Dataset Examples

A data snapshot from one of these recordings is presented in Figures 1 and 2. Each Figure shows the signal-to-noise (SNR) power ratio for 10 seconds of raw I/Q data. Figure 1 shows the SNR for frequencies from 2 to 22 MHz. The wide variety of signal strengths, frequencies, and modulations are evident in the horizontal traces. Figure 2 represents the same data shown in Figure 1, but zoomed in between 4 to 5 MHz, a diagonal signal is apparent from 4.1 MHz at 00:01:20 UTC to 5.0 MHz at 00:01:29 UTC, which is a non-characterized sounding of interest.
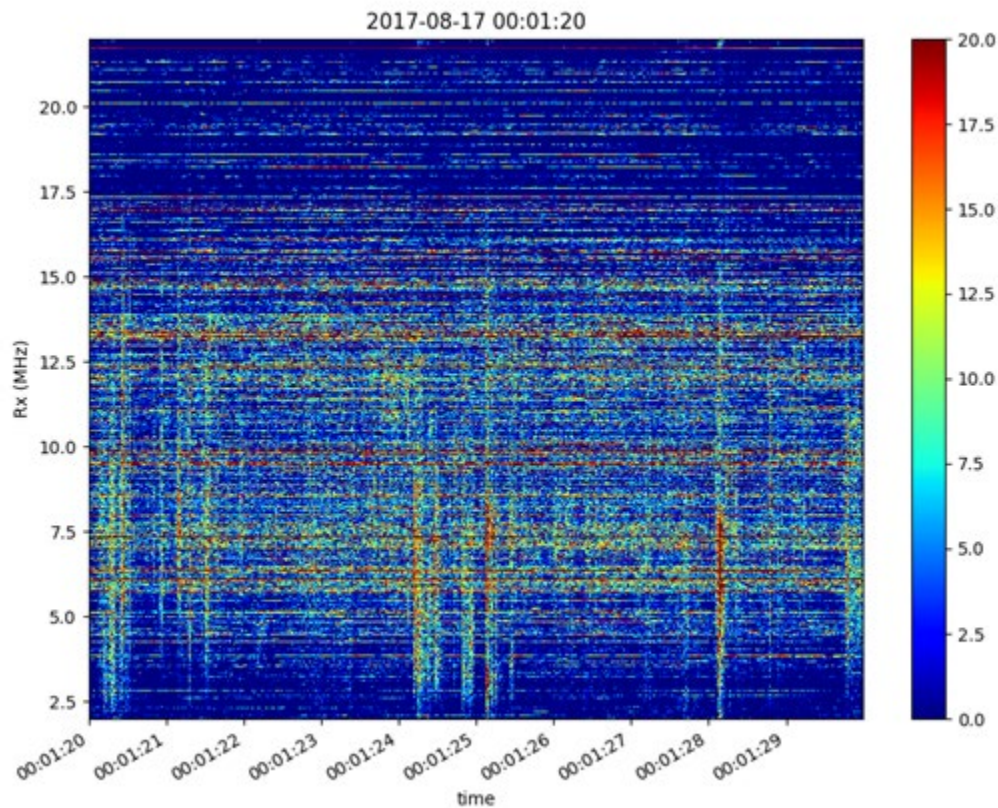
Data Examples

Figure 1: Snapshot of HF Signals Recorded by PINS Challenge SDR

- Example time period: two seconds of HF reception at 00:01:20 UTC, August 17, 2017.
- Sample recorded from a HF broadband receiver.
- Power spectrum vs. time of example data shown above. Signal-to-noise ratio (decibels in color) vs. time (horizontal axis) and signal frequency (vertical axis).
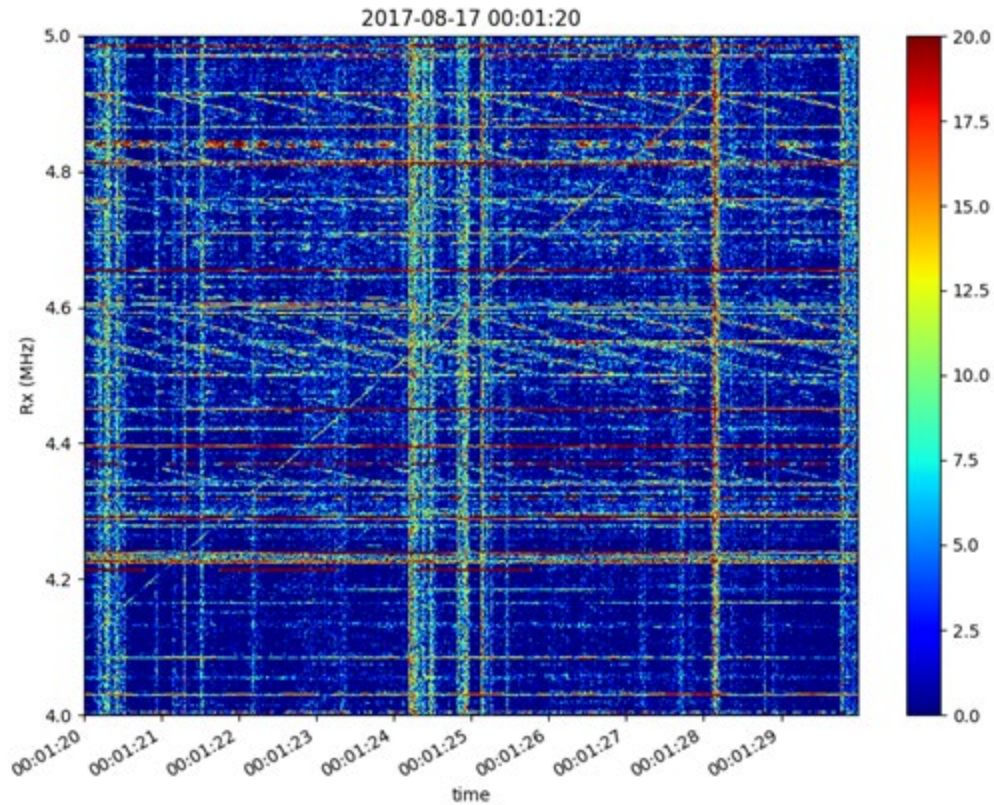- Note: Signals are from several HF transmitters.

2017-08-17 00:01:20

Figure 2: Snapshot of HF Signals Recorded by PINS Challenge SDR, Zoomed in Between 4 to 5 MHz

- Example time period: Two seconds of HF reception at 00:01:20 UTC, August 17, 2017.
- Sample recorded from a HF broadband receiver.
- Power spectrum vs. time of example data shown above. Signal-to-noise ratio (decibels in color) vs. time (horizontal axis) and signal frequency (vertical axis).
- Note: Diagonal sounding signal from 4.1 MHz at 00:01:20 to 5.0 MHz at 00:01:29.