p> <p>Pascale Ferrage explained that this is not foreseen at CNES level to provide such files. This is not so easy than for GPS RINEX files. Indeed, TEC data can be computed using the phase measurements given in DORIS RINEX files, but with an ambiguity error that can not be solved using the code (pseudo-range) measurements (low accuracy, about 50m) → this requires a processing using the POE (or MOE) results. Such activity is not a priority for CNES.</p> <p>Pascal Willis will confirm the interest of the iono groups to use DORIS absolute TEC data, and then Pascale Ferrage will ask CNES (SOD team) to re-consider the possibility to plan this activity.</p> <p>Other solution: ACs could perform such process and provide the corresponding product.</p>	P. Willis, P. Ferrage
DPOD/IDS08	<p>DPOD2005 must be maintained. The SOD team (L. Cerri) has not scheduled to use ITRF2008 soon.</p> <p>→ IDS08: long term of cumulative solutions (positions and velocities) could be a good topic to discuss.</p>	
Doris data and products	<ul style="list-style-type: none"> - DORIS data, Jason-2 new format: name convention and structures adopted without any problem. - Quaternion files + solar panel angles files are now available for Jason1 and Jason2. - Topex quaternions are not available. See action #41 : Frank Lemoine, to confirm the need and find the documentation. - Envisat quaternion are not available: quaternion files are not used by the SOD team, since the nominal attitude law is accurate enough. - About Cryosat2, the decision to provide IDS with attitude quaternion files will depend on SOD team feedback. Indeed, there are 3 different quaternion files: one per star tracker, one data every second, a new file at each passes (about 13 pass a day). → Many big files that require several process to obtain the satellite attitude quaternion. SOD team will perform POD using these files and the nominal attitude law. Good topic for next AWG. NB: there is no solar panel attitude control (they are fixed), a complete documentation will be available on IDS web as soon as it is signed. - About description files: some files are still missing. Action Carey Noll to list the missing files and send an email to ACs. - STCD: no progress since last GB meeting, Chopo Ma is not really convinced. P. Willis takes the lead on this and will ask a few people to have their feeling about it. 	C. Noll P. Willis
SPOT-4 data for 1998	<p>See L. Cerri's email to ids.analysis.forum "Redelivery of 1998 SPOT-4 DORIS files" 12/12/09.</p> <p>P. Willis will perform test and answer to Luca, then re-delivery to CDDIS/IGN will be planned.</p>	P. Willis
Old data 1990-1993	<p>Status of archived files at CNES for SPOT-3 : 1993/10/08 → 1996/11/13 (the whole mission)</p>	

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	<ul style="list-style-type: none"> - All ephemeris POE files - All DORIS data files but with an internal format of a former version of ZOOM software (FIMBI format) : <ul style="list-style-type: none"> → need to find the description of this format (this should be possible). → need to develop a tool to convert these files in DORIS1B format V2.2. This implies that ACs are able to process V1.0 and V2.2 in the same period. 	
<p>CITRIS data</p>	<p>P. Willis has contacted P. Bernhard (who has submitted a paper to the DORIS special issue). P.B. agrees to send data to IDS in the required format / name convention.</p> <p>Action to BC to define required format. 1 month of data (1 data / 10s) will be asked for test.</p>	<p>Central Bureau</p>
<p>IDS organization aspects</p>	<p>Need to form a small group chaired by M. Pearlman to update the IDS Terms of Reference (comparison with other services...)</p>	
<p>Next IDS Meetings: Workshop, AWG, GB</p>	<p>The next IDS workshop will take place in Lisbon 21-22 October. P. Ferrage will send a DORIS mail (ready to be sent) as soon as she has the agreement of OSTST organisation committee (before mid January).</p> <p>CNES/IGN is willing to support DORIS host agencies to attend this workshop. P. Willis will ask Herman Drewes about IAG sponsorship. (see Pascal's email 2009/12/16)</p> <p>The next IDS Analysis Working Group meeting is scheduled in spring 2010. Frank Lemoine will send an email to AWG (see Frank's email 2009/12/16)</p> <p>The next GB meeting will take place in Lisbon (specific room if possible). P. Willis suggests to schedule the poster session the last day at 4:00 pm, and the GB meeting at 5:00pm.</p>	
<p>Review of actions</p>	<p>See updated xls file "IDS actions_2009_12_14"</p>	