

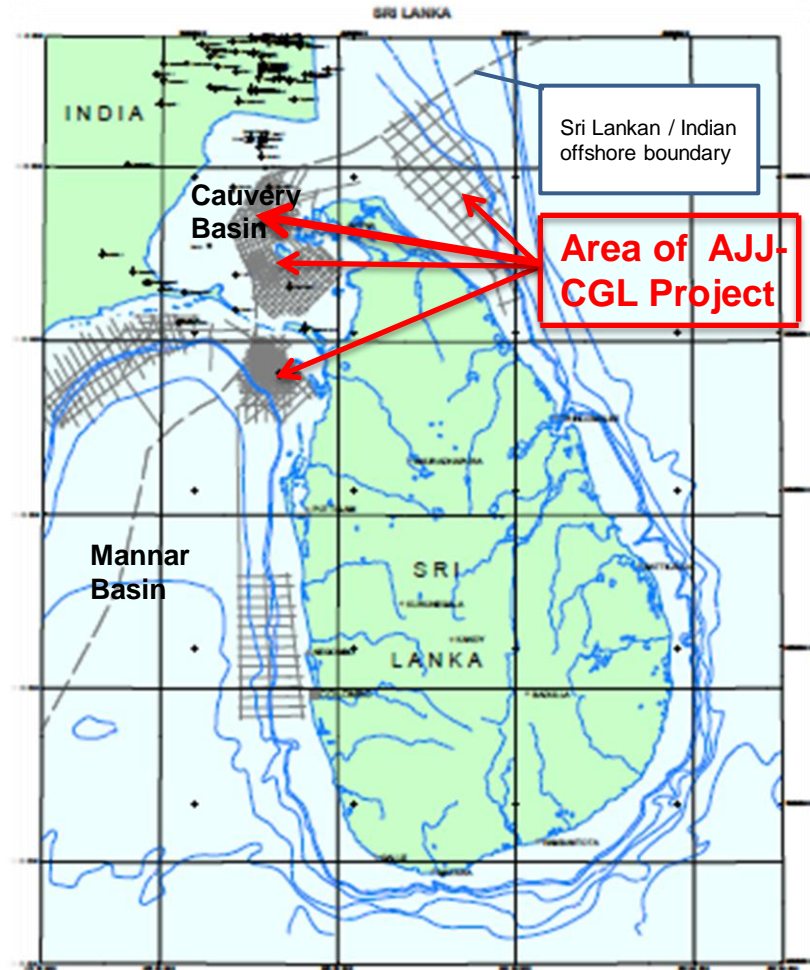
Seismic Vectorizing in the Sri Lanka Sector of the Cauvery Basin



