



Saint-Mandé

November 29, 2023

Page 1

IDS GB meeting

AGENDA:

- Governing members and IDS representatives (Laurent)
- DORIS on GENESIS mission (Claude)
- IDS station in Kanpur (Jérôme)
- Updates from CDDIS (Taylor)
- Working Group "NRT DORIS data" status and way forward (Ningbo)
- UN Global Geodetic Centre of Excellence + report Virtual Meeting between IAG and UN-GGCE (Laura)
- Suggested actions from IDS AWG (Petr, Guilhem).
- Next IDS events and participation to major events
- AOB

MAIN DECISIONS:

New WG "NRT ionospheric application" (follow-on WG "NRT data").

ATTENDEES:

Elected and appointed members:

(in person) Claude Boniface, Karine Le Bail, Frank Lemoine, Guilhem Moreaux, Jérôme Saunier, Ernst Schrama, Laurent Soudarin, Petr Štěpánek
(remotely) Laura Sanchez, Tonie van Dam

Excused: Patrick Michael, Denise Dettmering (ex-officio member)

Guests: Taylor Yates (remotely), Ningbo Wang (remotely)

<p>Actions list</p>	<p>See appendix The list was partially reviewed during the meeting.</p>
<p>Governing members and IDS representatives</p>	<p>Data Centers' representative: From 1 Oct Patrick Michael must step down from the data center coordinator position temporarily as the US Navy has decided to recall him back to active duty for a year. He proposed Taylor Yates to fill in the gap. → The GB approves the temporary replacement of Patrick Michael by Taylor Yates.</p> <p>DORIS system representative: Arnaud Sellé changes of activity and is replaced by Claude Boniface as CNES/IDS project manager and representative of the DORIS system within the IDS.</p> <p>IAG representative: Ernst Schrama is appointed by IAG Executive Committee as IAG representative for the IDS GB for 2023-2027</p> <p>IDS representative for GGOS Governing Board: Karine Le Bail proposed as the IDS representative of the GGOS Governing Board in September 2023 for a four-year term. → Approved by the GB</p> <p>NB: Jérôme (as Network rep) is the IDS rep. to GGOS BNO, Petr (as Analysis Coordinator) is the IDS rep to GGOS BPS</p> <p>Reminder: next elections by end 2024: Data Centers' representative, Analysis Centers' representative, Member at large</p>
<p>DORIS on GENESIS mission</p>	<p>Claude Boniface gives a status of the topic "DORIS on Genesis". "As the scientific community has strong expertise with DORIS, it seems relevant that the IDS GB expresses its interest for the inclusion of this instrument on GENESIS. A simple letter or statement of support from the Board could reinforce DORIS' case in the current competitive funding environment. The IDS GB should specify how having DORIS aboard would clearly demonstrate its scientific and operational value for achieving the mission's objectives."</p> <p>Frank proposes to write an interest letter from IDS to ESA. In addition, Laura proposes to write a letter of support from GGOS, if needed. The GB will come back to this proposal when the IDS letter is ready.</p> <p>Action GB_23_18: Frank writes an interest letter from IDS to ESA (recipient to be confirmed) → 15 Jan 2024</p>

