8:00 AM–8:30 AM  Registration / Continental Breakfast

8:30 AM–12:00 PM  PRE-CONFERENCE TUTORIAL: Uncertainty Analysis and Budgeting for On-Orbit Radiometric Calibration
- Calibration Requirements and Planning for Missile Defense Remote Sensing
  Ray Russell—The Aerospace Corporation
- On-Orbit Components of Radiance Uncertainty Analysis Budgets for Operational Satellite Instruments: A CALCON Exploratory
  Bob Iacovazzi and Fred Wu—NOAA
- Correlation of Target-dependent Calibration Methods used to Determine Absolute Radiometric Accuracy for Space-based Remote Sensing Payloads
  Howard Bowen—ITT

12:00 PM–1:15 PM  Registration

1:15 PM–1:30 PM  CONFERENCE WELCOME: Brent Miller—Vice President for Research, Utah State University

1:30 PM–2:15 PM  KEYNOTE ADDRESS: Chester A. “Chet” DeCesaris, Jr.—Principal Deputy for Test, Fielding and Integration, Missile Defense Agency

2:15 PM–3:45 PM  TECHNICAL SESSION: Pre-launch Testing and Post-launch Performance
- CLARREO: Advances in High Accuracy Spectrally Resolved Radiance Measurements for Climate Forecast Testing and Global Climate Benchmarks
  James Anderson—Harvard University
- AIRS Pre-Launch Spectral Calibration: Spectral Resolving Power Measurement vs. Prediction
  Charles Dionne—BAE Systems
- The On-Orbit Calibration of SeaWiFS: Functional Fits to the Lunar Time Series
  Gene Eplee—Science Applications International Corporation
- Status of CrIS Instrument Pre-launch Calibration
  Denise Hagan—Northrop Grumman Space Technology

3:45 PM–4:05 PM  Refreshment Break

4:05 PM–5:45 PM  TECHNICAL SESSION: Pre-launch Testing and Post-launch Performance (cont.)
- Statistical Analysis of Contrast Ratios in Earth Observed Scenes for VIIRS
  Stephen Mills—Northrop Grumman Space Technology
- Apparent 3rd Order Effects in VIIRS MWIR (3 to 5 microns) and the Relation to Calibration Errors Using a Blackbody
  Stephen Mills—Northrop Grumman Space Technology
- MODIS On-board Blackbody Performance
  Jack Xiong—NASA Goddard Space Flight Center
- MODIS Solar Diffuser On-orbit Performance
  Jack Xiong—NASA Goddard Space Flight Center
- Measuring and Correcting for the Non-linearity of Microwave Radiometers
  Giovanni De Amici—Northrop Grumman Space Technology

6:15 PM–8:30 PM  OPENING SOCIAL at the Space Dynamics Laboratory
1695 North Research Park Way, North Logan
TUESDAY, AUGUST 26, 2008

8:00 AM–8:30 AM  Continental Breakfast

8:30 AM–10:20 AM  **TECHNICAL SESSION:** National Standards Laboratory Resources for Radiometric Calibration

- Calibrations and Uncertainties of Low Background IR Test Chambers using the BXR  
  Adriaan Carter—NIST

- Radiometers for Absolute Calibrations at 1 pW of Total Infrared Power  
  Adriaan Carter—NIST

- Progress in On-orbit SI-traceable Radiance Measurements for CLARREO  
  Jonathan Gero—Harvard University

- Results of a NIST-led Inter-laboratory Comparison of Infrared Reflectance  
  Leonard Hanssen—NIST

- Spectral Characterization of Infrared Radiometers and Imagers  
  Sergey Mekhontsev—NIST

9:30 AM–4:30 PM

10:20 AM–11:05 AM  Refreshment Break

11:05 AM–12:15 PM  **TECHNICAL SESSION:** Calibration Methods using Celestial Objects

- Correlation of Target-dependent Calibration Methods used to Determine Absolute and Relative Radiometric Accuracy, Monitor Long-term Stability, Assess Stray Light Performance, Measure MTF Performance and Estimate Effective Focal Length for the IKONOS Space-based Remote Sensing Payload  
  Howard Bowen—ITT

