



Committee on Earth Observation Satellites

Requirements and Gap Analyses: LSI-VC Context

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LSI-VC-8

Session 10

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LSI-VC Terms of Reference (2015):

	3-Year Horizon	5-Year Horizon
Space Segment	<p>Aggregate and analyze multiple sets of validated, domain-specific requirements to identify gaps and opportunities for optimization and improve interoperability and complementarity</p> <p>Optimize and harmonize CEOS Agency global data collections, as much as possible.</p>	<p>Harmonize acquisition plans across major international land surface imaging programs to support validated domain-specific requirements</p>



LSI-VC Implementation Plan (2017):

Requirements	Assessment of Terrestrial Carbon Strategy Variables	<p>In support of the CEOS Carbon Strategy, LSI-VC will analyze validated land carbon observation requirements and identify the gaps in and opportunities for optimization across CEOS Agency missions. This work will leverage the GEOGLAM requirements 'matrix' as a framework.</p>	<p>SEO WGClimate</p>	CARB-13	Q4 2017
Requirements	Pilot Approaches to Conducting Integrated Assessments of Gaps/Opportunities in Asset Usage	<p>The LSI-VC will, building on the work for land carbon, develop and pilot an approach for analyzing multiple sets of domain-specific requirements and identifying gaps/opportunities for optimization.</p> <p>This effort will integrate validated requirements for forestry, carbon, climate, and agriculture; and identify potential continuity issues for land surface observations from space via CEOS Agency assets.</p> <p>A joint session of LSI-VC, SDCG for GFOI and the CEOS Ad-Hoc Working Group on GEOGLAM will be scheduled for Q3 2017 to progress discussions on this topic.</p>	<p>SEO SDCG for GFOI CEOS- GEOGLAM ad-hoc WG WGDisasters</p>	VC-26	Q4 2017



LSI-VC-5 (2018) conclusions:

- LSI-VC reached out to the CEOS carbon community multiple times, with little result and infrequent interactions. It was agreed that there is not much we can do in a one-way fashion – LSI-VC needs inputs and feedback from the thematic side.
- Needs to be a strong pull from the thematic side/a demand for this analysis to be done.
- Broad, generalised gap analyses do not look feasible
- The requirements tasks were discontinued in favour of focusing on progressing CEOS tools and information systems in support of gap analyses.
- **CEOS Work Plan tasks on requirements deleted.**



Current requirements-related CEOS Work Plan Task/Deliverable:

VC-37: CEOS Information Tool Improvements	Q4 2019	Identify potential modifications to existing CEOS information tools that can be made to help improve their value for gap analyses. Including modifying the CEOS MIM database to allow complex queries and gap analyses through the addition of an API. Develop a prototype online user interface using an API connected to the MIM.	LSI-VC
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1. A thematic area with a reasonably small scope to trial an LSI-VC requirements/gap analysis process
1. An active counterpart on the thematic side that can translate science requirements into observational requirements
1. A specific set of unique requirements (e.g., global moderate resolution optical is NOT a good focus for a gap analysis)