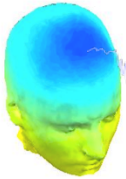


STUDY design and plotting overview



STEP 1

Build a STUDY

STEP 2

Build design(s)

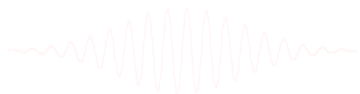
STEP 3

Precompute the data

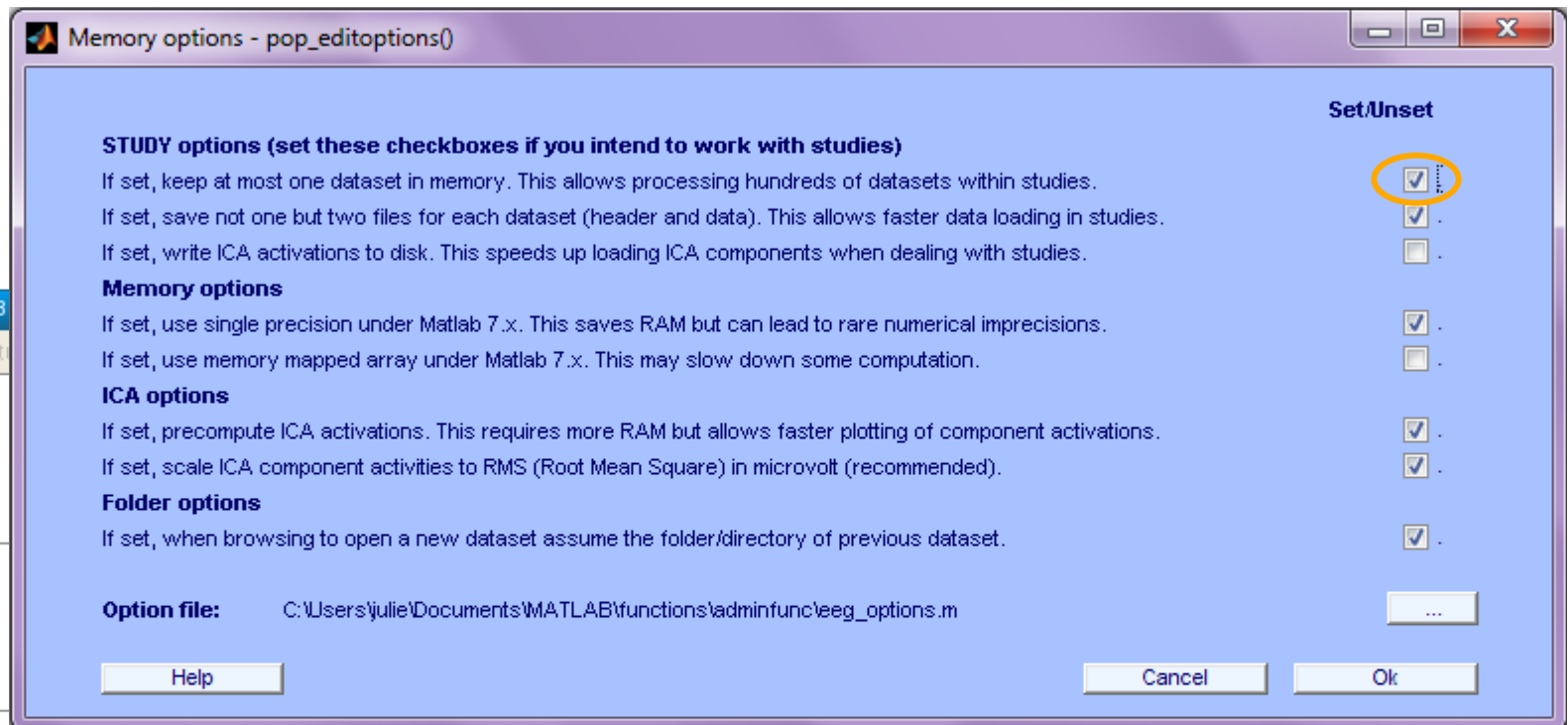
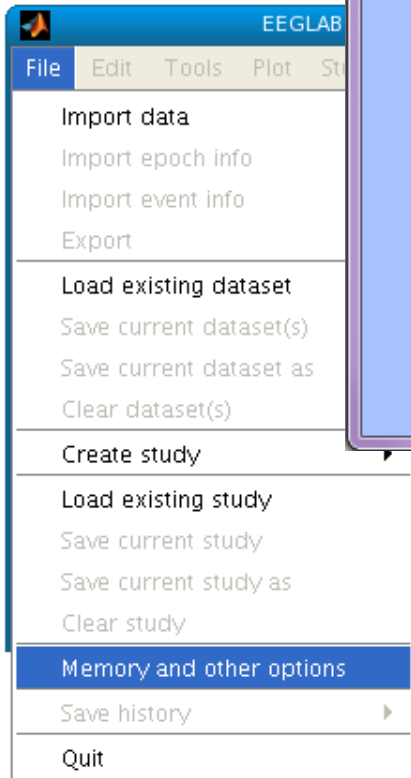
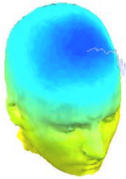
STEP 4

Plot the data

Exercise...

