Sprint 1

IO and Algorithm

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Background

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Project background

- SIGPROC library
- eScience center
- Asteria
- IO/Algorithm

Methodology

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What were our methods?

- SCRUM
- Sprint reviews

Goals

Our goals for Asteria

- Refactoring SIGPROC library
- Python/C++
- Tests minimal 60% code coverage

Modules

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These modules are present and usable in the Asteria library

- Filterbank
- Pipeline
- Clipping
- Dedisperse
- Timeseries
- Fourier
- Plot

Filterbank

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- Read filterbank files
- Generate mock data

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Pipeline

Clipping

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- Filter samples
- Filter channels

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Dedispersion

Timeseries

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- Downsampling

Fourier

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- FFT Matrix
- Discrete Fourier Transform
- Cooley-Tukey
- Shirt zero-frequency

Plot

- Plot
- Waterfall

Questions?

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