

DORIS system status and future missions

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DORIS network / beacons

○ Beacons 1.1 :

- 1 station: SOCORRO (OK)

○ beacons 2.0 :

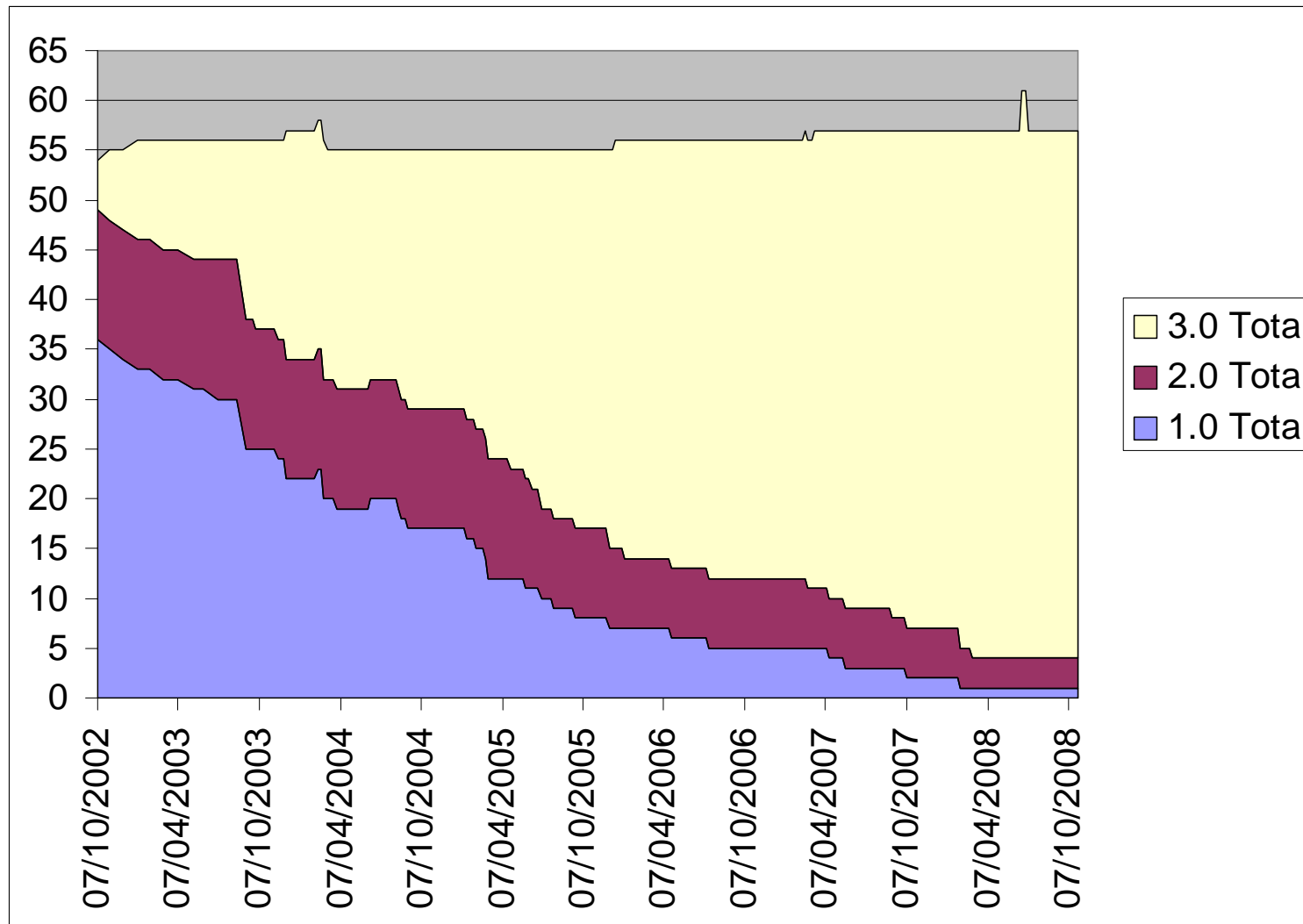
- 3 stations 1 OK / 2 failed: FUTUNA (OK) , FAIRBANKS (NOK), and KRASNOYARSK (NOK)

○ beacons 3.0 :

