

General Update

- SPR
 - domain setup
 - frb-snap11 and frb-snap12 installed
 - ATA Control server upgrade (“control” and “data”)
 - Handover of SRI to SETI (infrastructure / network)
- ATA signal chain verification
 - Found a local person to get me in contact with an engineer from PG&E.
- ATA integration into GNU Radio (Ellie)
 - Testing control of ATA antennas and building GNU Radio control blocks
 - Moved IF switch into gnuradio network
 - USRP arrived and in the process of being installed

Antonio Feed update

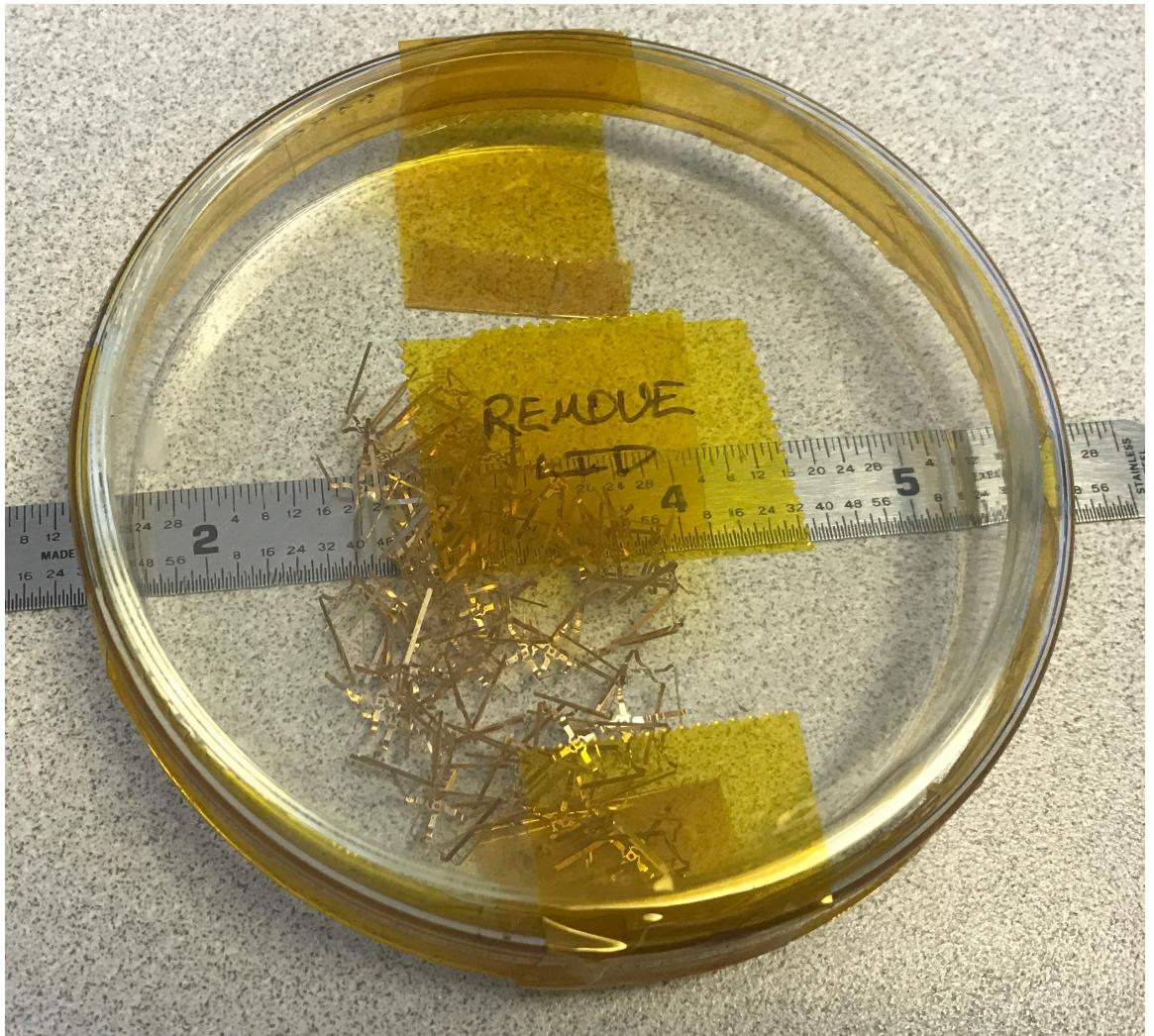
- 3C –(020)
 - Done / Operational
- 1K – (012)
 - Done / Operational
- 4J – (006)
 - Inner feed assembly, LNA module (Minex)
 - Tuning Cryocooler
 - PAX Box calibrated
 - Initial testing / installation on antenna / TSYS
- 1H – (013)
 - Inner feed assembly, LNA module (Minex)
 - Requires all retrofits!
 - PAX Box calibrated
 - Initial testing / installation on antenna / TSYS

