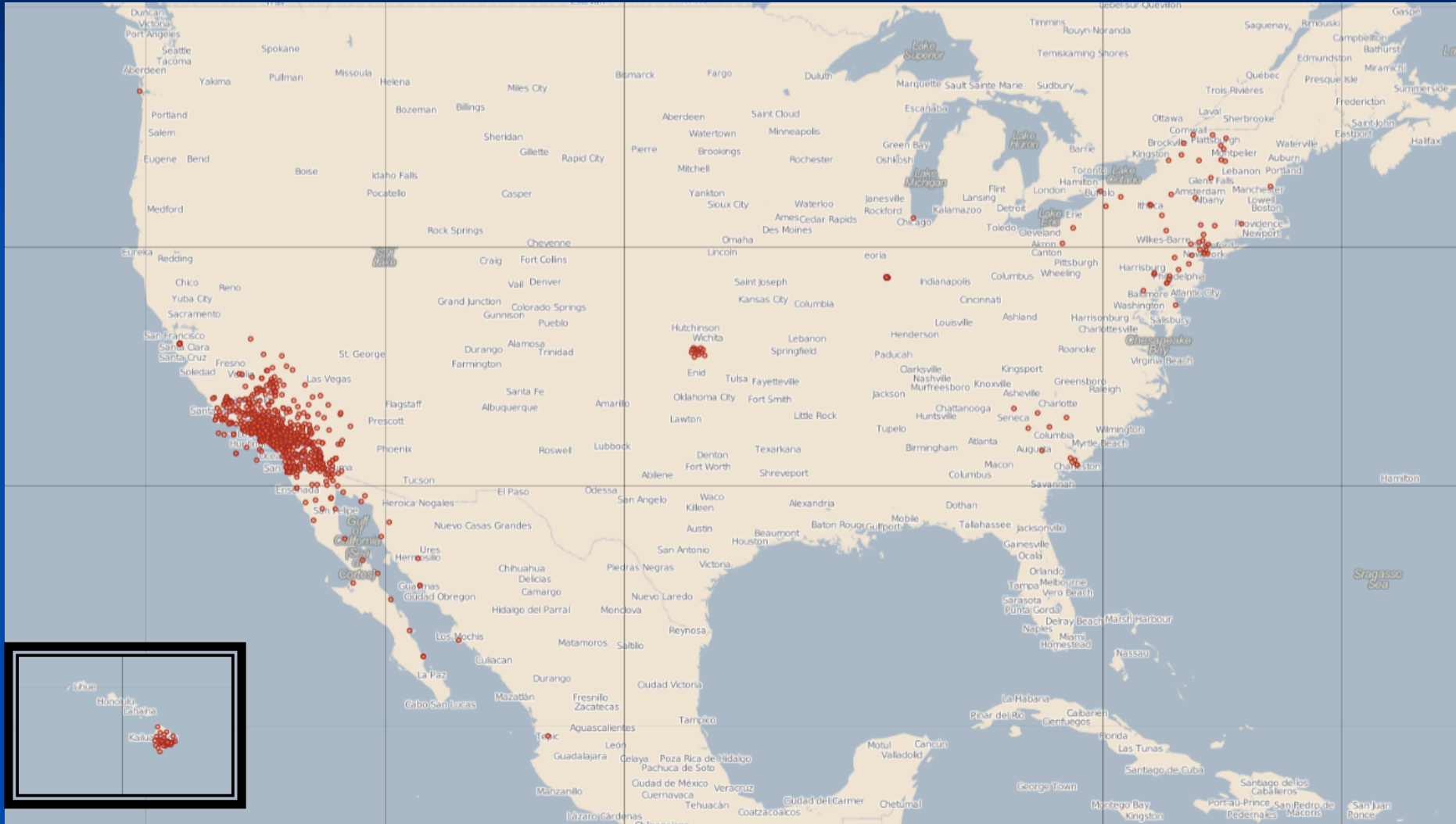


Station Information System (SIS v2.0)

Progress Report & Future Directions

NetOps, Oct 12, 2016

SIS v2.0 users



Equipment Repository

SIS serves as a comprehensive, community-maintained equipment repository

- Sources: Networks using SIS, IRIS Nominal Response Library (the NRL is refreshed daily)
- 222 Sensor models
- 120 Digitizer models
- 124 Manufacturers (all equipment types)
- Once a model is added by any user, it becomes available to all users

SIS Sessions at NetOps

Session 1: 12:30-1:50 p.m.

