

Reprocessing Objectives

The Agency has selected lines from various vintages for reprocessing, with the aim to improve the overall quality and imaging so that the lines can be effectively utilized to improve the geological understanding along the southern continental margin of South Africa. These will aid in the imaging and understanding of the seismic stratigraphy for future oil and gas related projects in the southern offshore.

If required, some of the following may be applied:

- Include de-ghosting, de-multiple, de-bubbling
- Swell noise attenuation
- Linear noise attenuation
- Surface related multiple elimination (SRME)
- Tau-P deconvolution
- Navigation assignment (where applicable)
- Velocity analysis
- Shot interpolation
- Radon high resolution de-multiple
- Diffracted multiple attenuation
- Noise attenuation in common offset domain
- Normal moveout (NMO) application
- Stack (full offsets)
- Inner and outer trace mutes
- Deconvolution/Spectral balancing/Amplitude Q compensation as required
- FX deconvolution
- Time variant filter
- Residual gain application/AGC as required
- Survey matching – phase rotation and static shift
- Datum correction
- Angle stacks, near, mid, far and ultra-far

Expected final products can potentially include the following

- Raw PSTM Stack - Seg-Y
- Final filtered PSTM Stack - Seg-Y
- CDP gather, pre or post PSTM - Seg-Y
- Stacking velocities
- Migration velocities
- Final positional data
- Processing report

The Processing report will detail which of these processes can or will be applied and which alternatives are recommended, after discussion and agreement with the Agency.