

miga =

struct with fields:

```
channelnum: [1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16] -> ID of recording channels
spikechannel: [1 2 3 4 7 8 9 9 10 12 13 14 14 15 16] -> length of array = number of spike-sorted units, @element is the channel number at which the unit was recorded
blockno: [1x693 double] -> 1xN array, where N is the number of trials, @element indicates the attention condition, 1 = Attend AWAY, 2 = Attend IN
condno: [1x693 double] -> 1xN array, @element contains information about the orientation of target stim during a trial
spike_mat: {15x693 cell} -> MxN cell array, M is number of units (length of spikechannel), N is the number of trials, @cell is an array of spike times in ms.
lfp_mat: {16x693 cell} -> MxN cell array, M is number of channels (length of channelnum), N is the number of trials, @cell is an array of ms resolution LFP in mV
lfp_range: [-0.3960 0.4361] -> min and max values of LFP across all channels and all trials. For plotting purpose.
eye_mat: {2x693 cell} -> 2xN cell array, where N is num of trial. Row 1 contains horizontal co-ordinate, Row 2 contains vertical co-ordinate. Needs to be transformed to degrees of visual angle.
eye_range: [-3.6462 4.0462] -> min and max values of eye position across all channels and all trials. For plotting purpose.
event_mat: {1x693 cell} -> Information about each trial. See separate documentation.
photodiode_mat: {1x693 cell} -> Not used.
photodiode_range: [-0.3467 0.3857] -> Not used.
labview2eom_mat: {1x693 cell} -> Not used.
labview2eom_range: [-0.0195 0.0293] -> Not used.
det36a_mat: {1x693 cell} -> Not used.
det36a_range: [-0.0293 0.0122] -> Not used.
realshutter_mat: {1x693 cell} -> Not used.
realshutter_range: [0.0293 0.0562] -> Not used.
mockshutter_mat: {1x693 cell} -> Not used.
mockshutter_range: [0.0146 3.3716] -> Not used.
isi_hist: [15x101 double] -> MxN, M is number of units (length of spikechannel), N is number of time bins
isi_hist_edges: [1x101 double] -> 1xN, bounds of each time bin. Use dispSpikeSIhist.m
wform_mean: {1x15 cell} -> 1xM cell array, M is number of units (length spikechannel), @array has mean waveform shape in res determined by wfrom_freq.
wform_std: {1x15 cell} -> 1xM cell array, M is number of units (length spikechannel), @array has STD waveform shape in res determined by wfrom_freq.
wform_freq: 40000 -> sampling freq for waveform shape analysis
name: 'a_20150403c_probe_dcorr02' -> Name of the session.
isolation: [4 4 4 4 3 4 1 3 4 2 3 2 3 4 4] -> 1xM, @element is unit type. 1,2 - single units, 3 - Multiunit, 4 - Poor MU Data by Anirvan Standards
deltaOri: [1 2 3 4 6 8 10 12] -> 1xN, N is number of distinct target orientation changes, @element is delta orientation value in degrees.
contrast: [10 18 26 34 42 50 10 18 26 34 42 50] -> 1xN, 1 to N/2 shows contrast values for attend AWAY, N/2+1 to N shows contrast values for attend IN.
baselineOri: 0 -> Orientation of non-target gabor stimuli in degrees.
phase: 0 -> Cosine Phase of non-target + target gabor stimuli in degrees.
foilDeltaOri: 4 -> Orientation change of gabor stimuli in degrees at uncued location (These are Foil trials. Trial type info in event_mat).
inputLayer: [3 4 5 6] -> 1xN, Channel numbers identified as input layer. Superficial layers < element 1, Deep layers > element N.
CSDfile: 'a_20150403b_probe_csdfiltrg' -> Files containing CSD info
MAPSPACfile: 'a_20150403a_probe_mapspac4' -> Files containing RF info
eventsProcessed: 1 -> Flag indicates that event_mat has been fully populated. If 0, events have not been parsed for this session.
invalidUnits: 3 -> 1xN, N is number of hand identified invalid units. @element is the unit index of spikechannel or isolation array.
eye_cal_x: [3.1719 0.2200] -> used for tranforming eye position to degrees of visual angle.
eye_cal_y: [4.2405 -0.1821] -> used for tranforming eye position to degrees of visual angle.
eymo: [1x1 struct] -> Contains info about saccades and micro-saccades. Used for state IDing in spotaneous data.
eymoProcessed: 1 -> Flag indicates that eye movement data has been processed to ID saccades, micro-saccades etc.
```