- SIS Progress Report
- User Case Studies and Best Practices Discussion
 - a. Jacob Crummey
 - b. Patrick Bastien and Mitch Gold
 - c. Mike Watkins
 - d. Aris Aspiotes and Dan Determan
 - e. Philip Crotwell

Session 2: 3:15-4:00 p.m.

- Survey results, Q&A, user feedback and discussion

Development Accomplishments

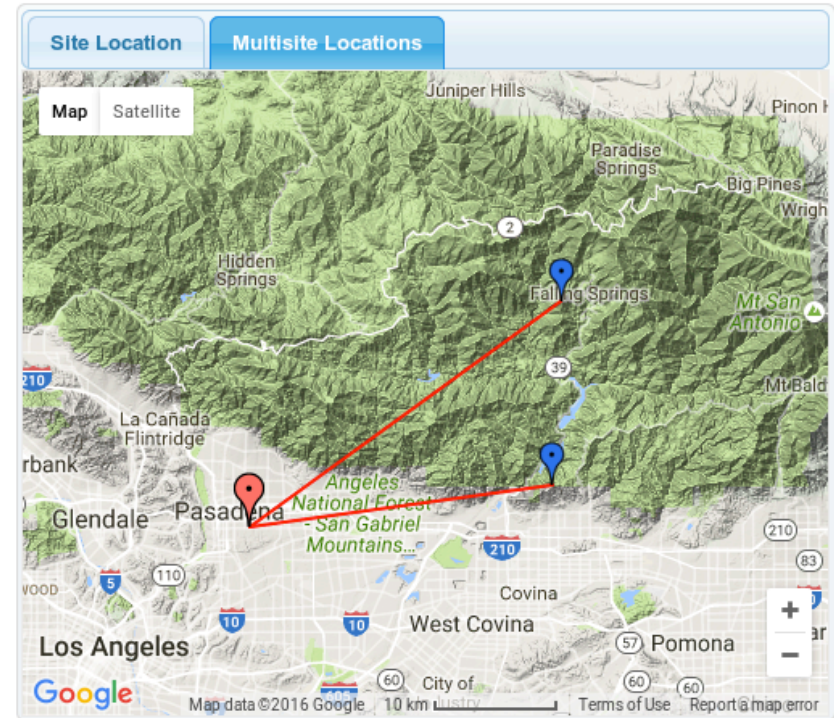
- Editing Historical Metadata
- New Visual Displays for Users
- New Features
 - Co-located sites; transfer operatorship; jump to equipment; bootstrap multi-site logger
- Complete Description of SOH Channels
- Loading IIR Filters
- ExtStationXML version 2.1
- Improved Configuration Management

New Visual Displays for Users

CI XPASADENAHUB

Net: CI Site Lookup Code:

Latest Site Epoch	[Total Number of Epochs: 1]
Name	XPasadenaHub
Location Description	Pasadena EarthWorm
Latitude	34.137 WGS84
Longitude	-118.128 WGS84
Elevation	None m
Reference Azimuth	0.0
Epoch On Date	1900-01-01 (001) 00:00:00
Epoch Off Date	Active
Site Operator(s)	■ SCSN-CA
▶ Site Header Detail	
▶ Latest Site Epoch Detail	
▶ Co-located Sites (0)	

