



# Land Surface Imaging (LSI) Virtual Constellation

**Co-Leads:** *U.S. Geological Survey (USGS),  
Indian Space Research Organization (ISRO), and the  
Instituto Nacional de Pesquisas Espaciais (INPE)*



SIT-26 – Frascati, Italy 24-25 May, 2011

## Status Report

- LSI Portal Enhancements
  - LSI Mid-Resolution Optical Guidelines Document
  - LSI Freeware Tools
  - LSI Support to:
    - GEO FCT/GFOI Task
    - JECAM (new)
- (To be covered else where on the agenda)**

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# LSI Portal Enhancement

- **Expand functionality to include cross-system, granule-level, search and data retrieval**
  - **Highest priority:** The addition of a prototype map-based query and direct data download capability to the Portal using CWIC as the interface to the member data systems.
  - CWIC will provide an **access point** for major CEOS agency catalog systems.
- **CEOS Plenary in Rio: CEOS initiated a review and assessment of CEOS GEO Portals**
  - CWIC implementation within the LSI Portal **on hold** pending the recommendations from portal assessment.
  - **Request support from SIT to finalize a way forward resulting from the CEOS GEO Portal Assessment**

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# LSI Mid-Resolution Optical Guidelines

## On Going Progress

**01-Mar-2011:** Complete 2nd draft report for review by the LSI Constellation Team.

**01-Jun-2011:** Complete 3rd draft report for review by the LSI Constellation Team.

**30-Sep-2011:** Final report completed and presented at the CEOS SIT Workshop.

**October 2011** - submit a plan for use by the land imaging community at the CEOS Plenary

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## LSI Freeware Tools (INPE)

### On Going Progress

**16 Feb 2011:** Release of stand-alone command line orthorectification tool. (<http://www.ceos.org/LSI>)

INPE recently coordinated the development of a new tool, the MS3Ortho, a significant contribution to the LSI Constellation and CEOS. MS3Ortho is a stand-alone command line orthorectification tool that implements two algorithms: the standard ortho process using RPC files and a rigorous model that uses ephemerides, attitude and the camera geometric model. It supports most mid-resolution sensors that are available: Landsat, ResourceSat, and CBERS.

**April 2011:** beta version of SPRING freeware GIS with orthorectification; final release in August 2011.

## FCT/GFOI and JECAM

- LSI Support to FCT/GFOI and JECAM previously discussed
- LSI is committed to on-going support of both FCT/GFOI and JECAM