



International DORIS Service

Nice, France
November 13-14, 2008
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GOVERNING BOARD MEETING Nice, France, November 13-14, 2008

AGENDA:

- DORIS instruments: status of satellites, future missions
- Network, status of beacons, future stations/ New IDS/DORIS ground station
- Improvement of DORIS warnings information
- Data Centers: Jason-2 data (RINEX & 2.2), quaternions...
- IDS web pages
- New analysis centers
- ITRF 2008 schedule : Analysis Centers, combination
- DORIS special issue in Advances in Space Research 2009
- GB election
- GB organization: review of ToR
- IDS representative to IAG/GGOS
- FAGS membership
- Review of actions items (GGOS UAW, AWG...)
- Switch to ITRF2005 for the sitelogs and DORIS-mails, status of DPOD2005
- IDS reports for 2003-2008
- IVS anniversary (2009)
- Next GB Meeting



MAIN DECISIONS :



- Preparation of the IDS combination for ITRF2008
- GB election
- DORIS special issue in Advances in Space Research 2009



ATTENDEES:



Governing Board: Hervé Fagard, Frank Lemoine, John Ries, Laurent Soudarin, Gilles Tavernier, Pascal Willis
Guest Pascale Ferrage

<p>DORIS instruments: status of satellites, future missions</p>	<ul style="list-style-type: none"> - See presentations of IDS workshop Nice 12-14 Nov2008 (online on IDS web site http://ids.cls.fr/html/report/ids_workshop_2008/), most important news will be reported in “what’s new on IDS/DORIS” pages - About GRASP (Y. Bar Sever – JPL): on-board collocation (SLR + DORIS + GPS + VLBI) the presentation should be shown to the CNES programme directorate - About CITRIS, P. Bernhardt intends to submit a paper in the DORIS special issue. We must ask him for some news and about data availability 	<p>CB (Central Bureau)</p> <p>P. Ferrage CNES</p> <p>G. Tavernier</p>
<p>Network: status of beacons, future stations</p>	<ul style="list-style-type: none"> - Installation of a new “IDS station” in Riyadh is on the good way (Spring 2009?). Jamming studies have to be performed for Riyadh and Tamanrasset : both station should be operated with shifted frequencies (no measurements with SPOT-2 and SPOT-4). - With a 7-channel on-board Jason-2 and future satellites (CryoSat-2, SARAL...), should we re-activate the station selection group? IDS is still interested in implementing new stations for geodesy, both to have more collocated stations 	<p>P. Ferrage CNES</p>

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	<p>(IERS) and to have DORIS in places where other techniques can't go. CNES should first define how many beacons are available and order more beacons if necessary, then a new "stations call for proposals" could be prepared.</p> <ul style="list-style-type: none"> - About DORIS/VLBI collocation Chopo Ma is about to perform some tests in Greenbelt, according to Hervé Fagard. 	
<p>Improvement of DORIS warnings information</p>	<p>See B. Nhun Fat's presentation "How to improve station disturbance detection and warning" on IDSweb (http://ids.cls.fr/html/report/ids_workshop_2008/)</p> <p>Principle:</p> <ul style="list-style-type: none"> - routine analysis and quick look on coordinates determination based on SSALTO weekly solutions - report in case of station disturbance (missing data or corrupted data) - two steps of report: <ul style="list-style-type: none"> • 1st warning sent to the analysis forum , before DORIS 2.2 dissemination, + comments from Analysis Centers. • 2nd report through a DORIS email when the disturbance is confirmed and identified <p>Then, an history file of "station events" will be available in IDS website.</p> <p>This will be implemented in SSALTO and IDS web site, a mail to finalize the principle will be sent to the GB/CB for confirmation.</p>	<p>CB</p>
<p>Data Centers</p>	<p>Data documentation: Martine Feissel-Vernier's document should be checked and probably updated (format descriptions, readme files...). Coherency between the document and the contents of both DCs will be checked by the Central bureau and the Data Flow Coordinator.</p> <p>RINEX files: is it necessary to send a DORIS report for each delivery? As they are automatically sent daily by SSALTO to the Data Centers, the procedure of report may not be the same as for format 2.2 data (10-day or weekly report by CNES POD team); a DORIS report every week or every cycle would be useful => automatic procedure to be implemented at SSALTO level?</p> <p>About the filename convention: decision to keep the current convention (same as GPS).</p> <p>ACs are currently very busy preparing ITRF2008 and will start to process RINEX files next year (2009).</p> <p>TOPEX/POSEIDON & Jason-1/2, ENVISAT quaternions: GGOS UAW action item.</p> <p>Status presented by L. soudarin:</p> <ul style="list-style-type: none"> - Current quaternions of current missions are available in SSALTO (last 60 days). Implementation of an automatic procedure to send satellite quaternions to Data Centers shall be performed ASAP. - TOPEX quaternions are only available in optical disk (=> long process to retrieve the data), and format document to be found => Action to confirm the need of TOPEX attitude quaternions, and provide the documentation if confirmed. We should also look for other sources (USA?). - JAS1 quaternions are available in AVISO catalog and partially in AVISO ftp : the 	<p>P. Ferrage,C. Noll, L. Soudarin,</p> <p>P. Ferrage</p> <p>F. Lemoine</p>