<p>IDS station in Kanpur</p>	<p>Jérôme Saunier goes to India next week for reconnaissance, and set up an agreement (standard agreement + chapter about scientific cooperation). New DORIS station in Kanpur expected by the end of 2024.</p> <p>Vikash Kumar is currently at GOP with Petr Štěpánek for 3 months (November-January). He is training DORIS data processing. Then he will spent several months in Toulouse with CNES and CLS teams (Alexandre Couhert, Jean-Michel Lemoine, Hugues Capdeville).</p>
<p>Updates from CDDIS</p>	<p>Taylor Yates present the updates from CDDIS.</p> <p>In response to increased Information Technology (IT) security requirements from both the U.S. Government and NASA, CDDIS was forced to remove unencrypted anonymous ftp access to its archive in the fall of 2020 and in its place put in encrypted ftp or what is commonly called ftp over SSL/TLS. The entire archive with the same directory structure is available using ftp-ssl at gdc.cddis.eosdis.nasa.gov.</p> <p>Action GB_23_19: Taylor and Laurent prepare information for users about this update. Laurent will put them online on the website.</p> <p>CCDIS has statistics on accesses and downloads of IDS data and products. Taylor presents a graph for unique users accessing DORIS via CDDIS in 2021. More specific maps (by mission, datatype, etc.) can be provided.</p> <p>Action GB_23_20: Laurent draws up a list of statistics of interest to be requested from CDDIS</p>
<p>Working Group "NRT DORIS data" status and way forward</p>	<p>Ningbo Wang presents the status and prospects of the working group "NRT DORIS data".</p> <p>The WG has been active since 2017. The general objectives are thorough assessment of applications, benefits, requirements, and prospects of DORIS data with improved data latency. Currently, NRT data with about 3 hours latency is available for Jason-3 mission (observations and orbits); more missions are planned.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> • Data format and access has been defined and tested. • Data latency has been evaluated. • Value of NRT data for ionospheric applications has been demonstrated. • Both geodesy and non-geodesy communities are interested in NRT DORIS data. <p>But</p> <ul style="list-style-type: none"> • Investigation on added value for NRT ionospheric modelling still lacking (only possible if more missions are available) • Integration attempts of other application groups unsuccessful <p>Current status of the WG:</p> <ul style="list-style-type: none"> • Terms of Reference outdated • Numerous WG members inactive (no email response)

- WG chair (Denise Dettmering) no longer available due to too many other duties

Possible options:

- End the WG and be satisfied with the goals achieved
- Upgrade the WG with new Terms of Reference, new chair and new members

New objectives can be:

- Promote the usage of NRT DORIS data for different applications (needs interdisciplinary members...)
- Focus on applications in the ionosphere: demonstrate value for combined modelling / highlight potential due to large number of missions and very good global data distribution
- ...

Ningbo Wang volunteers to lead a working group focusing on ionospheric applications.

Ningbo adds that the 3-hr latency is enough for the analysis. A variety of altitudes is beneficial. He stresses the importance of promoting NRT data and informing the community (IGS, ILRS, IVS) of their existence

Laura Sanchez recalls the GGOS Focus Area in operation on geodetic space weather research, and invites to show IDS progress at the next GGOS Focus Areas Topical meeting in October 2024.

Laurent Soudarin provides an update on the IDS request to CNES for additional NRT data (RINEX/DORIS + DIODE sp3 orbit).

CNES made developments to include NRT data deliveries in the operational production chain for CNES altimetry products. It will be operational by the end of 2023. NRT data production will be introduced mission by mission during the first semester 2024. In addition to Jason-3, NRT data for Sentinel-3A&B, Sentinel-6A and Saral will be available to the IDS by the end of June 2024.

The GB decides:

- the end of the current WG “NRT doris data” whose objectives have been achieved,
- the creation of a new WG “NRT ionospheric application”.

The GB asks Ningbo to propose for this WG Terms of Reference, goals and members.

Action GB_23_21: Ningbo proposes to the GB terms of Reference, goals and members for the WG “NRT ionospheric application”.

UN Global Geodetic Centre of Excellence + report Virtual Meeting

Laura Sanchez shares information about the newly established United Nations Global Geodetic Centre of Excellence.

The so called UN-GGCE was inaugurated on the 29 March 2023 at the UN Campus in Bonn, Germany. It is the coordinating body for the activities necessary for the implementation/development/enhancement of the UN Global Geodetic Reference Frame

