Documenting Multibeam System Parameters in SIS

Multibeam Advisory Committee

2012-03-21

SIS 3.8.3

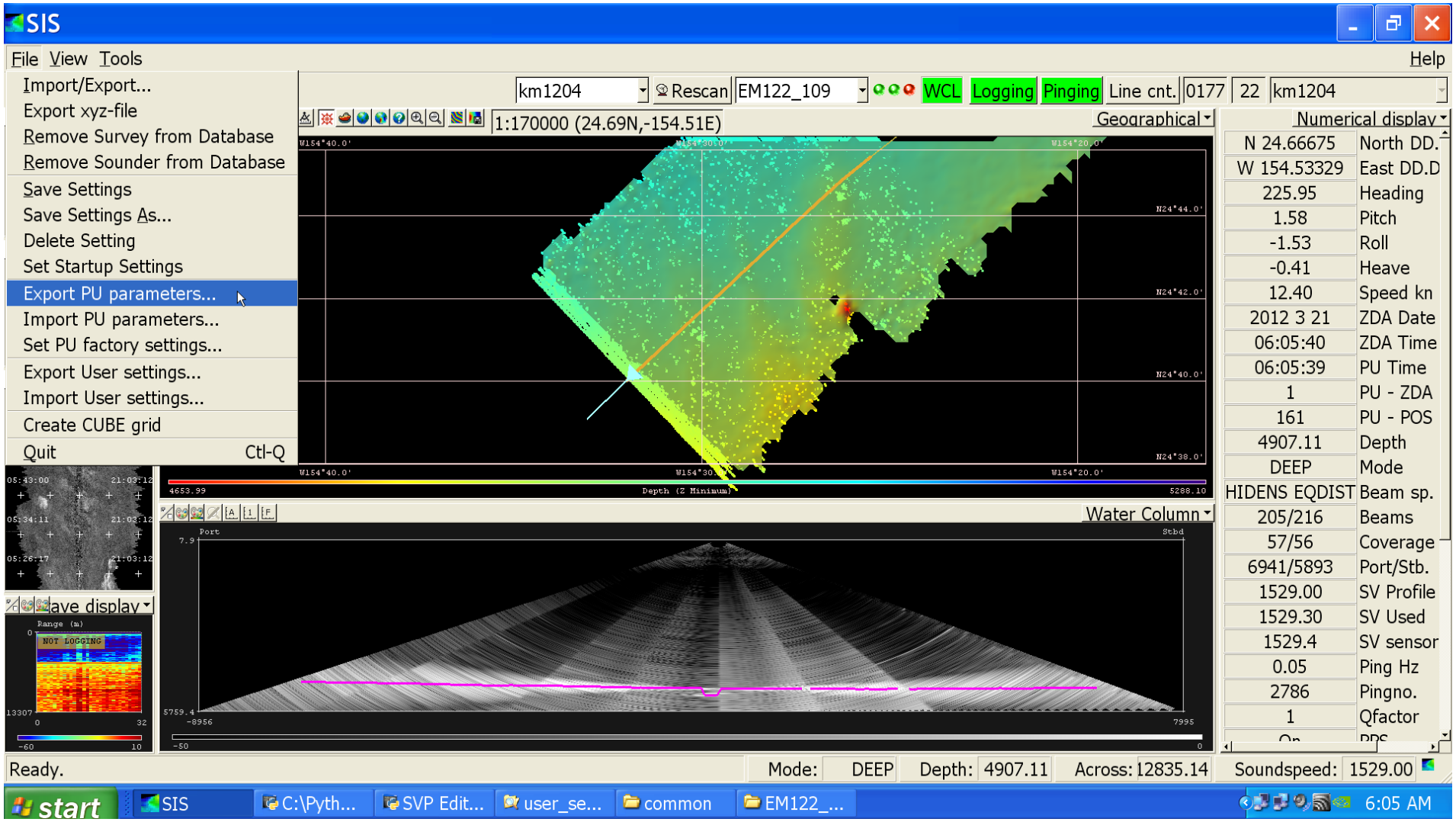
Outline

- Exporting system configuration parameters
- Screen grabs
  - Installation parameters
    - I/O configuration of sensors
    - Installation geometry
  - Runtime parameters
    - Preferred sounder mode of operation
  - External Sensors
    - Communication configuration for other sensors
  - Datagram Distribution
    - Distributing data to other software

