



NASA's Earth Science Division

25 May 2011

NASA Operating Missions (International Collaboration)







SAC-D/Aquarius: Measuring Sea Surface Salinity 06.09.11



SAC-D/Aquarius will contribute to better understanding and prediction of ocean circulation, the Earth's hydrologic cycle, and climate through global, space-based measurements of sea surface salinity. SAC-D/Aquarius is an international cooperative mission between NASA and CONAE (Argentina), with additional contributions from Brazil, Italy, France, and Canada.



SAC-D/Aquarius: LRD June 9, 2011

ESSP: Aquarius Mission

- NASA-CONAE Partnership Science Mission
- L-band Radiometer / Scatterometer provided by NASA
- Service Platform (S/P) & MOC provided by CONAE
- Dedicated Delta II launch vehicle provided by NASA
- Category II mission and Risk Class C
- Operational Design Life: 3 years

Aquarius Science

- Investigate the links between the global water cycle, ocean circulation and climate
- Global measurements of Sea Surface Salinity (SSS)
- Provide 0.2 psu (<u>practical salinity unit</u>) accuracy at monthly, 150 km resolution
- Seasonal & year-to-year variations of SSS; how these 6 relate to changes in water cycle & ocean circulation





goddard Space flight center

