

## Updates 26\_11

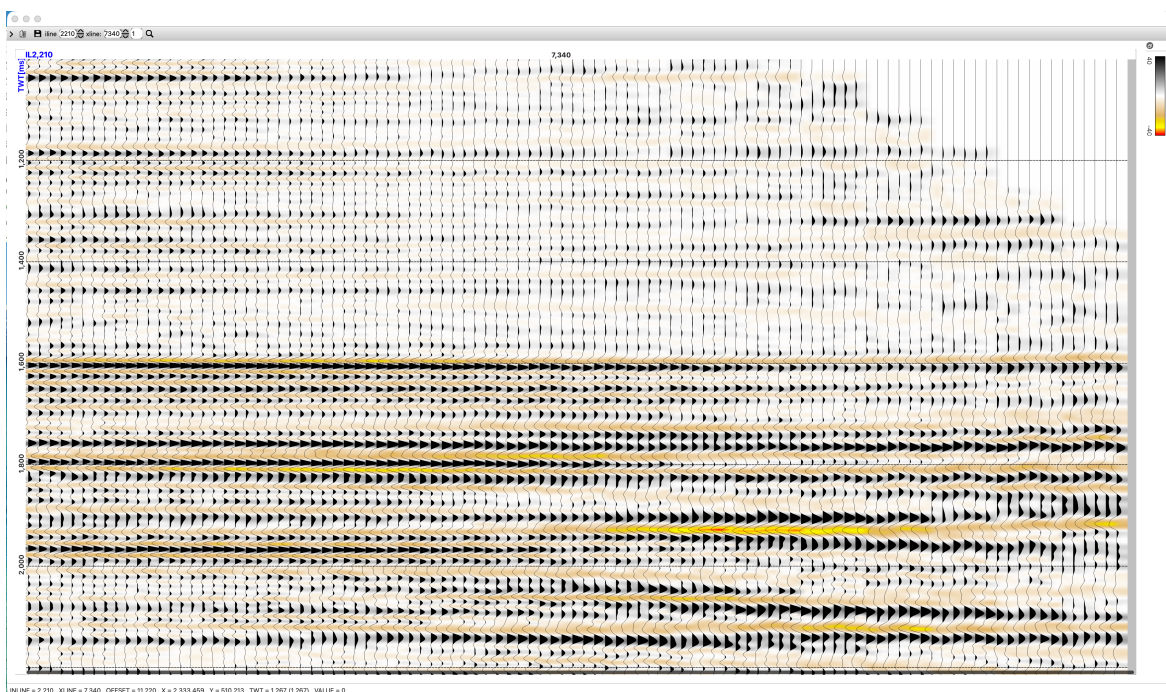
### Manipulating Gathers

There are multiple processes you can apply to your gathers under the processing tab in the Main Window. For example, you can apply: 1) trace scaling, 2) AGC, 3) band pass filtering, and phase rotation. When the processes are applied from this dropdown, the result is a new volume with the applied parameters. These same processes can be applied when gathers are open in the Gather Viewer, BUT the results are not saved. This is a good place to test various parameters you might want to apply to the gathers and then go to the processing tab and choose the process you want to apply with your tested parameters.

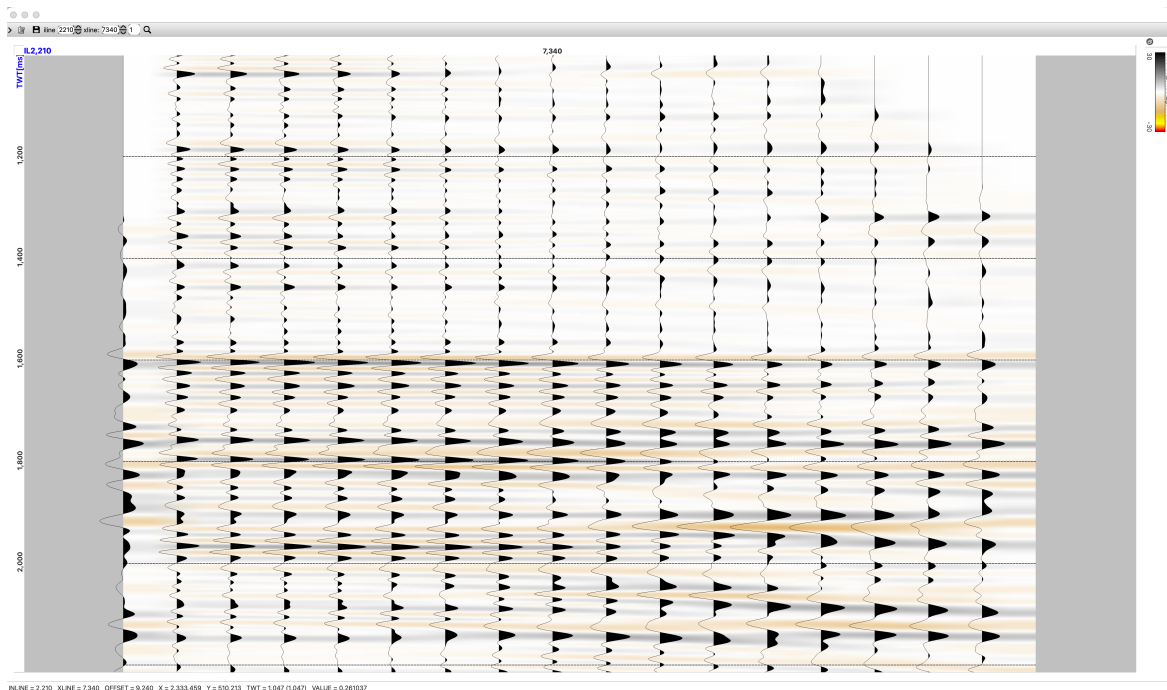
There appears to be some confusion about a couple of options for gathers that are under the processing tab. These are: 1) stack and 2) stack offsets.

