



An Introduction to
Jet Propulsion Laboratory
California Institute of Technology

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Agenda

JPL

- What is JPL?
- Who are the JPLers?
- What are we currently flying?
- What will we be doing in the future?



What is JPL?

- A division of the California Institute of Technology
 - JPL employees are Caltech employees
- A contractor-operated Federally-funded Research and Development Center
 - NASA contracts with Caltech to operate JPL
 - Government-owned facilities and equipment



Who are the JPLers?

- About 5,300 employees
- Most of the technical employees are in the Engineering and Science Directorate
 - ~4,000 people, with about 3,217 technical employees
 - 1,078 - Ph.D.s; 1,014 - Master's; 1,050 - Bachelor's
 - Basic roles
 - Scientific research related to space exploration
 - Technology development to support future space missions
 - Implementation of scientific space missions



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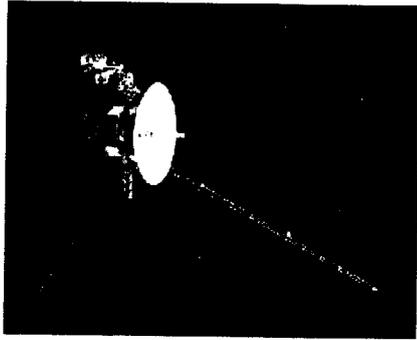
What are we currently flying?



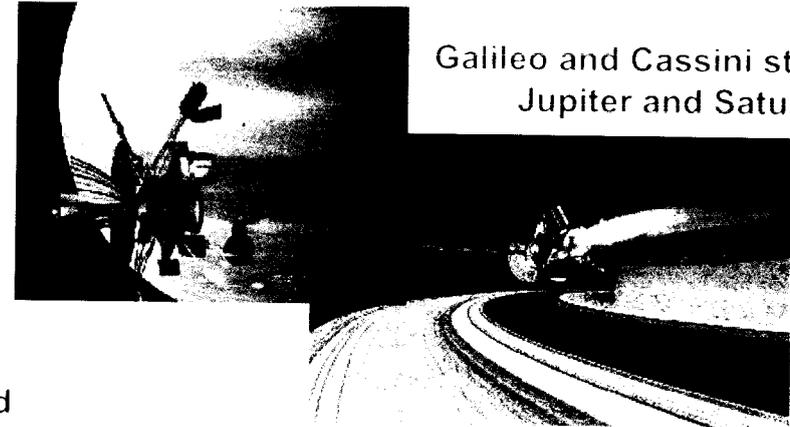
Fourteen JPL spacecraft now operating across the solar system

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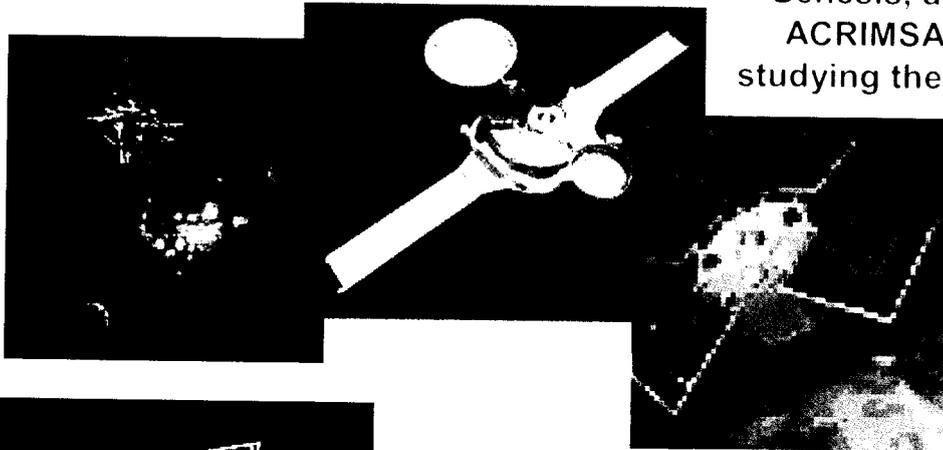
Two Voyagers on an interstellar mission



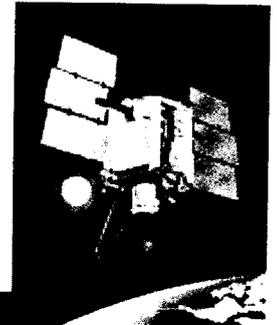
Galileo and Cassini studying Jupiter and Saturn



