General Update

- SPR
  - Network changes
    - IPMI, domain setup
  - SNAPs
    - Implementation of RPIs
    - Implementation new boot image
    - Verification and testing of gateware
- ATA signal chain verification
  - Investigating 60Hz in 2H
  - Power drop investigation ISM 902-928MHz
- Feed Firmware
  - Finishing firmware tests in Lab
  - Testing firmware 5.4 on one feed in the field
- Observation
  - Developing capture code for voltage stream design (dada / hashpipe)

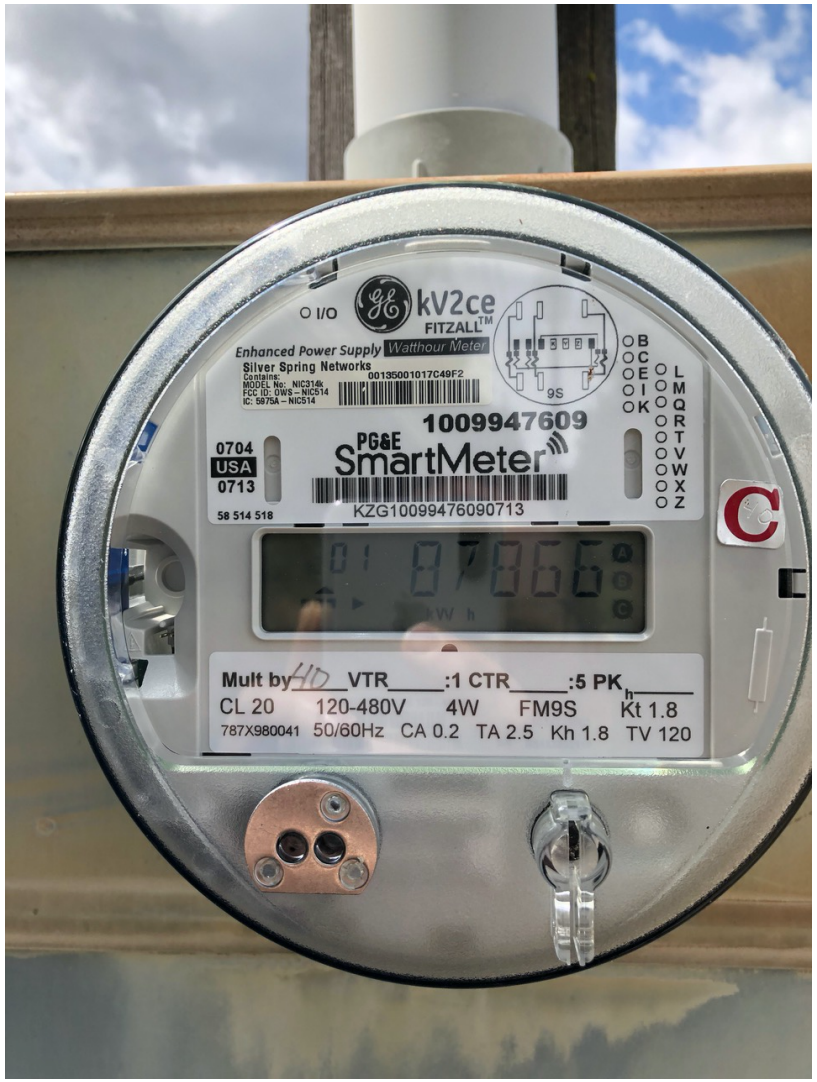
Antonio Feed update

- 3C – replacement of pyramid with new tip-link and modified, preconditioned coaxial wiring.
  - Gold plating
  - LNA to Tip coaxial assembly
  - Inner feed assembly
  - Tip-link assembly
  - Transport to HCRO
  - Installation into feed base, update of firmware
  - Initial testing
  - Installation in 3C
  - Tsys measurement
- 4J – replacement of base plate and pyramid with new tip-link and modified, preconditioned coaxial wiring.
  - Replace base plate (HCRO)
  - Gold plating
  - LNA to Tip coaxial assembly
  - Inner feed assembly
  - Tip-link assembly
  - Transport to HCRO

