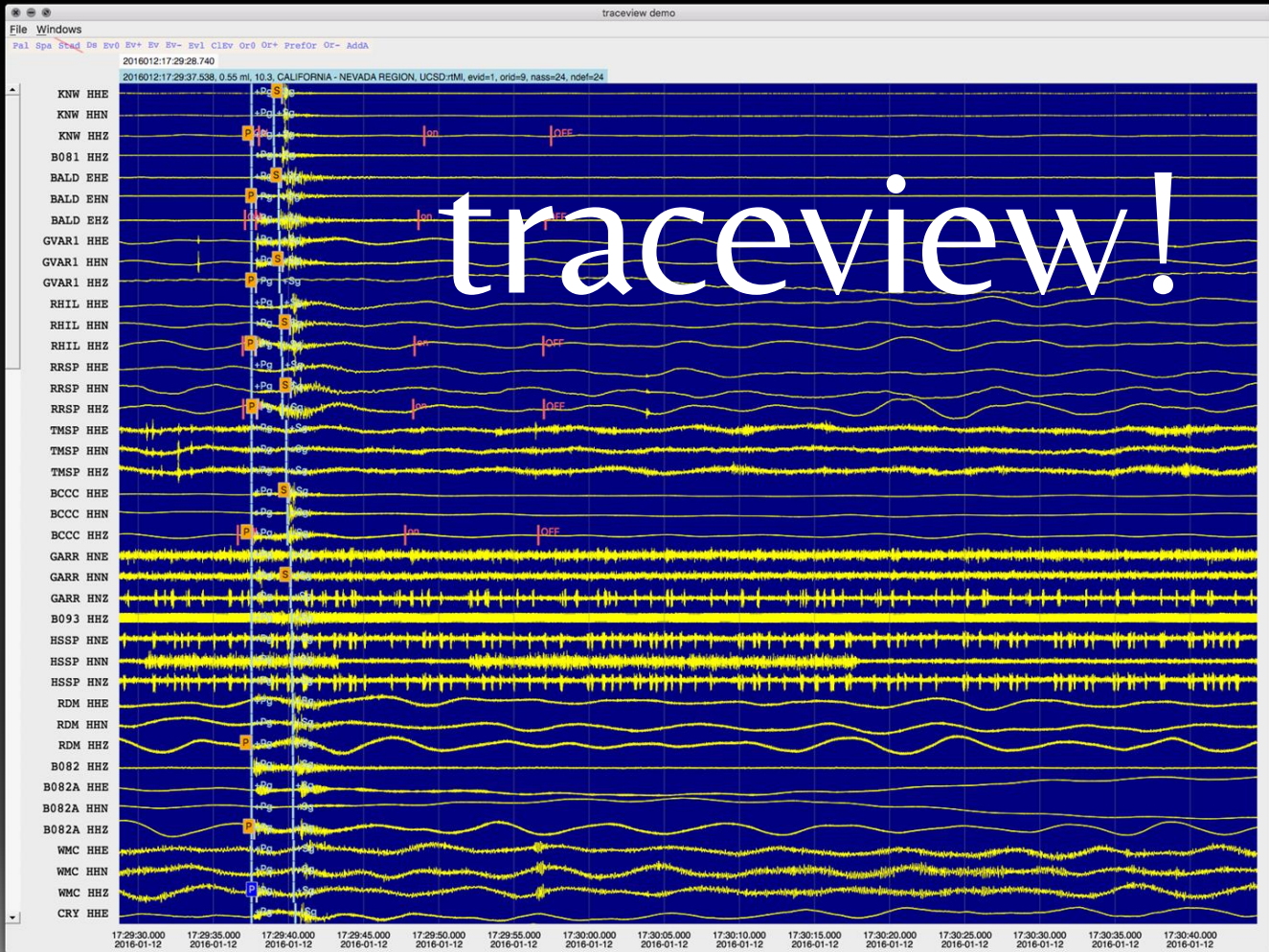


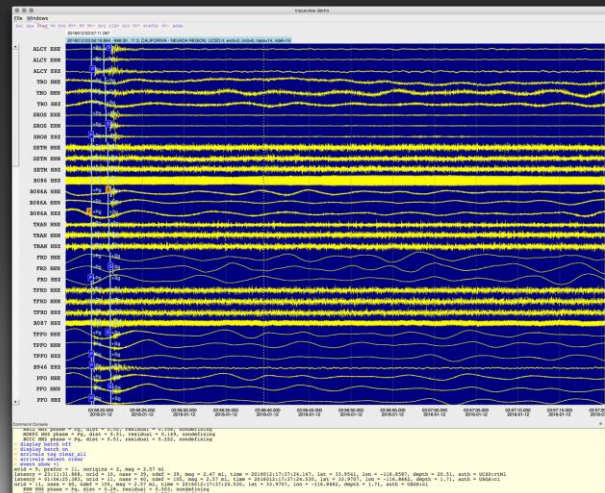
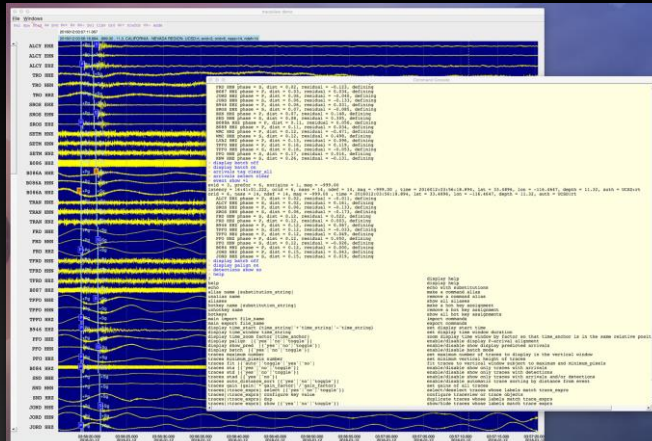
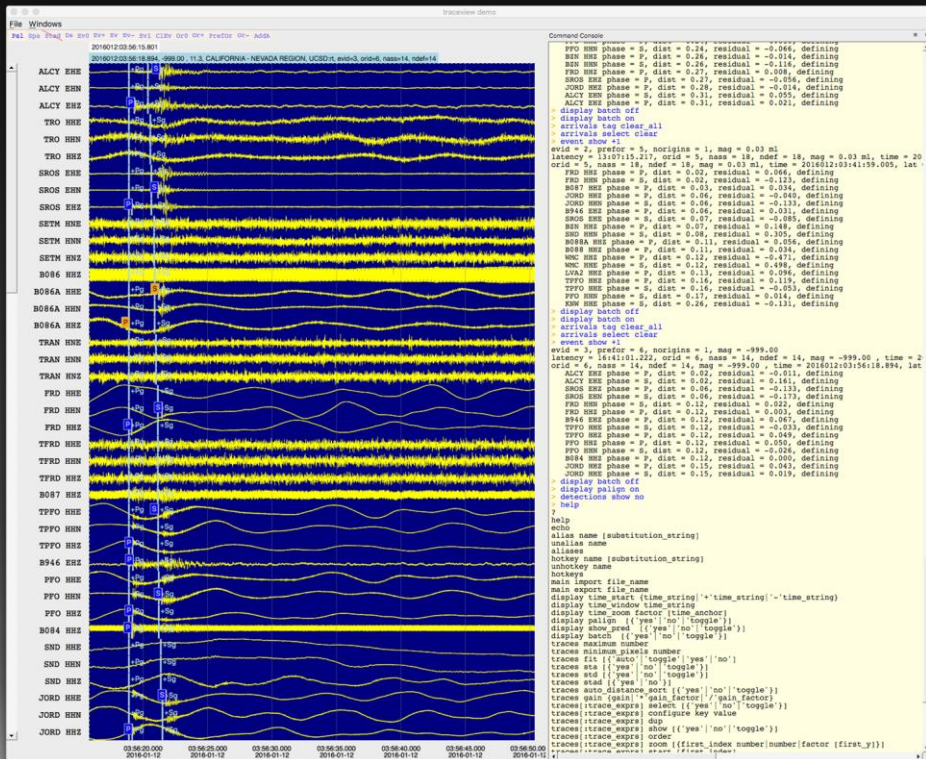
traceview