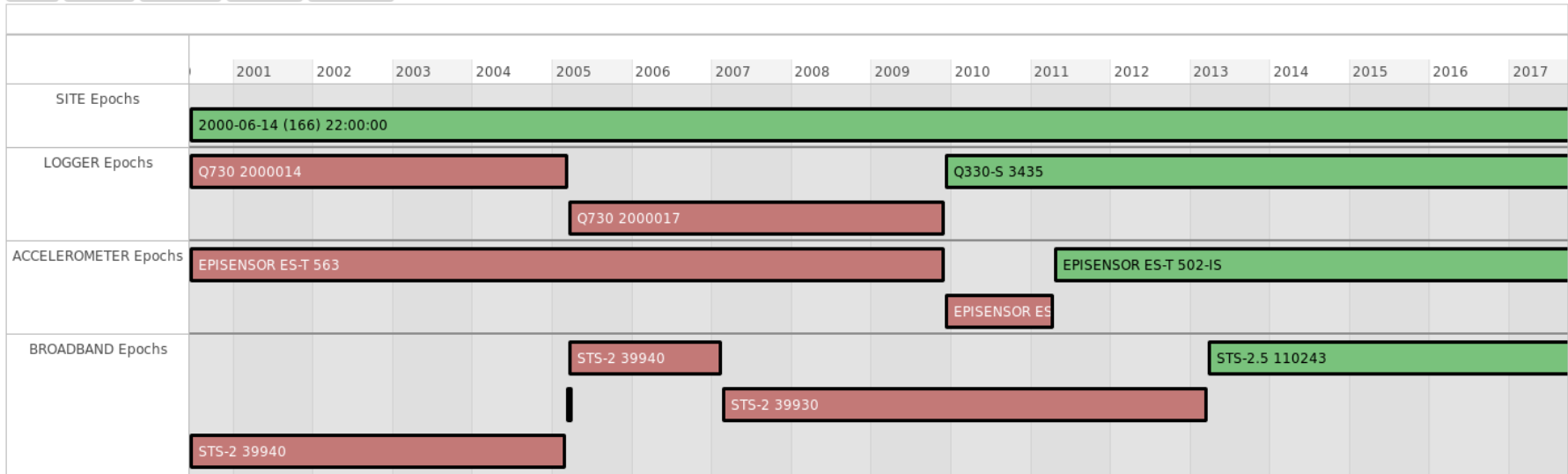


Hub Map

New Visual Displays for Users

BBR Epoch Timeline

Click on an Epoch in the Timeline to highlight details in the tables below.

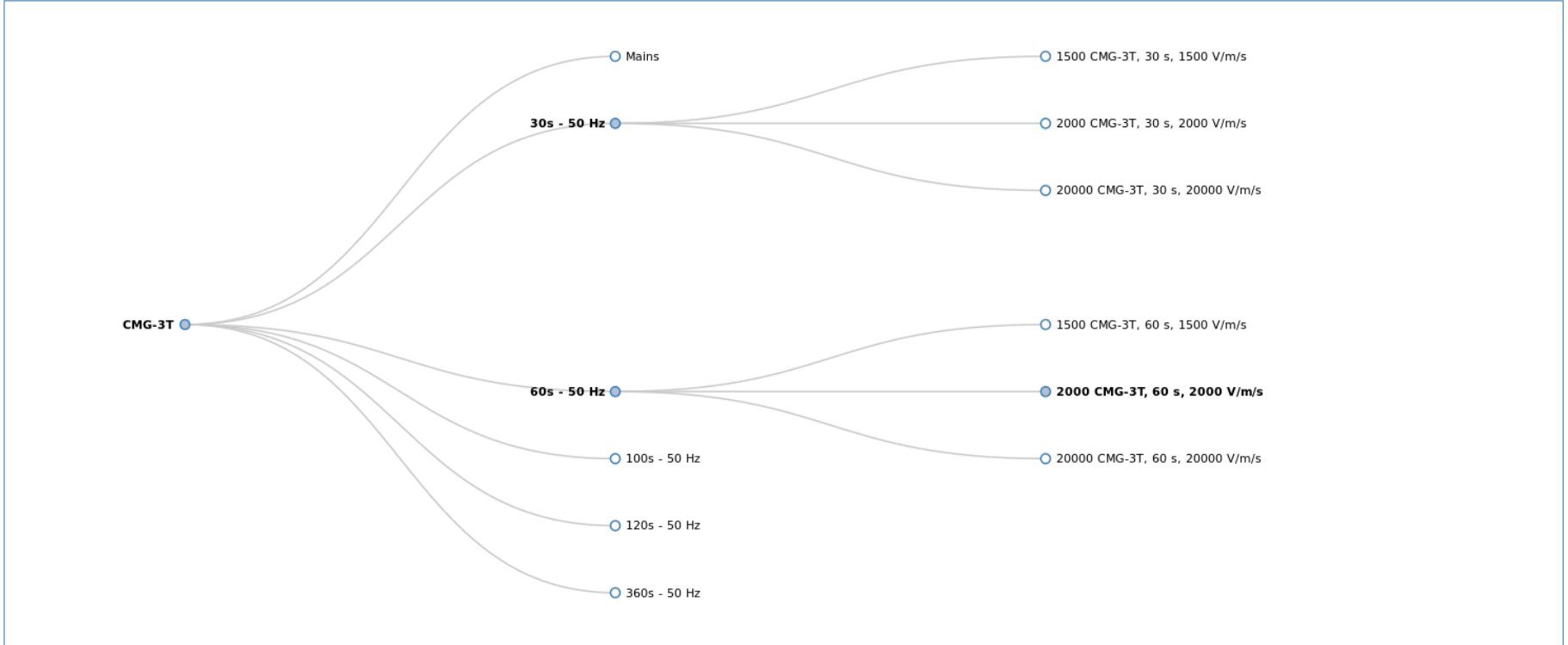


Epoch Timeline

New Visual Displays for Users

Select NRL Response for CMG-3T

Please make a selection from the tree nodes, and click the Submit button.