Refurbishment Overview

- Antonio Feed Inventory

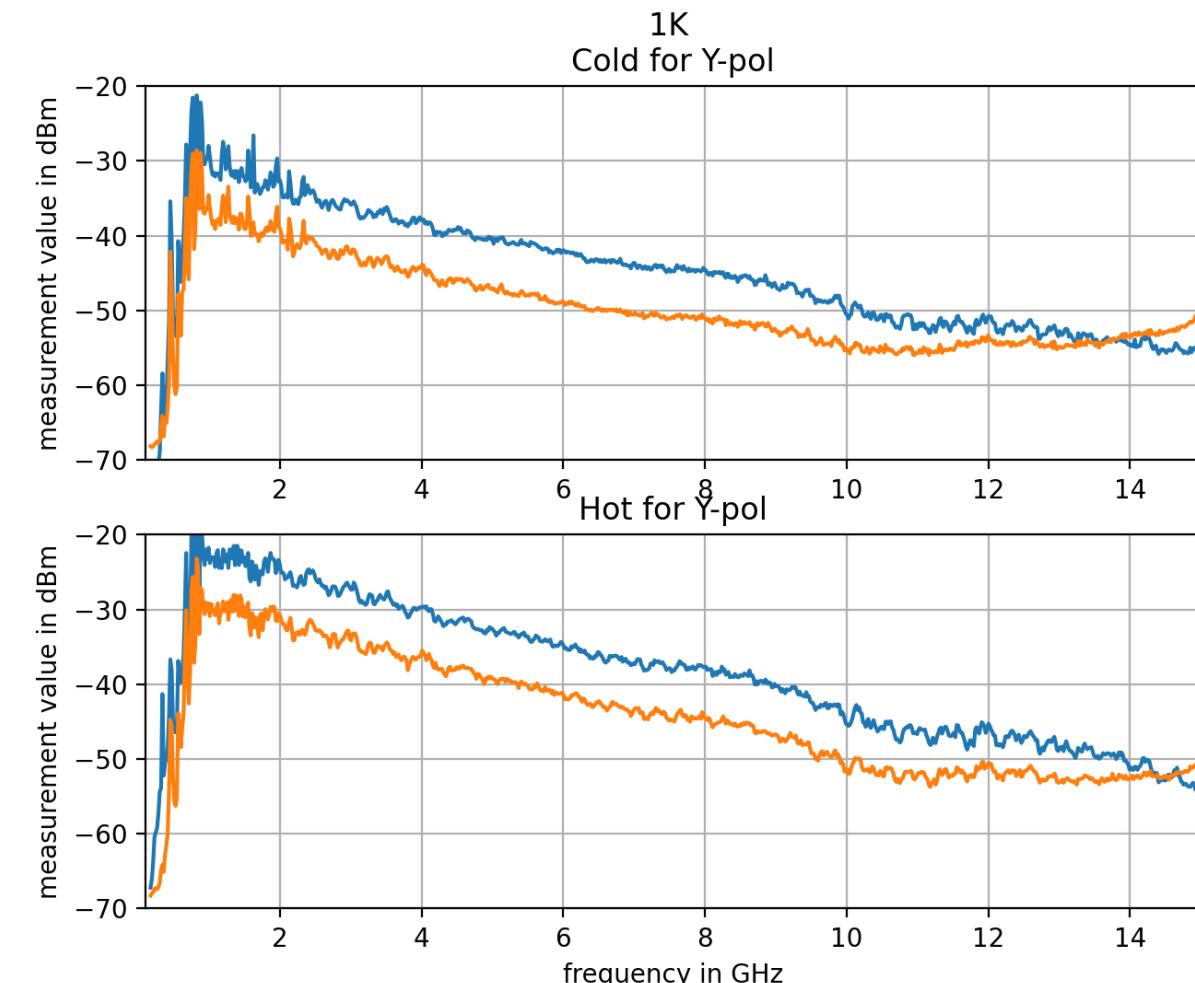