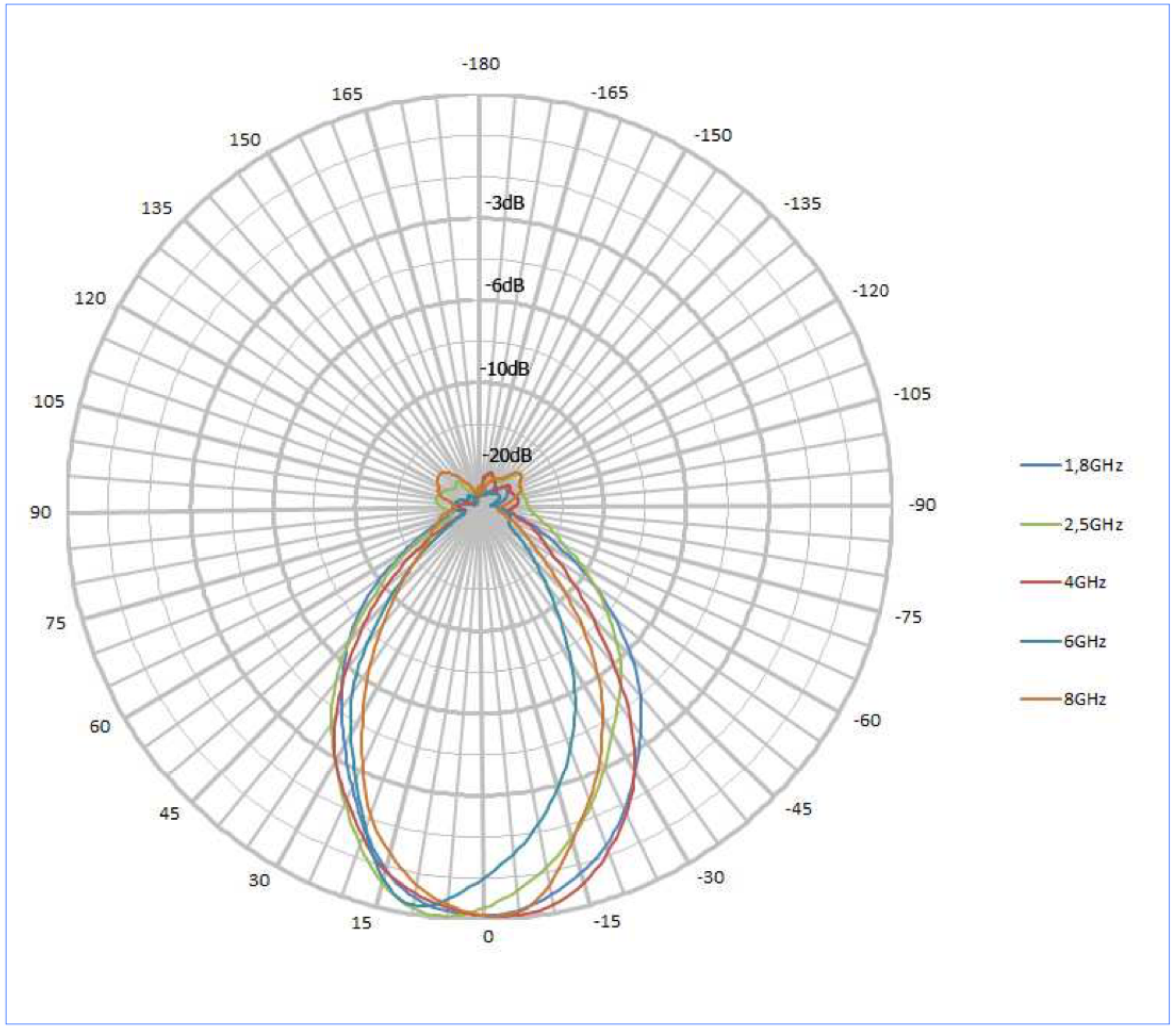
Student Projects and Internships:

Name	Type	Duration (dd/mm/yyyy)	Description	Status
Olivia Durrett	Internship	15/06/2020 to TBC	Astronomical observations and data analysis of pulsars and FRBs	
Sarah Schoultz	Internship	01/07/2020 to 15/10/2020	Outreach, update of posters at ATA, local RFI monitoring	
Daniel Allspach	REU SETI	07/06/2020 to 15/08/2020	Astronomical observations and data analysis of pulsars and FRBs	
Ellie White	REU Berkeley	08/06/2020 to 14/08/2020	GNU Radio Enabled Capabilities for RFI Monitoring and Beamforming	
Hellen Peng	URAP Berkeley	24/02/2020 to 01/05/2020	Software development to control digital step attenuator for IF power leveling	Finished

