

# *NOAA Command and Data Acquisition Station*





# DCS (GOES Data Collection System)

- DCS receives a combined 34K messages an hour from our GOES-16 (East) and GOES-17 (West) satellites.
- DCS has several different mechanisms for data retrieval provide by NOAA.
  - DADDS (DCS Administration and Data Distribution System)
  - NWSTG (National Weather Service Telecommunication Gateway)
  - DOMSAT (Service ended 14 May, 2019)
  - LRGS (Local Readout Ground System)
  - HRIT (High Rate Information Transmission)



# How Do We Get All of the Messages?



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# How Do We Get All of the Messages?

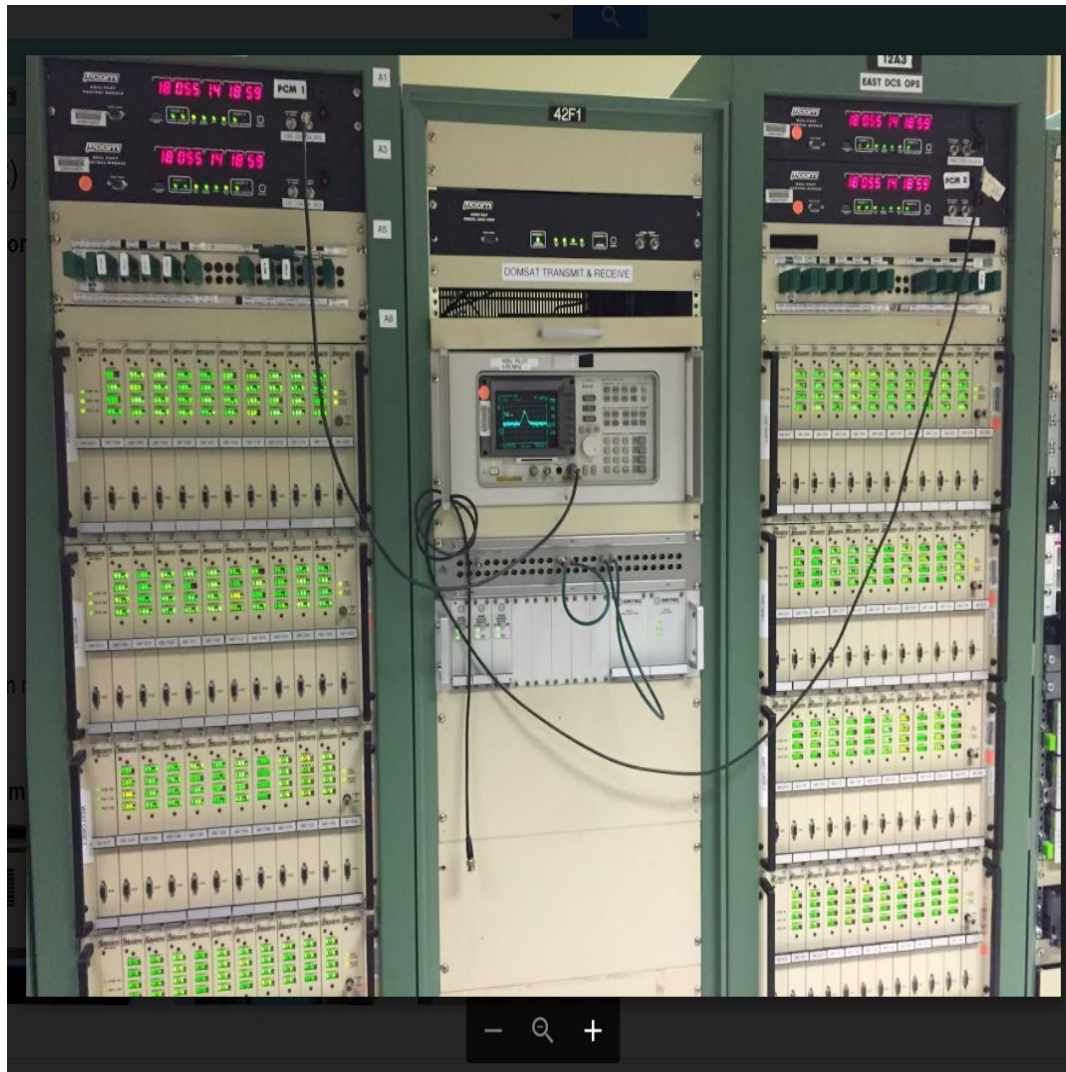


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# The Demods and DCPMs'

