Jason-CS / Sentinel-6

Richard Francis
ESA-ESTEC
28th October 2014

Jason-CS / Sentinel-6

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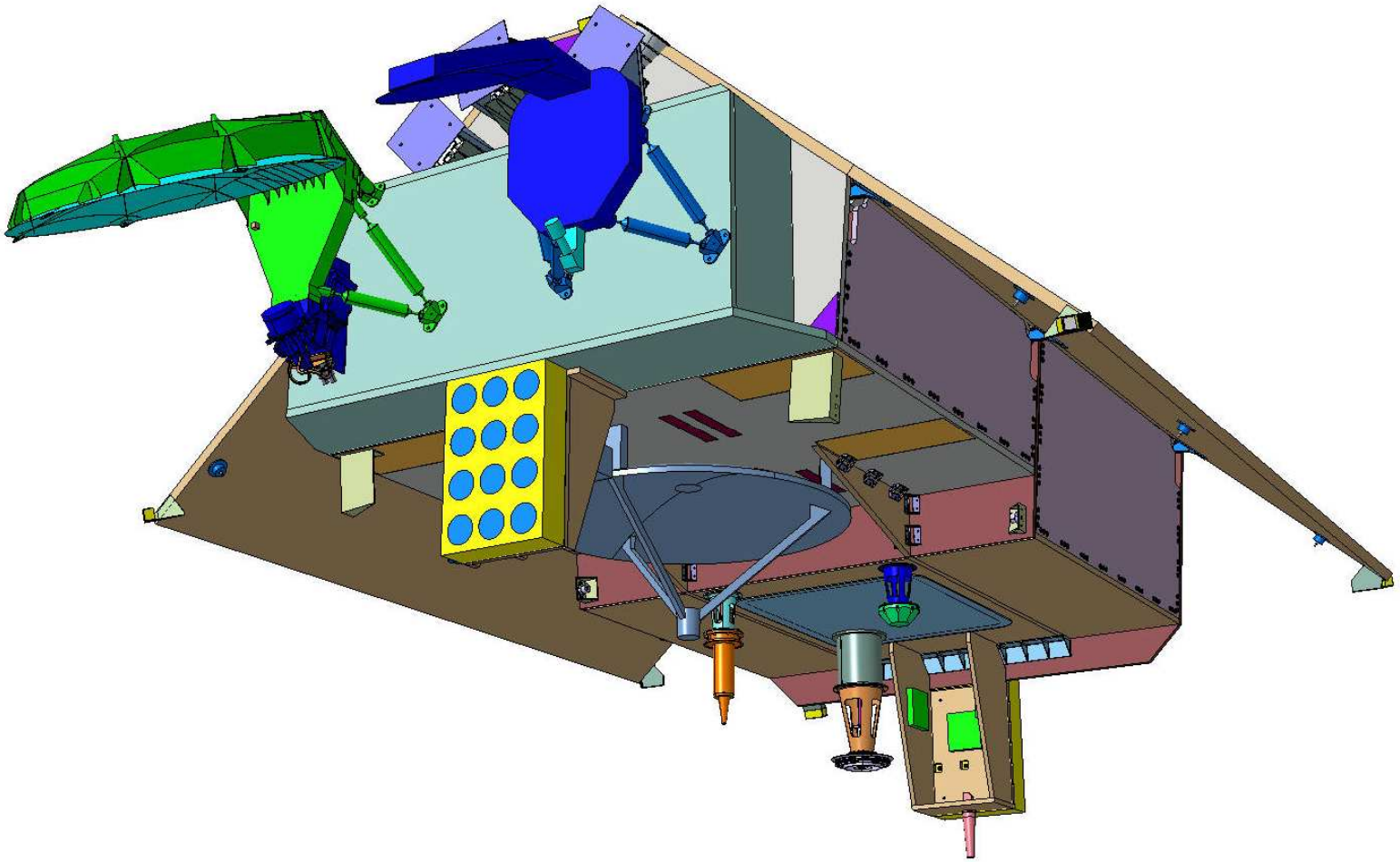
ESA-ESTEC
28th October 2014

Jason-CS (2013)



