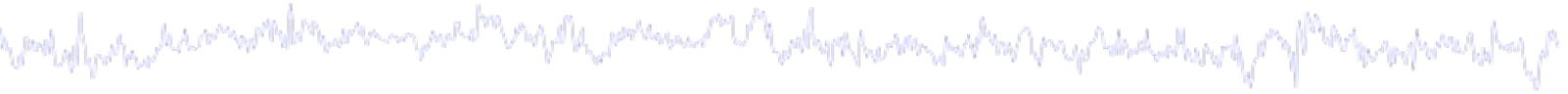
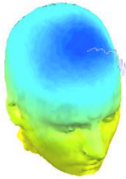


STUDY plot menu



Task 1

Plot cluster summaries

Task 2

Plot individual ICs

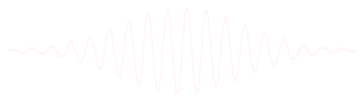
Task 3

Plot using statistical thresholds

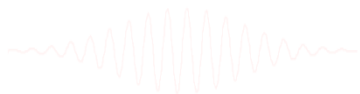
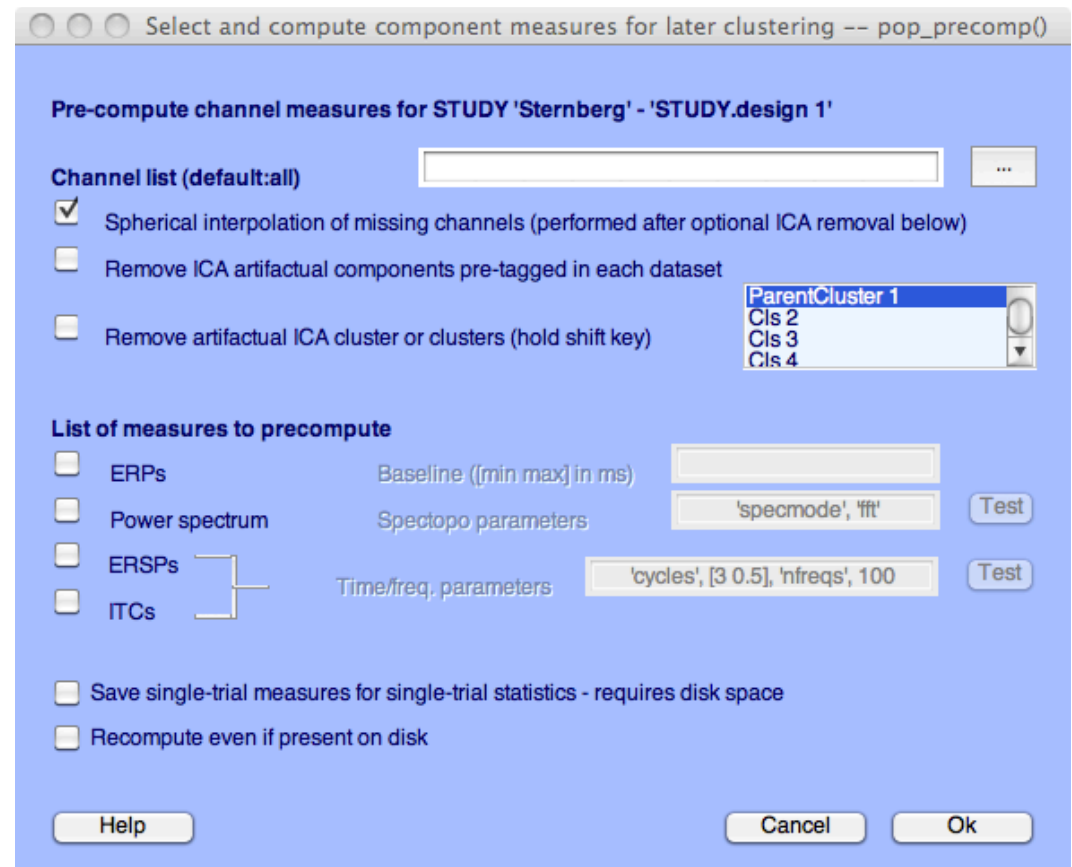
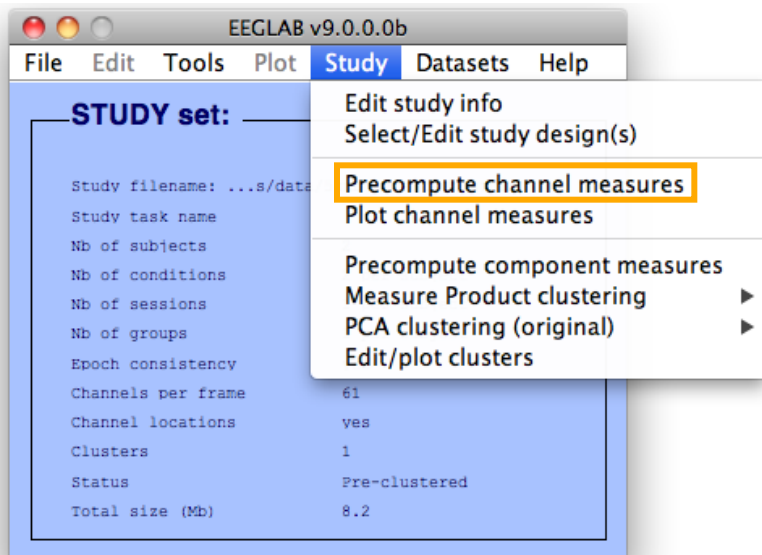
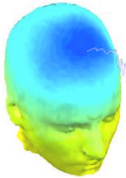
Task 3

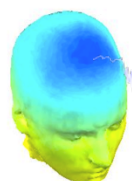
Eliminate/reassign ICs

Exercise...



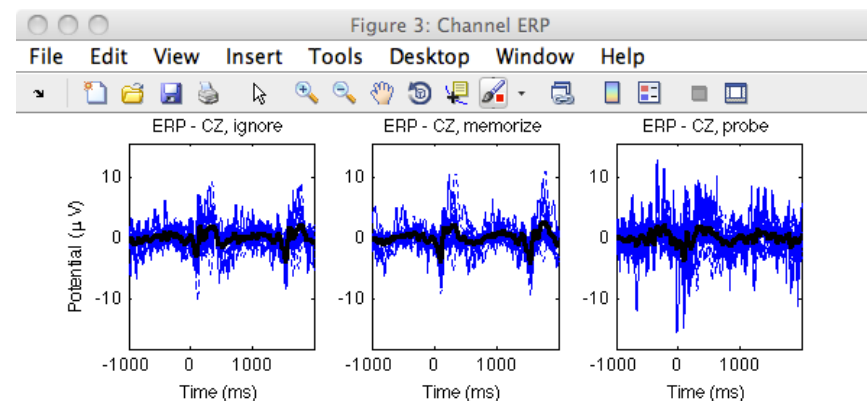
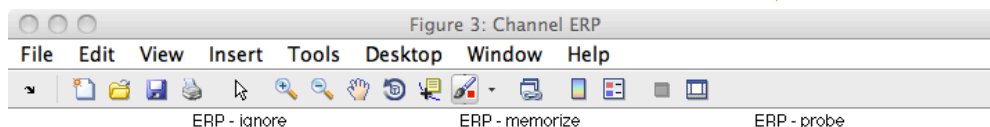
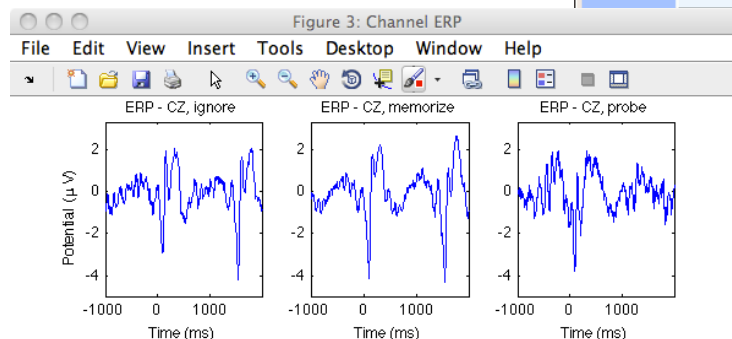
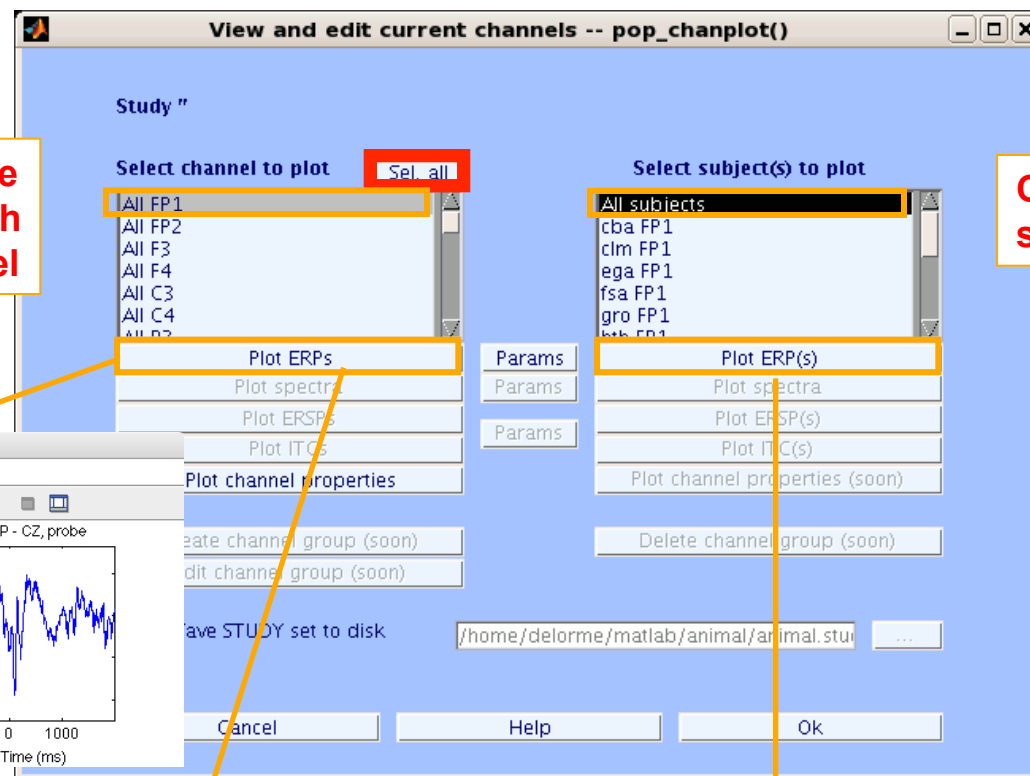
Precompute data measures

