Fujifilm's 5th Annual Global IT Executive Summit
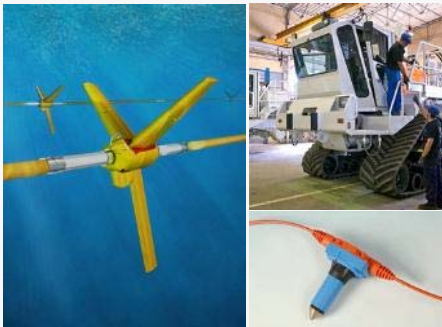
24th October 2013

Passion for Geoscience

CGG

DSG – Data centers Services Group

CGG and our Business: Organization

Equipment

Full range of products and clear market leadership onshore, offshore and downhole:
- Technology leadership
- Large installed base
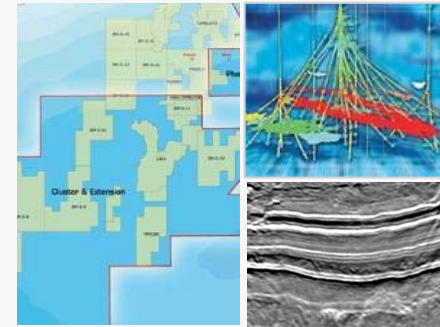- A cornerstone for CGG integrated solutions

Acquisition

Full range of seismic and other geophysical methods for acquisition:
- Land
- Marine
- Seabed*
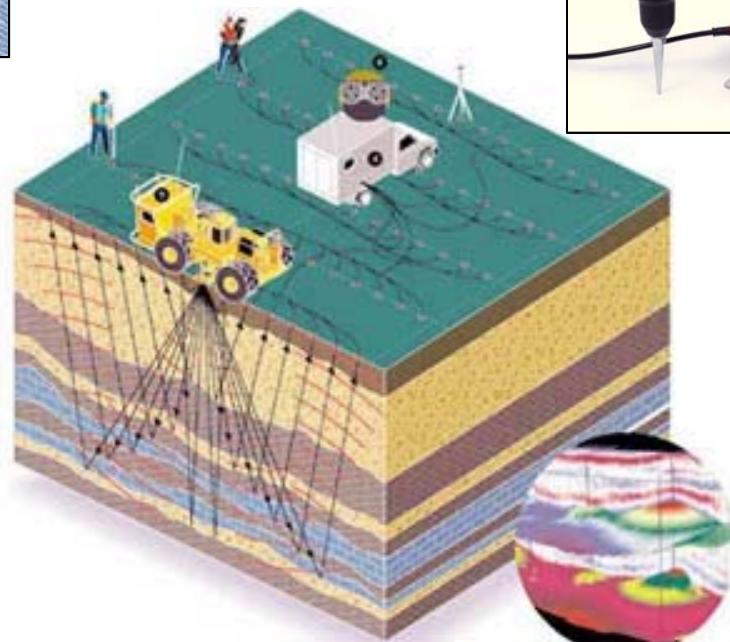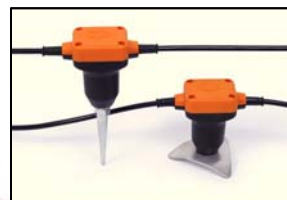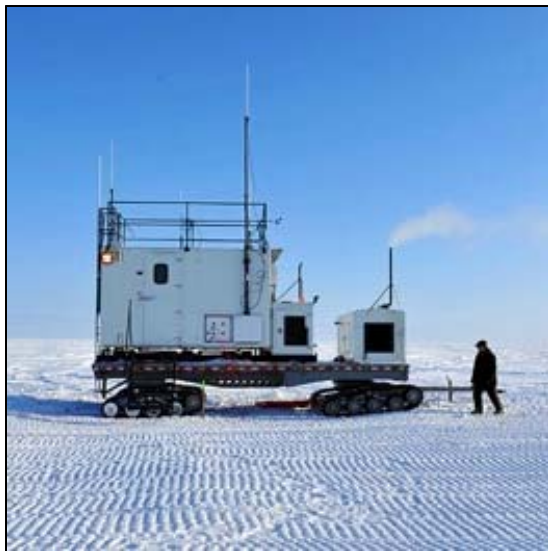- Airborne