Ulysses, Genesis, and ACRIMSAT studying the sun



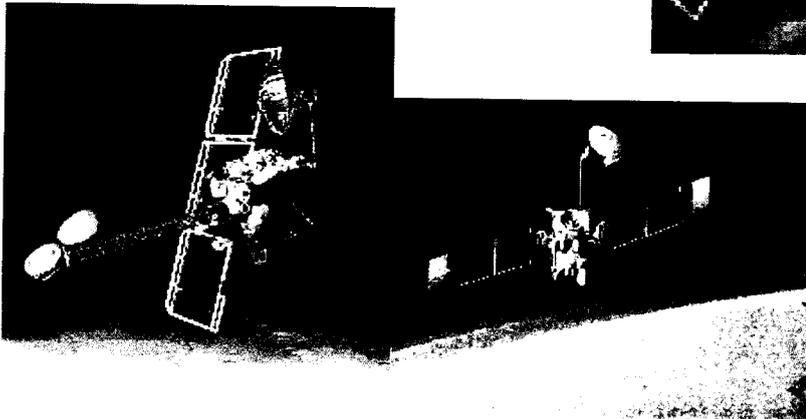
Stardust returning comet dust



Topex/Poseidon, Quikscat, Jason 1, and GRACE monitoring Earth

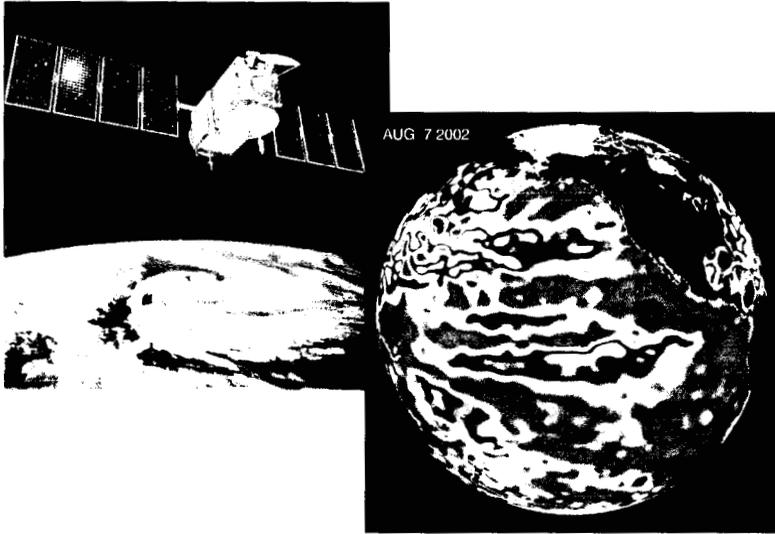


Mars Global Surveyor and Mars Odyssey in orbit around Mars

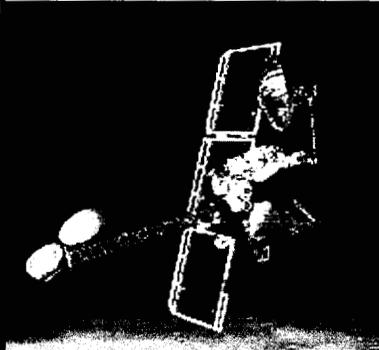




2001-2002 missions and results **JPL**



Jason launched December 7, 2001



2001 Mars Odyssey began taking data in February



Launched Atmospheric Infrared Sounder (AIRS) in May.