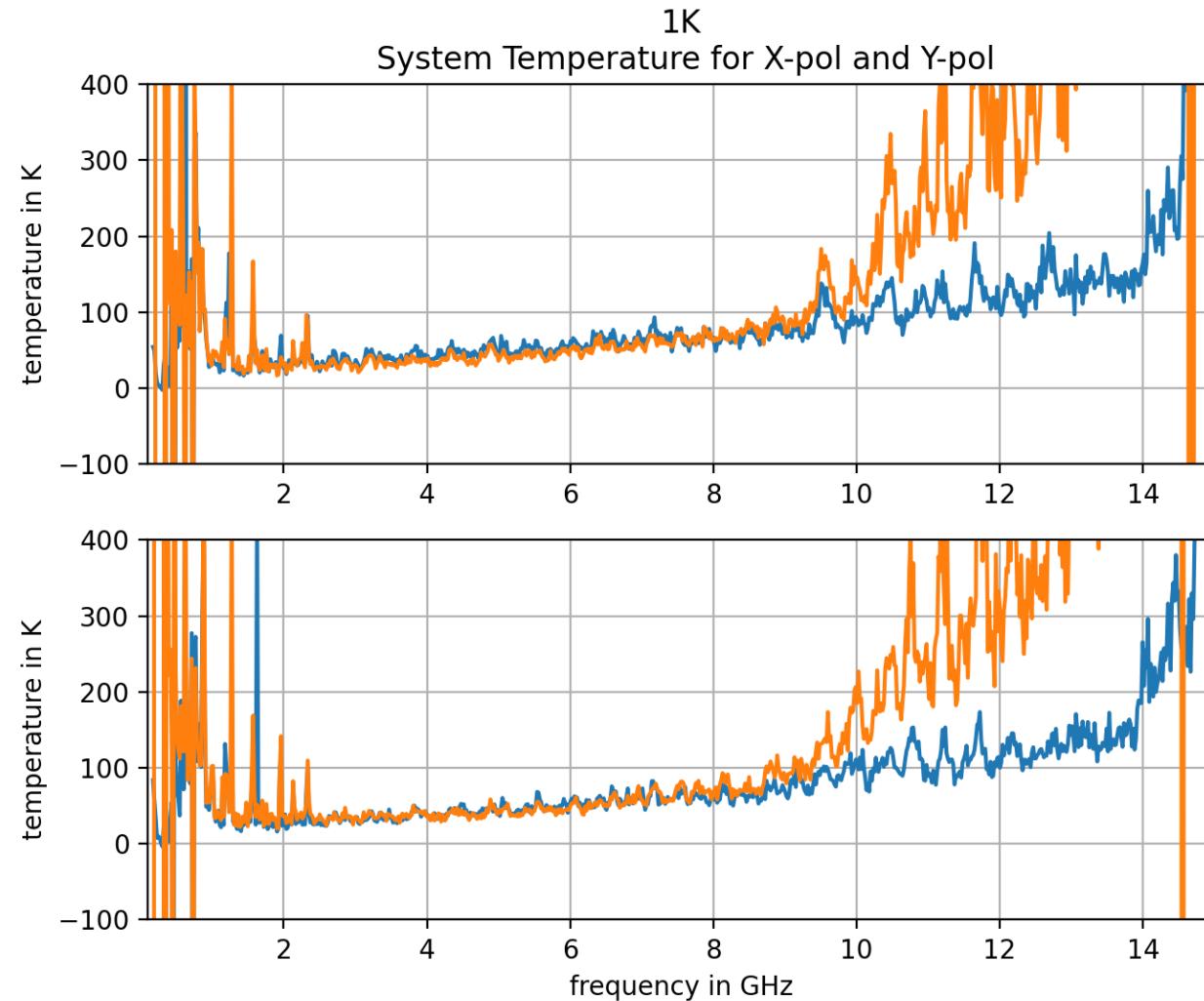
Refurbishment Overview