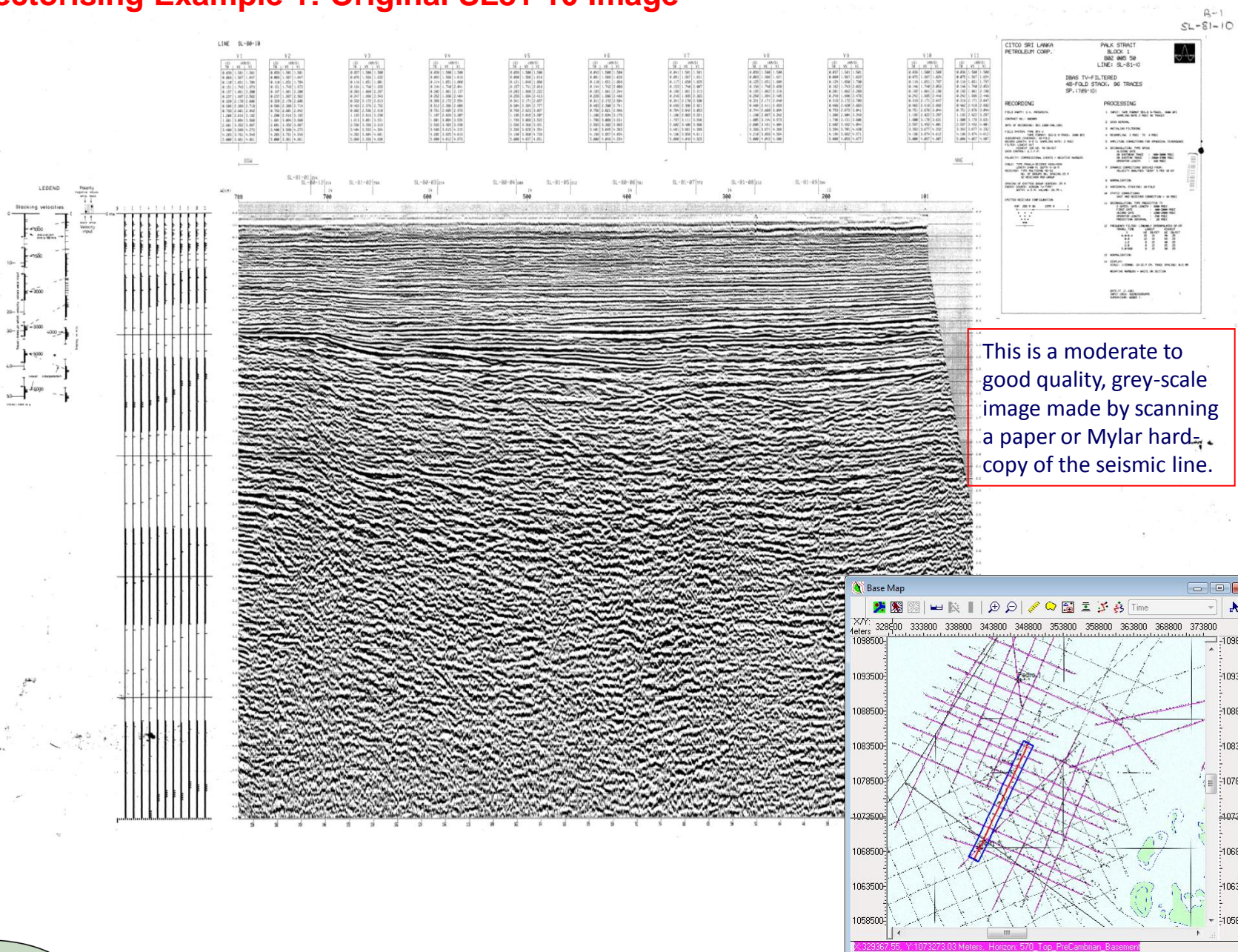
Calderdale Geoscience Limited, a Geoscience Consultancy established in 2004, in association with Consultant Reservoir Engineer AJ Jayasekera, have been authorized by PRDS Sri Lanka to vectorize the legacy seismic data, and to market the product. The coverage is the 2D seismic acquired in the 1976 to pre-2001 period. This is mostly 48 fold data. The survey areas (Palk Strait, Palk Bay, Gulf of Mannar and the North East area) are shown the adjoining figure.

Technical work completed:

Some 6300 Km of seismic lines have been vectorized in the areas shown
The SEGY data are in a Kingdom Database

