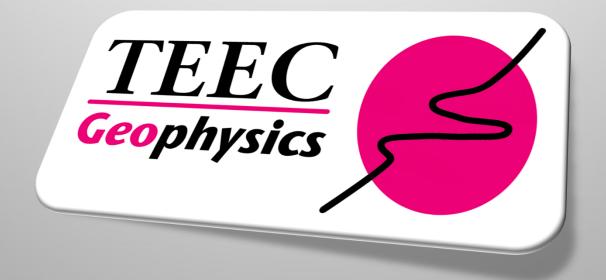
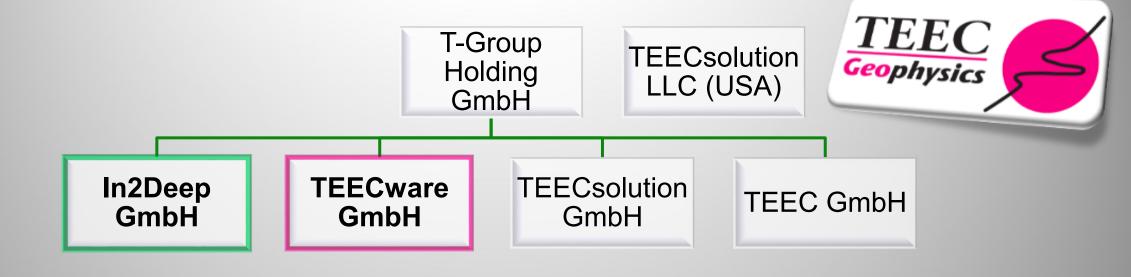
TEEC Company Presentation

September 2021



TEEC & T-Group Holding



- 30 years of experience with cluster computing & Al
- Experts team R&D and code implementation
- Individual solution provider seismic service and beyond

TEEC



TEEC: worldwide operation



- Head office
- Offices & local partner
- **Activities of TEEC**

TEEC service portfolio



Over 25 years of experience.

Seismic Processing

- Worldwide experience
- Standard processing
- Special Processing with in-house proprietary software
- Market leader in CRS Processing

Software Development

- 1st Class software development
 Denoising toolbox,
 CRS, RTM,
 FWI, FWM ...
- Close cooperation with universities and research consortia.

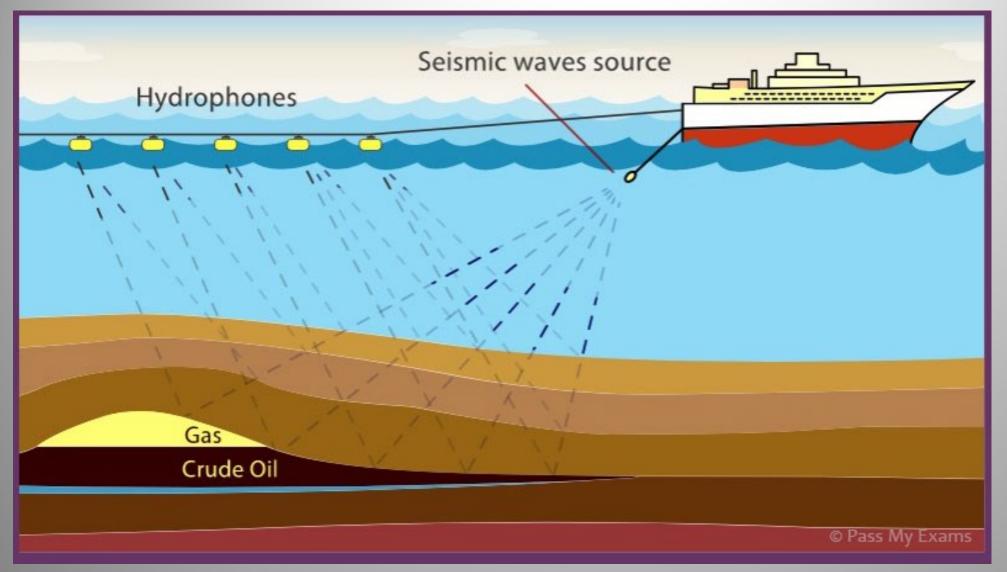
Reservoir Characterization

- Proprietary software Package
- AVO Analysis
- Coherency Processing
- Facies Classification and Fault Detection