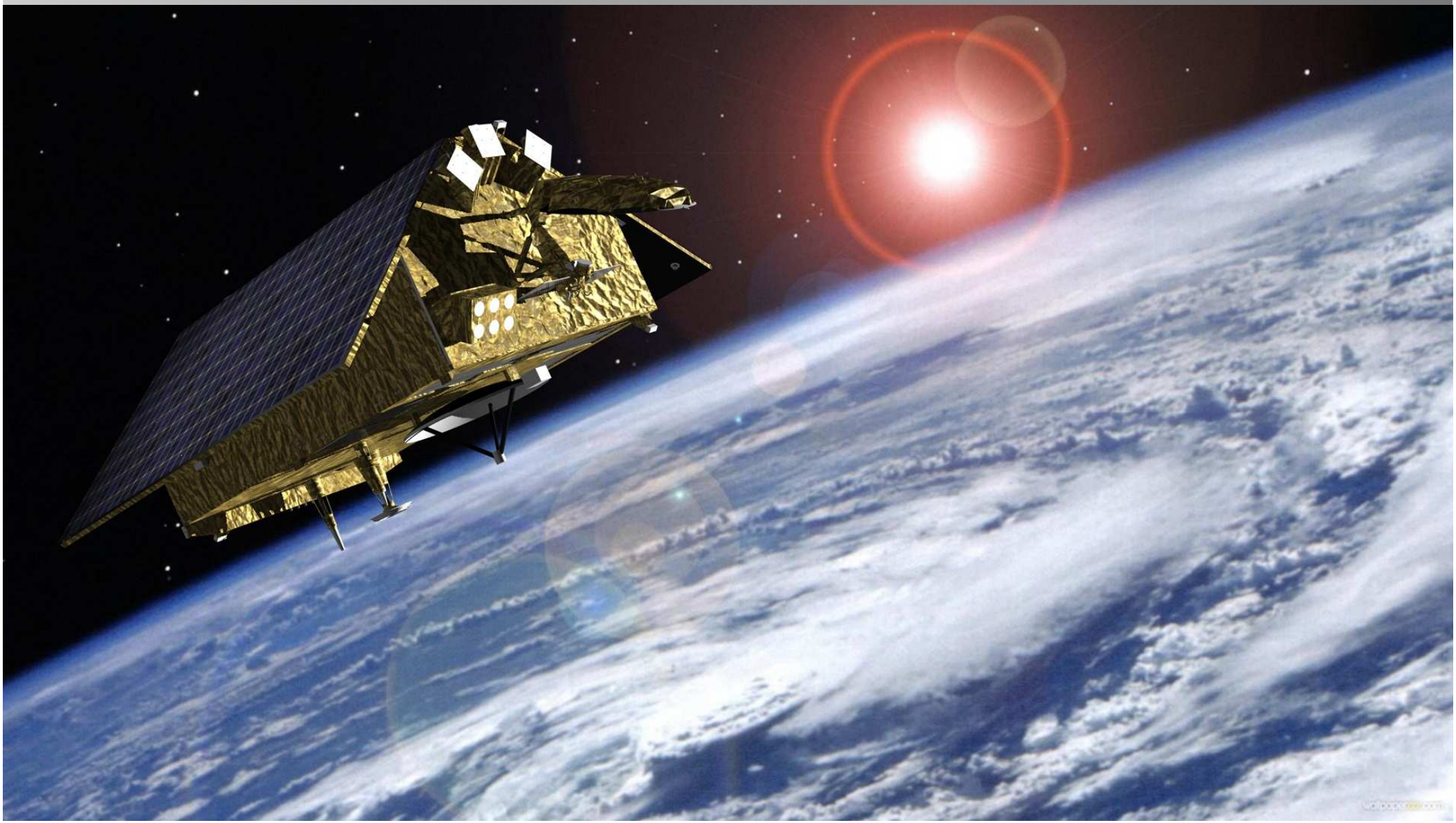
One year ago …

- Poseidon-4 Radar Altimeter
  - With 'Interleaved mode' – continuous open burst.
  - Issues with drift requirement (since resolved)
- AMR-C Microwave radiometer (US)
- GNSS-POD
- DORIS Receiver
- Laser Retroreflector (US)
- GNSS-RO (US)
- High Resolution Microwave radiometer

