

There are a couple of significant enhancements in this version, and also a number of minor fixes and enhancements.

The major enhancements come under a new button on the Main Menu Page... 'attributes – prestack'. There are two currently two new attributes... 'compute gather semblance' and 'compute gather rmo (residual moveout)'. The gather semblance computes the semblance along each time sample in a gather. Perfectly flattened gathers would have very strong semblance. Poorly flattened gathers would have variable semblance. We have observed that when we are working with gathers from different azimuths this is a type of proxy for velocity variations with azimuth. The output is a single trace per gather... i.e., like a stack, but it is under the attributes list. The result for different azimuths is different. The second attribute, gather rmo, fits the data with hyperbolas looking for the best fit and then computes the time difference between the near trace and the far trace. The output is a single trace per gather. Again, this appears to be a proxy for looking at velocity and multiple issues.

How does one use these? We are trying to sort out answers. As noted above, we have observed that the result very clearly varies with azimuth for the gather semblance, but maybe not as definitely for the gather rmo. Right now, we look on both attributes as anomaly finders... and anticipate that one needs adequate well control and a review of the processing steps to understand the relevance.

The minor fixes include significantly speeding up the stacking process if you want to stack your gathers using different parameters (offset ranges, filters, azimuths). Also fixed was the issue that one could not compute the spectrum of your stacked gathers output.

Another fix was the addition of options to set the contour line width, and label size in the map viewer for grids and horizons.

Also added were some basic colors to the color selection dropdown. This included adding totally red, green, blue and yellow along with cyan and magenta.

Another 'bug' fix was to allow one to see the location of the flattened horizon in the Stack or Cross-Section Viewers when you go above the flattened horizon. Negative values... remember when you flatten the flatten horizon time is set to '0'. The approach is to choose your data set (stack or attribute) in the Map Viewer, and choose the horizon to flatten on. Next open either the Stack or Cross-Section Viewers and choose the stack or attribute volume you want to look at in those views. Display the SAME horizon, and click the flatten horizon box. The stack or attribute volume displayed in the Stack or Cross-Section Viewers need NOT be the same as on the Map Viewer. However, if you change the volume displayed, you may have to reopen the Stack or Cross-Section Viewer. Now you will see the flattened time slice line move up or down (positive or negative) in the Section or Cross-Section Viewers as you change the time slice values.