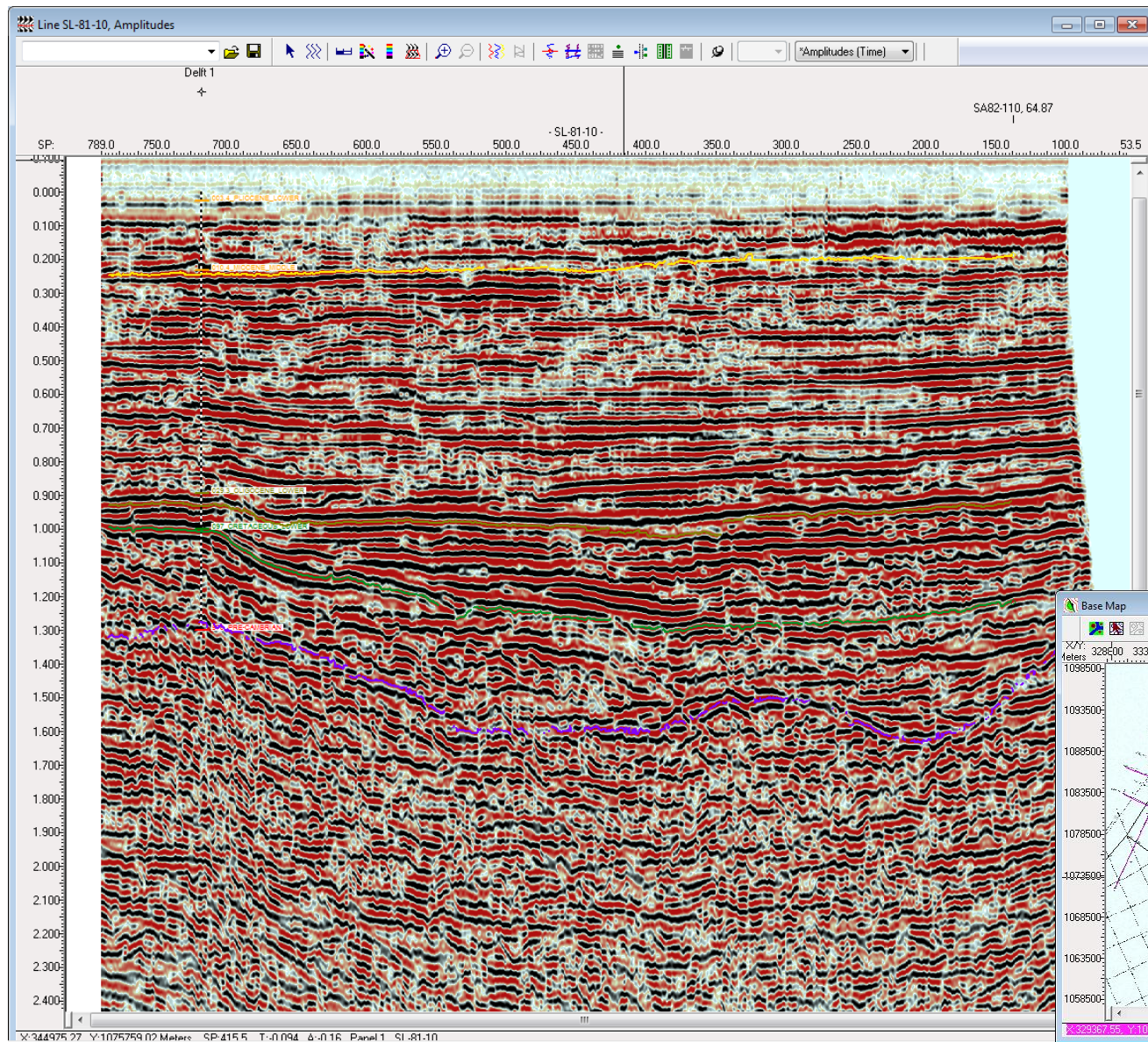


Vectorising Example 1: Original SL81-10 Image



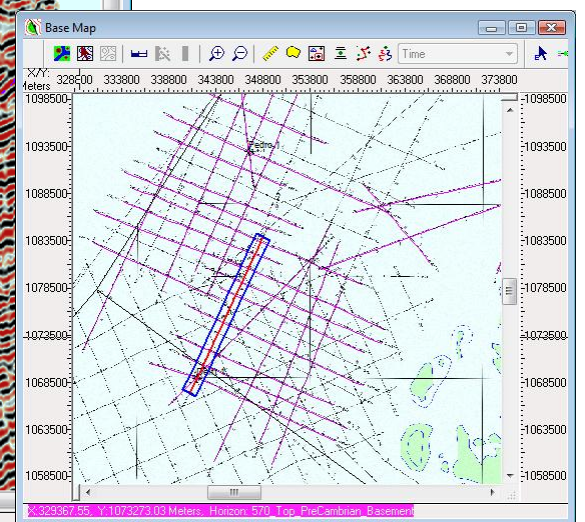


Vectorising Example 1: Vectorised SL81-10 image



➤ Vectorisation produces a SEGY file which is a faithful reconstruction of the grey-scale image.