EUMETSAT Requirements

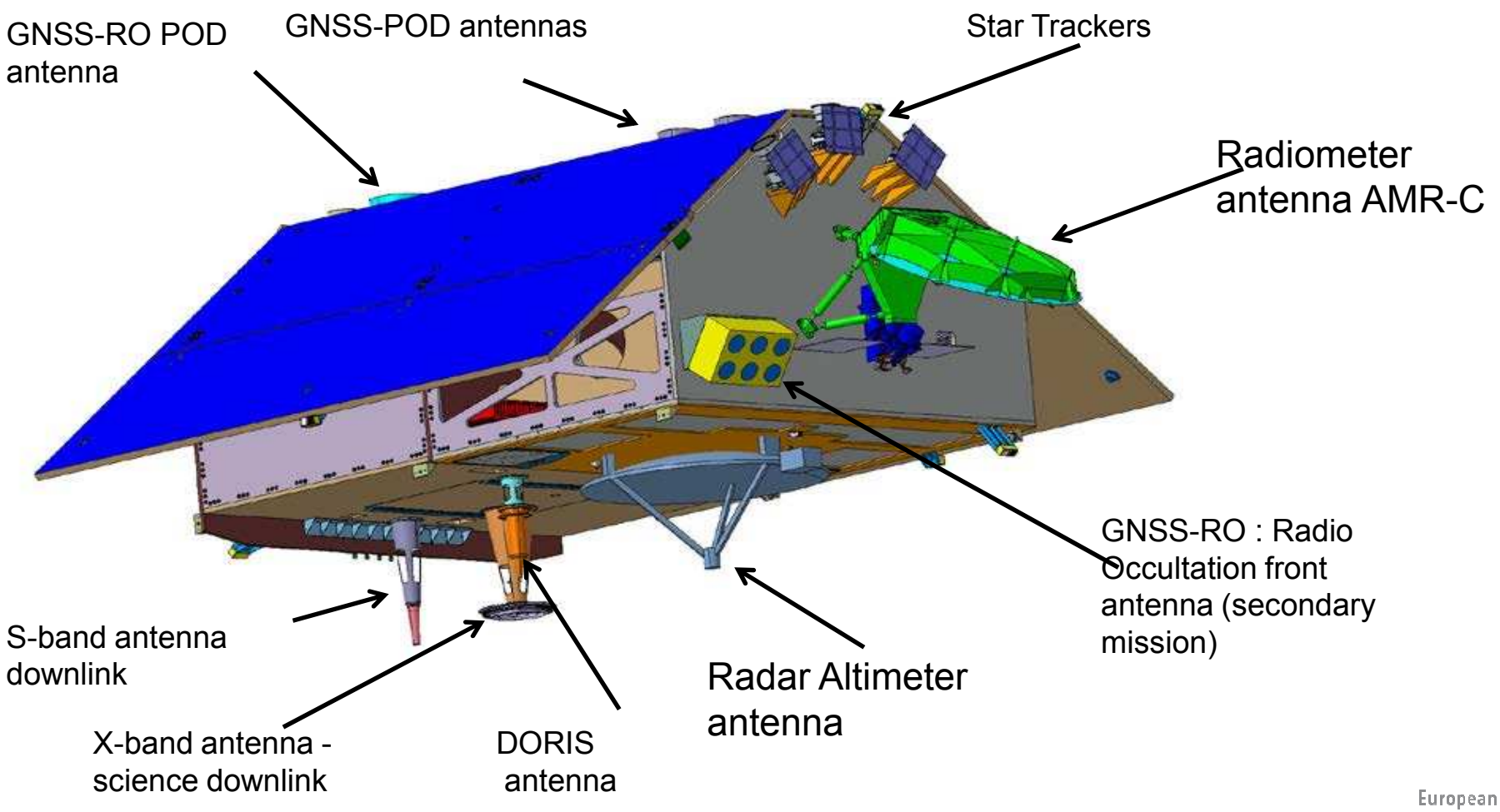
- Jason-CS shall embark a GNSS receiver able to measure radio-occultation (RO) of GNSS satellites.
- Originally from EUMETSAT member states, this requirement has been endorsed by NOAA.
- Jason-CS shall embark a GNSS-POD receiver compatible with Galileo constellation
  - Possibly upgraded to solve for potential obsolescent GPS signals end 2021.

Jason-CS/Sentinel-6



Jason-CS (2014)

- The Platform Structure end Phase B2



Reviews to Date

- Feb 2012*: ESA DCR – Design Consolidation Review
- Feb 2013*: ESA SDR – Satellite Design Review
- Mar 2014*: EUMETSAT SRR-1 – System Requirements Review (part 1)
- Dec 2014*: ESA PDR – Preliminary Design Review
- Mar 2014: EUMETSAT SRR-2 – System Requirements Review (part 1)

(* completion date)

Status

- ESA opened subscriptions between Feb and May 2014. Satellite development authorised Jun 2014 by PB-EO.
- Final subscriptions expected C'MIN 2014 (Dec 2014)
- Satellite Phase C0 Jan 2015 followed by Phase C/D planned Jul 2015 (with EUMTESAT programme entry into force).
- EUM Initial Ground Segment development team in place.

