

RSEIS: Seismic Time Series Analysis in **R** swig buttons

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Seismic analysis in **R** can be achieved by using swig - an interactive program for analyzing time series and specialized time series associated with seismology.

Buttons can be defined by the user and called in at run time. There are currently many buttons available, already programmed.

1 Buttons available in swig

1.1 Picking Buttons

WPIX Window Pick

NOPIX Temporarily remove all picks

REPIX Replot all picks

FILLPIX extend picks to fill the screen

RIDPIX delete individual picks

SEEPPIX show the picks

PickWin create a separate picking window with 3-components

pADDPIX add picks

Ppic P-wave arrival

Spic S-wave arrival

Apic Acoustic wave arrival

POLSWITCH switch polarity (p-wave only)

Pup Polarity up (p-wave only)

Pnil Polarity nil (p-wave only)

Pdown Polarity down (p-wave only)

1.2 Wiggle Buttons

NEXT Next frame

PREV Previous frame

HALF Half frame advance

CENTER Center frame

MARK Mark this wiggle

DOC Documentation

REFRESH Refresh screen

RESTORE Restore (unzoom completely)

ZOOM.out Zoom out (calculated by window)

ZOOM.in Zoom in

LEFT Shift Left

RIGHT Shift right

SCALE Toggle: scale by window versus scale by trace

PSEL Select stations/components

FLIP Flip trace

PTS Show points of wiggle

FILT Filter traces (filter choice dialog box pops up)

UNFILT Unfilter traces

fspread Filter spread (filters provided in command line)

SPEC Power Spectrum

WWIN (not sure)

SGRAM Spectrogram

WLET Wavelet transform

XTR Extract trace to ascii file

Pinfo Pick information

TSHIFT Shift traces (to earliest pick)

RMS Root-Mean-Square (between two clicks)

LocStyle Locator(Cursor) style

ROT.RT Rotate to radial-transverse (need event location)

JustV Only vertical components

JustE Only East components

JustN ONLY North Components