

Homework 2

Homework 2 is due on 11.55 p.m. 14th August, 2018. Deadline extension requests will not be entertained. You are to create a **pdf file** (not odt or doc) with the necessary figures and text. Figures should be generated in jpg or gif format (see next slide) and should be legible.

You have to submit the assignment **individually**.

Saving plots in SU

- You should save plots in .ps and jpg format, with labels:
- `suwind < vikinggraben.su key=cdp min=450 max=450 > cdp450.su`
- `suxwigg < cdp450.su key=offset label1="Lag (s)" label2="Offset (m)" title="Viking graben, CDP450" perc=99 & ——— Plot wiggle plot with labels, with percentile clip`
- `supswigg < cdp450.su key=offset label1="Lag (s)" label2="Offset (m)" title="Viking graben, CDP450" perc=99 > wiggle_cdp450.ps ——— Save wiggle plot with labels, with percentile clip`
- `suximage < cdp450.su label1="Lag (s)" label2="Trace" title="Viking graben, CDP450" perc=99 & ——— Plot image plot with labels, with percentile clip`
- `supsimag < cdp450.su label1="Lag (s)" label2="Trace" title="Viking graben, CDP450" perc=99 > image_cdp450.ps ——— Plot image plot with labels, with percentile clip`

You can export the .ps file to jpg format, in the following fashion:

- `convert image_cdp450.ps image_cdp450.gif — Convert postscript to gif format`
- `convert image_cdp450.ps image_cdp450.jpg — Convert postscript to jpg format`

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Field Statics

1. For the Viking graben data, work out the water velocity (show figures!) and apply statics correction on *gained* near-trace gather and the 3 CDP gathers which were generated in the last homework:

a) using commands `suchw` and `sustatic` with option `hdrs=1`

b) using `sustatic` with option `hdrs=0`

Compare results of a) and b) with data without statics correction. Do the results match? How does `sustatic` with option `hdrs=0` work for a **general case**? Draw a diagram.