Seismic analysis in \texttt{R} can be achieved by using \texttt{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 \textbf{Buttons available in swig}

1.1 Picking Buttons

\texttt{WPIX} Window Pick
\texttt{NOPIX} Temporarily remove all picks
\texttt{REPIX} Replot all picks
\texttt{FILLPIX} extend picks to fill the screen
\texttt{RIDPIX} delete individual picks
\texttt{SEEPIX} show the picks
\texttt{PickWin} create a separate picking window with 3-components
\texttt{pADDPIX} add picks
\texttt{Ppic} P-wave arrival
\texttt{Spic} S-wave arrival
\texttt{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