GOES DCS Update

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October 17, 2016
What is GOES DCS?

- Data Relay System for Government Environmental Use
- Near-Real time data transmissions
- Used for monitoring environmental events
  - Tsunamis
  - Floods
  - Fires
  - Synoptic Observations
- 28,000+ stations reporting in footprint of GOES
- Used by government agencies in U.S., Central America, South America, Canada, Pacific and Caribbean
- Data Communications for most emergency warning systems in the Western Hemisphere (footprint of GOES)
Requirements

- Can transmit any environmental parameter that can be measured
- Must be government or government sponsored
- Must apply for a System Use Agreement (SUA) and be approved before transmitting
- Must use Certified Transmitters (determined by NOAA to not interfere with satellite or other users)
- Must conform to NOAA System Use Policies
- Must be a “good neighbor” to all other users
System Use Agreement

- Application can be submitted from website
  - https://dcs1.noaa.gov
  - https://dcs2.noaa.gov
  - https://dcs3.noaa.gov
  - https://dcs4.noaa.gov
  - Complete online and submit electronically

- Must be renewed regularly
  - 5 years for government agencies
  - 1 year for transmitter manufacturers

- Signatory on System Use Agreement must have authority to correct transmitter or interference problems for the program identified
  - Must be registered in DCS Administration and Data Distribution System (DADDS)

- Can have multiple users under a single System Use Agreement
DADDS

• DCS Administration and Data Distribution System
  – Manages user and platform information
    • Channel and time assignments
    • User contact information
    • User logins
    • System Use Agreements
  – Data monitoring and download
    • New network list capability will make downloads (exports) easier
  – Dissemination to other circuits
    • NWSTG
    • DOMSAT
DADDS

- Tables have fields that users must update
  - platform location
  - maintenance contact
  - Group Manager (to authorize other users)

- Self-Registering of assigned Contact allows access to tables

- Can be used to download (export) data

- Use of “WMO Header” allows routing on GTS
  - WMO Header SOxx10 specially formulated for Tsunami Users

- Users can verify assignments before equipment is deployed
  - New DCS Field Test easily accessed and bookmarked from a cell phone
  - Currently shows received data for a platform, soon will display assignment information
DADDS Updates

• What’s Coming
  – Improved Network List
  – Bulk Download (by Network List or by query)
    • Use of Web Technology means no software client to install
    • Same Technology used for streaming videos (youtube)

• Still Need Tables Populated: PDT, Contact Information, Group Contacts

• Access at:
  – https://dcs1.noaa.gov
  – https://dcs2.noaa.gov
  – https://dcs3.noaa.gov
  – https://dcs4.noaa.gov
DADD'S Updates

• What’s Coming
  – System Use Agreement Processing and Tracking System (GOES, Argos and DRO)
  – Bulk Download (Network List?)

• Still Need Tables Populated: PDT, Contact Information, Group Contacts

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**TSUNAMI PLATFORMS**

- 135 Stations Report Every 5 minutes
- 581 Stations Report Every 6 minutes (NOAA/NOS)
- 55 Stations Report Every 15 minutes
- 6 Channels Used for General Tsunami Use
- 6 Channels Used by NOAA/NOS
- Report Rate Request Submitted to the Tsunami Warning Program Managers (Christa Von Hillebrand and Stuart Weinstein) who will recommend Rate (5 or 15 minutes)
- NOAA will try to accommodate the recommendation
- If Resources are limited NOAA will go back to Christa and Stuart and let them know
System Changes

- Version II Transmitters (also known as Certification Standard 2 or CS2) required for all new deployments
  - Smaller channels, allow for doubling system capacity
- Can No Longer Deploy CS1 Equipment
- Depending on Vendor may be upgradeable to CS2
- All Existing CS1 Equipment can be used until May 31, 2026
- More than 8000 CS2 transmitters already deployed
- When enough are deployed we can claim new channels between the existing channels
- Additional Demodulators Purchased to support new channels
Contact Us

• GOES DCS Customer Service
  – Letecia Reeves (letecia.reeves@noaa.gov)

• GOES DCS Program Manager
  – Kay Metcalf (kay.metcalf@noaa.gov)

• 24 Hour Troubleshooting Assistance (WCDA)
  – 757-824-7450

• http://noaasis.noaa.gov/DCS

• DADDS Login:
  – https://dcs1.noaa.gov
  – https://dcs2.noaa.gov
  – https://dcs3.noaa.gov
  – https://dcs4.noaa.gov