a user's introduction

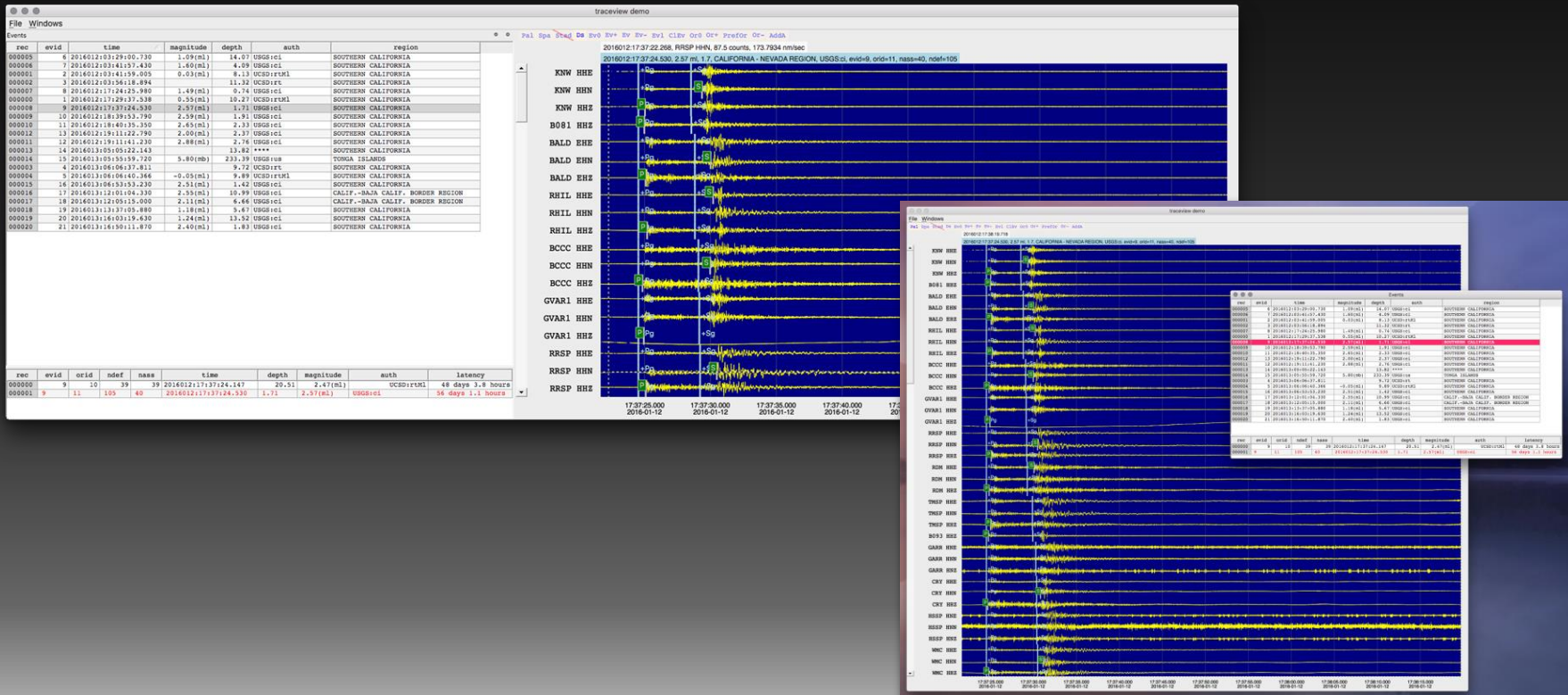




Command console



Events + origins tables

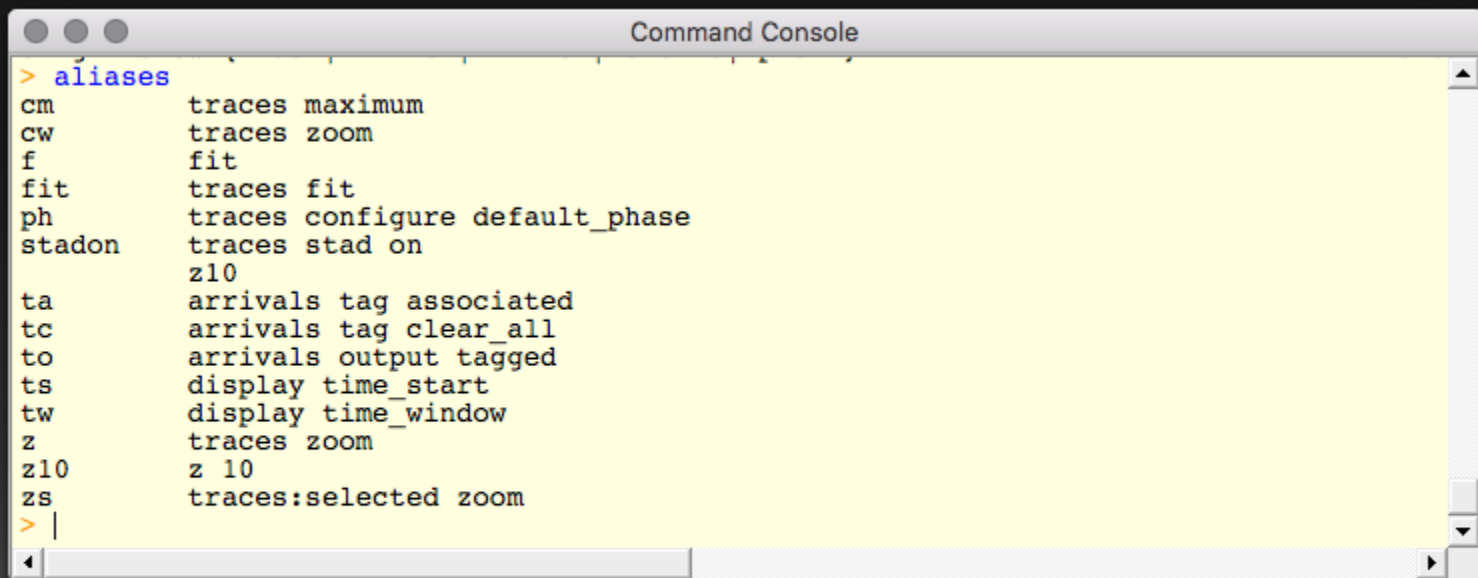


Command console

```
Command Console
> help
?
help
echo
alias name [substitution_string]
unalias name
aliases
hotkey name [substitution_string]
unhotkey name
hockey
main import file_name
main export file_name
display time_start {time_string|'+time_string'|-time_string}
display time_window time_string
display time_zoom factor [time_anchor]
display palign [{yes|'no'|'toggle'}]
display show_pred [{yes|'no'|'toggle'}]
display batch [{yes|'no'|'toggle'}]
traces maximum number
traces minimum pixels number
traces fit [{auto|'toggle'|yes|'no'}]
traces sta [{yes|'no'|'toggle'}]
traces std [{yes|'no'|'toggle'}]
traces stad [{yes|'no'}]
traces auto distance_sort [{yes|'no'|'toggle'}]
traces gain {gain}*gain_factor[/gain_factor]
traces{:trace_exprs} select [{yes|'no'|'toggle'}]
traces{:trace_exprs} configure key value
traces{:trace_exprs} dup
traces{:trace_exprs} show [{yes|'no'|'toggle'}]
traces{:trace_exprs} order
traces{:trace_exprs} zoom [first_index number|number|factor [first_y]]
traces{:trace_exprs} start [first_index]
traces{:trace_exprs} stretch factor
traces{:trace_exprs} color [color_string]
traces{:trace_exprs} color background [color_string]
traces{:trace_exprs} linewidth [linewidth]
traces{:trace_exprs} filter [TPAD time_pad |filter_string ['#' filter_label]
traces{:trace_exprs} units [{source|'counts'|'sm'}]
traces{:trace_exprs} scale [{fixed|'abottom atop'|'auto'}]
arrivals edit_mode {yes|'no'|'toggle'}
arrivals select {'clear'|'arid' {yes|'no'|'toggle'}}
arrivals add_mode {yes|'no'|'toggle'}
arrivals copy {'clear'}
arrivals paste ['dont_paste_tags' time_string]
arrivals phase_string
arrivals tag {'clear'|'clear_all'|'associated'|tag_string}