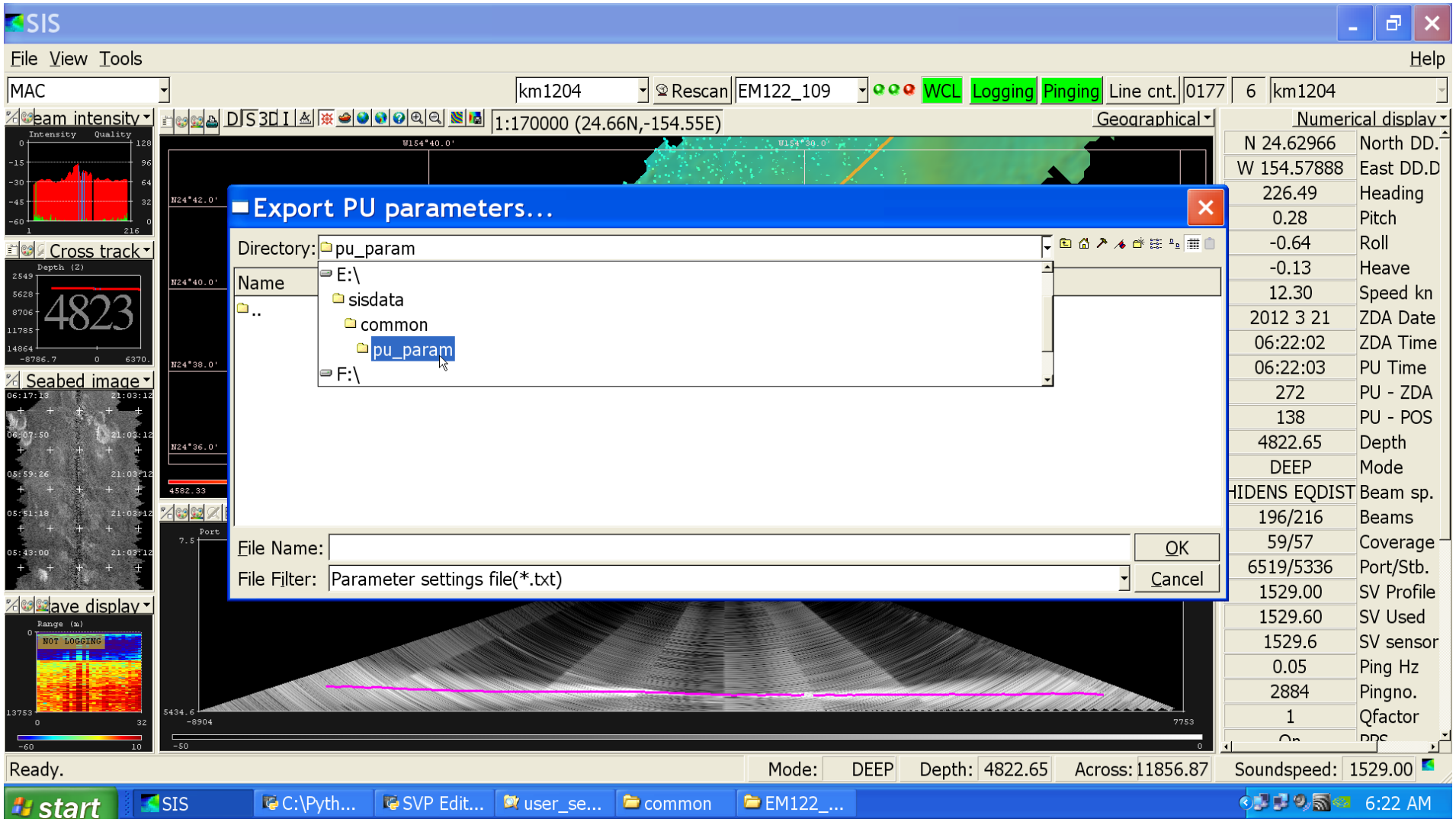
1. Exporting Parameter Files

- Much of the system configuration can be exported as readable text configuration files which can later be imported. This is useful in quickly reconstructing a working system after a SIS re-installation.
- There are exporting options under the SIS "File" menu.
  - Export PU parameters: saves "Installation Parameters" and "Runtime Parameters"
  - Export User Settings: saves user preferences, datagram distribution list, etc.
- Do
  - store the configuration files off the SIS machine in a write protected, yet easily accessible, location on the ship's network
  - prepare some metadata for the files describing the date/time and hardware/ software/firmware versions of the system they pertain to
  - Setup a naming convention that that captures the date, platform, sonar type and file contents, e.g. 2012_081_Kilo_Moana_EM122_PU_parameters.txt
- Don't
  - edit the configuration files, they are easily corrupted by wayward keystrokes