- Greg prepared 40 new tip-links



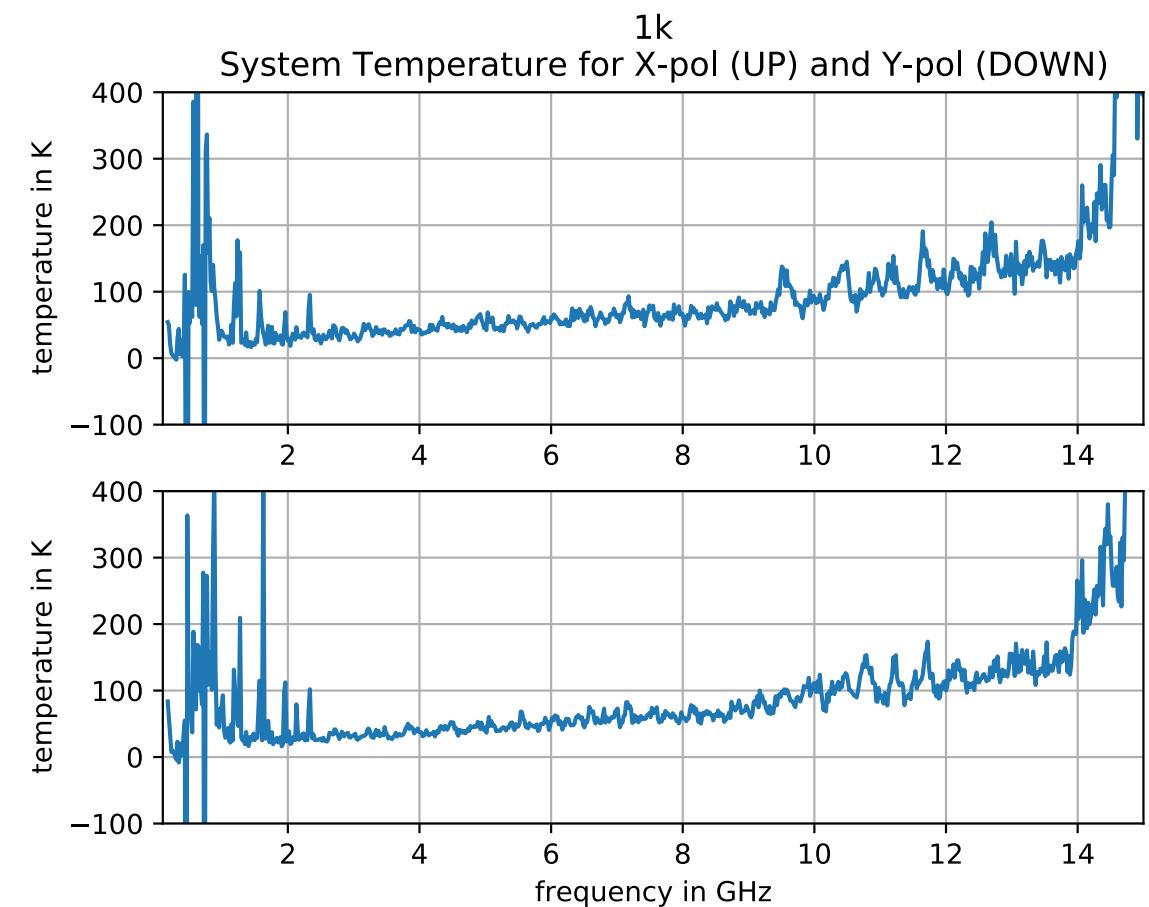
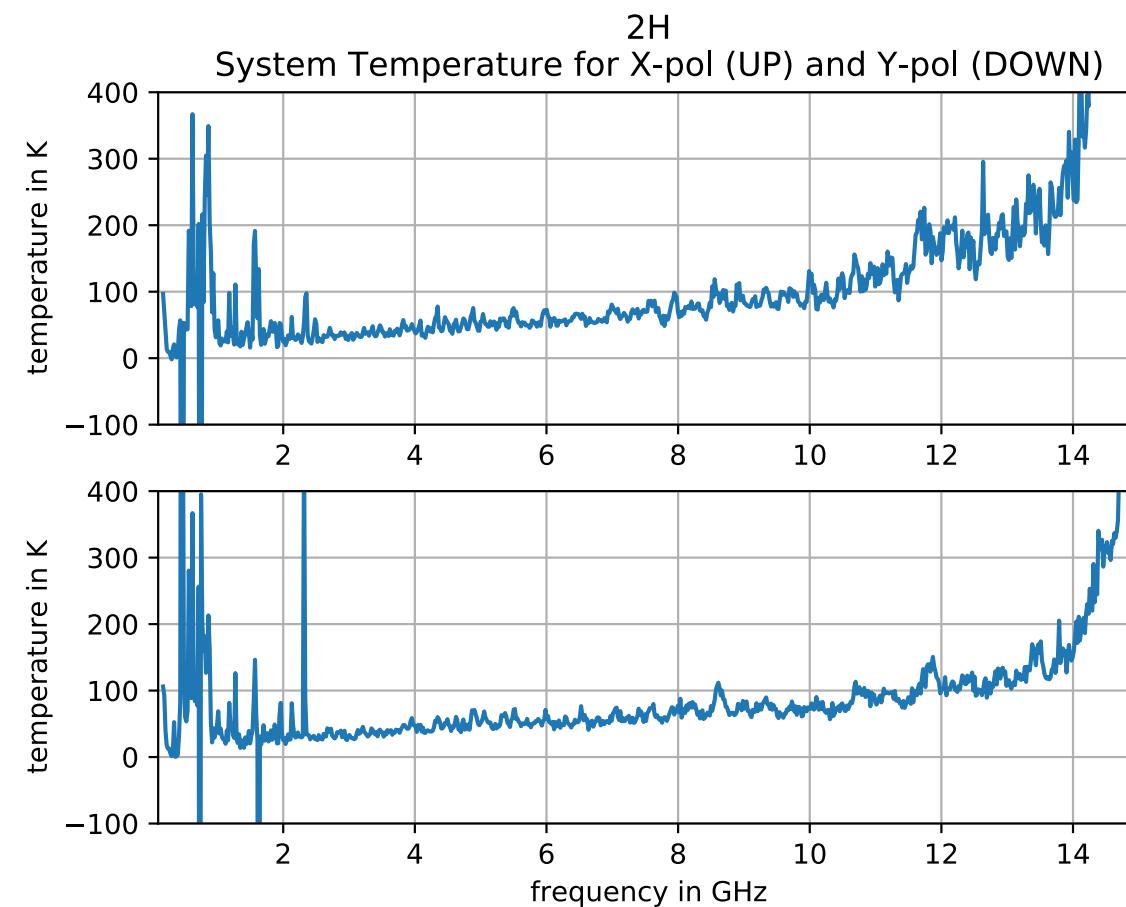
1K Tsys measurement