arrivals output {'tagged'|'selected'}
arrivals edit_queue clear
arrivals edit_queue undo ['all'|number]
arrivals edit_queue redo ['all'|number]
arrivals edit_queue setstate name
arrivals edit_queue gotostate name
arrivals{:trace_exprs} show [{yes|'no'|'toggle'}]
detections{:trace_exprs} show [{yes|'no'|'toggle'}]
event show {index|'+incr'|'-incr'|'evid'|'noev'}
origin show {index|'+incr'|'-incr'|'o'|'oid'|'pref'}
>
```

```
display help
display help
echo with substitutions
make a command alias
remove a command alias
show all aliases
make a hot key assignment
remove a hot key assignment
show all hot key assignments
import commands
export commands
set display start time
set display time window duration
zoom display time window by factor so that time_anchor is in the same relative position
enable/disable display P-arrival alignment
enable/disable show display predicted arrivals
enable/disable batch mode
set maximum number of traces to display in the vertical window
set minimum vertical height of traces
fit traces to vertical window subject to maximum and minimum_pixels
enable/disable show only traces with arrivals
enable/disable show only traces with detections
enable/disable show only traces with arrivals and/or detections
enable/disable automatic trace sorting by distance from event
set gains of all traces
select/deselect traces whose labels match trace_exprs
configure traceview or trace objects
duplicate traces whose labels match trace_exprs
show/hide traces whose labels match trace_exprs
order and show traces whose labels match trace_exprs
zoom traces to first and last labels that match trace_exprs or to the specified indexes
pan traces to begin at first label that matches trace_exprs or to the specified index
stretch vertical heights of traces whose labels match trace_exprs