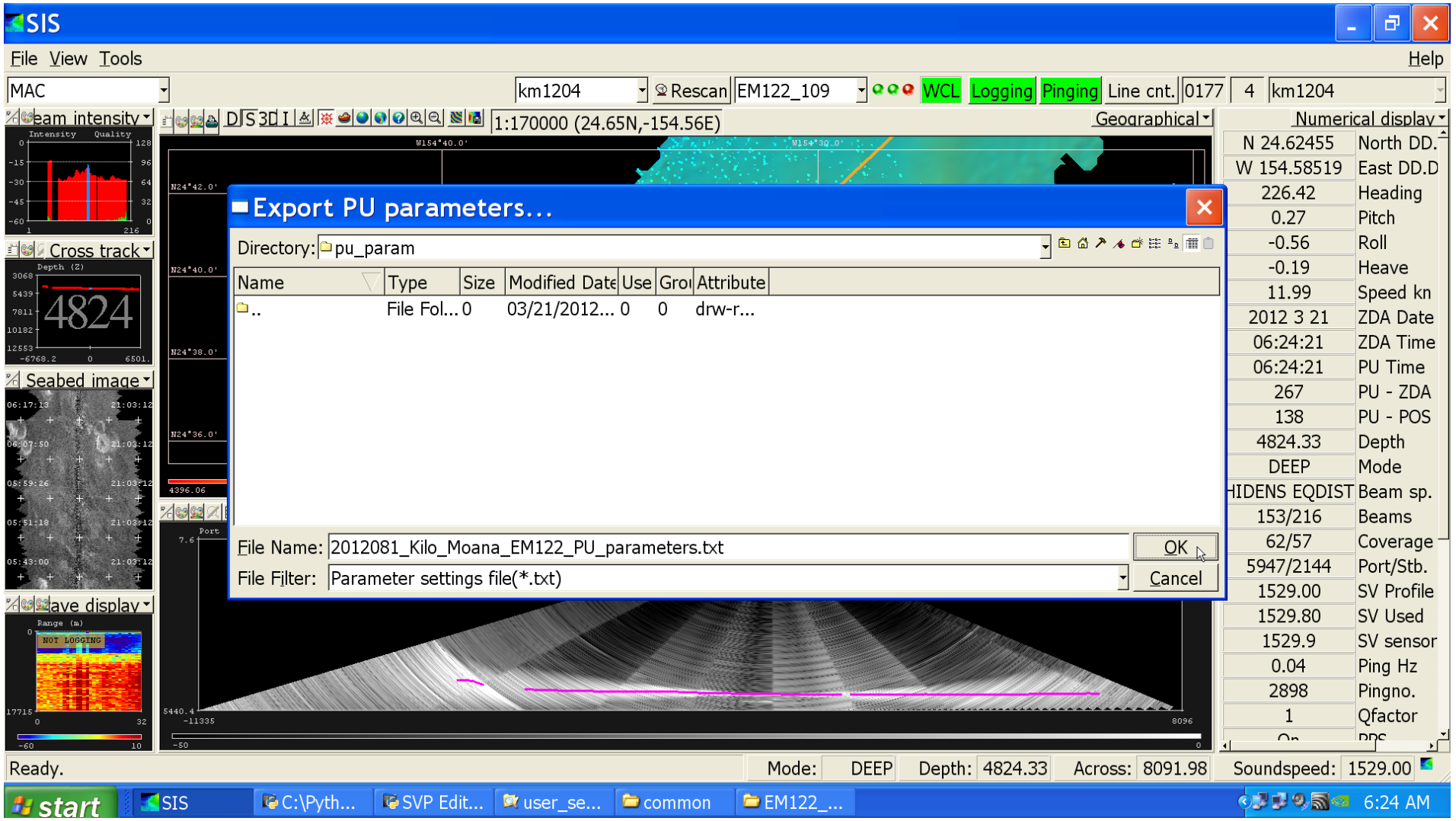
Exporting PU Parameters



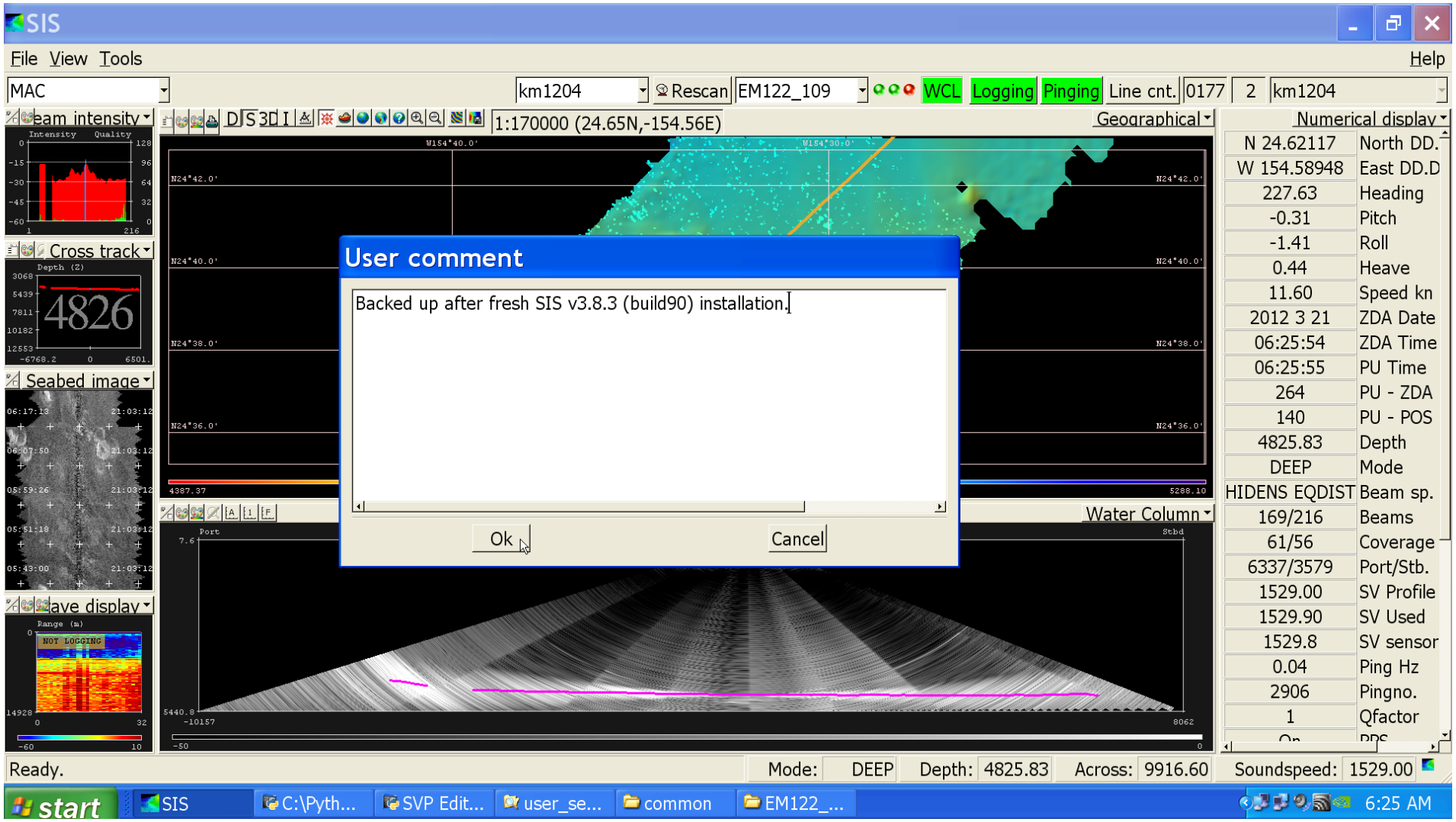
Exporting PU Parameters