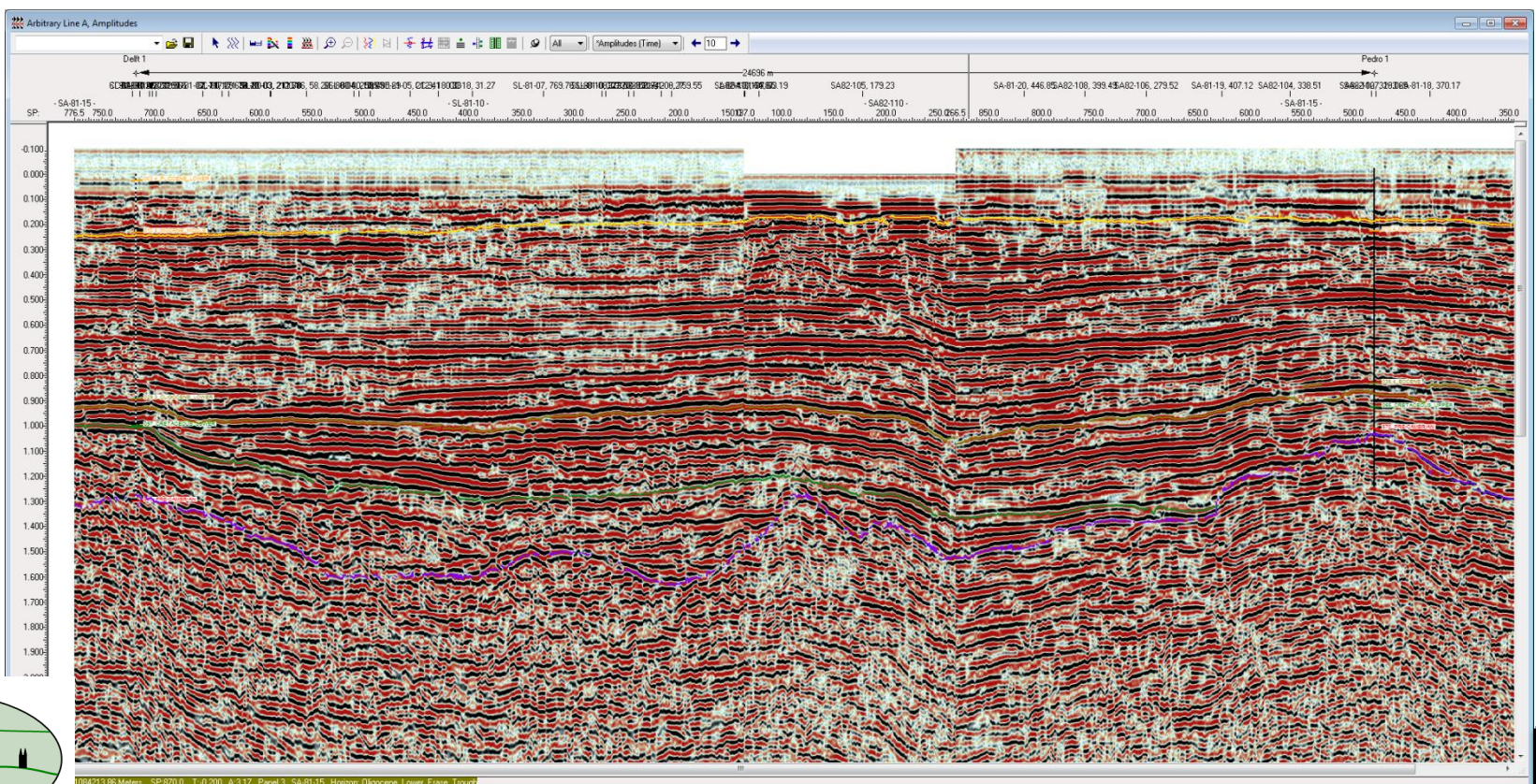
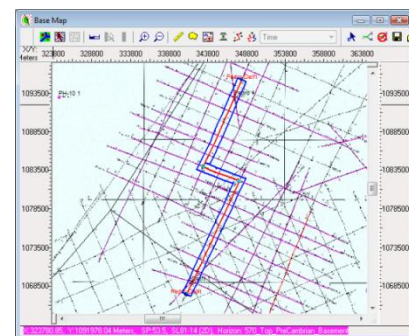
➤ Loading well data, with stratigraphic tops and time-depth tables allows the display of the well (Delft-1) on top of the seismic image.



