Lab 5

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Processing flow: CMP gathers

- We will now move on to processing CMP gathers. In this lab, we shall do velocity analysis. Instead of processing the entire dataset, we will window 100 CDPs and process it. The processing flow now reads:
    - Window 100 CDPs of Viking Graben data
    - Amplitude correction
    - Statics
    - Signature deconvolution using far field wavelet
    - Predictive error filtering. Caution! In order to satisfy the assumptions, you will need to do NMO with water velocity prior to PEF!
    - Bandpass filtering following PEF, followed by inverse NMO.

Modify the shell script “preprocess.sh” to include the steps above

Readying the data for velocity analysis

After applying the steps outlined in the previous slide, the data are now ready for velocity analysis. Velocity analysis can be carried out by using the shell script “Velan_VG.sh” (Note: If you want to redo velocity analysis, make sure to clean up the parameter files generated by running Clean.sh)

Velocity analysis outputs a file “stkvel.p1” a parameter file containing Tnmo and Vnmo pairs. Apply NMO correction for the data with 100 cdps and stack the data.