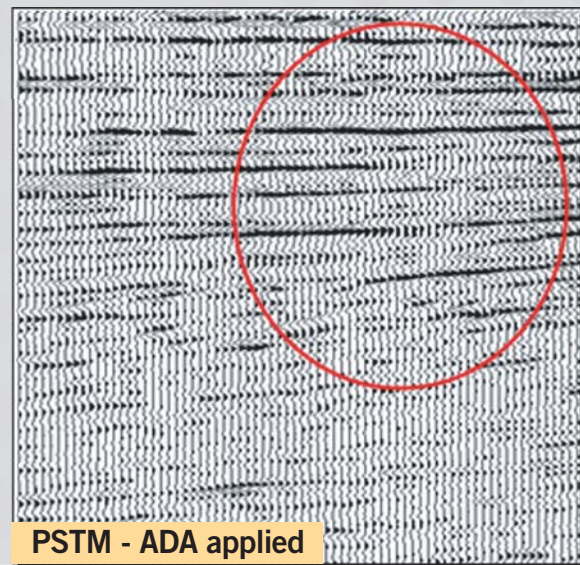
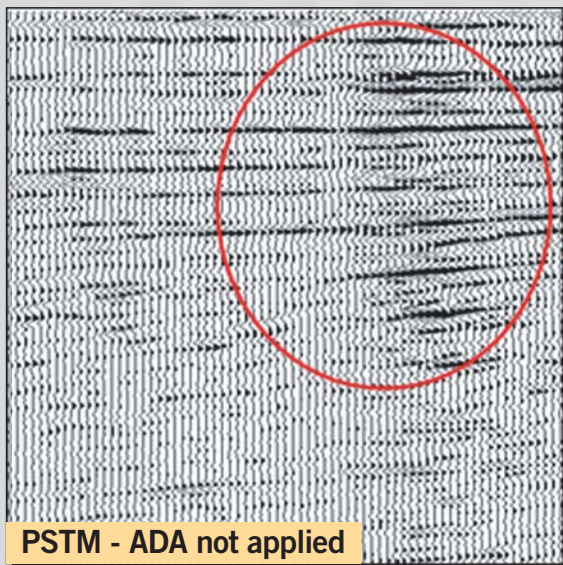


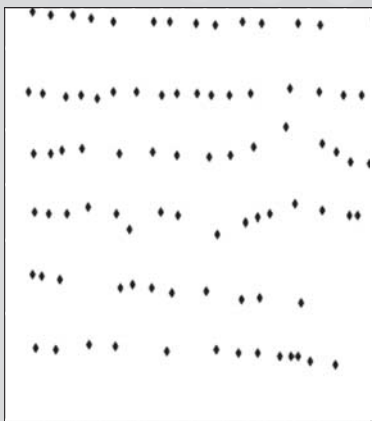
# Acquisition Dependent Amplitude (ADA) Correction for Imaging

ADA helps remove spurious 4D signal allowing improved fluid and pressure characterization.

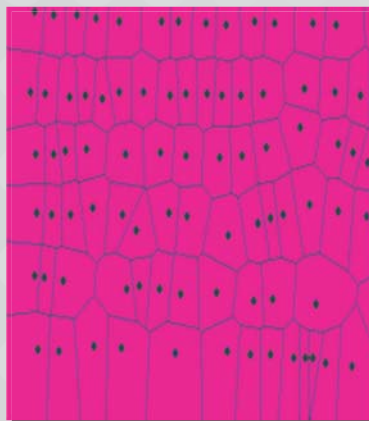
- For PSDM and PSTM
- Eliminate Migration Footprint Artifacts
- Improved Fluid and Pressure Predictions
- Enhance AVO Response
- Reliable 4D Analysis



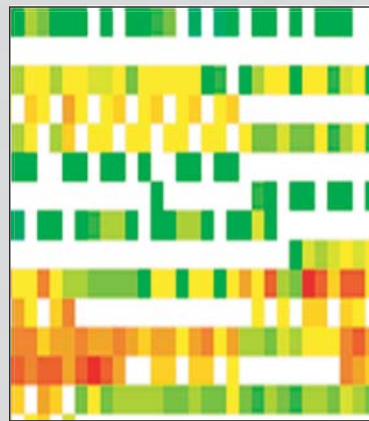
Note the amplitude stripping (circled area) on the results of a PSTM.