Geology, Geophysics & Reservoir

- Subsurface Imaging
- Reservoir Software & Services
- Geological Services
- Exploration & Appraisal
- Satellite Mapping
- Multi-Client Data Library (Seismic, Grav-Mag, Geological)
- Data Management Services

*Through the Seabed Geosolutions joint venture owned 60 % by Fugro % and 40 % by CGG
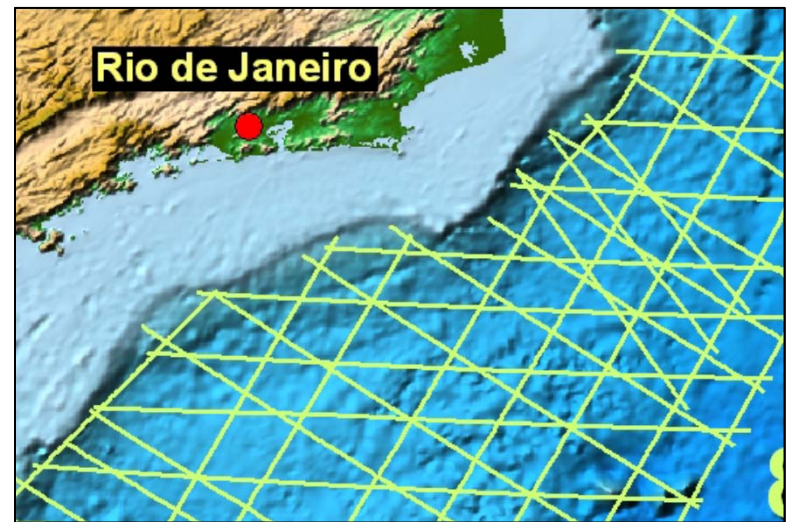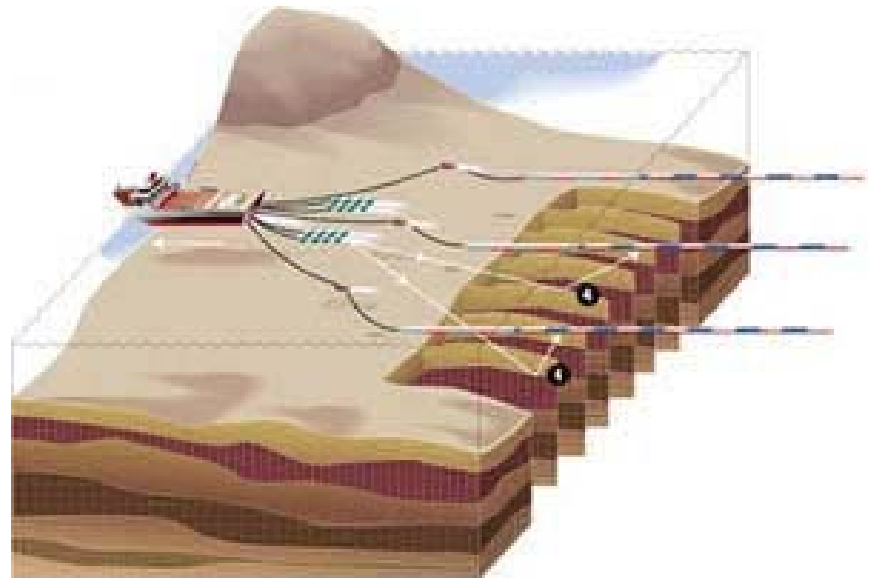
- 9,800 employees
- 70 locations worldwide
- $4.2 Bn 2012 pro-forma revenue