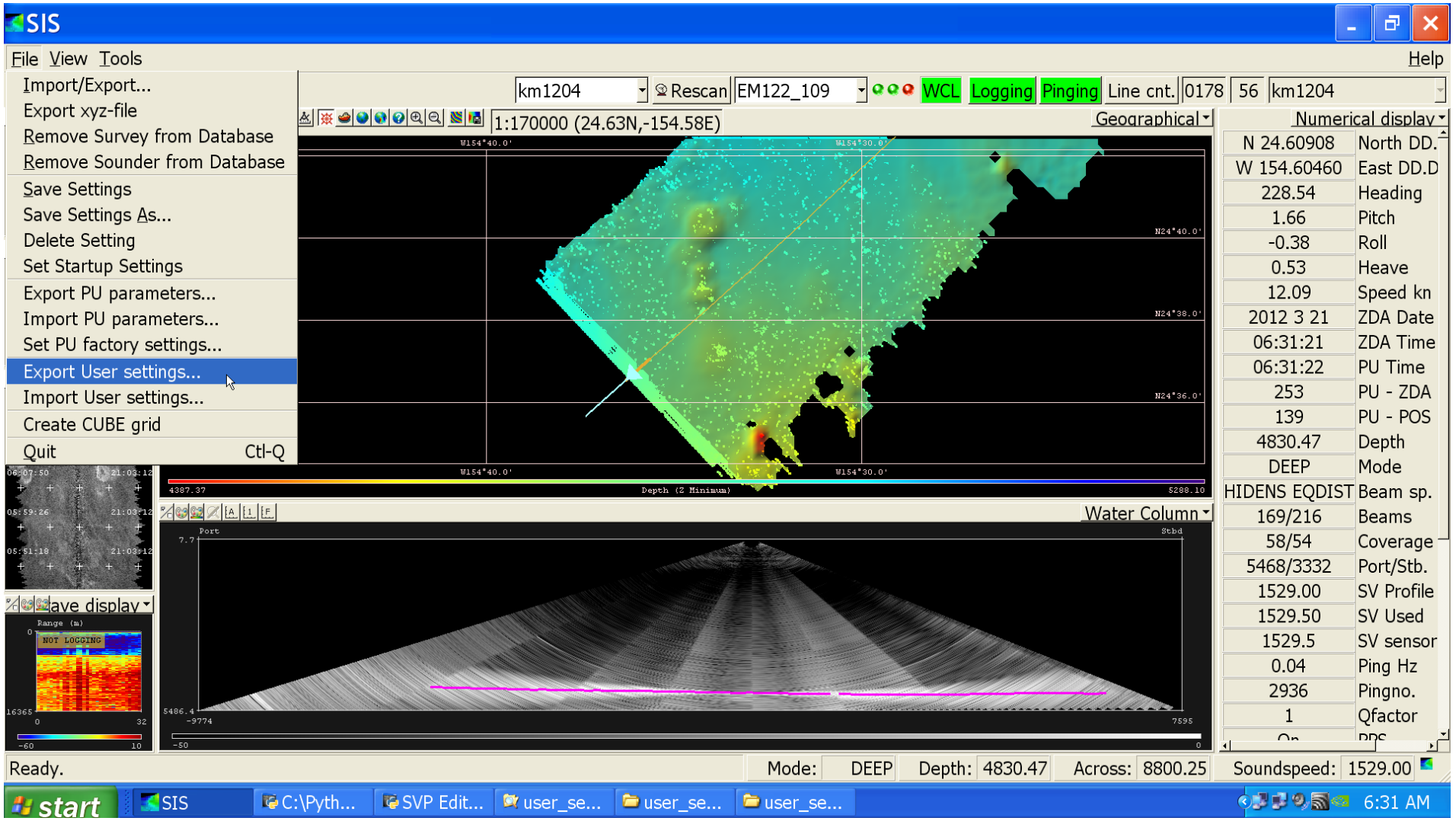
Exporting PU Parameters



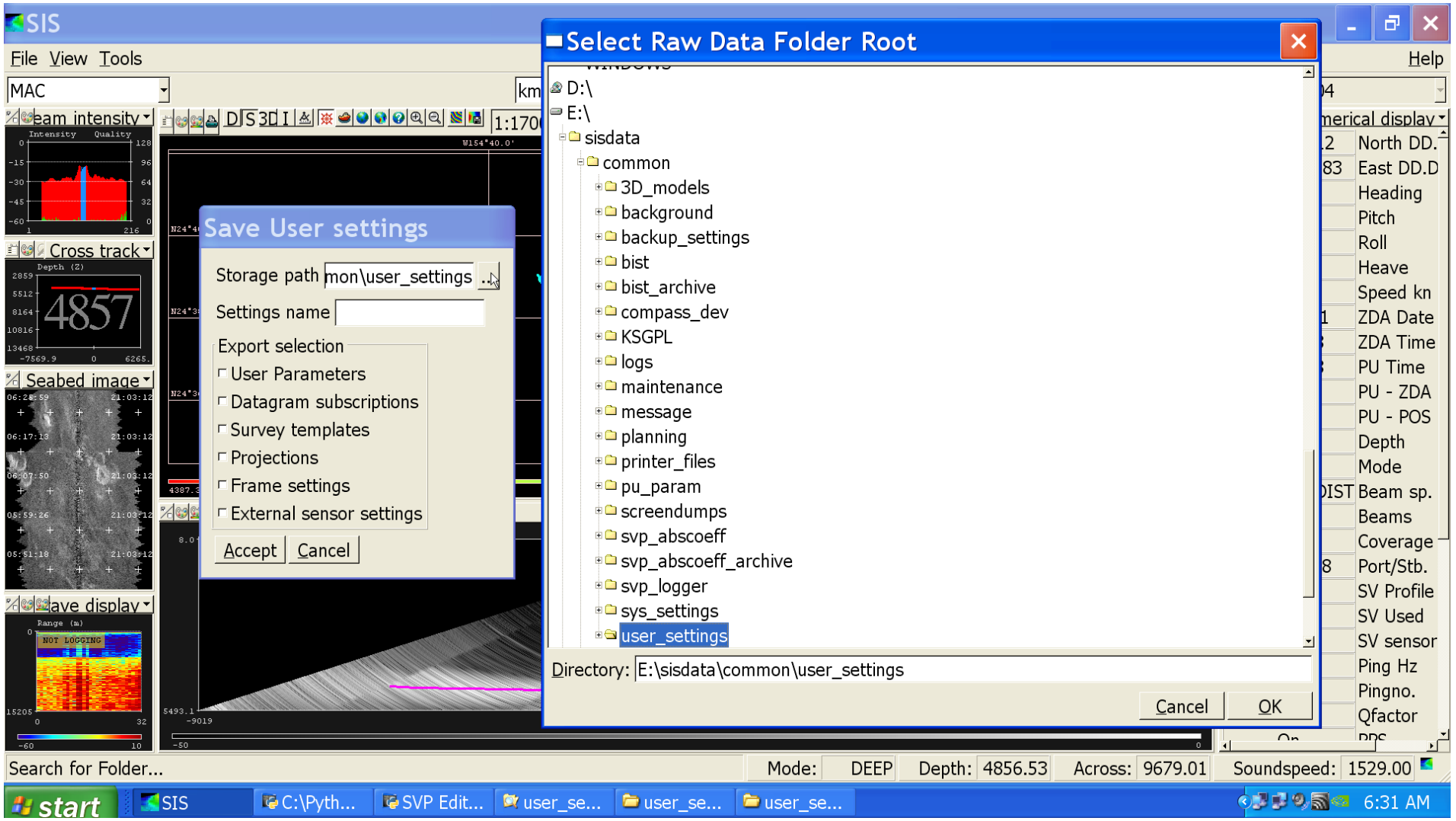
Exporting PU Parameters



Exporting User Settings