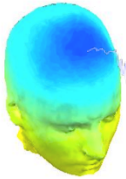


Memory options



Memory options should change when using STUDY vs single dataset

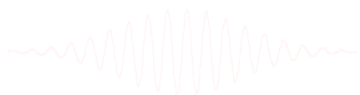
Build a STUDY



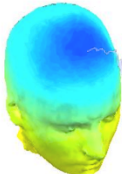
EEGLAB v6.0b

File Edit Tools Plot Study Datasets Help

- Import data
- Import epoch info
- Import event info
- Export
- Load existing dataset
- Save current dataset(s)
- Save current dataset as
- Clear dataset(s)
- Create study**
 - Using all loaded datasets
 - Browse for datasets**
- Load existing study
- Save current study
- Save current study as
- Clear study
- Memory and other options
- Save history
- Quit



Build a STUDY, cont'd



Create a new STUDY set -- pop_study()

Create a new STUDY set

STUDY set name:

STUDY set task name:

STUDY set notes:

	dataset filename	browse	subject	session	condition	group	
1	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Select by r.v. <input type="button" value="Clear"/>
2	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Clear"/>
3	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
4	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
5	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
6	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
7	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
8	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
9	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
10	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

Important note: Removed datasets will not be saved before being deleted from EEGLAB memory

< Page 1 >

Update dataset info - datasets stored on disk will be overwritten (unset = Keep study info se

Delete cluster information (to allow loading new datasets, set new components for clustering

Choose dataset to add to STUDY -- pop_study()

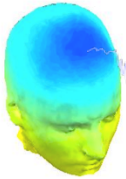
Look in: S01

Name	Date modified	Type
Ignore.set	11/8/2009 7:06 PM	SET File
Memorize.set	11/8/2009 7:06 PM	SET File
Probe.set	11/12/2009 10:02 ...	SET File

File name:

Files of type: (*.set, *.SET)

Edit dataset info



Create a new STUDY set -- pop_study()

Edit STUDY set information - remember to save changes

STUDY set name:

STUDY set task name:

STUDY set notes:

	dataset filename	browse	subject	session	condition	group	Select by r.v.	
1	/Volumes/donnees/data/STU[...]	...	S01	<input type="checkbox"/>	memorize		All comp.	Clear
2	/Volumes/donnees/data/STU[...]	...	S01	<input type="checkbox"/>	ignore		All comp.	Clear
3	/Volumes/donnees/data/STU[...]	...	S01	<input type="checkbox"/>	probe		All comp.	Clear
4	/Volumes/donnees/data/STU[...]	...	S02	<input type="checkbox"/>	memorize		All comp.	Clear
5	/Volumes/donnees/data/STU[...]	...	S02	<input type="checkbox"/>	ignore		All comp.	Clear
6	/Volumes/donnees/data/STU[...]	...	S02	<input type="checkbox"/>	probe		All comp.	Clear
7	/Volumes/donnees/data/STU[...]	...	S03	<input type="checkbox"/>	memorize		All comp.	Clear
8	/Volumes/donnees/data/STU[...]	...	S03	<input type="checkbox"/>	ignore		All comp.	Clear
9	/Volumes/donnees/data/STU[...]	...	S03	<input type="checkbox"/>	probe		All comp.	Clear
10	/Volumes/donnees/data/STU[...]	...	S04	<input type="checkbox"/>	memorize		All comp.	Clear

Important note: Removed datasets will not be saved before being deleted from EEGLAB memory

< Page 1 >

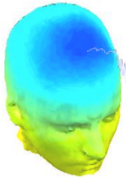
Dataset info (condition, group, ...) differs from study info. [set] = Overwrite dataset info.

Delete cluster information (to allow loading new datasets, set new components for clustering, etc.)