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	<p>solution is to complete AVISO ftp with missing period of JAS1 quaternions (2 years & 4 months), then available for Jason POD team (send a message) and Data Centers. A readme file should also be prepared for the Data Centers.</p> <ul style="list-style-type: none"> - JAS2 available in AVISO catalog : shall be copied to AVISO ftp to be available for for Data Centers. - Envisat : available on AVISO catalog, <u>but only from 2004</u>. Moreover, files are very big , and formats are not easy to understand and to use, => a test could be done before doing anything on Envisat. Action to find and provide documentation+ a file example to F. Lemoine, then he will perform a test. <p>=> <u>Action CNES/CLS (change request, proposal and implementation):</u></p> <ul style="list-style-type: none"> - implement automatic procedure to deliver quaternions of JAS1/JAS2 to Data Centers & put documentation on IDS website. - deliver to Data Centers and/or AVISO ftp old quaternions of JAS1/JAS2 <p>SP1 interpolator: John Ries states that it could be useful. Frank Lemoine will ask whether IGS groups have such a software.</p> <p>CB ftp site: macromodels, mass and maneuver history files are available.</p> <p>For SPOT-3 no history of mass is available. A “line feed” should be added at the end of the history file (add a line with 0 0 0 0 LF).</p> <p>New SPOT-2 2.2 files: Laurent Soudarin will perform tests.</p> <p>What about 3 first months of SPOT-3 and early SPOT-2 data?</p>	<p>CB</p> <p>P. Ferrage CNES/L. Soudarin CLS</p>
<p>IDS web pages</p>	<p>Next improvements:</p> <ul style="list-style-type: none"> - Global residuals (wrt POE for each satellites, instead of each station) - manoeuvres characteristics (cf action AWG : <i>Investigate the feasibility for CNES to provide additional information on DORIS satellite maneuvers (amplitude and direction)</i>) <p>The report on web site activity supplied by Laurent Soudarin is very useful and should be supplied twice a year.</p> <p>CB should update regularly the “what’s new” pages , not only with news about the web pages, and ask ACs to send regular information to be put on line of IDSweb (AC news, results, time series, combination..)</p>	<p>Central Bureau</p>
<p>New Analysis Centers</p>	<p>Hervé Fagard asks about new Analysis Centers: people from might be interested.</p> <p>New ACs are welcome, IDS ACs, GB and CB are open to support them as much as possible.</p> <p>Several software are available: Gipsy, Bernese, GINS</p> <p>Criteria to be accepted as an Analysis Center:</p> <ul style="list-style-type: none"> - Stations coordinates time series: 1 year of data (2005) to be tested with current ACs products, to check that is is compatible, 	

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	<ul style="list-style-type: none"> - Orbits: January 2005, should compare reasonably with existing orbits - Commitment to deliver products on an operational basis. 	
<p>ITRF 2008 schedule</p>	<p>See AC presentations on IDS website (IDS workshop NICE 12-14 Nov 08)</p> <p>http://ids.cls.fr/html/report/ids_workshop_2008/</p>	
<p>DORIS special issue in Advances in Space Research 2009</p>	<p>New DORIS special issue in <i>Advances in Space Research 2009</i> managed by Pascal Willis:.</p> <p>Schedule:</p> <ul style="list-style-type: none"> - call for paper (DORISMail): September - Deadline to submit papers: February or March 2009 - Publication: end 2009-beginning 2010 <p>At the moment, about 30 papers are foreseen (20 certain, 5 probably, 5 maybe), with around 1/3 from previous authors, 1/3 from different persons from previous groups and 1/3 from new groups/persons. Unfortunately none about ionosphere...</p> <p>Frank Lemoine will contact other Analysis Coordinators about recommendations for citations.</p>	<p>F. Lemoine</p>
<p>GB election</p>	<p>The nomination committee for AC and DC representatives is now completed : Jim Ray Bruce Hayne and Gilles Tavernier.</p> <p>The objective is to finalize the GB election in December (AGU).</p> <p><u>What shall be done before that:</u></p> <ul style="list-style-type: none"> - finalize the vote procedure and send the corresponding email to the election list - AC and DC representative should be elected. Candidates proposals and vote will be send to a unique email address ids.nc@cls.fr (J. Ray, B. Hayne & G. Tavernier). - CB will contact IAG and IERS about their representatives. - CB will propose 2*2 names for AC coordinator and Network representative, GB will elect them during next GB meeting (in SF in dec 2008 during AGU fall meeting) - then, CB will propose names for the 2 members at large, and GB will elect them if possible the same week. <p>Then the GB chaiperson will be elected during the next GB meeting that could take place in March 2009 in Paris.</p>	<p style="text-align: center;">G. Tavernier</p> <p style="text-align: center;">L. Soudarin</p>
<p>IDS representative to IAG/GGOS</p>	<p>Will be the next GB chaiperson.</p>	
<p>FAGS</p>	<p>Pascal Willis met Nicole Capitaine: FAGS doesn't exist any more and will be replaced</p>	

