

Setting the Stage for Discussions

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CESAS Co-Chairs

October 27 & 29, 2025

1. What world are we living in? (overview of what Art and others have heard from sponsors)
2. Take-aways from questionnaire
3. Overview of what to expect from Workshop (and implications for Decadal)
4. Implications for next Decadal
5. What can CESAS do?

What world are we living in?

Three different budget realities and their implications:

1. President's Budget Request (PBR)
2. House Bill
3. Senate Bill

Impacts on current missions, new missions, continuity

National Aeronautics and Space Administration

**CHANGE FROM
FY2025
(funding in
millions)**

	FY25 Enacted	FY26 PBR	FY26 House	FY26 Senate
NASA (Topline)	\$24,838.33	\$18,809.10 (-24.3%)	\$24,838.33 (0%)	\$24,899.68 (0.3%)
Science Mission Directorate	\$7,334.20	\$3,907.60 (-46.2%)	\$6,00.00 (-18.2%)	\$7,300.00 (-0.5%)
<i>Earth Science</i>	<i>\$2,195.00</i>	<i>\$1,035.90 (-52.8%)</i>	<i>\$1,325.00 (-39.6%)</i>	<i>\$2,166.00 (-1.3%)</i>
<i>Planetary Science</i>	<i>\$2,716.70</i>	<i>\$1,891.30 (-30.4%)</i>	<i>\$2,500.00 (-8.0%)</i>	<i>\$2,551.80 (-6.1%)</i>
<i>Heliophysics</i>	<i>\$805.00</i>	<i>\$432.00 (-46.3%)</i>	<i>\$625.00 (-22.4%)</i>	<i>\$887.30 (10.2%)</i>
STEM Engagement	\$143.00	\$0 (-100%)	\$84.00 (-41.26%)	\$148.00 (3.5%)

(From AGU)

President's Budget Request (PBR):

- Terminates over 40 missions (more than 1/3), including top priority decadal missions, Earth System Observatory missions
- Cuts Landsat Next and directs NASA and USGS to propose a scaled-down version.
- Significantly cuts Research and Analysis across SMD including a 50% cut in Earth Science

House Bill:

- Notes the importance of the Earth System Observatory and directs NASA to select missions capable of operating in a spectrum-constrained environment
- Provides \$70 million for the Sustainable Land Imaging request to support the Landsat record through Landsat Next
- Provides \$26 million for EPSCoR and \$58 million for the Space Grant program.

Senate Bill:

- Unequivocally states that the report should not be interpreted as suggestions but as statute
- Rejects all mission terminations proposed in the PBR
- Affirms the importance of commitments to international partners
- Provides \$200.4 million for Earth Venture Class Missions and supports selection of Earth System Explorers; rejects the proposed termination of the Earth System Observatory missions; provides \$183 million for Landsat NEXT and encourages NASA to maintain the current three-satellite architecture; and reiterates support for Earth System Modeling, including at Goddard Institute for Space Studies (GISS)

National Oceanic and Atmospheric Administration (NOAA)

CHANGE FROM FY2025 (funding in millions)	FY25 Enacted	FY26 PBR	FY26 House	FY26 Senate
NOAA (Topline)	\$6,182.50	\$4,515.30 (-27.0%)	\$5,795.05 (-6.3%)	\$6,142.29 (-0.7%)
National Ocean Service		\$434.25 (-36.5%)	\$699.00 (2.2%)	\$685.70 (0.3%)
Oceanic and Atmospheric Research		\$0 (-100%)	\$726.80 (0.1%)	\$707.05 (-2.6%)
National Weather Service		\$1,447.93 (7.1%)	\$1,529.50 (13.2%)	\$1,357.86 (0.5%)
NESDIS		\$1,531.37 (-14.8%)	\$1,605.12 (-10.7%)	\$1,682.80 (-6.4%)
Mission Support		\$327.22 (-30.6%)	\$416.81 (-11.6%)	\$437.62 (-7.2%)
Office of Marine and Aviation Operations		\$432.68 (-1.6%)	\$460.62 (4.8%)	\$473.36 (7.7%)

President's Budget Request (PBR):

- Instructs NESDIS to “**immediately cancel all major instrument and spacecraft contracts on the Geostationary Extended Observations (GeoXO) program,**” and to overhaul that program to cut lifecycle costs by half.
- Reprioritization of NESDIS and NOAA toward “weather-only” missions
- Cancels OAR's Climate Research Program, the weather and ocean labs and **cooperative institutes**