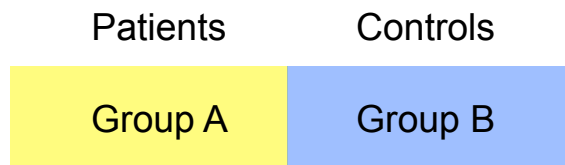
Help Cancel Ok



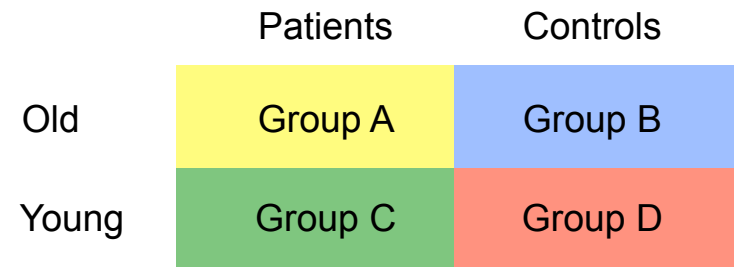
Experimental design



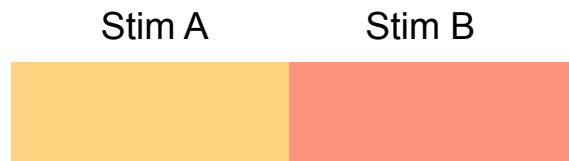
1x2 unpaired



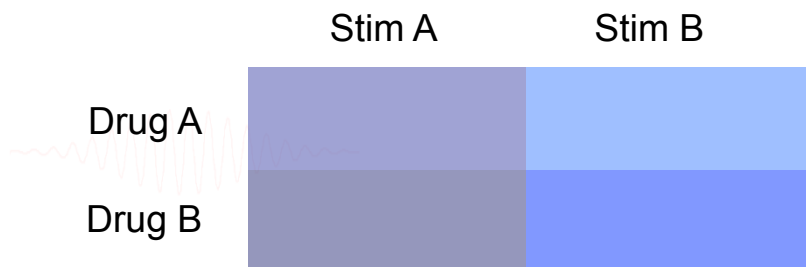
2x2 unpaired



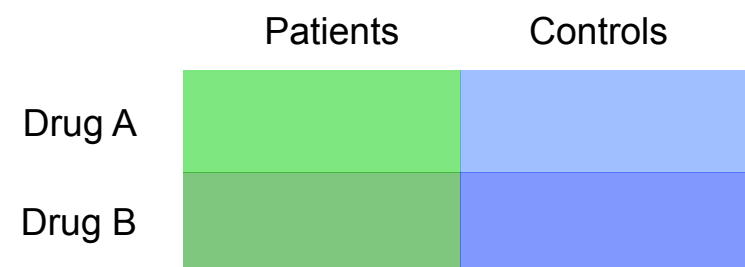
1x2 paired

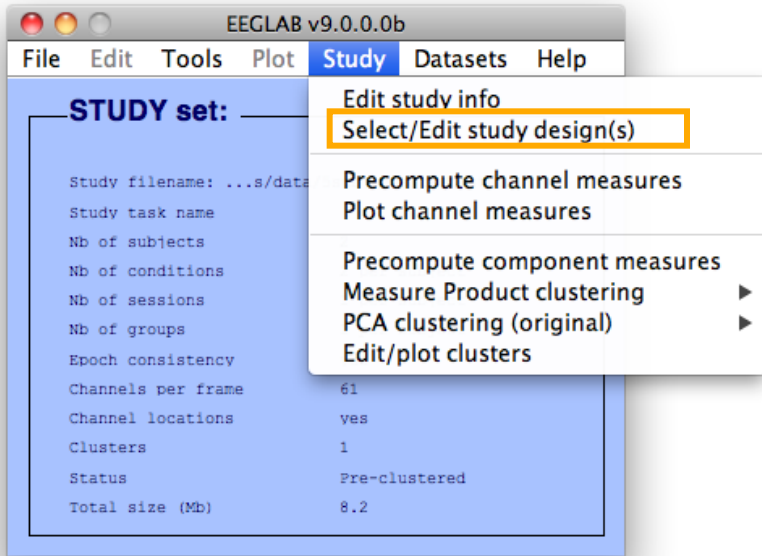


2x2 paired

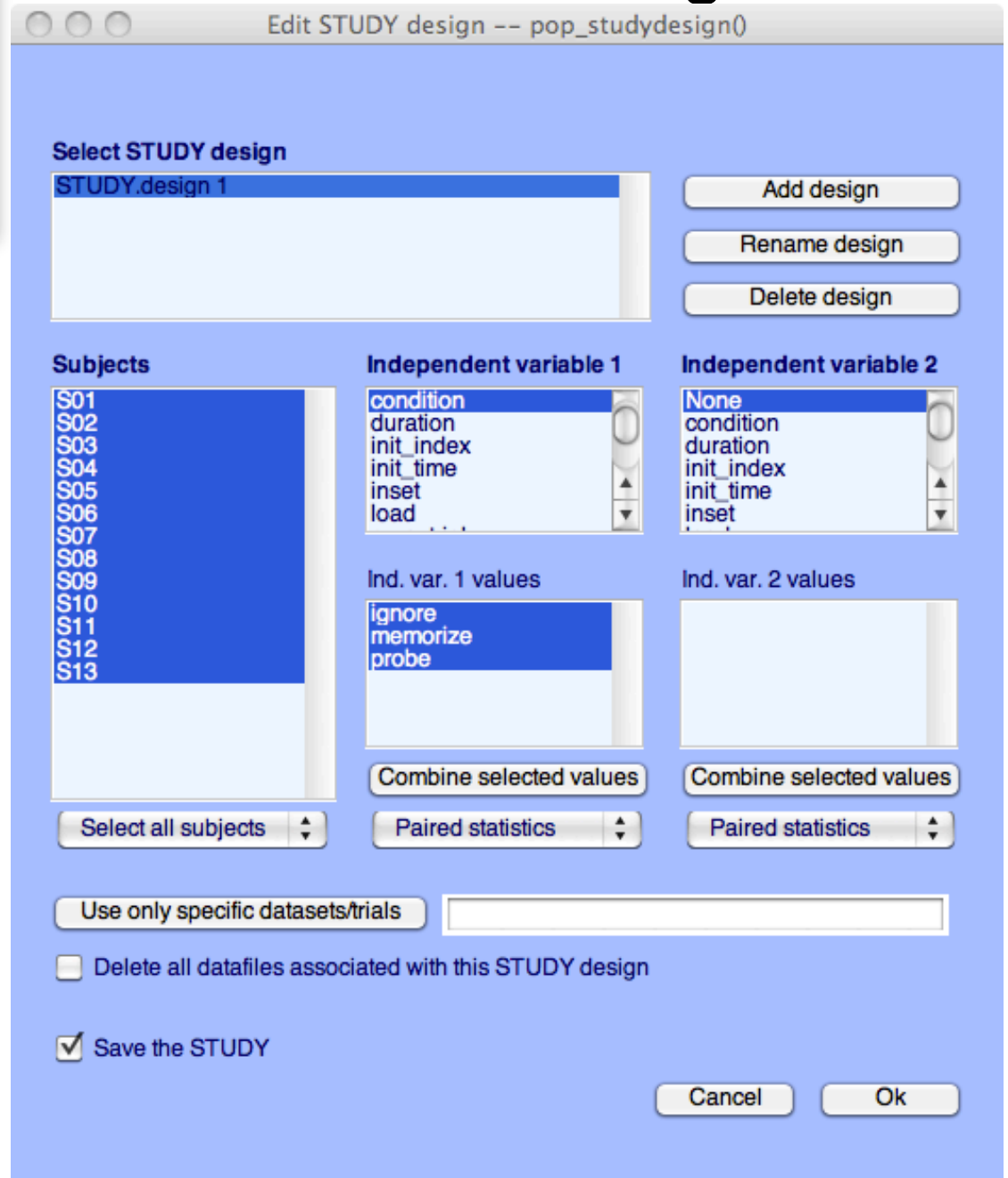


2x2 paired & unpaired

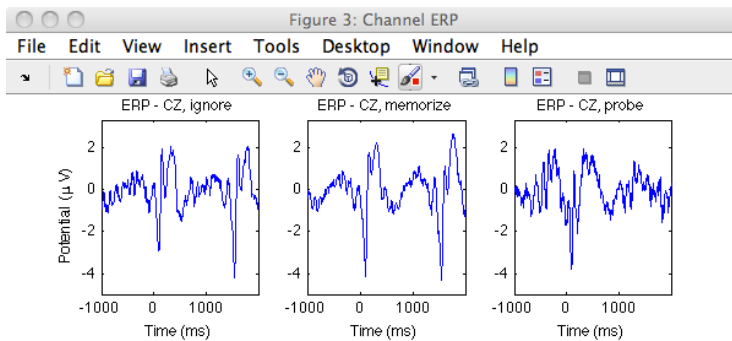




Create design



1x3 design



EEGLAB v7.1.7.18b

File Edit Tools Plot Study Datasets Help

Dataset info
Event fields
Event values
About this dataset
Channel locations
Select data
Select data using events
Select epochs or events