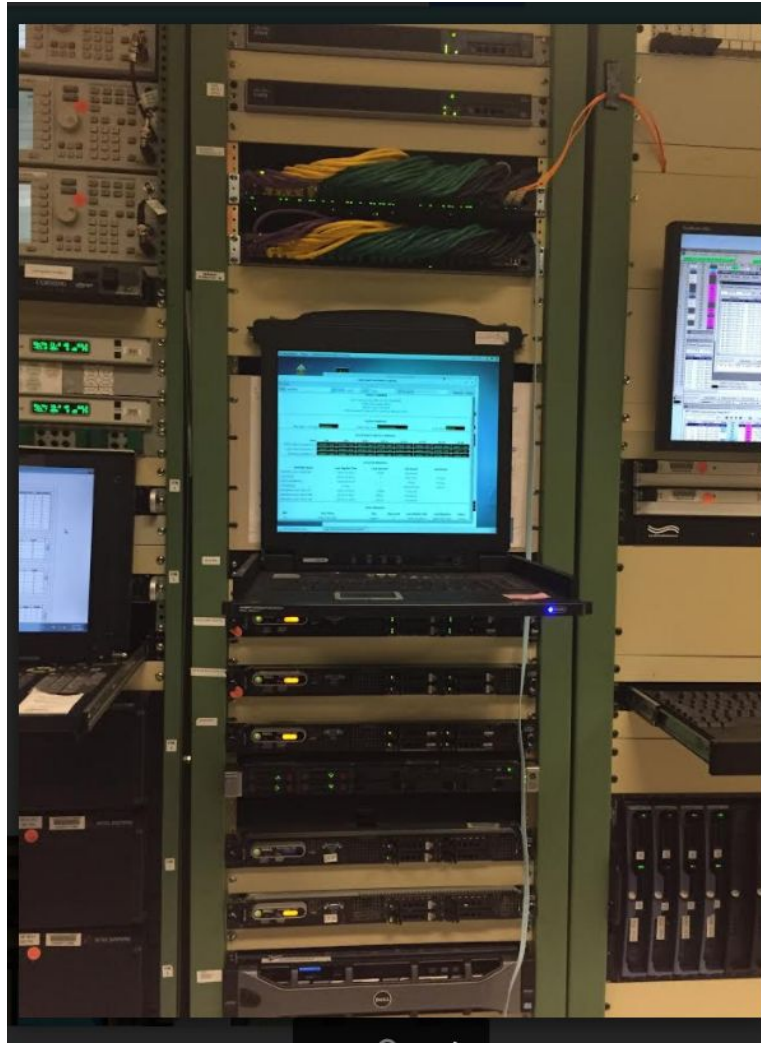


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# The Servers



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# LRGS Information



**NOAA** GOES DATA COLLECTION SYSTEM  
OFFICE OF SATELLITE AND PRODUCT OPERATIONS



» Operational Notices  
12/14/2017 17:39 UTC

» Help Desk  
24/7 Operations

» System Information

» Program Information

» DADDs File Downloads  
02/24/2018 13:00 UTC  
pdts\_compressed.txt  
chans\_by\_baud.txt

» Wallops Webservers  
dcs1.noaa.gov  
dcs2.noaa.gov

» NSOF Webservers  
dcs3.noaa.gov  
dcs4.noaa.gov

» LRGS Status

» LRGS Deadlines  
Password Implementation:  
August 9, 2016  
SHA-256 Implementation:  
August 17, 2016

Related Links

» Satellite Conference 2015

» DCS Newsletter - Dec. 2013

**DCS Administration and Data Distribution System (DADDs)**  
NOAA's System for Managing and Providing Access to Data from GOES DCS

**DADDs DCS1**  
User Login

Email

Password

**SIGN IN**

- Need a Login? Click [here](#).
- Forgotten Password? Click [here](#).
- DCS Field Test? Click [here](#).
- Need Help? Click [here](#).
- **24/7 Technical Support: (757) 824-7450**
- **DCS Operational Notices RSS Feed**

**Submit an Application for GOES DCS SUA**

## Notice to Users

**\*\*WARNING\*\*WARNING\*\*WARNING\*\***

This is a United States NOAA computer system, which may be accessed and used only for official Government business by authorized personnel. Unauthorized access or use of this computer system may subject violators to criminal, civil, and/or administrative action.

