

GEONETCast-Americas Status

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Summary and Purpose of Document

GEONETCast-Americas (GNC) is a suitable, low-cost tool for making datasets available in areas with poor internet connectivity. A station can be installed at a cost of less than 5K USD per unit. Twenty-nine receiving stations have been installed by NOAA, USAID or GNC-Americas partners.

One of the primary uses of GNC is in support of disaster risk reduction, e.g. in the case when other telecommunication systems are affected by a disaster. This is relevant in invoking the International Charter on Major Disasters which is opening its user base to recognized national disaster response authorities. Training is another important use of the GNC.

ACTION PROPOSED

The seventh session is invited to:

- (a) Note the steady progress of GEONETCast-Americas;
 - (b) Provide comments, suggestions or recommendations for GEONETCast-Americas;
 - (c) Recommend if there are any changes needed due to GOES-13 (East) outages.
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DISCUSSION

Introduction

GNC is a suitable, low-cost tool for making datasets available in areas with poor internet connectivity. A station can be installed at a cost of less than 5K USD per unit. Twenty-nine receiving stations have been installed by NOAA, USAID or GNC-Americas partners. GNC-Americas offers 2 Mbit/s data rate relying on a new Insat-21 telecommunications satellite (expected to operate for another 8-9 years) using multiplexed C-band DVB-S. Options exist to expand to 12 Mbit/s data rate. Product broadcast channels are separate per data provider and there are no restrictions on product formats. Metadata (“discovery and access broker”) available on the GEO Portal is also being transferred.

The team responsible for operating GEONETCast-Americas (GNC-A) consists of: Yana Gevorgyan (NOAA NESDIS), Eric Madsen (NOAA NESDIS), Paul Seymour (NOAA NESDIS) and Rich Coley.

One of the primary uses of GNC is in support of disaster risk reduction, e.g. in the case when other telecommunication systems are affected by a disaster (e.g., land slide). This is relevant in invoking the International Charter on Major Disasters which is opening its user base to recognized national disaster response authorities. Training is another important use of the GNC. A VLab Training channel was set up on GNC-A in August 2012 in support of the VLab. We have tested and initiated sending recordings of the monthly focus group sessions as mp4 files. These files have been smaller than 20MB. Because of limited capacity on both the dissemination and receiving ends, some of the training resources beyond 60 MB in size may not get through to the user.

NOAA hosted the WMO Train the Trainer workshop on 6-7 April 2013 at the National Center for Weather and Climate Prediction (NCWCP) in College Park, Maryland. GEONETCast was the focus of the workshop. General operations, capabilities, and installation of GEONETCast were addressed as well as the use of GNC for disaster mitigation products, as a training channel, and data collection system. There was also a session reviewing regional requirements documentation and the need for better integration of regional dissemination systems. Recommendations identified during the event include:

- In Central and South America and the Caribbean, operational users of satellite data from GOES and other systems require a low-cost, operational and sustained data dissemination system building on GNC-A and EUMETCast. Arrangements for cost-sharing, e.g. of bandwidth fees, should be developed with urgency.
- Training on the use of satellite data and associated visualization, processing and analysis tools should be made available, taking into account the different needs and skills of satellite data users. Training should in particular involve preparing users from the Region for GOES-R.
- The proposed standing coordination group for satellite data requirements in RA III and IV should establish user needs for data, products, training, and associated issues (e.g., data formats). The group should ensure linkage to and follow-up by satellite providers at the appropriate level, and represent the needs of a wide variety of users in the Region.

Since the workshop, we are exploring the option of transmitting geotiff files of satellite imagery through GNC-A and the capability of McIDAS-V to display the data. We are also looking into developing 2 event weeks: one focused on GEONETCast and the other on GOES-R. The GEONETCast event week will make potential users aware of the capabilities of GEONETCast and will also encourage them to start using the service so that it does not go away. All these activities will support recommendations of the workshop. We also plan to review the EUMETCast Training Channel Implementation Plan for guidance on writing a GNC-A Training Channel Implementation Plan and address ways to get around file size limitations for transmitting.