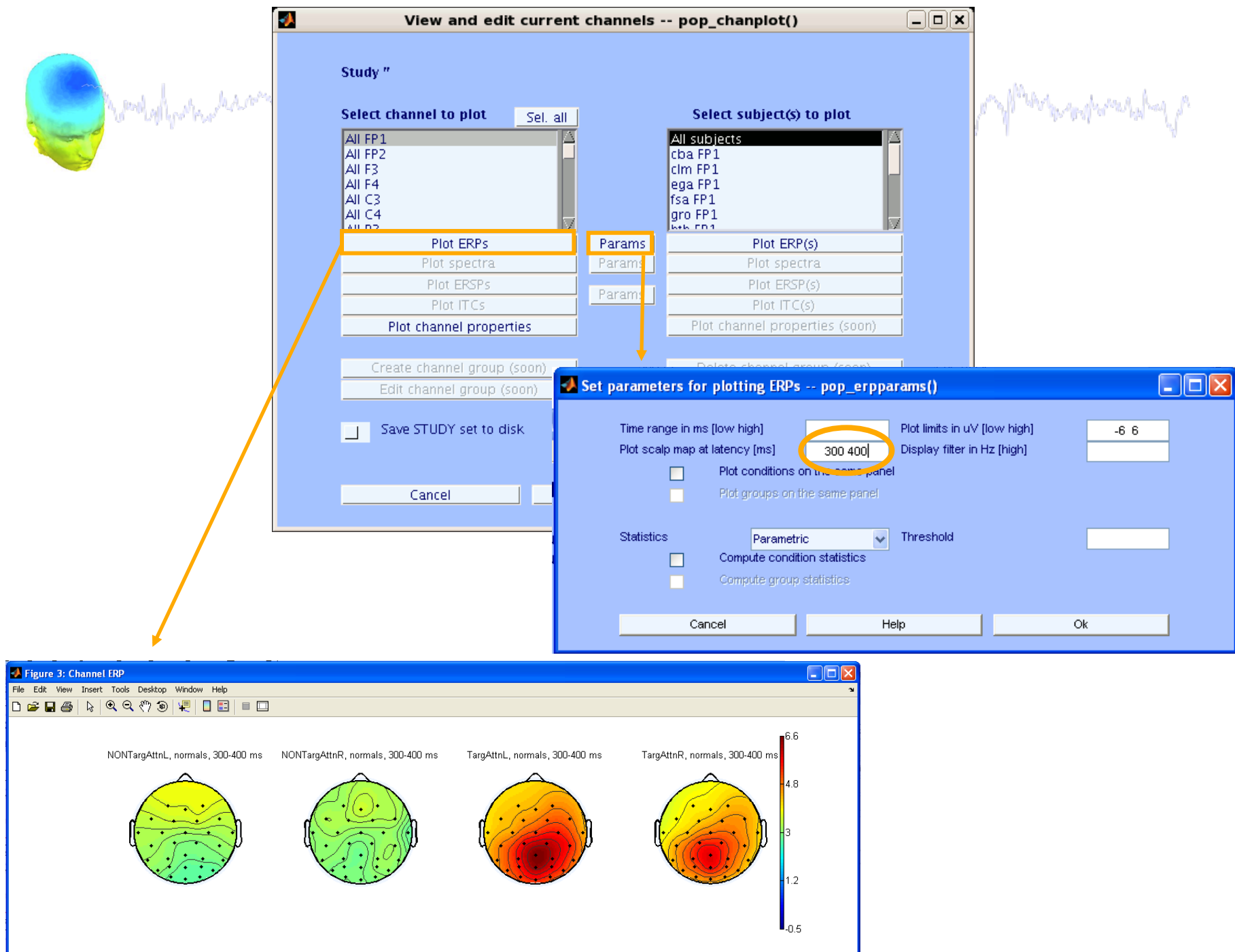




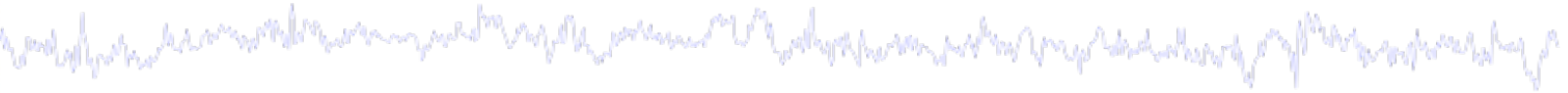
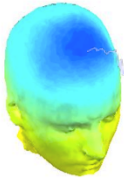
Choose which channel

Choose which subject





View and edit clusters



EEGLAB v6.0b

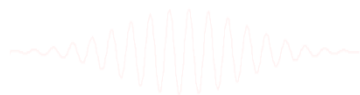
File Edit Tools Plot **Study** Datasets Help

STUDY set: At

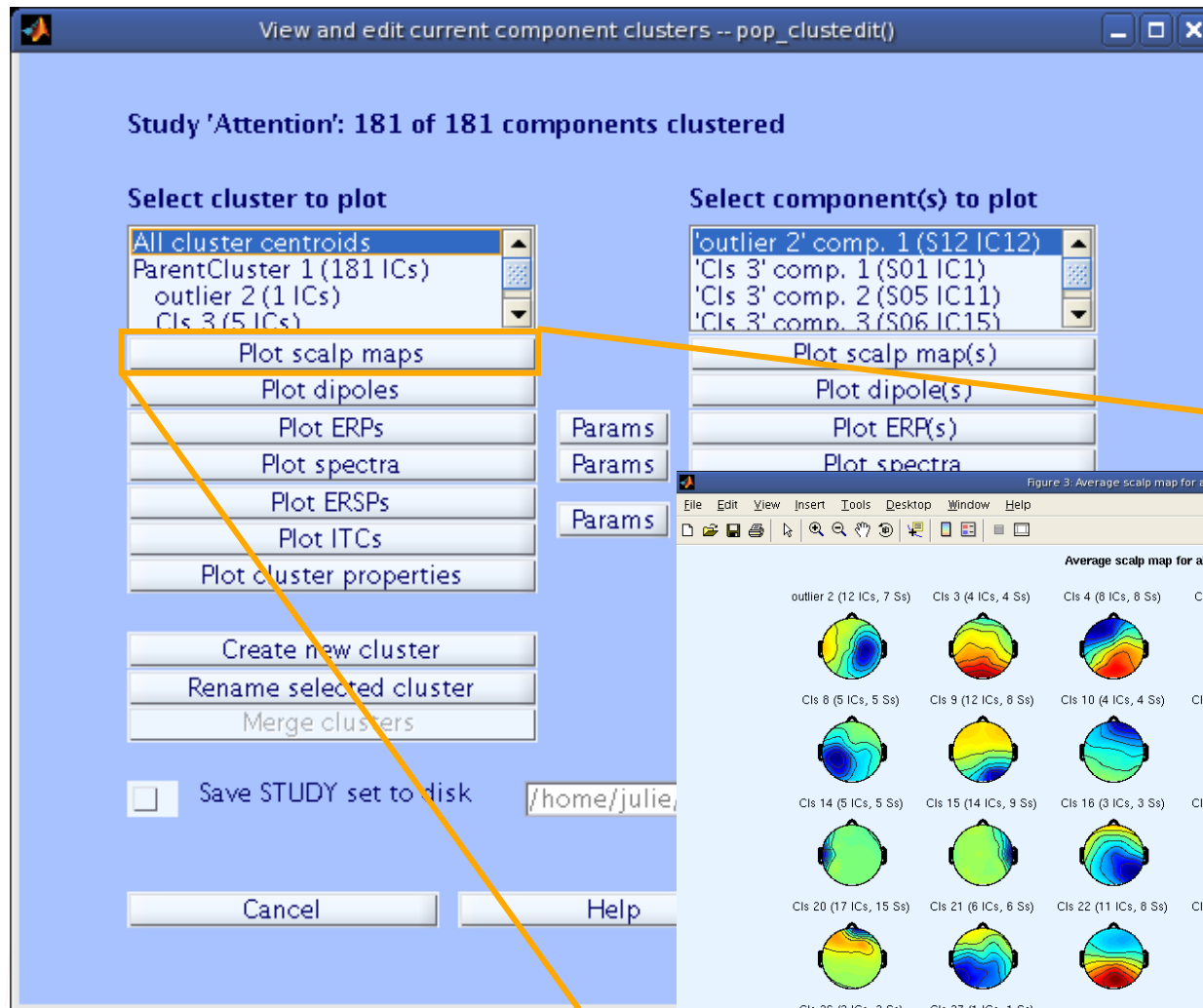
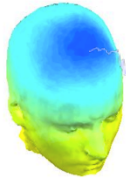
Study filename:
Study task name
Nb of subjects
Nb of conditions
Nb of sessions
Nb of groups

