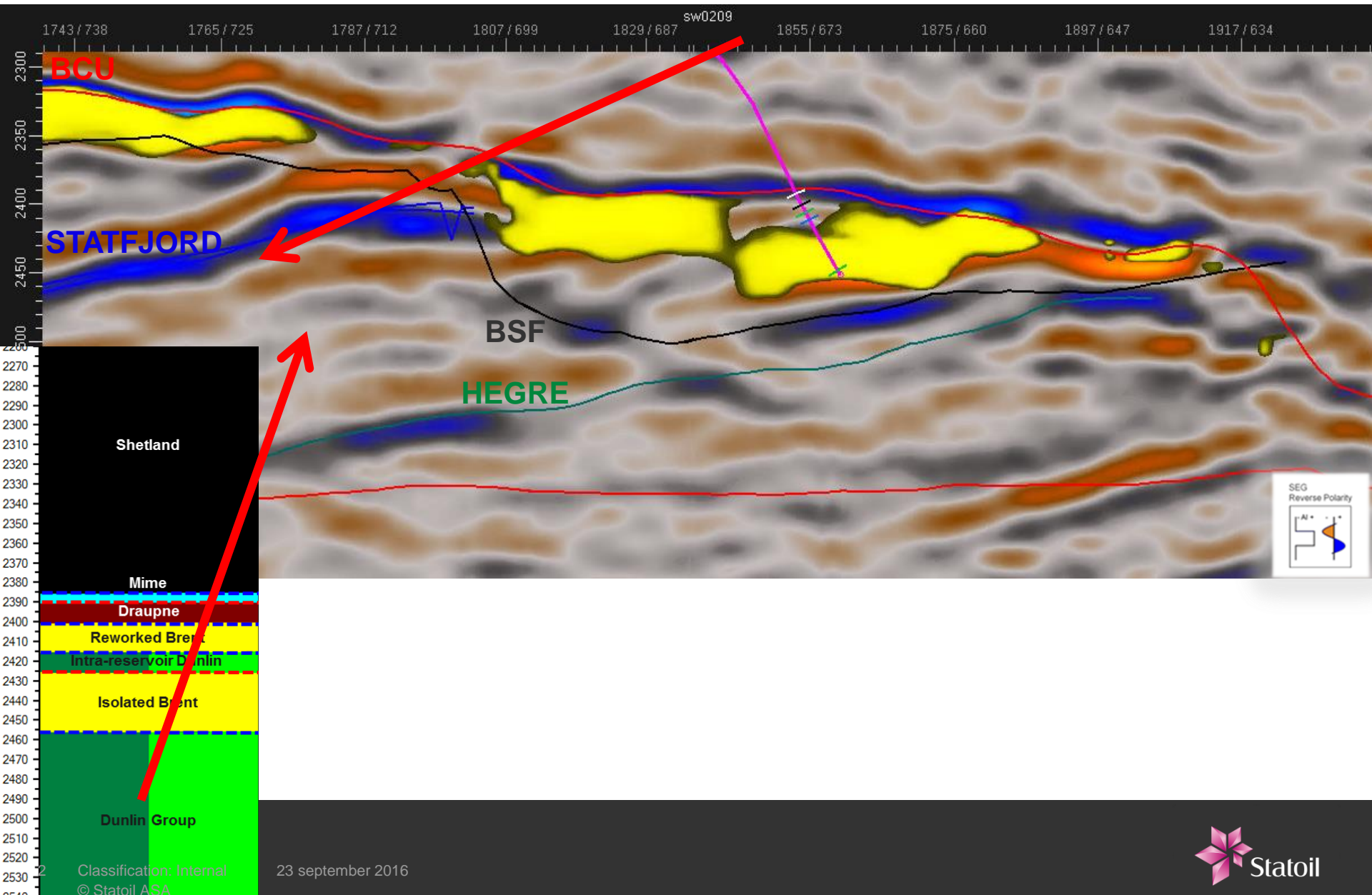# Slides shown at the Force meeting 17.11.2016 in addition to the NPF presentation

- Øyvind Skjæveland, Statoil, 16/11-16

Statoil

Detailed look at result in a Statfjord well.
Inversion cannot predict Statfjord sand – BG model does not allow it.