<p>between IAG and UN-GGCE</p>	<p>(UN-GGRF). Nicholas Brown, previously Director of National Geodesy at Geoscience Australia, became head of UN GGCE officially in October.</p> <p>The UN-GGCE organized two online sessions on November 28 to meet with the IAG to present its objectives and to identify points of convergence with the IAG to design a global implementation plan aimed at improving the current geodetic infrastructure.</p> <p>In addition, Nicholas Brown, has specifically asked Richard Gross (IAG EC President) to consolidate a contact list of about three representatives from each IAG service so that a direct dialogue can be established between the UN-GGCE and the Services.</p> <p>Most IDS members were on their way to or at the AWG meeting on November 28 and could not attend the sessions. The GB asks the Central Bureau to request the slides presented during these sessions and offer to give IDSs answers to the discussion topics (see Concept Note and Provisional Agenda of Virtual Meeting between IAG and UN-GGCE emailed on November 23 by Laura Sanchez).</p> <ul style="list-style-type: none"> a) What are the key problems IAG is facing? b) What challenges do these problems lead to? c) How could UN-GGCE assist solving these problems? d) How can UN-GGCE best interact with IAG? e) What does success in our collaboration look like 1 year from now? f) Who would you like UN-GGCE to engage with? g) What could we do right now that would help you? h) Do you have events coming up where you think it would be useful to engage? And how would you recommend we engage? i) Are there other IAG representatives who aren't here you think we should talk to? <p>Action GB_23_22: the Central Bureau contacts Nicholas Brown to request the slides presented during these sessions and offer to give IDS's answers to the discussion topics.</p>
<p>Suggested actions from IDS AWG</p>	<p>Petr Stepanek and Guilhem Moreaux review the outcomes of the AWG meeting.</p> <p>Two recommendations are made:</p> <ul style="list-style-type: none"> -establish a Working Group on the introduction of GNSS clocks for DORIS data processing of the Sentinel; -not to include HY2C, HY2D and Sentinel-6A in the combination series for the ITRF extension because of the scale behavior of these missions. <p>Petr proposes to held the next AWG meeting online in May. The groups will meet in person at the next IDS Workshop in September.</p> <p>Even if not all Analysis Centers are fully operational, the return to normal is becoming clearer, and progress is encouraging. IGN will be able to carry on the routine processing and production of an Analysis Center in 2024. INASSAN continues to implement DORIS/RINEX data processing capabilities in GIPSY-OASIS II. GFZ is applying to become an Analysis Center. Dionysos Satellite Observatory (DSO) continues the development of their own in-house DORIS processing software. Karine Le Bail is opening at Chalmers University</p>

	<p>of Technology a PhD position in space geodesy, and in particular the DORIS technique. The objective is to be an IDS AAC in the future.</p> <p>Guilhem points out that three AC produce LOD results (ESA, IGN, GFZ). A combination could be performed and evaluated soon.</p> <p>Action GB_23_23: Petr prepares the establishment of a Working Group on the introduction of GNSS clocks for DORIS data processing of the Sentinel ("Sentinel Clocks Modeling").</p>
<p>Next IDS events and participation to major events</p>	<p><u>Next major events</u></p> <ul style="list-style-type: none"> • AGU, San Francisco, USA, 11-15 December 2023 Frank and Tonie will attend. Guilhem will present "Impact of DORIS Post Seismic Deformation and Seasonal corrections on the DPOD2020 solution". • EGU, Vienna, Austria, 14-19 April 2024 Frank, Guilhem, Laurent plan to attend. • 45th COSPAR Scientific Assembly, Busan, Korea, 13-21 July 2024 • GGOS Focus Areas Topical Meeting, Potsdam, Germany, 7-11 October 2024 Announcement: https://ggos.org/news/ggos-focus-areas-topical-meeting-ggos-days-2024/ • IAG Scientific Assembly, Rimini, Italy, 1-5 September 2025 <p><u>IDS Events 2024</u></p> <ul style="list-style-type: none"> • AWG meeting to be organized online in May 2024 • IDS Workshop: in conjunction with « 30 years of progress in radar altimetry symposium » organized 2-6 September 2024, Montpellier, France (preference for the 2nd half of the week) <p><u>DORIS days</u></p> <p>The aim of this second edition is to organize a course on DORIS data processing, with a theoretical part on data (description, access, use) and an applied part with data processing using orbitography software. Discussions have begun with the CNES/GRGS team (GINS software). However, the objectives and target need to be clearly defined to assess workload for preparing and delivering courses. The GB suggests giving this training first to new users already in demand (Vikash while in Europe, Xanthos, Julian) whose aim is to be trained to process data and corresponds to the IDS objectives of increasing the number of analysis groups.</p> <p>To be discussed at Central Bureau meetings</p>
<p>AOB</p>	<p><u>DORIS on Sentinel-3NG?</u></p> <p>Ernst Schrama is part of a mission advisory group (MAG) of the next generation Sentinel-3 topography mission. The question is whether the S3NG-T mission will contain a DORIS</p>