Epoch consistency yes
Channels per frame 31
Channel locations yes
Clusters 26
Status Pre-clustered
Total size (Mb) 39.1

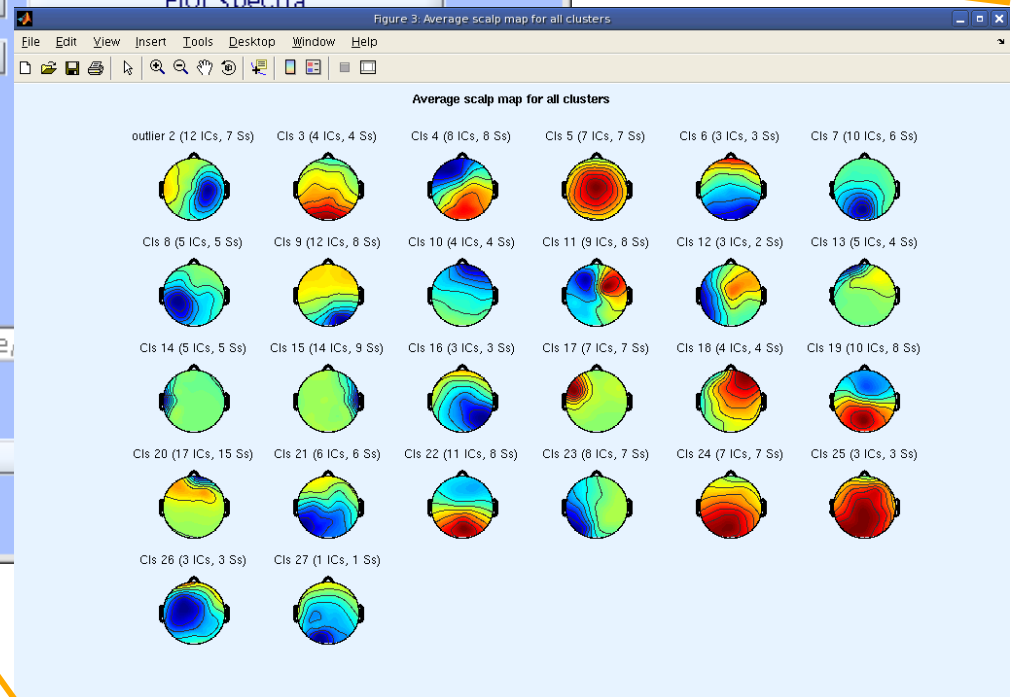
- Edit study info
- Precompute channel measures
- Plot channel measures
- Precompute component measures
- Build preclustering array
- Cluster components
- Edit/plot clusters**



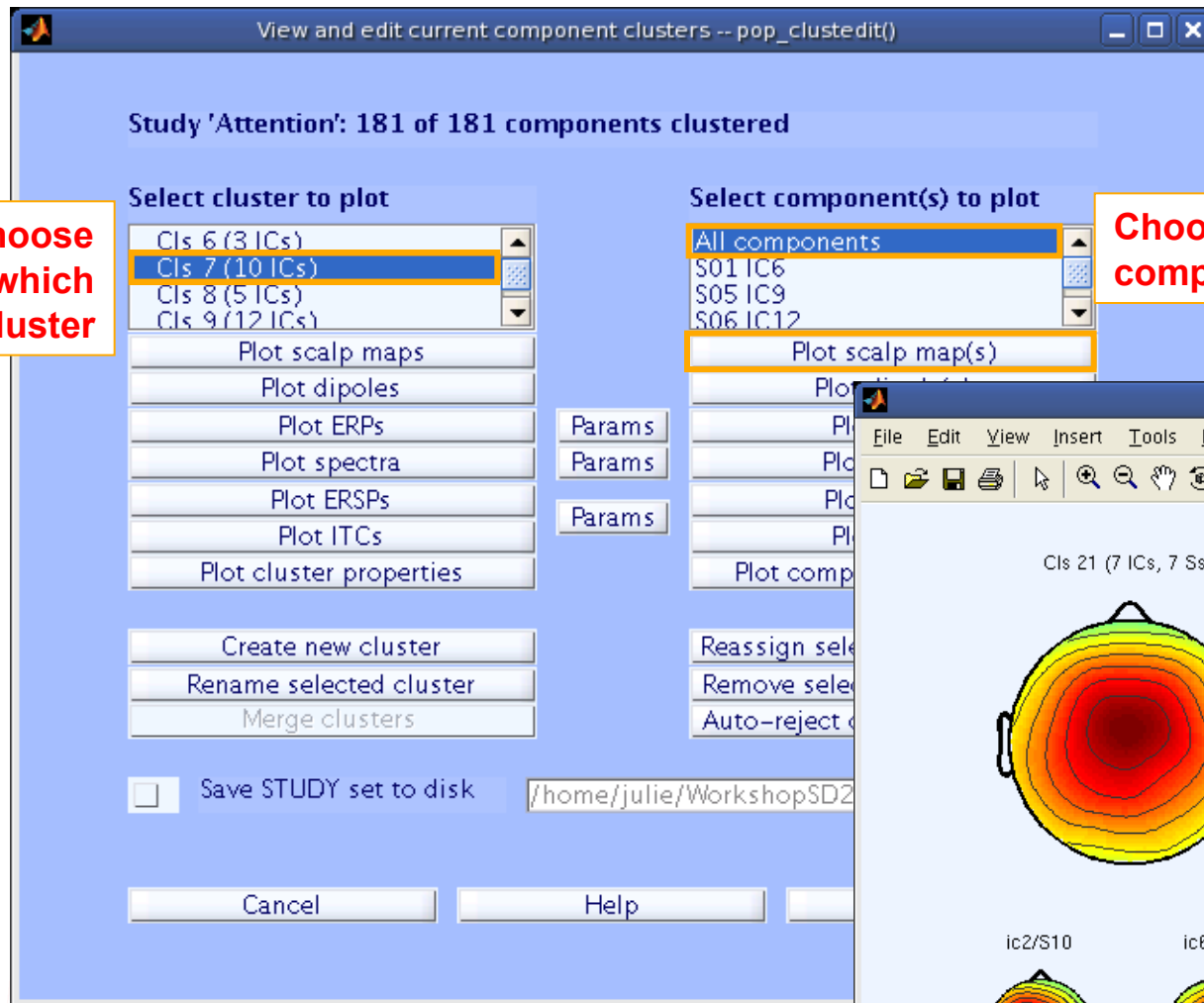
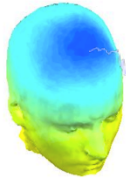
Plot cluster data



Plot mean scalp maps for easy reference

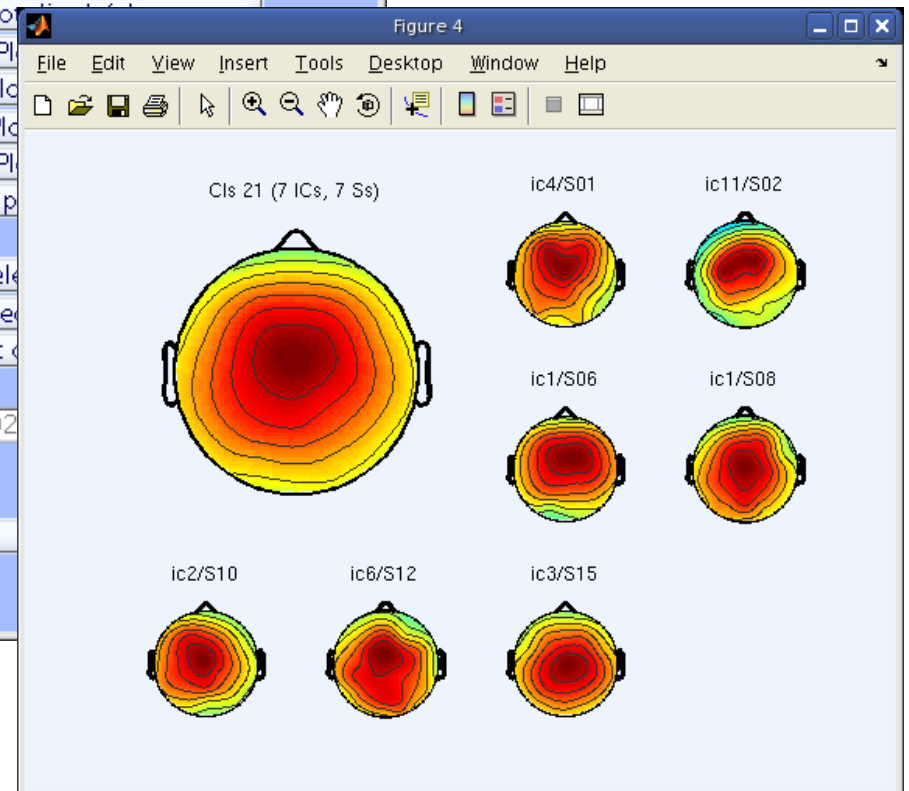


Plot cluster data

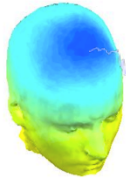


Choose
which
cluster

Choose which
components



Plot cluster data



Clis 19 - 5 sets - 14 components (14 dipoles)

File Edit View Insert Tools Desktop Window Help

15 dipoles:
Plot one
Keep|Next
Next
Prev
Keep|Prev
1
IC3, S02
RV: 2.62%
X tal: -6
Y tal: -13
Z tal: 21
Display:
Mesh on
Tight view
Sagittal view
Coronal view
Top view
No controls

Plot scalp maps
Plot dipoles
Plot ERPs
Plot spectra
Plot ERSPs
Plot ITCs
Plot cluster properties
Create new cluster
Rename selected cluster
Merge clusters
Save STUDY set to disk
Cancel Help Ok

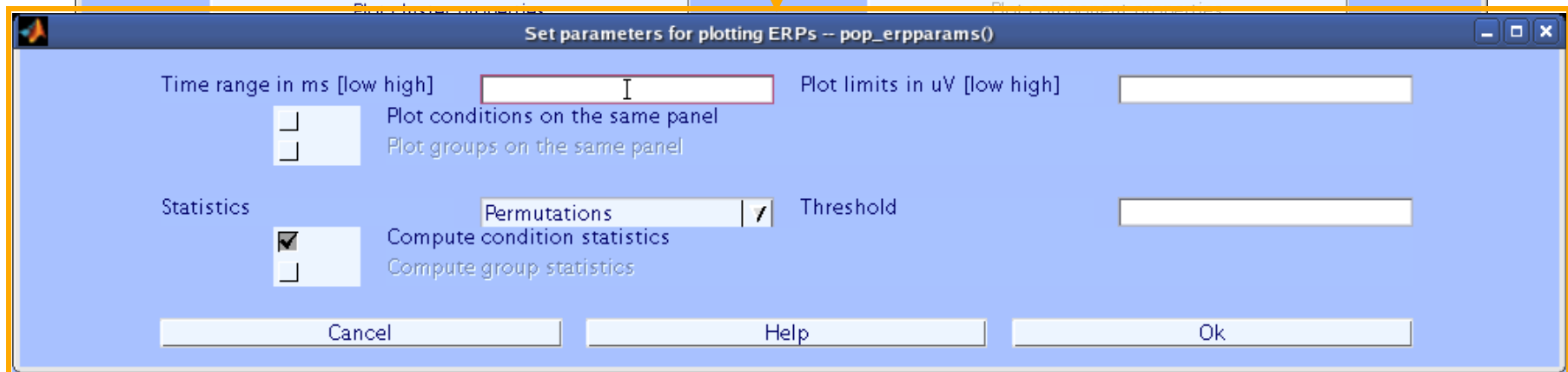
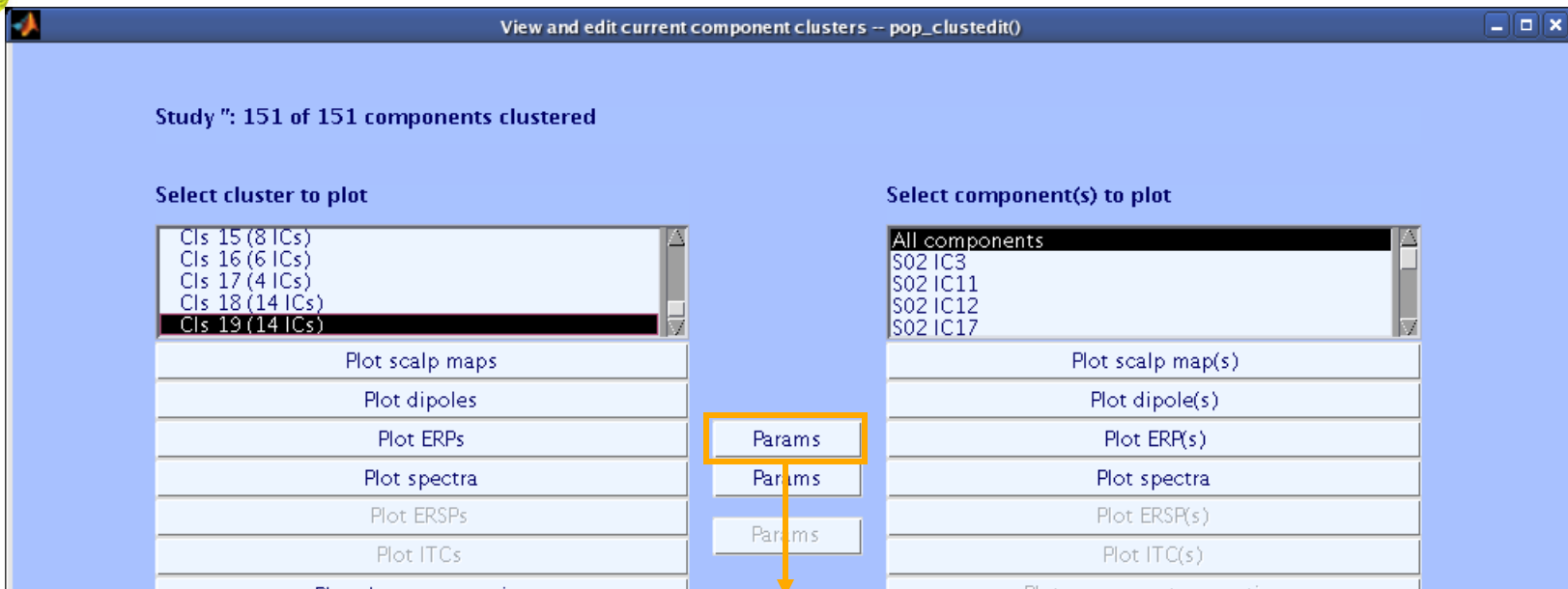
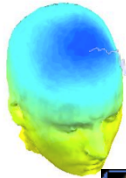
component clusters -- pop_clustedit()

Select component(s) to plot

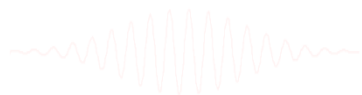
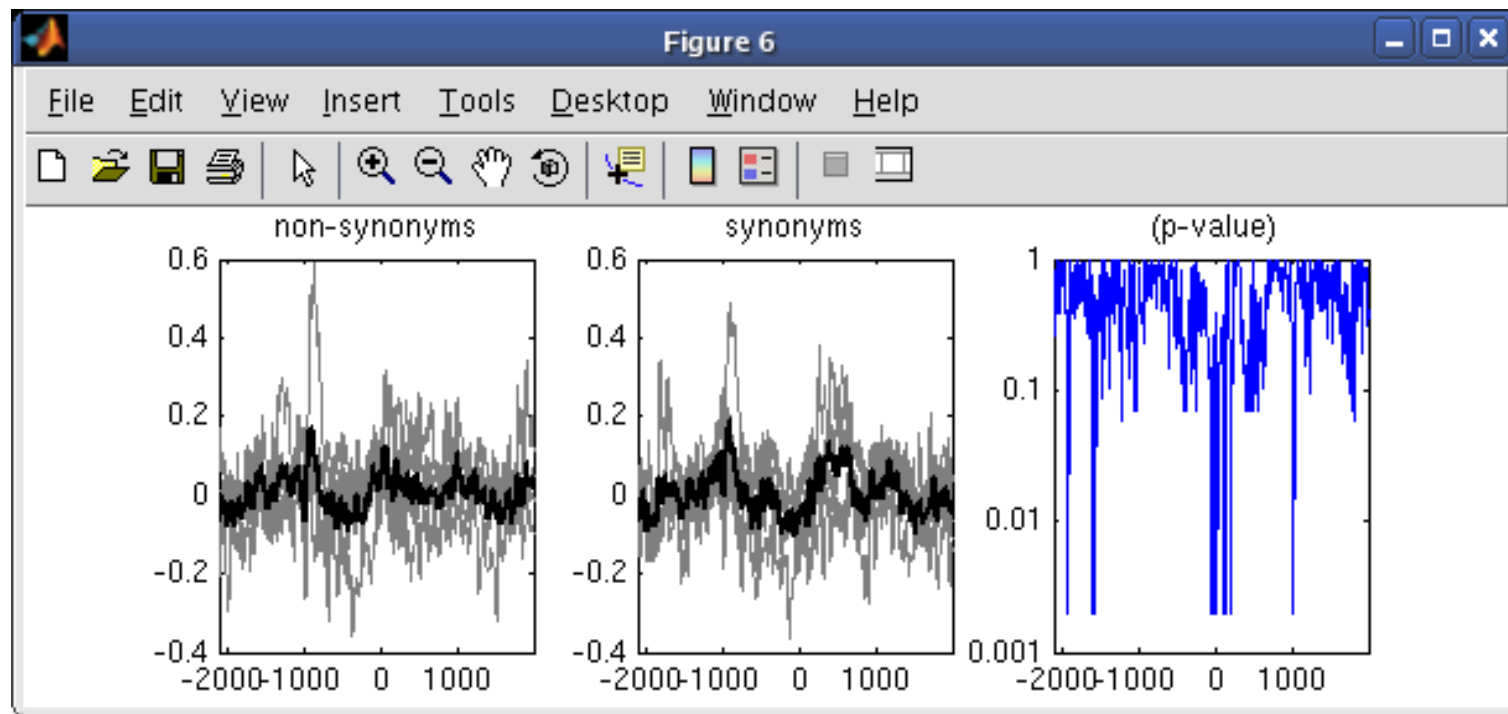
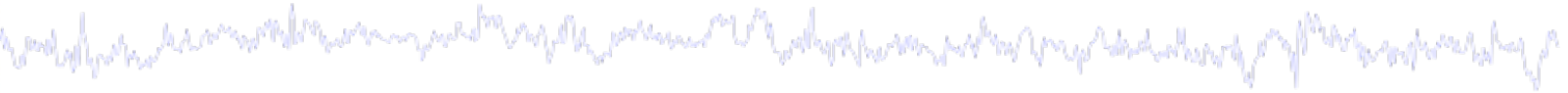
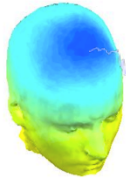
All components
S02 IC3
S02 IC11
S02 IC12
S02 IC17

