

## LSI-VC-12 Actions & Decisions

### Actions

<b>LSI-VC-12-01</b>	<p>Brian to follow up with the Black Marble team regarding the specifics of the terrain occlusion point and why this was considered not applicable. Brian will ask whether the occlusion percentage could be added to the metadata and ask the team about the expected impact of terrain occlusion at global scale.</p>	<p style="text-align: center;"><b>COMPLETE</b></p> <p><i>The SEO addressed this issue with the Black Marble team. They agreed it may be an issue in extreme locations, but further analysis is required. As of now, terrain occlusion is not part of the metadata. A presentation on the status of the PFS and ARD compliance will be given at Pecora on October 27.</i></p>
<b>LSI-VC-12-02</b>	<p>SEO team to analyse the impact of partial terrain occlusion with the Black Marble dataset and to report back as input to <b>LSI-VC-12-03</b>. This analysis will use the NASA DEM and the VIIRS Black Marble viewing geometry to determine how many pixels are partially occluded and the impact on the dataset in certain parts of the world (e.g., are there cities where the terrain occlusion could be significant?).</p>	<p style="text-align: center;"><b>IN PROGRESS</b></p> <p><i>The CEOS SEO team plans to analyse the impact of partial terrain occlusion. This analysis will use the NASA DEM (30 metres) and the VIIRS viewing geometry to determine how many pixels are partially occluded and the impact on the dataset in certain parts of the world (e.g., high terrain cities such as Gatlinburg, TN or Boulder, CO). This will be completed in early 2023 and reported at the LSI-VC-13 meeting.</i></p>
<b>LSI-VC-12-03</b>	<p>Brian and Matt to coordinate a CEOS-ARD Oversight Group discussion around the way the PFS currently handle terrain occlusion and to consider how to better document the specifics of this parameter.</p>	<p style="text-align: center;"><b>After LSI-VC-13</b></p> <p><i>This action cannot be completed until LSI-VC-12-02 is complete.</i></p>
<b>LSI-VC-12-04</b>	<p>Andreia and Matt to add notes to the <a href="#">tracking spreadsheet</a> for the PFS review process around 1.11 (radiometric calibration) and 2.10 (terrain occlusion).</p>	<p style="text-align: center;"><b>COMPLETE</b></p> <p><i>Completed September 2022</i></p>
<b>LSI-VC-12-05</b>	<p>Sarah to send Brian details of Chinese and UK nighttime lights missions that might generate products that are applicable for assessment against the new PFS.</p>	<p style="text-align: center;"><b>COMPLETE</b></p> <p><i>Sarah and the Black Marble team (NASA) have provided information on future missions relevant to nighttime lights. These include: China's SDGSAT-1 (launched Nov. 2021) with nighttime observations (<a href="http://www.sdgsat.ac.cn/">http://www.sdgsat.ac.cn/</a>) to support the UN SDGs. The spatial resolution is Panchromatic: 10m; RGB: 40m. They just released the data to the public (<a href="http://data.sdgsat.ac.cn/">http://data.sdgsat.ac.cn/</a>). ESA will likely be providing funding support for NOEMI (an Earth at</i></p>

		<i>Night mission concept). This is the first phase (Pre-phase A) before making a selection for small ESA missions.</i>
<b>LSI-VC-12-06</b>	Ferran to share information about the DLR mission that might produce a Nighttime Lights Surface Radiance type product.	<b>COMPLETE</b> <i>DLR does not plan to launch a dedicated nighttime light mission. However, a mission is being considered by a team, including DLR, for the next "ESA Scout Missions" call (<a href="#">link</a>).</i>
<b>LSI-VC-12-07</b>	Brian to share the final Nighttime Lights Surface Radiance PFS document to <a href="mailto:lsi@lists.ceos.org">lsi@lists.ceos.org</a> , provide another opportunity for final critical comments (1 week), and note that virtual endorsement will be assumed after that point. The PFS will then be shared with USGS for the editorial review and subsequently published online.	<b>COMPLETE</b> <i>PFS endorsed and posted on the CEOS-ARD website.</i>
<b>LSI-VC-12-08</b>	LSI-VC Leads to consider how to re-open the discussion regarding how the PFS address geometric uncertainty and absolute/relative accuracy (note parameters 1.8, 1.7, and 4.1 in the SR PFS). WGCV support (incl. TMSG) will be needed. This should be considered in the frame of the CEOS Interoperability Framework.	<b>LSI-VC-13</b>
<b>LSI-VC-12-09</b>	Matt to add <b>LSI-VC-12-08</b> to the WGCV-51 agenda.	<b>COMPLETE</b> <i>Peter will add a reference in his interoperability slides for the joint WGCV-WGISS meeting.</i>
<b>LSI-VC-12-10</b>	Matt and Clement to coordinate a final email to <a href="mailto:lsi@lists.ceos.org">lsi@lists.ceos.org</a> sharing the ORB PFS, providing a 1 week window for critical final comments, and noting that virtual endorsement will be assumed after that point. The PFS will then be shared with USGS for the editorial review and subsequently published online.	<b>COMPLETE</b> <i>PFS endorsed and posted on the CEOS-ARD website.</i>
<b>LSI-VC-12-11</b>	CEOS-ARD Oversight Group to consider an update to the CEOS-ARD Framework that would capture the agreed wording around the PFS update process. This will capture the agreement regarding cadence,	<b>November 2022</b> <i>Will be raised at a meeting of the CEOS-ARD Oversight Group.</i>

