

National Aeronautics and
Space Administration



EXPLORE EARTH

National Academies Space Science Week
NASA SMD Science Endeavors Panel
Dr. Karen St. Germain, Earth Science Division Director
March 21, 2022



EARTH FLEET

INVEST/CUBESATS

- CSIM-FD 2023
- HARP 2022
- CIRIS 2023
- CTIM* 2022
- HYTI* 2022
- SNOOPI* 2022
- NACHOS 2022
- NACHOS2* 2022

JPSS INSTRUMENTS

- OMPS-LIMB 2022
- LIBERA 2027

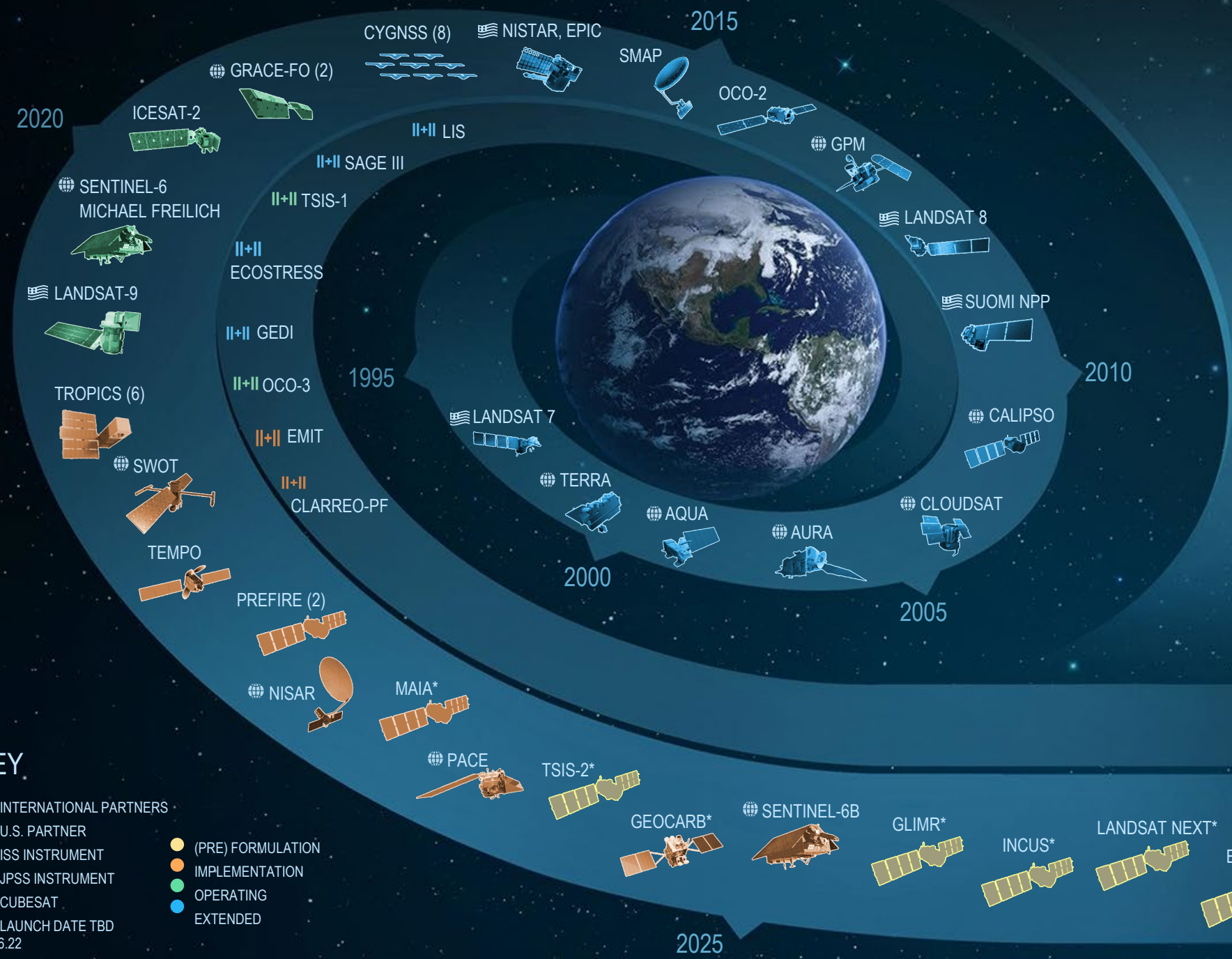
ISS INSTRUMENTS

MISSIONS

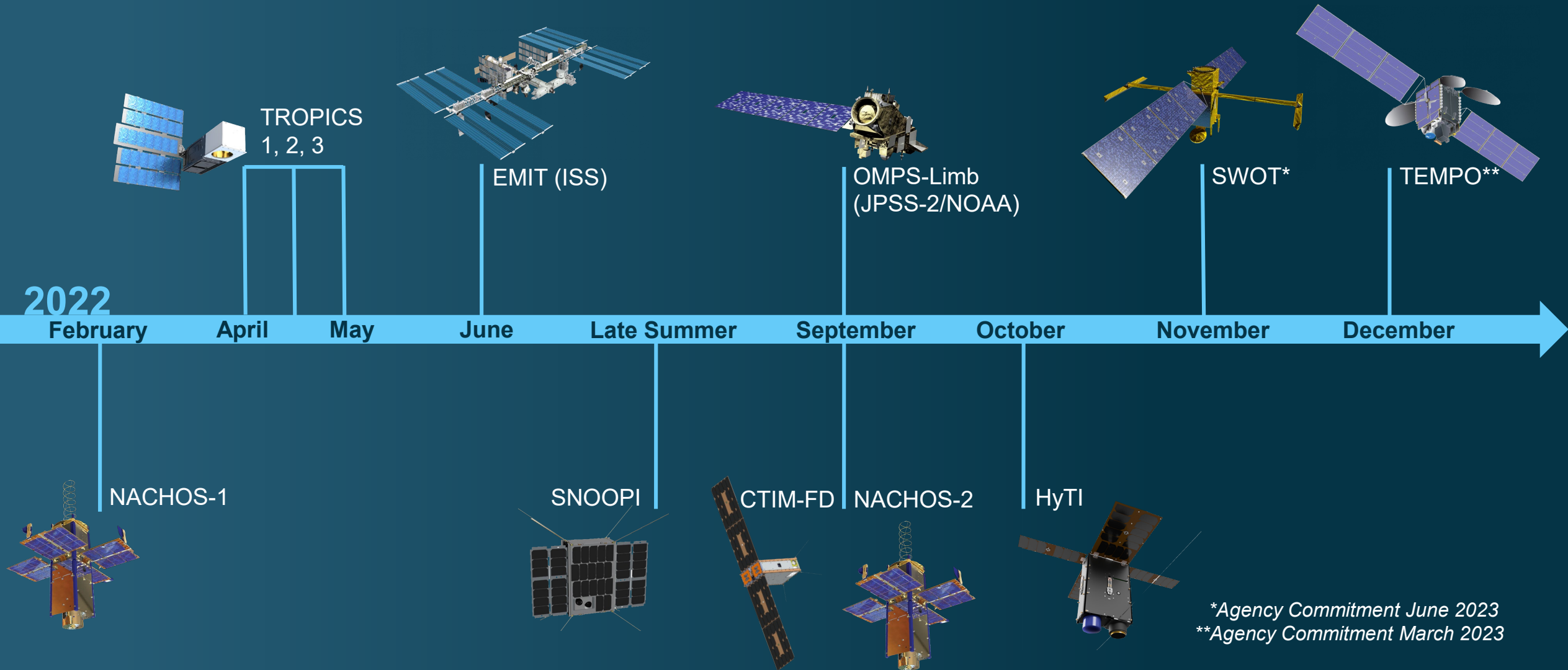
KEY

- INTERNATIONAL PARTNERS
- U.S. PARTNER
- ISS INSTRUMENT
- JPSS INSTRUMENT
- CUBESAT
- LAUNCH DATE TBD
- (PRE) FORMULATION
- IMPLEMENTATION
- OPERATING
- EXTENDED

