Who We Are

NASA VISION
To discover and expand knowledge for the benefit of humanity.

NASA MISSION
Pioneer advances in aeronautics, space exploration, science, and technology to transform our understanding of the universe, unlock new opportunities, and inspire the world.

SCIENCE MISSION DIRECTORATE VISION
To lead a globally interconnected program of scientific discovery that encourages innovation, positively impacts people’s lives, and is a source of inspiration.
NASA Earth Science Mission: To Protect and Improve Life on Earth

Measuring

Understanding

Delivering
Societal Benefit
Earth as a Complex Inter-related System

NASA Earth Science advances knowledge of Earth as a system to meet the challenges of environmental change and to improve life on our planet.

In parallel with research, NASA pursues innovative and practical uses of Earth science data and results to inform decisions and actions.

**Earth System Science**: Requires quantitative understanding of *interactions between processes* in order to define the Earth system – nonlinearities link spatial and temporal scales.
Earth Science Objective:

Advance knowledge of Earth as a system to meet the challenges of environmental change and to improve life on our planet

Major Activities

• Develop *technology* we need to make observations
• Make the *observations* we need to “see” our earth systems
• Advance our *understanding* of the physical, chemical, and biological mechanisms and their interactions
• Bridge to decision-makers so they can *apply* understanding to improve life on our planet
NASA Earth Science Division Elements

Technology

- Develops and demonstrates technologies for future satellite and airborne missions: Instruments, Information Systems, Components, InSpace Validation (CubeSat and SmallSat form factors).

Flight including Data Systems

- Develops, launches, and operates NASA's fleet of Earth-observing satellites, instruments, and aircraft.
- Manages data systems to make data and information products freely and openly available.

Research & Analysis

- Supports integrative research that advances knowledge of Earth as a system.
- Includes six science focus areas plus field campaigns, modeling, and scientific computing.

Applied Sciences

- Develops and supports use of Earth observations and scientific knowledge for public and private planning and decisions.
- Activities include disaster response support and capacity building.
Science Leadership Priorities

- Exploration and Scientific Discovery
- Innovation
- Interconnectivity and Partnerships
- Inspiration
What’s Next?