Acquisition: Land

3

Acquisition: Marine

Dataflow: Example

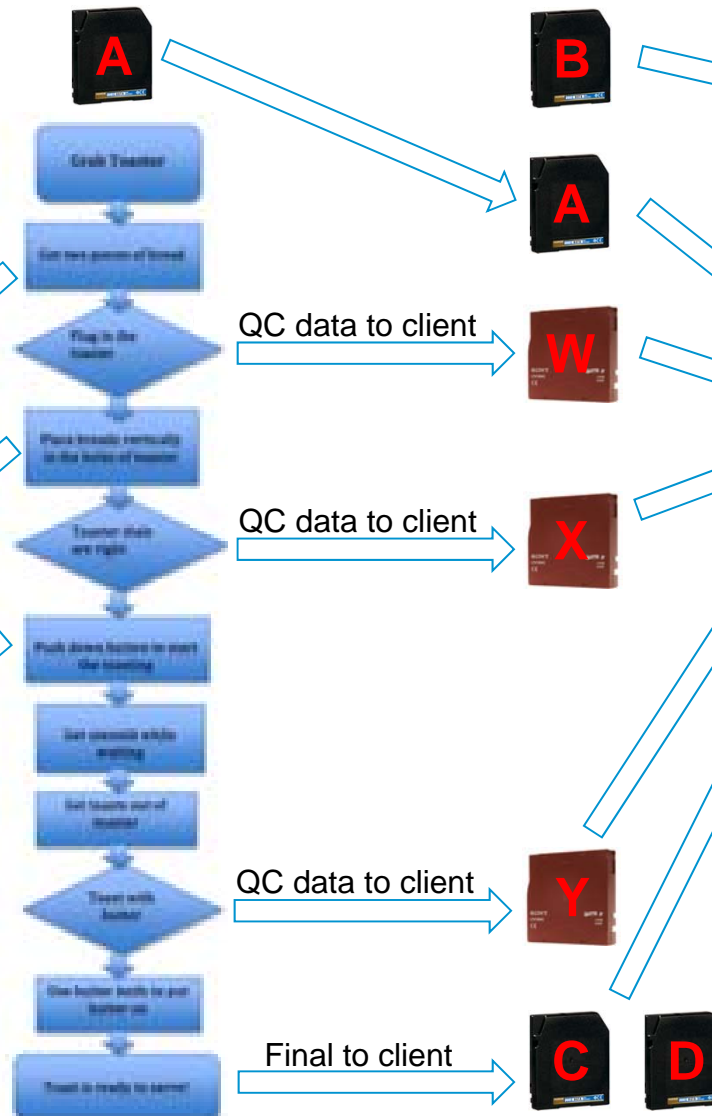## Processing Contractor

Client

Data Hall 1

Data types