Let's discuss 'stack offsets' first. Stack offsets will be renamed 'Stack Common Offset Traces'. If you look carefully at a gather (see 1<sup>st</sup> figure below), you will find by looking at the info at the bottom that multiple traces in your gather have a common (the same) offset. This makes looking at the AVO response a little confusing. Hence, this option looks for traces with the same offset and stacks them (see the result in the 2<sup>nd</sup> figure below).

The two figures below represent the SAME gather with the first one having all of the traces in the original gather and second one in which each trace represents a single offset. On the first display, the first 6 traces all have the same offset of 660 ft, the next 6 have an offset of 1320 ft, and so on. In the second figure, the first trace has an offset of 660 ft, the next 1320, and so on.



In the second display (the same gather location), all of the repeated traces (6, in this example) have been stacked to create a single trace at that offset. It is now much easier to see the AVO response, and when you calculate AVO attributes, you will probably have a better result.



The second option 'stack' is pretty straight forward. It allows one to create various stacked volumes from any of your gather volumes. The dialog box is below. First choose the gathers you wish to stack. Second give your new stack volume a unique name. If you want to stack all of the traces in your gathers, you can leave the defaults (0 to 99999). But if you want to stack a small offset range, you can enter the minimum and maximum offsets to stack.

create cdp stack

create cdp stack of gathers.

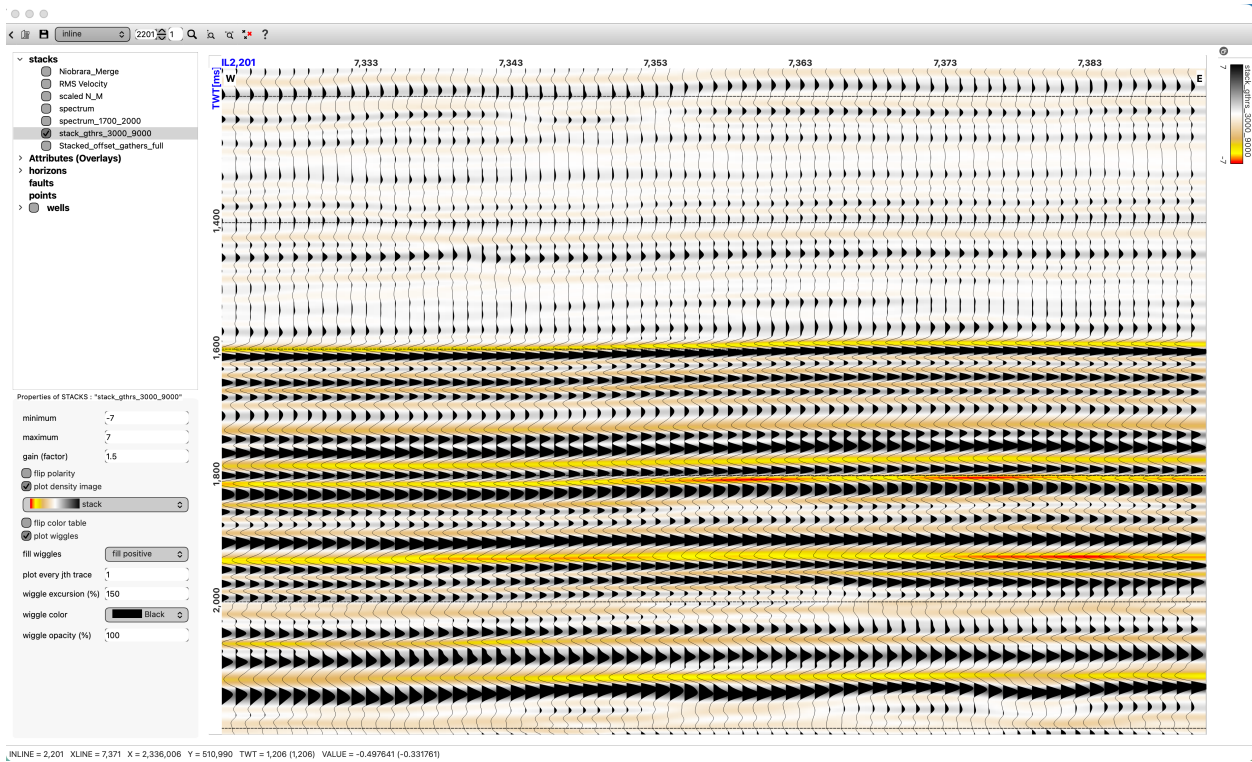
gathers (input)

stack (output)

minimum offset

maximum offset

Below is an example of the original gathers stacked with an offset range of 3000 to 9000 ft.



**NOTE: When loading large volumes of seismic data, either gathers or stacks, the input progress bar will appear to hang at 99%. DO NOT INTERRUPT IT...LET IT FINISH. It is creating indices and scanning the volume for amplitudes so that when opened in the project, the process will be quicker.**