



# Mission Summary: CALIPSO



## Salient Features

- Instruments:
  - Dual wavelength, polarization backscatter lidar (532 & 1064 nm)
  - Infrared Imaging Radiometer at 8.65, 10.6, 12.05  $\mu\text{m}$
  - Wide Field-of-view Camera at 645 nm
- Launch Vehicle: Co-manifested with CloudSat on Delta II
- Launch date: 28 April 2006
- Orbit: Sun Synchronous, 98.2° inclination, 688km
- Formation Flying with CloudSat (C-Train)
- EOPM: April 2009; Currently in extended mission
- Partnership with CNES (S/C, IIR, on-orbit ops)
- Principal Investigator: David Winker, LaRC
- Project Scientist: Chip Trepte, LaRC
- NASA Program Executive: Charles Webb, HQ
- ESSP Program Manager: Greg Stover, HQ-LaRC



## Science

- Produce a global uniformly-calibrated aerosol and cloud data set
- Identify cloud ice-water phase and aerosol type
- Improved understanding of aerosol and cloud effects on radiation budget
- Improve aerosol and cloud information from other A-train sensors
- Improved predictive capability for climate, weather, air quality