	<p>receiver, or more precisely: can ESA afford to finance the complete development of a new DORIS (the current one being obsolete and no longer available to be procured), which is not formally contributing to the mission requirements? However, the capability to accommodate DORIS (mass, power, data, etc) is maintained, pending the resolution of the funding problem. Ernst will send to Frank and Laurent ESA's arguments leading to this statement, to share with CNES DORIS team in order it gives further arguments for the interest of having DORIS on board an altimetry satellite (pointing out also that this is an OSTST recommendation).</p> <p><u>Status of the strategic plan</u> Frank would like to review the actions defined in the strategic plan to ascertain their status and define future action plans.</p> <p>Action GB_23_24: the Central Bureau prepares and organizes an online GB meeting in February to present the status of the actions of the strategic plan.</p>
<p>Next GB meeting</p>	<p>The next meeting is to be scheduled in February. Sole item on the agenda: status of the strategic plan.</p>



Saint-Mandé

November 29, 2023

Page 8

Appendix: action list

New / Changes (since previous review)

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
GB_16_12	GB	ToR	propose a correction of the Terms of Reference about the duration of the Chairperson's period	<p>2017/05/24: take into account the correction chosen by the GB (maintain the Chair as ex-officio) and update the ToR</p> <p>2018/06/15: Frank will quickly check the proposition sent by Laurent</p> <p>2018/09/26: Frank would like to include some other modifications proposed at the Retreat:</p> <p>(a) clarify term of chairman.</p> <p>(b) In line with recommendation from IDS Retreat, think of more expansive language about IDS Mission, talking about IDS Mission in terms of more fundamental services to science and society.</p> <p>(c) the term "chairman" is sexist. Should we have another designation for this office?</p> <p>2019/03/31 B. Luzum: "the term "chair" is gender neutral and might be considered"</p> <p>2019/09/30: To be done before next election (Fall 2020)</p> <p>2023/02/03: To be done before IAG EC meeting in Berlin July 2023</p> <p>2023/02/13: A committee is set up: Frank, Pat and Laurent. GB members will read the ToR (https://ids-doris.org/ids/organization/terms-of-reference.html) and send proposals of updates within two weeks to the committee. The committee will include the modifications proposed at the retreat (see above) and the minor changes proposed by the GB. Major changes will be the subject of another discussion for a later revision. A vote of the GB will be organized to validate the updated ToR before sending them to IAG EC for approval.</p>	Central Bureau + F. Lemoine	01/11/2016	01/06/2023	open

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
GB_18_29	GB	Cookbook for RINEX processing	Create a cookbook for RINEX processing	2019/04/05: Matthis Blossfeld, Sergey Kuzin, Pascal Willis could review the document 2020/11/24: Hugues will send a message to Jean-Michel 2023/02/13: Petr will contact the ACs, the AACs and the group at Dionysos to know if they documents are needed or the papers are enough. If demanded, Petr will start the writing.	JML, HC with expected support of Alexandre Couhert and Flavien Mercier	26/09/2018	01/04/2023	open
GB_18_30	GB	Observable in RINEX	To create a document that better defines observable in the RINEX	2020/11/24: Hugues will send a message to Jean-Michel 2023/02/13: action to link with GB_18_29	JML, FL, with help from CJ, with solicited comments from Mathis Blossfeld, and John Ries	26/09/2018	01/04/2023	open
GB_18_31	GB	Mitigation of SAA effect	To write a document with the list of strategies for mitigation of SAA effect on DORIS satellites (Jason-1, Jason-2, Jason-3, SPOT-5)	2019/09/30: 1 or 2 pages with inputs of the presentations on SAA at AWG meeting Paris October 2019. 2020/11/24: write the document with updates based on the processing for ITRF2020 2023/02/13: Petr proposes: 1. Write the summary of the strategies so far applied by the ACs with the help of Hugues and Guilhem 2. Submit the documents to ACs for suggestions 3. Provide the document to the CB for putting it on the website	Analysis Coordination	26/09/2018	01/04/2023	open
GB_18_32	GB	Working Group on SAA	To propose charter for Working Group, work plan, and ideas for members, and submit to GB for consideration	2019/04/05: HC asks JML if still interested in 2019/09/30: Pierre Exertier (GRGS) proposed to participate and lead the WG. Hugues will check with Jean-Michel Lemoine and get confirmation from Pierre 2020/11/24: Hugues will contact Pierre again 2023/02/13: Postpone the continuation of this action after the next AWG meeting (Apr 18, 2023) where the subject will be discussed	Pierre Exertier, Hugues Capdeville	26/09/2018	18/04/2023	open