Copy current dataset
Append datasets
Delete dataset(s)
ICA weights
Dataset size (Mb)

ntinuous -- Rere...

70
610133
1
1303
250
0.000
2440.528
CZ
Yes
Yes
348

Edit event values -- pop_editevents()

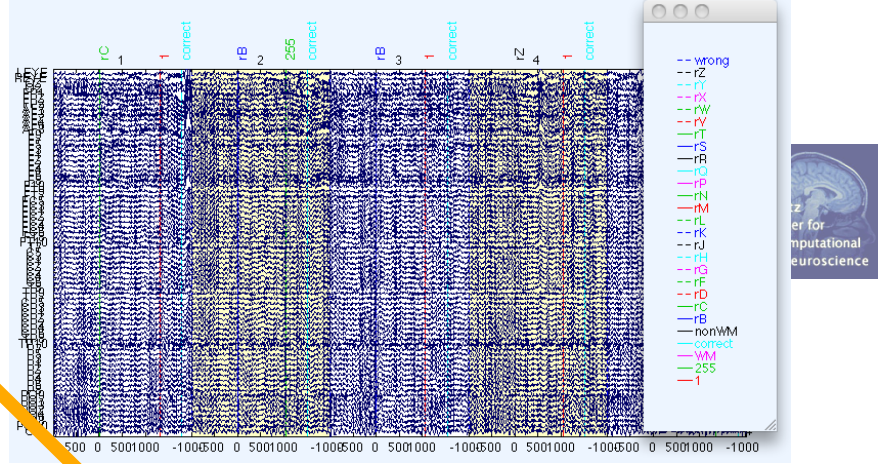
Edit event field values (currently 1303 events)

Number of event fields is unlimited

Trial	1
Event_Type	Picture
Type	nonWM
Latency (sec)	3.112
Time	0
Uncertainty	2
Duration	50283
Uncertainty2	3
ReqTime	0
ReqDur	50000
init_index	1
init_time	0.0227
Duration (sec)	0
Load	

Event Num: 1

Re-order events (for review only)
Main sorting field: No field selected
Secondary sorting field: No field selected



Create a new STUDY set -- pop_study()