All information on this computer system may be intercepted, recorded, read, copied, and disclosed by and to authorized personnel for official purposes, including criminal investigations. Access or use of this computer system by any person whether authorized or unauthorized, constitutes consent to these terms.

**\*\*WARNING\*\*WARNING\*\*WARNING\*\***

**Register for Direct Readout and Services Notifications**  
**Help us keep you up to date with changes and anomalies!**



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# LRGS Information



## LRGS Summary Status

UTC: September 23, 2019 18:45:38 (Day 266)

<i>Host Name</i>	<i>Status Time</i>	<i>LRGS Status</i>	<i>Primary Downlink Status</i>	<i>Primary Quality Last Hour</i>	<i>Aggregate Quality Last Hour</i>	<i>Msgs This Hour</i>	<i>Num DDS Clients</i>	<i>Cove LRGs Version</i>
<a href="http://cdadata.wcda.noaa.gov">cdadata.wcda.noaa.gov</a>	09/23 18:45:27	OK	DRGS:Active	99.52%	99.52%	28362	85	9.1
<a href="http://cdabackup.wcda.noaa.gov">cdabackup.wcda.noaa.gov</a>	09/23 18:45:33	OK	DRGS:Active	99.51%	99.51%	28359	64	9.1
<a href="http://nlrgs1.noaa.gov">nlrgs1.noaa.gov</a>	09/23 18:45:19	OK	DRGS:Active	99.48%	99.48%	28277	15	9.1
<a href="http://nlrgs2.noaa.gov">nlrgs2.noaa.gov</a>	09/23 18:45:22	OK	DRGS:Active	99.48%	99.48%	28302	16	9.1
<a href="http://lrgseddn1.cr.usgs.gov">lrgseddn1.cr.usgs.gov</a>	09/23 18:45:34	OK	DDS:Active	99.51%	99.51%	28392	85	9.1
<a href="http://lrgseddn2.cr.usgs.gov">lrgseddn2.cr.usgs.gov</a>	09/23 18:45:12	OK	DDS:Active	99.54%	99.54%	30122	36	9.2
<a href="http://lrgseddn3.cr.usgs.gov">lrgseddn3.cr.usgs.gov</a>	09/23 18:45:13	OK	DDS:Active	99.52%	99.52%	28180	27	9.1