CMG-3T

Select the natural period in seconds for this sensor 60s - 50 Hz

Select the sensor sensitivity in V/m/s 2000 CMG-3T, 60 s, 2000 V/m/s

Submit

NRL Picker

SIS v2.0 Help

- SIS trac wiki wiki.anss-sis.scsn.org/SIStrac/
 - SIS tutorials
 - Webex training sessions
- ANSS listserv: anss-sis@cisn.org
- SIS developers: sis-help@gps.caltech.edu



Presentations

GPS Sites/Equipment in the SIS

anss-sis.scsn.org/sis/

ANSS Station Information System

Welcome ddeterman. [SIS UI Wiki](#) [Change Password](#) [Log out](#)

Section Index Links [Home](#)

Welcome to SIS. Click on the Section names to access the full index for that section. All Section Index Links are accessible from the top-left corner of the site.

[Upload Station XML File For Data Load](#)

Sites

Find Site

Network

Lookup Code

[Browse Networks](#) – Network List. Select a network to view its sites.
[Browse Sites](#) – Latest Epoch per site. Browse Sites across networks. Select a site to view its current information.
[Retrieve KML Data](#) – Google Earth KML files.

Equipment

Equipment is organized under the following hierarchy: Category > Model > Equipment item.

Find Equipment

Category

Model Name Contains *Case Insensitive*

Serial Number Contains *Case Insensitive*

Click on a Category Group to begin viewing/editing its categories, models and equipment:

[GPS](#)
[POWER](#)
[SEISMIC-EQUIPMENT](#)
[TELEMETRY](#)

[Search Equipment across all categories by current Operator/Owner](#)

Response

[Response Representations](#) – Response represented as Pole/Zero sets or Polynomials.
[Filter Cascades](#)

Admin

[Organizations](#) – Operators, Owners and other Agencies
[Name Spaces](#)

ANSS Station Information System

[Section Index Links](#) ▾ [Home](#) > [Sites Section Index](#) > [Networks](#) > [CI](#) > CACT

CI CACT

Net: **CI** Site Lookup Code:

Latest Site Epoch	[Total Number of Epochs: 1]
Name	Cactus City Communications Site
Location Description	1 mi S of Cactus City Rest Area on HWY
Latitude	33.6551 WGS84
Longitude	-115.9899 WGS84
Elevation	518.45 m
Reference Azimuth	0.0
Epoch On Date	2000-03-16 (076) 00:00:00
Epoch Off Date	Active
Site Operator(s)	<ul style="list-style-type: none"> SCSN-CA

- ▶ [Site Header Detail](#)
- ▶ [Latest Site Epoch Detail](#)
- ▶ [Co-located Sites \(1\)](#)



User A

-
-
-

Site Hi

-
-
-
-
-
-

- [Current Equipment](#)
- [Current Channels](#)
- [Remote Channels](#)
- [Last Site Log](#)

Geodetic Equipment

Category	Manufacturer	Model	Serial Number	Install Date	Install Alias	Install Notes
GPS-ANTENNA	TRIMBLE	TRM57971.00	5000115169	2015-02-10		
GPS-RADOME	UNKNOWN	SCIT	221	2000-03-16		IMPORT DATA
GPS-RECEIVER	TRIMBLE	TRIMBLE NETR9	5301K56110	2015-02-10		

ANSS Station Information System

Section Index Links ▾ [Home](#) > [Sites Section Index](#) > [Networks](#) > [CI](#) > CACT

CI CACT

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Elevation	518.45 m
Reference Azimuth	0.0
Epoch On Date	2000-03-16 (076) 00:00:00
Epoch Off Date	Active
Site Operator(s)	<ul style="list-style-type: none"> SCSN-CA