Edit STUDY set information - remember to save changes

STUDY set name: Sternberg
STUDY set task name: Sternberg
STUDY set notes:

	dataset filename	browse	subject	session	condition	group	Select by r.v.
1	C:\Users\julie\Documents\Wor...	...	S01		memorize		Comp.: 3 5 ... Clear
2	C:\Users\julie\Documents\Wor...	...	S01		ignore		Comp.: 3 5 ... Clear
3	C:\Users\julie\Documents\Wor...	...	S01		probe		Comp.: 3 5 ... Clear
4	C:\Users\julie\Documents\Wor...	...	S02		memorize		Comp.: 5 6 ... Clear
5	C:\Users\julie\Documents\Wor...	...	S02		ignore		Comp.: 5 6 ... Clear
6	C:\Users\julie\Documents\Wor...	...	S02		probe		Comp.: 5 6 ... Clear
7	C:\Users\julie\Documents\Wor...	...	S03		memorize		Comp.: 6 7 ... Clear
8	C:\Users\julie\Documents\Wor...	...	S03		ignore		Comp.: 6 7 ... Clear
9	C:\Users\julie\Documents\Wor...	...	S03		probe		Comp.: 6 7 ... Clear
10	C:\Users\julie\Documents\Wor...	...	S04		memorize		Comp.: 1 2 ... Clear

Important note: Removed datasets will not be saved before being deleted from EEGLAB memory

Page 1

Dataset info (condition, group, ...) differs from study info. [set] = Overwrite dataset info.
Delete cluster information (to allow loading new datasets, set new components for clustering, etc.)

Edit STUDY design -- pop_studydesign()

Select STUDY design
STUDY design 1

Subjects: S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S11, S12, S13

Independent variable 1: condition, duration, init_index, init_time, inset, load

Independent variable 2: None, condition, duration, init_index, init_time, inset

Ind. var. 1 values: ignore, memorize, probe

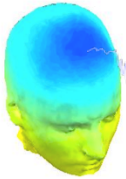
Ind. var. 2 values:

Combine selected values
Paired statistics

Select all subjects
Use only specific datasets/trials

Delete all datafiles associated with this STUDY design
Save the STUDY

Build a STUDY, alternative method



Create a new STUDY set -- pop_study()

Create a new STUDY set

STUDY set name:

STUDY set task name:

STUDY set notes:

	dataset filename	browse	subject	session	condition	group	Select by r.v.	
1	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
2	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
3	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
4	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
5	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
6	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
7	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
8	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
9	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear
10	<input type="text"/>	...	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Clear

Important note: Removed datasets will not be saved before being deleted from EEG LAB memory

< Page 1 >

Update dataset info - datasets stored on disk will be overwritten (unset = Keep study info separate).

Delete cluster information (to allow loading new datasets, set new components for clustering, etc.)

Help Cancel Ok

Choose dataset to add to STUDY -- pop_study()

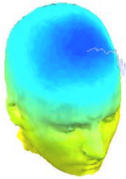
S01

Name	Date Modified
Memorize.icaspec	Thursday, November 12, 2009 9:08 PM
Memorize.icatopo	Monday, November 16, 2009 9:43 PM
Memorize.set	Sunday, November 8, 2009 8:06 AM
Probe.daterp	Monday, June 14, 2010 11:45 PM
Probe.fdt	Thursday, November 12, 2009 11:02 AM
Probe.icaerp	Monday, November 16, 2009 10:01 PM
Probe.icaersp	Tuesday, November 17, 2009 12:05 PM
Probe.icaitc	Tuesday, November 17, 2009 12:05 PM
Probe.icaspec	Thursday, November 12, 2009 9:09 PM
Probe.icatopo	Monday, November 16, 2009 9:44 PM
Probe.set	Thursday, November 12, 2009 11:02 AM
S01.fdt	Tuesday, November 9, 2010 12:05 PM
S01.set	Tuesday, November 9, 2010 12:05 PM

File Format: (*.set, *.SET)

Cancel Open

Edit dataset info



Create a new STUDY set -- pop_study()

Edit STUDY set information - remember to save changes

STUDY set name:

STUDY set task name:

STUDY set notes:

	dataset filename	browse	subject	session	condition	group	Select by r.v.	
1	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S01"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
2	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S02"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
3	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S03"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
4	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S04"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
5	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S05"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
6	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S06"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
7	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S07"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
8	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S08"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
9	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S09"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>
10	<input type="text" value="/Volumes/donnees/data/STU[..."/>	<input type="button" value="..."/>	<input type="text" value="S10"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Comp.: 1 2 ..."/>	<input type="button" value="Clear"/>