set foreground color of traces whose labels match trace_exprs
set background color of traces whose labels match trace_exprs
set linewidth of traces whose labels match trace_exprs
set filter of traces whose labels match trace_exprs
set units of traces whose labels match trace_exprs
set vertical scale factor of traces whose labels match trace_exprs
enable/disable arrivals edit mode
clear selected arrivals or enable/disable selected arrival
enable/disable interactive add arrivals mode
copy selected arrivals into clipboard or clear clipboard
paste arrivals in clipboard
set selected arrivals phase to phase_string
add tag tag_string to selected arrivals or clear selected arrivals tags or clear all arrivals tags
output a list of arids and association status for tagged or selected arrivals
clear edit queue
undo edits
redo edits
set edit queue state
go to edit queue state
show/hide arrivals that match arrival_exprs
show/hide detections that match detection_exprs
show event
show origin
```

Default aliases

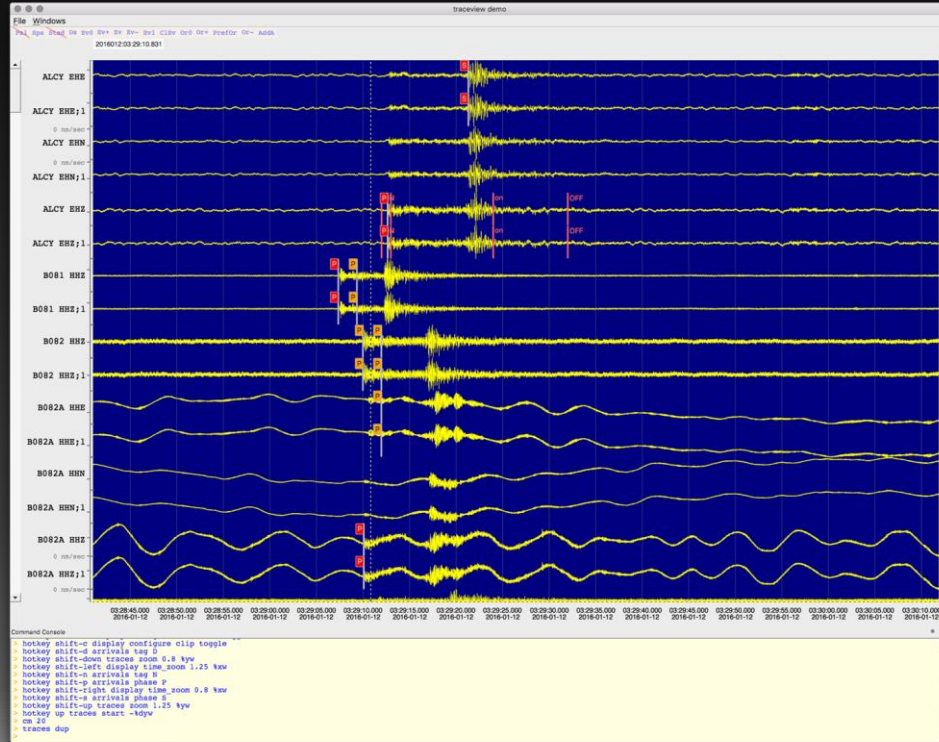
A screenshot of a 'Command Console' window with a yellow background. The window title is 'Command Console'. The text inside shows a list of default aliases. The first line is a prompt '>' followed by the command 'aliases' in blue. Below this, a list of aliases is shown, each on a new line. The prompt '>' is followed by a vertical bar '|'.

```
> aliases
cm      traces maximum
cw      traces zoom
f       fit
fit     traces fit
ph      traces configure default_phase
stadon  traces stad on
z10
ta      arrivals tag associated
tc      arrivals tag clear_all
to      arrivals output tagged
ts      display time_start
tw      display time_window
z       traces zoom
z10    z 10
zs      traces:selected zoom
> |
```