From Trace Surface Locations



Construct Voroni Polygons



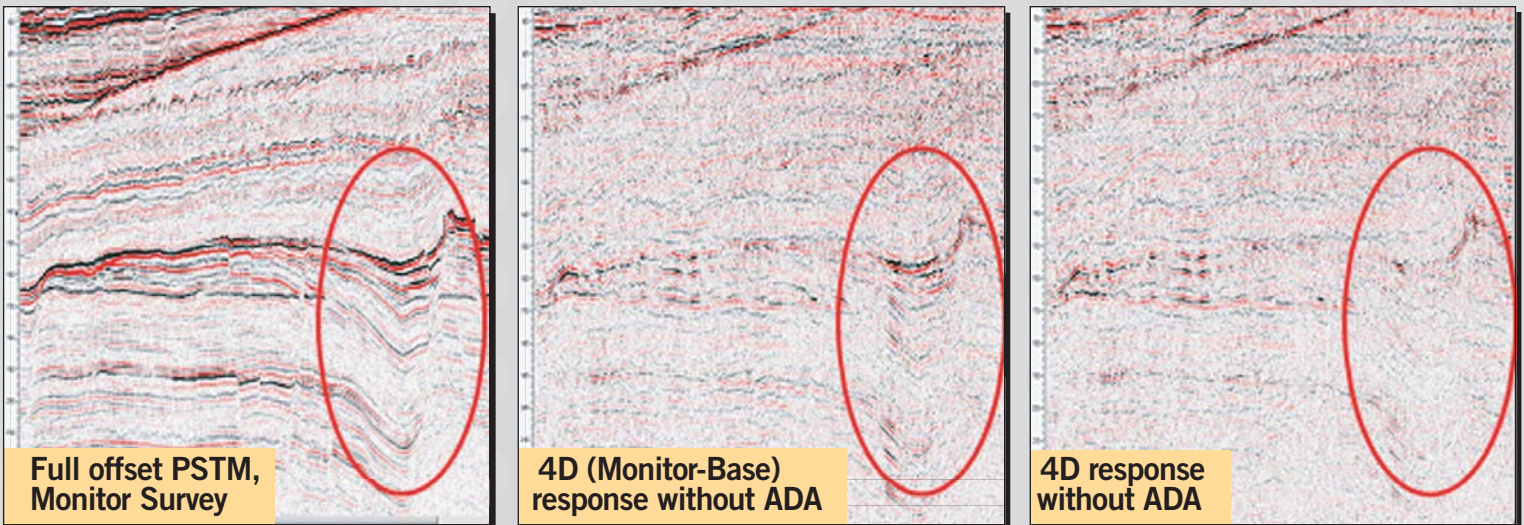
Compute Trace Weights

### Weights correct for:

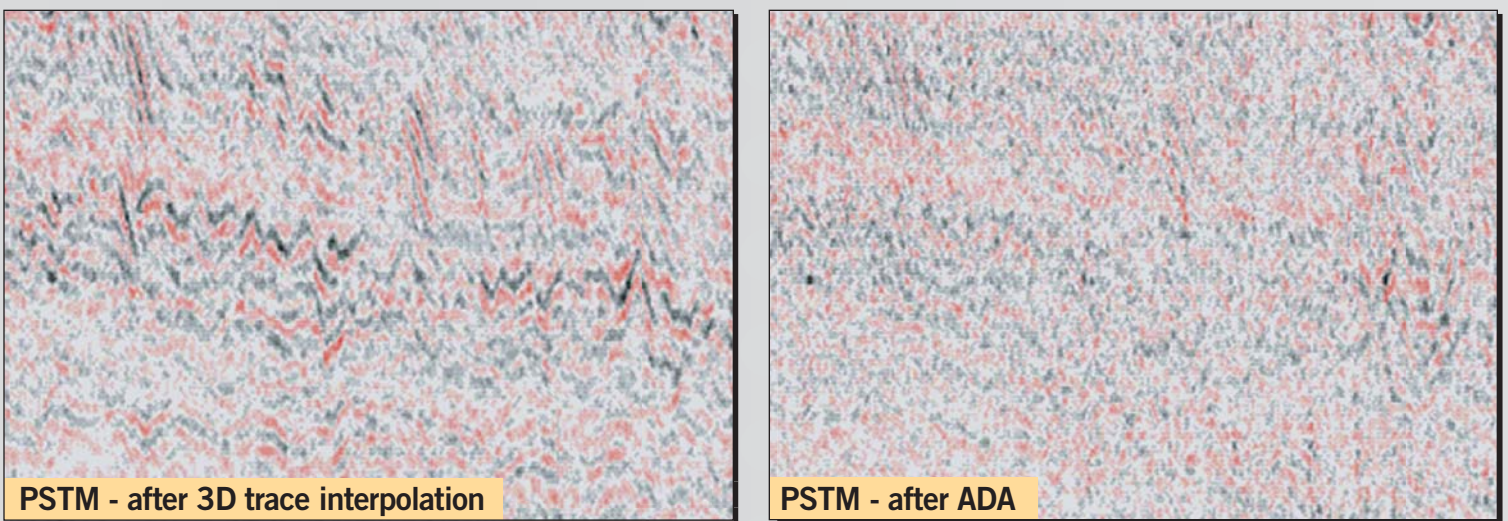
- Uneven data distribution
- Data Acquisition Holes
- Survey directionality
- Merge Zones

- TimeLapse3D (4D) studies critically rely upon amplitude consistency in processing between monitor and base surveys.
- Removal of migration artifacts is one phase in the sequence to allow the qualitative and quantitative 4D analysis.
- Geotrace's proprietary ADA is part of the 4D toolkit to allow reservoir and production engineers to optimize production and ultimate recovery.

## *Subtle Differences are Critical in 4D!*



Notice the high amplitude zone (circled) which exhibits considerable signal leakage in the non ADA difference displays. By contrast, including ADA in the sequence has accounted for the acquisition footprint.



Difference Section from globally matched PSTM data. Note there is a data dependent element to the dipping energy creating signal leakage, while ADA has correctly handled it.

