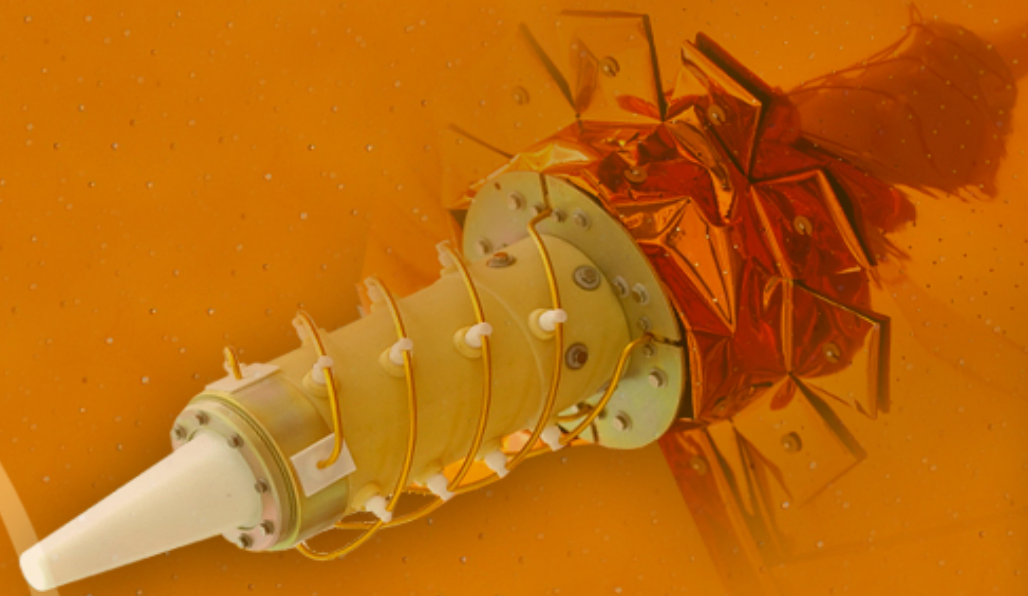




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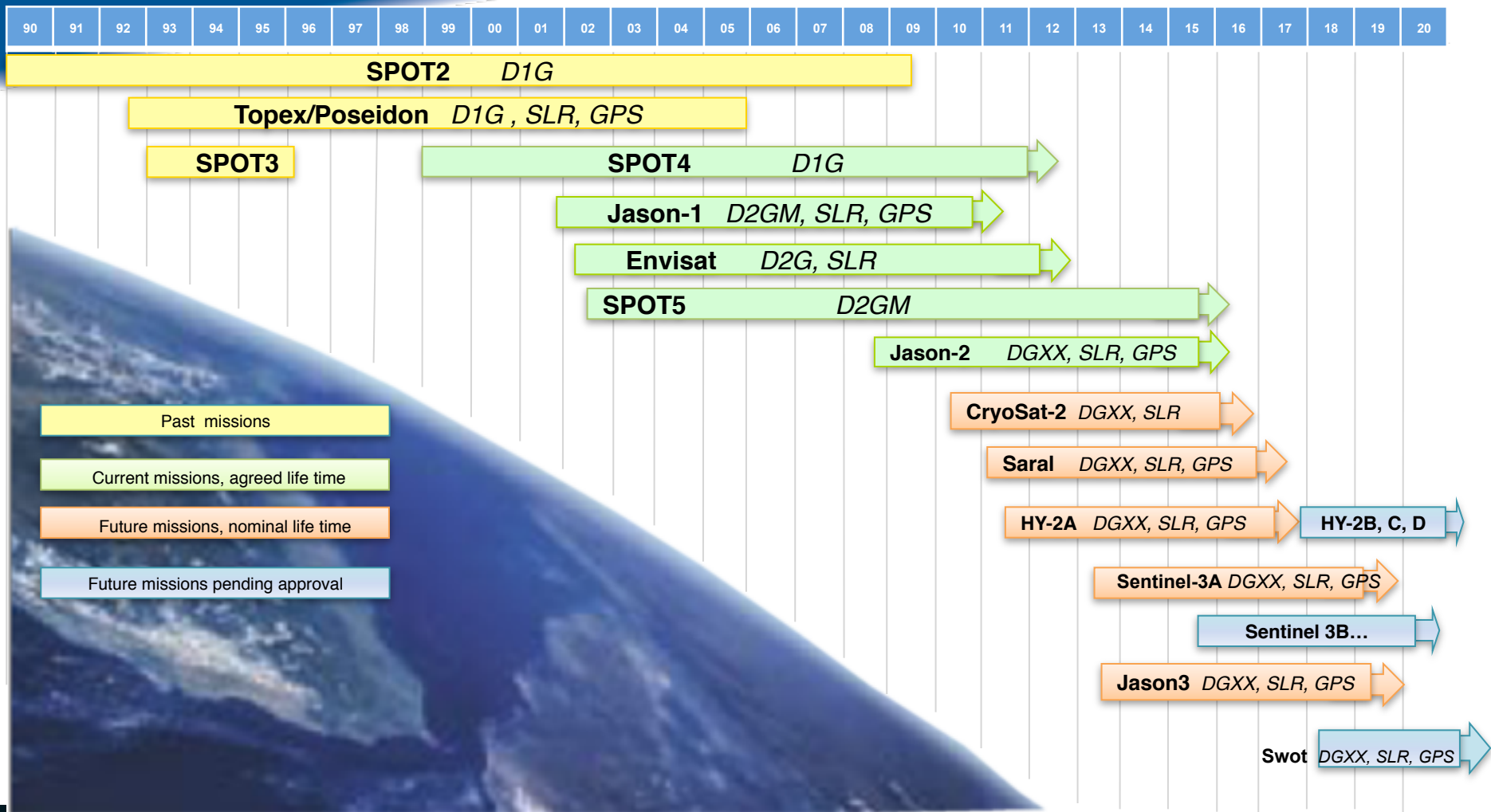
Missions status