- LNA - 5m – AMP – 3dB – 1m – AMP – 3dB – 1m – Spectrum Analyzer (5dB input attenuation)
- LNA - 5m – 3dB – AMP – 10dB – 1m – AMP – 1m – Spectrum Analyzer (10 dB input attenuation)



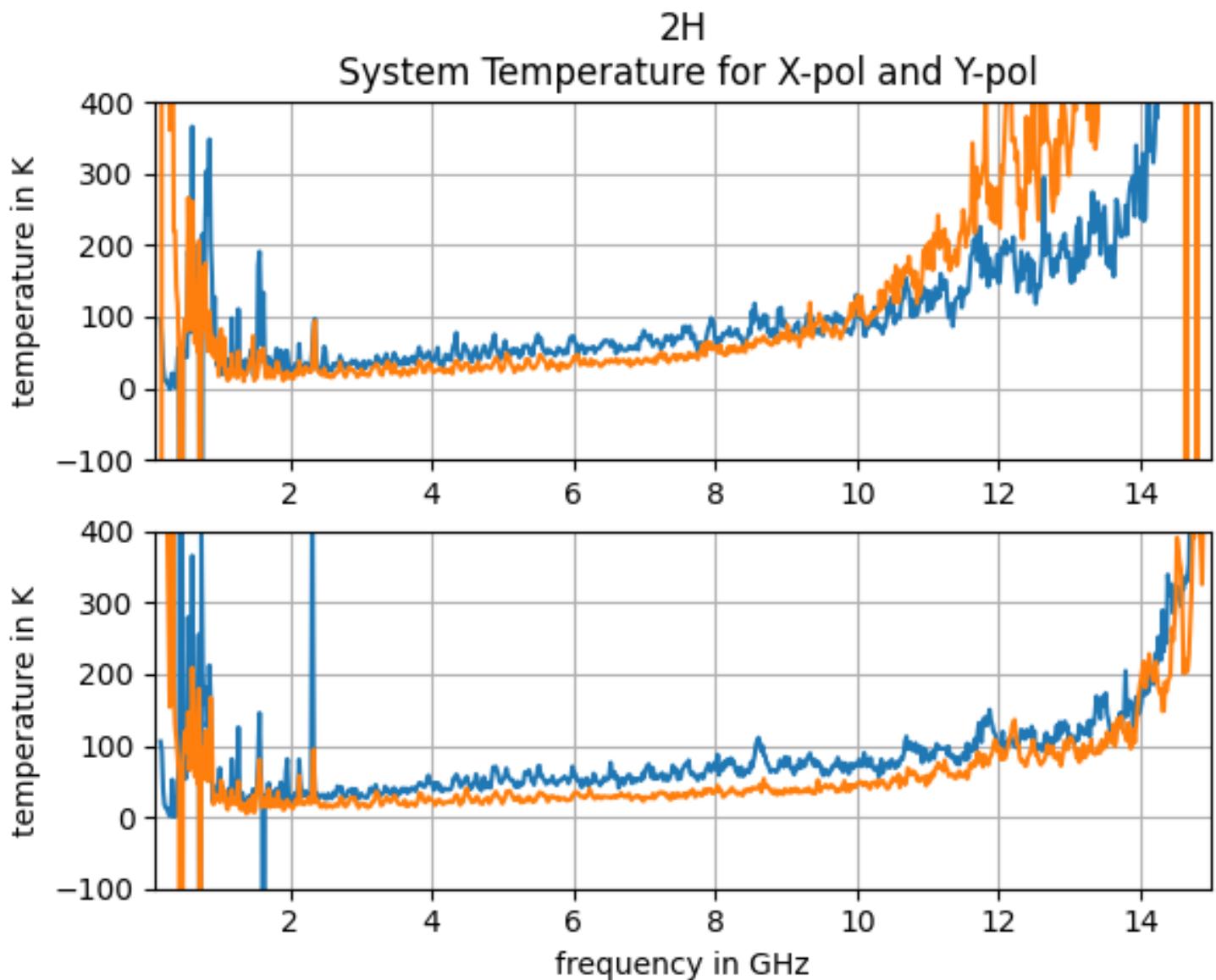
Tsys measurement

- LNA - 5m – AMP – 3dB – 1m – AMP – 3dB – 1m – Spectrum Analyzer (5dB input attenuation)