Plot scalp map(s)
Plot dipole(s)
Plot ERP(s)
Plot spectra
Plot ERSP(s)
Plot ITC(s)
Plot component properties
Reassign selected component(s)
Remove selected outlier comps.
Auto-reject outlier components
/home/julie/workshop06/5subjects/WSstudy.study

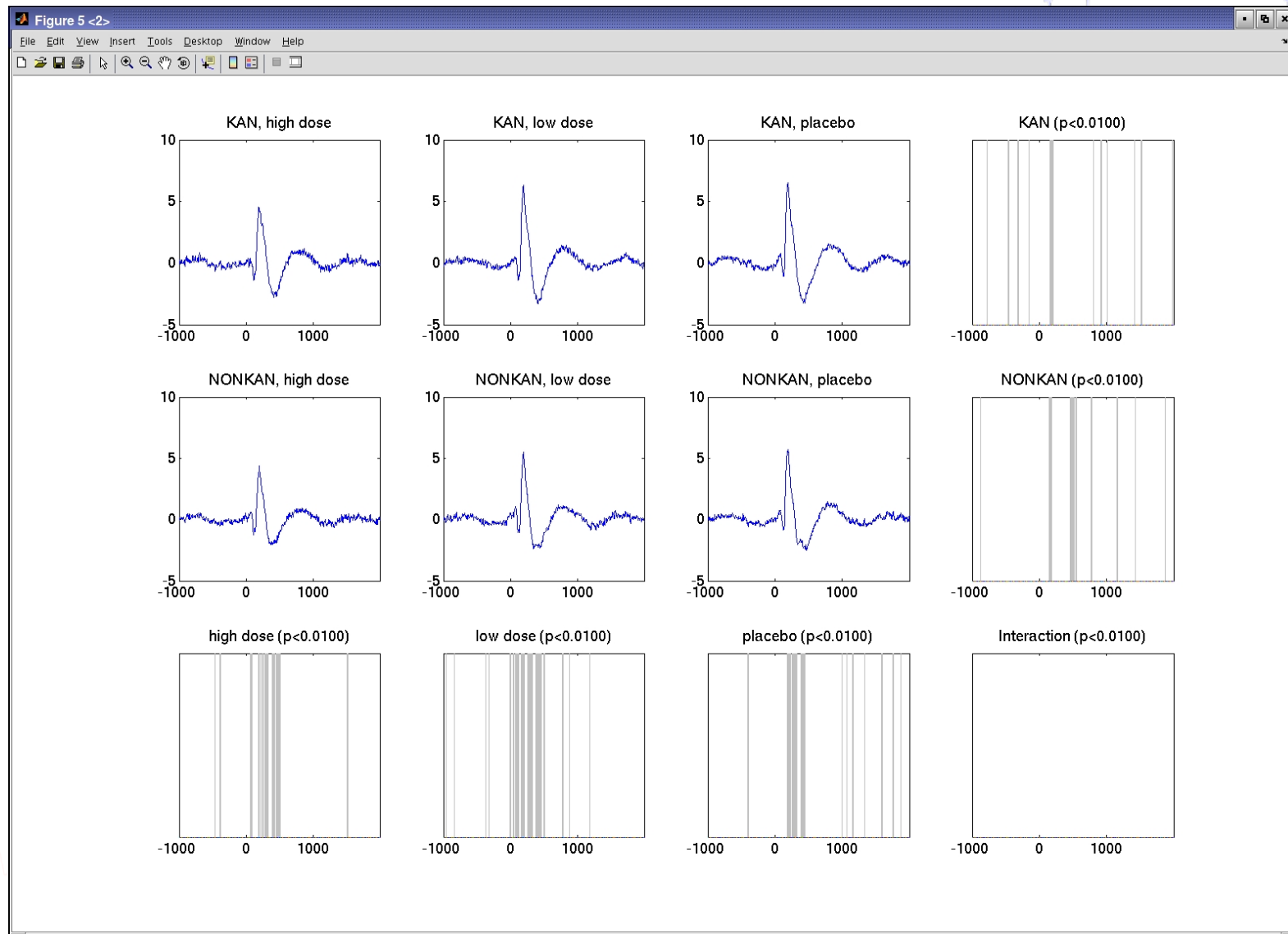
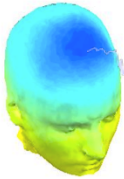
Plot cluster data



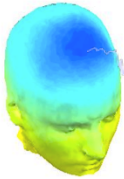
Plot cluster ERP



STUDY ERPs with p-value



Other plotting options...



Set parameters for plotting ERPs -- pop_erpparams()

Time range in ms [low high] Plot limits in uV [low high]

☐ Plot conditions on the same panel

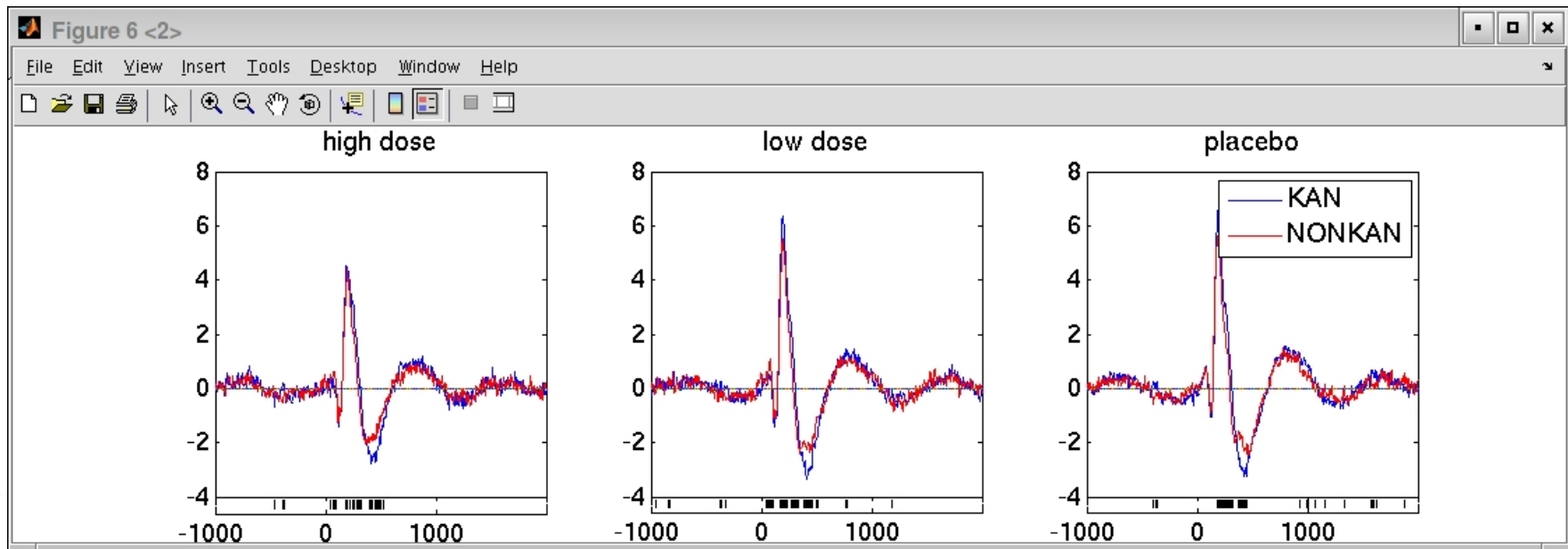
☐ Plot groups on the same panel

Statistics ☐ Permutations ☐ Threshold

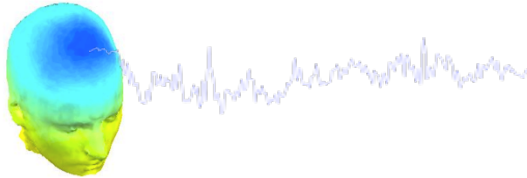
☒ Compute condition statistics

☐ Compute group statistics

Cancel Help Ok



Parameters



ERP

Set ERP plotting parameters -- pop_erpparams()

Time range in ms [low high]

Plot scalp map at latency [ms]

☐ Plot conditions on the same panel

☐ Plot groups on the same panel

Statistical method to use

☐ Compute condition statistics

☐ Compute group statistics

☐ Use single trials (when available)

☐ Use False Discovery Rate to correct for multiple comparisons

Plot limits in uV [low high]

Display filter in Hz [high]

Statistical threshold (p<)

Spectrum

Set spectrum plotting parameters -- pop_specparams()

Frequency [low_Hz high_Hz]

Plot limits [low high]

Plot scalp map at freq. [Hz]

☐ Subtract individual subject mean spectrum

☐ Plot conditions on the same panel

☐ Plot groups on the same panel

ERSP/ITC

Set ERSP/ITC plotting parameters -- pop_erspparams()

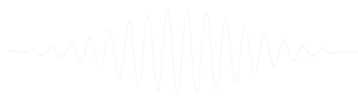
Time range in ms [Low High]

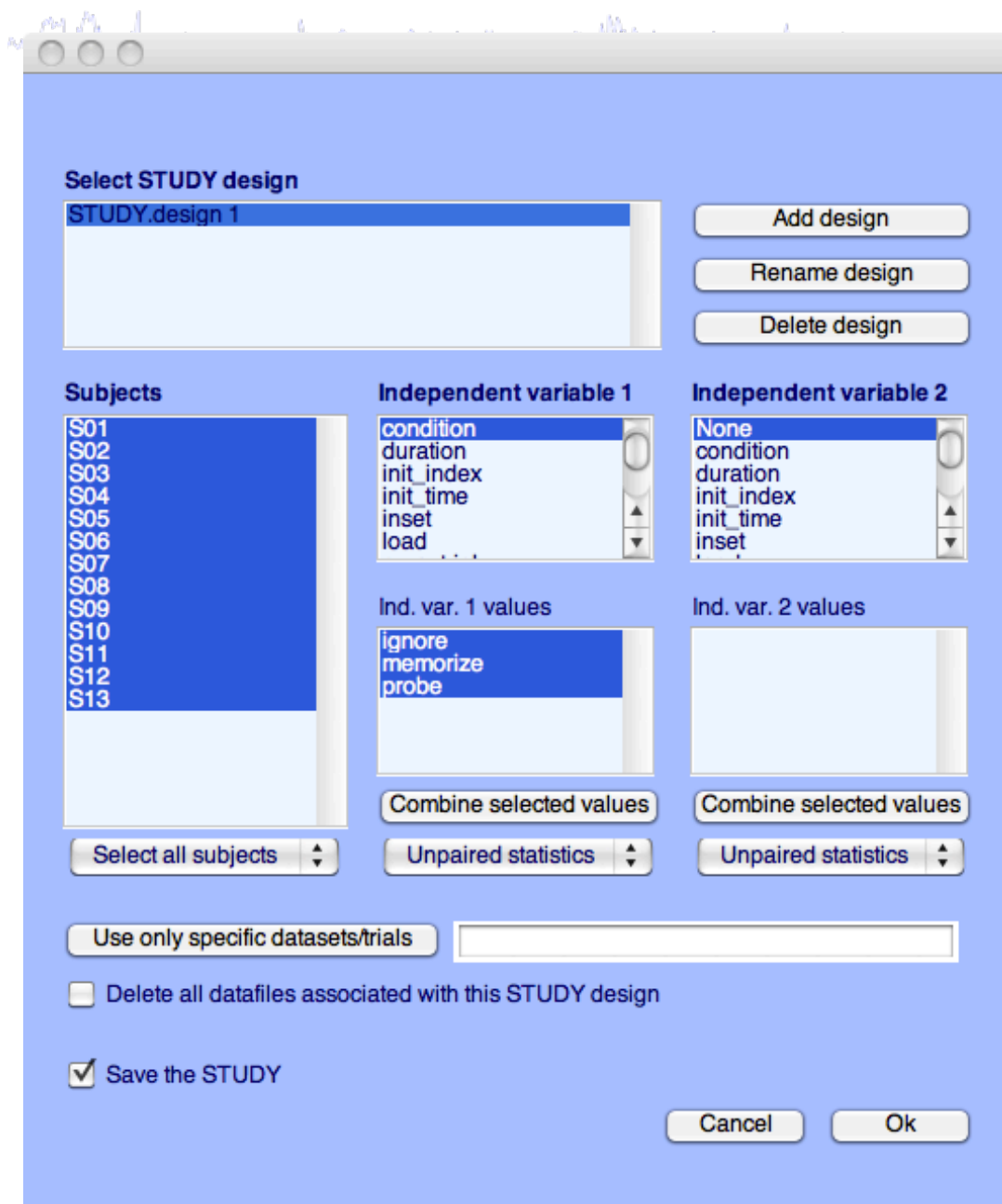
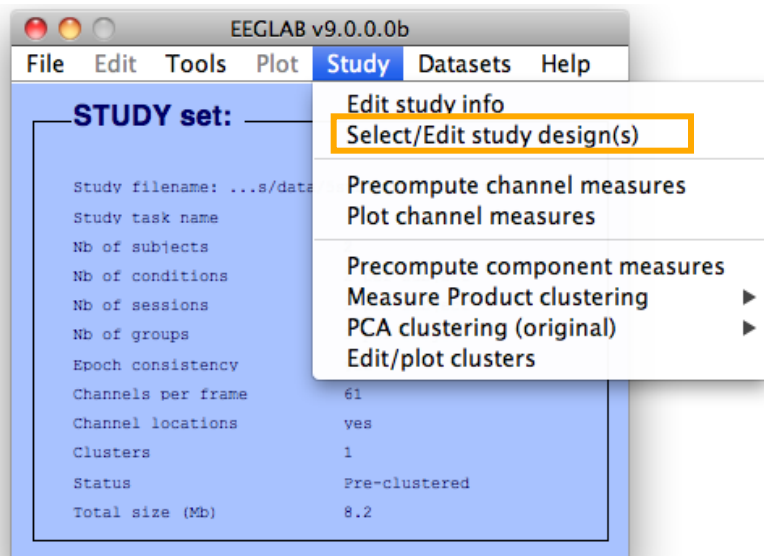
Freq. range in Hz [Low High]

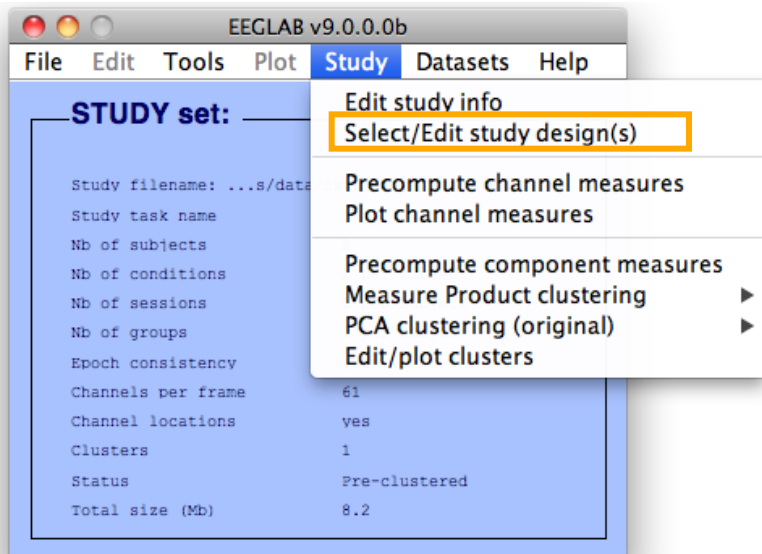
Power limits in dB [Low High]

