

CESAS Member Comments on Midterm Sponsor Responses

4 November 2024

Background

- In a public session during the August 2024 telecon, CESAS met with NASA ESD officials and the midterm assessment co-chairs. Our goal was to:
 - Ensure proper understanding of the Midterm
 - Provide member comments as feedback on the report
- Our goals for *this* meeting include:
 - Ensure proper CESAS understanding of sponsor responses
 - Provide member comments as feedback to the sponsors
 - Facilitate open community discussion of both report and responses
 - Help structure the process to motivate discussion and guide resulting actions
- Our ultimate goal is to identify CESAS actions (over the next year+), arising from the Midterm, that best support the community and sponsors

Aggregated Midterm Topic Areas/Subjects

AREA	TOPIC	MIDTERM ITEM	SUGGESTED CESAS ACTION
1. Successful Implementing the Decadal	A. Overcoming Fundamental Challenges & Constraints	1, 3, 4, 5, 6, 8, 15	Candidate CESAS Priority
	B. Assessing New Architecture Choices	9, 10, 11, 12	As-Needed CESAS Support
2. Exploration vs Continuity Science vs Operations	A. How Landsat Priority and Budget integrate into Decadal	7 (ESD, USGS)	Candidate CESAS Priority
	B. Prioritizing and Affording Continuity/Operations	17	Candidate CESAS Priority
3. Communication & Engagement	A. Community Communication & Engagement	13, 16	As-Needed CESAS Support
4. Expanding Opportunities	A. Expanded Investigator Opportunity	2	As-Needed CESAS Support
	B. DEIA and Workforce	14, 15	As-Needed CESAS Support
	C. Modeling	18	As-Needed CESAS Support

Priority determination criteria: a) relevance to CESAS charter, b) importance of topic to community and sponsors, c) opportunity for CESAS to contribute and ability to do so

CESAS-Suggested Added Topic Areas

AREA	SUBJECT	MIDTERM ITEM	CESAS ACTION
5	Formal Lessons-Learned Guidance for Next Decadal	Aggregates many Midterm items	Candidate CESAS Priority
6	Earth Science to Action Plan	ESD discussion	Candidate CESAS Priority

General CESAS Comments* on Sponsor Responses

- CESAS members reviewed the NASA response and attended the Community Forum
- It appears that NASA largely concurs with the Midterm. Differences are small but important and should be recognized in defining subsequent actions.
- CESAS welcomes formal responses or discussion from NOAA and USGS, and will respond as requested

*CESAS comments throughout this presentation reflect perspectives of individual members, and do not imply consensus of the committee

CESAS Comments (1)

- “Item” refers to NASA response to midterm
- “Page” refers to page number in Midterm report
- “CESAS Role?” indicates direct reference to CESAS in Midterm or in NASA response

NASA ITEM	MID PAGE	SUMMARY OF MIDTERM FINDING/RECOMMENDATION	SPONSOR RESPONSE	CESAS ROLE?	CESAS MEMBER COMMENTS
1	27	Articulate societal value, urgency, & resources for Decadal, including sacrifices when changes needed	[NASA] Partially Concur		Recognizing the challenges of multiple constituencies and of timeline constraints is important to any CESAS role in guiding implementation
2	29	Expand funding for US investigators in international, interagency, & commercial	[NASA] Concur		Response appreciated
3	30-32	<ul style="list-style-type: none"> • Program element growth does not reflect appropriate consideration of program balance & Decadal priorities • Seek prior advice from CESAS when major ESO changes, to protect balance and Decadal priorities 	[NASA] Concur	Yes, in Midterm Also, yes in NASA response	Response appreciated
4	34	<ul style="list-style-type: none"> • Uneven response to Decadal • Decision rules not followed 	[NASA] Don't Agree		CESAS could review if requested, but likely not important to resolve
5	34	<ul style="list-style-type: none"> • ESD stuck in analysis mode rather than making timely decisions 	[NASA] Don't Agree		While progress has certainly occurred and should be applauded, the Midterm concern may have merit and may benefit from being addressed

CESAS Comments (2)

