



IDS news

L. Soudarin and C. Manfredi

30 Years of Progress in Radar Altimetry Symposium

2-7 September 2024 | Montpellier, France



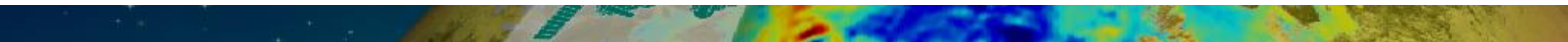
IDS organization

- From September 1, **Cécile Manfredi**, whom you know as CNES DORIS project manager, takes on the role of **CNES/IDS project manager and representative of the DORIS system within the IDS Governing Board**, replacing Claude Boniface who was acting temporarily after Arnaud Sellé left for another position in September 2023. She is also **member of the Central Bureau**.

Big thanks to Claude and a warm and friendly welcome to Cécile!

- **Elections in Autumn to renew three positions within the Governing Board for 2025-2027:**
 - **Data Centers' representative** (currently Patrick Michael, subst. Taylor Yates)
 - **Analysis Centers' representative** (currently Frank Lemoine)
 - **Member-at-large** (currently Karine Le Bail)

→ A call for nomination will be sent out in the next weeks



IDS Working Groups

Working Group **Integrated Clock Corrections for DORIS**

Chair: Patrick Schreiner (GFZ)

Aim: to deal with the behavior of the DORIS clocks, exploiting DORIS clock co-locations both in space and on ground.

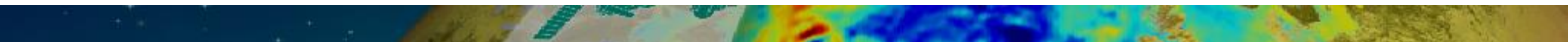
Goal: to derive methods to better model DORIS USO behavior (e.g. SAA-induced perturbations) and reduce a source of systematic error in the DORIS technique

On-board clocks:

On Sentinels 3A, 3B & 6A, it is possible to correct the clock of the **DORIS** observations using estimated **GNSS** clock corrections, because both techniques are **connected to the same USO** (Ultra-Stable Oscillator)

On ground clocks:

It will be possible to study the DORIS frequency behaviour by GNSS stations when both technique are linked. **Action in progress to connect co-located DORIS and REGINA** (GNSS station network operated by CNES and IGN) stations



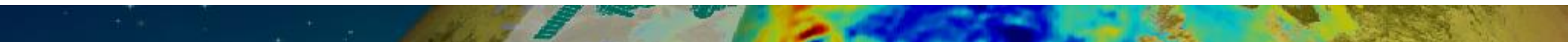
IDS Working Groups

Working Group NRT ionospheric application
Chair: Ningbo Wang (AIR/CAS)

The Working Group was proposed to continue and **broad the use of NRT DORIS data for ionospheric analysis**, after the success of previous working group «NRT DORIS Data» whose objectives have been successfully achieved.

Study **based on Near-Real-Time DORIS data** (DORIS RINEX + DIODE orbits with 3-hr latency)

→ **Setup in progress**: anyone wishing to participate in this WG can contact Ningbo Wang



IDS and Genesis

GENESIS (2028): all four geodetic techniques on one dedicated satellite

- CNES is working with the ESA GENESIS project to get a DORIS DGXX-S instrument on this mission.
- IDS fully supports this project and is ready to overcome these exciting challenges by promoting a close and open collaboration between the technical and scientific experts on all the components of the DORIS system and ESA GENESIS project team
- Participation to ESA GENESIS Science Workshop on February 20, 2024
- Genesis Working Group DORIS: chair Guilhem Moreaux + several DORIS experts



Data

NRT data

As of July 5, 2024, RINEX DORIS data and real-time DORIS orbits are available for seven satellites with a latency of < 3 hrs, at the IGN data center.

Cryosat2 (orbits not yet distributed), Jason-3, Sentinel-3A, Sentinel-3B, Sentinel-6A, Saral, Swot

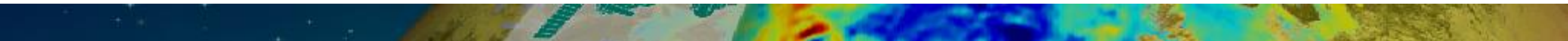
→ Mainly intended for the WG “NRT ionospheric application”

→ To be validated by the WG (before industrialization of the distribution by CNES)

SWOT quaternions and solar panel angles

In June, CNES began delivering quaternions files (netcdf) and solar panel angles (xml) to IGN Data Center. But the format of quaternions and their overly large sample size is not suited to the processing of Analysis Centers.

A lighter version of the quaternions in a simpler format will be available in the coming weeks, both at IGN and CDDIS DCs.



IDS publications

- Activity reports 2022 available online (only)

<https://doi.org/10.24400/312072/i02-2024.001>

- Activity report 2023 in progress → target: September

- IDS/DORIS article for the Encyclopedia of Geodesy, with Jérôme Saunier (IGN)

- Participation in the GGOS video “Connecting the world through Terrestrial Reference Frames” (GGOS Youtube channel)

- IDS Newsletter in preparation

- Project of a user guide for beginners in DORIS and data processing



Come and join the IDS community!



Flash here to visit
the IDS website

Contacts for more information
IDS Central Bureau:
ids.central.bureau@ids-doris.org



IDS Analysis Working Group Meeting
Sainte Mandé, France; Nov 28-29, 2023

Highlights

- Cécile Manfredi is the new IDS representative of the DORIS system and a member of the Central Bureau
- Elections in Autumn for Data Centers' representative, Analysis Centers' representative and one Member-at-large
- New Working Group “Integrated Clock Corrections for DORIS”; Chair: Patrick Schreiner (GFZ)
- New Working Group being set up “NRT ionospheric application”; Chair: Ningbo Wang (AIR/CAS)
- ESA Genesis Working Group DORIS: chair Guilhem Moreaux with DORIS experts and IDS members
- NRT data (RINEX DORIS data and DIODE orbits) of 7 missions are available now
- SWOT quaternions and solar panel angles soon available in a fitted format