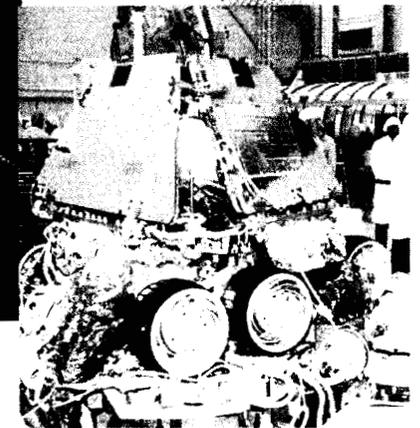
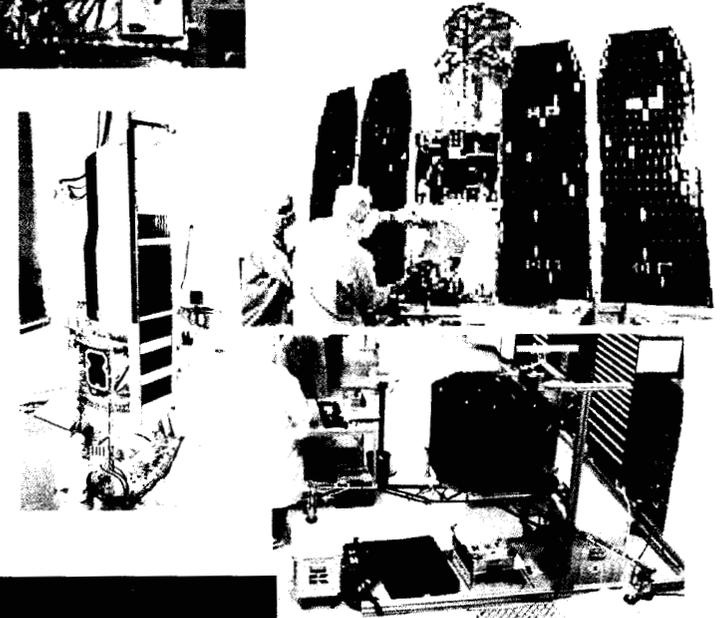
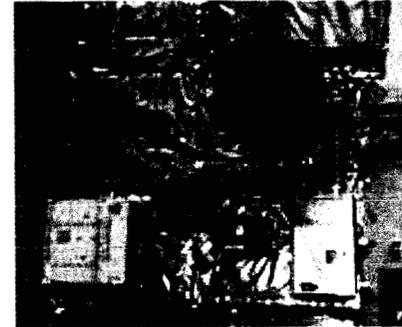
Launched Gravity Recovery and Climate Experiment (GRACE) spacecraft in March.

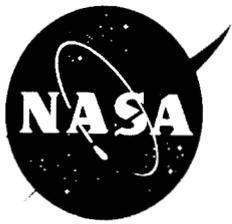


Fiscal year 2003 launches



- Seawinds on Japanese ADEOS 2 on December 10
- Space Infrared Telescope Facility (SIRTF) in January
- Galaxy Explorer (GALEX) in January or February
- Rosetta instruments launch in January
- Mars Express instruments launch in May
- Two Mars Exploration Rovers (MERs) in May and June





2003 - 2004:

The Busiest Period in JPL's History



January 9, 2003	Space Infrared Telescope Facility (SIRTF) launch
February 2003	Galaxy Evolution Explorer (GALEX) launch
May 30, 2003	Mars Exploration Rover – 1 (MER-1) launch
June 25, 2003	Mars Exploration Rover – 2 (MER-2) launch
January 2, 2004	Deep Impact Launch
January 2, 2004	Stardust Encounter with Comet Wild-2
January 4, 2004	Mars Exploration Rover – 1 (MER-1) landing
January 25, 2004	Mars Exploration Rover – 2 (MER-2) landing
January 2004	Microwave Limb Sounder (MLS) and Tropospheric Emission Spectrometer (TES) launch on EOS-AURA
April 15, 2004	Cloudsat launch
July 1, 2004	Cassini Saturn orbit insertion
September 8, 2004	Genesis solar wind sample return (first samples from beyond lunar orbit)
October 26, 2004	First Cassini images of Titan surface
January 14, 2005	Huygens probe Titan atmospheric entry

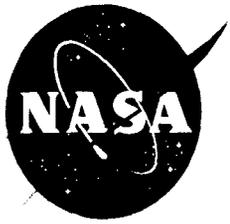
In addition to the above key events:
• 7 to 12 missions in development
• 14 missions in operations



Future Missions for this Decade



- Cloudsat (2004)
- Deep Impact (2004)
- Mars Reconnaissance Orbiter (2005)
- Aquarius (2006)
- Dawn (2006)
- Orbiting Carbon Observatory (2006)
- Herschel/Planck (2007)
- Kepler (2007)
- Mars Smart Lander (2009)
- Netlander (2009)
- Space Interferometer Mission (2009)



Employee Activities



DIVERSITY PROGRAMS

- ACW (Advisory Council for Women)
- ACMA (Advisory Committee on Minority Affairs)
- African American Resource Team
- Amigos Unidos
- Asian American Council

ATHLETIC PROGRAMS

- Basketball
- Volleyball
- Softball

CLUBS

- Aero Association of Caltech
- Astronomy
- Amateur Radio
- Bicycle
- Dance/Drama
- Fishing
- French
- Genealogy
- Golf
- Gun
- Hiking
- Running
- Stamp
- Table Tennis
- Tennis
- Toastmasters
- Camper/Trailer Club



What we do for fun

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