

To avoid quick-and-dirty plots (a MUST!): qdp off

To change SAC window size (within x=[0,1], y=[0,1]): window xsize 0.1 0.8 ysize 0.5 0.9

To high pass filter one-way so as not to introduce precausal energy (eg at 0.5 Hz): hp co 0.5

The SPPIM files are already de-trended, but for others use this before filtering: rtrend

To limit the window around the arrival in T0 (which is AK135 predicted P for SPPIM): xlim t0 -20 t0 +10

To plot all records in the same window: p1

to align them at the xlim start time and plot only 3 per window: p1 rel perplot 3

To add a title: title 'Event 2018/12/14 18: 20: 12.3 depth 10 M 5.3'

To generate a PDF named myplot.pdf of the current window: saveimage myplot.pdf

To plot a spectrogram [0-2 Hz] over the full seismogram: spectrogram cbar off ymax 2.0

To limit the time window for the spectrogram, first use CUT and read them again, e.g:

```
cut t0 -20 t0 + 20
read
```

To plot station name, distance and azimuth in the upper left corner:

```
fileid type list kstnm gcarc az location UL
```

To plot the amplitude spectrum after tapering first and last 10%:

```
taper width 0.1
fft
psp am
```

To pick arrivals, add them to file APF, and save APF:

```
oapf name
ppk perplot 1
capf
```

To see all SAC commands: help

To see the manual page for command ppk: help ppk

To get the latest SAC manual from the web: <https://ds.iris.edu/files/sac-manual/>

Hint:

I put commands that I always use in .sacrc and use an alias:

```
sac='/usr/local/sac/bin/sac /Users/auguste/.sacrc'
```

my file .sacrc contains:

```
xdiv nice power off
ydiv nice power on
xlabel "Time (sec)"
color black increment list red green blue magenta cyan black
fileid type list kstnm gcarc
qdp off
```