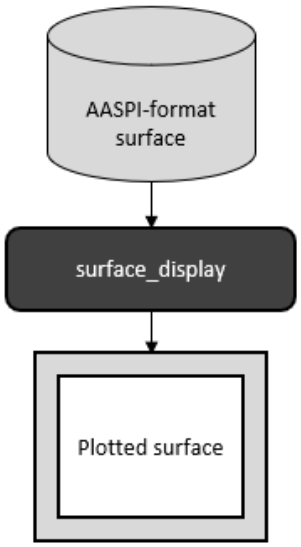
PLOTTING A 2D AASPI-FORMAT SURFACE – PROGRAM surface_display

Contents

Overview

AASPI-format surfaces are stored in the order of increasing CDP numbers followed by increasing line numbers. In general, the *inline_axis* or axis of increasing CDP numbers is not North, and the *crossline_axis* or axis of increasing line numbers is not East, such that a simple display using program **aaspi_plot** would be misoriented. Program **surface_display** reads in the values of *inline_axis* and *crossline_axis* from the surface data file and reorders the data to be approximately oriented with North on the upper vertical axis and East on the rightmost horizontal axis. The results are stored in a temporary rotated file which is then plotted using program **aaspi_plot**.

Computation flow chart



Program **surface_display** has only one input file. The output is a temporary rotated file that is erased after the display window has been closed.

Output file naming convention

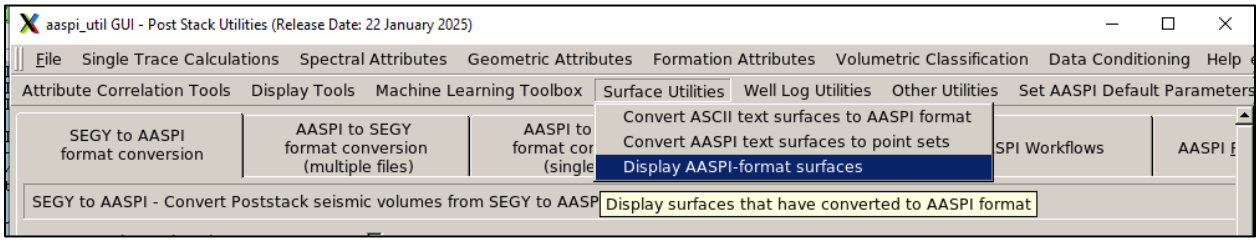
There are no output data files for this simple program other than a temporary rotated file use for display and then deleted when the plot is closed. However, program **surface_import** will always generate the following output files:

Output file description	File name syntax
Program log information	surface_display.log
Program error information	surface_display.err

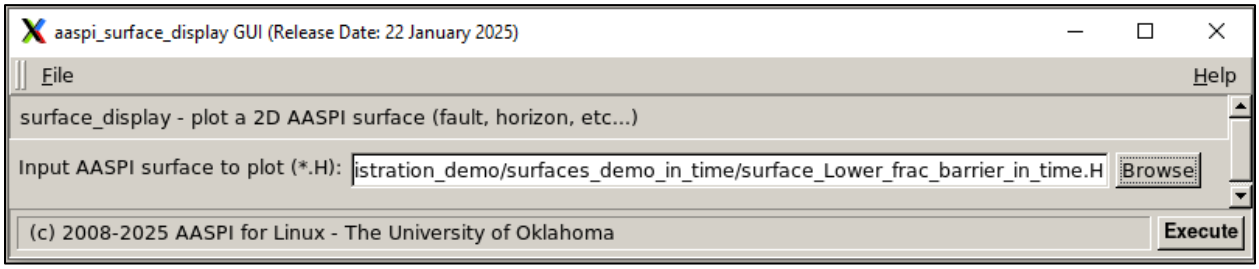
Any software trace-back errors will be contained in the **.log* file. Completion success or failure will appear the **.err* file. Unlike most AASPI programs, the completion pop-up window is not used; with the data display itself indicating successful completion.

Invoking the surface_import GUI

To display AASPI-converted surfaces, navigate to *Surface Utilities → Display AASPI Surfaces*:



The following GUI appears:



Simply browse to the *.H file corresponding to the AASPI surface you want to display and click the *Execute* button.

The example below shows an AASPI-format surface that was picked using commercial interpretation software, exported in ASCII (text) format and converted to AASPI-format using AASPI program **surface_import**. Black indicates areas where the surface has not been defined, either due to no-permit zones, limits of the seismic survey, depositional hiatus, erosion, or simply inability to accurately pick and thereby define the surface.