

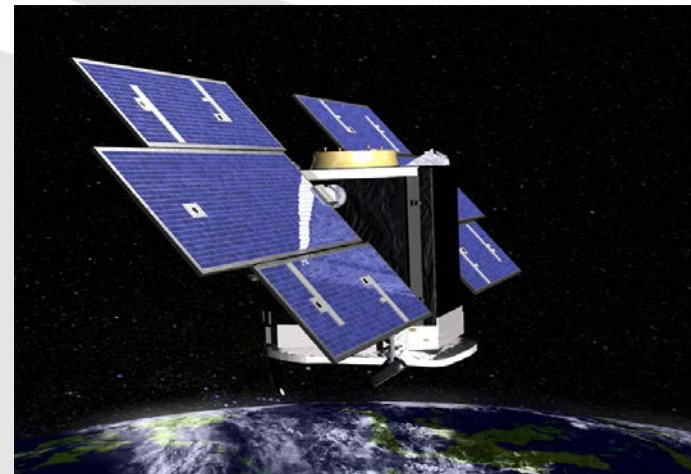


Mission Summary: CloudSat



Salient Features

- Instruments: 94 GHz radar space borne system
- Launch Vehicle: Co-manifested with CloudSat on Delta II
- Launch date: 28 April 2006
- Orbit: Sun Synchronous, 98.2° inclination, 688km
- Formation Flying with CALIPSO (C-Train)
- EOPM: April 2008; Currently in extended mission
- Partnership with DoD (on-orbit ops), DoE (validation) and CSA (radar development)
- Principal Investigator: Graeme Stephens, JPL
- Project Manager: Deborah Vane, JPL
- NASA Program Executive: Charles Webb, HQ
- ESSP Program Manager: Greg Stover, HQ-LaRC



Science

- Measure the vertical structure of clouds and quantify their ice and water content
- Improve weather prediction and clarify climatic processes.
- Improve cloud information from other satellite systems, in particular those of Aqua
- Investigate the way aerosols affect clouds and precipitation
- Investigate the utility of 94 GHz radar to observe and quantify precipitation, in the context of cloud properties, from space