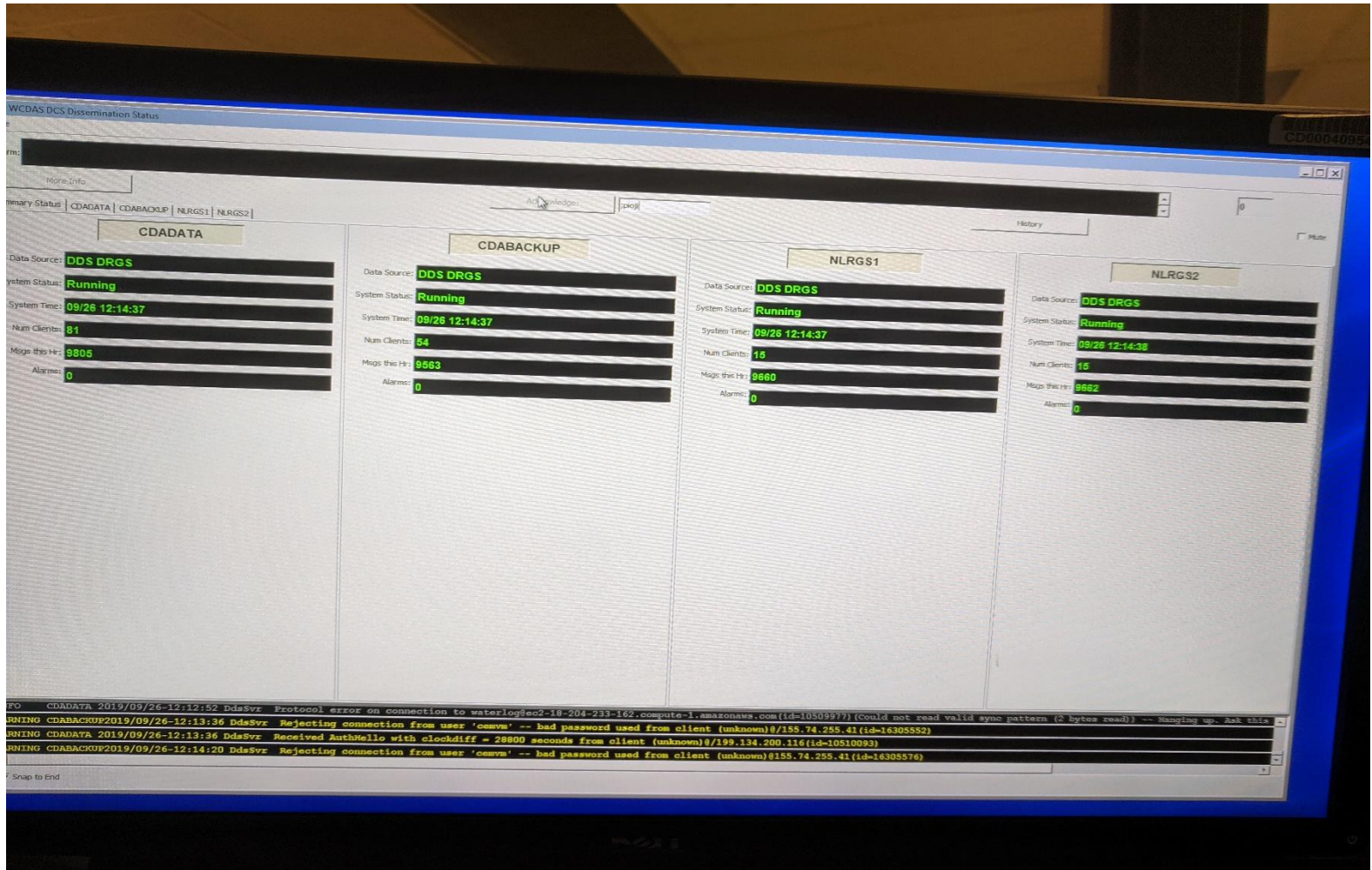
# LRGS Servers

- There are several LRGS Servers. They are at different locations across the country.

<a href="http://cdadata.wcda.noaa.gov">cdadata.wcda.noaa.gov</a>
<a href="http://cdabackup.wcda.noaa.gov">cdabackup.wcda.noaa.gov</a>
<a href="http://cdadrot.wcda.noaa.gov">cdadrot.wcda.noaa.gov</a>
<a href="http://nlrgs1.noaa.gov">nlrgs1.noaa.gov</a>
<a href="http://nlrgs2.noaa.gov">nlrgs2.noaa.gov</a>
<a href="http://lrgseddn1.cr.usgs.gov">lrgseddn1.cr.usgs.gov</a>
<a href="http://lrgseddn2.cr.usgs.gov">lrgseddn2.cr.usgs.gov</a>
<a href="http://lrgseddn3.cr.usgs.gov">lrgseddn3.cr.usgs.gov</a>



# LRGS Monitoring GUI



# User Account Setup

- Call a DCS operator at 757-824-7450 to begin the process for account set up.
- Have available the following:
  - Name
  - Email Address
  - Organization
  - Telephone Number
  - Preferred 6-character user name



# Important Note

- Your DADDS account and your LRGS account are different.
- DADDS and LRGS are two separate systems and the usernames are not interchangeable.



# User Account Set Up

- Must be a unique username.
  - We will check to see if your username is available.
  - Currently, once you establish your password there is no requirement to change it.
  - Once your account is established, it will be immediately available on CDADATA. Your credentials will propagate to the other LRGs machines within 30 minutes.



# Password Convention

- An initial password is generated by a GUI interface located at Wallops.
- The DCS operator will provide your new password over the phone.
- You may choose to keep this password or change it at your leisure.
- IT security requirements will not let us email you the password at this time.



# Password Convention

- **NOAA CITR-021 Password Requirements**

- Passwords must contain at least 12 non-blank characters
- Password must contain 3 of the following four character classes: upper case letters, lower case letters, digits, special characters.
- Passwords cannot contain the user name or any dictionary word or acronym that is 5 characters or longer
- When changing a password, you cannot reuse any of the last 8 passwords, or any password that was set in the past 2 years.



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# Password Convention

- Users can change their passwords if so desired.
- The instructions are found in the Client User Guide provided on the download page.
- Additionally, we cannot see your password once it has been initially created. If you forget, you will have to call the Wallops DCS help desk to have a new one created.