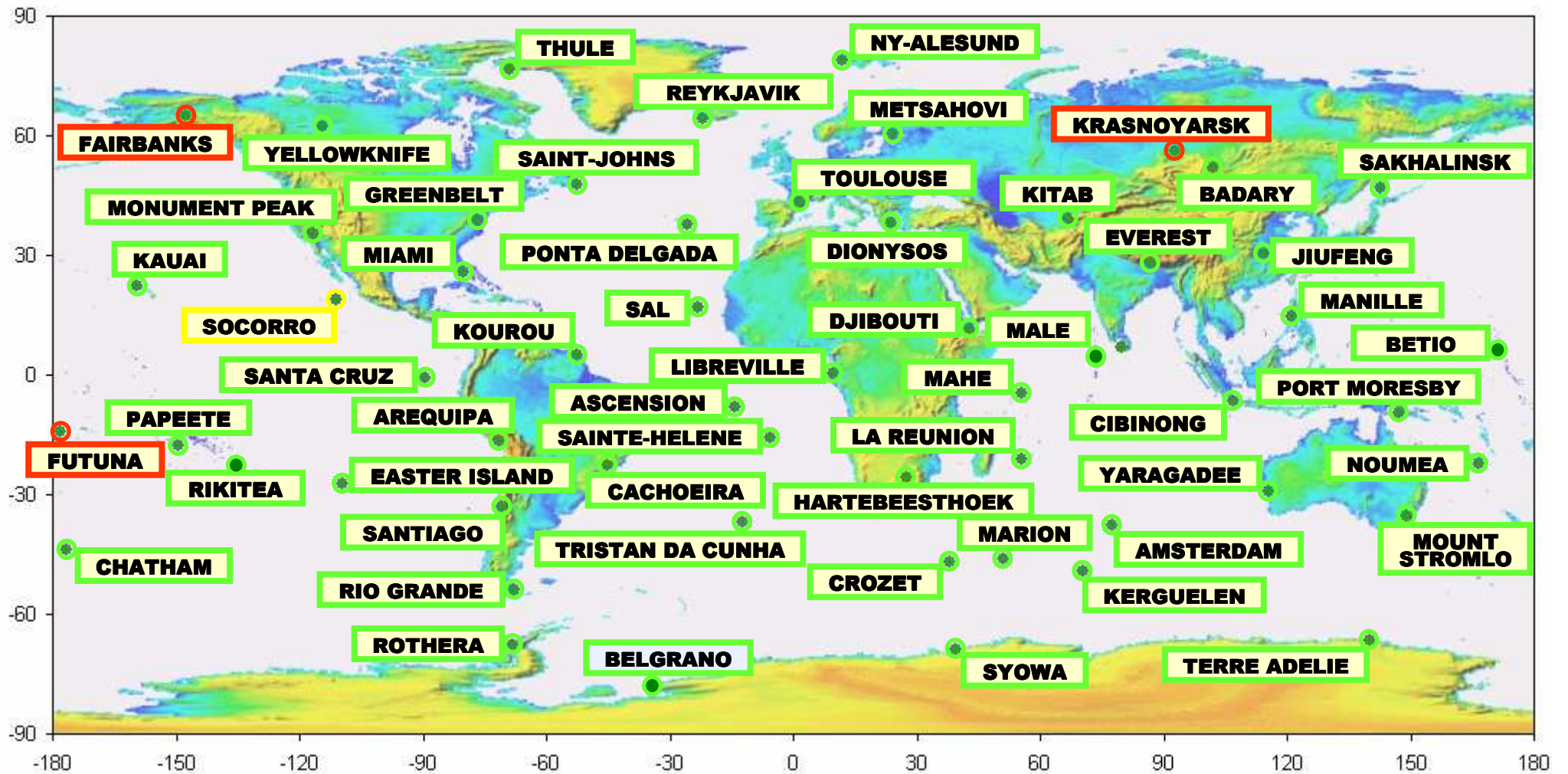
- 53 stations: 49 OK, 4 failed (Badary, Yuzhno-Sakhalinzk, Kerguelen , Tristan)

→ 3 new beacons 3.0 will soon be installed in Krasnoyarsk, Badary, and Yuzno-Sakhalinzk.