☒ Compute ERSP baseline across conditions

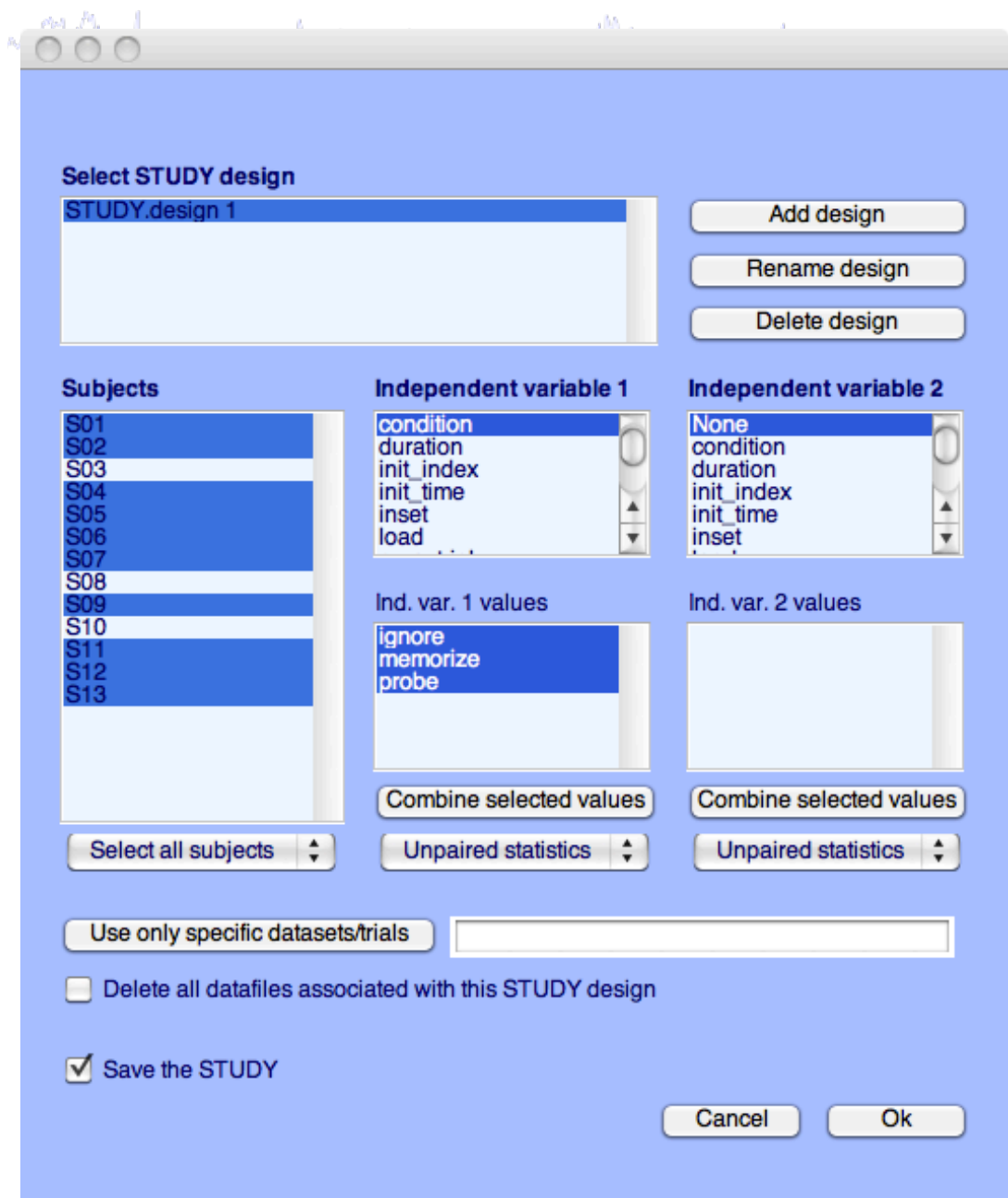
ITC limit (0-1) [High]



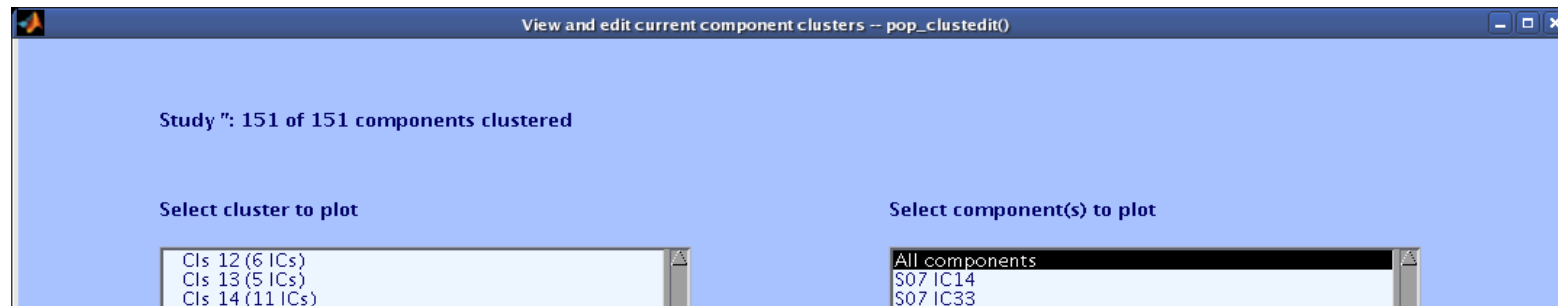
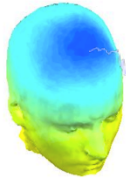




Select subjects



Reassigning components



Select component(s) to plot

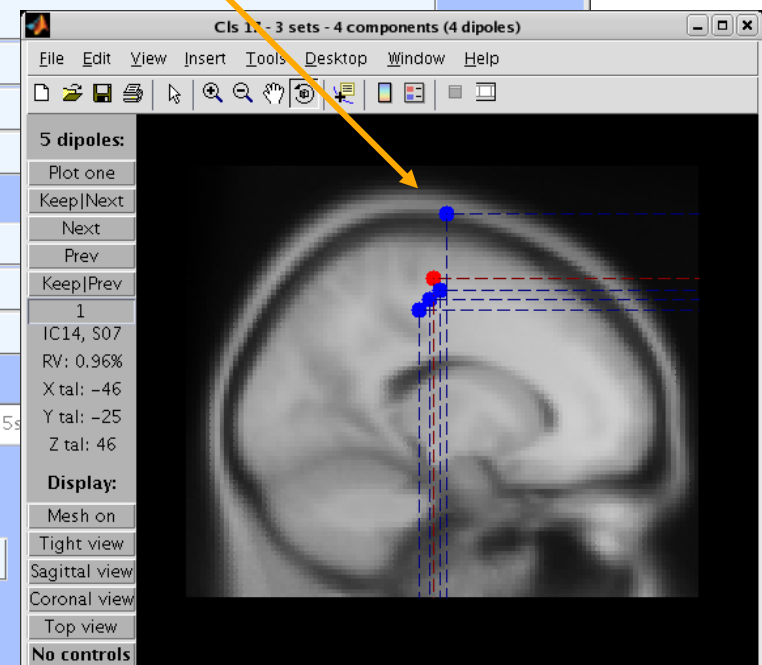
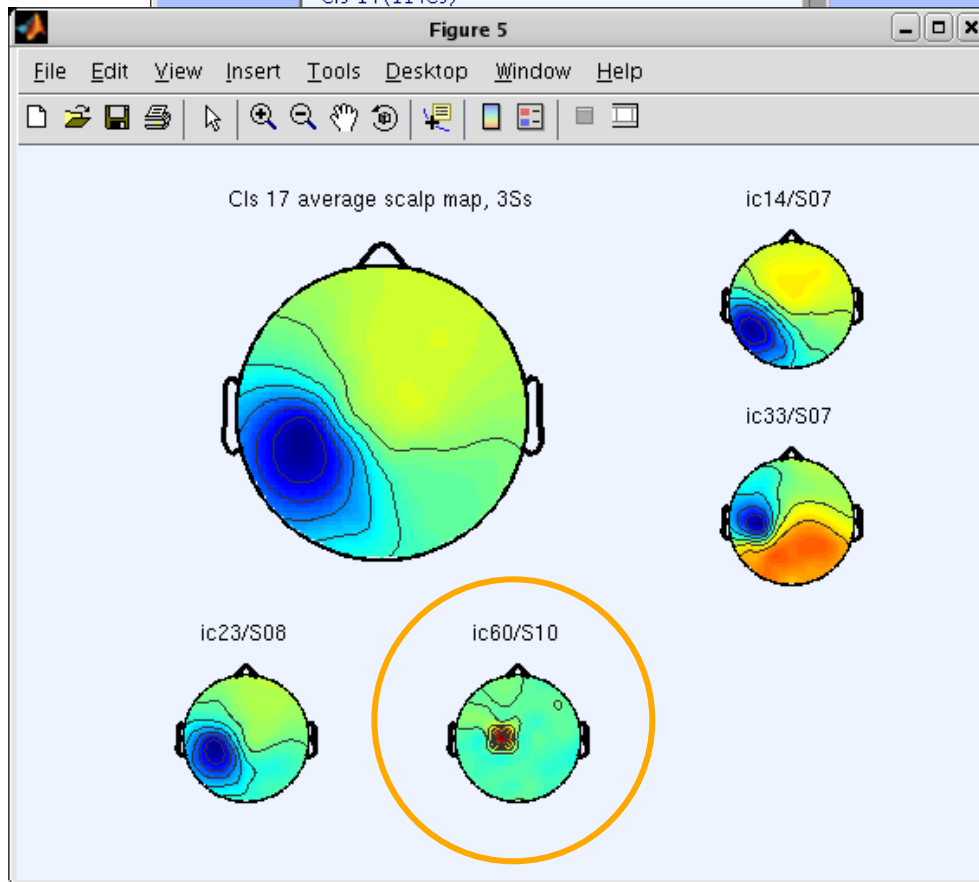
All components