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
GB_19_02	GB	Softwares	check availability of all the softwares (contact Tim Springer for Napeos); CB will prepare a table on the website with links to softwares' webpages, information about licences if any.	2019/09/30: request for information (software availability, point of contact, license) to be sent quickly to ACs, AACs and other groups (Norway). 2020/11/24: Geodyn freely available online https://sgp.gsfc.nasa.gov/techniques/tools/GEODYN/GEODYN.html 2023/02/13: Laurent will start this action, in preparation for the DORIS days 2023. 2023/11/20: work in progress	Analysis Coordination + Central Bureau	05/04/2019	01/04/2023	open
GB_19_07	GB	IDS Newsletter	send the distribution list to the GB for proposal of new recipients	2019/09/30: make the subscription easier; add a link on the front page. 2023/02/07: added link on the next website version to be deployed in February; take steps to comply with EU GDPR regulation	Laurent Soudarin	05/04/2019	01/03/2023	open
GB_19_08	GB	WG Geocenter	ask Alexandre Couhert to write 1 or 2 paragraphs describing the goals of the WG, and forward GB's approval to chair the IERS WG	2019/09/30: The WG is created. Participation of GOP, GSFC, GRGS. 2023/02/13: We need to try to rejuvenate this WG. There are some activities. Guilhem will ask Alexander to give the status of the WG. Frank pointed out the charter for this WG has not been approved by the GB.	Hugues Capdeville	05/04/2019	18/04/2023	open
GB_19_19	GB	Strategic plan	push people to get the paragraphs	2023/02/07: distribute Marek's slides to GB and organize a working session to decide further actions	Frank Lemoine + Laurent Soudarin	30/09/2019	18/04/2023	open
GB_19_22	GB	CC products	clarify naming conventions and propose a solution	2020/11/24: not only CC products but also AC products; to be done before ITRF2020 publication 2023/02/06: to be discussed with Guilhem 2023/02/14: status?	Guilhem Moreaux + Laurent Soudarin	30/09/2019	01/04/2021	open

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
GB_20_10	GB	User survey	solicit the GB members to prepare the user survey 2021	2023/02/07: submit survey to GB before the meeting Feb 13. 2023/02/13: item not added to the agenda of the GB meeting, already full. See if Committee "DORIS days 2023" can suggest updates.	Central Bureau	24/11/2020	01/04/2023	open
GB_20_11	GB	IDS and social networks	evaluate the creation of a LinkedIn account for the IDS and its regular supply of information	2023/02/07: need of a communications and outreach manager?	Central Bureau	24/11/2020	01/06/2023	open
GB_22_03	GB	Elections in fall 2022	Ask IAG EC (or Zuheir) to appoint a rep. for 2023-2026	2023/11/20: IAG proposes Ernst for the term 2023-20276. 2023/11/29: approved by the GB	Laurent Soudarin	08/07/2022	01/06/2023	closed
GB_22_07	GB	NRT data	provide other satellites (S6A, S3-A&B, HY2-C&D, ...)	2022/02/11: data will be at IGN DC only ask to keep only the last month. see possible latency improvements the WG must tell us if it is worth it to gain 30mn, then we will see on the CNES/CD side if we can do it 2023/02/07: in progress for S3-A&B, S6-A. No Diode on HY-2C&D 2023/02/13: discussed in GB meeting Feb. 13. No additional request. 2023/11/20: CNES must choose a solution for the distribution and provide a calendar	Arnaud Sellé	02/11/2022	01/06/2023	open
GB_22_08	GB	New groups	Contact each group individually, propose dedicated meetings: india, Greece, Bonn, Chili, Argentina		Laurent Soudarin	02/11/2022	31/03/2023	open
BC_23_02	BC	DOI	determine needs of DOI for IDS products, documentation, ...		Central Bureau	07/02/2023	31/03/2023	open