Unique technology – one step ahead of the main stream service => R&D

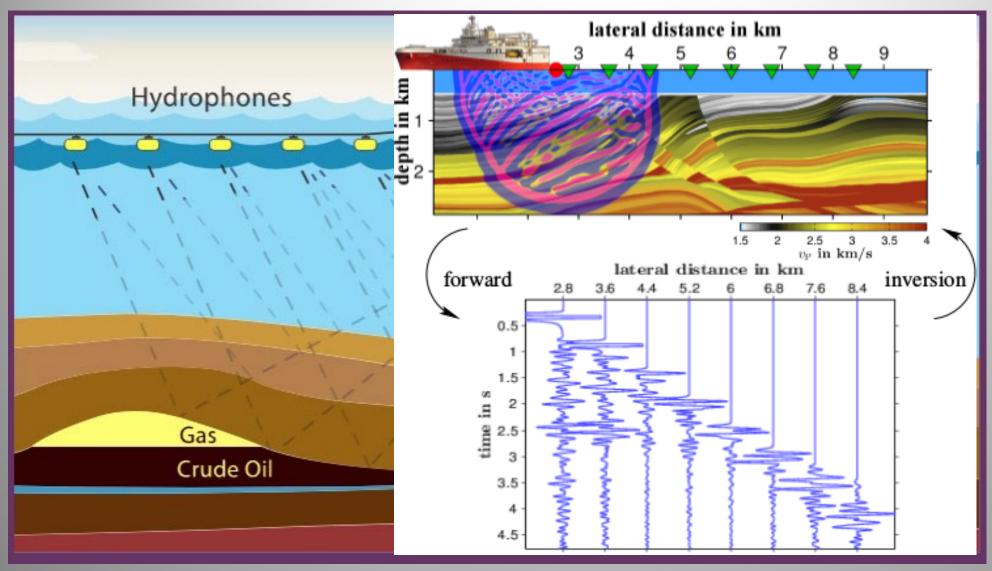


TEEC seismic service: What we do!



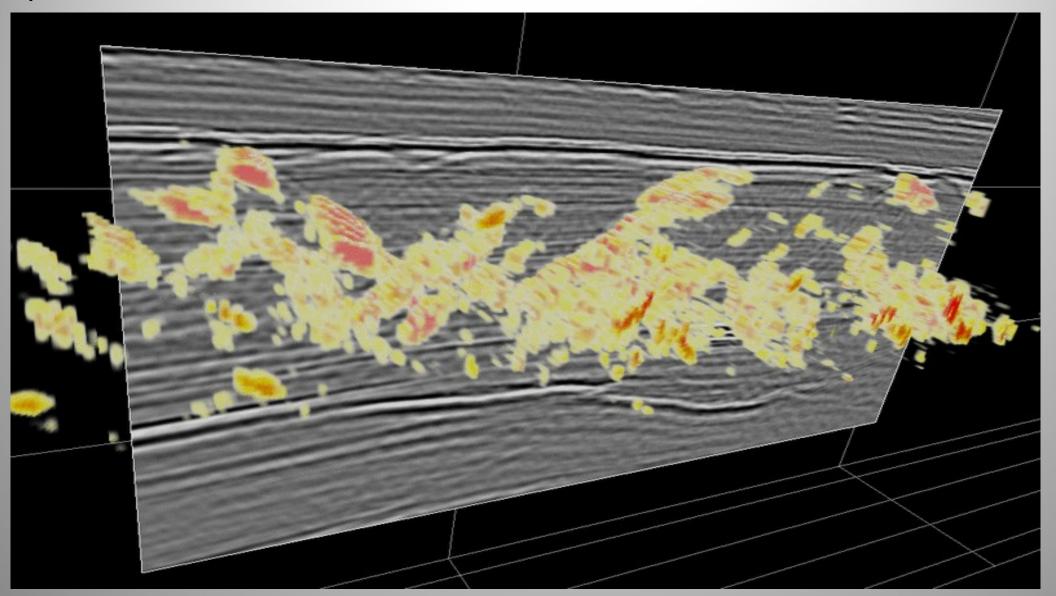


TEEC seismic service: What we do!





Separate Diffractions





Computational demands

Computational efforts:

- Simulations (Finite Difference modelling, Frequency domain modelling)
- Inversion processes
 - Simultaneous optimisation in 8D parameter space of 3D volumes.
 - Cross-correlation of simulations of large data volumes
 computational demanding tasks -> HPC environment

Large data volumes

conventional seismic 3D survey provides hundreds GB or TB scale input data.

Large data + large computational effort => "Many task" computing problems. In-house development of efficient **many-task computing** facilities on arbitrary hardware (CPU/GPU heterogenous clusters, HPC systems).

Efficient computation of large data volumes is the key to success.

=> POP service very useful



POP experience

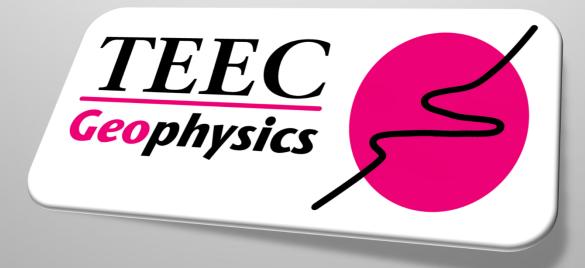
Software code from research consortia in house adaption at TEEC

- → scaling of code is already in very good shape for HPC systems.
- → currently testing for heterogenous systems.

- So far, no gain in performance, but in confidence!
- Learning new tools, that make code optimisation easier



Thank You!



Unique solution provider!