Doris Network



- **CRYOSAT-2** (ESA): 717 km, 92° April 8, 2010, → end 2013, (DGXX + LRA)
- **JASON2** (CNES/NASA): 1336 km, 66° June 2008 → end 2013, (DGXX+LRA+GPS)
- **ENVISAT** (ESA): 800 km, 98.5° March 2002 → 2013, (DGXX+ LRA)
Oct 2010: orbit change: altitude reduction -17 km
- **SPOT5** (CNES): 830 km, 98° May 2002 → 2015
- **JASON1** (CNES/NASA) 1336 km, 66° Dec 2001 → end 2011 (DGXX+LRA+GPS)
orbit change under discussion
- **SPOT4** (CNES): 830 km, 98° March 98 → 2012

- **SARAL/ALTI-KA (ISRO)** : 88km, 98.5° January 2011, (5 years), (DGXX + LRA + GPS)
- **HY2A (CNSA)** : 963km, 99.3° June 2011, (3 years), (DGXX+LRA+GPS)
... then HY2B, 2C, 2D...
- **SENTINEL3A (GMES)** : 814km, 98.6° April 2013, (7 years), (DGXX+LRA+GPS),
Sentinel 3B: 12 to 30 months later
- **Jason-3 (Eumetsat/NOAA/CNES)** : 1336 km, 66° summer 2013 (DGXX+LRA+GPS),
- **SWOT (NASA/CNES)** : 970km, 78° 2018 (DGXX+LRA+GPS),



- Past missions
- Current missions, agreed life time
- Future missions, nominal life time
- Future missions pending approval

Today 57 beacons (54 V3.0, 2 V2.0 with 1 ON , 1 V1.0 ON) :

■ Good news:

- ◆ Russian beacons; Badary and Krasnoyarsk have started again, Yuzhno is expected for as soon as possible (communication difficulties)
- ◆ 2 new IDS stations in Riyadh and Tamanrasset (in progress)
- ◆ Study of a new station on a Japanese island, Pacific north (Chichi-Jima: 27°4N, 142°12E)
- ◆ IGN is working on the integration of several GNSS stations (co-located with DORIS) to IGS: Futuna, Djibouti, Rikitea, Cold Bay ,Dionysos ...
- ◆ a GNSS IGS station is to be installed in Rothera (co-located with DORIS)

■ 7 beacons are currently unavailable : replacement or renovation in progress

- ◆ Futuna , Tristan Da Cunha, MAHE, MALE , Marion Island, Santa Cruz
- ◆ **Monument Peak:** (interference with TV)