DORIS beacons deployment



DORIS Network



1.0 : 1 stations

2.0 : 3 stations

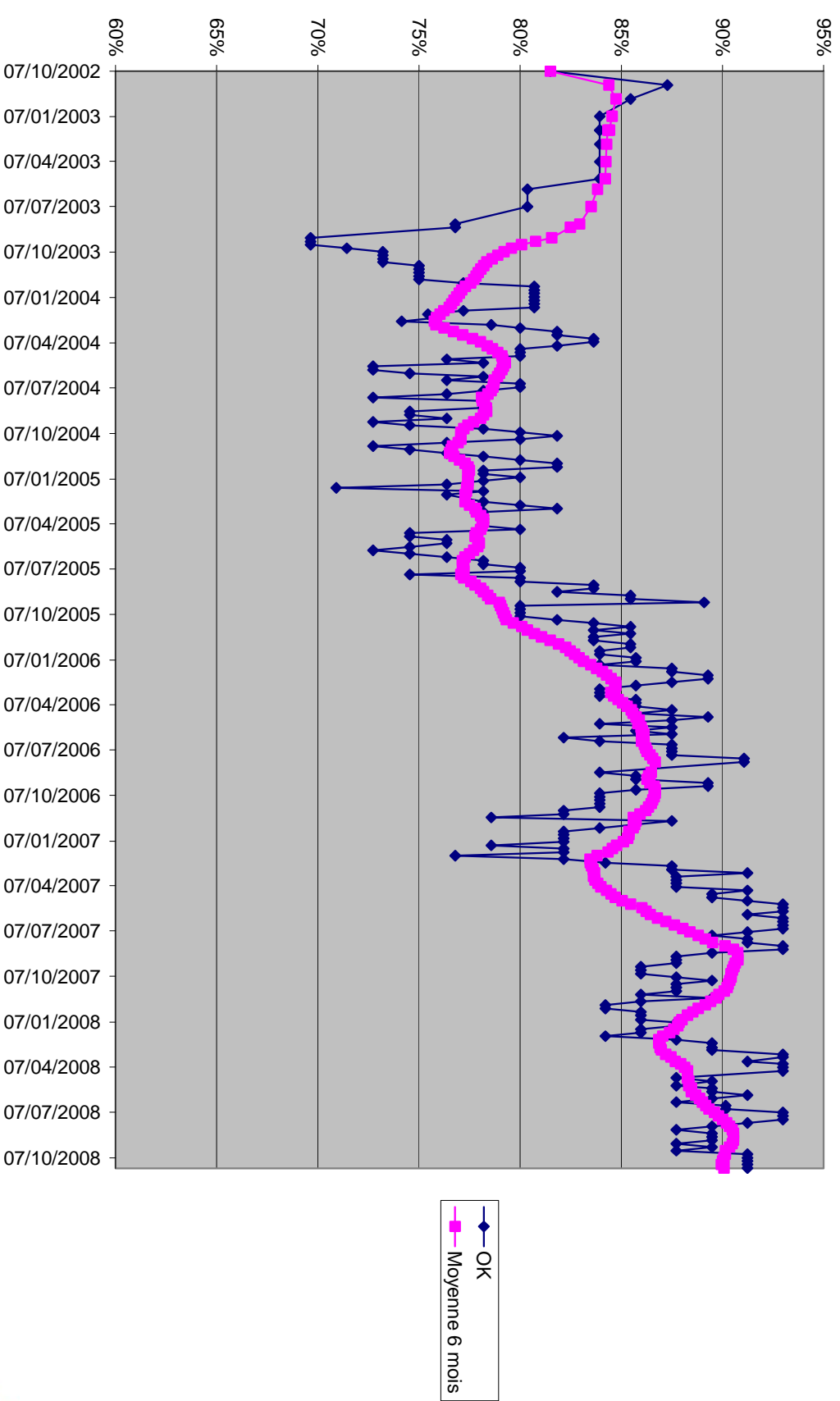
3.0 : 53 stations

Observing and Forecasting the Ocean

IDS Workshop
Nice - 12-14 Nov 2008



DORIS network / availability



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beacon availability improvement

remote controlled beacon

- Successful test on T2L2 (GRASSE) in October
- => reactivity improvement : decrease dependence on host agency
- => Only 2 open days to re-start a beacon in **nominal** mode
- **Objective:** in 2011 : remote-controlled beacons deployed in all the DORIS network.