NASA ITEM	MID PAGE	SUMMARY OF MIDTERM FINDING/RECOMMENDATION	SPONSOR RESPONSE	CESAS ROLE?	CESAS MEMBER COMMENTS
6	34	ESD should seek CESAS feedback on implementation plans to achieve more timely decisions and maintain Decadal alignment	[NASA] Concur, with note on constraints	Yes, in Midterm, NASA agree	Midterm comment is appropriate, when constraints noted by NASA recognized
7	41	<ul style="list-style-type: none"> Seek funding for LS-Next scope & budget increases Impacts other Decadal priorities 	[NASA] Concur [USGS] TBD		<ul style="list-style-type: none"> Issues associated with LS-N operational status need recognition, as distinct from other Decadal science mission priorities How to do this is not clear
8	46	To address budget challenges, follow Decadal guidance prioritizing competition in Explorer and Venture	[NASA] Concur		Response appreciated
9	47	Proceed with SBG-VSWIR and SBG-TIR to minimize cost and maximize overlap	[NASA] Concur		Response appreciated
10	48	<ul style="list-style-type: none"> Implement Decadal descope guidance for Aerosols and Clouds, Convection, and Precipitation TO Simpler single band radar 	[NASA] Concur		Response appreciated

CESAS Comments (3)

NASA ITEM	MID PAGE	SUMMARY OF MIDTERM FINDING/RECOMMENDATION	SPONSOR RESPONSE	CESAS ROLE?	CESAS MEMBER COMMENTS
11	48	<ul style="list-style-type: none"> • New GRACE-C appropriate • Need lower cost long-term solution 	[NASA] Concur		Response appreciated
12	49	<ul style="list-style-type: none"> • Engage with Copernicus to explore SDC collaboration • Assess unmet science and continuity objectives once NISAR data available 	[NASA] Concur		Response appreciated
13	49	<ul style="list-style-type: none"> • Improve community communication • Need timely info about plans, budgets, solicitations 	[NASA] Concur		<ul style="list-style-type: none"> • CESAS can play significant role as communication vehicle • Ideas: a) more discussion time with sponsors during open mts/tcns, b) facilitated discussion, c) better advance preparation, d) better integrate outside community in mtgs/tcns
14	52	<ul style="list-style-type: none"> • Improve DEI and accessibility • Ensure supporting budget • Need opportunities for training, PI development, mission engagement at all levels, sharing of best practices 	[NASA] Concur	Yes, in NASA response	Important topic that CESAS can contribute to as needed

CESAS Comments (4)

NASA ITEM	MID PAGE	SUMMARY OF MIDTERM FINDING/RECOMMENDATION	SPONSOR RESPONSE	CESAS ROLE?	CESAS MEMBER COMMENTS
15	52	Lack of competed missions has limited workforce development and DEIA	[NASA] Clarification Provided		Response appreciated
16	52-53	Prior to next Decadal, ESD, NOAA, and USGS should engage broader community to identify needs and set expectations	[NASA] Concur [NOAA] TBD [USGS] TBD	Yes in NASA response	Could be integrated with CESAS guidance for next Decadal
17	54	Despite Decadal guidance, continuity process is still ad hoc	[NASA] Concur?	Yes in NASA briefing	<ul style="list-style-type: none"> • This is a central unresolved topic for the community and the next Decadal • It is relevant to Item 7 • We might expand this to include operational as distinct from scientific continuity
18	55	ESD, NOAA, and USGS should engage modeling community to advance capability	[NASA] Concur	Yes in NASA briefing	CESAS can play significant role as communication vehicle

Conclusion

- It is good to see the level of alignment between the Midterm report and sponsor responses. That suggests we're ready to identify next steps.
- CESAS could focus on any of the topic areas, or on any of the underlying 8 topics – priority topics are suggested
- Areas/topics could be pursued through any of the mechanisms available to CESAS, based on sponsor guidance
 - Dedicated projects*, including sponsored reports or workshops (to be negotiated through NASEM)
 - CESAS Meeting Discussions
 - “Ongoing Topics”, designated as important for regular discussion in CESAS meetings
 - “Ad Hoc Topics”, identified on a meeting-by-meeting basis

*Upon agency request and with the approval of the National Academies, CESAS can write short reports related to the implementation of the most recent Earth science decadal survey (see: <https://tinyurl.com/2xhoktj7>). The committee can also assist in the formation of ad hoc committees that would organize approved studies, workshops, or “meetings of experts.”

CESAS General Comments on Next Steps

- For in-depth guidance on any topic, we should consider our breadth and balance of member expertise and augment as needed
- CESAS could benefit from briefings on specific topics (e.g., budget development) as needed to support priority areas
- Meetings and telecons could be structured better – we welcome sponsor suggestions