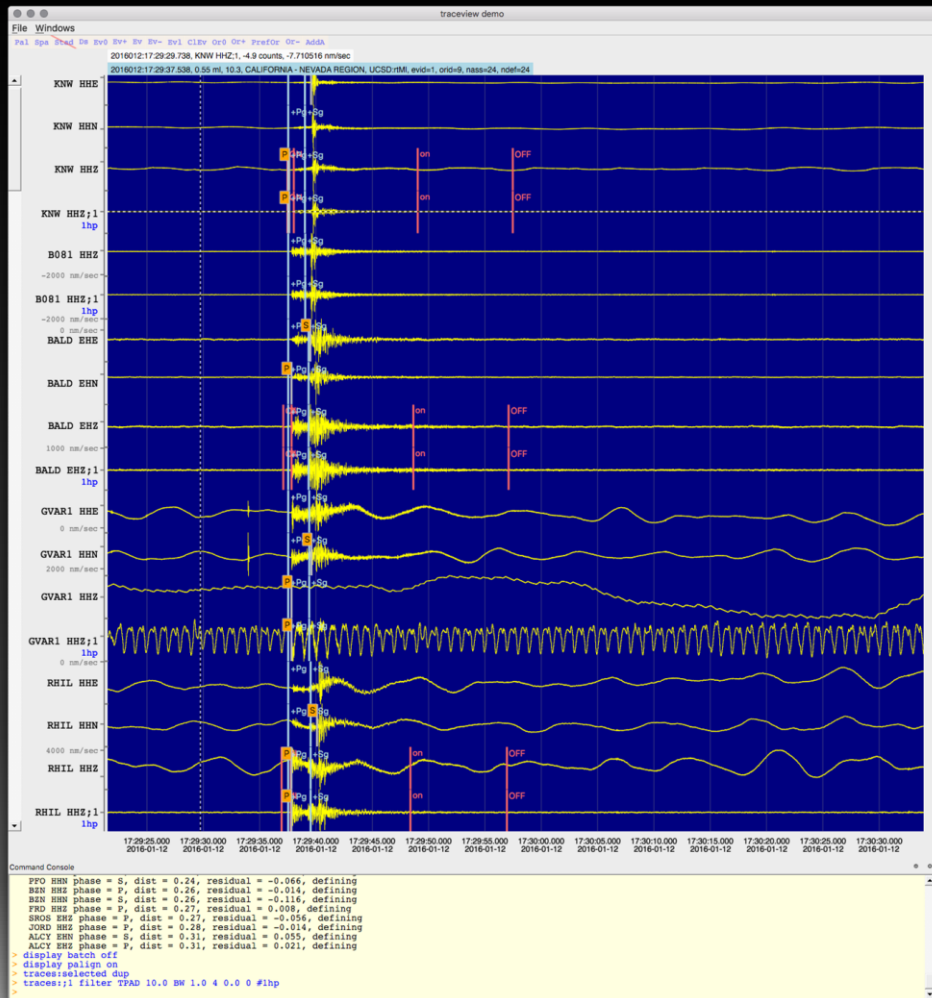
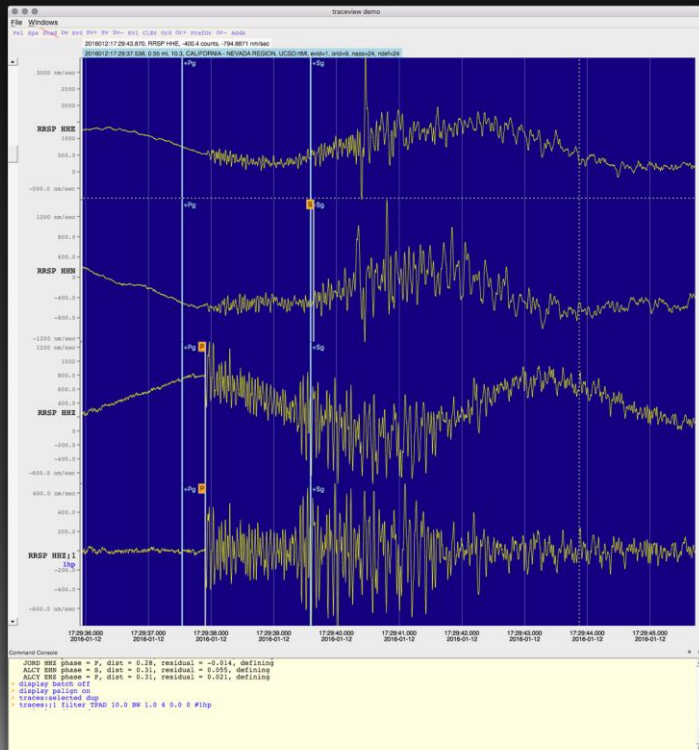
Default hotkeys

```
Command Console
> hotkeys
0          traces filter none
1          traces filter TPAD 100.0 BW 0.8 4 3.0 4 #tele
2          traces filter TPAD 10.0 BW 1.0 4 0.0 0 #lhp
3          traces filter TPAD 10.0 BW 5.0 4 0.0 0 #5hp
a          arrivals add_mode toggle
c          arrivals select clear
control-c  arrivals copy
control-down traces gain *0.8
control-up  traces gain *1.25
control-v   arrivals paste %xw
control-x   echo time is %xw
delete     arrivals phase del
down       traces start +%dyw
e          arrivals edit_mode toggle
f          traces fit
left       display time_start +%dxw
n          traces filter none
p          traces configure default_phase P
right     display time_start -%dxw
s          traces configure default_phase S
shift-a    display configure antialias toggle
shift-c    display configure clip toggle
shift-d    arrivals tag D
shift-down traces zoom 0.8 %yw
shift-left display time_zoom 1.25 %xw
shift-n    arrivals tag N
shift-p    arrivals phase P
shift-right display time_zoom 0.8 %xw
shift-s    arrivals phase S
shift-up   traces zoom 1.25 %yw
up         traces start -%dyw
> |
```

