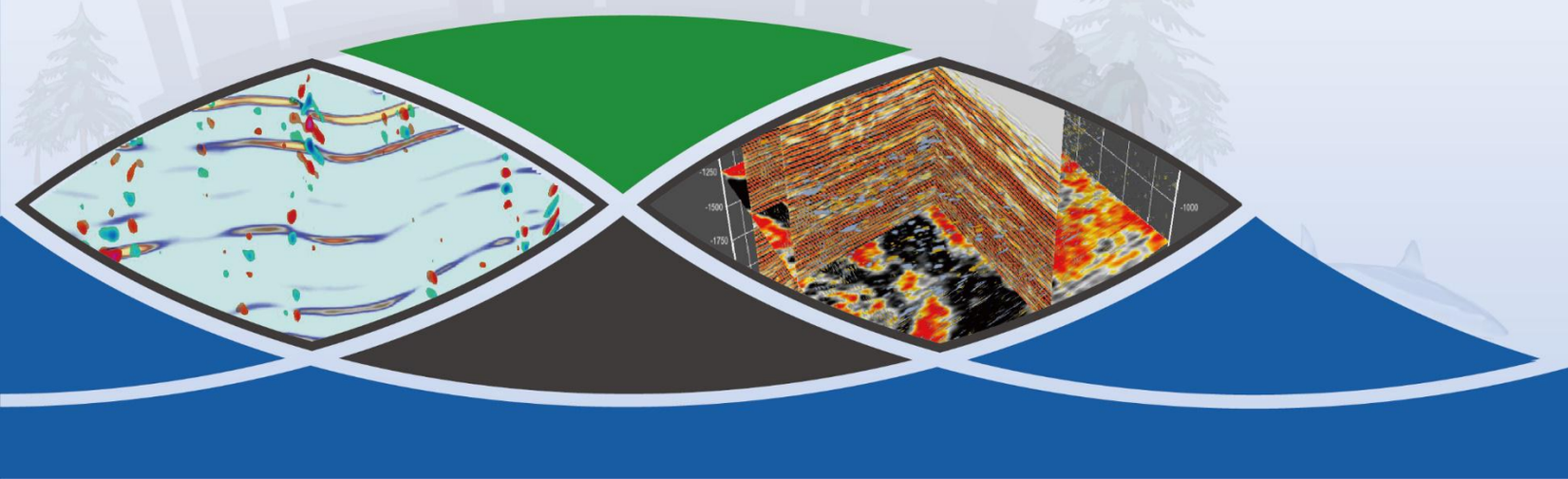
中国矿业大学（北京）
China University of Mining & Technology, Beijing

