

# DORIS missions updates



P. Ferrage (CNES)

# Today 5 satellites contribute to IDS



- SARAL (CNES/ISRO): 800km, 98.5° February 2013 → 2018 (DGXX+LR)
- HY2-A (CNSA, NSOAS): 960km, 99° August 2011 → mid 2014(DGXX+LRA+GPS)
- CRYOSAT-2 (ESA): 717 km, 92° April 2010 → end 2017 (DGXX + LRA)
- JASON2 (NASA/CNES): 1336 km, 66° June 2008 → 2017 (DGXX+LRA+GPS)
- SPOT5 (CNES): 830 km, 98° May 2002 → mid 2015 (DGM)

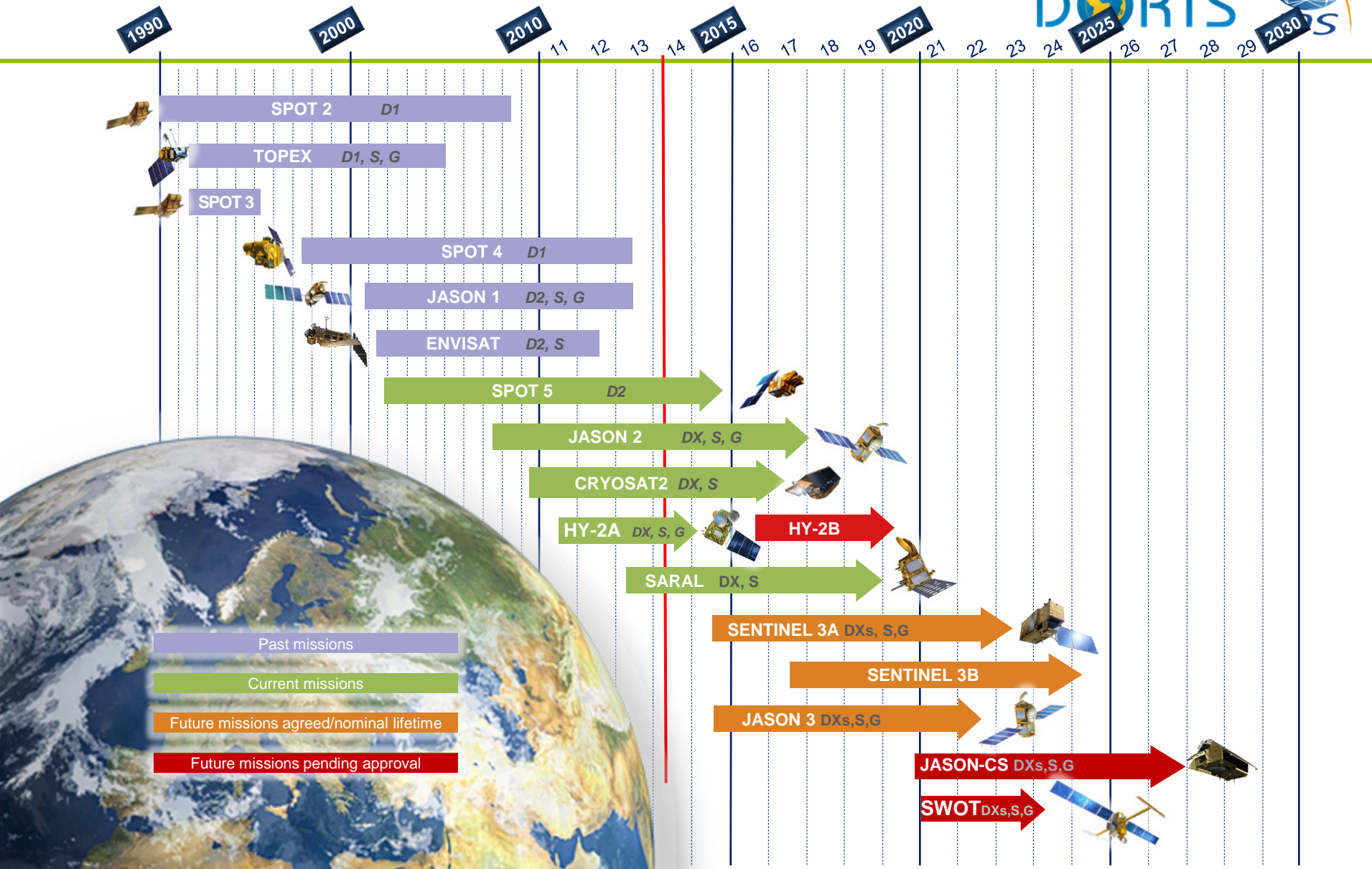
# At least 6 Future missions



- SENTINEL3A (GMES) : 814km, 98.6° mid 2015 (7.5 years + 5)
  - Sentinel 3B: 2018
- JASON-3 (Eumetsat/NOAA/NASA/CNES) : 1336 km, 66° mid 2015 (5 years)
- HY2B\*, C\*, D\* ???? (3 years)
- JASON-CS (Eumetsat/NOAA) : 1336 km, 66° end 2020 (7 years)
  - Jason-CS (B): 2022 (7 years)
- SWOT\* (NASA/CNES) : 970km, 78° post 2020 (3 years)

*\* Mission pending approval*

***NB: DORIS DATA: only RINEX format for the future missions***



Past missions

Current missions

Future missions agreed/nominal lifetime

Future missions pending approval

On board instruments:  
 D1, D2, DX, DXs: DORIS/versions, S:SLR, G:GNSS

## ■ sites for IDS stations

- Current priority: 1 Mashall Island, 2 west indies (Antilles), 3 Korea

## ■ Question about Gavdos:

- most people are in favor of moving the station .
- Gavdos is an IDS station → will be replaced by an IDS station.

## ■ → 3 new IDS sites can be considered :

- 2 beacons aside for IDS sites,
- + Gavdos replacement
- First installation = replacement of Gavdos

## ■ Purpose / site candidates

- **altimeter Calibration** (replacement of Gavdos) → CDN1 (Island of Crete) but isolated on a mountain ridge (alt. 1000m) with no power supply .
- **IDS objectives** : (co-location with other geodetic techniques, with a view to GGOS, tide gauge colocation and not supported by other techniques...):
  - Marshall Island (couverture+) ,
  - Korea (GGOS? AC?),
  - Wettzell (GGOS) ,
  - Hertmonceaux (GGOS),
  - Nigeria-Toro close to Libreville (GGOS, GNSS, AC IDS?)
  - Falklands /Port Stanley (improve south atlantic coverage+, IGS)
  - South Georgia /King Edward Point (south Atlantique, tide gauge)