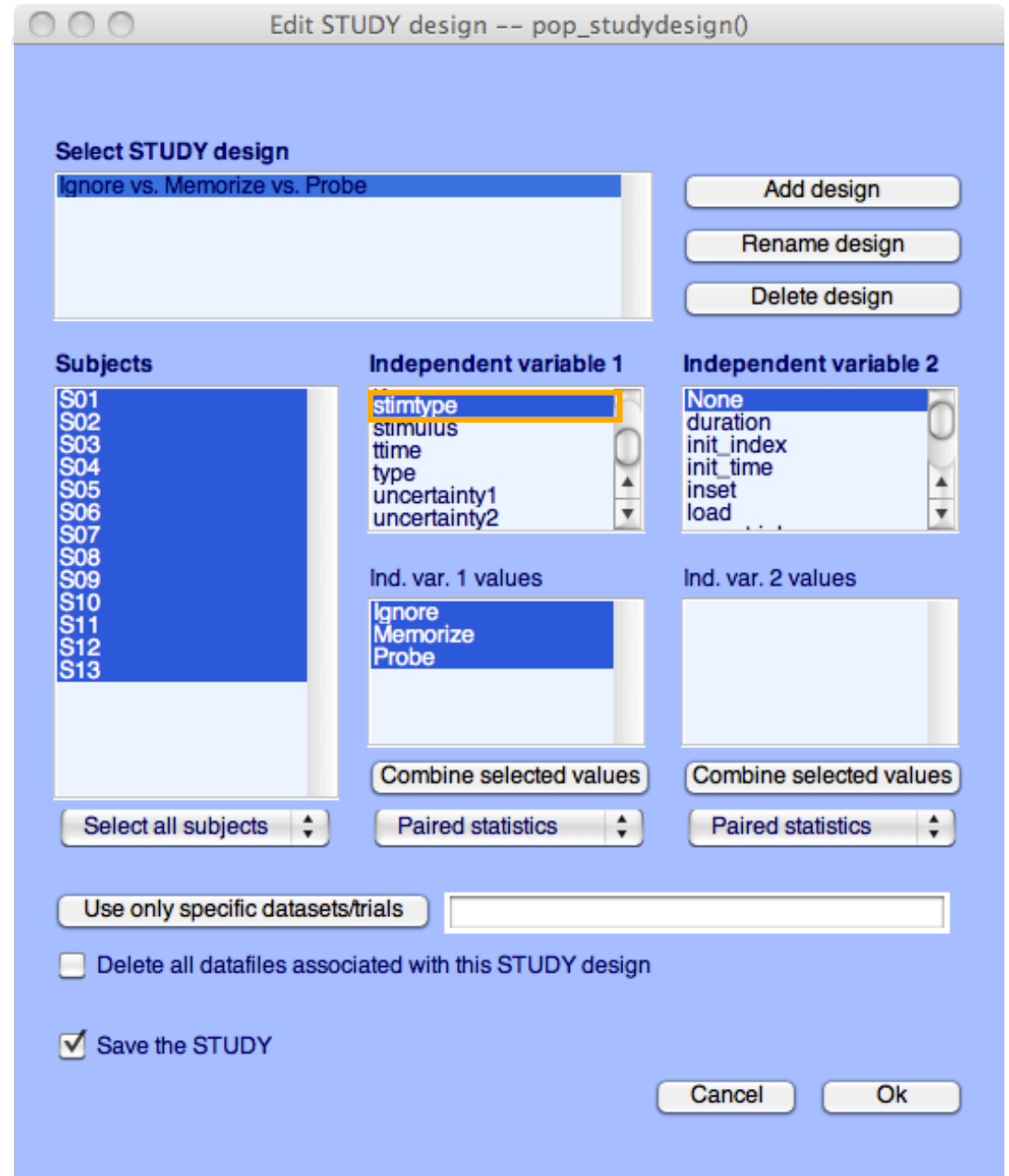
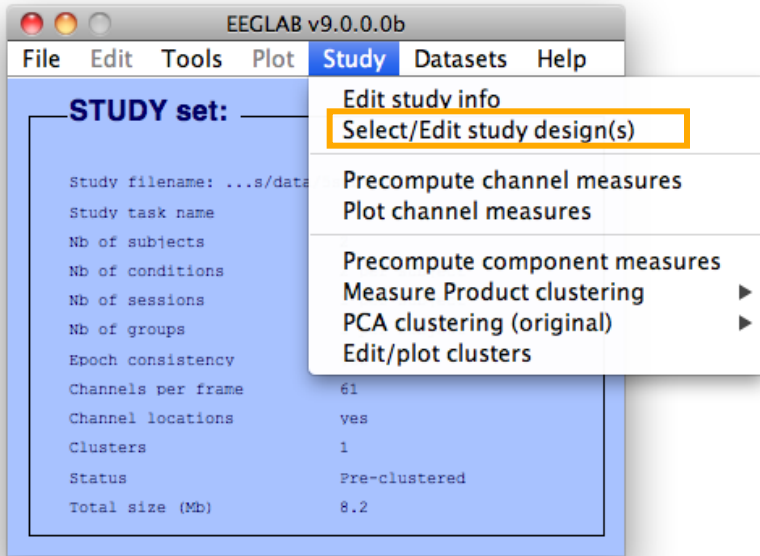
Important note: Removed datasets will not be saved before being deleted from EEGLAB memory

Update dataset info - datasets stored on disk will be overwritten (unset = Keep study info separate).

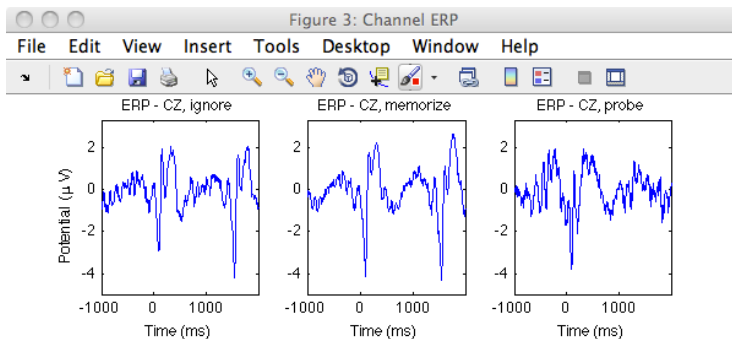
Delete cluster information (to allow loading new datasets, set new components for clustering, etc.)

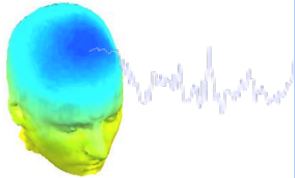


Create design



1x3 design





Edit STUDY design -- pop_studydesign()

Select STUDY design

Audio versus light all subjects
All stimulus type - non dual subjects only
Blank versus other stimulus type - non dual subjects only
Audio preceded by different stimulus types
Audio versus light across sessions - non dual subjects only
Audio versus light across presentation - non dual subjects only

Add design
Rename design
Delete design

Subjects

c1
c2
c3
c4
c5
c6
c7
c8
nd1
nd2
nd3
nd4
nd5
nd6
nd7
nd8

Select all subjects

Independent variable 1

None
group
stimulusType
presentation
session
preevent

Ind. var. 1 values

audio
blank
both
light
audio - light

Combine selected values
Unpaired statistics

Independent variable 2

None
group
stimulusType
presentation
session
preevent

Ind. var. 2 values

control
nondual

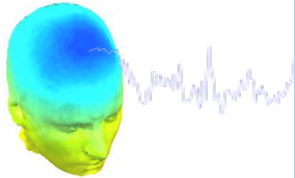
Combine selected values
Unpaired statistics

Use only specific datasets/trials

Delete all datafiles associated with this STUDY design

Save the STUDY

Cancel Ok



Edit STUDY design -- pop_studydesign()

Select STUDY design

Audio versus light all subjects
All stimulus type - non dual subjects only
Blank versus other stimulus type - non dual subjects only
Audio preceded by different stimulus types
Audio versus light across sessions - non dual subjects only
Audio versus light across presentation - non dual subjects only

Add design
Rename design
Delete design

Subjects

c1
c2
c3
c4
c5
c6
c7
c8
nd1
nd2
nd3
nd4
nd5
nd6
nd7
nd8

Select all subjects

Independent variable 1

None
group
stimulusType
presentation
session
preevent

Ind. var. 1 values

audio
blank
both
light
audio - light

Combine selected values
Unpaired statistics

Independent variable 2

None
group
stimulusType
presentation
session
preevent

Ind. var. 2 values

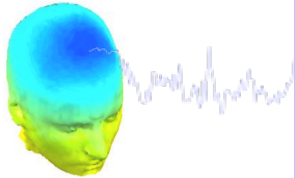
Combine selected values
Unpaired statistics

Use only specific datasets/trials

Delete all datafiles associated with this STUDY design

Save the STUDY

Cancel Ok



Edit STUDY design -- pop_studydesign()

Select STUDY design

Audio versus light all subjects
All stimulus type - non dual subjects only
Blank versus other stimulus type - non dual subjects only
Audio preceded by different stimulus types
Audio versus ligh accross sessions - non dual subjects only
Audio versus light accross presentation - non dual subjects only

Add design
Rename design
Delete design

Subjects

c1
c2
c3
c4
c5
c6
c7
c8
nd1
nd2
nd3
nd4
nd5
nd6
nd7
nd8

Select all subjects

Independent variable 1

None
group
stimulusType
presentation
session
preevent

Ind. var. 1 values

audio
blank
both
light
audio - light

Combine selected values
Unpaired statistics

Independent variable 2

None
group
stimulusType
presentation
session
preevent

Ind. var. 2 values

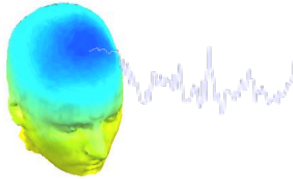
Combine selected values
Unpaired statistics

Use only specific datasets/trials

Delete all datafiles associated with this STUDY design

Save the STUDY

Cancel Ok



Edit STUDY design -- pop_studydesign0

Select STUDY design

- Audio versus light all subjects
- All stimulus type - non dual subjects only
- Blank versus other stimulus type - non dual subjects only
- Audio preceeded by different stimulus types**
- Audio versus ligh accross sessions - non dual subjects only
- Audio versus light accross presentation - non dual subjects only

Add design
Rename design
Delete design

Subjects

- c1
- c2
- c3
- c4
- c5
- c6
- c7
- c8
- nd1**
- nd2**
- nd3**
- nd4**
- nd5**
- nd6**
- nd7**
- nd8**

Select all subjects

Independent variable 1

- None
- group
- stimulusType
- presentation
- session
- prevevent**

Ind. var. 1 values

- audio**
- blank**
- both**
- light**

Combine selected values
Unpaired statistics

Independent variable 2

- None**
- group
- stimulusType
- presentation
- session
- prevevent

Ind. var. 2 values

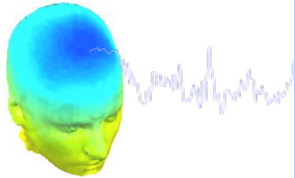
Combine selected values
Unpaired statistics

