General Update

- SPR
 - Install of additional 30A sockets for rack power supply
 - RFSoC heatsink retrofitted
- Other
 - Wire harness construction for Antonio Feeds
 - RFSoC Enclosure construction
- Documentation:
 - Uploaded memos to GitHub
 - In process of writing up RFSOC design
- CHIME:
 - Geotechnical in prep
 - Clearing field in prep
 - Shasta County Use Permit APPROVED

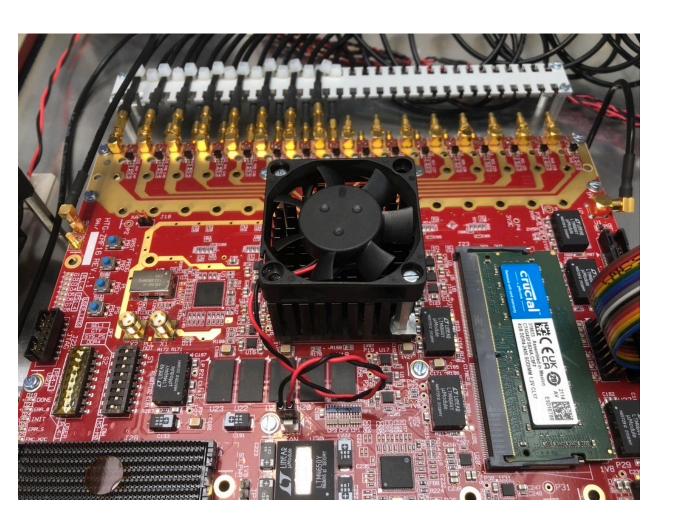
Antonio Feed

- Quotes for 6 LNA modules
- Quotes for 3 Feed bases
- Get anechoic chamber from Minex
- 2K installed and ready to be tested
- 4J Cryo-Controller replaced

- ATA full buildout
 - PAM design and prototype
 - PAX control board (Mike / Todd)
 - Drive box control board
 - Control box replacement
 - Antenna PSU retrofit

RFSoC heatsink:

- Second generation about 25 deg improvement
- Voltage firmware:
 - 65 70 degC new
 - 90 95 degC original



```
(base) obsuser@obs-node1:~
rfsoc1_sensors
remote_temp = 68.4
pl_{temp} = 68.3
ps_{temp} = 64.9
rfsoc2_sensors
remote\_temp = 70.7
pl\_temp = 71.5
ps_{temp} = 66.1
rfsoc3_sensors
remote\_temp = 71.4
pl\_temp = 71.6
ps_{temp} = 69.0
rfsoc4_sensors
remote_temp = 68.7
pl\_temp = 69.6
ps\_temp = 64.0
rfsoc5_sensors
remote_temp = 69.9
pl\_temp = 72.4
ps\_temp = 67.6
```

2K installed again:

Currently cooling down

Next steps:

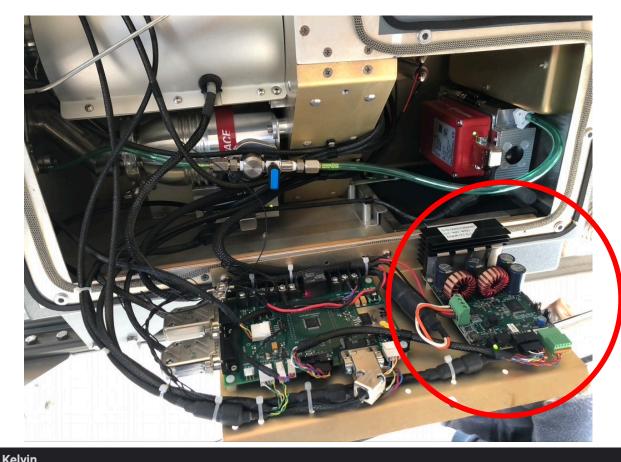
- pointing calibration
- SEFD measurement