	draft versions, publicising upcoming changes via the website, etc. This will be applicable to all PFS.	
<b>LSI-VC-12-12</b>	Jonas to check if the feedback on ARD gathered by DLR through their exchanges/workshops with users can be shared with CEOS.	<b>November 2022</b>
<b>LSI-VC-12-13</b>	Matt to follow up the Sea Surface Temperature PFS and self-assessment developments with Ed Armstrong and Ken Casey.	<b>October 2022</b>
<b>LSI-VC-12-14</b>	Hari Priya to share a summary of all of ISRO's self-assessments that are in the pipeline, so they can be reflected on the website.	<b>IN PROGRESS</b> <i>Steve Labahn followed up with the ISRO team at a recent meeting. The Resourcesat-2/2A Surface Reflectance product has been added to the <a href="https://ceos.org/ard">ceos.org/ard</a> table as a result.</i>
<b>LSI-VC-12-15</b>	Matt to compare existing PFS with the template and see what the common denominators are between them.	<b>December 2022</b>
<b>LSI-VC-12-16</b>	Stephen to share the CEOS Virtual Constellation Process Paper for information. The description of LSI-VC in this paper will need to be updated consistent with changes to our LSI-VC Terms of Reference (ref: <b>LSI-VC-12-18</b> ).	<b>COMPLETE</b>
<b>LSI-VC-12-17</b>	Matt to share an online document with the draft descriptions of the LSI-VC Vision, Objectives and Work Packages, for iteration by the team.	<b>November 2022</b>
<b>LSI-VC-12-18</b>	LSI-VC Leads to initiate an update of the LSI-VC Terms of Reference once the Vision, Objectives and Work Package descriptions are updated.	<b>Target endorsement of updated LSI-VC Terms of Reference at SIT-38 (March, 2023)</b> <i>In addition to confirming updates to LSI-VC's objectives, etc. in our Terms of Reference, we will take the opportunity to reaffirm our leadership and to propose an update to the LSI-VC description in the CEOS Virtual Constellation Process Paper.</i>

<b>LSI-VC-12-19</b>	Matt to add Land Surface Temperature (LST) measurement continuity for Climate Data Records (CDRs) to the LSI-VC 'requirements' work package, and reconnect with WGClimate leadership to follow up the suggestion from the September 2019 joint session in Alaska (LSI-VC-8/WGClimate-11).	<b>November 2022</b>
<b>LSI-VC-12-20</b>	Matt to make a call for participants for an Interoperability Task Team within LSI-VC.	<b>November 2022</b>
<b>LSI-VC-12-21</b>	LSI-VC GEOGLAM Subgroup Leads to share the interdependency mapping that has been developed in the Essential Agricultural Variable (EAV) process. LSI-VC to consider this input and make a mapping to existing CEOS 'Level' definitions.	<b>December 2022</b>

## Decisions

<b>Decision 1</b>	The LSI-VC team agreed with the proposal to revise/produce statements of LSI-VC's Vision, Objectives and Work Packages to better organise, coordinate and distribute the work of LSI-VC moving forward.
<b>Decision 2</b>	LSI-VC proposes that CEOS develop an Interoperability Framework.
<b>Decision 3</b>	At SIT Technical Workshop, LSI-VC will present the idea of an Interoperability Framework, demonstrate the type of issues we are facing, and seek agreement to propose a CEOS Plenary action for LSI-VC to flesh out the concept with other interested parties (e.g., WGISS, WGCV) and come back with a concrete proposal for SIT-38 consideration in March 2023.
<b>Decision 4</b>	LSI-VC-13 will be held 23-24 March 2023, at ESA ESIRIN.