Vectorising Example 2: Arbitrary Strike Line tying wells Delft-1 and Pedro-1

➤ Once many seismic lines have been vectorised, composite tie lines can be constructed, in standard workstation fashion, to investigate reflection continuity between well locations.

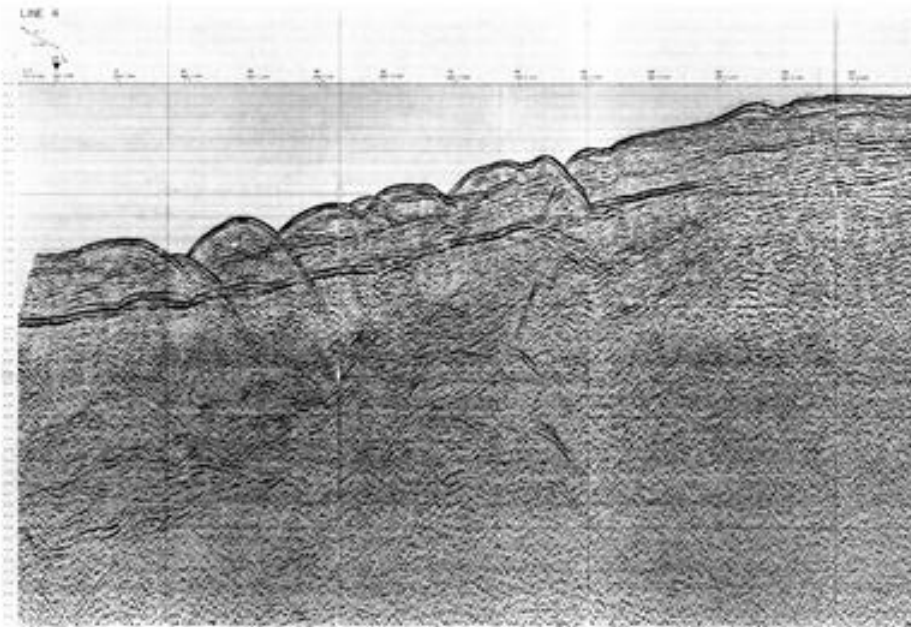
➤ This facilitates the identification of megasequence boundaries/unconformities – top PreCambrian basement – top syn-rift (Megasequence 1 and 2) – post-rift (Megasequence 3 and 4)



