Land Surface Imaging (LSI) Virtual Constellation Workshop Notes

29 March 2012

La Jolla, CA

Attendance: (INPE, USGS, CSA, CEO, SEO, JAXA, WGCV, NASA/JPL, WMO, ESA, NSC, Geosciences Australia, CNES, ISRO, CONAE, ASI)

Julio Dalge, INPE, Marcia Alvarenga, INPE, Jean Parcher, USGS, Yves Crevier, CSA, Tim Stryker, CEO, Brian Killough, SEO, Osamu Ochiai, JAXA, Tom Holm, USGS, Greg Stensaas, WGCV, Mike Abrams, NASA/JPL, Barbara Ryan, WMO, Ivan Petiteville, ESA, Per Erik Skrovseth, NSC, Adam Lewis, Geosciences Australia, Steve Hosford, CNES, P.G. Diwakar, ISRO, Ana Medico, CONAE, Stefano Bruzzi, ASI, David Hudson, Geosciences Australia, John Faundeen, USGS

After brief introductions from all attendees, Brian Killough (NASA), representing the SEO, presented an overview of the Portal Study conducted last year. He then detailed the specific points noted for the LSI portal which included the following:

- Initial entry page is rather simplistic and content is duplicated on the secondary entry page.
- Users preferred the secondary page as an entry point to the portal.
- Suggest using a "More" link for the text content beyond the first paragraph found on the About Portal page and the About LSIC page.
- A simple land image might be nice on the entry page to suggest land imaging products and simple unified user interface.
- Some table cell dividers need fixing.
- Have the GEO-FCT link open in a new tab/window to maintain the LSI portal link in the local browser.
- Add SAR missions and intruments including modes and data ordering requirements.
- Data policy related aspects was also discussed, particularly with respect to access, redistribution, data sharing and licensing.

John Faundeen (USGS) discussed how the LSI VC plans to address many of those shortcomings. The first activity is to move the existing NOAA-based domain of the web site to a USGS one allowing updates to be made. That effort is onging with a hoped for May 2012 completion. Once that is done the site will undergo changes recommended by the SEO Portal Study to improve the user experience. The LSI team will work with WGISS to identify a common look such as the NASA Coherant example. October is the planned release for the updated web look. Lastly, plans for adding a map interface to the LSI site were discussed. This long-sought LSI capability will utilize the CWIC middleware work coordinated by WGISS. Combined, the map interface and CWIC will allow geographic queries to be submitted to multiple CEOS agency catalogs from the single LSI site. October is targetted to have this functionality available.

In addition, it was also suggested to add CEOS priorities to the TOR of LSI. Mention was also made on the definition of the data product to be clearly brought out.

Julio Dalge (INPE) led a discussion on the LSI mission and objectives from the inception of the VC dating to 2007 when a letter of intent was signed by seven agencies. It should be noted that Barb Ryan was one of those original signers. This discussion involved many of the attendees which contributed to a good understanding of how the LSI came to be and what it focused on.

Yves Crevier (CSA) stimulated discussion on where the LSI could focus its resources in the future. The significant and varied requests to CEOS addressing the GEO initiatives, the complexities of the Public-Private Partnerships existing with many CEOS agencies, and the challenge to coordinate radar missions were actively debated. He was of the opinión that LSI should focus on data as well as thematic information. Julio Dalge (INPE) added pointed questions that also helped the attendees to identify several areas that LSI could provide needed services for CEOS.

Detailed discussions took place on how LSI can position itself with respect to various requirements of VCs and WGs and the role of LSI with regard to SDCG. For example, SDCG under FCT is involved in large data acquisition. Can LSI play a bigger role by coordinating all such requirements?

Focus was also on ECVs, particularly the long-term requirements, how to avoid duplication of efforts, QA & validation processes as some of the important activities. Can LSI have specific roles in them?! Some of the VCs are already producing specific parameters, will LSI coordinate these activities or unify them under one umbrela (to avoid duplication)?

Julio Dalge (INPE) detailed the development of an ortho generation tool contributed to LSI. The tool has been in work for some time and generated interest among multiple CEOS agencies in the workshop.

The three LSI co-chairs, Julio Dalge (INPE), P.G. Diwakar (ISRO), and John Faundeen (USGS) summarized the wokshop and received concurrence from the attandees on the following activities for the LSI VC to focus on:

- The coordination and distribution of terrestrial Essential Climate Variables (ECVs)
- Addressing the cross-cutting issues that are common and fundamental to all data coordination response from CEOS (info extraction, cross calibration, inter-operability, long-term data records, availability and dissemination, etc.)
- Initiating a dialogue with end users on current offer, gaps and potential discontinuity in data availability
- Being responsible for the monitoring and reporting of its collective assets and flag issues
- Becoming a consultative forum and interface between the LS mission operators and CoPs
- Including radar missions and instruments
- Including hyperspectral missions and instruments
- Evolving away from focusing solely upon moderate resolution optical missions and instruments
- Investigate a possible land data coordination role for the LSI with CEOS agencies utilizing Public-Private Partnerships arrangements
- Discussing whether LSI could sponsor a Post 2020 Terrestrial Mission Planning workshop with the goal to truly coordinate CEOS space missions.
- Policy perspectives with respect to Open data distribution and licensing issues to be addressed
- Working closely with the WGCV/IVOS, WGISS, WGClimate, WGCapD, and the SDCG with well defined roles and responsibilities.

The other point of discussion was – data that gets generated within a thematic group could find usability amongst other groups too (VCs or WGs). Even a strong mechanism to organise relevant metadata of

these + regular update and maintenance could be an important activity which comes out a strong coordination amongst all groups – Can LSI position itself on this, if not done already!!

The workshop attendees suggested monthly telecons to get everyone involved with current LSI activities. This workshop was considered a success based upon the number of attendees, the interest expressed through engaged discussion, and the expressed desire for the LSI to address several items of interest to CEOS members. Brief discussion ensued as to when the next LSI VC Workshop should be held. The attendees agreed that aligning it next to another event, like SIT-27 this year, helped to boost attendance and attention. A similar occasion will be investigated by the Co-Chairs.

Based on this workshop, the Terms of Reference and the 2012 Work Plan will be modified to address the activities identified to be areas of need for CSI that the LSI VC can provide.

Julio Dalge (INPE) LSI Co-Chair

P.G. Diwakar (ISRO) LSI Co-Chair

John Faundeen (USGS) LSI-Co-Chair