Sprint 1

Albert van Kiel, Timo Hermsen, Robin Banek Max van Hasselt, Robert Klee and Menno Prinzhorn

Background

Methodology

Coals

Module

Filterban

Clipping

Dedisperse

Timeseries

Fourier

Pipelin

Sprint 1 IO and Algorithm

Albert van Kiel, Timo Hermsen, Robin Baneke, Max van Hasselt, Robert Kleef and Menno Prinzhorn

January 24, 2019

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${\sf Background}$

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Project background

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

Methodology

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Backgroun

Methodology

Goals

Modul

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Fourier

Pipelii

What were our methods?

- SCRUM
- Sprint reviews

Goals

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Pipelir

Our goals for Asteria

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

Modules

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Methodology

Goal

Modules

Filterban

Dadispars

Dedispers

Timeserie

Pipelii

Pipeline

These modules are present and usable in the Asteria library

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

Filterbank

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Methodology

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Filterbank

Filterban

Dadienare

Dedispers

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Fourier

Pipelir

- Read filterbank files
- Generate mock data

Clipping

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Background

Methodology

Goals

Module

Filterba

Clipping

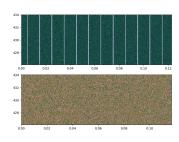
Dedispers

Timeserie

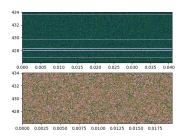
-ourier

Pipeline

Filter samples with noise



Filter frequencies with noise



Dedisperse

Sprint 1

Dedisperse

Dedispersion

Timeseries

Sprint 1

Timeseries

Downsampling

Fourier

Sprint 1

Fourier

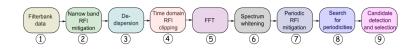
■ Discrete Fourier Transform

FFT

Pipeline

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Pipeline



Plot

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Background

Methodology

Goals

Module

Filterban

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Fourier

Pipeli

- Plot
- Waterfall

Questions?

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Methodolog

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Fourier

Pipel

 ${\sf Questions?}$