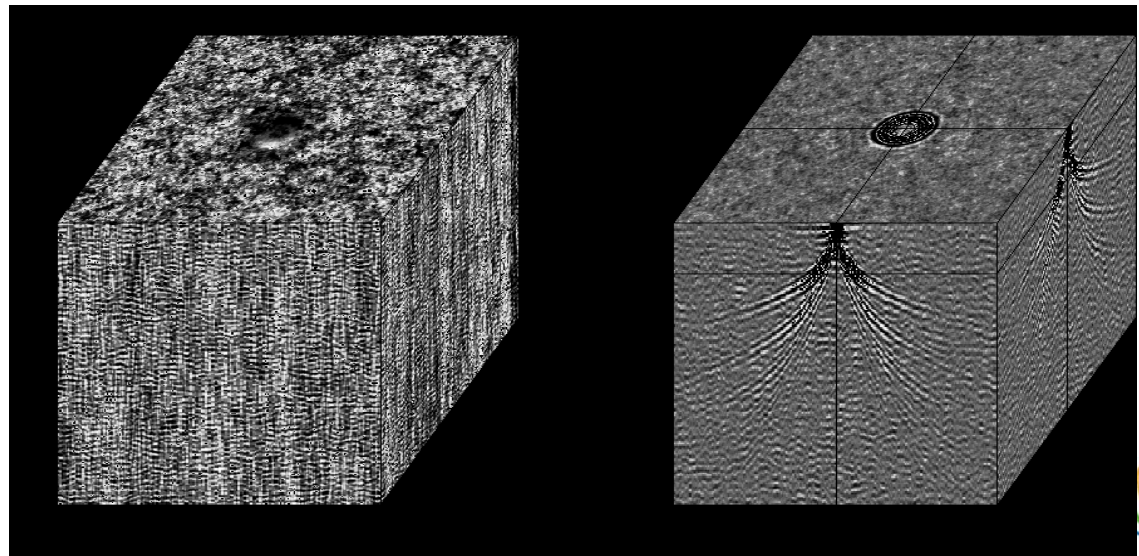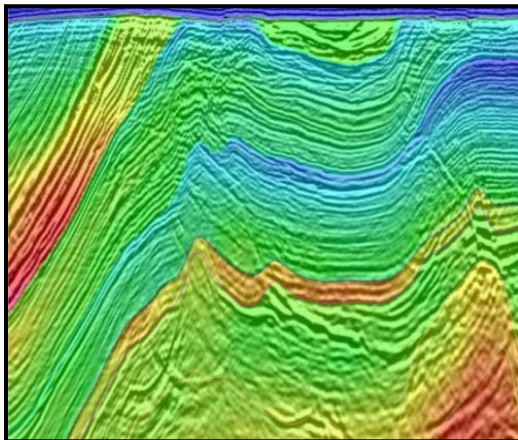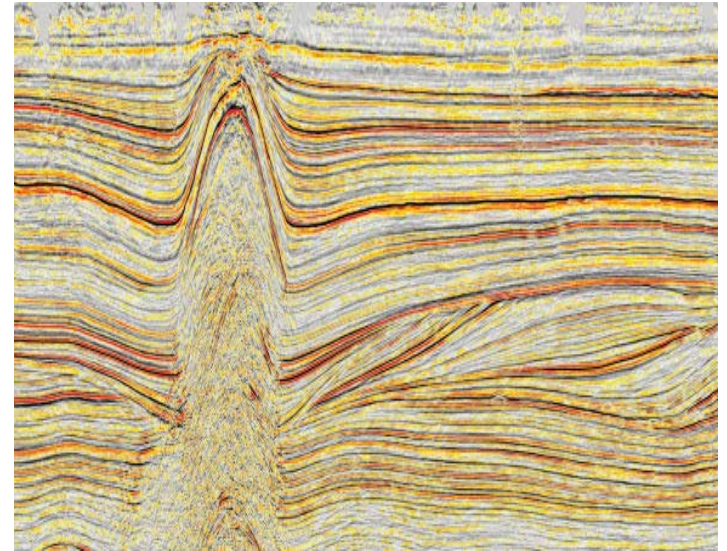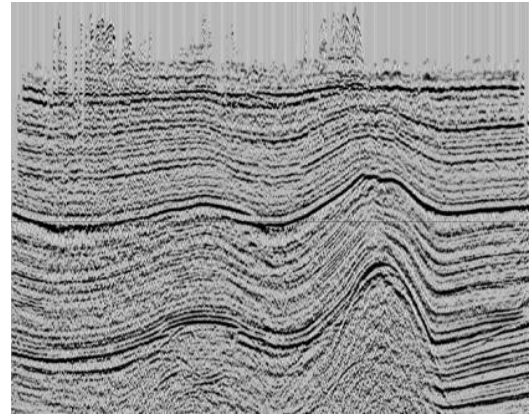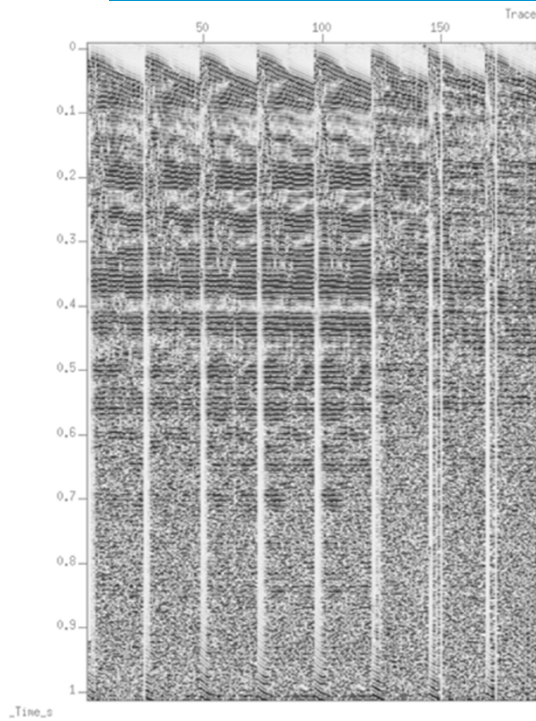