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<p>membership</p>	<p>by the “World Data Systems”. A new call for participation will be issued by the end of 2009. USD2000-3000 a year could be granted for travel support.</p> <p>IDS will wait for the call for participation (IVS, IGS... will apply).</p>	
<p>Review of actions items</p>	<p>See action list table (end of the document)</p>	
<p>Switch to ITRF2005/ DPOD2005</p>	<p>H. Fagard is ready to switch to ITRF2005/ DPOD2005 for sitelogs and send the corresponding DORIS-mails. DPOD2005 current version is 1.4</p>	<p>H. Fagard</p>
<p>IDS reports for 2003-2008</p>	<p>CB will put online the existing file (2003-2005), then the next report (2006-2008) should start ASAP. CB will tell ACs that their contribution (max. 2-3 pages) is welcome, and support them in this task.</p>	<p>Central Bureau</p>
<p>IVS anniversary (2009)</p>	<p>Will take place in Bordeaux the 25th of March, and presentations from other techniques are expected.</p> <p>F. Lemoine will participate. → the next IDS WG meeting in Paris should be planned at the same period.</p>	
<p>Next IDS Meetings</p>	<ul style="list-style-type: none"> - Next GB meetings: during AGU in San Francisco (dec 08), then during next IDS WG meeting or/and during EGU (April 09) in Vienne. - Next IDS WG meeting: in Paris in March 2009 - Next IDS workshop in 2010 : to be organized jointly with next OSTST meeting or other (like Cryosat2 meeting for example) 	

Action list (from previous IDS GB or WG meetings)

Last modifications are written in [blue](#).

N°	action	Resp.	Opening date	Deadline	status
2	Provide information concerning DORIS ground antenna switch off and resets	H. FAGARD	14/11/2008	14/12/2008	open
7	Send information concerning the launch of Jason-2 satellite , the planned evolution of the DORIS constellation, and the end of DORIS/SPOT-2 data delivery	G. TAVERNIER		01/07/2008	open
9	Provide reference on previous articles related to TOPEX solar panel orientation	F. LEMOINE		01/07/2008	open
12	Check vector from center of mass to center of phase of the antenna and macro-models used by all software packages	all ACs		01/07/2008	open
13 B	Modify C21,S21, C21dot and S21dot in gravity field files per IERS conventions	all ACs		01/07/2008	open
13 A	Provide C21, S21, C21dot, S21dot values for ITG, EGM2008, EIGEN, GGM02C models to AC's. Remind AC's of locations of Gravity files. 13/11/08: Done but action shall be repeated	Frank Lemoine		16/06/2008	open
14	Check compatibility with IERS conventions (IAU, nutation, polar motion time series	all ACs		01/07/2008	open
15	Post information on IDS Analysis Forum concerning the formula used for data down-weighting at low elevation in different software packages	all ACs		01/07/2008	open
16	Provide information on atmospheric drag estimation for each AC on a satellite by satellite basis) through the IDS Analysis Forum.	All ACs		01/07/2008	open
17	Send letters of support for NCEP/AGRA service.	F. LEMOINE + all ACs		01/07/2008	open
18	Provide description of DORIS data analysis by AC, using the Excel template provided by IDS Central Bureau.	All ACs		01/07/2008	open
20	Investigate if TOPEX estimated SRP coefficients present a discontinuity around July 17, 1993 and post results on the IDS Analysis Forum	All ACs		15/07/2008	open
21	Redo STCD data files and plots using DPO2005 as a priori coordinates and update IDS Web site	L. SOUDARIN, P. WILLIS		15/07/2008	open
22	Provide new SINEX solutions for 2005 orbits at CDDIS (based on new POD orbits) at IDS data centers 14/11/08: closed, then action reopened	S. KUZIN		15/07/2008	open
24	Verify if geomagnetic storms are visible in current and older SINEX solutions (larger RMS with regards to ITRF2005) and post results through the IS Analysis Forum	J.-J. VALETTE		15/07/2008	open
25	Finalize the estimation strategies between IGN and INASAN to make them complementary	P. WILLIS, S. KUZIN		15/07/2008	open
26	Finalize the estimation strategies between GSFC and Geoscience Australia to make them complementary	F. LEMOINE, R. GOVIND		15/07/2008	open