- Long-wave IR Spectroscopic Observations of Space Objects with the Broadband Array Spectrograph System (BASS) at the Advanced Electro-Optical System (AEOS) Telescope on Maui  
  Mark Skinner—AMOS Observatory

- Calibrated Stellar Database of the USGS Lunar Calibration Program  
  Tom Stone—US Geological Survey

12:15 PM–1:15 PM  Lunch Provided

1:15 PM–3:25 PM  **TECHNICAL SESSION:** Equipment, Capabilities, and Facilities for Radiometric Calibration

- Image Assessment System for Landsat ETM+ / TM / MSS Datatypes  
  James Dewald—South Dakota State University

- MICS Calibrator Fabrication and Characterization  
  Alan Bird—USU/Space Dynamics Laboratory

- Performance of the Cryogenic Michelson Interferometer  
  Philippe Lagueux—Telops Inc

- Novel Cryogen-Free Calibration Sources in the Infrared  
  Tanya Myers—Pacific Northwest National Laboratory

- Diffraction Analysis in Optical Design  
  Eric Shirley—NIST

- Capability of Low Reflectance Measurements by an Infrared Laser-based Reflectometer  
  Jinan Zeng—NIST

- Concept for a Space-Based Transfer Standard Spectroradiometer  
  Donald Heath—Ball Aerospace & Technologies Corporation
**TUESDAY, AUGUST 26, 2008**

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<tbody>
<tr>
<td>3:25 PM–4:05 PM</td>
<td>Refreshment Break</td>
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<tr>
<td>4:05 PM–5:35 PM</td>
<td><strong>TECHNICAL SESSION:</strong> System-level Program Requirements and Calibration Planning</td>
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<td>- On-Orbit Calibration Knowledge and Program Objectives for CLARREO</td>
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<td>- MKV Carrier Vehicle Sensor Calibration</td>
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<td>- CLARREO Mission Visible and Near-Infrared Radiometry Studies</td>
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<td>- NPP VIIRS, CrIS, ATMS, OMPS SDR Cal/Val Planning</td>
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<td>6:00 PM–7:30 PM</td>
<td><strong>LOW BACKGROUND INFRARED (LBIR) FACILITY USER'S BOARD MEETING</strong></td>
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<td>University Inn, Room 510</td>
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<td>Free Evening</td>
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**WEDNESDAY, AUGUST 27, 2008**

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<th>Time</th>
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<tr>
<td>7:00 AM–7:30 AM</td>
<td>Continental Breakfast</td>
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<td>7:30 AM–10:15 AM</td>
<td><strong>TECHNICAL SESSION:</strong> US-only Restricted Session</td>
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<td>GEO Payload Ground Radiometric Calibration Analysis Overview</td>
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<td>GEO Payload Ground Radiometric Calibration Tests Overview</td>
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<td>A Methodology for Characterization and Long-Term Trending of SBIRS Radiometric Data</td>
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<td>Tim Boyd—Northrop Grumman</td>
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<td>In-flight Performance Characterization of EO Sensors using Specular Reflectors</td>
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<td>Stephen Schiller—Raytheon Space and Airborne Systems</td>
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<td>Combining Radiometric Calibration and Complex Scene Projection for Mission Simulation in the AEDC Sensor Test Facilities</td>
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<td>Randy Nicholson—Aerospace Testing Alliance (ATA)</td>
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<td>CrIS Flight Model 1 Test Overview</td>
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<td>Ronald Glumb—ITT</td>
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<td>9:30 AM–4:30 PM</td>
<td>Exhibits Open</td>
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<td>10:15 AM–10:35 AM</td>
<td>Refreshment Break</td>
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WEDNESDAY, AUGUST 27, 2008

10:35 AM–12:20 PM  **TECHNICAL SESSION:** Pre-launch NPP Sensor Characterizations
- Preparation for CrIS and Radiosonde Matchups
  Eugene Kratz—Raytheon ITSS
- Absolute Radiometric Calibration of the CrIS Sensor
  Mark Esplin—USU/Space Dynamics Laboratory
- Pre-Launch Spectral Calibration of the CrIS Sensor on NPOESS/NPP
  Larrabee Strow—University of Maryland Baltimore County
- Analysis of CrIS Flight Model 1 Radiometric Linearity and Radiometric Noise
  Joe Taylor—University of Wisconsin, SSEC
- Cross-Comparison of Sensor Measurements from Different Satellite Platforms: Preparation for NPP/NPOESS On-Orbit Cal/Val
  ZiPing (Frank) Sun—Northrop Grumman Space Technology

