SDR - Spectrum Sensing

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Overview

- Development of Real-Time Plotting Module
- Evaluation of Alternative Plotting Methods
Development of Real-Time Plotting Module

- Stable build of module
- Adjusts for changes in carrier frequency and sampling rate
- Can run on ORBIT nodes with USRPs and Gnuplot installed
- 15-30 second latency when plotting over ssh
Evaluation of Alternative Plotting Methods

- Currently Gnuplot runs as separate process on node, must be tunnelled to client via ssh
- Researching use of websockets in coordination with Javascript and/or HTML5 for browser-based visualization
  - research libwebsockets C++ library and use of OpenSSL
Next Week

- Look into other methods of plotting
  - browser-based visualization
- Optimizing module to reduce latency
- Start compiling final project poster