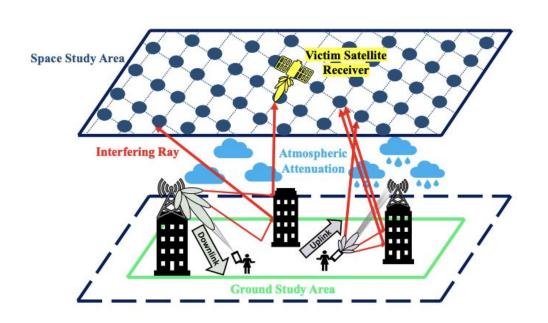
Enabling Spectrum Coexistence of 5G mmWave and Passive Weathe<u>r Sensing</u>

By Despoina Kosmopoulou, John Allen Manego, and Mark Moroney

Experiment Overview

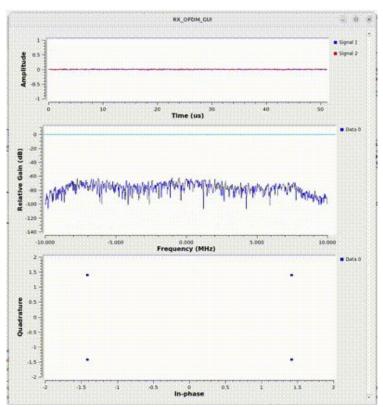


- 5G band is very close to the weather band
- Create a Pipeline
- Radio Frequency
 Interference can cause
 error in weather
 prediction

This week's progress

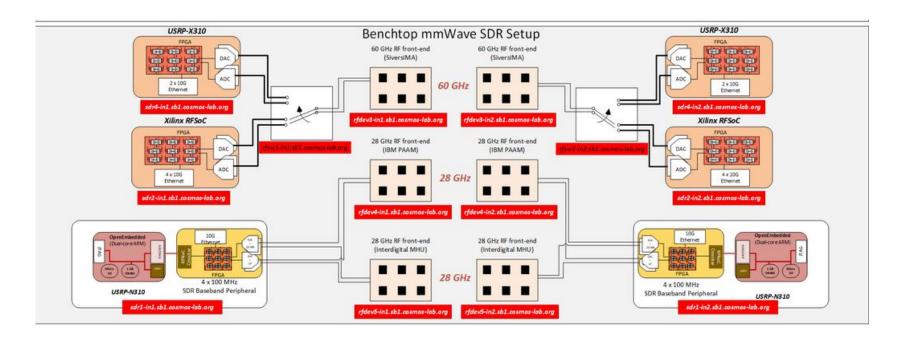
 Used the sb1 PAAMs to transmit orthogonal frequency-division multiplexing signal for text messages (sanity check)

```
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi fr
This is our first (successful!!) attempt to transmit an OFful!!) attempt to transmit an OFDM signal over the PAAM. If you
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi fr
e reading this messamething:)
This is our first (successful!!) attempt to transmM. If you are reading this messomething:)
This is our first smit an OFDM signal over the Pm something:)
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi fr
This is our fitransmit an OFDM signal over the PAAM. If you are reading this message, hi from conference room something:
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi f
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi fr
This is our first (successful!!) atteming this message, hi from conference room something:)
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi fr
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi fr
This is our first (successful!!)ignal over the PAAM. If you are reading this message, hi from conference room something:
!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hi from conference room something:
This is our first (successful!!) attempt to transmit an OFDM signal over the PAAM. If you are reading this message, hig:
This is our first (successful!!) attempt to transmit an you are reading this message, hi from conference room something:
This is our first (successful!!) attempt to transmit af you are reading this message, hi from conference room something:
```



This week's progress

- Transmitted simple one-tone signals
- Getting familiar with GNURadio and Sandbox 1 (cosmos environment)



Goals for Next week

Continue developing custom
 Python blocks for GNURadio

 Measure the oscillator drift for various carrier frequencies

Noise floor characterization

