

Otway Basin – V18-1, V18-2 & V18-3 and adjacent areas

2D & 3D Matched Seismic Data

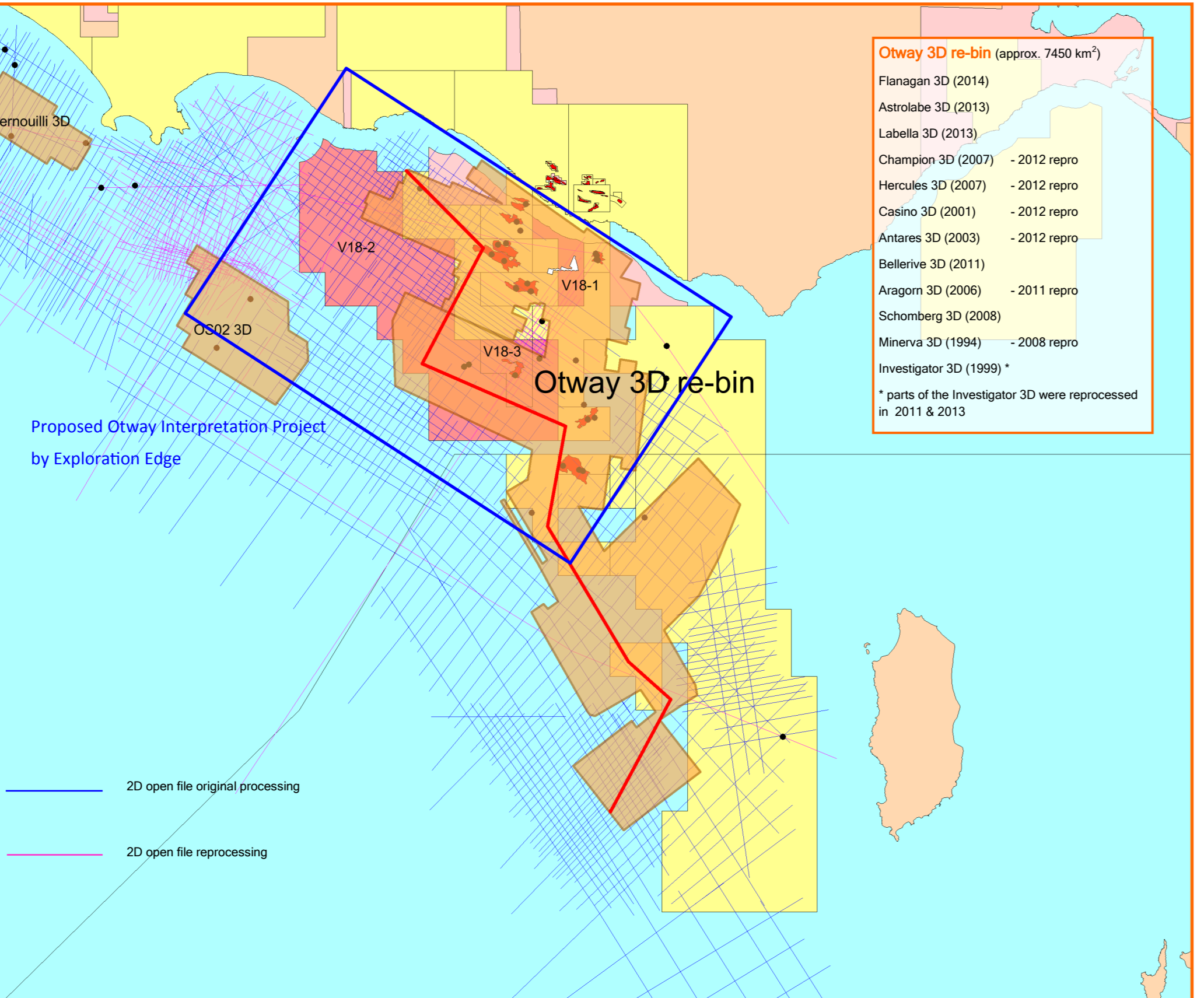
Exploration Data Services and GeoCom Services Australia have combined their expertise in open file data and post-stack seismic data matching to produce a dataset of 2D & 3D seismic data over the proposed V18-1, V18-2 & V18-3 acreage release and adjacent parts of the Otway Basin.

The 2D & 3D surveys over this part of the Otway Basin range in age from the 1970's to 2014, however a substantial amount of vintage data has been reprocessed in recent years and by utilising this data it has been possible to produce a comprehensive dataset where the majority of the data processing is post 2000 with only a few select lines of 1991 & 1996 vintage processing.

The 2D & 3D data have been phased matched, amplitude balanced and time shifted to create a homogeneous dataset, with standardised navigation data.

The 12 conjoining 3D surveys over the proposed 2018 gazettal blocks and the area to the south have been re-binned to provide a single 3D data volume. The surveys date from 1994 to 2014, but a number have been merged and reprocessed consequently only 7 datasets were required for the re-bin.

Approximate data totals are; 22,000 kms of 2D data, 7450 km² Otway 3D re-bin and 1320 km² Bernouilli & OS02 3D surveys. All 2D lines & 3D data volumes are final full migrations (or equivalent).



3D re-bin and data matching processes

- the 3D re-bin area consists of 12 surveys but by utilising recent reprocessed and merged data only 7 individual datasets were required.
- the individual datasets have been re-binned onto a common 12.5m x 12.5m grid and resampled to 4ms where required.
- observed time, phase and amplitude misties have been computed at all overlap points between each survey, using 4 time gates centred at 500, 1000, 2000 and 3000ms.
- the shifts to each survey have been applied in a time variant manner with the datasets then merged to produce a final data volume.
- deliverables: workstation ready final segy 2D & 3D datasets

Otway Interpretation Project

A detailed interpretation of the 2018 acreage release blocks V18-1, V18-2 & V18-3 using the GeoCom / EDS matched seismic database is proposed by Exploration Edge (Kim Morrison and Mike Wilson).

The authors have considerable experience working in this part of the Otway Basin, most recently with WHL Energy who were the last permit holders (VIC/P67) of the V18-2 and V18-3 areas.

The study will:-

- tie key wells
- produce time structure maps for up to 7 key horizons
- interpret key structural trends
- evaluate identified prospects and leads

For further information contact:

