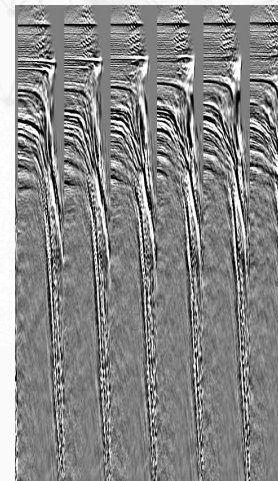


# Extended Source Inversion: a potential alternative to LF FWI

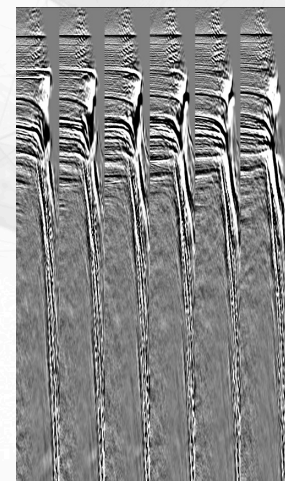
W. Symes (Rice), M. Dolliazal (Total), R. Nammour (Total) and P. Williamson (Total)

Inversion with extended source: access kinematic info in HF data w/o picking

- Surface extension – source energy spreads over 2D surface – fit any data with any velocity!
- Data misfit + *penalty* for energy spread beyond acquisition footprint: forces velocity to match data kinematics
- Examples: 2D synthetic, 3D marine
- Sketch of theoretical justification
- Limitations, prospects



FWI.



SSE