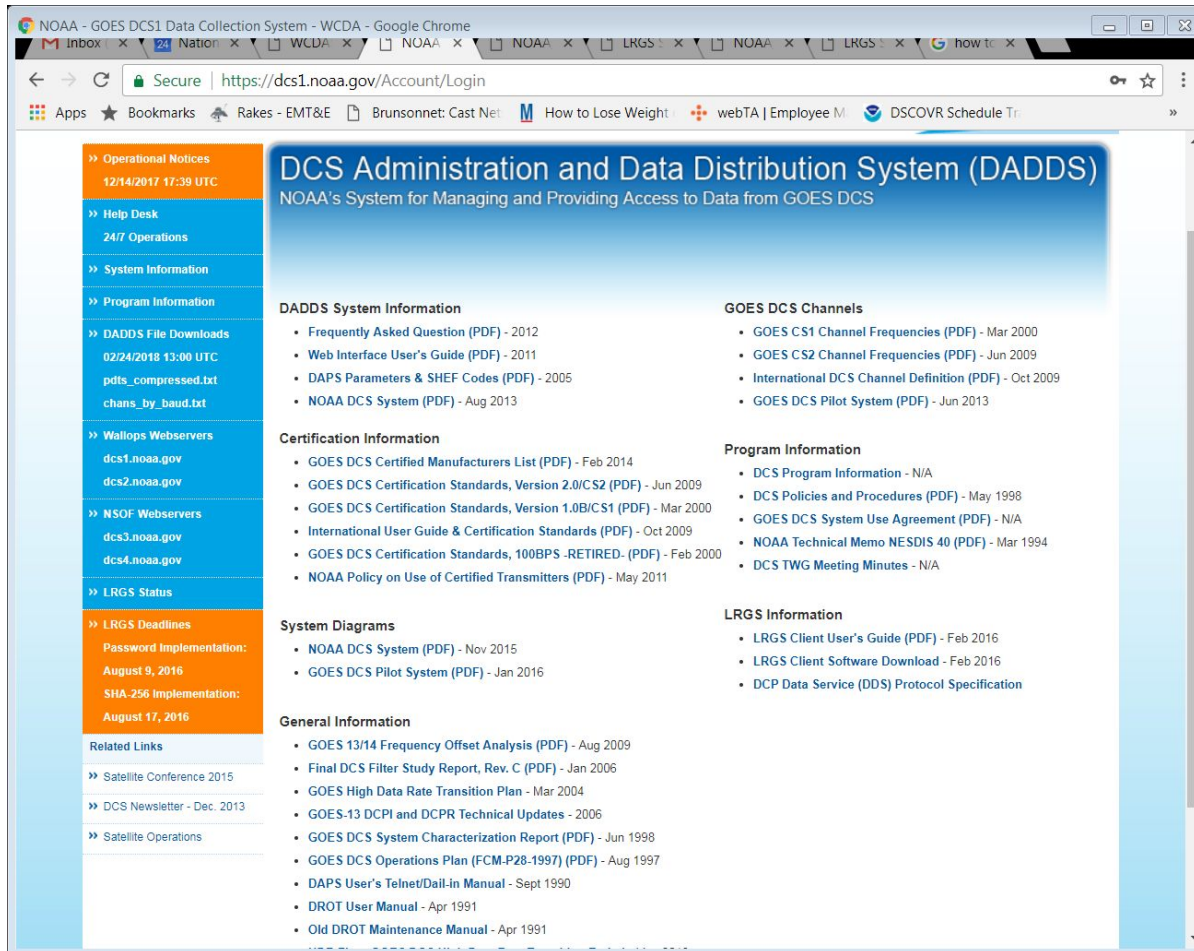


# Downloads

- You do not need to login to your DADDS account to download the client
- Go to our web page for the download link
- DCS1.NOAA.gov, DCS2.NOAA.gov
- Download the user manual first and read the particulars for your particular application
- Download the client software



# LRGS Downloads



The screenshot shows a web browser window displaying the NOAA DADDS (Data Administration and Data Distribution System) website. The page title is "DCS Administration and Data Distribution System (DADDS)" and the subtitle is "NOAA's System for Managing and Providing Access to Data from GOES DCS".

