



National Aeronautics and
Space Administration

Climate Research at NASA

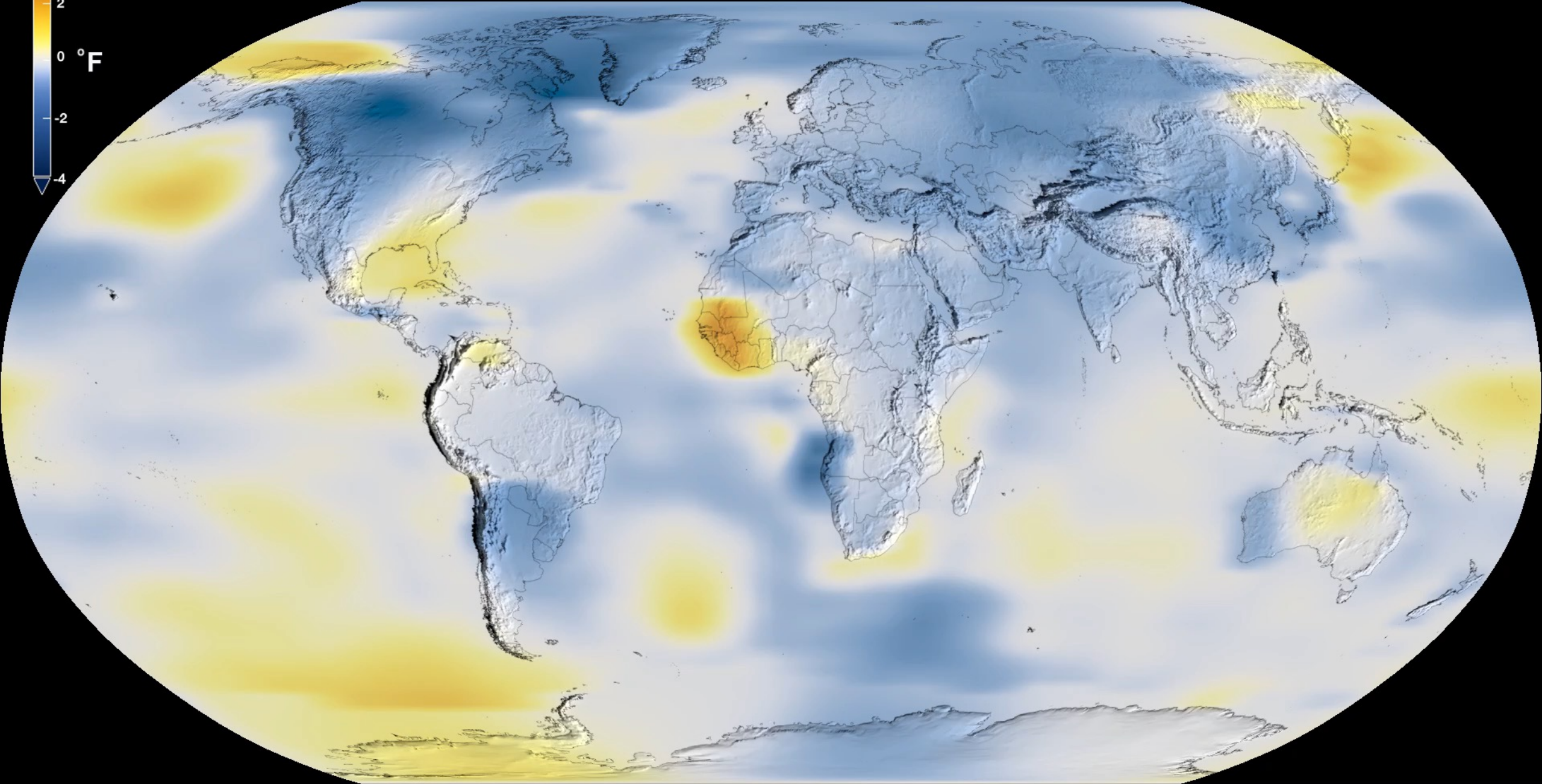
KATE CALVIN

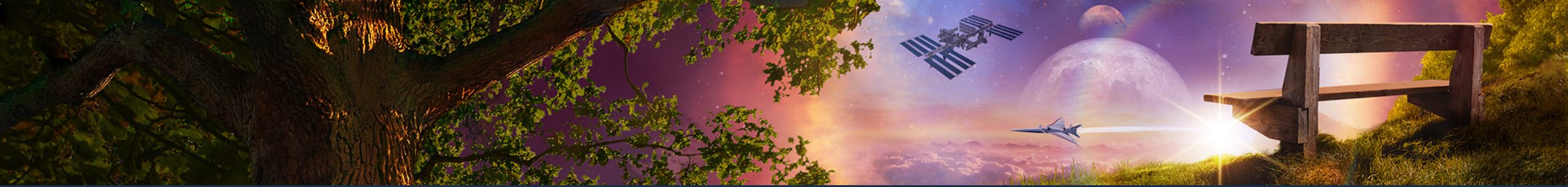
NASA Chief Scientist
and Senior Climate
Advisor

