



LSI Mid-Resolution Optical Guidelines Document:

Where we are, where we need help, and what's next

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September 17, 2010



What we are trying to do

- The CEOS Action list (item AR-09-02a_26) as well as the LSI work plan and overview all include the LSI Mid-Resolution Optical Guidelines Document.
- Goal 2 of the LSI overview states:
 - “Develop preliminary standards or guidelines for a mid--resolution Land Surface Imaging Constellation”
 - “In 2008, the LSI Constellation initiated an effort to define standards (or guidelines) that **define a set of ideal or optimal guidelines for mid-resolution optical mission, instrument, and data policy characteristics.** It is recognized that no single mission or ground segment would be expected to meet all of these guidelines. Instead, the overall virtual constellation of LSI would together achieve these goals through the combination of their specific subset of specialties and foci.”



Document use case

- Use 1: A CEOS agency has an instrument already built that they feel will benefit the LSI Community. They go to the guidelines document to learn about where they would fit with other LSI instruments and to determine if they are filling a needed niche.
- Use 2: A CEOS agency would like to build an instrument to achieve LSI goals. The instrument design team goes to the guidelines document to see what the instrument characteristics should be.
- Therefore address questions such as:
 - Who are the users?
 - What kinds of instruments?
 - What kinds of measurements?
 - What SBAs are related?
 - What spectral bands are of interest?
 - What are current missions?
 - What are the guideline values for measurements?



What we have now

- A draft of the guidelines document, as compiled by the SEO, is available now.
 - Strongly based on the WMO GOS-Dossiers compiled by Bizzarro Bizzarri
- Supports the two use cases discussed at the last LSI meeting in February



What we have now, continued



- The document includes:
 - Measurements, User Communities, and Societal Benefit Areas
 - Measurements and Instrument Types
 - Measurements and Spectral Bands
 - Mid-Resolution Optical Missions
 - Missions and Measurements
 - Measurement Guidelines
 - Measurement Expected Performance
 - Systems Analyses



Where we'd like to go next



To finalize this document for the plenary session while ensuring that it is meaningful to you as the land surface imaging community and will be utilized in the future

- To this end we need your help to make the final edits



What are the next steps: Needs

- The SEO has comments for the LSI Team to address.
 - Most of the guidelines and potential performance values are outside of the mid-resolution range as defined by this document (10m to 100m).
 - Three measurement types seem to be particularly dominant in the number of instruments that measure them: Earth's surface albedo, vegetation type, and land surface imagery. Does this make sense?
 - The mission data shown should be updated when the new 2010 CEOS MIM Database updates have been completed and released in late 2010.

- Are there any other comments on the document? Edits and feedback need to be collected and folded in.



What are the next steps: Schedule



- Initial draft discussed at LSI Study Team Meeting
 - 17 September 2010
- Community review of document complete and comments submitted
 - 1 October 2010
- Final draft of document complete
 - 8 October 2010
- CEOS Plenary
 - 13-15 October 2010



Today's goals

- Points for discussion:
 - Collect comments on the draft document in general
 - Are there other questions to answer?
 - Collect edits to the content of the document
 - Do we need to list more challenging guideline values?
 - Address the SEO comments

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