The left sidebar contains several navigation links:

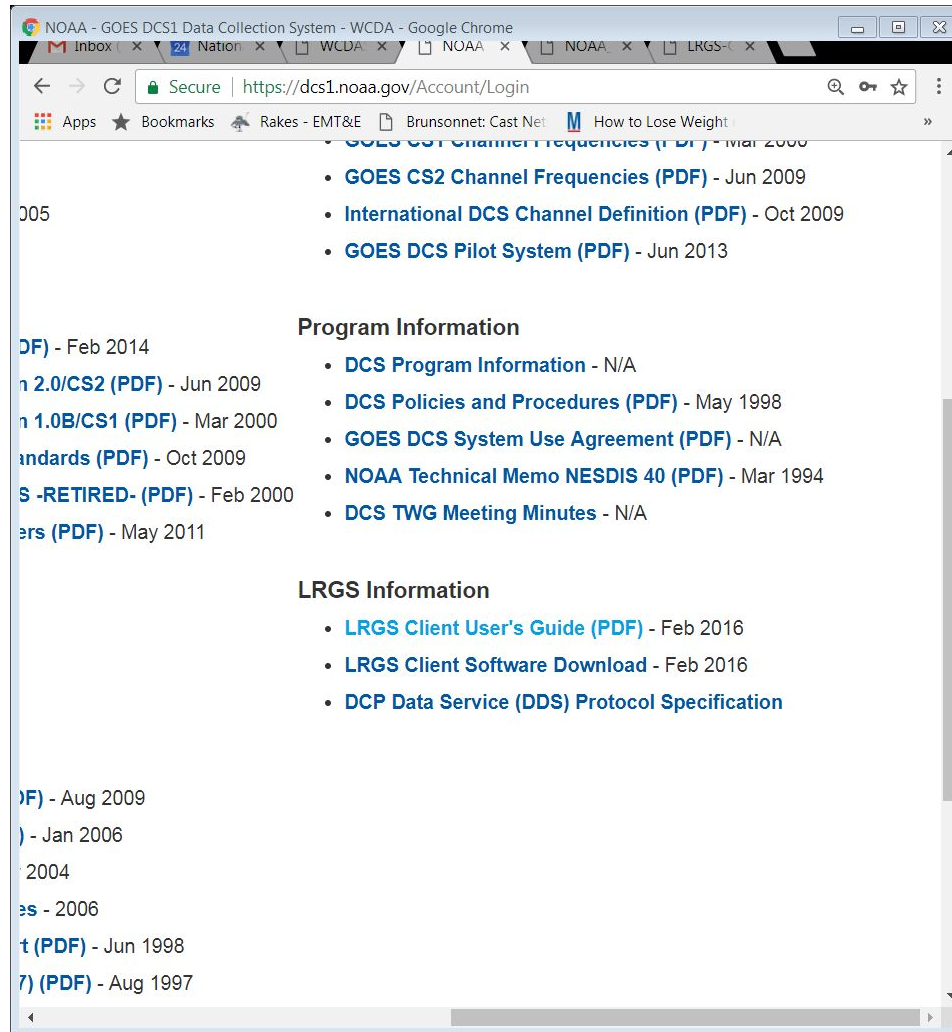
- Operational Notices (12/14/2017 17:39 UTC)
- Help Desk (24/7 Operations)
- System Information
- Program Information
- DADDS File Downloads (02/24/2018 13:00 UTC)
  - pdts\_compressed.txt
  - chans\_by\_baud.txt
- Wallops Webservers
  - dcs1.noaa.gov
  - dcs2.noaa.gov
- NSOF Webservers
  - dcs3.noaa.gov
  - dcs4.noaa.gov
- LRGS Status
- LRGS Deadlines
  - Password Implementation: August 9, 2016
  - SHA-256 Implementation: August 17, 2016
- Related Links
  - Satellite Conference 2015
  - DCS Newsletter - Dec. 2013
  - Satellite Operations

The main content area is divided into several sections:

- DADDS System Information**
  - Frequently Asked Question (PDF) - 2012
  - Web Interface User's Guide (PDF) - 2011
  - DAPS Parameters & SHEF Codes (PDF) - 2005
  - NOAA DCS System (PDF) - Aug 2013
- Certification Information**
  - GOES DCS Certified Manufacturers List (PDF) - Feb 2014
  - GOES DCS Certification Standards, Version 2.0/CS2 (PDF) - Jun 2009
  - GOES DCS Certification Standards, Version 1.0B/CS1 (PDF) - Mar 2000
  - International User Guide & Certification Standards (PDF) - Oct 2009
  - GOES DCS Certification Standards, 100BPS - RETIRED - (PDF) - Feb 2000
  - NOAA Policy on Use of Certified Transmitters (PDF) - May 2011
- System Diagrams**
  - NOAA DCS System (PDF) - Nov 2015
  - GOES DCS Pilot System (PDF) - Jan 2016
- General Information**
  - GOES 13/14 Frequency Offset Analysis (PDF) - Aug 2009
  - Final DCS Filter Study Report, Rev. C (PDF) - Jan 2006
  - GOES High Data Rate Transition Plan - Mar 2004
  - GOES-13 DCPI and DCPR Technical Updates - 2006
  - GOES DCS System Characterization Report (PDF) - Jun 1998
  - GOES DCS Operations Plan (FCM-P28-1997) (PDF) - Aug 1997
  - DAPS User's Telnet/Dail-in Manual - Sept 1990
  - DROT User Manual - Apr 1991
  - Old DROT Maintenance Manual - Apr 1991
- GOES DCS Channels**
  - GOES CS1 Channel Frequencies (PDF) - Mar 2000
  - GOES CS2 Channel Frequencies (PDF) - Jun 2009
  - International DCS Channel Definition (PDF) - Oct 2009
  - GOES DCS Pilot System (PDF) - Jun 2013
- Program Information**
  - DCS Program Information - N/A
  - DCS Policies and Procedures (PDF) - May 1998
  - GOES DCS System Use Agreement (PDF) - N/A
  - NOAA Technical Memo NESDIS 40 (PDF) - Mar 1994
  - DCS TWG Meeting Minutes - N/A
- LRGS Information**
  - LRGS Client User's Guide (PDF) - Feb 2016
  - LRGS Client Software Download - Feb 2016
  - DCP Data Service (DDS) Protocol Specification



# LRGS Downloads



NOAA - GOES DCS1 Data Collection System - WCDA - Google Chrome

Secure | <https://dcs1.noaa.gov/Account/Login>

- [GOES CS1 Channel Frequencies \(PDF\)](#) - Mar 2000
- [GOES CS2 Channel Frequencies \(PDF\)](#) - Jun 2009
- [International DCS Channel Definition \(PDF\)](#) - Oct 2009
- [GOES DCS Pilot System \(PDF\)](#) - Jun 2013

### Program Information

- [DCS Program Information](#) - N/A
- [DCS Policies and Procedures \(PDF\)](#) - May 1998
- [GOES DCS System Use Agreement \(PDF\)](#) - N/A
- [NOAA Technical Memo NESDIS 40 \(PDF\)](#) - Mar 1994
- [DCS TWG Meeting Minutes](#) - N/A

### LRGS Information

- [LRGS Client User's Guide \(PDF\)](#) - Feb 2016
- [LRGS Client Software Download](#) - Feb 2016
- [DCP Data Service \(DDS\) Protocol Specification](#)

005

[DF](#) - Feb 2014

[n 2.0/CS2 \(PDF\)](#) - Jun 2009

[n 1.0B/CS1 \(PDF\)](#) - Mar 2000

[Standards \(PDF\)](#) - Oct 2009

[S -RETIRED- \(PDF\)](#) - Feb 2000

[ers \(PDF\)](#) - May 2011

[DF](#) - Aug 2009

[\)](#) - Jan 2006

2004

es - 2006

[t \(PDF\)](#) - Jun 1998

[7\) \(PDF\)](#) - Aug 1997



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# LRGS Support

- Wallops has very limited support for LRGS
- It's a free OpenDCS suite developed to give users another option for data retrieval.
- At Wallops we issue passwords for the system, keep the interface servers running and ensure DCS data is flowing to the LRGS's.



# LRGS Support

- Wallops staff does not help with installation of the client software. We provide a secure download of the latest client and user guides.
- Users should coordinate with their system administrator for installation help.



# LRGS Support

- If you have detailed LrgsClient questions, contact Cove Software, LLC for specific application support. Cove's phone number is listed in the last page of the user manual.



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# Questions?

## Contact

Wallops DCS Help Desk – (757) 824-7450

[wdc@noaa.gov](mailto:wdc@noaa.gov)

Travis Thornton - (757) 824-7316

[Joseph.t.Thornton@noaa.gov](mailto:Joseph.t.Thornton@noaa.gov)

Matthew Sullivan - (757) 824-7360

[Matt.g.Sullivan@noaa.gov](mailto:Matt.g.Sullivan@noaa.gov)



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