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27 A	Provide minimum requirements to become an IDS Analysis Center, based on estimation strategy provided by all ACs	F. LEMOINE		01/08/2008	open
27 B	Provide benchmark orbits, initial conditions, output for Benchmark periods on IDS or other website.	F. LEMOINE		01/08/2008	open
28	Post results (orbits and SINEX) for the 1 st benchmark period (December 1994)	All ACs		01/08/2008	open
	Investigate the feasibility for CNES to provide additional information on DORIS satellite maneuvers (amplitude and direction)	G. TAVERNIER, L. CERRI		01/08/2008	open
30	Investigate ways to provide feed-back to ACs on rejected station in the combination process (emails, Web site, files on ftp server,...)	J.-J. VALETTE		01/09/2008	open
32	Analyse results (orbits and SINEX) from all ACs for 1 st benchmark period (December 1994) and post results through IDS Analysis Forum or on IDS Web site	F. LEMOINE, J.-J. VALETTE		01/10/2008	open
33	Investigate use of AGRA models in view of a possible presentation at the IDS Workshop	All ACs		01/11/2008	open
34	Reprocessing ENVISAT data correcting the time tagging issue and resubmit ENVISAT data files at IDS data centers	L. CERRI		01/12/2008	open
35	About GRASP (Y. Bar Sever, JPL): on-board colocation (SLR , DORIS , GPS , VLBI) the presentation should be shown to the CNES programme directorate	P. FERRAGE	14/11/2008	14/12/2008	open
36	About CITRIS, P. Bernhardt intends to submit a paper in the DORIS special issue. We must ask him for some news and about data availability	G. Tavernier	14/11/2008	14/12/2008	open
37	With a 7-channel on-board Jason-2 and future satellites (CryoSat-2, SARAL...), should we re-activate the station selection group? CNES should first define how many beacons are available and order more beacons if necessary, then a new "stations call for proposals" could be prepared.	P. FERRAGE	14/11/2008	14/12/2008	open
38	Systematic detection of station disturbance: this will be implemented in SSALTO and IDS web site, a mail to finalize the principle will be sent to the GB/CB for confirmation, then implementation will start.	CB (P. FERRAGE)	14/11/2008	14/12/2008	open
39	DATA documentation: Martine Feissel-Vernier's document should be checked and probably updated (format descriptions, readme files...). Coherency between the document and the contents of both DCs will be checked by the Central bureau and the Data Flow Coordinator	CB (P. Ferrage), C. Noll	14/11/2008	14/12/2008	open
40	RINEX files: DORIS report for RINEX delivery: check the possibility to implement at SSALTO level a process for a weekly report, or verify that such a kind of report can still be sent by POD team?	P. Ferrage	14/11/2008	14/12/2008	open
41	TOPEX quaternions / document to be found => Action to confirm the need of TOPEX attitude quaternions, and provide the documentation if confirmed.	F. Lemoine	14/11/2008	14/12/2008	open



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42	Envisat attitude quaternions: big files and formats are not easy to understand and to use, => a test could be done before doing anything on Envisat. Action to find and provide documentation+ a file example to F. Lemoine , then he will perform a test.	CB (L. Soudarin, PF)	14/11/2008	14/12/2008	open
43	* implement automatic procedure to deliver quaternions of JAS1/JAS2 to Data Centers & put documentation on IDS website. * deliver to Data Centers and/or AVISO ftp old quaternions of JAS1/JAS2	P. Ferrage/ L. Soudarin	14/11/2008	14/12/2008	open
44	DORIS special issue in Advances in Space Research 2009: Frank Lemoine will contact other Analysis Coordinators about recommendations for citations	F. Lemoine	14/11/2008	14/12/2008	open
45	GB election: finalize the vote procedure and send the corresponding email to the election list	G. Tavernier	14/11/2008	14/12/2008	open
46	GB elections: * CB will contact IAG and IERS about their representatives. * CB will propose 2*2 names for AC coordinator and Network representative, GB will elect them during next GB meeting (in SF in dec 2008 during AGU fall meeting) * then, CB will propose names for the 2 members at large, and GB will elect them if possible the same week	CB	14/11/2008	14/12/2008	open
47	H. Fagard is ready to switch to ITRF2005/ DPOD2005 for sitelogs and send the corresponding DORIS Mails. DPOD2005 current version is 1.4	H. Fagard	14/11/2008	30/11/2008	open
48	IDS activity report: CB will put online the existing file (2003-2005), for the next one: (2006-2008) CB will tell ACs that their contribution is welcome, and support them in this task.	CB	14/11/2008	14/12/2008	open