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# Program Status CNES

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## CNES Strategy in Oceanography

- Contribute to operational outcome of altimetry :  
TOPEX/POSEIDON => JASON1 => JASON2/OSTM =>?  
ERS 1 & 2 => ENVISAT => ?  
+ CORIOLIS, MERCATOR/COO/ECOMF, ...
- Continue research activities for future altimetry missions/instruments (AltiKa, WSOA, ...)
- Contribute to space measurements of other ocean physical parameters :
  - salinity : SMOS, CNES contribution to ESA project
  - directional wave spectrum (SWIMSAT)
  - ocean colour (VGT1 & 2, POLDER1 & 2, ...)
- Prepare ocean applications of ORFEO (Cosmo SkyMed/Pleiades) : mainly coastal applications

## Status of altimetry missions/activities

- TOPEX/POSEIDON :
  - more than 11 years of ocean observations : total success
- Jason/ TOPEX tandem mission : success !
- ENVISAT
  - excellent synergy with Jason1, (T/P and ERS complementarity further improved)
- DORIS
  - 6 DORIS receivers simultaneously in flight : earth reference system strengthened
- MERCATOR
  - inter Agency structure for the implementation of an oceanographic forecasting center in Europe in the mid term
  - next step : C2O (Center for Operational Oceanography) in 2006
- AltiKa : Preliminary Design Review in July 2003
- Next Step : O<sup>3</sup> = Operational Ocean Observer (phase A planned in 2004/2005)



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# Jason1

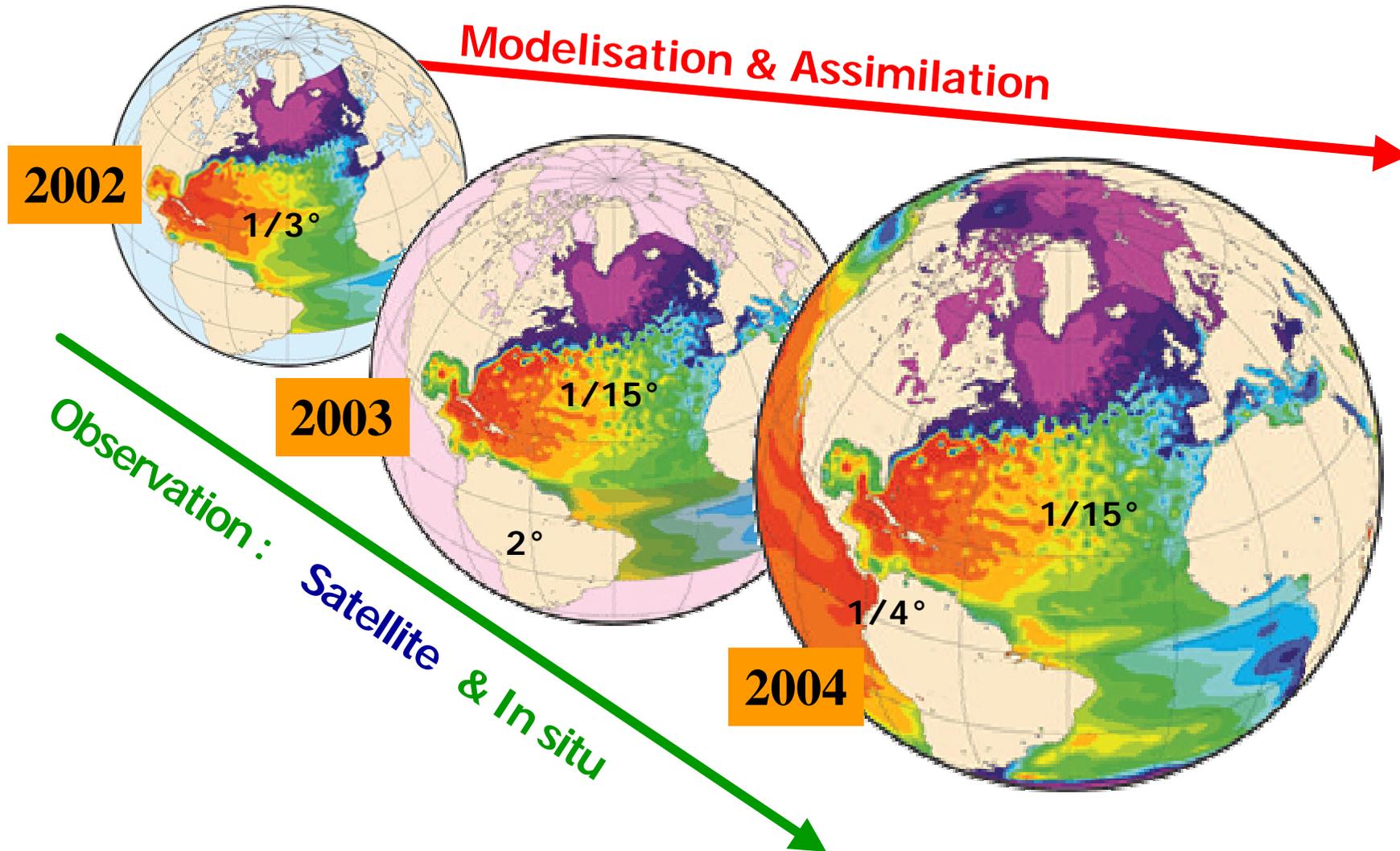
- Qualified in orbit
- Ready for research and application use
  - operational mission begun
  - products distributed routinely
- CNES operations funded through the SALP, Altimetry service, project
  - required lifetime : 3 years
  - expected lifetime : > 5 years



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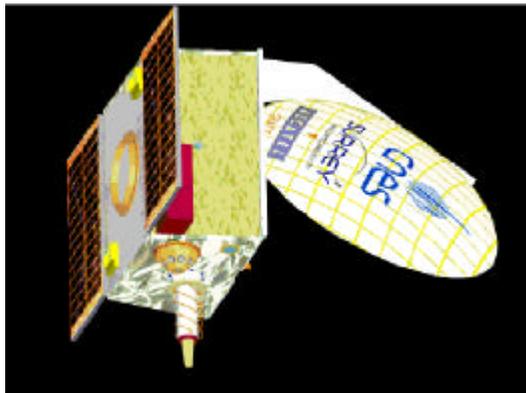
## Jason2 European side

- Cooperative Framework : letter co-signed by NOAA/NASA/EUMETSAT/CNES
  - basic mission, continuation of Jason1 : core mission
  - Major new feature under analysis : Wide Swath Ocean Altimeter
  - 4-party MOU is being prepared
- CNES
  - anticipated procurement phase
    - anticipated procurement for Doris and the Altimeter
    - Platform already funded through PROTEUS multi satellite contract with Alcatel Space
    - Complement to WSOA accommodation study
  - Phase B/C/D to start begin of 2004
- EUMETSAT
  - program approved in June, 2003
  - CNES/EUMETSAT agreement submitted to EUMETSAT Council on November, 2003



## Future altimetry missions

- *What Mission to complement JASON-2 ?*



*Example : AltiKa  
(cooperation CNES/SHOM/  
UK/JPL/...)*

- Post-2010 missions : to be decided/approved by **operational** agencies
    - NPOESS (IPO)
    - OCEANWATCH (EUMETSAT/ESA ??)
    - JASON3 (EUMETSAT/CNES ??)
- (note : some of those missions might merge into a single one...)