- S07 IC14
- S07 IC33
- S08 IC23
- S10 IC60

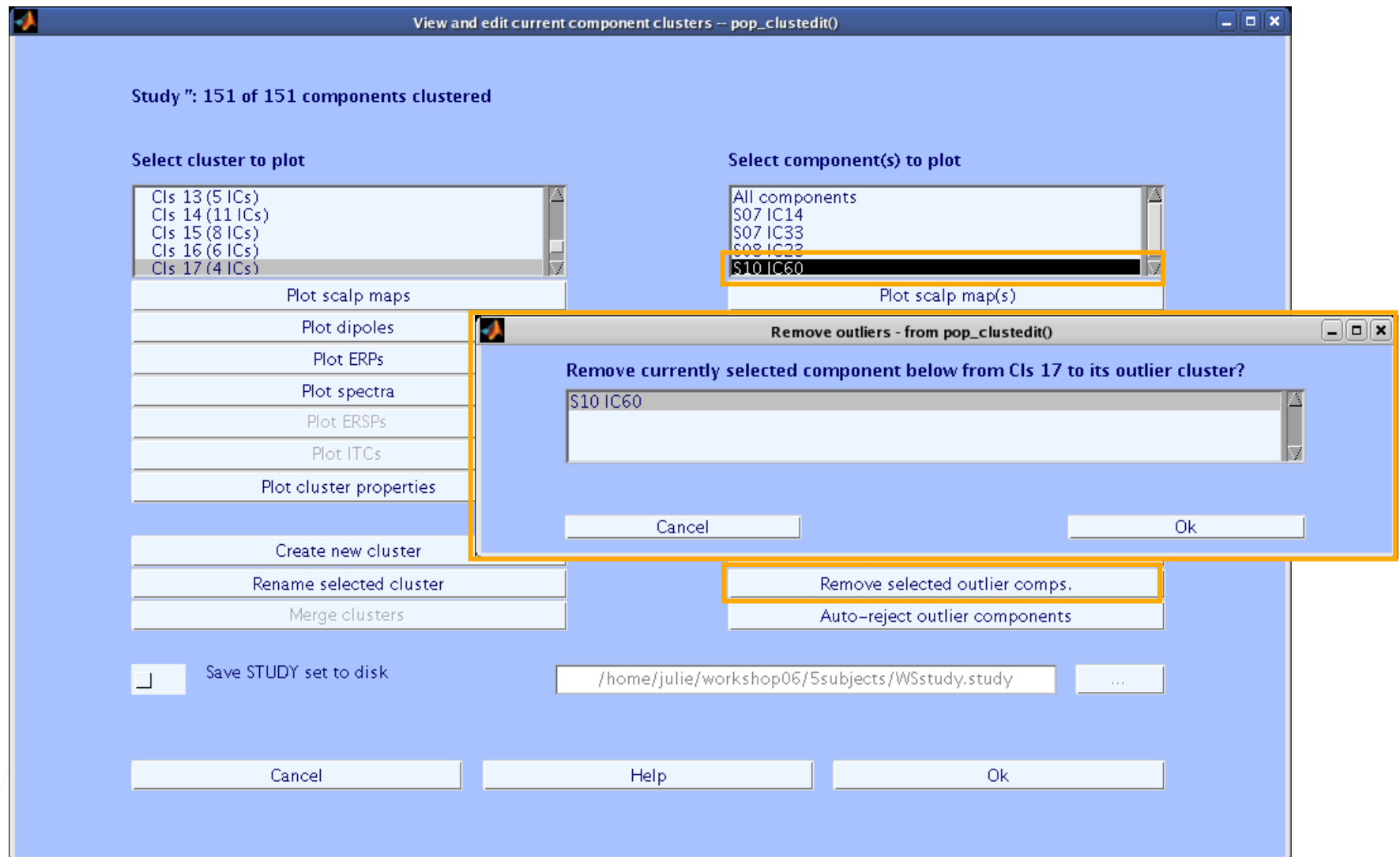
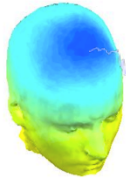
Plot scalp map(s)

Plot dipole(s)

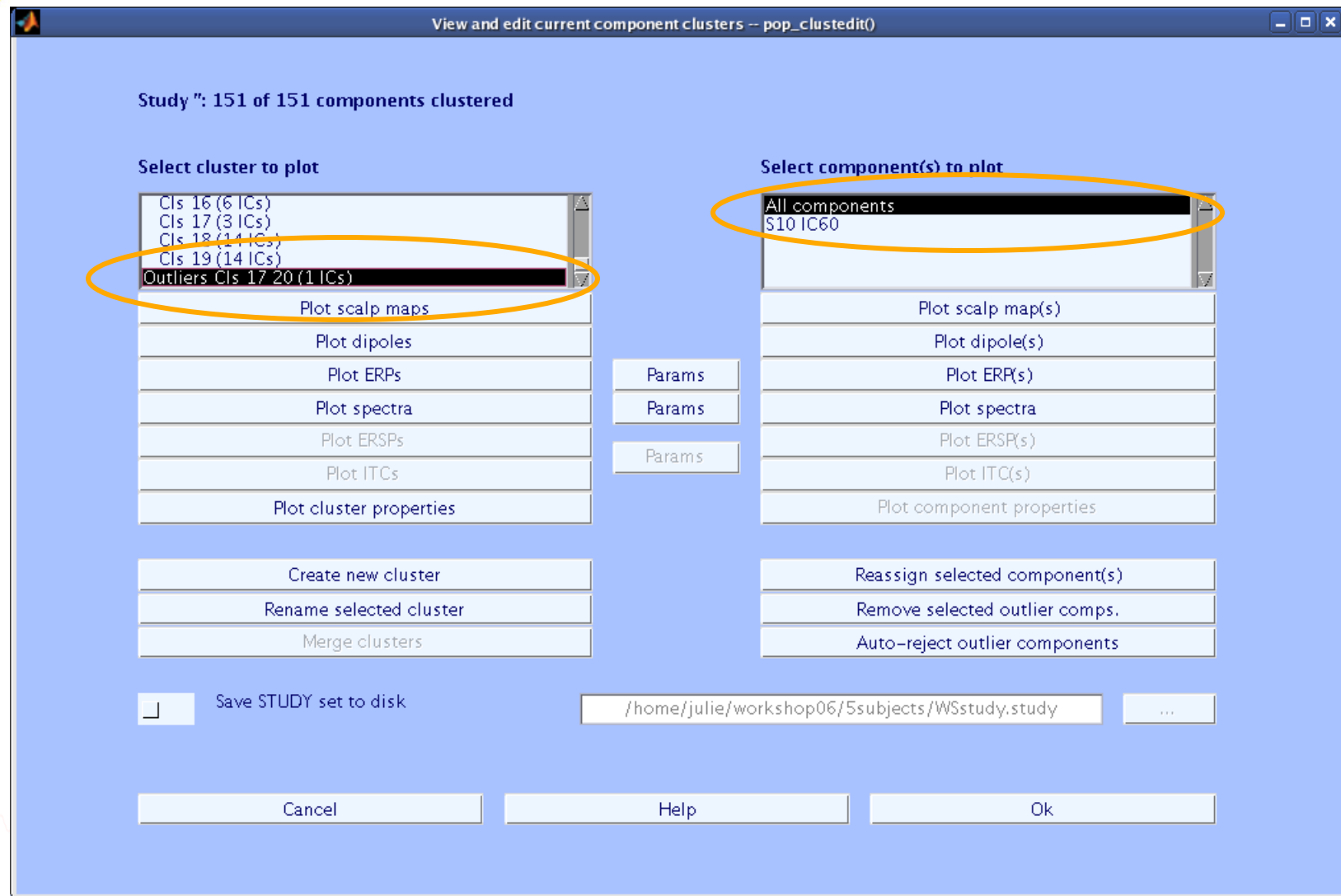
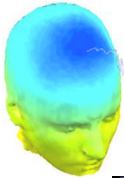
Plot ERP(s)



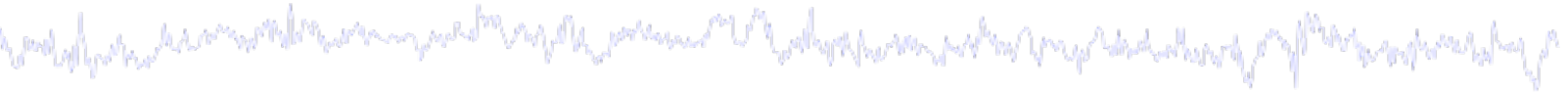
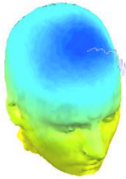
Reassigning components



Outlier cluster reassignment



Exercise



Suggestion:

Load stern.study in STUDY folder

From the GUI, compute ERP for data channels. Plot grand average ERP for all channels. Experiment with statistics.

Then move to the plotting cluster function. Plot ERSP for frontal midline theta cluster (cluster 19) and remove outliers by hand.

Build a STUDY design to compare letter with high memory load versus letter with low memory load. Recompute spectrum for components and compare the two conditions for the frontal midline cluster (cluster 19).

