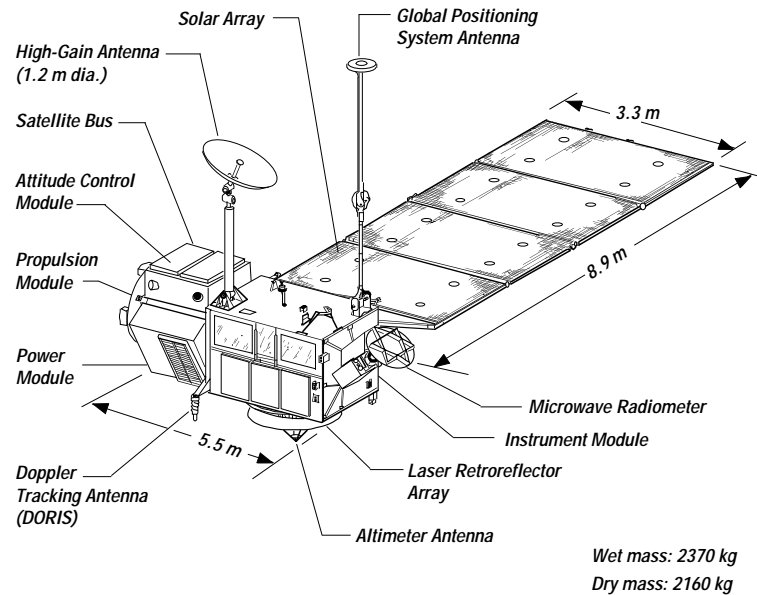
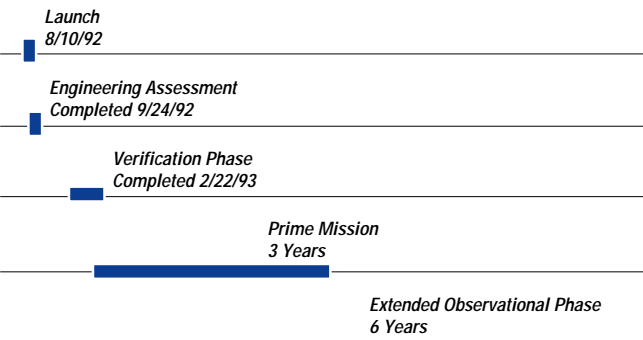


TOPEX/POSEIDON

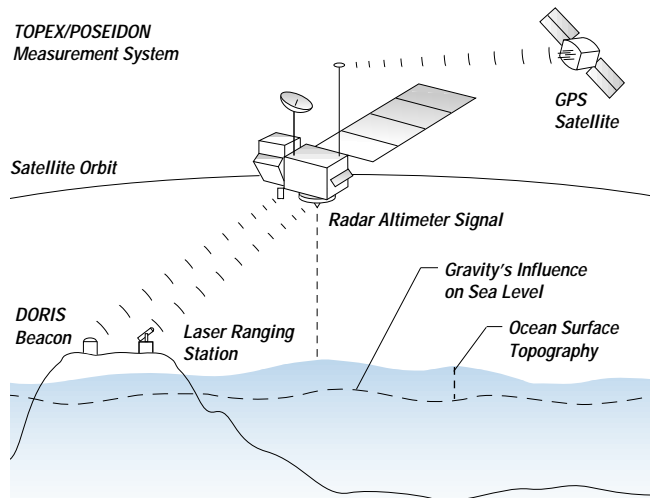
Ocean Surface Topography Experiment



1992 1993 1994 1995 1996 1997 1998 2000 2001



TOPEX/POSEIDON Measurement System



Objectives

- Three-year global view of Earth's oceans
- Improved understanding of ocean currents
- Improved forecasting of global climate

Highlights

- Joint U.S.–France (Centre National d'Études Spatiales — CNES) program
- Launched August 10, 1992, on Ariane 42P launch vehicle
- Completes nine years of mission operations on August 10, 2001
- Sensors:
 - Altimeters (NASA, CNES)
 - Microwave radiometer (NASA)
 - Global Positioning System receiver (NASA)
 - Laser retroreflector array (NASA)
 - Doppler tracking antenna (CNES)
- Orbits Earth at 1336-km altitude, 66-degree inclination
- 10-day repeat of ground tracks (± 1 -km accuracy)
- Covers 95% of the ice-free oceans every 10 days
- Unprecedented accuracy: sea-level measurements to better than 5 cm
- Has measured sea levels, mapped basin-wide current variations, monitored effects of currents on global climate change; studied phenomena such as El Niño and Pacific Decadal Oscillation (PDO)



National Aeronautics and Space Administration
Jet Propulsion Laboratory
California Institute of Technology
Pasadena, California

JPL 400-605, Rev. 1 5/01

WWW Site: <http://sealevel.jpl.nasa.gov>