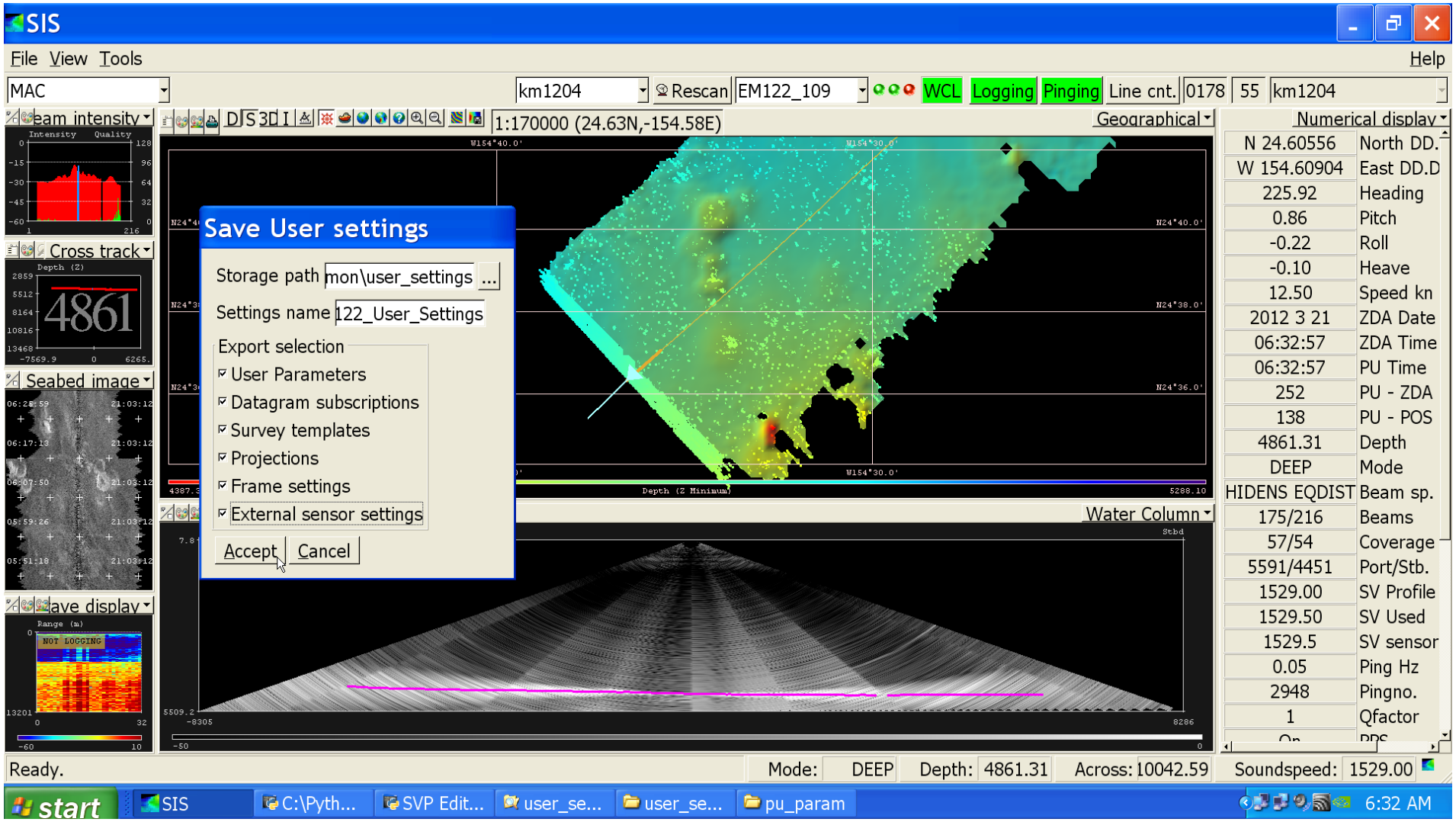


Exporting User Settings



Choose the path first, then enter a filename prefix that follows your naming convention.