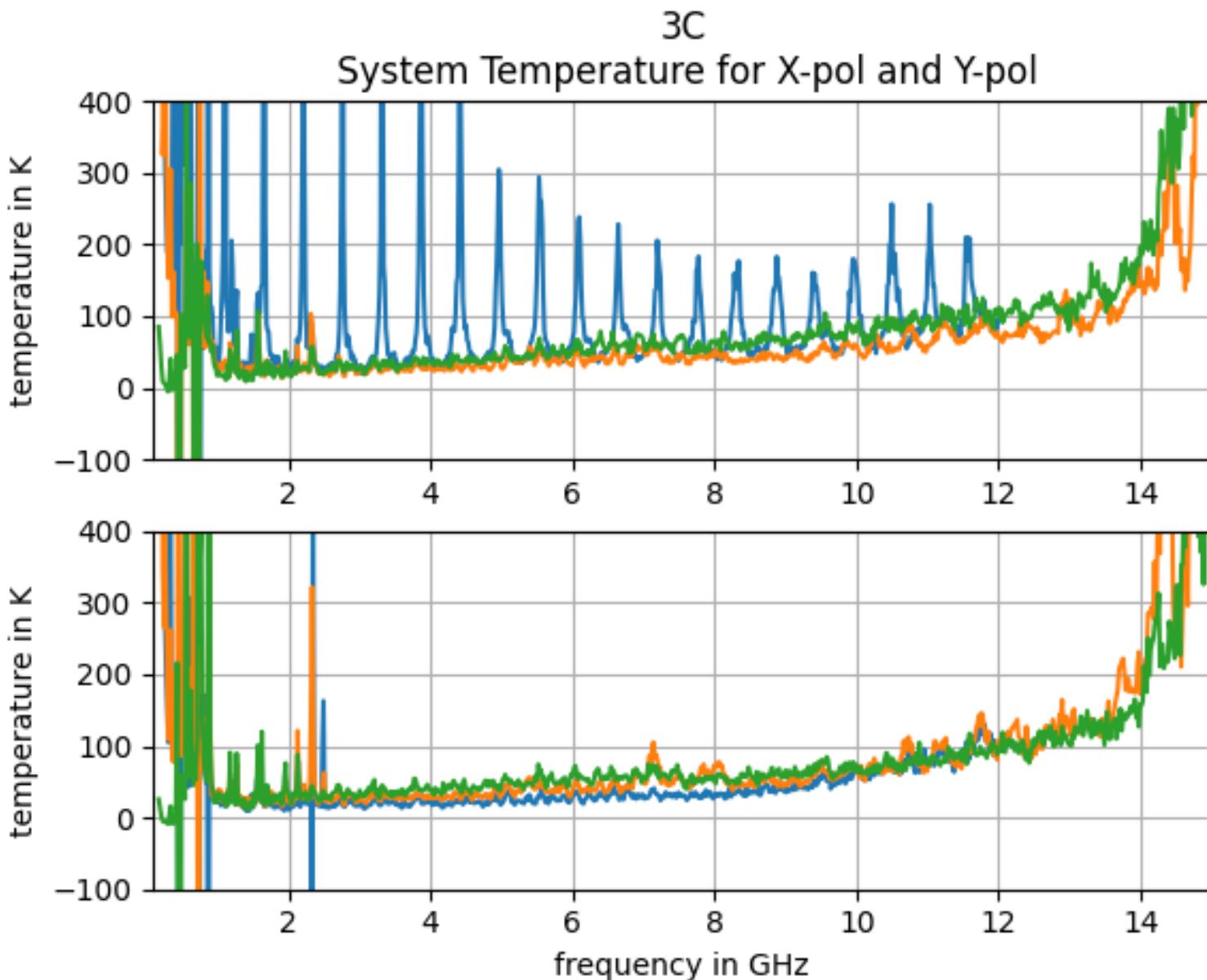
2H Tsys measurement

- Original Tip-Link / Copper / 80K (Oct 2019)
- New Tip-Link / Gold Plated / 80K (Aug 2020)



3C Tsys measurement

- Original Tip-Link / Copper / 80K (Aug 2019)