House Bill:

- Would impose moderate cuts compared to FY2025 levels, but significantly rejects the Administration's proposed reductions to NOAA's scientific enterprise.
- Under the House bill, **GeoXO remains approved and supported**, but would be under tighter budget controls. The program likely will continue, but with some **reduced funding growth, emphasis on core weather functions**, and **possible trade-offs** in capabilities or schedule to stay within cost constraints

Senate Bill:

- Directs NOAA to “**procure a revised mission architecture that retains continuity of data in geostationary orbit, while modernizing core weather-monitoring capabilities and maintaining first launch in 2032**”
- GEOXO “**must include imaging and sounding as the core instruments for all satellites with data quality standards that meet or exceed GOES-R Series requirements and to consider additional instruments if they can be accommodated under a lower life-cycle cost cap.**”
- NOAA will likely need to scale back/postpone non-weather components of GeoXO unless they can fit under cost constraints

Enacted vs. Proposed FY2026 Actions

Agency/Program	Action Since Jan 2025 (Enacted)	Proposed FY2026 Actions (If PBR Enacted)	Key Citations
NASA Earth Science Division (ESD)	No satellite cancellations. EO 14154 paused IIJA/IRA spending. Operating under P.L. 119-4 (FY2025 full-year appropriation).	Budget cuts Earth Science from \$2.14B to \$1.06B. Early shutdowns of some operating missions likely. Prioritizes NISAR, SWOT, SMAP, PACE, GRACE-FO. \$70M for Landsat Next restructure.	EO 14154 Sec.7(a); NASA FY2026 Budget Book p.22; CRS FY2026 Summary
NOAA NESDIS	FY2025 rescission of IRA balances (P.L. 119-21) affecting climate/coastal programs. Spending below enacted.	FY2026 request cuts NOAA from \$6.1B to \$4.5B, eliminates OAR, reduces GeoXO launches/instruments.	CRS FY2026 Summary; FY2025 P.L.119-21; NOAA FY2026 Request
USGS National Land Imaging (Landsat)	No cancellations. Continued L8/L9 operations. Spending constrained by EO 14154 pause.	FY2026 DOI Budget restructures Landsat Next with NASA to find 'more affordable ways' to sustain continuity.	DOI FY2026 Budget-in-Brief p.62; USGS Landsat Next page

Takeaways from the Questionnaire

1. **Fiscal realism + flexibility** are essential
2. **Continuity** is the backbone of credibility and societal value
3. **Integration of science and applications** must be institutionalized
4. **Interagency and cross-sector collaboration** are imperative
5. **AI, modeling, and digital infrastructure** must be mainstreamed
6. **Inclusive workforce and stakeholder engagement** will determine success
7. **Iterative, adaptive governance** should replace static 10-year models

Overview of what to expect from the Midterm Workshop (and implications for the Decadal)

Goal: Help CESAS define the nature and mechanics of the 2027 Decadal Survey

Four Panels, 15 min presentations, 30 min discussion period:

1. Applications
2. Modeling
3. Continuity
4. Collaboration

Discussion: Implementing the Midterm Recommendations and Guidance for the next Decadal Survey

