

“UNSLICING” A VOLUME – PROGRAM **unslice**

Contents

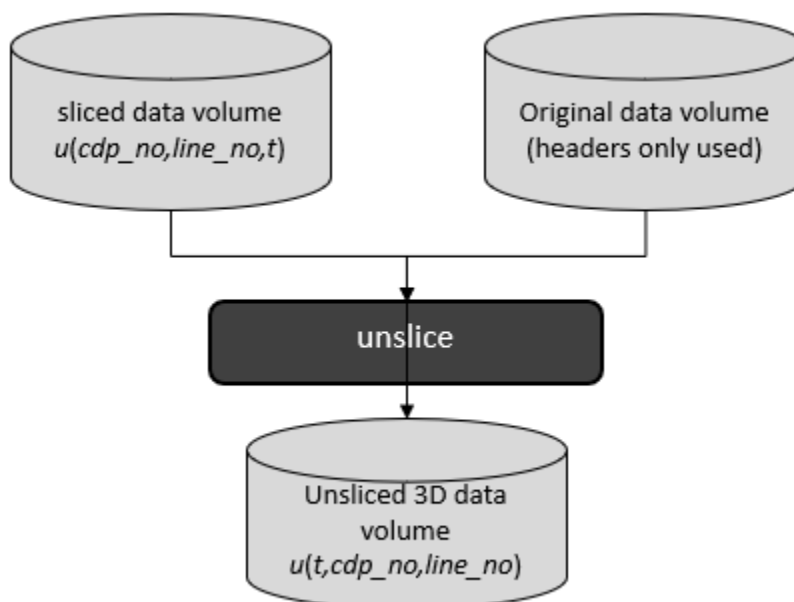
Overview	1
Computation flow chart	1
Output file naming convention	2
Invoking the slice GUI	2

Overview

Acquisition footprint is most apparent and most easily addressed on time or depth slices requiring the original data to be sliced with the data ordered as CDP no., Line No, and time as the 1st, 2nd, and 3rd axes. After filtering using simple k_x - k_y or 2D continuous wavelet transforms, we need to unslice the filtered results to obtain a conventionally ordered data volume stored with time (or depth), CDP no, and Line no as its 1st, 2nd, and 3rd axes for subsequent use.

Computation flow chart

Program slice has a two input files and a single input and output file. The data to be sliced are contained in the input sliced data volume, whereas the headers are read from the original file that was used to generate the sliced file (typically before filtering):



Other Utilities: Program **unslice**

Program **unslice** will also unslice 4D and 5D gathers.

Output file naming convention

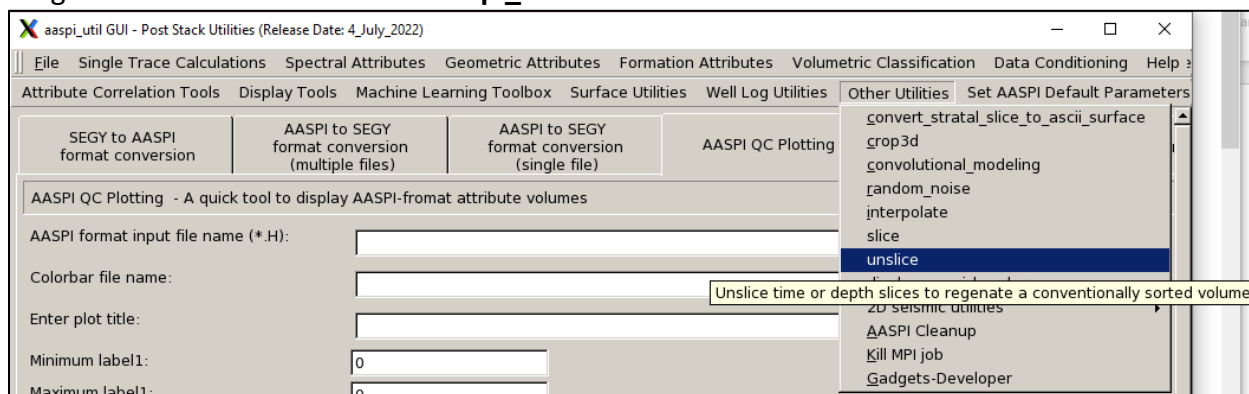
Program **slice** will always generate the following output files:

Output file description	File name syntax
unsliced data volume	unsliced_ <i>+unique_project_name_suffix</i> .H
Program log information	unslice_ <i>unique_project_name_suffix</i> .log
Program error/completion information	unslice_ <i>unique_project_name_suffix</i> .err

Where *unique_project_name* and *suffix* are read from the program GUI. The errors we anticipated will be written to the *.err file and be displayed in a pop-up window upon program termination. These errors, much of the input information, a description of intermediate variables, and any software trace-back errors will be contained in the *.log file.

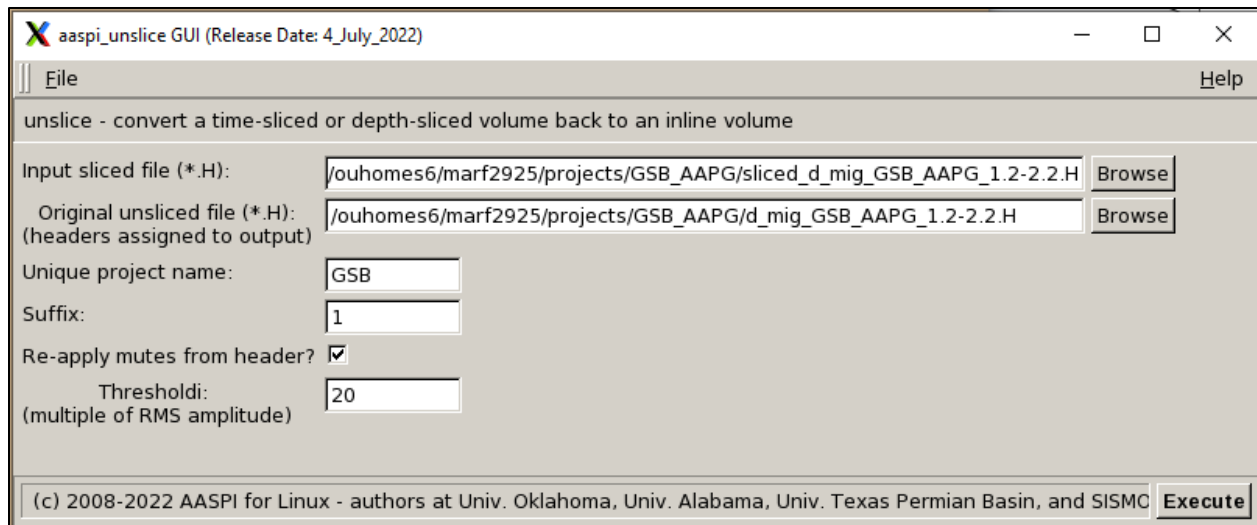
Invoking the slice GUI

Program **slice** is found under the **aaspi_util** GUI *Other Utilities* tab:



The following GUI appears:

Other Utilities: Program **unslice**



Browse to the *.H file of the volume to be unsliced as well as to the original (unsliced data file that contains the headers). In general, you will want to reapply the mutes to the unsliced data volume. A threshold value is also allowed to deal with potential spikes in the data that may have been introduced by the filtering process.