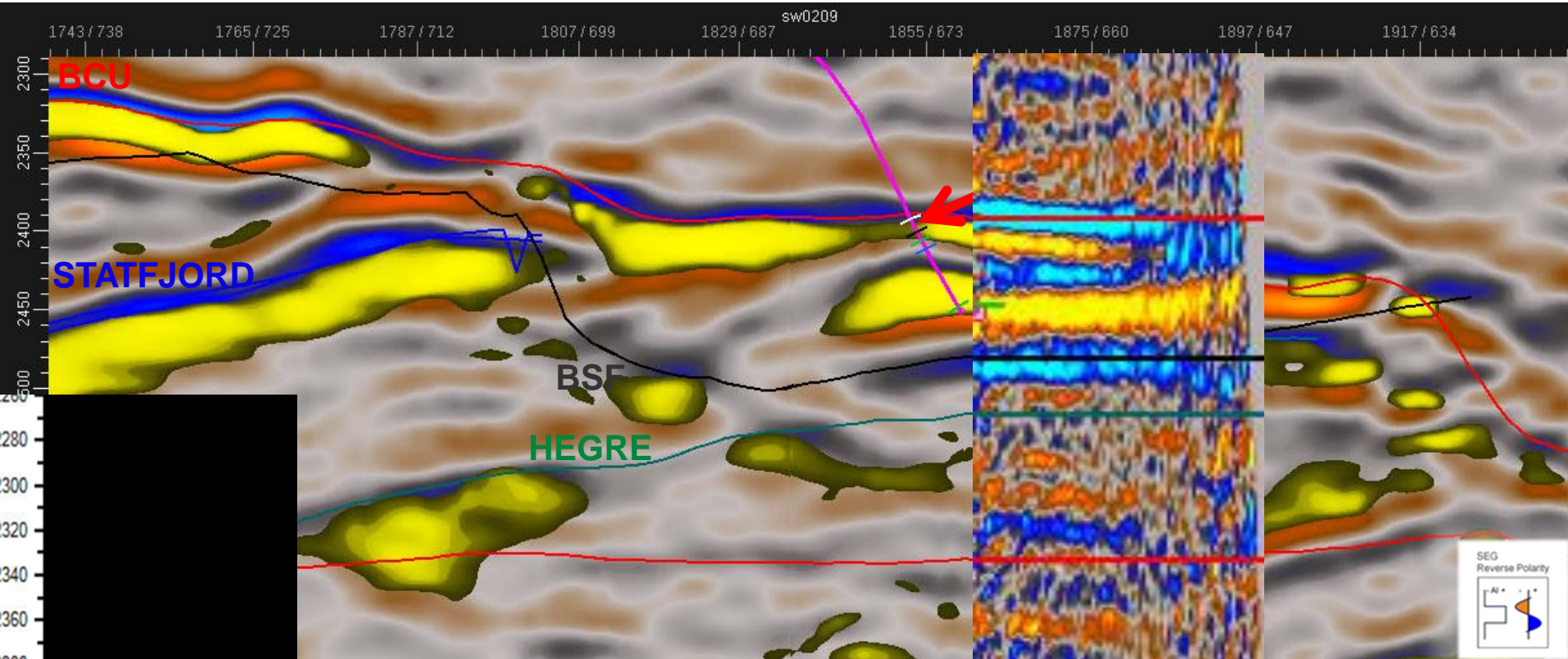# Detailed look at result in B-11D well.
More open background model. Statfjord sand detected.