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
BC_23_03	BC	IUGG 2023	propose abstract for IDS 20th anniversary in IAG session G01	2023/11/20: done	Frank Lemoine	31/01/2023	13/02/2023	closed
BC_23_05	BC	IDS article	propose a plan of the article		Frank Lemoine	31/01/2023	31/03/2023	open
BC_23_07	BC	IDS stations	send questions to the two pre-selected after GB meeting on Feb 13, and organize online meetings from mid-March	2023/11/20: done	Laurent Soudarin	31/01/2023	20/02/2023	closed
BC_23_08	BC	ITRF2020	prepare a DORISmail about IDS contribution to ITRF2020 with DOIs of the article and the combined solution		Frank Lemoine	31/01/2023	31/03/2023	open
BC_23_09	BC	Newsletter	write an article about Cryosat's 12th anniversary	2023/11/20: Cryosat-2 is 12 on April 8 2023. Too late for next Newsletter.	Frank Lemoine, Ernst Schrama	31/01/2023	24/02/2023	closed
BC_23_11	BC	Newsletter	write article about Höfn with comparaison DORIS/GNSS	2023/11/20: article about Höfn in Newsletter #10	Jérôme Saunier, Guilhem Moreaux	31/01/2023	24/02/2023	closed
BC_23_13	BC	SWOT	prepare a DORISmail about DORIS/SWOT with Cécile Manfredi	2023/11/20: DORISmail sent out in November	Laurent Soudarin, Arnaud Sellé	31/01/2023	31/03/2023	closed
BC_23_14	BC	POE-F orbit	distribute TOPEX POE-F orbits	2023/11/20: done (series ssatop20) NB: no DORISmail	Laurent Soudarin, Arnaud Sellé	31/01/2023	28/02/2023	closed
GB_23_16	GB	AWG fall 2023	ask Arnaud Pollet and Samuel Nahmani if IGN	2023/11/20 AWG organized at IGN in Saint-Mandé by IGN AC	Jérôme Saunier	14/02/2023	18/04/2023	closed

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
			AC can host the meeting					
GB_23_17	GB	DORIS days 2023	organize online committee meetings every two weeks		Laurent	14/02/2023	15/09/2023	open
GB_23_18	GB	ESA GENESIS	Frank writes an interest letter from IDS to ESA (recipient to be confirmed)		Frank Lemoine	29/11/2023	15/01/2024	open
GB_23_19	GB	CDDIS updates	Taylor and Laurent prepare information for users about this update. Laurent will put them online on the website.		Taylor Yates and Laurent Soudarin	29/11/2023	05/09/2024	open
GB_23_20	GB	CDDIS statistics	Laurent draws up a list of statistics of interest to be requested from CDDIS		Laurent Soudarin	29/11/2023	05/09/2024	open
GB_23_21	GB	WG "NRT ionospheric application".	Ningbo proposes to the GB terms of Reference, goals and members for the WG "NRT ionospheric application".		Ningbo Wang	29/11/2023	05/09/2024	open
GB_23_22	GB	Virtual Meeting between IAG and UN-GGCE	the Central Bureau contacts Nicholas Brown to request the slides presented during these sessions and offer to give IDS's		Laurent Soudarin	29/11/2023	05/09/2024	open

N°	Origin	Title	Action	answer	Resp.	Opening date	Deadline	status
			answers to the discussion topics.					
GB_23_23	GB	WG "Sentinel Clocks Modeling"	Petr prepares the establishment of a Working Group on the introduction of GNSS clocks for DORIS data processing of the Sentinel ("Sentinel Clocks Modeling").		Petr Stepanek	29/11/2023	05/09/2024	open
GB_23_24	GB	Status of the strategic plan	the Central Bureau prepares and organizes an online GB meeting in February to present the status of the actions of the strategic plan		Laurent Soudarin	29/11/2023	05/09/2024	open