Site Header Detail

Network Name	Southern California Seismic Network
Site Lookup Code	CACT
Site On Date	2000-03-16 (076) 00:00:00
Site Type	GPS Station
Place Name	Cactus City
Header Created	2013-09-03 18:37:46 +0000 by sis2.0_migration
Header Last Modified	2016-09-29 23:09:07 +0000 by aaspiotes

▶ Latest Site Epoch Detail

▶ Co-located Sites (1)



User Action

- [Field](#)
- [Site](#)
- [Edit](#)
- [Send](#)

Site History

- [Cha](#)
- [Cha](#)
- [Equ](#)
- [Epo](#)
- [Fiel](#)
- [Site](#)
- [Site](#)

Current Equipment

Current Channels

Remote Channels

Last Site Log

Geodetic Equipment

Category	Manufacturer	Model	Serial Number	Install Date	Install Alias	Install Notes
GPS-ANTENNA	TRIMBLE	TRM57971.00	5000115169	2015-02-10		
GPS-RADOME	UNKNOWN	SCIT	221	2000-03-16		IMPORT DATA
GPS-RECEIVER	TRIMBLE	TRIMBLE NETR9	5301K56110	2015-02-10		

ANSS Station Information System

Section Index Links ▾ [Home](#) > [Sites Section Index](#) > [Networks](#) > [CI](#) > CACT

CI CACT

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Name	Cactus City Communications Site
Location Description	1 mi S of Cactus City Rest Area on HWY
Latitude	33.6551 WGS84
Longitude	-115.9899 WGS84
Elevation	518.45 m
Reference Azimuth	0.0
Epoch On Date	2000-03-16 (076) 00:00:00
Epoch Off Date	Active
Site Operator(s)	<ul style="list-style-type: none"> SCSN-CA

▸ Site Header Detail

▾ Latest Site Epoch Detail

Vault	
City	Coachella
Region	CA
Country	
Country	USA
ZIP Code	
Epoch Created	2013-09-03 18:37:46 +0000 by sis2.0_migration
Epoch Last Modified	2016-09-29 23:09:07 +0000 by aaspiotes

▸ Co-located Sites (1)



User Actions

- [Field](#)
- [Site](#)
- [Edit](#)
- [Send](#)

Site History

- [Cha](#)
- [Cha](#)
- [Equ](#)
- [Epo](#)
- [Field](#)
- [Site](#)
- [Site](#)

[Current Equipment](#) [Current Channels](#) [Remote Channels](#) [Last Site Log](#)

Geodetic Equipment

Category	Manufacturer	Model	Serial Number	Install Date	Install Alias	Install Notes
GPS-ANTENNA	TRIMBLE	TRM57971.00	5000115169	2015-02-10		
GPS-RADOME	UNKNOWN	SCIT	221	2000-03-16		IMPORT DATA
GPS-RECEIVER	TRIMBLE	TRIMBLE NETR9	5301K56110	2015-02-10		

ANSS Station Information System

[Section Index Links](#) ▾ [Home](#) > [Sites Section Index](#) > [Networks](#) > [CI](#) > CACT

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Reference Azimuth	0.0
Epoch On Date	2000-03-16 (076) 00:00:00
Epoch Off Date	Active
Site Operator(s)	<ul style="list-style-type: none"> SCSN-CA

▸ Site Header Detail

▸ Latest Site Epoch Detail

▾ Co-located Sites (1)

Other Sites at Place: Cactus City

- [CI: CTC](#)



User Action

- [Field](#)
- [Site](#)
- [Edit](#)
- [Send](#)

Site History

- [Cha](#)
- [Cha](#)
- [Equ](#)
- [Epo](#)
- [Fie](#)
- [Site](#)
- [Site](#)

[Current Equipment](#)

[Current Channels](#)

[Remote Channels](#)

[Last Site Log](#)

Geodetic Equipment

Category	Manufacturer	Model	Serial Number	Install Date	Install Alias	Install Notes
GPS-ANTENNA	TRIMBLE	TRM57971.00	5000115169	2015-02-10		
GPS-RADOME	UNKNOWN	SCIT	221	2000-03-16		IMPORT DATA
GPS-RECEIVER	TRIMBLE	TRIMBLE NETR9	5301K56110	2015-02-10		

ANSS Station Information System

Welcome **ddeterman**. [SIS UI Wiki](#) [Change Password](#) [Log out](#)

[Section Index Links](#) [Home](#) [Sites Section Index](#) [Networks](#) [CI](#) [CACT](#)

