



2013 HyspIRI Science Workshop

Objectives, Overview and Update



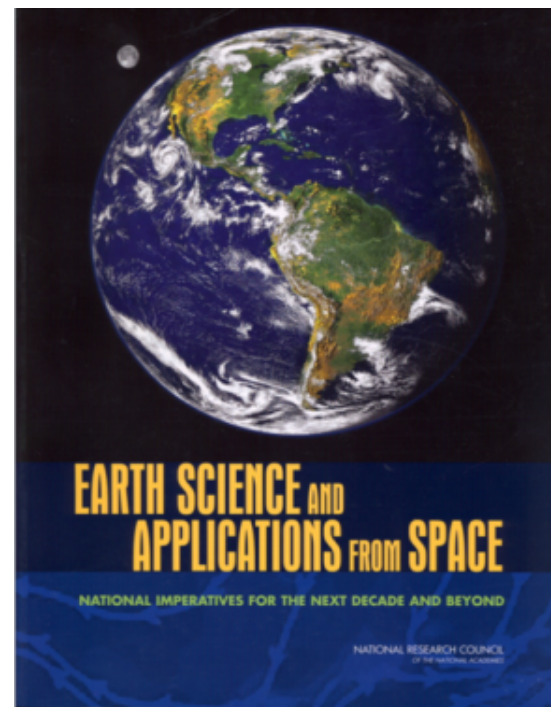
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and the HyspIRI Study Group
October 15, 2013**



HyspIRI

HyspIRI is a Tier 2 NASA Decadal Survey *global* mission concept featuring:

- a VSWIR imaging spectrometer at 380 to 2500 nm with 10 nm sampling, capturing the Earth's complete terrestrial surface and coastal regions at 60m spatial resolution every 19 days;
- an 8-channel multispectral TIR instrument operating between 3 and 12 microns capturing the same area at 60m spatial resolution every 5 days; and
- an intelligent payload module for direct broadcast capability coupled with on-board processing for a subset of data streams



The HyspIRI mission concept is relatively straightforward, low cost, and low risk and meets the urgent needs of the Earth System Science and Climate Science communities for global measurements.



Workshop Objectives

- Overview of HypsIRI Mission Concept and Next Steps
- Update Community on HypsIRI Status
- Examine HypsIRI-related Precursor Science
- Explore Potential HypsIRI Applications
- Present Technologies and Tools supporting HypsIRI
- Explore Domestic and International Partnership Opportunities
- Discuss HypsIRI Preparatory Science Activities
- Review Early Results from AVIRIS-ng, HYTES, and PRISM



Workshop Overview

Tuesday, October 15:

Programmatic Context; Mission Concept; HyspIRI Science; Separate
Platforms

Wednesday, October 16:

HyspIRI Science Products; Applications of HyspIRI Data, Poster Session

Thursday, October 18:

International Activities; Precursor Airborne Campaign; Technology
Development/New Instruments; Panel Discussion; Wrap Up



Activities since the Last Workshop

- Steering Committee, Science Study Group, and International Science Group Teleconferences
- 4th HyspIRI Data Products Symposium at GSFC
- HyspIRI Aquatic Data Products WG – session at Symposium
- Tech Demo Study of HyspIRI Instruments on ISS
- ROSES 2011 *HyspIRI Preparatory Airborne Activities and Associated Science and Applications Research*
 - *First year of flights*
- HyspIRI Spectral Libraries Subgroup
 - Group led by Phil Townsend
- Pre-Formulation Workshop
 - Independent platforms



HyspIRI Next Steps

Remember we are:

- A global mission
- A broad-based Earth System Science mission addressing urgent needs
- A mission with mature technologies

Goals:

- Cost reduction
- Retiring risk through instrument development
 - Exploring separate platforms
- Developing precursor scientific opportunities
- Seeking partnerships with domestic and international partners for:
 - Joint scientific campaigns
 - Calibration/validation
 - Data product development and use
 - Spacecraft
 - Launch
- Working with other NASA missions



Thank You



Photo at the break!