- Seismic field data
- Navigation data
- QC data
- Intermediate data
- Business data
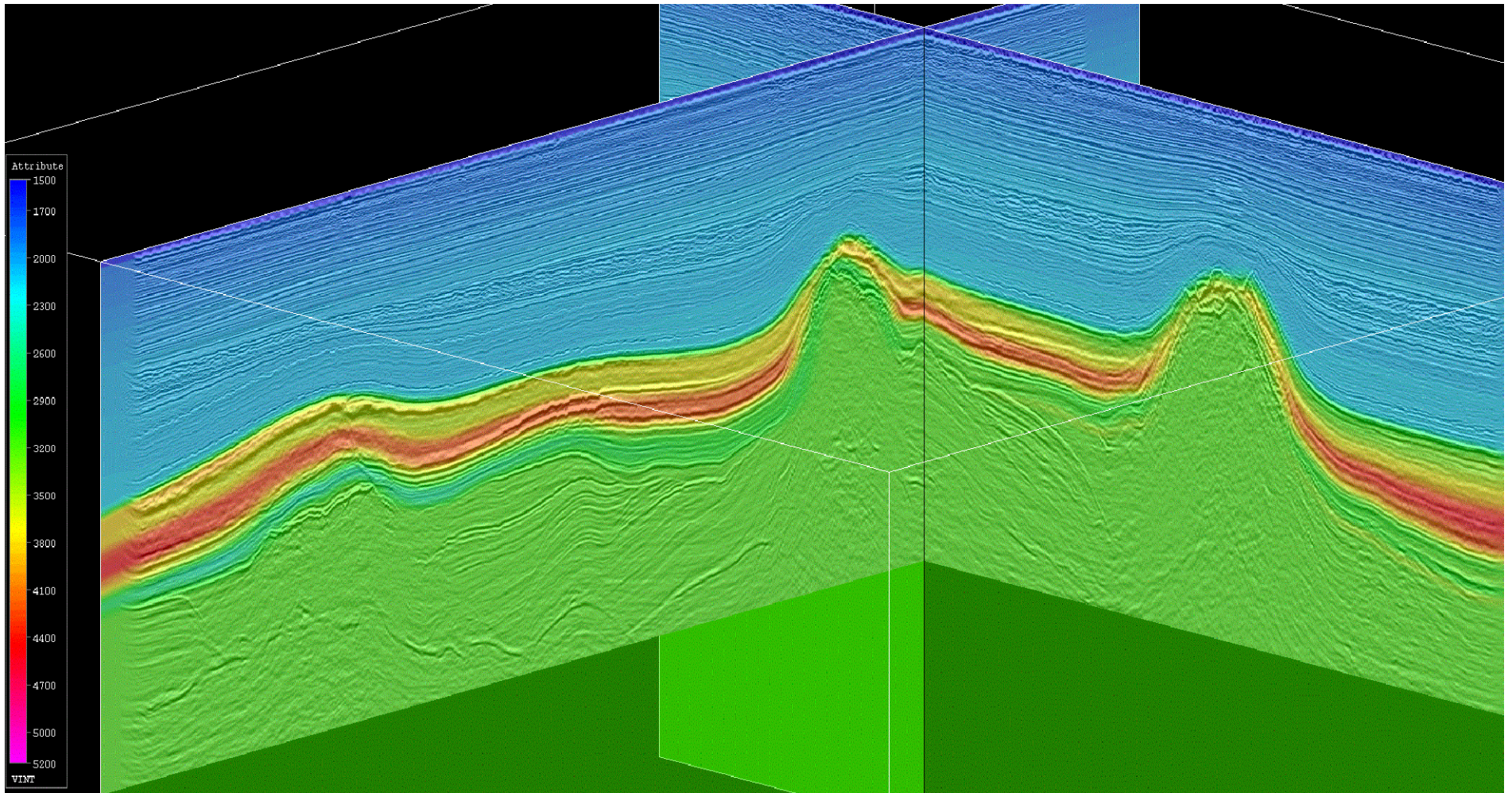- Archive data
- Backup data

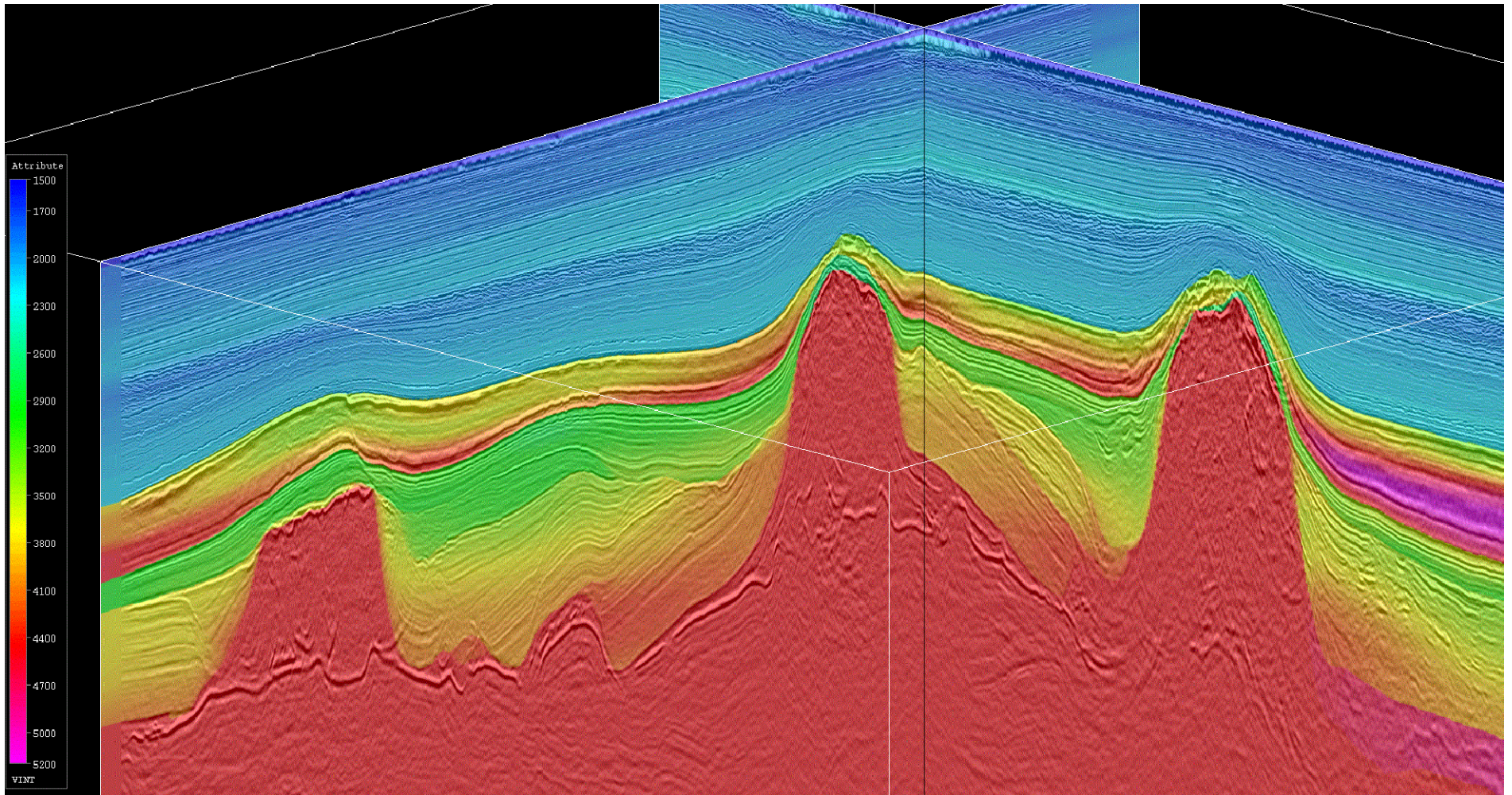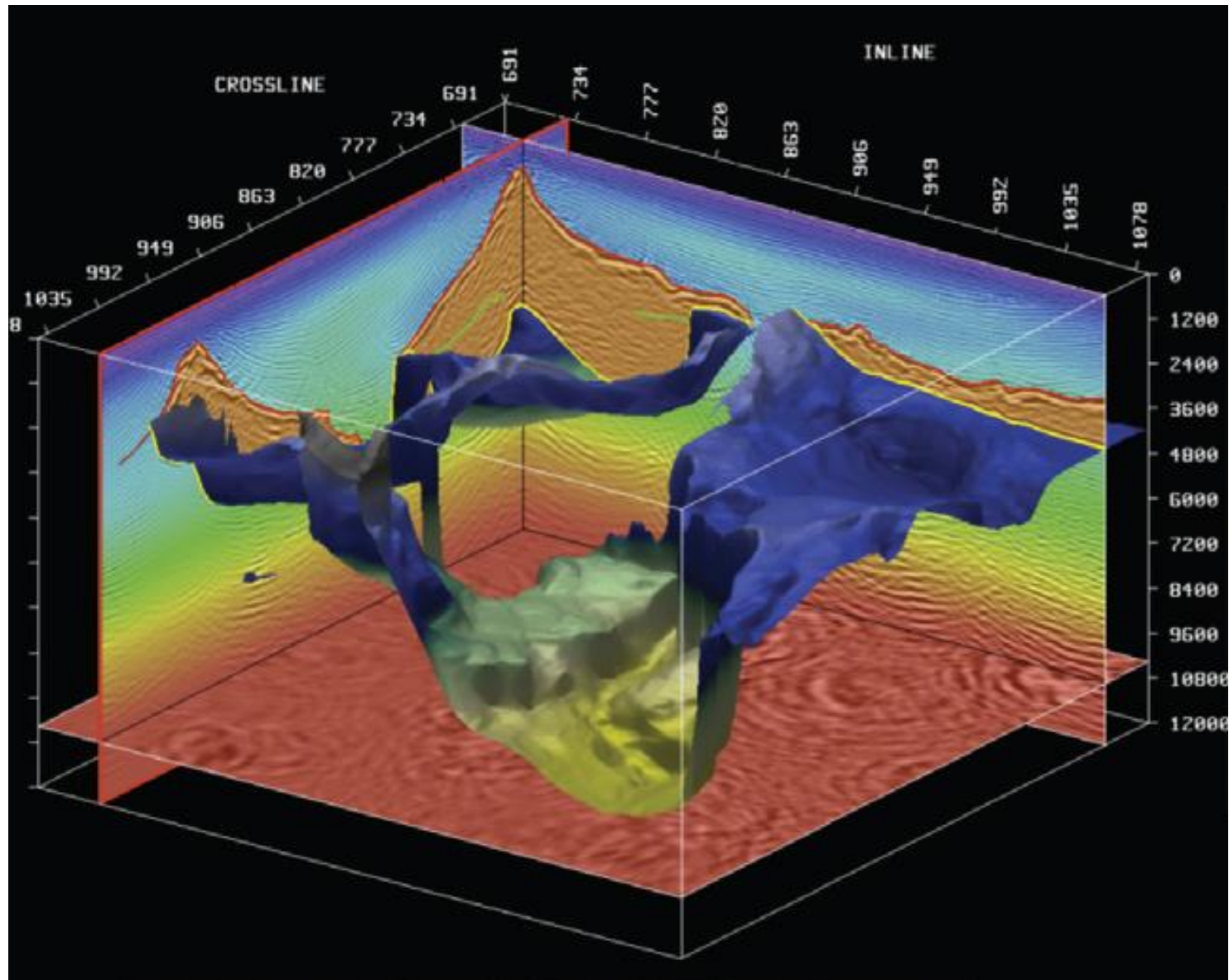Intermediate data for DR and BCP or by Client Contract "Temporary Data"

QC data to client

QC data to client

QC data to client

Final to client

Data Hall 2

Data Hall 3

Dataflow: Images

Dataflow: Images

Dataflow: Images

Dataflow: Images

Challenges

❑ Unique requirements
- – Robustness of media for field data and storage.
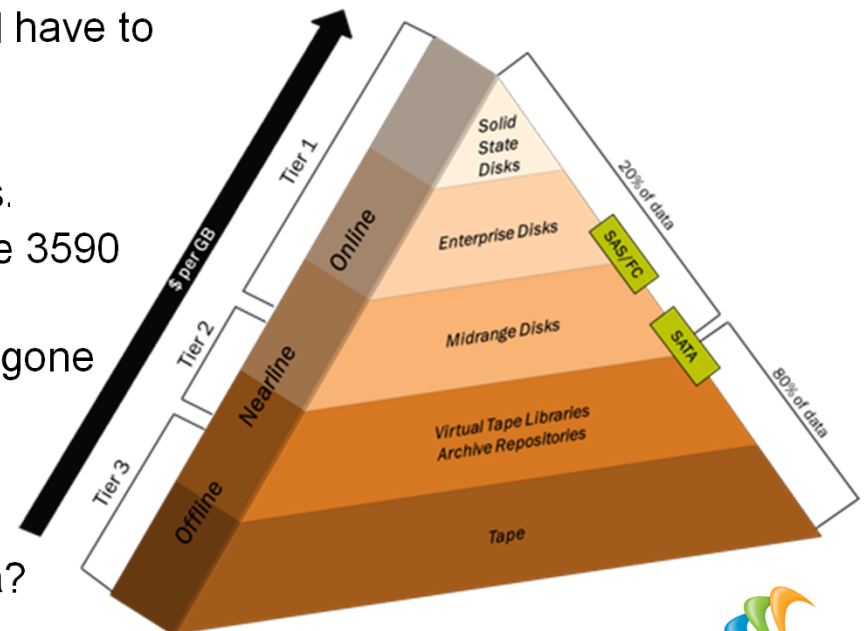- – Long lifespan.   Data may set on the shelf for many years.
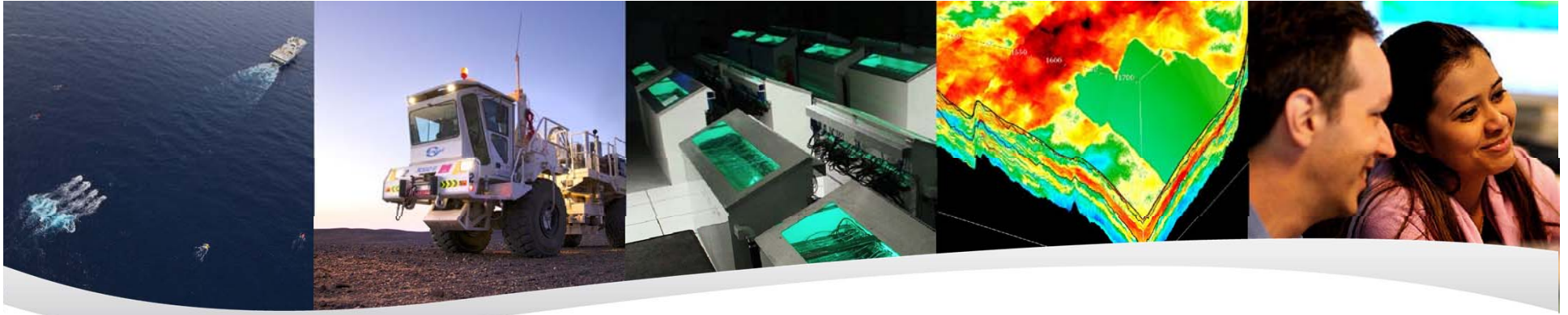
❑ Implemented Solutions
- – Early setting of tape standards by SEG.
- – Internally created data transfer applications.

❑ Storage challenges going forward
- – Transcription: Re-reading old media. We still have to read 40 year old tapes for our clients.
- – The longevity of tape drive hardware.
- – Re-mastering the data center and the vessels.
  - • New tapes and drives every 'X' years. The 3590 was in production for over 20 years.
  - • In nine years, the 3592 drive has already gone through four generations of drive.
- – BIG DATA! Data Loss. BIG DATA LOSS!
- – Where's my Data????!!!!
- – How much does it cost to manipulate my data?

Thank you