

# 2011 Satellite Direct Readout Conference



## Major Outcomes

A number of excellent ideas, suggestions and recommendations emerged from the conference plenary sessions, the conference survey, question and answer sessions and breakout groups. These ideas, suggestions and recommendations were grouped in four overall theme areas; Transition from GOES to GOES-R; Transition from POES to NPP/JPSS; Satellite Services; and Frequency Issues. The conference findings were discussed and the top recommendations were identified and agreed upon. The top recommendations from the NOAA 2011 Satellite Direct Readout Conference were:

1. GOES environmental data users consisting of various international partners and public users such as Universities wanted to know what their options are for collecting GOES-R GRB data. Users have indicated they cannot update their GVAR systems to GRB due to the significant cost increase in GRB ground stations.
2. Users requested the ability to collect smaller file sizes or subsets of the full imagery from GOES-R to ease data processing requirements and focus in on areas of interest. For example, the collection of data from a particular region/country rather than the full hemispheric image.
3. There was an ongoing need expressed to identify resources and approaches to train international users by providing translations of training material in other foreign languages, expanding the proving ground concept to include foreign users, participate in WMO conference in 2012 in Rio, and extend outreach efforts to Regional Associations (RA) III/IV/V.
4. A very important area of concern was antenna upgrades and equipment needs. The users need NOAA to provide signal specification to users in 2012, provide notional geographic coverage maps/antenna size, explore a prototype GVAR/GRB receiver – backward compatibility, and develop SW to unpack GRB feed for Direct Readout Users.
5. Develop a robust suite of LRD products by using day and nighttime AVHRR baseline channels for LRD initial specifications and conduct a final analysis of ideal channel combinations for LRD.
6. The user recommendations about the LRD Downlink Frequency issue were to explore the possibility of dropping center downlink (1707 MHz) frequency below 1690 MHz to avoid future interference with mobile cellular industry, and in the short-term, move center downlink frequency below 1707 MHz to avoid the current 4G interference.
7. With regard to the HRD Processing Packages, users prefer NOAA supported IMAP vs. IPOPP software and they need access to software and source code at the NPP launch date. They also need consistency between local and global processing software and support for the HRD processing software.
8. The DCS Transition Plan to new transmitters needs to be clearly defined and communicated to user communities.
9. DCS users wanted to update the DCS stream into LRIT with modern quality indicators (which are currently available in DCS system) and have more reliable delivery mechanisms and better latency.
10. Users want to make the GERBER (plan for printing circuit boards) files available to the general public.
11. NOAA will work with NTIA to advocate additional exclusion zones, as there will be a compelling argument required, as current U.S. law and NTIA rules do not allow exclusion zones for non-U.S. government sites.
12. The L-Band user community should collaborate on innovative approaches like the use of dispersed antennas -- "hot back-ups" and antenna placement. The users believe that Government and intergovernmental bodies should facilitate this.
13. Users feel that NOAA, together with the WMO and national meteorological organizations, should facilitate enhanced communication among the L-Band user community to: update, re-activate, and maintain the WMO user data base, establish informal networks, and organize user forums, etc, for unconstrained user communication.

## International Partners

- WMO Space Programme
- WMO Region Associations III, IV and V
- European Organisation for the Exploitation of Meteorological Satellites
- Centre National d'Études Spatiales (CNES)
- National Institute for Space Research (INPE)
- Comision Nacional de Actividades Espaciales (CONAE)
- Environment Canada

## Conference Support

- GOES-R Program Office
- JPSS Program Office
- Office of Systems Development
- National Weather Service
- National Hurricane Center

## Vendors

- SeaSpace Corporation
- Sutron Corporation
- CIMSS/SSEC
- Waterlog YSI Incorporated
- IPS MeteoStar, Inc.
- Microcom Design, Inc.
- Global Imaging
- Orbital Systems, Ltd.
- Northern Video Graphics, Inc
- NOAA GEONETCast/GEONETCast Americas
- NESDIS
- National Hurricane Center
- GOES-R
- RANET
- Vaisala, Inc
- Stevens Water Monitoring Systems, Inc.
- Aquila Systems
- Kongsberg Spacetec
- Harris Corporation
- NOAA

Real-time Access for Real-time Applications

<http://directreadout.noaa.gov/miami11/>