Future DORIS contributor satellites

○ CRYOSAT-2 (nominal life time: 3.5 years)

- novembre 2009 (Dnepr)
- Orbit: 715km, 369 days (5344 revolutions); 30 days sub-cycle
- DORIS+LRA

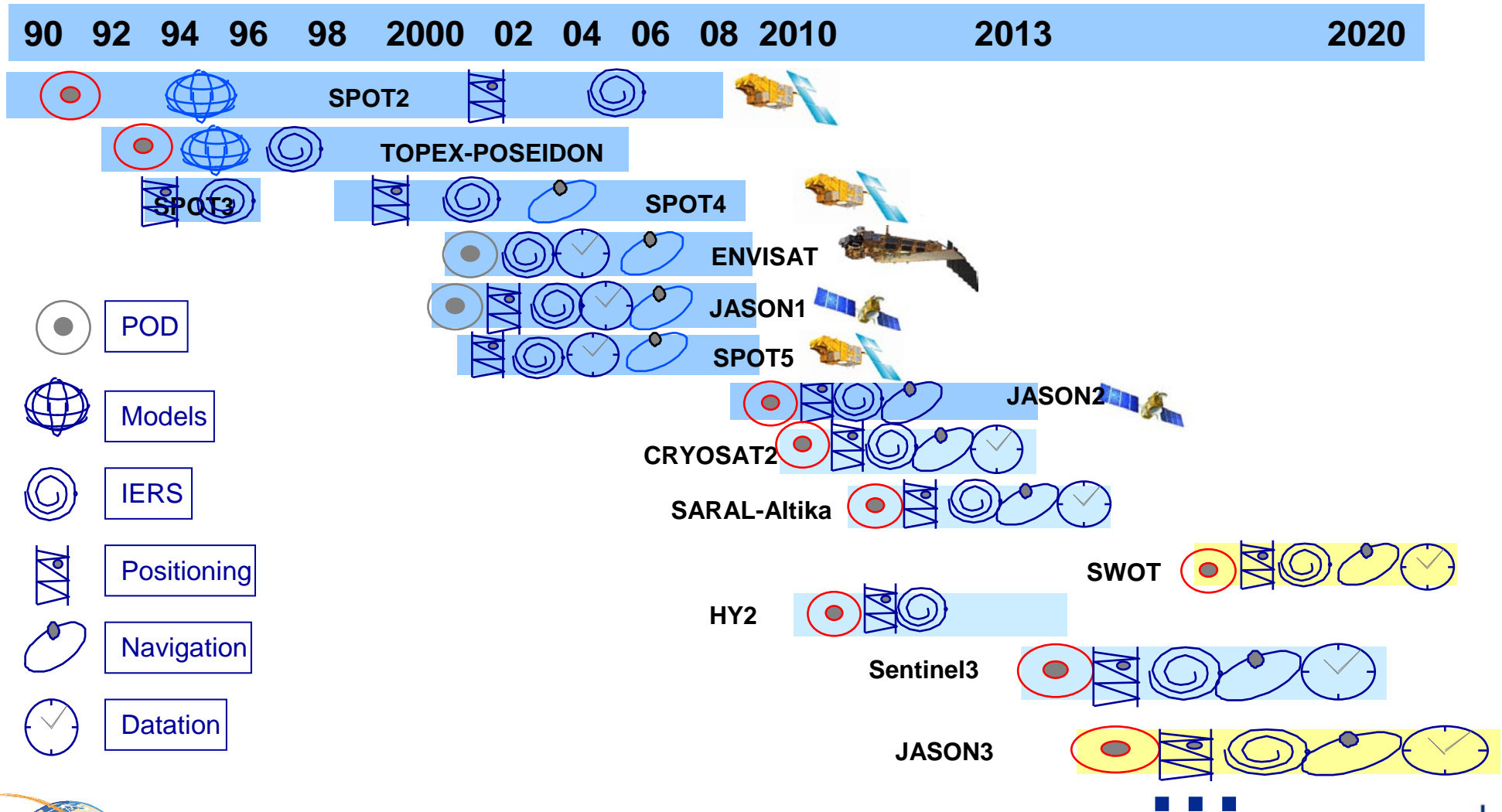
○ HY-2A (nominal life time : 3 years)

- June 2010: HY2A,
- To be confirmed: 2012 :HY2B, 2014: HY2C, 2016 HY2D
- Orbit : 14 days, 963,6 km, 99,3° (3rd year=> 965,7 km, 168 days),
- DORIS+GPS+LRA