Model No: NIC314k FCC ID: OWS-NIC514 (five out of six)
Model No: NIC214k FCC ID: OWS-NIC507 (located at the runway close to Bidwell Ranch)



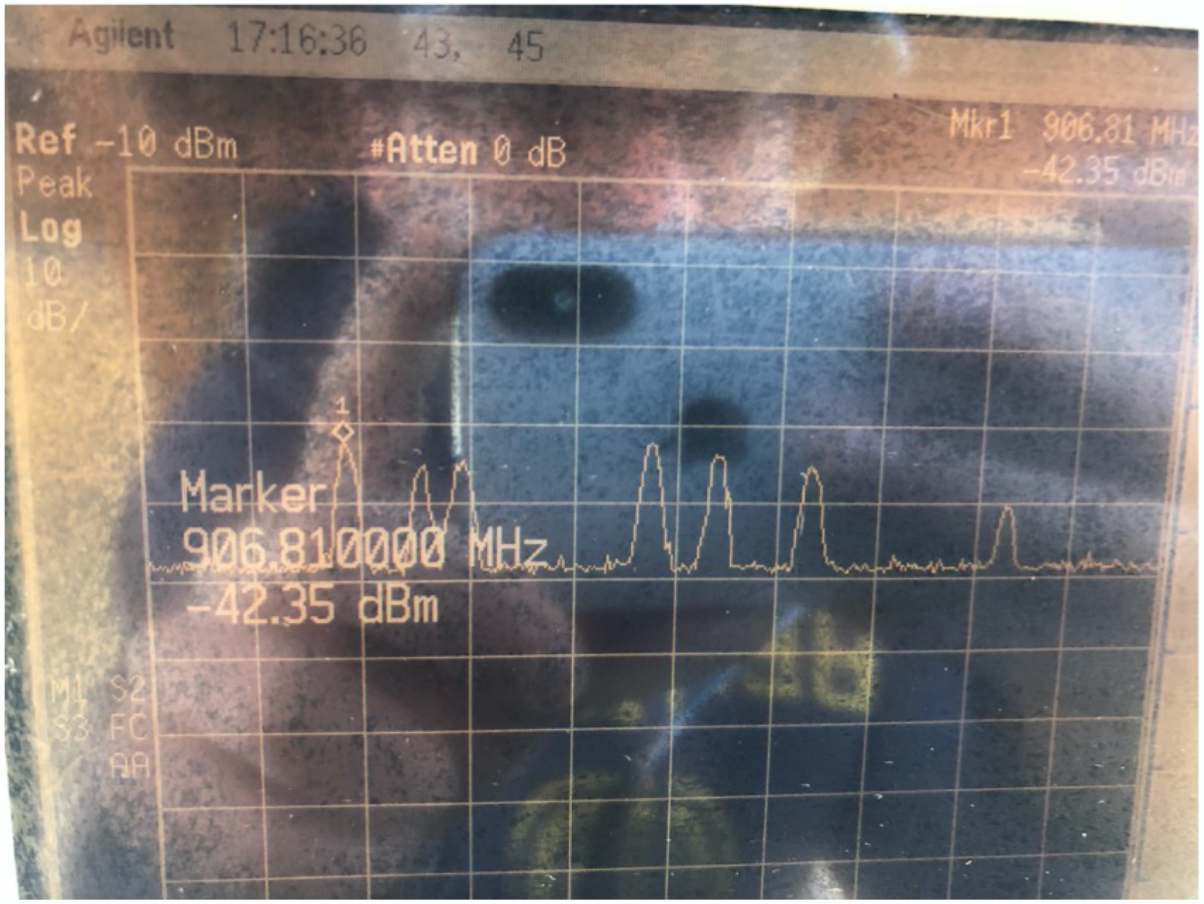
Test setup to identify emission from specific SmartMeter