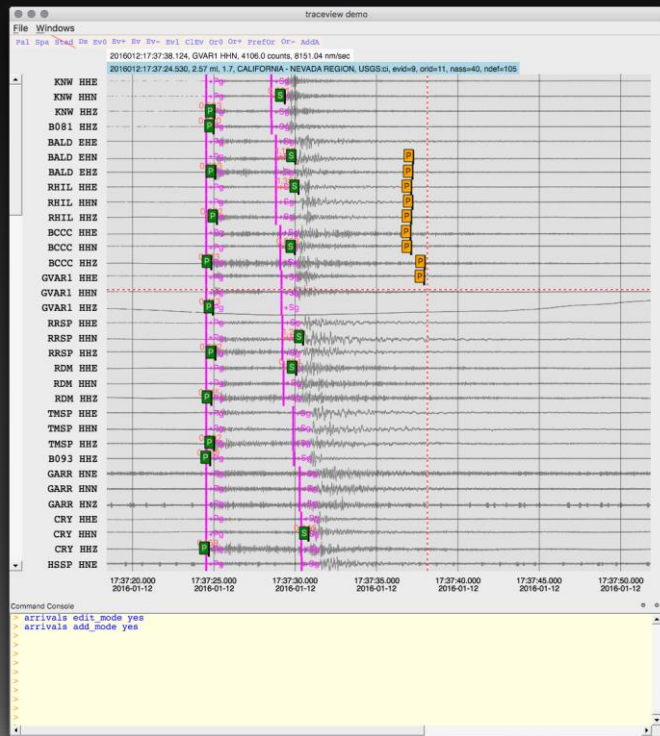
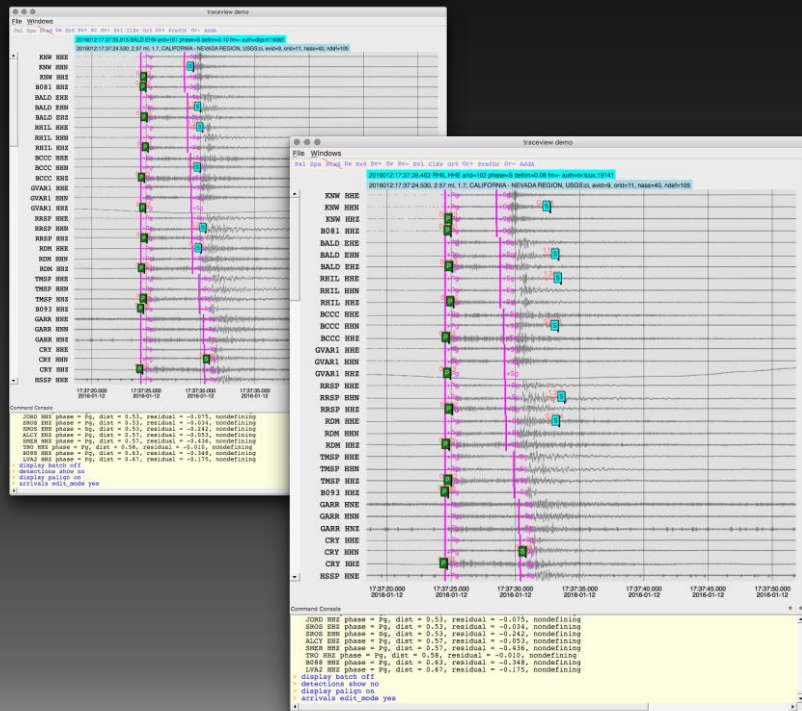
Trace duplication