03.16.22



Upcoming Earth Science Launches



EARTH SYSTEM OBSERVATORY

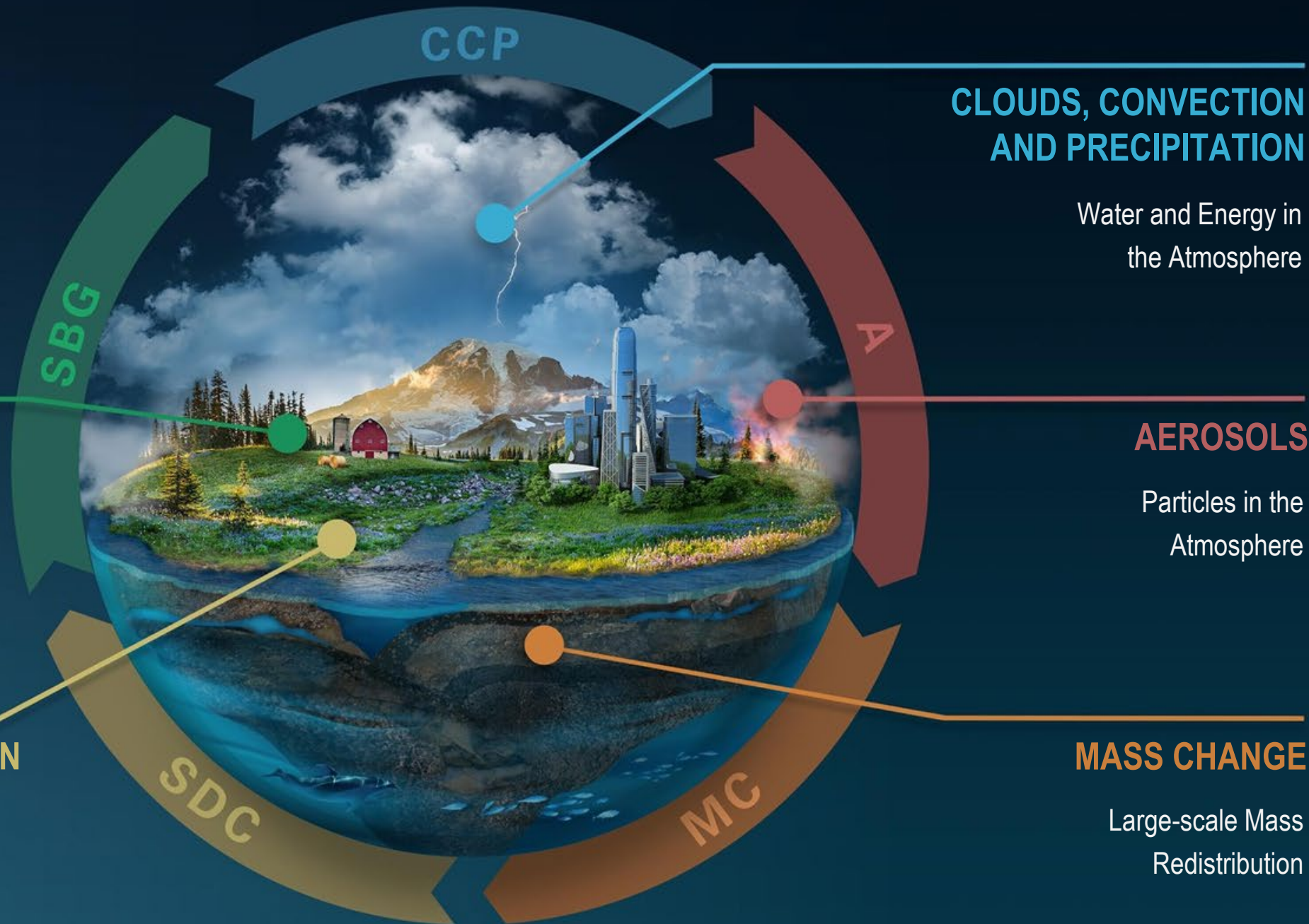
INTERCONNECTED
CORE MISSIONS

SURFACE BIOLOGY AND GEOLOGY

Earth Surface &
Ecosystems

SURFACE DEFORMATION AND CHANGE

Earth Surface Dynamics



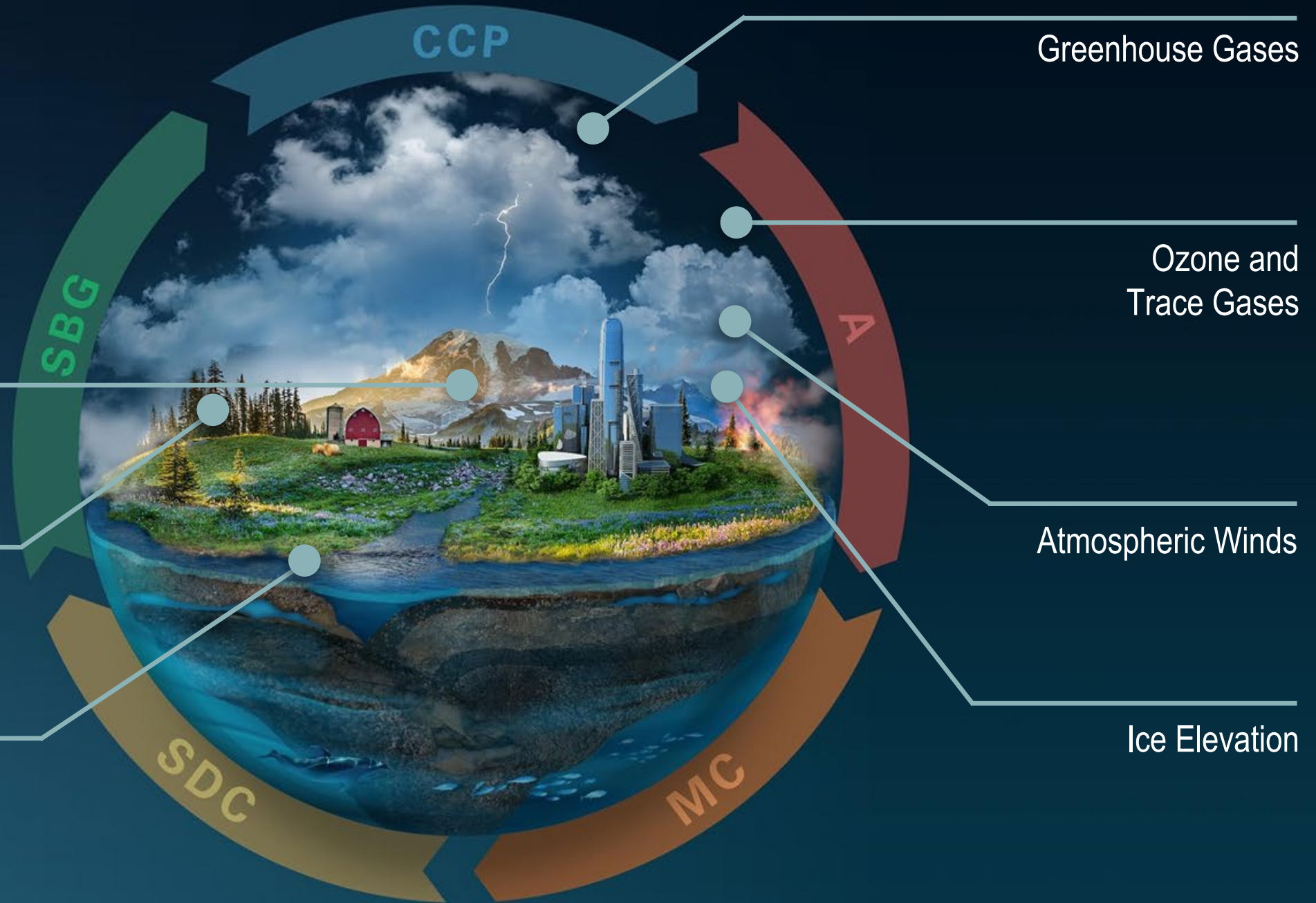
EARTH SYSTEM OBSERVATORY

INNOVATION & COMPETITION
EARTH EXPLORER MISSIONS

Snow Depth and
Water Content

3D Ecosystem
Structure

Ocean Surface
Winds and Currents



NASA's Open-Source Science Initiative

- **Initiate** new missions, research and applied activities as open-source science projects.
- **Implement clear policies** for software, publications and data.
- **Integrate and improve** data management, access, computing, analytics and scientific collaboration.
- **Transform to OPen Science (TOPS)** is a 5-year effort focused on capacity building, partner engagement, and incentives to help accelerate scientific discovery through open science.