Reworked brent not detected in well

BCU

STATFJORD

BSF

HEGRE
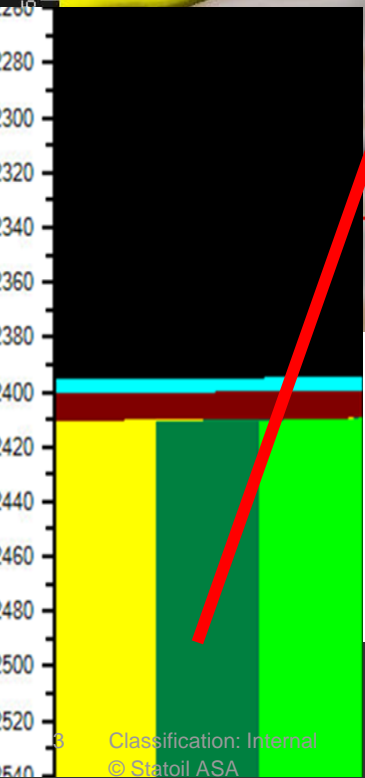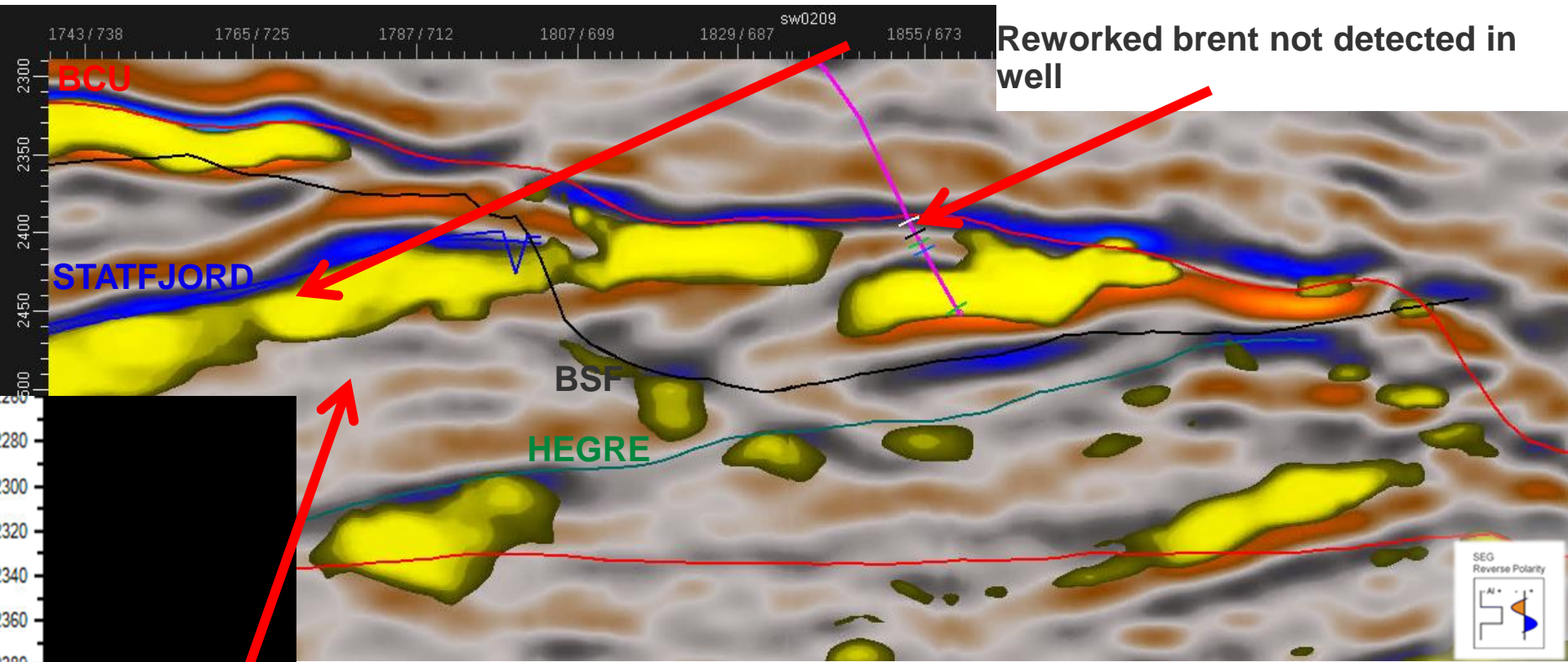
Isolated Brent not defined by horizons. No Isolated Brent output horizons

Statoil

Detailed look at result in B-11D well.
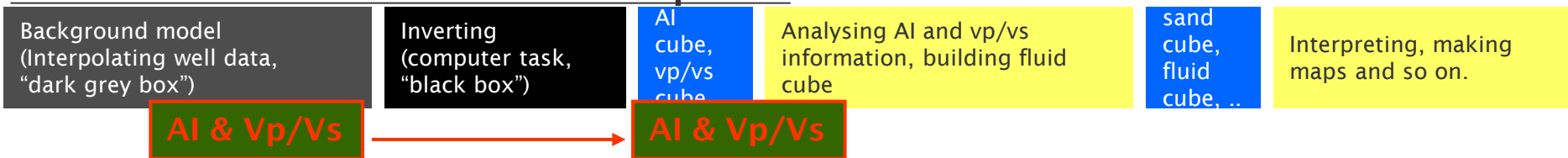# Open background model. Near and Mid only (Far dropped)

Reworked Brent also detected. Far stack has data quality issues here. Important to have input data at hand.

What makes Pcube special

- Uses geological knowledge in a very direct way.
  - By building a background model with explicit facies.
- Output is ready to use.
  - You get a oil cube, brine cube, shale cube, .. directly.
  - No need to "massage" inversion result to get e.g. sand cube.

"Classical inversion" workflow - simplified

| Background model (Interpolating well data, "dark grey box") | Inverting (computer task, "black box") | AI cube, vp/vs cube | Analysing AI and vp/vs information, building fluid cube | sand cube, fluid cube, .. | Interpreting, making maps and so on. |

AI & Vp/Vs → **AI & Vp/Vs**

Pcube workflow - simplified

| Analysing AI and vp/vs information, building facies models (brine sand, HC sand,..) | Background model – explicitly deciding where facies can be, "not at all black box" | Inverting (computer task, "black box") | Facies cubes (oil sand cube, brine sand cube, hot shale cube ..) | Interpreting, making maps and so on. |

LFC → **LFC**