Perspectives on ESAS 2017

Waleed Abdalati and
William Gail, Co-Chairs

28 October 2025

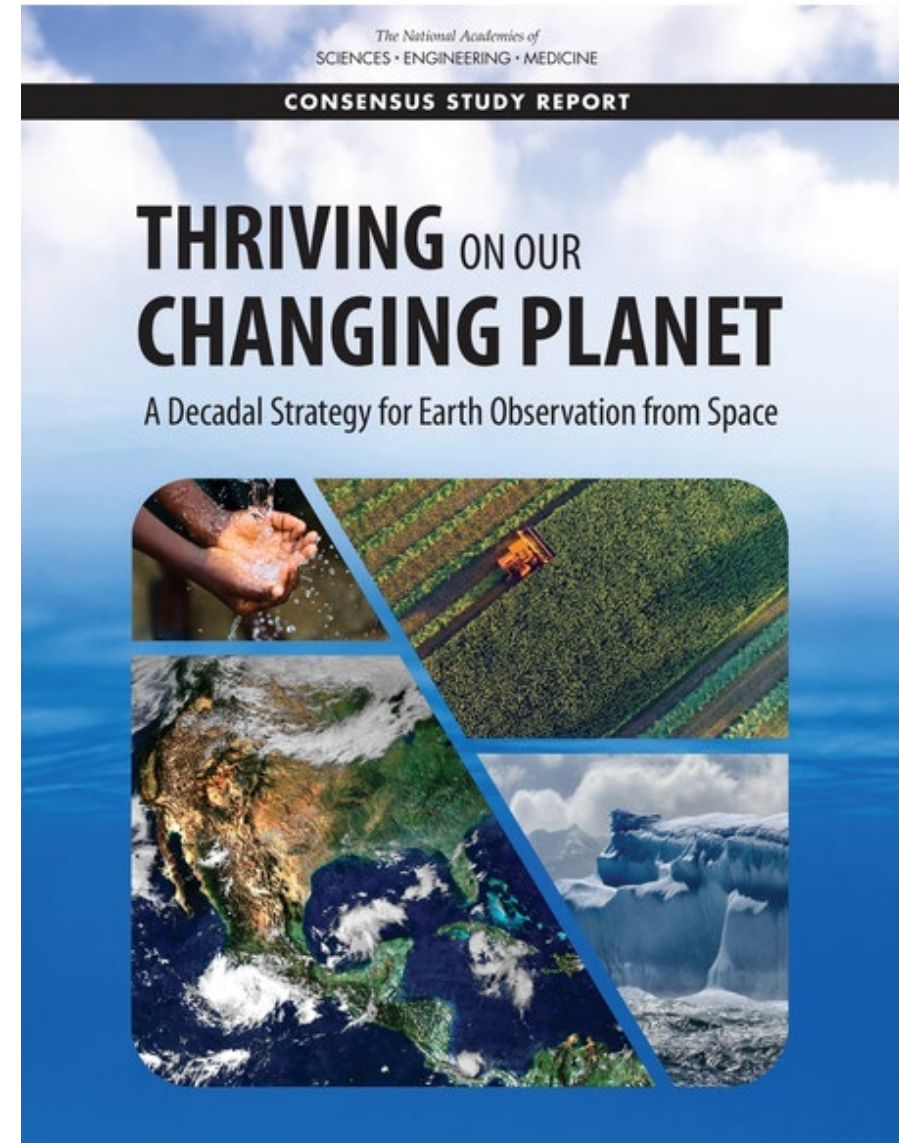
Overview and discussion of decision points:

Pre-study (e.g., statement of task, budget constraints, partner scope, etc.)

Early study (e.g., panel structure, community input, prioritization, theme, etc.)

Mid-to-Late study (e.g., acquisition approach, writing process, decision rules, etc.)

Post-study (e.g., Implementation process, ongoing community guidance/engagement)



What can CESAS do?

- Evaluate lessons-learned from the Midterm
- Listen and respond to the community
- Coordinate closely with sponsors
- Revise Decadal structure based on above, revisit decision points
- Remain flexible, encourage communication and transparency

Key ideas discussed on Monday

- Listen to end users and get their input; WRT the DS: whose priorities, which user groups? Leverage ongoing agency-user connections and user group information. “Technology Push vs. Demand Pull”
- Questionnaire (7 points) very useful
- Put forward important science and associated observables and let the DS committee work out the details
- Engage w/CEOS, [Satellite Needs WG](#), Satellite Industry Assoc., USGEO
- Continuity
 - It means continuity of data, observables, expertise, instrumentation, lower cost
 - We can learn from the Europeans on research and operations programs (Copernicus)
 - Institutional barriers – agency gaps in continuity, research-to-ops, roles and responsibilities
 - Don’t keep doing the same thing if it is not working wrt continuity
 - National Environmental Data Continuity Act (NEDCA)
- US leadership role has changed
- Non-space measurements – how to promote the value of non-mission activities
- More diverse sponsorship of the DS and more diverse financing of DS implementation
- 10 years is the right time for the DS; implementation should be immediate, nimble, adaptable w/community mechanism to provide feedback. Need funding wedge to be immediately responsive to the new DS’ priorities
- Riley’s functional block chart
- Use R&A to focus on existing data to keep the ES Community active, workforce training, maintain expertise