Partners

ESA: Majority funding for development of Satellite A. Procurement of Satellite B.

EUMETSAT: Complementary funding for Satellite A, funding of GS (European part), operations & shared funding of Satellite B with EU.

EU: Shared funding of Satellite B & funding for all operations.

CNES: Provision of system expertise, performance analysis & orbit determination.

NOAA: Provision of some payload, launcher and ground station.

NASA: development of payload instruments and funding of US science teams.

Funding and Approval (2013)

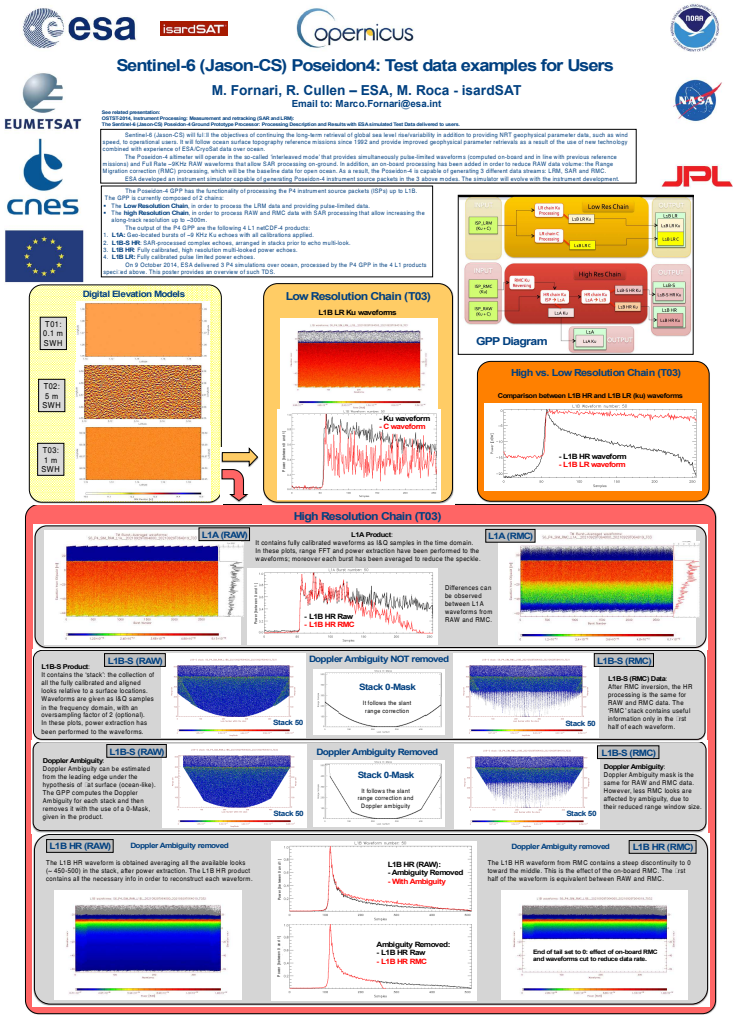
- ESA:
  - Phase B2 at C-MIN'12, with full approval at C-MIN'14
- EUMETSAT:
  - Preliminary Programme approved Jun 2012
  - Full Programme entry into force expected mid-2015
- EU:
  - Included in "Long-Term Scenario", funded under Multiannual Financial Framework 2014-2020
- NOAA:
  - To be included in FY'15 President's Request, Feb 2014

Funding and Approval (now)

- ESA:
  - Approved in June 2014 by ESA Programme board (PB-EO) with final subscriptions expected at C-MIN'14
- EUMETSAT:
  - Full Programme presented at PPM#3 (23rd Oct) and subscription opens end Nov 2014 (expected ~6 month to reach 90% threshold).
- EU:
  - Funding 2014-2020 now in European law: Copernicus Regulation
  - Signature of Agreement between EC and ESA 28th Oct (today!!)
- NOAA:
  - To be included in FY'16 President's Request, Feb 2015

Preliminary Test Data Sets

- ESA has released several preliminary test data sets – 6 years before launch!
- See '*Instrument Processing*' Splinter poster and presentations.
- E-mail released to science and operational Users 9th Oct.
- Contact ESA project for information



Thank you