12:20 PM–1:20 PM  Lunch Provided

1:20 PM–3:20 PM  **TECHNICAL SESSION:** Pre-launch NPP Sensor Characterizations (cont.)
- Solar Diffuser Features in Earth-observing Sensors: What are They and What Can be Done about Them
  Glen Jaross—SSAI / NASA
- VIIRS Emissive Band Aliveness Test by Vicarious Internal Calibration
  Carl Fischer—MIT Lincoln Laboratory
- VIIRS Crosstalk and Ghosting Map Methodology
  Mau-Song Chou—Northrop Grumman Space Technology
- Focal Plane Filter Angle Resolved Scatter Update
  Gene Waluschka—NASA Goddard Space Flight Center
- Status of VIIRS Polarization Characterization for Ocean Color Algorithms
  Patty Pratt—Northrop Grumman Corporation
- Model Based Performance Evaluation of VIIRS Spatial Characteristics
  Lushalan Liao—Northrop Grumman Space Technology

3:20 PM–4:05 PM  Refreshment Break
Poster Viewing—Authors Present

4:05 PM–4:45 PM  **TECHNICAL SESSION:** Pre-launch NPP Sensor Characterizations (cont.)
- Effects of Physical Orientation on Spectral Behavior of a Tungsten-Halogen Lamp
  John Aldridge—MIT Lincoln Laboratory
- Impact of Ambient Water Vapor on VIIRS M9 RVS Pre-Launch Characterization
  Christopher Moeller—University of Wisconsin - Madison

4:45 PM–5:30 PM  **TECHNICAL SESSION:** Data Management
- NSIPS Facility for NPP/NPOESS Cal/Val
  Lushalan Liao—Northrop Grumman Space Technology
- GRAVITE—Central Technical Support Infrastructure for the IPO NPP Calibration and Validation Program
  Captain Vaughn Gonzalez, USAF—NPOESS Integrated Program Office

6:00 PM–8:00 PM  **BARBEQUE IN LOGAN CANYON**
Guinavah-Malibu Campground Group Site C
THURSDAY, AUGUST 28, 2008  No Exhibits Available

7:30 AM–8:00 AM  Continental Breakfast

8:00 AM–9:50 AM  TECHNICAL SESSION: Inter-calibration and Validation of Operational Sensors
  - Monitoring On-orbit Radiometric Stability of the Terra MODIS and Landsat 7 ETM+ Sensors using Pseudo-Invariant Test Sites
    Gyanesh Chander—SGT at USGS
  - Spectral and Spatial Assessment of an Automated Approach to Ground-Based Vicarious Calibration
    Jeff Czapla-Myers—University of Arizona
  - A Post-launch Calibration Strategy of the Nonlinear MTSAT Visible Sensor
    Lance Avey—Science Systems and Applications Inc.
  - On the Use of Deep Convective Clouds to Monitor Geostationary Visible Sensor Degradation
    David Doelling—NASA Langley Research Center
  - Comparison of AIRS and IASI Co-located Radiances Over a Broad Temperature Range
    Denis Elliott—Jet Propulsion Laboratory

9:50 AM–10:20 AM  Refreshment Break

10:20 AM–11:20 AM  TECHNICAL SESSION: Inter-calibration and Validation of Operational Sensors (cont.)
  - Cross-calibration of Hyperspectral Imagers using Multispectral Sensors
    Joel McCorkel—University of Arizona
  - Inter-Calibration of the AIRS and IASI Operational Infrared Sensors
    Larrabee Strow—University of Maryland Baltimore County
  - Intercalibration of Microwave Sounding Unit for Climate Research—Lessons Learned
    Cheng-Zhi Zou—NOAA/NESDIS/STAR

11:20 AM–11:35 AM  CONFERENCE CONCLUSION

11:35 AM–12:35 PM  Lunch Provided