April 22, 2022



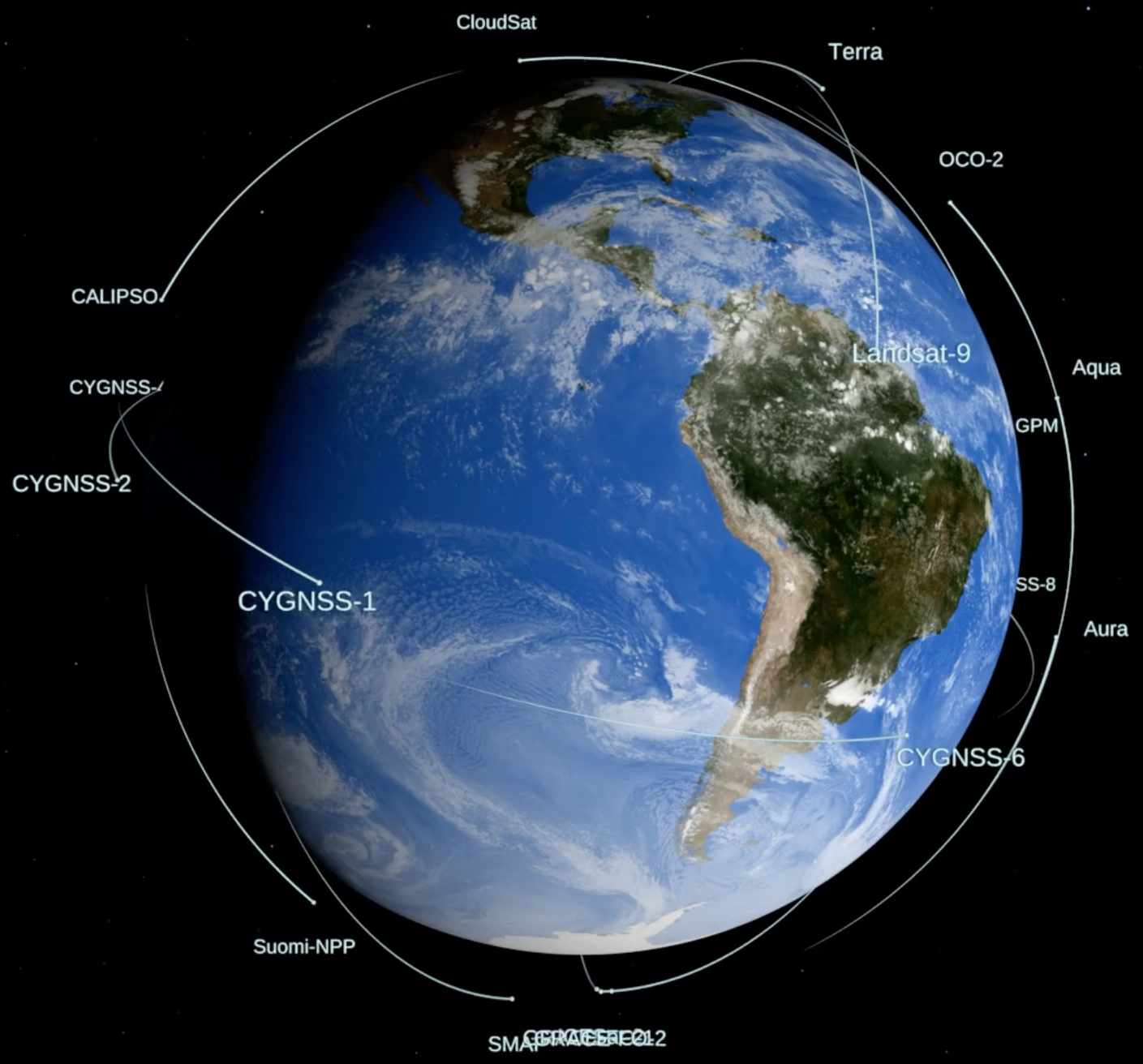
1880 - 1884





NASA and Climate

- NASA is the U.S. space agency that provides end-to-end research about our home planet
- NASA has more than two dozen satellites and instruments in orbit, including several on the International Space Station
- NASA develops technologies that can help mitigate or adapt to climate change, like sustainable aviation technologies
- NASA provides information that aides in disaster response and informs planning
- Working to make climate change data more accessible for researchers, planners and individuals in vulnerable communities
- NASA facilities are also impacted by climate change