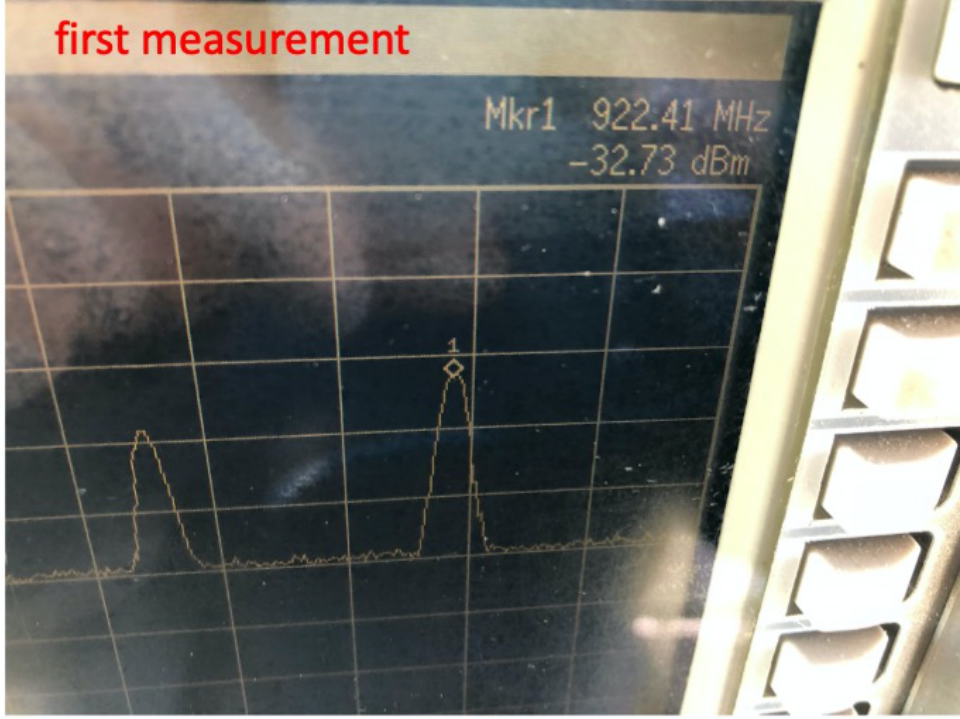
Test setup to identify emission from specific SmartMeter

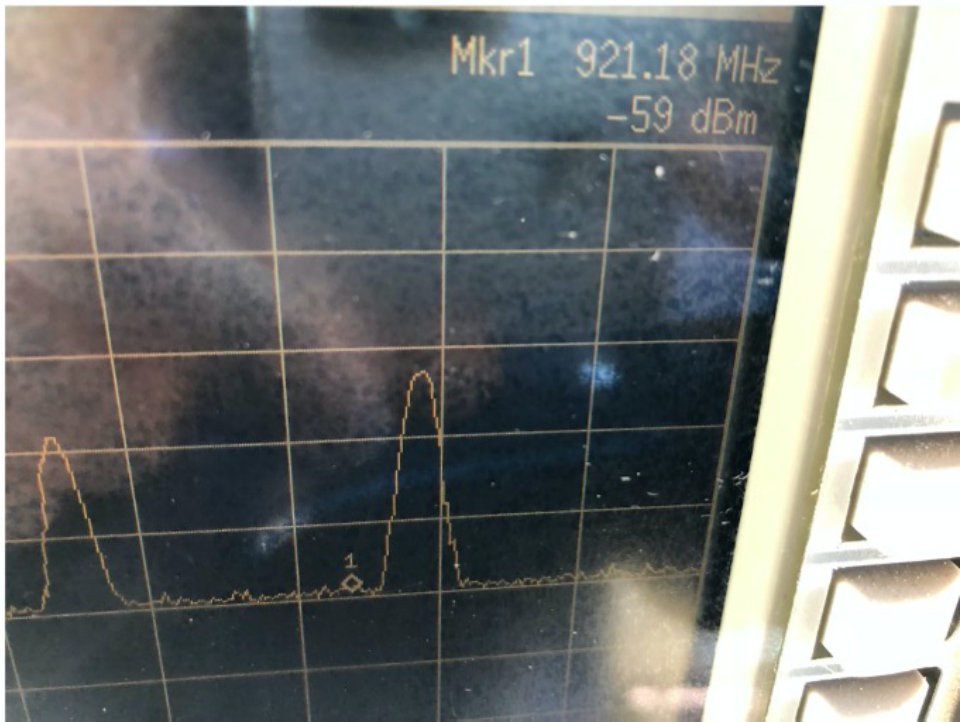
(without preamplifier)