- New Tip-Link / Copper / 80K (Nov 2019)
- New Tip-Link / Gold Plated / 80K (Aug 2020)



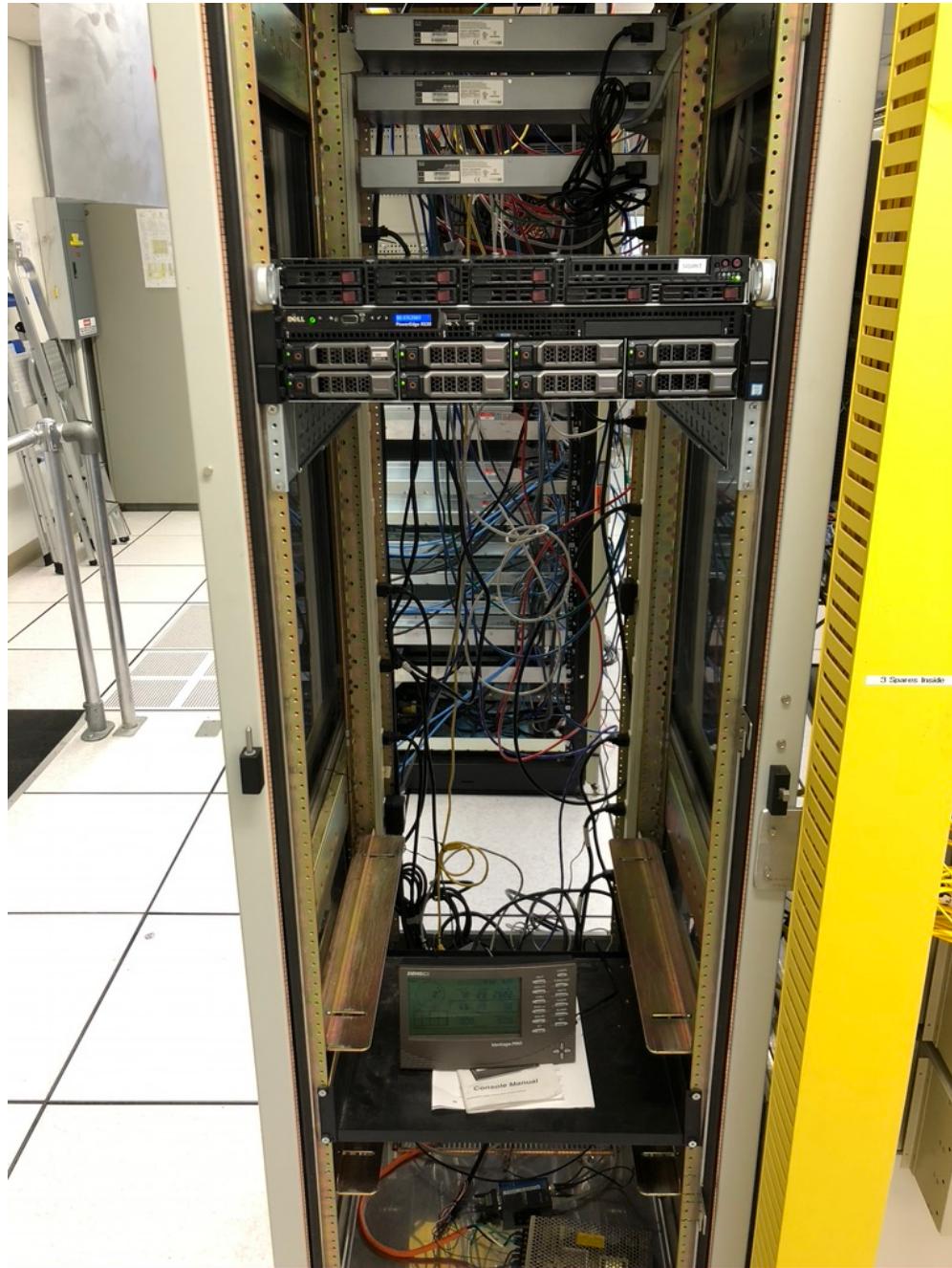
ATA Control Server Overview

- Control (Ubuntu 20.04)
- Data (Ubuntu 20.04)