EARTH SYSTEM OBSERVATORY

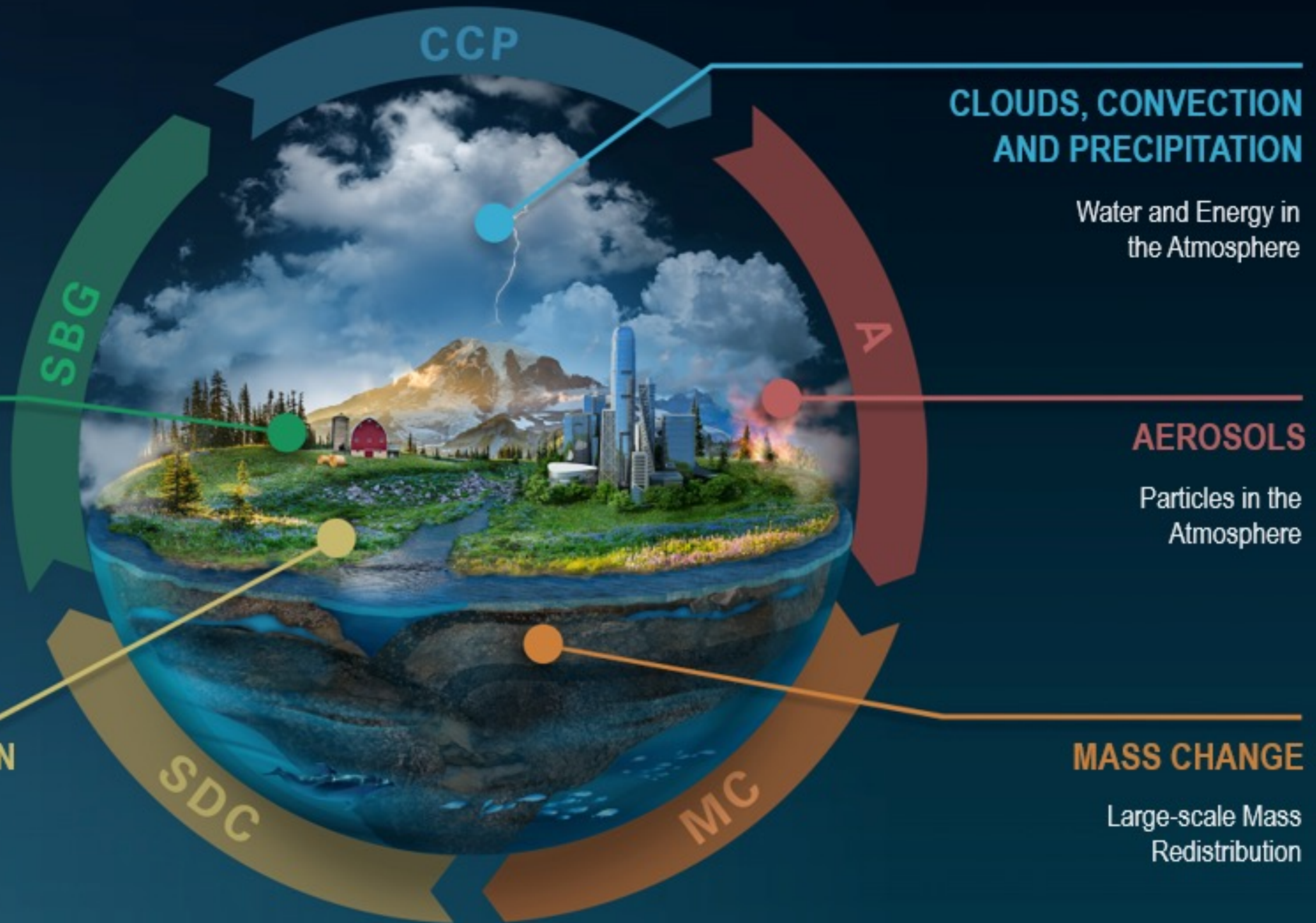
INTERCONNECTED CORE MISSIONS

SURFACE BIOLOGY AND GEOLOGY

Earth Surface & Ecosystems

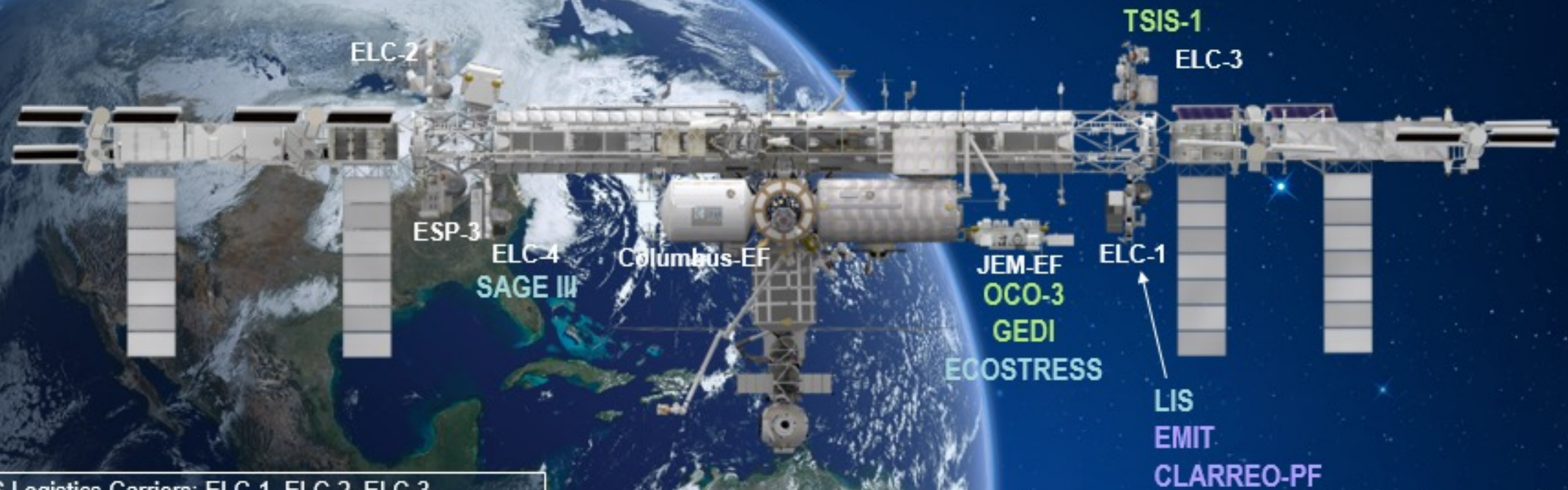
SURFACE DEFORMATION AND CHANGE

Earth Surface Dynamics



INTERNATIONAL SPACE STATION

EARTH SCIENCE OPERATING MISSIONS



EXPRESS Logistics Carriers: ELC-1, ELC-2, ELC-3
External Stowage Platforms: ESP-3
Columbus External Payload Facility: Columbus-EF
Kibo External Payload Facility: JEM-EF

(PRE) FORMULATION ●
IMPLEMENTATION ●
PRIMARY OPS ●
EXTENDED OPS ●





What's Next?

- Launching several Earth science missions
- Testing an all-electric airplane
- Continuing to provide Earth observations and applied science information to those who need it
- Working to make NASA data more accessible

A surreal landscape featuring a large tree on the left, a wooden bench on the right, and a satellite in the sky. The background is a vibrant, multi-colored sky with a large moon, a smaller planet, and a jet flying over a sea of clouds. The scene is illuminated by a bright sun or star on the right.

Thank you!