second measurement



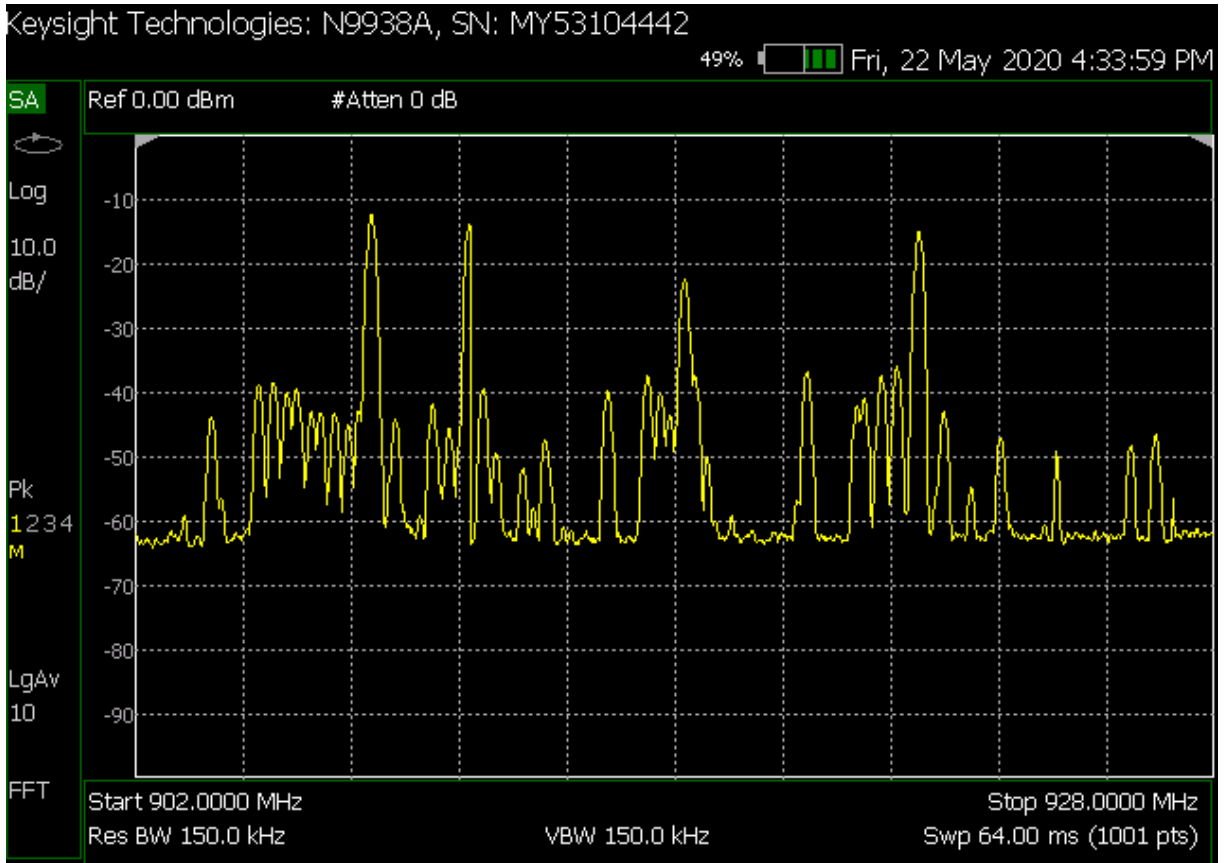
first measurement





Test setup to identify emission from specific SmartMeter

At workshop / Lassen House
(with preamplifier)