Exporting User Settings

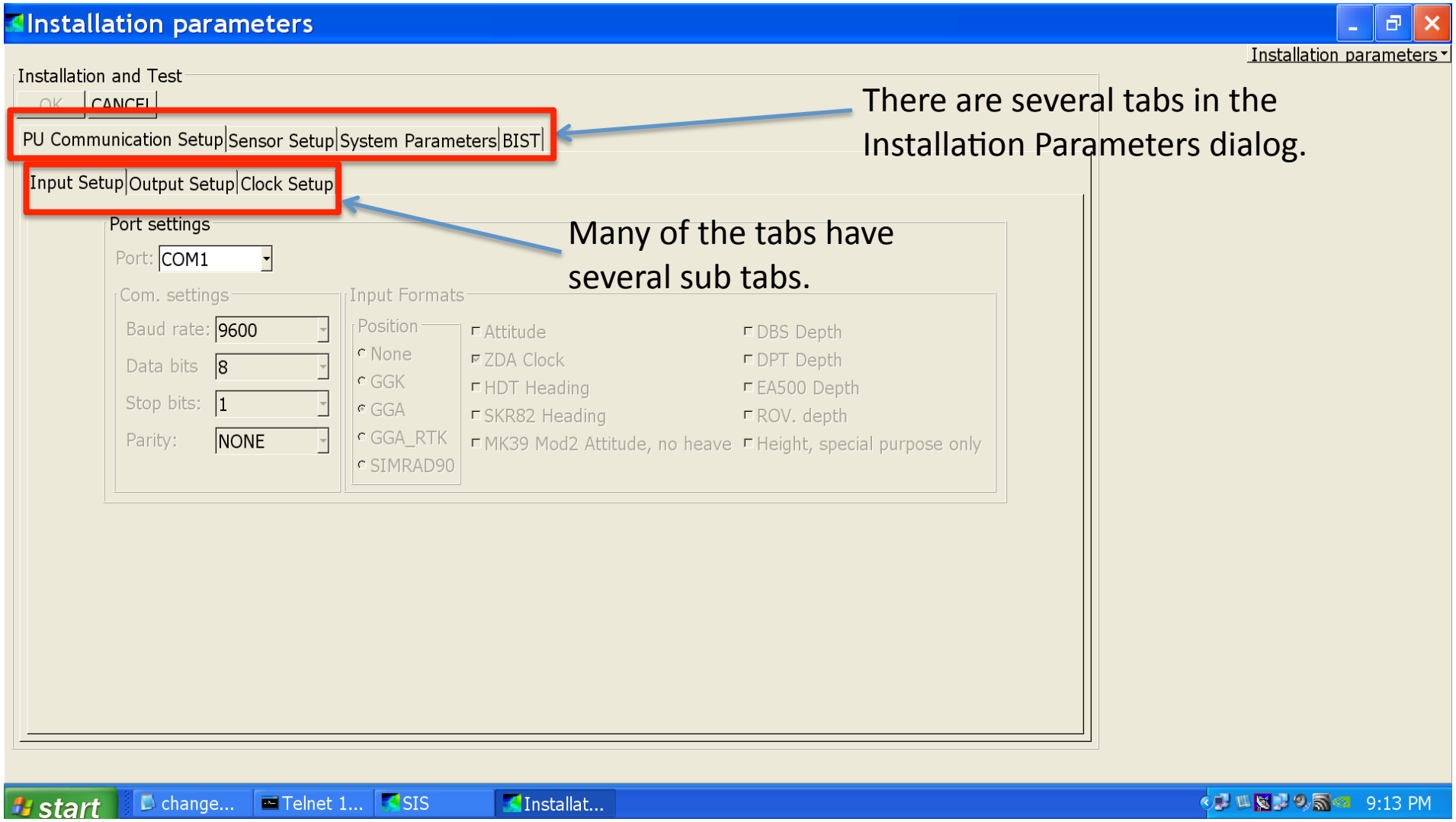


Choose all of the options to export and click Accept.

2. Screen Grabs

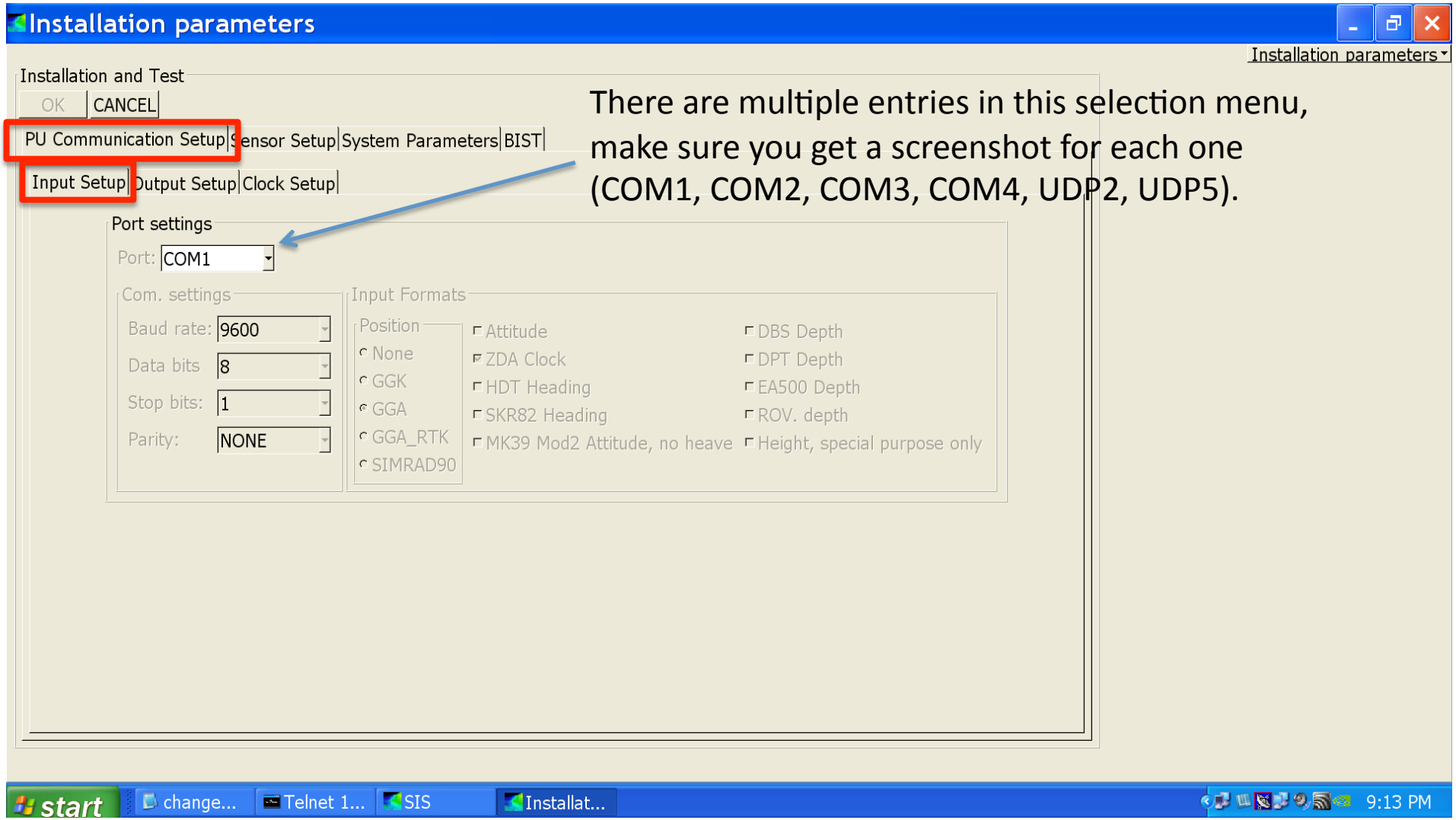
- Screen grabs allow for a safer, if more labor intensive, reconstruction of the last known good operating state of the system and can help deal with
  - SIS database corruption: it may be inadvisable to re-import configuration files that might be causing the corruption.
  - SIS upgrades: the migration of these types of settings is not always successful
- Do
  - Tag screen grabs with date/time and organize in a meaningful manner
  - Store some metadata along with the screen grabs that clearly indicate the multibeam hardware/firmware/software versions that they pertain to
  - Collect screen grabs from software of other sensors that are associated with the multibeam (e.g. motion sensor), this will allow for reconstruction of the mapping system as a whole