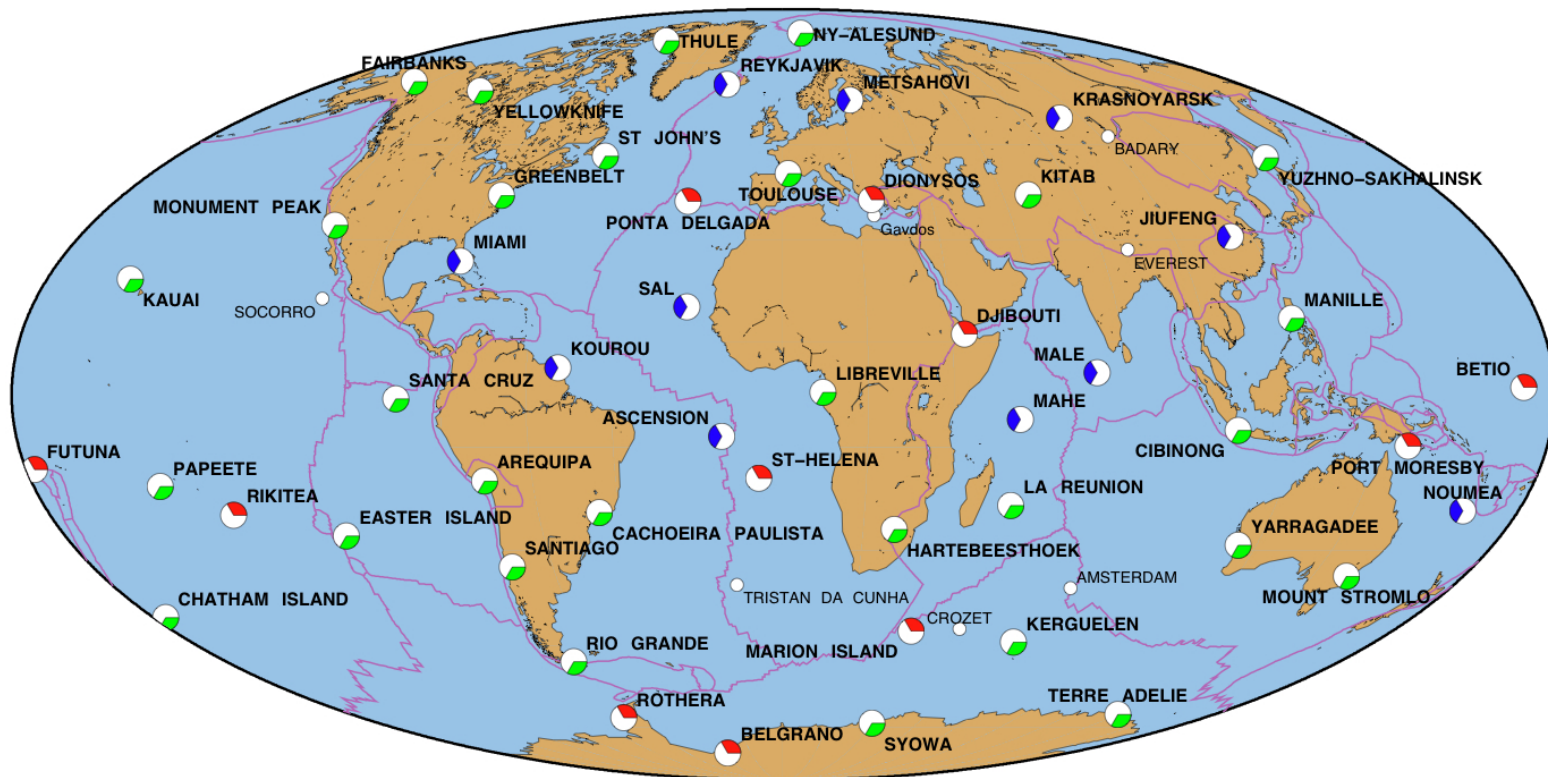
■ Remote control beacon:

- Reactivity improvement : **decrease dependence on host agency => Only 2 working days to re-start a beacon in nominal mode.**
- Objective: **mid 2010 , 20 terminals deployed. (Sal, Terre Adelie first)**

■ 3.0 improvements:

- 3.1: reliability improvement, functioning simplified (new baseline)
 - ➔ **upgrade current beacon to 3.1 progressively**
- 3.2: reduce mask and multipath (**longger cable lengh with deported amplifier close to antenna**)
 - ➔ **reserved for specific sites**