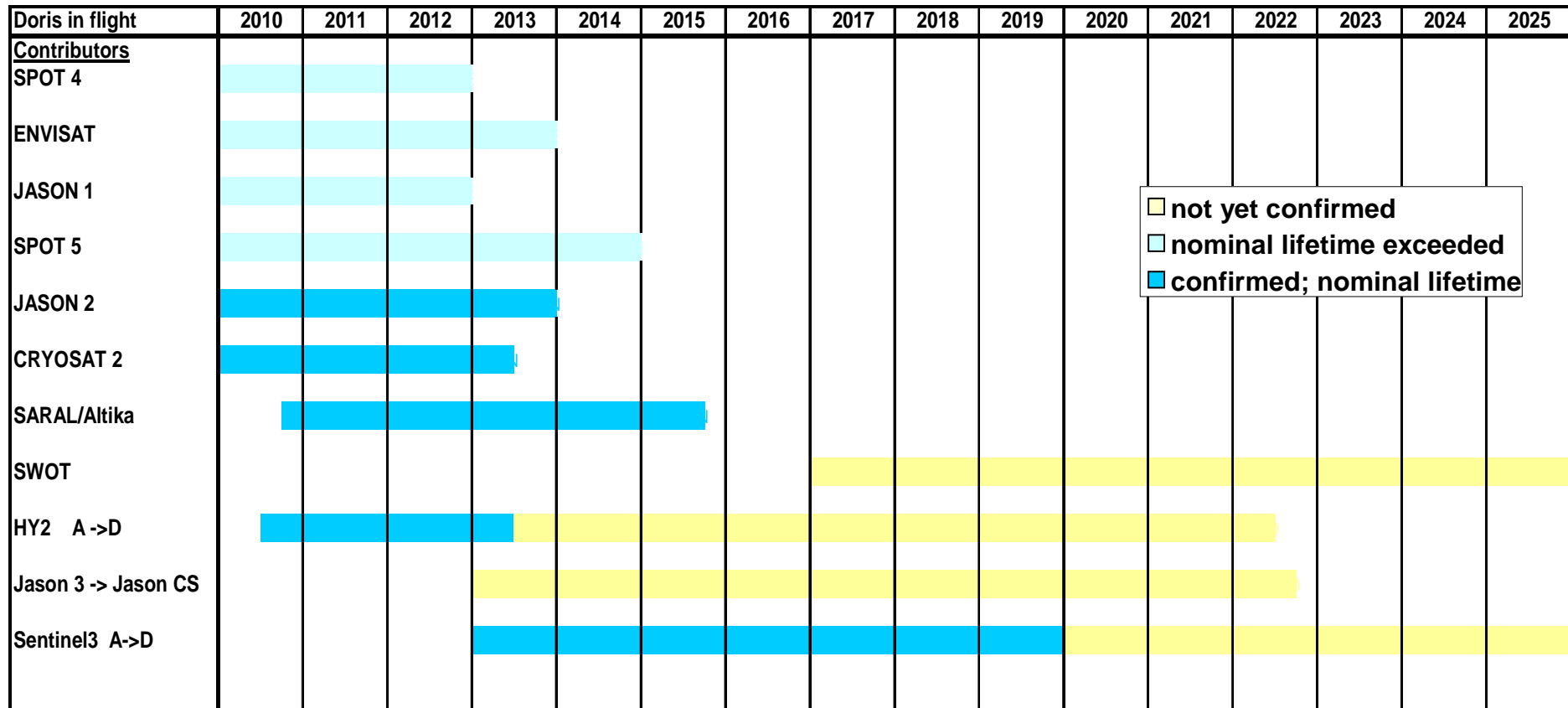
Future DORIS satellite contributors

- **SARAL/ALTI-KA (nominal life time : 5 years)**
 - SARAL (Satellite with ARGOS & ALtika)
 - mid 2010
 - Orbit: 800km, cycle:35 days; heliosynchronous
 - DORIS+LRA
- **SENTINEL 3 (nominal life time: 7 years)**
 - GMES program from European Union : ESA mission
 - november 2012: sentinel3A , then Sentinel3B, C, D : from 2019
 - Orbit :800km, $i=98.6^\circ$, cycle: 27days (sub-cycle 4da ys)
 - DORIS+GPS+LRA
- **Jason-3 : *to be confirmed***
 - Jason3 2013 , then Jason-CS
 - DORIS+GPS+LRA
- **SWOT : *to be confirmed (end 2016)***

A long life System



DORIS constellation



not yet confirmed
 nominal lifetime exceeded
 confirmed; nominal lifetime

DORIS constellation

DORIS constellation