Host: antenna	Host: Control	Host: Data
ControlBoxServer	AntennaServer	MetaDataAdapter
DriveBoxServer	RecoveryServer	AntennaLogServer
CopleyServer	GeodesyServer	DataServer
RimBoxServer	SLALIBServer	LdapServer
CryoServer	NOVASServer	
PAXBoxServer	WeatherServer	
DishServer	WindsockServer	
deadmans-switch	LOServer	
	InternetServer	
	TimeServer	
	AlarmServer	
	PredictServer	



ATA Control Server Overview



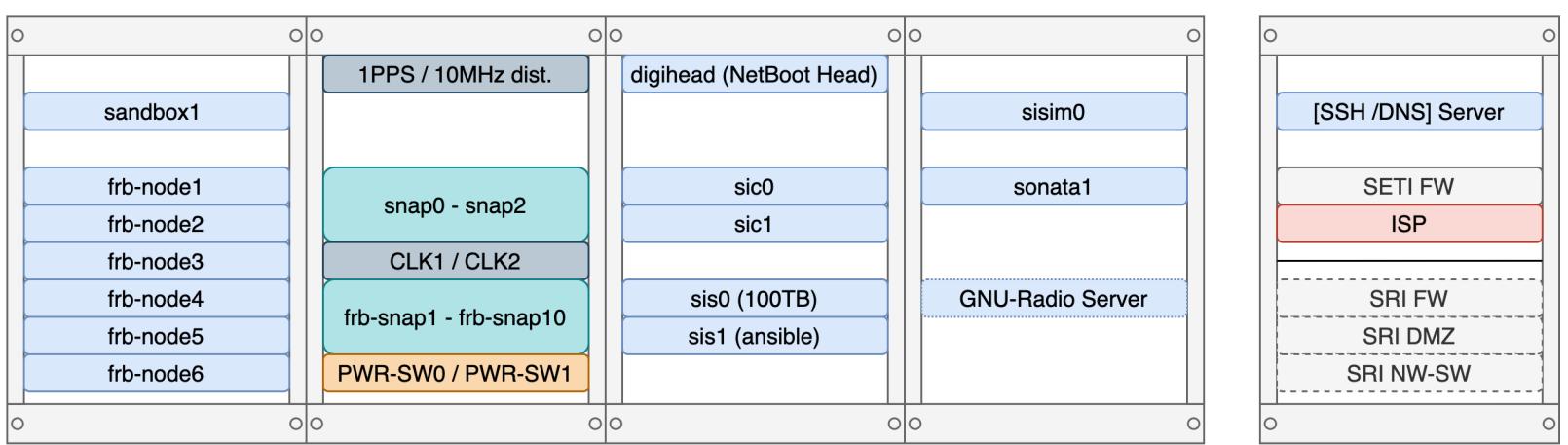
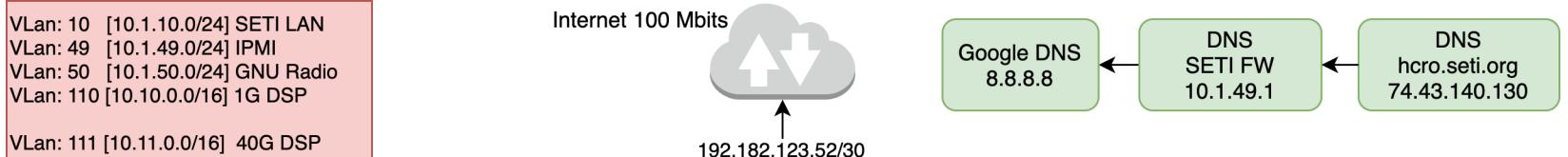
Update

Network changes:

- DNS implemented
- Network range changed
- LAG 2x 1Gbit implemented
- VLANs implemented
- Setup SIC1 to analyze data
- Setup IPMI

To Do:

- Setup DNS domain
(hcro.seti.org)



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