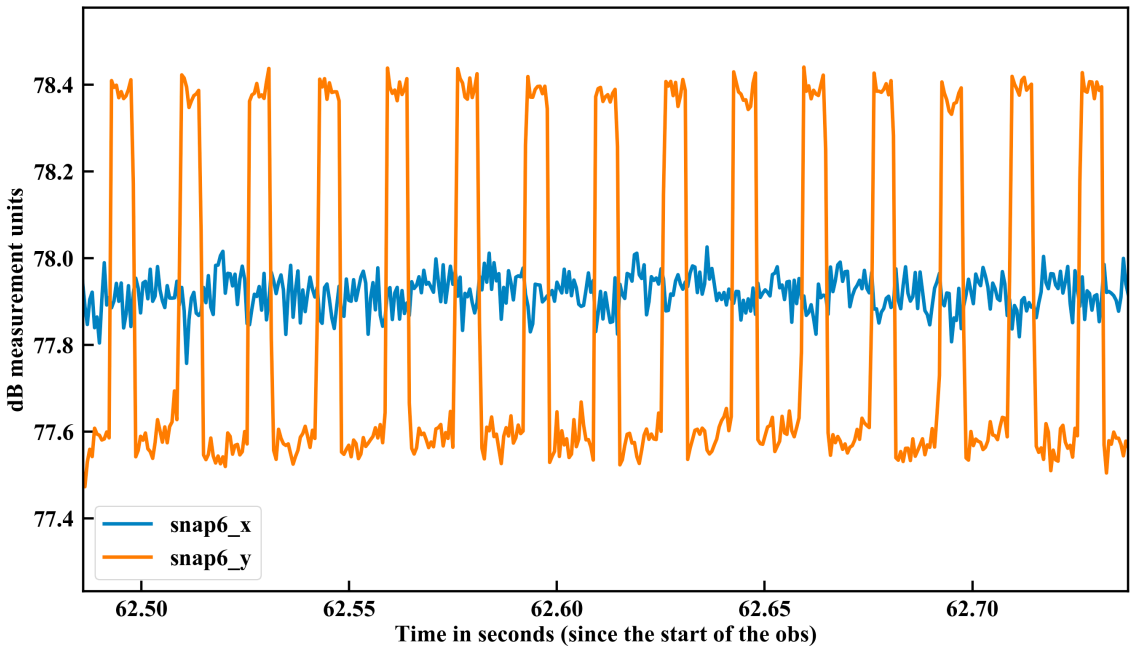


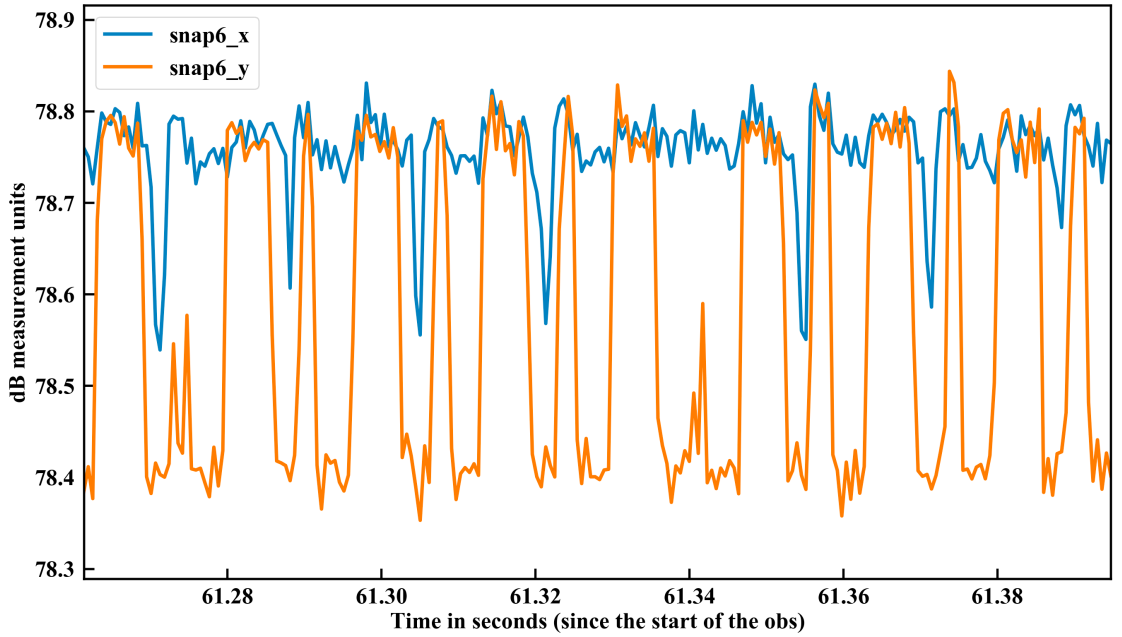
60Hz investigation 2H

- Tested LNA bias supply
- Tested PAM supply
- -> PAX box is fine

- Looked at feed control board and grounding

- Cryo controller shows 60Hz (59.9Hz) modulation.