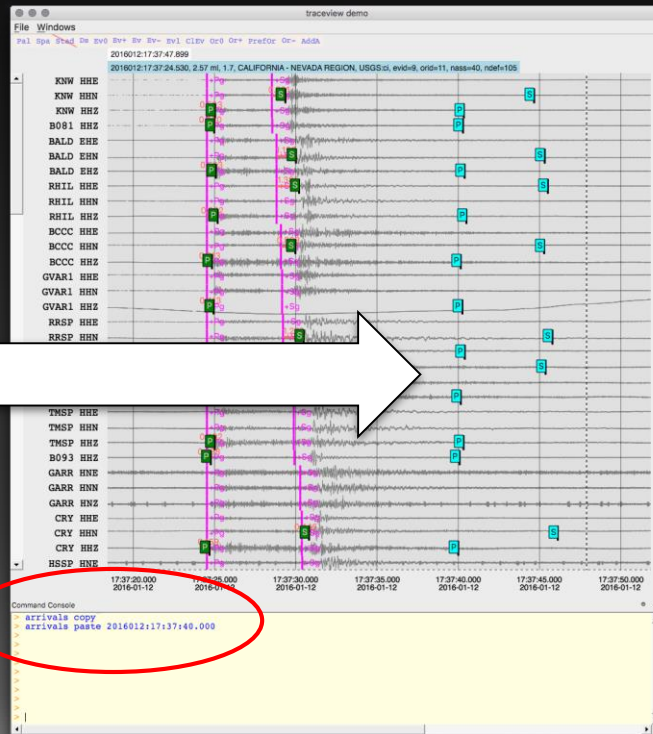
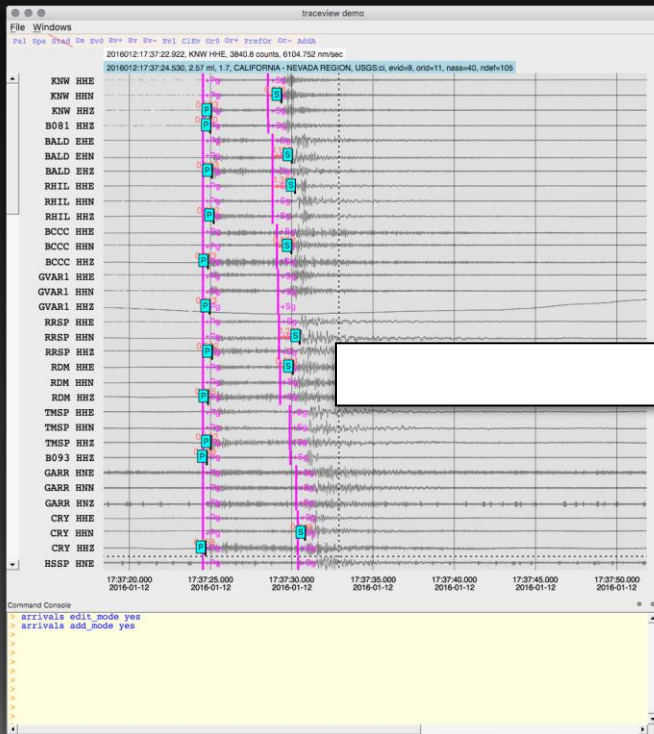
Filtering selected traces



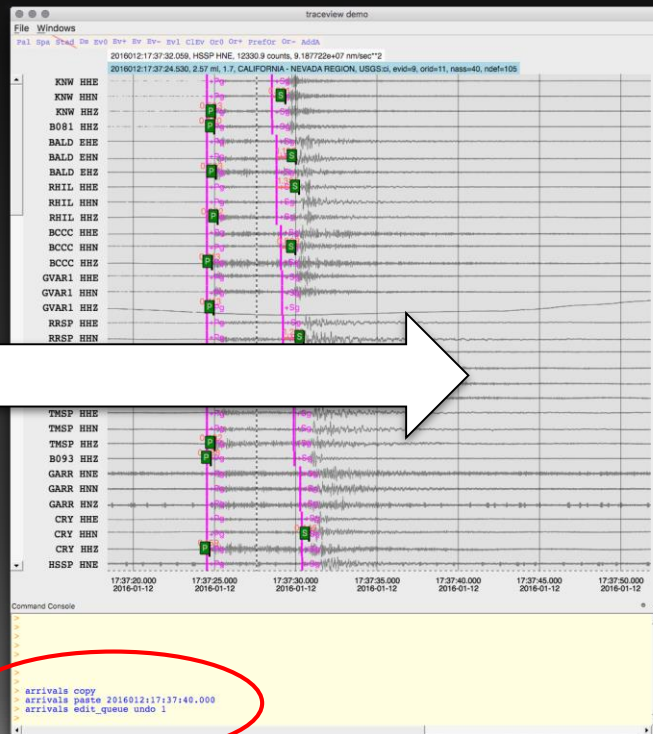
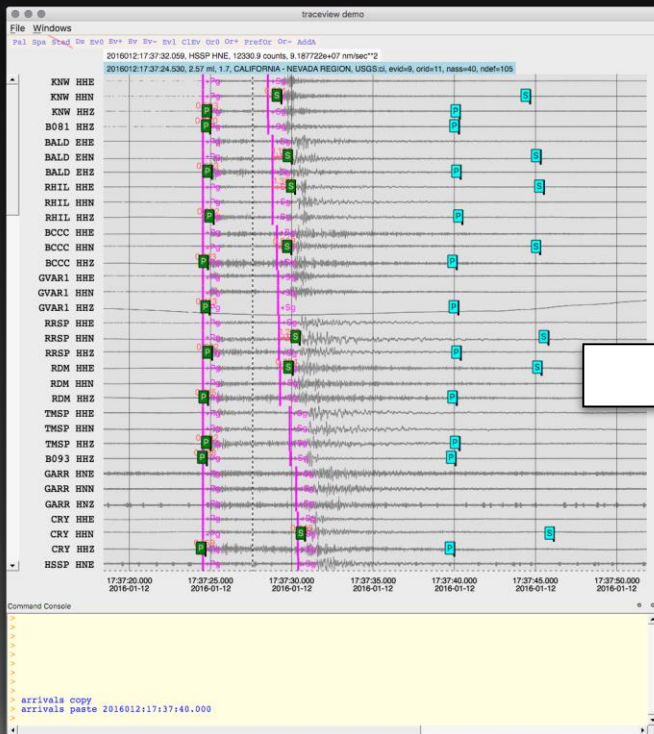
Arrivals edit + add mode