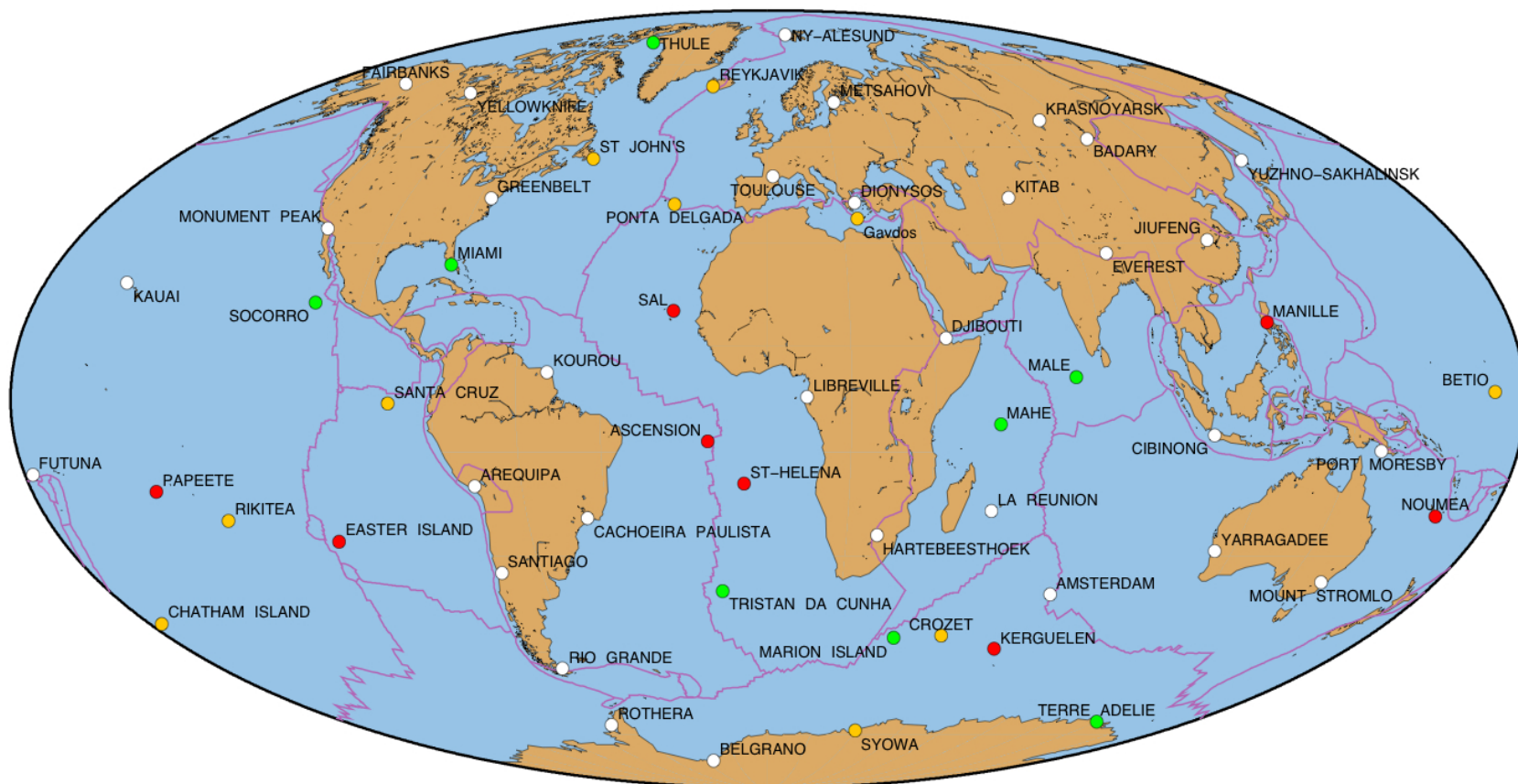
Co-location DORIS – GNSS (march 2010)



● GNSS (IGS)
 ● GNSS (not IGS)
 ● IGS Dormant or Dist > 3km
 ○ No GNSS co-location

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Co-location DORIS – Tide gage (march 2010)



● Distance DORIS – Tide gage < 500 m ● Dist. < 3.6 km ● 3.6 km < Dist. < 10 km ○ No co-location

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