CI CACT

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Elevation	518.45 m
Reference Azimuth	0.0
Epoch On Date	2000-03-16 (076) 00:00:00
Epoch Off Date	Active
Site Operator(s)	<ul style="list-style-type: none">SCSN-CA

[Site Header Detail](#)

[Latest Site Epoch Detail](#)

[Co-located Sites \(1\)](#)

Other Sites at Place: Cactus City

- [CI: CTC](#)



User Action

- [Field](#)
- [Site](#)
- [Edit](#)
- [Send](#)

Site History

- [Change](#)
- [Change](#)
- [Equip](#)
- [Epoch](#)
- [Field](#)
- [Site](#)
- [Site](#)

[Current Equipment](#) [Current Channels](#) [Remote Channels](#) [Last Site Log](#)

Subject	CI.CACT sis update:Upgraded Firmware to 5.10
Log Date	2016-04-07 (098) 18:50:03

SITE: CI:CACT, Cactus City Communications Site

SERVICE LOG DATE: 2016-04-07 18:50:03

SIS PAGE: <http://anss-sis.scsn.org/sis/sites/site/853/detail/>

SITE DOWN TIME (UTC):

SERVICE DESCRIPTION:

SOLUTION/TROUBLESHOOT OF PROBLEM:Upgraded firmware to 5.10

PREVENTIVE MAINTENANCE:

COMMENTS:

FIELD TECH: Aris Gust Aspiotes

GEODETTIC EQUIPMENT BY CATEGORY:

GPS-ANTENNA TRIMBLE TRM57971.00 #5000115169

GPS-RADOME UNKNOWN SCIT #221

GPS-RECEIVER TRIMBLE TRIMBLE NETR9 #5301K56110

Total Number of Site Logs: 9

Presentations (cont'd)

End of Presentations

- We will take a break for 1 hour and 20 minutes
- Return here at 3:15 p.m. for SIS Session, Part 2:
 - SIS User Survey Results
 - Questions and Answers
 - User Feedback and Discussion

Active Development Continues

- Development Transition
- Previously Identified Next Steps:
 - Telemetry
 - Integration of external repositories (email, photos, etc)

User Survey, Sept. 2016

- Number of respondents: 29
- No. of networks represented: 19
- Features most desired next, by priority
 - Telemetry – #1 (10 votes)
 - Reports/better reporting – #2 (6 votes); #1 (3 votes)
 - E-mail & image links – #2 (5 votes); #3 (5 votes)
 - FDSN-style web services – #1 (6 votes); #4 (4 votes)
 - Other suggestions had one vote

User Survey, Sept. 2016

- Results tabulated with weighted ranking

Priority Rank	Telemetry votes	Email and Image Repositories votes	Reports/Better Reporting votes	FDSN-Style services votes	Rank Weight
1	10	3	3	6	8
2	1	5	6	3	4
3	1	5	4	1	2
4	2	0	0	4	1
Total Points Weighted by Priority	88	54	56	66	

User Survey, Sept. 2016 (cont'd)

■ Challenges of SIS

1. Steep learning curve
2. UI could be further tailored for field techs site visits
3. Error messages not helpful or clear
4. Waiting for development to use SIS for telemetry planning.
5. Help getting our metadata set up in order to migrate
6. Don't want to rely on a remote system we cannot fix locally
7. Improve reporting
8. Wish users could “belong” to more than one network
9. SIS setup does not fit needs

User Survey, Sept. 2016 (cont'd)

- How are you using SIS?
 - Data entry: 15
 - Editing entries: 13
 - Viewing: 3
 - Rarely use SIS: 3
 - Do not use SIS: 3
 - Single response for:
 - Just use to show off great features
 - Inventory, station service logs, dataless SEED generation
 - Generating reports
 - Not loaded yet

User Survey, Sept. 2016 (cont'd)

- What do you need to start using SIS or to migrate to using SIS?
 1. More time and/or exposure to UI
 2. Simpler interface geared towards field visits, so field techs can easily log what they did
 3. More streamlined way to manage stations of more than one type: seismic/GPS/Telemetry/camera
 4. Software and support for initial data upload
 5. More staff to assist with migration preparation
 6. Database linked to shipping and receiving for assets management

SIS v2.0 is Here for You!



<http://anss-sis.scsn.org/sis/>

Wiki: <http://wiki.anss-sis.scsn.org/SIStrac/>

Contact sis-help@gps.caltech.edu

for username and password