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GND48V connection at cryo controller to antenna GND

60Hz investigation 2H

- Tested LNA bias supply
- Tested PAM supply
- -> PAX box is fine

- Looked at feed control board and grounding

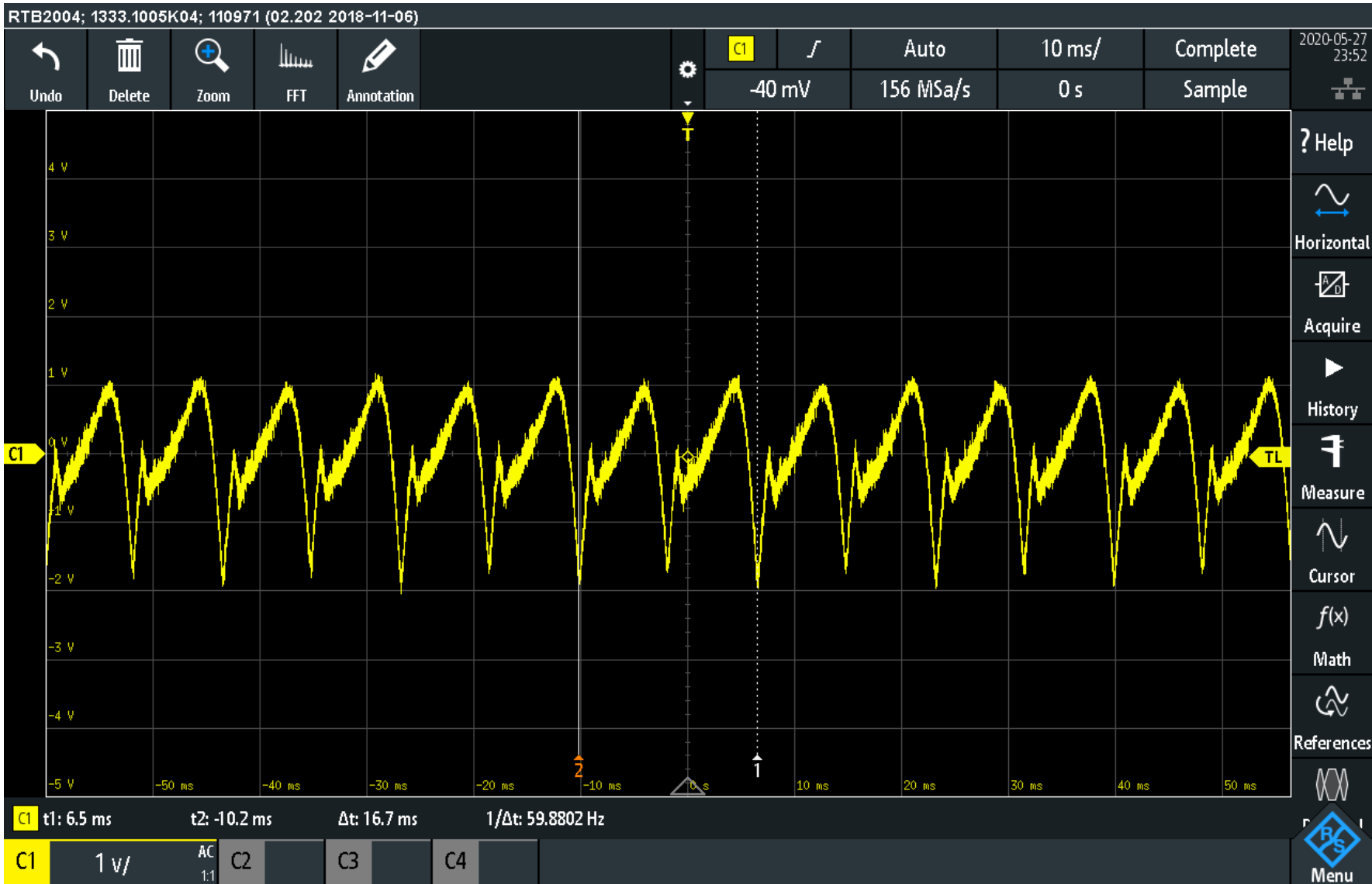
- Cryo controller shows 60Hz (59.9Hz) modulation.

- When turning off cryocooler, Antenna output is fine!

- Different power supply did not show any change!

- Maybe caused by a bad connection in supply wiring?