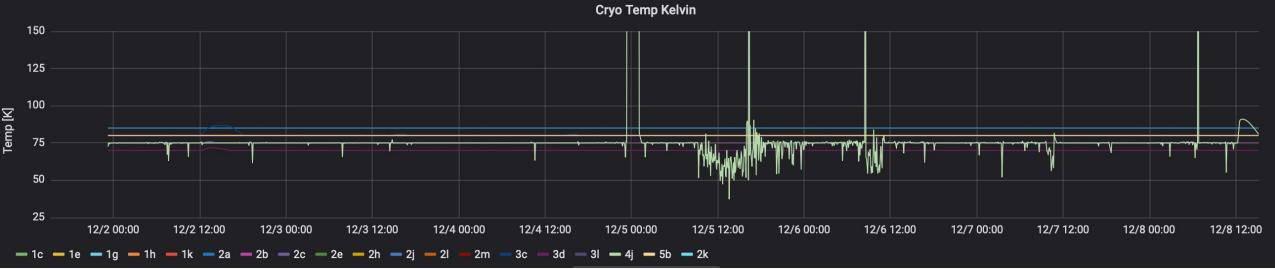


4J Cryo-Controller replaced:

Temperature readout intermittent noise and cut outs

- Had similar issue in the past on a different antenna.
- Now monitoring to see if that solved the problem.





Antenna retrofit:

- Control box replacement, this week we managed to replace 10 old control boxes.
- 8 more control boxes need to be replaced
- Also discovered broken power supply boards, all of them are replaced



Antennas				
Ant	Feed Version	Feed installed	Control Box	
<u>1A</u>	V1	YES	-	
<u>1B</u>	V2	-	-	
<u>1C</u>	V2	YES	-	
<u>1D</u>	V2	-	-	
<u>1E</u>	V2	YES	-	
<u>1F</u>	V1	YES	-	
<u>1G</u>	V2	YES	-	
<u>1H</u>	V2	YES	-	
<u>1J</u>	V2	-	-	
<u>1K</u>	V2	YES	-	
<u>2A</u>	V2	YES	•	
<u>2B</u>	V2	YES	-	
<u>2C</u>	V2	YES	-	
<u>2D</u>	V1	-	-	
<u>2E</u>	V2	YES	-	
<u>2F</u>	V2	-	-	
<u>2G</u>	V1	-	-	
<u>2H</u>	V2	YES	-	
<u>2J</u>	V2	YES	-	
<u>2K</u>	V2	-	-	
<u>2L</u>	V2	YES	-	
<u>2M</u>	V2	YES	-	
<u>3C</u>	V2	YES	-	
<u>3D</u>	V2	YES	-	
<u>3E</u>	V1	-	-	
<u>3F</u>	-	-		
<u>3G</u>	-	-		
<u>3H</u>	-	-		
<u>3J</u>	V1	-	OLD	
<u>3L</u>	V2	YES	OLD	
<u>4E</u>	V1	-	-	
<u>4F</u>	V1	-	-	
<u>4G</u>	V1	YES	OLD	
<u>4H</u>	V1	-	-	
<u>4J</u>	V2	YES	OLD	
<u>4K</u>	V1	-	OLD	
<u>4L</u>	V1	-	OLD	
<u>5B</u>	V2	YES	-	
<u>5C</u>	V1	YES	-	
<u>5E</u>	V1	-	OLD	
<u>5G</u>	V1	-	OLD	
<u>5H</u>	V1	-	-	

https://github.com/SETIatHCRO/Front-Page/tree/master/MEMOS

GitHub:

\$ master → Front-Page / MEMOS /		Go to file Add file ▼ ···
AlexanderPollak added attemplifier memo	0d4320d 26 seconds ago 🖰 History	
2019-10 Antenna Tsys Measurement	added memos	4 months ago
2020-01 Snap Board Enclosure	updated correct date of document	last month
2020-02 PAX Power Level Control Software	added memos	4 months ago
2020-09 ATA Dynamic Range Report	added memos	4 months ago
2020-10 RFCB-Measurement Report	added memos	4 months ago
2021-03 Interface & Rate Sheet	replaced old rate sheet	2 months ago
2021-04 Pointing-Calibration	fix formatting	last month
2021-07 Antonio Feed Buildout	added memos	4 months ago
2021-08 Tsys-Calibration(RonMaddalena)	updated memo	2 months ago
2021-09 ATA Beamformer	Add ATA GUPPI file format description	23 days ago
2021-12 Attemplifier Module	added attemplifier memo	26 seconds ago
DS_Store	added attemplifier memo	26 seconds ago
☐ Readme.md	Update Readme.md	14 months ago