Missions status

Doris Network
<table>
<thead>
<tr>
<th><strong>Current missions</strong></th>
<th><strong>6 satellites</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CRYOSAT-2 (ESA):</strong> 717 km, 92°</td>
<td>April 8, 2010, ➞ end 2013, (DGXX + LRA)</td>
</tr>
<tr>
<td><strong>JASON2 (CNES/NASA):</strong> 1336 km, 66°</td>
<td>June 2008 ➞ end 2013, (DGXX+LRA+GPS)</td>
</tr>
<tr>
<td><strong>ENVISAT (ESA):</strong> 800 km, 98.5°</td>
<td>March 2002 ➞ 2013, (DGXX+ LRA) Oct 2010: orbit change: altitude reduction -17 km</td>
</tr>
<tr>
<td><strong>SPOT5 (CNES):</strong> 830 km, 98°</td>
<td>May 2002 ➞ 2015</td>
</tr>
<tr>
<td><strong>JASON1 (CNES/NASA) 1336 km, 66°</strong></td>
<td>Dec 2001 ➞ end 2011 (DGXX+LRA+GPS) orbit change under discussion</td>
</tr>
<tr>
<td><strong>SPOT4 (CNES):</strong> 830 km, 98°</td>
<td>March 98 ➞ 2012</td>
</tr>
</tbody>
</table>
Future missions

■ 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),
Topex/Poseidon  
D1G, SLR, GPS

SPOT2  
D1G

SPOT3

SPOT4  
D1G

Jason-1  
D2GM, SLR, GPS

Envisat  
D2G, SLR

SPOT5  
D2GM

Jason-2  
DGXX, SLR, GPS

CryoSat-2  
DGXX, SLR

Saral  
DGXX, SLR, GPS

HY-2A  
DGXX, SLR, GPS

HY-2B, C, D

Sentinel-3A  
DGXX, SLR, GPS

Sentinel 3B...

Jason3  
DGXX, SLR, GPS

Swot  
DGXX, SLR, GPS

Past missions

Current missions, agreed life time

Future missions, nominal life time

Future missions pending approval

Future missions pending approval

90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20
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 length with deported amplifier close to antenna)
  ➔ reserved for specific sites
Co-location DORIS – Tide gage (March 2010)