

Open SonATA Work Required for minimal functionality to run 3 beam, 72 MHz cluster:

General:

- Extensive Testing and Debugging
- Resolve Network Architecture
- Refactoring of code
- Restructure directory tree to simplify SSE and sigproc common file access

SSE work to be done:

- Add channelizer & DX code to SSE
 - component config & startup
 - add DX interface & proxy (adapted from PDM interface)
 - add channelizer interface & proxy
 - channelizer tune & sync
 - channel based tuning of DXs
 - monitor channelizer statistics (sent by multicast)
- Add seeker multiresolution pulse configuration parameter(s)
- New archiving device control (replacement for tape jukebox)
- Modify Waterfall & Baseline display programs to support Sonata data format changes
- Remove code that handles obsolete components (ifc, tsig) from Makefiles, configurations, activities, etc.
- May need multiple SSE machines/instances to handle increased message traffic. Determine how will they distribute the load, and be coordinated.

Signal Processing work to be done:

- Add monitor and control from the SSE to the channelizer
- Modify existing PDM interface for the DX
- Singlet Pulse Handling
- 256 and 512 Hz Pulse Resolution
- Finalize Archive Channel format and processing