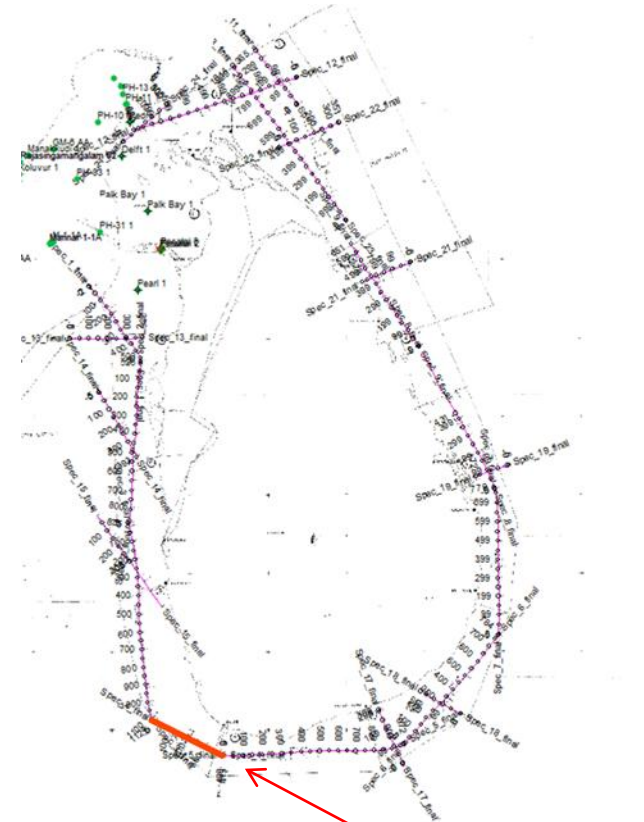


Phase 2 – Vectorizing 1976 Speculative Reconnaissance Survey

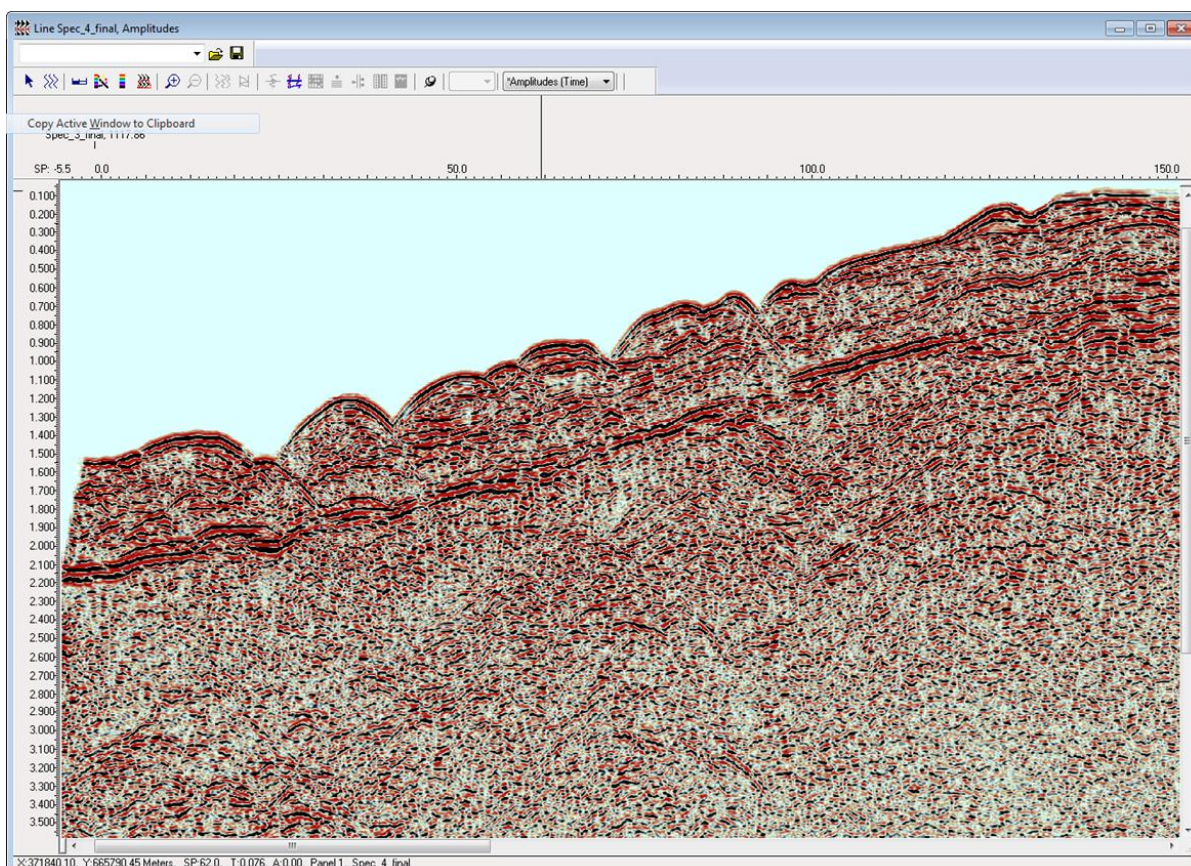
(This is a round the island seismic survey, consisting of 1700+ km of originally 24-fold data)



Original line is variable quality scan



Location of
sample
vectorised line
(other vectorised
lines in pink)



Vectorisation
produces a
SEG Y file
which is a
faithful
reconstruction
of the grey-
scale image.