

DORIS system status

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- **1/ DORIS missions**

- **2/ Network / beacons**
 - ◆ **Beacons status**
 - ◆ **Network events and maintenance**
 - ◆ **Evolutions**

- **HY-2A (CNSA)** : 963km, 99.3° August 2011 → mid 2014
 → **DATA AVAILABLE at IDS (1rst data: October 2011)**
 - **CRYOSAT-2 (ESA)**: 717 km, 92° April 8, 2010 → end 2013, (DGXX)
 - **JASON-2 (CNES/NASA)**: 1336 km, 66° June 2008 → end 2013, (DGXX+LRA+GPS)
 - **SPOT5 (CNES)**: 830 km, 98° May 2002 → 2015 (D2GM only)
 - **JASON-1 (CNES/NASA)** 1336 km, 66° Dec 2001 → 2013 (D2G+LRA+GPS)
 → **From mid February to May 7: Satellite in safe mode, then orbit change**
 → **no data during the period**
 - **SPOT4 (CNES)**: 830 km, 98° March 98 → end **2012**
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- **ENVISAT (ESA)**: 800 km, 98.5° March 2002 → April 2012, (D2G + LRA)
 → **Since April 8, Lost of ENVISAT**
 ♦ **New data set DORIS2.2 delivered (June 2002→ March 2007, improved iono correction)**

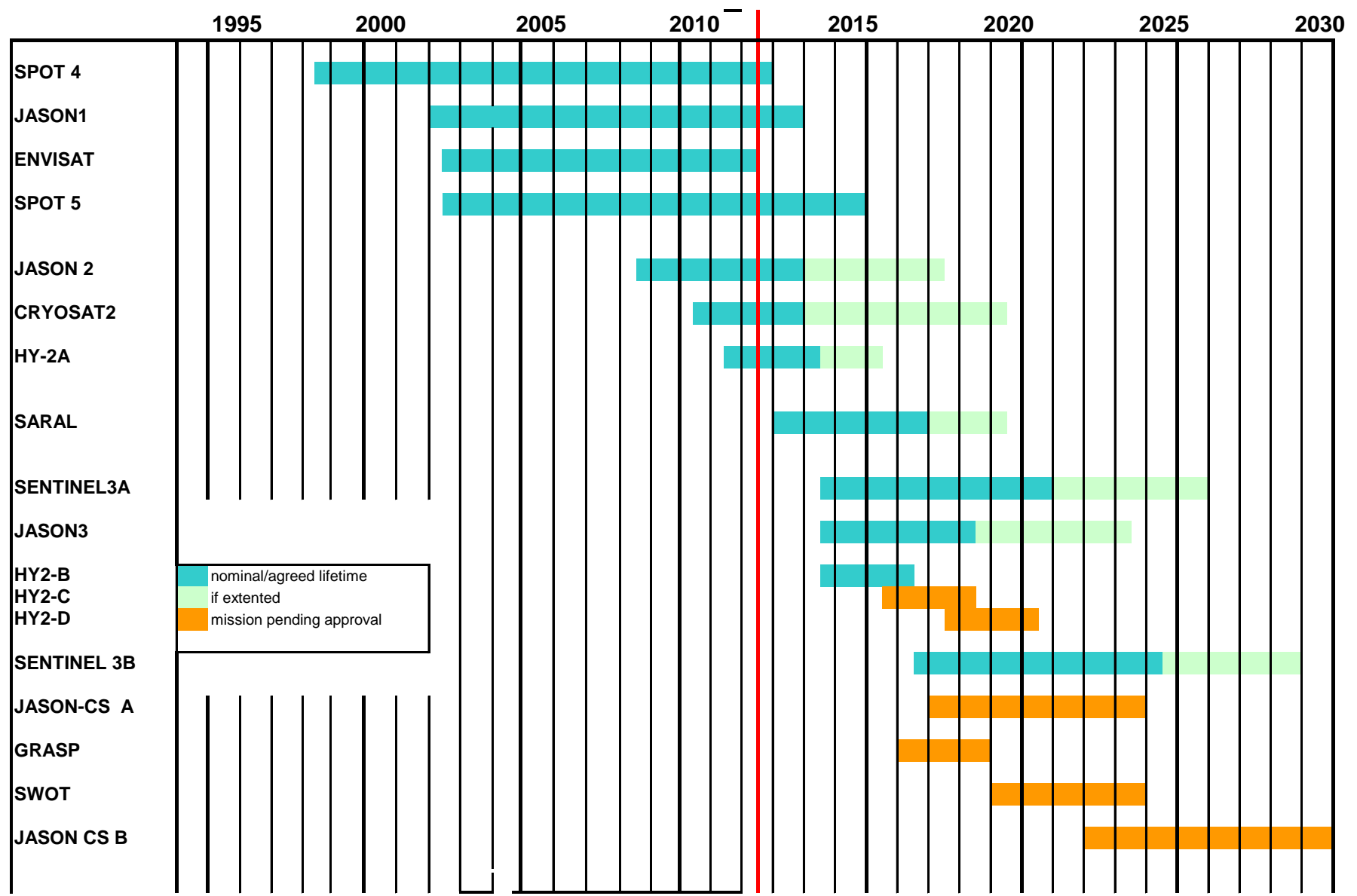
- **SARAL/ALTI-KA (ISRO)** : 800km, 98.5° October 2012 (5 years),
- **SENTINEL3A (GMES)** : 814km, 98.6° mid 2014, (7.5 years + 5)
 - ◆ Sentinel 3B: 2017 (TBC)
- **JASON-3 (Eumetsat/NOAA/NASA/CNES)** : 1336 km, 66° mid 2014 (5 years)
- **HY2B* C*, D *** 2014 2016, 2018 (3 years)
- **JASON-CS* (Eumetsat/NOAA)** : 1336 km, 66° 2018 (7 years)
 - ◆ Jason-CS (B): 2023 (7 years)
- **SWOT* (NASA/CNES)** : 970km, 78° 2020 (3 years)

Possible future missions (under study) with Doris receiver on board:

- **GRASP (JPL)*:** 1300 - 2000 km, 102 - 105° 2017 (3 years)
- **IRIDIUM-NEXT* (U-Texas, ARL):** 60 satellites, LEO polar orbits: Ionospheric data + POD 2015
- **COSMIC-2* (JPL):** ionospheric studies

* Missions TBC

DORIS Missions



■ Today **93%** of the stations are available

◆ But still 4 unavailable stations :

- ◆ Santa Cruz : **no data since May 2009** : difficult site, many staff changes
- ◆ Tristan Da Cunha: **no data since January 2010** : **renovation mission planned in June**
- ◆ Port Moresby: **no data since January 2011**, **new contact established ...**
- ◆ Soccoro : **no data since October 2009**: **renovation in view**

◆ **Yuzno-Sakhalinsk : abandoned**

■ Remote control (Iridium):

- 26 deployed
- 8 in progress

■ Beacon 3.1; 3.2

- 3.1 : → 4 beacons on site
(Toulouse, Terre Adélie, Yaragadee, spare)
- 3.2 : → 1 in Mahé

2012	Station	Event
May	Futuna	Major renovation (antenna support changing) + local tie survey (new GNSS station 'FTNA')
	Greenbelt	Major renovation (antenna raising)
April	Fr. West Indies Yuzno-Sakhalink	Reconnaissance (co-location IGS station) Station abandoned
March	Rio Grande	Antenna change (position unchanged)
	All	New set of site logs (major data updating and revision)
January	All	New coordinate and velocity set (DPOD/ITRF2008)

■ Short run (next 6 months)

- Tristan da Cunha: **(no data since 2010/01/23)** major renovation planned in June (antenna moving)
- Metsähovi: renovation (support changing), local tie survey
- Syowa: antenna replacement
- Mahé: antenna moving, local tie survey (new GNSS station)

■ Later

- Goldstone: new station in place of Monument Peak **(no data since February 2010)**
2010 Socorro: **(no data since october 2009)** major renovation (equipment, antenna moving...)
- Jiufeng: renovation, local tie survey (new GNSS station)
- Port-Moresby **(no data since January 2011)** : major renovation
- Miami: **definitive shutdown** (interferences with TV-mobile)
- Chatham: host agency moving
- Kitab: major renovation
- Easter: major renovation

■ New stations / permanent Network

- Chichijima: installation planned **before the end of the year**
- Hokkaido: in place of Yuzno-Sakhalinsk, co-location GNSS+VLBI
- **Goldstone :**
 - Waiting for NASA HQ approval (well on the way)
 - But a CNES/NASA agreement required, in preparation → **installation delayed**
- Miami replacement:
 - Fr. West Indies : installation planned before the end of the year
advantage IDS: **co-location GNSS, 1st DORIS station on West Indies tectonic plate**
 - +
 - Nicaragua: under negotiation with INETER, co-location GNSS
 - **Jamming OK, same coverage as with Miami , improves redundancy with Socorro and Santa-Cruz**

■ IDS stations :

- Korea: under negotiation with KASI, **co-location GNSS+SLR+VLBI**
- Wake island (Marshall): under consideration
- Riyadh: frequency clearance default → **abandoned**
- Tamanrasset: lying dormant