









IDS REPORT

GGOS Bureau of Networks and Observations

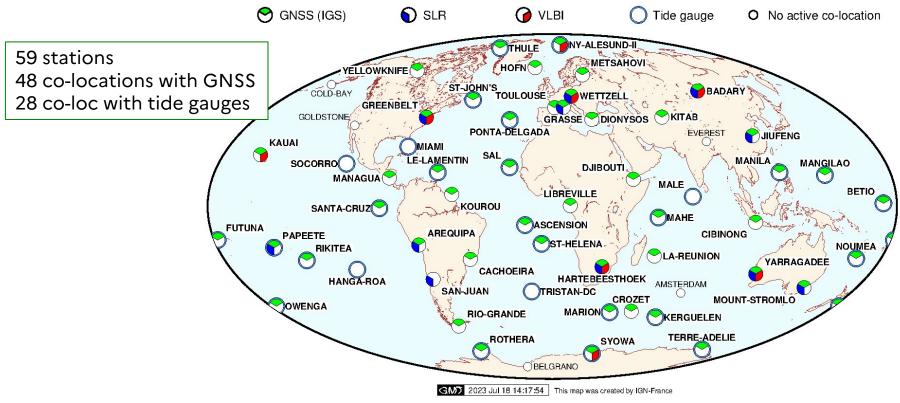
Berlin, 14 July 2023

Prepared by Jérôme SAUNIER, IGN (IDS representative to GGOS-BNO)

DORIS 1 18/07/2023



Network Status





Network Availability 2022

Annual mean of 88% of active sites over the year

Return to the normal activity after two difficult years due to Covid-19 related travel restrictions and local disturbances

Resumption of all the renovation projects for some sites to better meet performance requirements

Rate of stations in operation (fortnigthly statement)





Recent Network Events

April 2022: Shutdown of the Russian DORIS stations (Badary, Krasnoyarsk) following the Russo-Ukrainian War: alternative sites under consideration

June 2022: San Juan (Argentina) restarted after 2-yr outage due to Covid-19 lockdown

Sep. 2022: Futuna (South Pacific) restarted after 2-yr outage

Nov. 2022: Nouméa (New Caledonia) and Owenga (New Zealand) restarted

Apr. 2023: Commissioning of a new DORIS station at Hanga Roa (Easter Island)

Jul. 2023: Santa Cruz (Galapagos, Ecuador) restarted after 2-yr outage







Ongoing development and outlook

Equipment development

- 4th generation beacon deployment (started in 2019): 56% of the network stations already equipped
- Starec C antenna deployment (started in 2014): 44% of the network stations already equipped
- New on-board receiver under development to comply with future satellites requirements

Network densification

- Objective = 70 stations
- Improving the geographic coverage and the network robustness
- New sites: Easter Island, Chile (2023); Gavdos, Crete (2023); Katherine, Australia (2024), Kānpur, India (2024); Ulaanbaatar (2024); Changchun, China (2025), Tahiti, French Polynesia (2026?)

Stations renovation

• Improving the stations performance through antenna relocation, equipment upgrade, installation complying with the system requirements

5

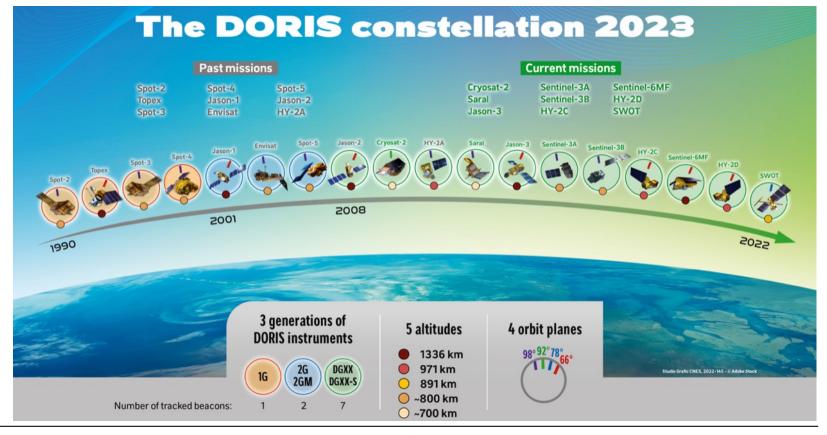
• Planned renovations: Rikitea, French Polynesia (summer 2023), Everest, Nepal (autumn 2023), Cachoeira Paulista, Brazil (autumn 2023), Le Lamentin, French West Indies (2024)

GGOS-BNO, July 2023 IDS Report



9 DORIS satellites in operation

1. DORIS System d. Constellation





IDS News

IDS Communication

- DORIS Special Issue, Adv. Space Res. published, 2023. Issue editors: Denise Dettmering, Ernst Schrama.
- IDS Activity Report 2021 available on-line: https://ids-doris.org/documents/report/IDS Report 2021.pdf
- IDS Newsletter #10 (Apr.2023): https://ids-doris.org/images/documents/newsletters/IDS-Newsletter10.pdf
- 20th anniversary of the IDS!! Special event on Tuesday 18 July from 6pm to 7pm in room R2 City Cube, Level 3

IDS Governing Board

- Arnaud Sellé (CNES) took over from Pascale Ferrage (13 years with the IDS!) as DORIS system representative
- Laura Sánchez (DGFI TUM) elected as Member-at-large (2023-2027) after the term end of C. Abbondaza (JPL)

7

• Petr Štěpánek elected as Analysis Coordinator (2023-2027).

IDS Analysis Centers

- Return of IGN AC to normal operations
- New AC: GFZ under evaluation (GFZ was already an Associate AC)
- Next AWG Meeting at IGN, St-Mandé, France on Nov. 28-29 November, 2023

GGOS-BNO, July 2023 IDS Report











8

http://ids-doris.org