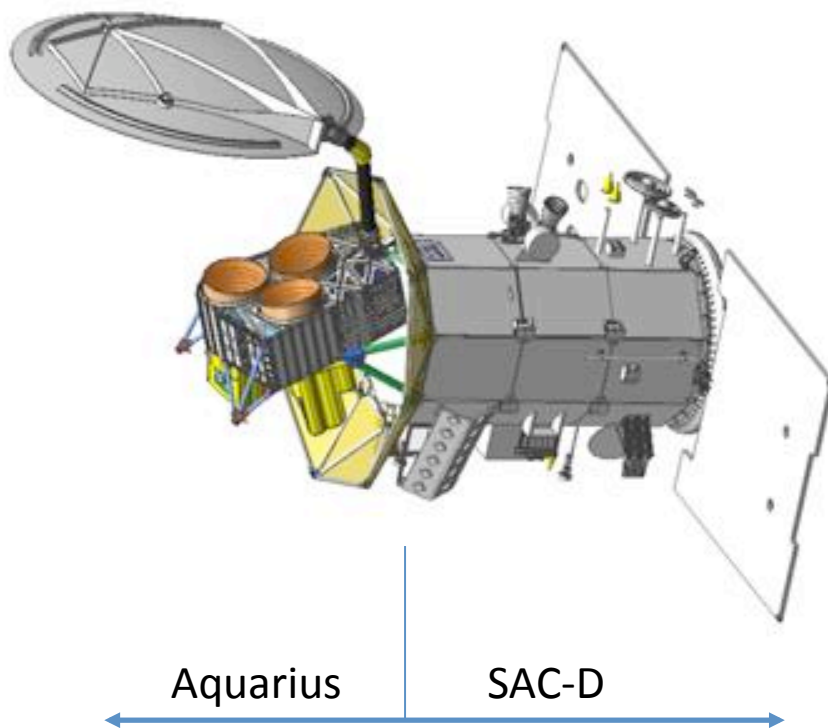


# Status of Aquarius/SAC-D

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# Aquarius/SAC-D



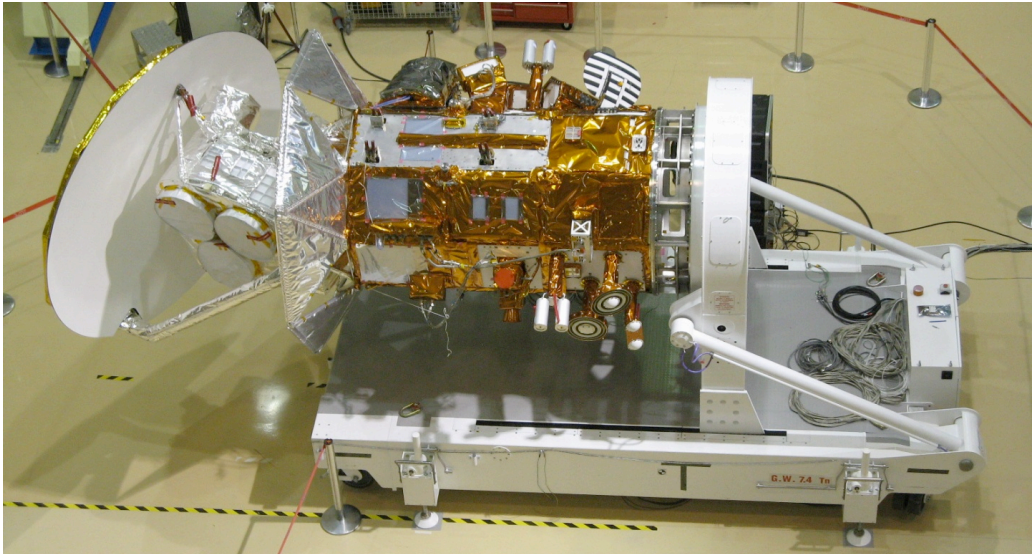
- **Instrument**
  - *L-band*
  - *Radiometer and Radar*
  - *3 Beam Pushbroom*
  - *Polarimetric*
- **Mission**
  - *Sun-synch orbit 6 am/6pm*
  - *Night time look*
  - *675 km Alt; 7 day revisit*
- **Science**
  - *Global maps of Sea Surface Salinity*
  - *Accuracy: 0.2 psu; 150 km; monthly*
  - *Seasonal and annual variations*
- **Partnership**
  - *CONAE (Argentina): Spacecraft (SAC-D)*
  - *NASA/GSFC: L-band radiometer*
  - *NASA/JPL: L-band scatterometer*

# Aquarius/SAC-D Instruments

| Instrument                                             | Objective                                            | Description                                   | Resolution                          | Source        |
|--------------------------------------------------------|------------------------------------------------------|-----------------------------------------------|-------------------------------------|---------------|
| <b>Aquarius</b>                                        | Sea Surface Salinity (SSS)                           | Radiometer (1.4 GHz)<br>Radar (1.26 GHz)      | 76x 94 km<br>84x120 km<br>96x156 km | NASA          |
| <b>MWR</b> : Microwave Radiometer                      | Precipitation; Wind speed; sea ice                   | 23.8 and 37 GHz<br>390 km swath               | 40 km                               | CONAE         |
| <b>NIRST</b> : New Infrared Sensor Technology          | Fires, Sea Surface Temp                              | 3.8, 10.7, 11.7 $\mu\text{m}$<br>180 km swath | 350 m                               | CONAE         |
| <b>HSC</b> : High Sensitivity Camera                   | Urban lights; Fire detection                         | 450-900 $\mu\text{m}$<br>700 km swath         | 200-300 m                           | CONAE         |
| <b>DCS</b> : Data collection System                    | Environmental data collection                        | 401.55 MHz uplink                             | 2 contact/day<br>200 platforms      | CONAE         |
| <b>ROSA</b> : Radio Occultation Sounder for Atmosphere | Atmospheric Temp & humidity profiles                 | GPS occultation                               | 300 km                              | ASI (Italy)   |
| <b>CARMEN 1</b> : ICARE & SODAD                        | Effects of Radiation space $\mu$ -particles & debris | Si/Li detectors and SMOS sensors              |                                     | CNES (France) |

# Ready to Go!

## Launch: June 9 from VAFB



Aquarius/SAC-D ready to ship to VAFB after environmental testing (March, 2011).

Assembly of Delta-II rocket, VAFB →



# Information

- General Information:
  - <http://aquarius.gsfc.nasa.gov/>
- Specific Information and Data Products:
  - <http://oceancolor.gsfc.nasa.gov/AQUARIUS/>
- Media Releases
  - <http://www.nasa.gov/topics/earth>
- Pictures:
  - <http://mediaarchive.ksc.nasa.gov/search.cfm?cat=228>
  - <http://countdown.ksc.nasa.gov/elv/index-vafb.html>