National Aeronautics and
Space Administration

NASA
earth

NASA's GHG Observation Plans for the next 4 years

Ken Jucks
NASA HQ Program Scientist
Earth Science Division

About this talk

- I will be matter of fact.
- What is written is not my opinion.
- I will attempt to NOT put my opinions into this presentation.
- There are many things I am not free to say publicly until NASA SMD gets internal concurrence regarding how to communicate this budget.

Budget Authority ($M)	FY 2024 Operating Plan[1/]	FY 2025 Enacted[2/]	FY 2026 Request				
			FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Exploration	**7,648.0**	**7,666.2**	**8,312.9**	**8,312.9**	**8,312.9**	**8,012.9**	**8,012.9**
Moon to Mars Transportation System	4,781.5		4,894.6	4,697.7	3,906.8	3,091.4	3,590.0
Moon To Mars Systems Development	2,772.4		2,815.4	2,864.2	2,650.5	2,435.8	2,490.2
Human Exploration Requirements & Architecture	94.1		602.9	751.0	1,755.6	2,485.7	1,932.7
Space Operations	**4,220.2**	**4,220.0**	**3,131.9**	**3,131.9**	**3,131.9**	**3,431.9**	**3,431.9**
International Space Station	1,240.6		920.1	920.1	920.1	920.1	920.1
Space Transportation	1,746.1		1,293.8	1,263.8	1,263.8	1,263.8	1,245.9
Space and Flight Support	1,005.1		645.8	645.8	645.8	645.8	645.8
Commercial LEO Development	228.4		272.3	302.3	302.3	602.3	620.2
Space Technology	**1,100.0**	**1,100.0**	**568.9**	**568.9**	**568.9**	**568.9**	**568.9**
Science	**7,325.4**	**7,334.2**	**3,907.6**	**3,907.6**	**3,907.6**	**3,907.6**	**3,907.6**
Earth Science	2,138.9		1,035.9	1,055.9	1,081.9	1,106.9	1,077.9
Planetary Science	2,764.3		1,891.3	1,861.3	1,867.3	1,822.3	1,851.3
Astrophysics	1,529.7		523.0	543.0	501.0	521.0	521.0
Heliophysics	805.0		432.5	422.5	432.5	432.5	432.5
Biological and Physical Sciences	87.5		25.0	25.0	25.0	25.0	25.0
Aeronautics	**935.0**	**935.0**	**588.7**	**588.7**	**588.7**	**588.7**	**588.7**
STEM Engagement	**143.0**	**143.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Safety, Security, and Mission Services	**3,131.0**	**3,092.3**	**2,118.3**	**2,118.3**	**2,118.3**	**2,118.3**	**2,118.3**
Mission Services & Capabilities	2,042.6		1,498.0	1,671.8	1,671.8	1,671.8	1,671.8
Engineering, Safety, & Operations	1,088.3		620.3	446.5	446.5	446.5	446.5
Construction and Environmental Compliance & Restoration	**326.3**	**300.0**	**140.1**	**140.1**	**140.1**	**140.1**	**140.1**
Construction of Facilities	274.8		$110.0	$105.0	$105.0	$105.0	$105.0
Environmental Compliance and Restoration	51.5		$30.1	$35.1	$35.1	$35.1	$35.1
Inspector General	**48.1**	**47.6**	**40.7**	**40.7**	**40.7**	**40.7**	**40.7**
NASA Total	**24,877.0**	**24,838.3**	**18,809.1**	**18,809.1**	**18,809.1**	**18,809.1**	**18,809.1**

1/ - FY 2024 reflects amounts in Public Law 118-42, Consolidated Appropriations Act, 2024, adjusted by NASA's September 2024 Operating Plan, plus $2.5M for IT Modernization WCF and $4.5M for the GSA TMF.
2/ - FY 2025 reflects the funding amount specified in Public Law 119-4, Full-Year Continuing Appropriations and Extensions Act, 2025.

Earth Science

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- Prioritizes missions such as NISAR, SWOT, SMAP, PACE, and GRACE-Continuity that provide information on natural hazards and environmental conditions that support various industries and users beyond the science community.
- $70M within Sustainable Land Imaging to ensure continuity of Landsat data, as NASA restructures the Landsat Next mission and studies more affordable mission architectures in collaboration with the U.S. Geological Survey.
- $154M for competitively awarded research to enhance scientific understanding, maintain U.S. leadership, provide economic benefits to industry, protect taxpayers through better environmental monitoring, and stimulate innovation in commercial Earth observation.
- $111M for the Responsive Science Initiatives and Applied Science programs to support high priority integrated science and applications relevant to users and decisionmakers, including agriculture and wildfires.
- $51M for the Earth Science Technology Program, to develop advanced technologies that enable new science capabilities, enhance measurements, and reduce costs and risks for future Earth science instruments.

Changes are coming…per the Administration budget.

- “OCO-2 and OCO-3, two climate missions beyond their prime mission, will close out and end in FY 2026.”
- The budget submission to Congress has $0 for both missions in FY26.
- That includes competed science.

What is preserved…

- EMIT will continue to operate.
- If you read the budget, you will see NO reference to any atmospheric retrievals from EMIT, other than dust.
- But the ISS is not a priority in this budget. The language is to work toward ending its operations as soon as possible.

- GEDI also survived. It has uses beyond usual scientific research, which likely helped.

Any mention of GeoCarb?

- No…

Any mention of CMS?