Arrivals copy/paste



Arrivals undo/redo



Parameter file editor

```
# This is the default traceview parameter file

use_wheel yes # use mouse wheel or track pad gestures for panning display
max_traces 40 # maximum number of traces to display
max_events 1000 # maximum number of events to process
min_pixels_traces 10 # minimum pixel height per trace
auto_distance_sort yes # automatically sort traces by distance from event
predicted_phases P,S # phases for predicted arrivals
default_phase P # default phase code for new arrivals
preserve_time_scale_on... yes # preserve pixels per second horizontal scale on resize?
preserve_traces_scale... yes # preserve pixels per trace vertical scale on resize?
auto_select_last_modif... no # automatically select last modified event?

# aliases contains command aliases

aliases &Arr

# hotkeys contains single character hot key aliases

hotkeys &Arr

# arrivals_menus contains arrivals editing menu items

arrivals_menus &Arr

# traceview_display_parameters contains colors, fonts and linewidths for the traceview display windows

traceview_display_params

# traceview_buttons definitions contains definitions of task buttons
# Note that the buttons definitions are defined in BQTaskbar

traceview_buttons_definitions

# traceview_buttons specifies which task buttons are displayed
# Note that the buttons are defined in BQTaskbar(3)

traceview_buttons &Tb1

# events_params define the parameters for the events tableview

events_params &Arr

# origins_params define the parameters for the origins tableview

origins_params &Arr

pf_revision_time 1554476057
auto_select_event no # automatically select event?

Status:
```

```
# traceview_display_params
# traceview_display_parameters contains colors, fonts and linewidths for the traceview display windows
# main display &Arr # these are display parameters for the main window
color_background gray # color of the trace window background
color_foreground gray # color of the trace window foreground (traces color)
linewidth 1 # linewidth used for trace plots
color_detection_0 0,0,1,0,0,7 # color for detection flag outline
color_detection_1 0,0,1,0,0,7 # color for detection flag fill
color_detection_2 #000000 # color for detection flag text
color_predicted_0 magenta # color for predicted arrival flag outline
color_predicted_1 magenta # color for predicted arrival flag fill
color_predicted_2 #000000 # color for predicted arrival flag text
color_normal_0 black # color for normal arrival flag outline
color_normal_1 black # color for normal arrival flag fill
color_normal_2 red # color for normal arrival flag text
color_selected_0 black # color for selected arrival flag outline
color_selected_1 black # color for selected arrival flag fill
color_selected_2 cyan # color for selected arrival flag text
color_edited_0 red # color for edited arrival flag outline
color_edited_1 red # color for edited arrival flag fill
color_edited_2 lightblue # color for edited arrival flag text
color_defining_0 black # color for defining arrival flag outline
color_defining_1 #ff0000 # color for defining arrival flag fill
color_defining_2 blue # color for defining arrival flag text
color_non_defining_0 black # color for non-defining arrival flag outline
color_non_defining_1 black # color for non-defining arrival flag fill
color_non_defining_2 green # color for non-defining arrival flag text
color_tapped_defining_0 black # color for tapped defining arrival flag outline
color_tapped_defining_1 black # color for tapped defining arrival flag fill
color_tapped_defining_2 lightblue # color for tapped defining arrival flag text
color_tapped_non_defining_0 black # color for tapped non-defining arrival flag outline
color_tapped_non_defining_1 black # color for tapped non-defining arrival flag fill
color_tapped_non_defining_2 lightgreen # color for tapped non-defining arrival flag text
color_non_associated_0 black # color for non-associated arrival flag outline
color_non_associated_1 black # color for non-associated arrival flag fill
color_non_associated_2 orange # color for non-associated arrival flag text
color_residual_0 0,0,1,0,0,7 # linewidth for arrival residual glyph outline
color_residual_1 0,0,1,0,0,7 # linewidth for arrival residual glyph fill
color_residual_2 # # linewidth for arrival residual glyph text
arrival_select_0 #A0A0FF00 # arrival flag select expression applied to phase
arrival_reject_0 !m1.* # arrival flag reject expression applied to phase
arrival_status_1
```

Live demonstration