+48V connection at cryo controller to antenna GND



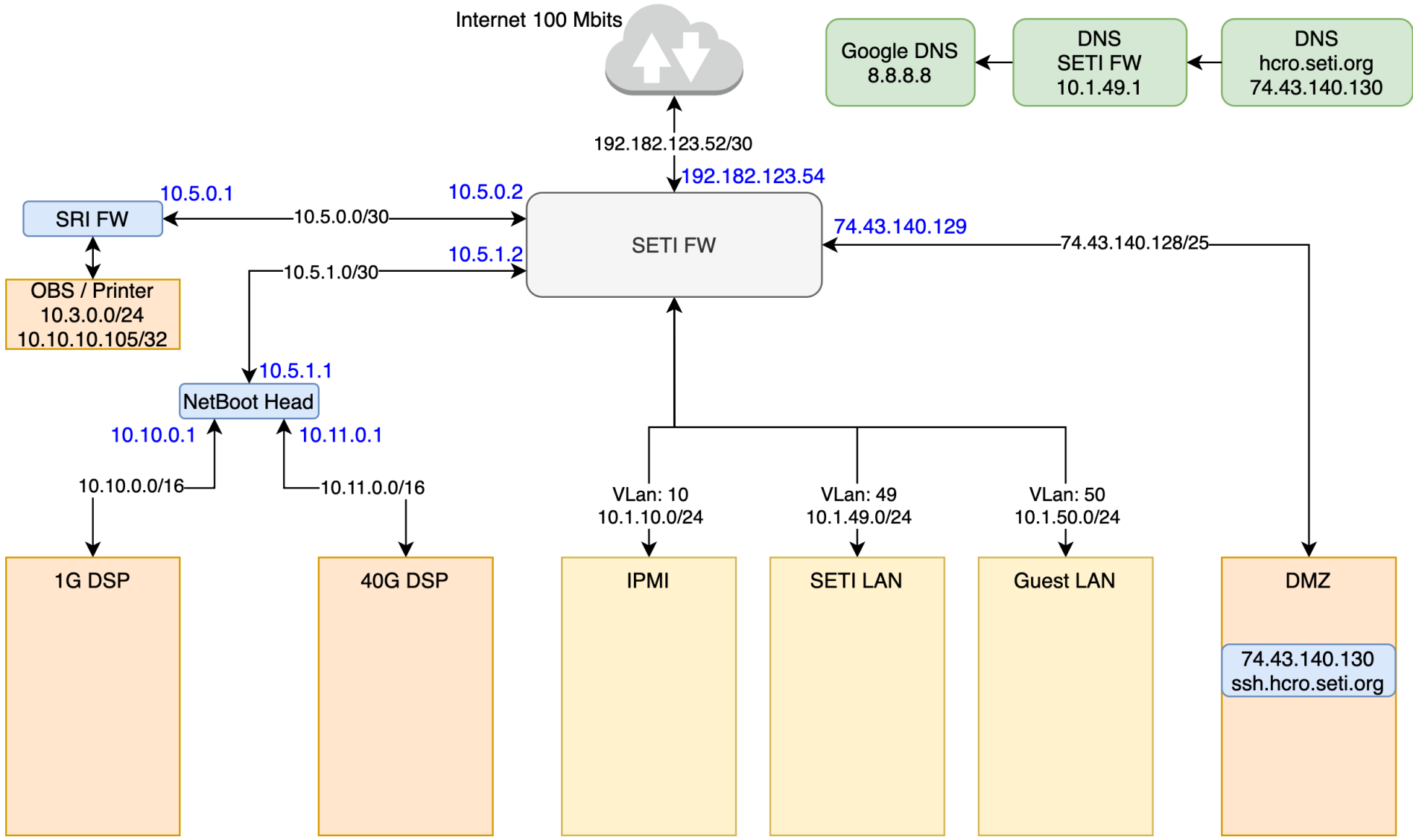
Update

Network changes:

- DNS implemented
- Network range changed
- Integrated 40G NIC into 100 TB storage

ToDo:

- Setup compute node to analyze data
- Implementing of VLans and updating of switch configuration



Update

Network changes:

- DNS implemented
- Network range changed
- LAG 2x 1Gbit implemented
- VLANs implemented

- Setup SIC1 to analyze data

To Do:

- Setup IPMI
- Setup DNS domain (hcro.seti.org)