Installation Parameters

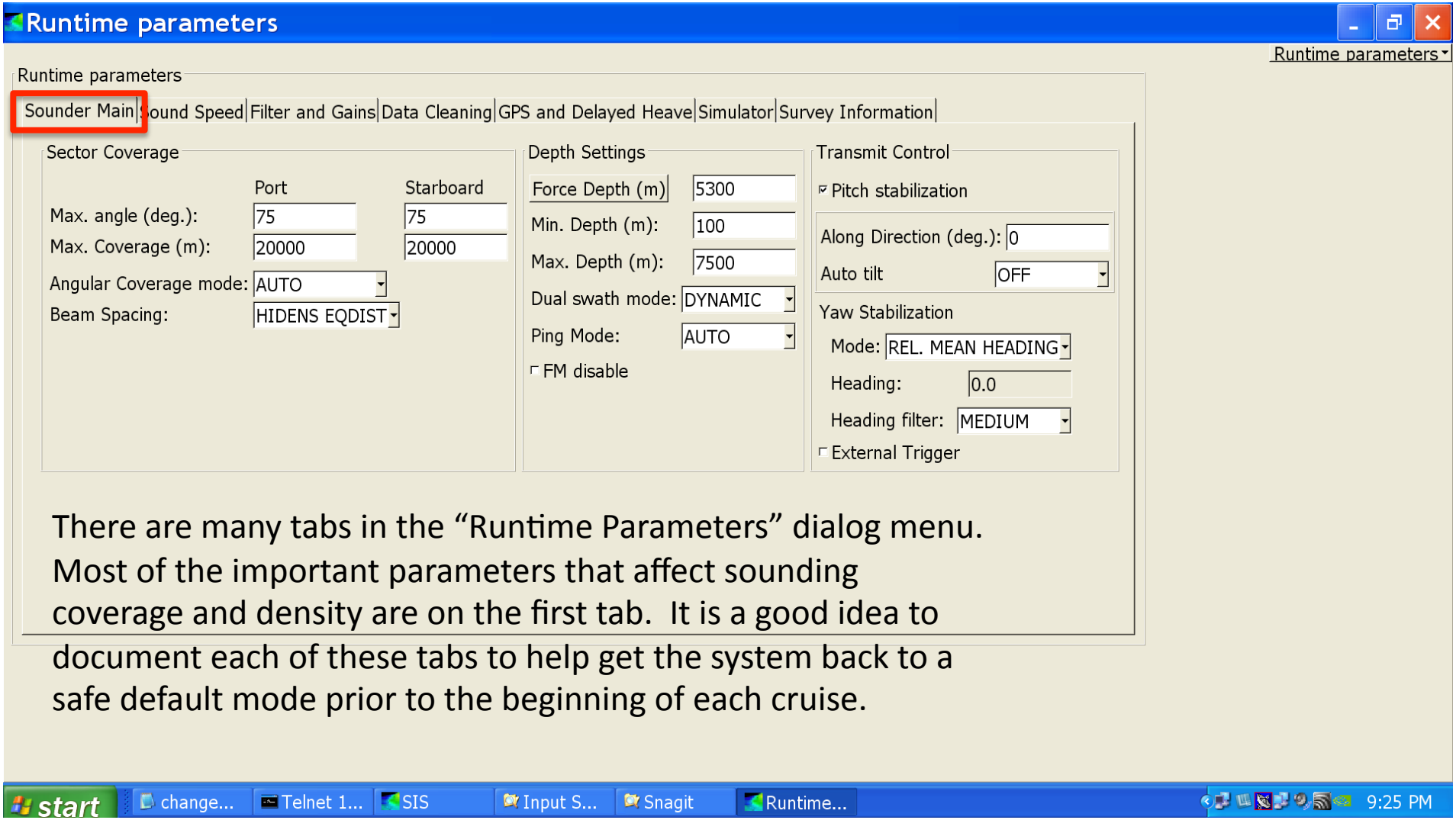


Open an "Installation Parameters" tear-off window and complete screen grabs for all tabs (View menu, the select "Tear off").