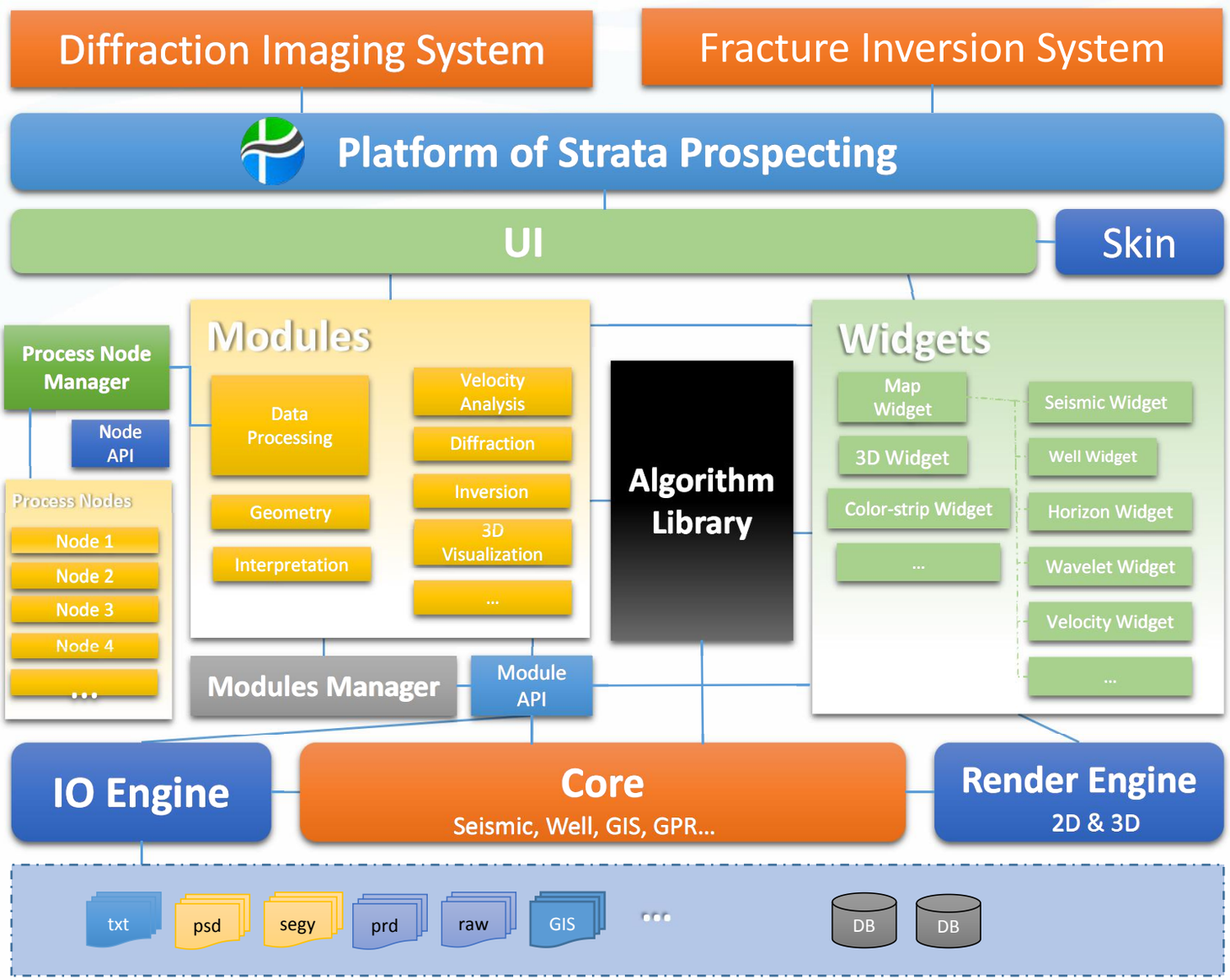
PSP

Platform of Strata Prospecting



1.Platform Architecture

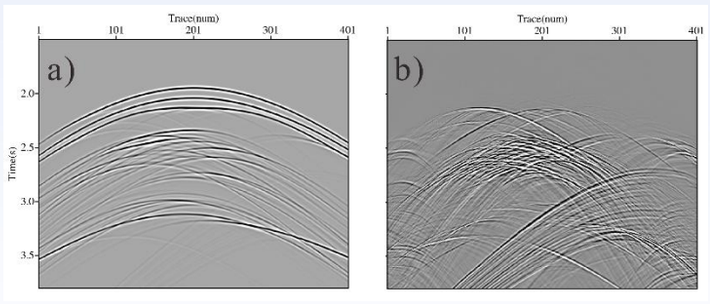
The platform adopts the "1+2" R & D modes: the "1" mode is the basic platform that comprises of functional modules such as seismic data processing, interpretation, inversion, and 3D visualization. The "2" mode involves geophysical systems that include a diffraction imaging system and a fracture inversion system. The PSP platform can be used as a means for teaching as well as studying, including performing scientific research and production practices. In particular, it provides high-resolution geophysical results for small-scale geological structures and discontinuities such as faults, karst caves, fractures, and collapsed columns.

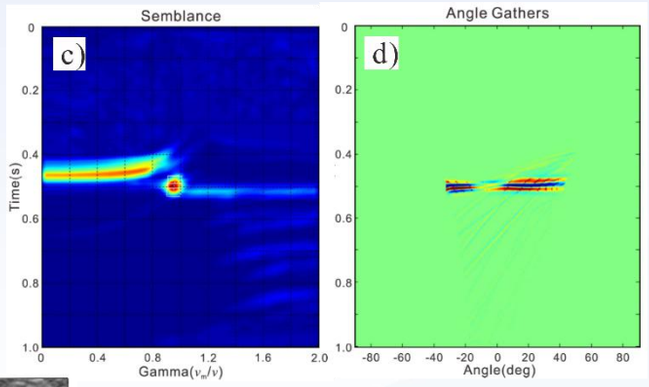


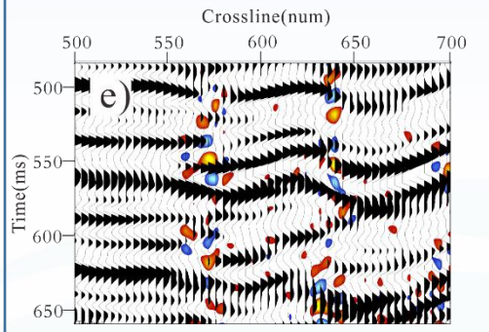
2. Platform Characterization

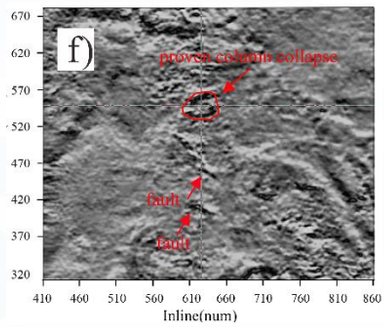
- Plugs assembling
- I/0 compatibility
- Advanced development
- 3D rendering engine
- Data fusion
- Cross-platform support

