

The JPL Cubesat Development Lab

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The Cubesat Development Lab at JPL
The Cubesat Development Lab (CDL) supports CubeSat development projects with a significant JPL involvement. The CDL is managed by the Instrument Division at JPL.

The physical 1500 sq. ft. facility, supportive of building and integrating flight unit, include:

- 250 sq ft viewing gallery/meeting room
- 1250 sq ft clean room
- Class 300K (ISO 8.5) controlled environment
- Complete internet/private intranet systems
- Electrostatic discharge (ESD) flooring
- Port for GPS applications
- 5 pure air class 100 (ISO 5) clean benches
- Limited (small) thermal vacuum facilities
- Production soldering and fabrication station
- 3D printer
- Cryogenic ventilation system

Current Status

CDL provides cleanroom support for building and integrating the flight platform. Other facilities nearby, including the Small Spacecraft Dynamic Testbed, are arising in parallel for testing, building, and integrating major subsystems at early or even later stages, supporting low cost, rapid development. Smaller, specialized facilities can be scheduled for particular kinds of environmental testing.

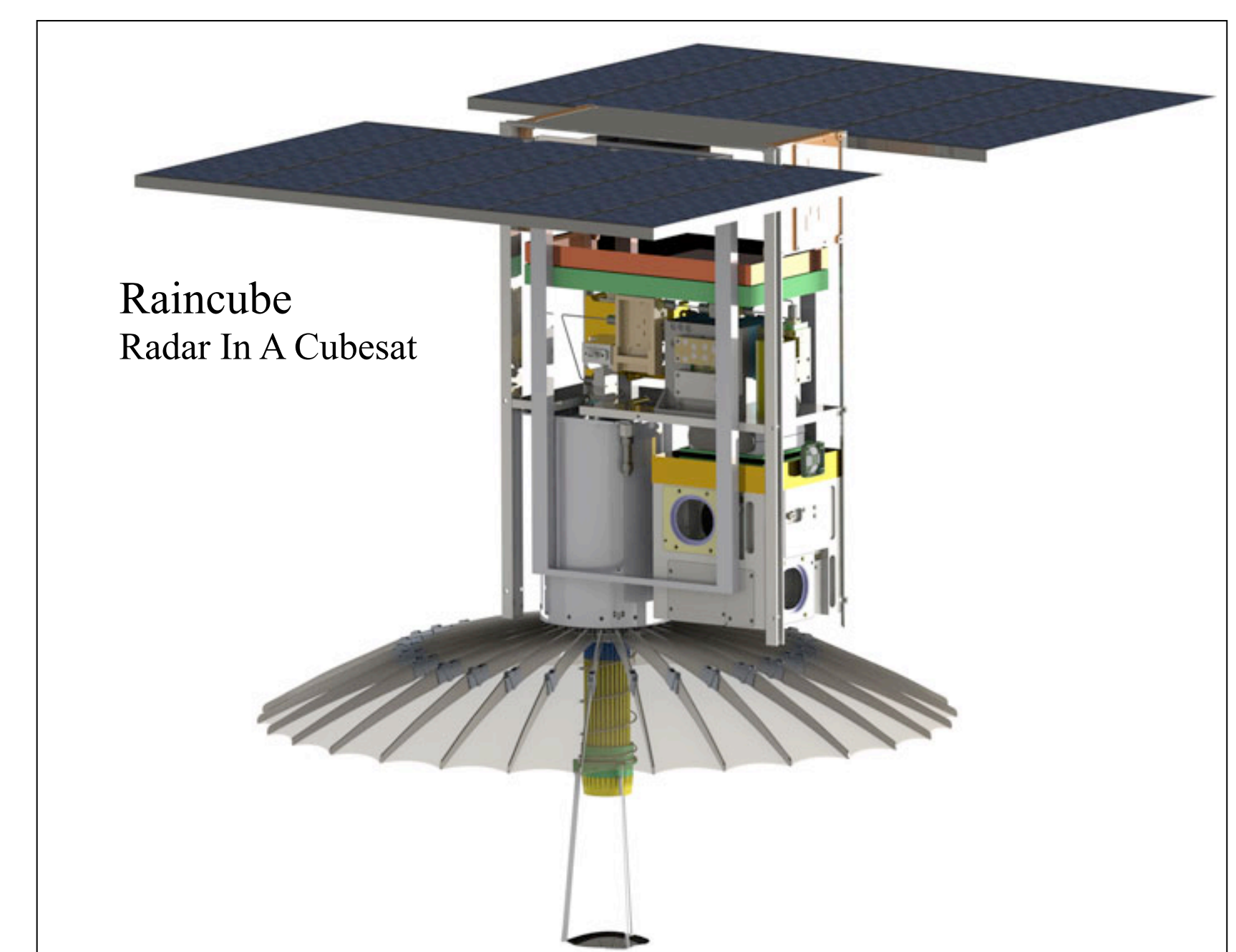
Personnel / Contacts:

- Pamela Clark (mailto:Pamela.E.Clark@jpl.nasa.gov) (818-393-3262) - Director

Ongoing Research Projects:

- Cubesats (<http://www.jpl.nasa.gov/cubesat/missions/>)
- MarCo, Raincube, Asteria, and Tempest D (RACE/MASC) have reserved lab bench space in the CDL at the present time.
- Tempest D (<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7167136>)

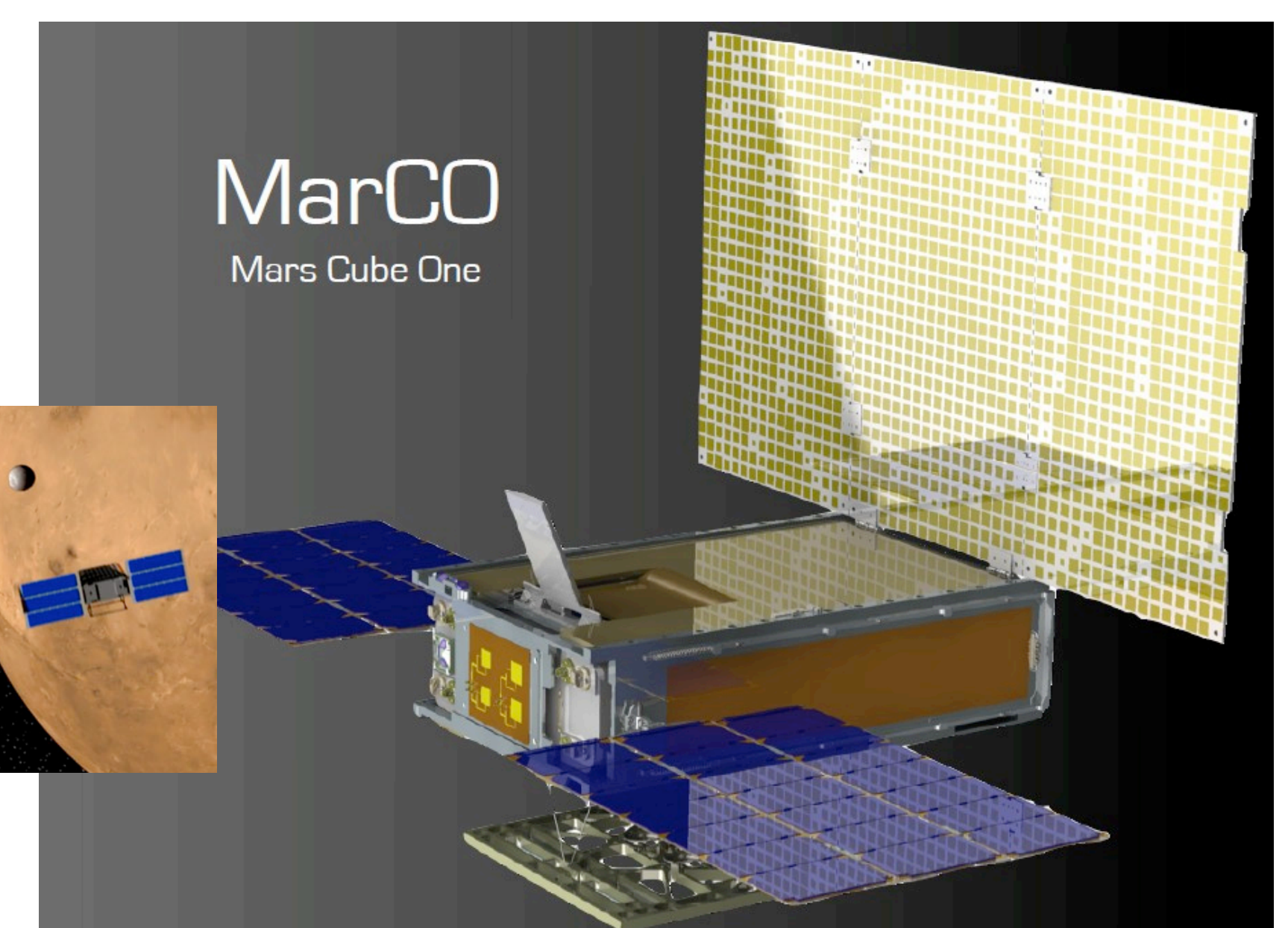
Some Recent Users of JPL CDL



1 x 6U demo compact Ka-band precipitation radar and ultra-compact deployable antenna



1 x 6U demo for two-stage pointing system to support exoplanet transit photometry



2 x 6U Demo dual band communication to support local and long range communication during INSIGHT EDL

<http://scienceandtechnology.jpl.nasa.gov/cubesat-development-lab>

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