Installation Parameters

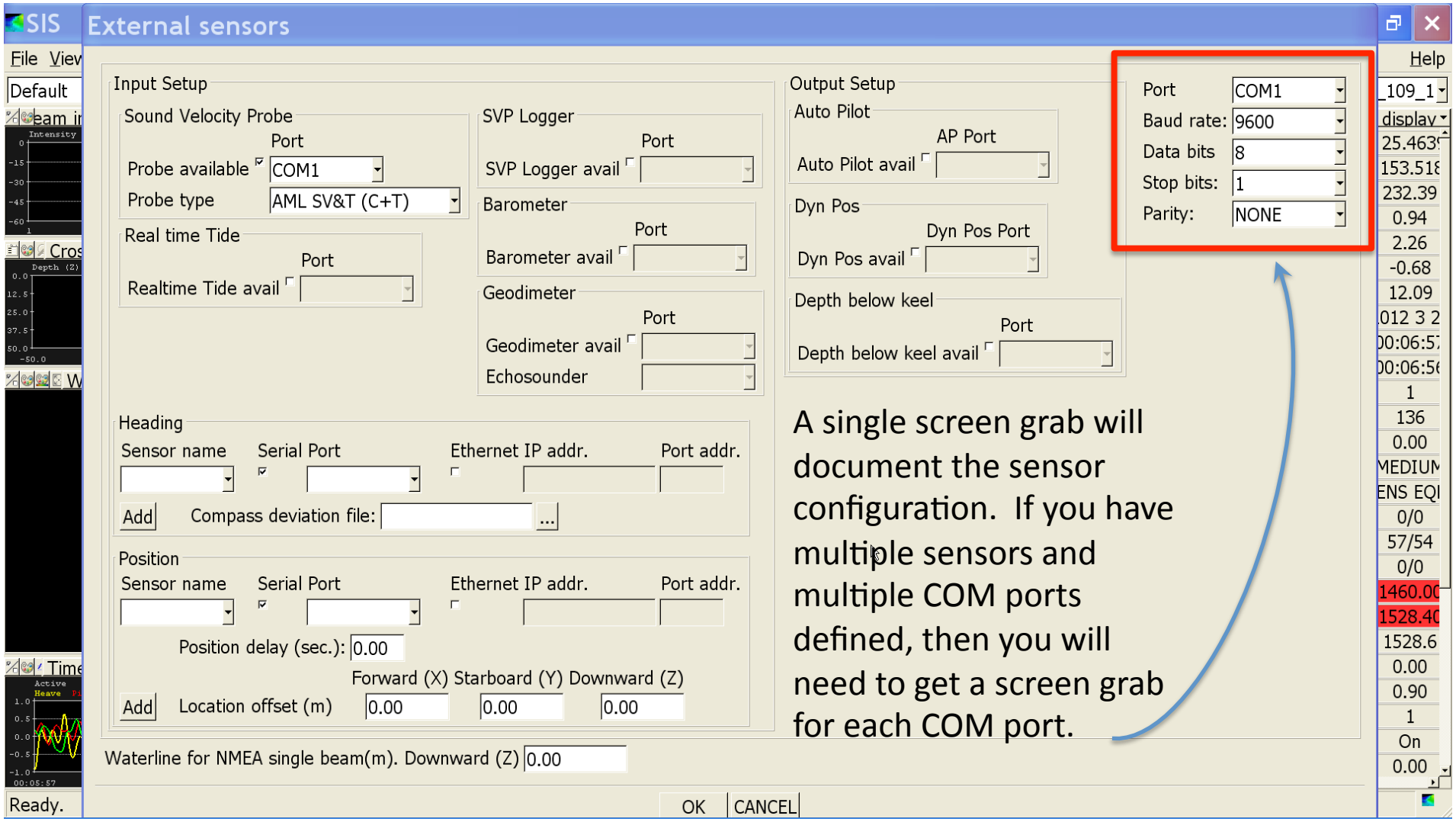


Runtime Parameters



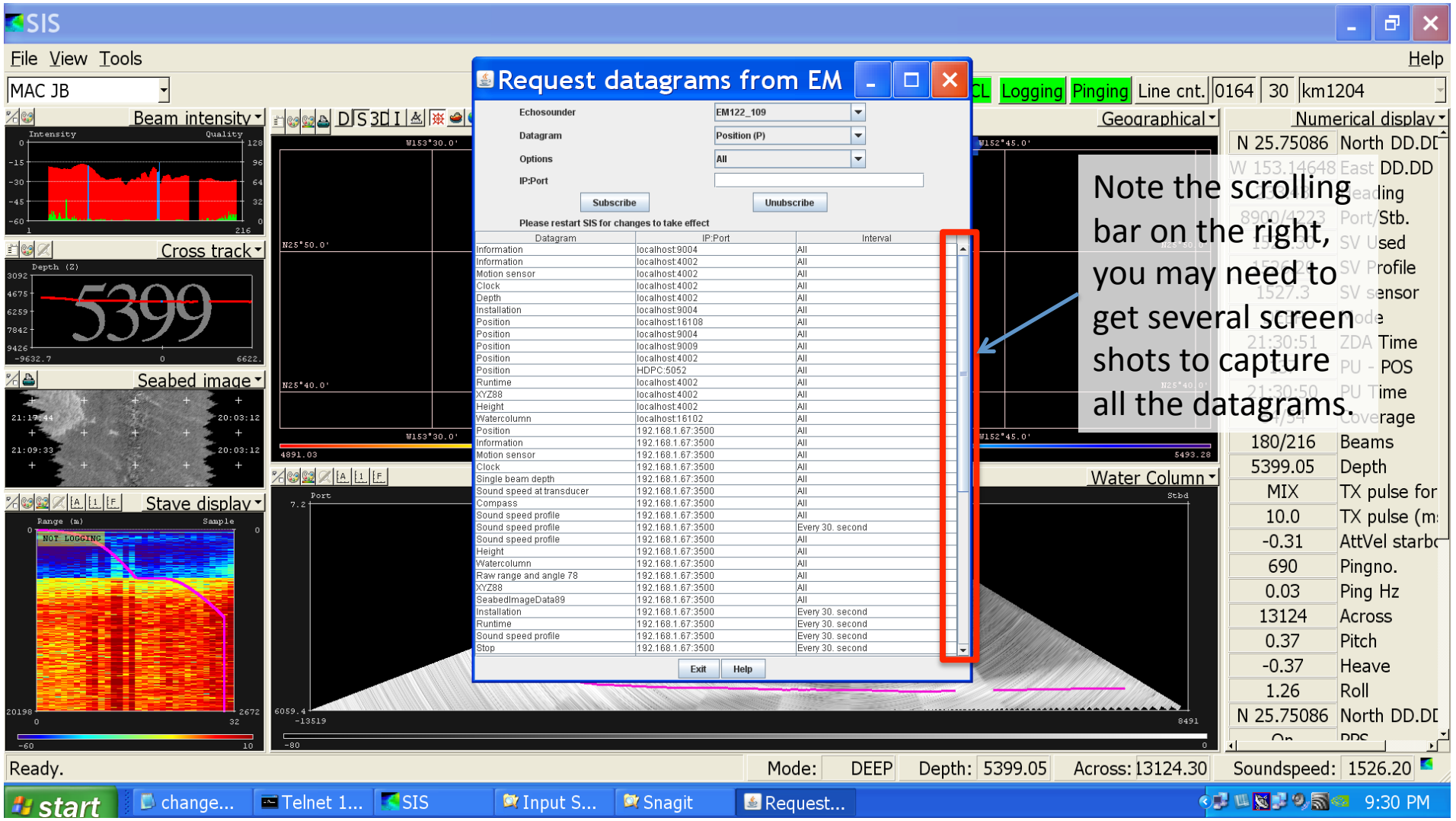
There are many tabs in the "Runtime Parameters" dialog menu. Most of the important parameters that affect sounding coverage and density are on the first tab. It is a good idea to document each of these tabs to help get the system back to a safe default mode prior to the beginning of each cruise.

External Sensors



Under the “Tools” menu, select “External Sensors”.

Datagram Distribution



Under the “Tools” menu, select “Custom” then select “Datagram Distribution”.