Diffraction Imaging







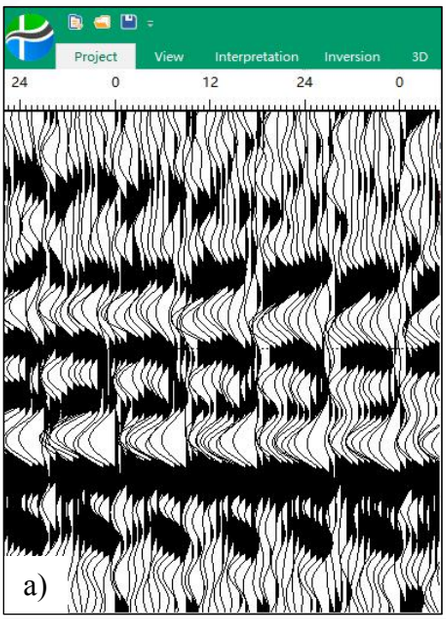


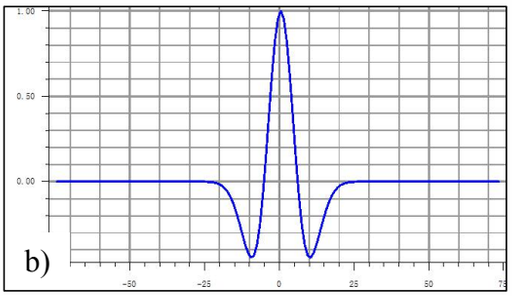
Separation
- a) Full-wavefield
- b) Diffractions

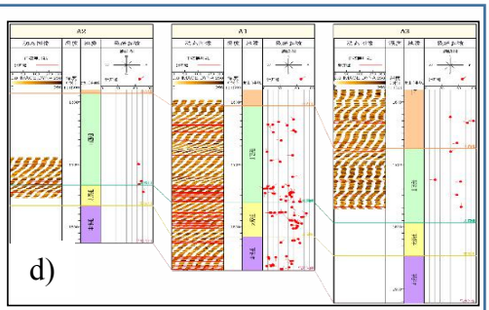
Velocity
- c) Semblance
- d) Angle gathers

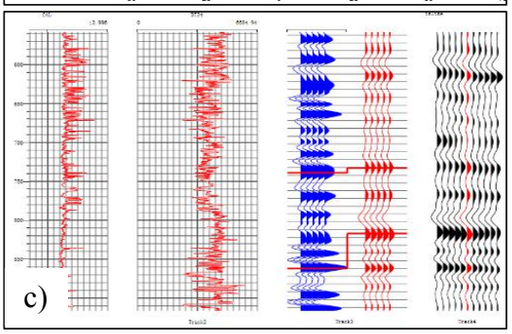
Imaging
- e) Superimposed display
- f) Horizon slice

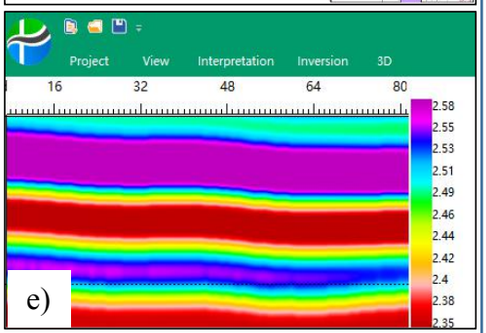
Fracture Inversion

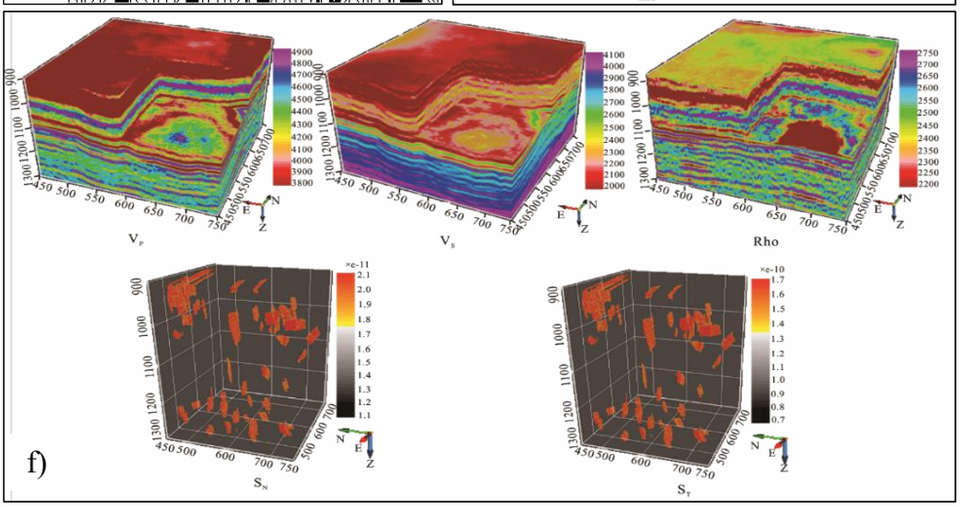












a) Angle gather reading

b) Wavelet extraction

c) Well - seismic calibration

d) Fracture parameter extraction

e) Initial model building

f) Inversion results

Stake Key Laboratory of Coal Resources and Safe Mining
煤炭资源与安全开采国家重点实验室

Stake Key Laboratory of Coal Resources and Safe Mining

Add: Ding No11 Xueyuan Road,Haidian District,Beijing 100083 P.R.China

Tel: 8601062331854

Email: Luyx@cumtb.edu.cn diffzjt@163.com

Fax: 8601062339208

URL:https://crsm.cumtb.edu.cn