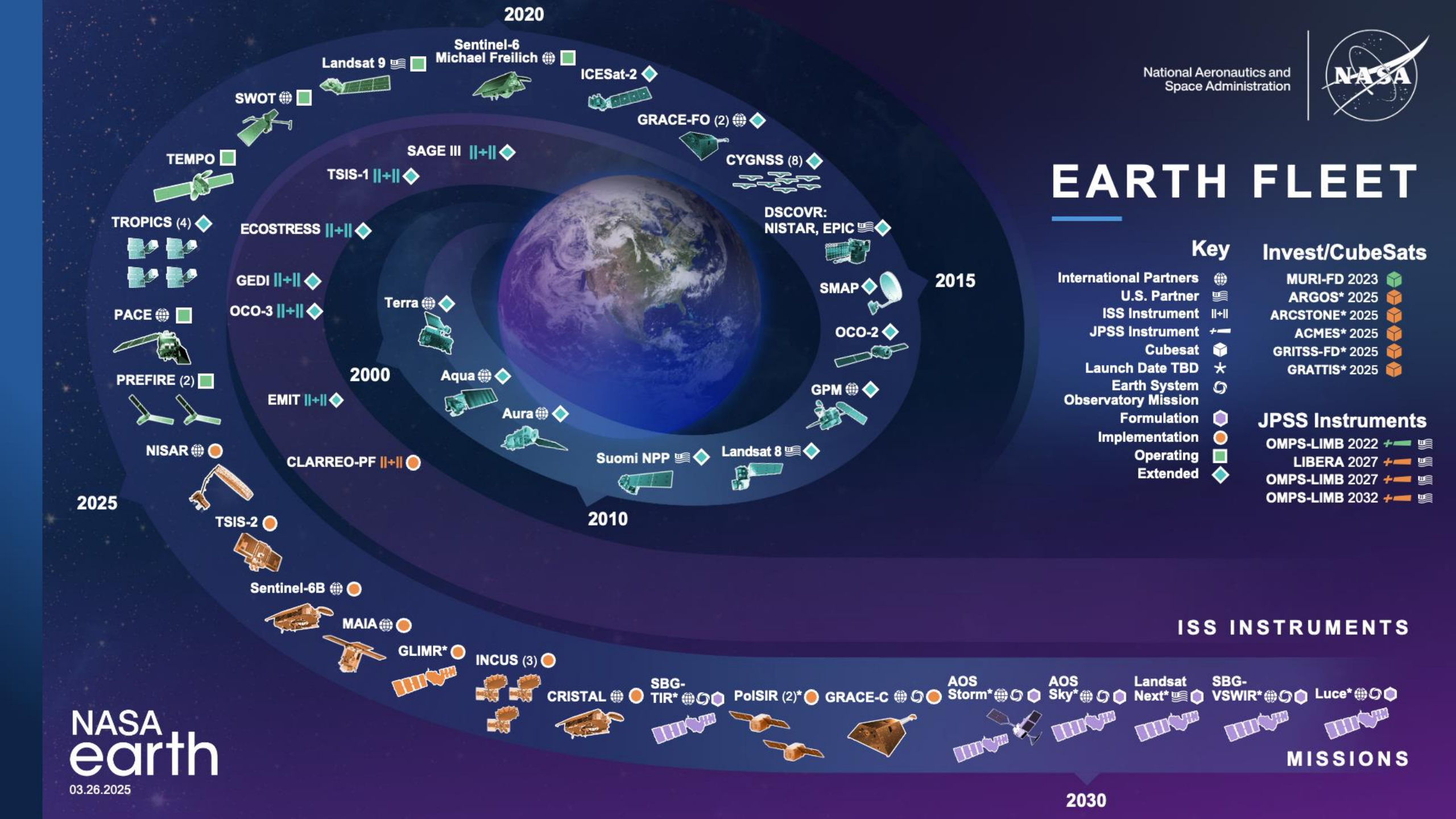
Yes. “New selections in FY 2026 will be limited. Several specific research calls that overlap with discipline science areas will not continue solicitations and selections in FY 2026, including Carbon Monitoring System and Land Cover and Land Use Change.”

What about Earth System Explorer selections?

- That review process has continued.
- The current budget submission allows for the selection of ONE mission, not two as originally planned.
- There is no language in the budget submission about which one may have “programmatic” priority.
- So…Carbon-I is still alive. But it’s chances of selection just went down by a factor of 2.

Where do we go from here???

- The Executive Branch budget submit is the first step in the budget process.
- Congress passes budgets.
- All the US agencies are REQUIRED to submit budget plans that are consistent with the submitted budget. This happens every year. That process is afoot within NASA.
- What Congress passes is TBD.
- What about ongoing grants? Stay tuned for guidance on NASA principles on this…



National Aeronautics and Space Administration

NASA

EARTH FLEET

Key

- International Partners
- U.S. Partner
- ISS Instrument
- JPSS Instrument
- Cubesat
- Launch Date TBD
- Earth System Observatory Mission
- Formulation
- Implementation
- Operating
- Extended

Invest/CubeSats

- MURI-FD 2023
- ARGOS* 2025
- ARCSTONE* 2025
- ACMES* 2025
- GRITSS-FD* 2025
- GRATTIS* 2025

JPSS Instruments

- OMPS-LIMB 2022
- LIBERA 2027
- OMPS-LIMB 2027
- OMPS-LIMB 2032

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03.26.2025