



Technical Committee Report International Spaceborne Imaging Spectroscopy

Cindy Ong, CSIRO

Andreas Mueller, DLR,

Uta Heiden, DLR

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International Spaceborne Imaging Spectroscopy (ISIS) TC

- **ISIS TC provides a forum for technical and programmatic discussion and consultation among national space agencies, research institutions and other stakeholders in land surface and coastal zone oriented imaging spectroscopy**
 - information sharing on current and future spaceborne imaging spectroscopy (hyperspectral) missions;
 - foster discussion between geo-scientific research groups, technology oriented and institutional Earth observation stakeholders;
 - seek opportunities for new international partnerships to the benefit of the global user community;
 - Hold discussions on interoperability among missions, ‘best practice’ mission implementation, mass data management challenges, calibration and validation, and development of a forward work plan for improved coordination amongst member agencies.



Organisation of Invited Sessions

- **I:33 International Spaceborne Imaging Spectroscopy Missions: Updates And News (Full Session)**
 - SHALOM: AN ITALIAN- ISRAELI HYPERSPECTRAL ORBITAL MISSION – UPDATE
 - PROGRESS IN CHINESE SATELLITE HYPERSPECTRAL MISSIONS
 - GLOBAL MAPPING OF TERRESTRIAL VEGETATION PHOTOSYNTHESIS: THE FLUORESCENCE EXPLORER (FLEX) MISSION
 - THE ENMAP MISSION – UPDATE
 - EARLY RESULTS OF PRISMA PAYLOAD TEST CAMPAIGN
 - THE FRENCH EO HIGH SPATIAL RESOLUTION HYPERSPECTRAL DUAL MISSION HYPXIM – AN UPDATE
 - CONCEPT STUDY OF CANADIAN HYPERSPECTRAL MISSION CURRENT STATUS OF HYPERSPECTRAL IMAGER SUITE (HISUI)
 - CURRENT STATUS OF HYPERSPECTRAL IMAGER SUITE (HISUI)
 - HYSPIRI UPDATE: MISSION STATUS, PREPARATORY AIRBORNE CAMPAIGN, AND SYNERGIES WITH FUTURE LAND AND AQUATIC IMAGING
 - EO-1/HYPERION: NEARING FOURTEEN YEARS OF SUCCESSFUL MISSION SCIENCE OPERATION AND END OF MISSION PLANS



Organisation Of Invited Sessions

- **I:7 Calibration And Validation And Standards In Support Of Spaceborne Imaging Spectroscopy Missions (Full Session)**

- STATUS OF THE ISO/TS 19159-1 “GEOGRAPHIC INFORMATION – CALIBRATION AND VALIDATION OF REMOTE SENSING IMAGERY SENSORS – PART 1: OPTICAL SENSORS”
- ENMAP DATA PRODUCT STANDARDS
- CALIBRATION DEMONSTRATION SYSTEM FOR AN IMAGING SPECTROMETER TO PROVIDE CLIMATE-QUALITY REFLECTANCE
- CALIBRATION AND VALIDATION FOR INTERNATIONAL SATELLITE IMAGING SPECTROSCOPY MISSIONS: AUSTRALIA’S CONTRIBUTION
- CONCEPT FOR ENMAP POST-LAUNCH PRODUCT VALIDATION AND INSTRUMENT CHARACTERISATION ACTIVITIES
- IMAGING SPECTROSCOPY VALIDATION ACTIVITIES UNDER THE AUSTRALIAN TERRESTRIAL ECOSYSTEM RESEARCH NETWORK – TERN
- HISUI VICARIOUS CALIBRATION AND CAL/VAL ACTIVITIES
- CONTINUED EO-1 HYPERION CALIBRATION PERFORMANCE
- LESSONS LEARNED FROM EO-1 CALIBRATION ACTIVITIES ADVANCED LAND IMAGER (ALI) BAND MISREGISTRATION IMPACT ON SPECTRAL INDICES RADIOMETRIC STABILITY OF LUNAR TEST SITES BASED ON HYPERION OBSERVATIONS
- ENMAP RADIOMETRIC INFLIGHT CALIBRATION



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International Spaceborne Imaging Spectroscopy (ISIS) Technical Committee

Andreas Mueller (Chair), German Aerospace Centre (DLR)
Karl Staenz (former Chair), Alberta Terrestrial Imaging Centre, University of Lethbridge
Cindy Ong (Co-Chair), Commonwealth Scientific and Industrial Organization (CSIRO)
Uta Heiden (Co-Chair), German Aerospace Centre (DLR)

1. Introduction

The International Spaceborne Imaging Spectroscopy Technical Committee (ISIS TC) of IEEE GRSS provides a forum for technical and programmatic discussion and consultation among national space agencies, research institutions and other stakeholders in land surface and coastal zone oriented imaging spectroscopy.

The main goal of the ISIS TC is to share information on current and future spaceborne imaging spectroscopy (hyperspectral) missions with a focus on land surface and coastal zone research. The group intends to foster the discussion between geoscientific research groups, technology oriented and institutional Earth observation stakeholders. It seeks opportunities for new international partnerships to the benefit of



Calibration And Validation Workshop Planning And Discussions

- **Initiated discussions with some key mission PIs, calibration and validation experts, ISO leads;**
- **Enlisted assistance of some key calibration and validation experts;**
- **Possibilities of collaboration with ISPRS WG3;**
- **Possibilities of collaboration with CEOS (Australia/CSIRO is chairing CEOS in 2016);**
- **Investigate engagement with measurement laboratories;**