Use only specific datasets/trials: 'stimulusType',{'audio'}

Delete all datafiles associated with this STUDY design

Save the STUDY

Cancel Ok



Edit STUDY design -- pop_studydesign()

Select STUDY design

Audio versus light all subjects
All stimulus type - non dual subjects only
Blank versus other stimulus type - non dual subjects only
Audio preceded by different stimulus types
Audio versus ligh accross sessions - non dual subjects only
Audio versus light accross presentation - non dual subjects only

Add design
Rename design
Delete design

Subjects

c1
c2
c3
c4
c5
c6
c7
c8
nd1
nd2
nd3
nd4
nd5
nd6
nd7
nd8

Select all subjects

Independent variable 1

None
group
stimulusType
presentation
session
preevent

Ind. var. 1 values

audio
blank
both
light
audio - light

Combine selected values
Unpaired statistics

Independent variable 2

None
group
stimulusType
presentation
session
preevent

Ind. var. 2 values

1
2

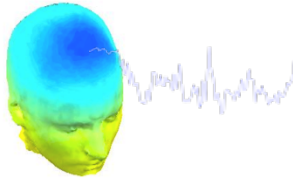
Combine selected values
Unpaired statistics

Use only specific datasets/trials

Delete all datafiles associated with this STUDY design

Save the STUDY

Cancel Ok



Edit STUDY design -- pop_studydesign()

Select STUDY design

- Audio versus light all subjects
- All stimulus type - non dual subjects only
- Blank versus other stimulus type - non dual subjects only
- Audio preceded by different stimulus types
- Audio versus light across sessions - non dual subjects only
- Audio versus light across presentation - non dual subjects only**

Add design
Rename design
Delete design

Subjects	Independent variable 1	Independent variable 2
c1 c2 c3 c4 c5 c6 c7 c8 nd1 nd2 nd3 nd4 nd5 nd6 nd7 nd8	None group stimulusType presentation session preevent	None group stimulusType presentation session preevent
Select all subjects	Ind. var. 1 values audio blank both light audio - light	Ind. var. 2 values evoked spontaneous
Unpaired statistics	Combine selected values	Combine selected values
Unpaired statistics	Unpaired statistics	Unpaired statistics

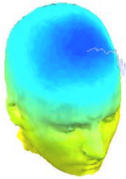
Use only specific datasets/trials

Delete all datafiles associated with this STUDY design

Save the STUDY

Cancel **Ok**

STUDY design and plotting overview



STEP 1

Build a STUDY

STEP 2

Build design(s)

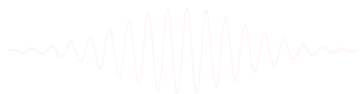
STEP 3

Precompute the data

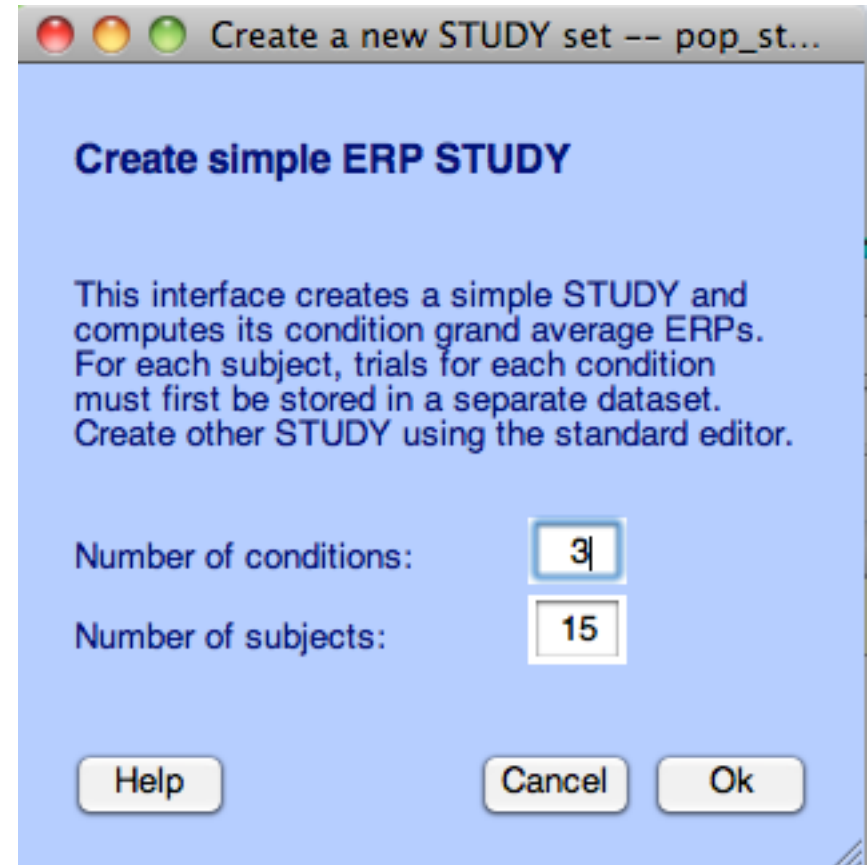
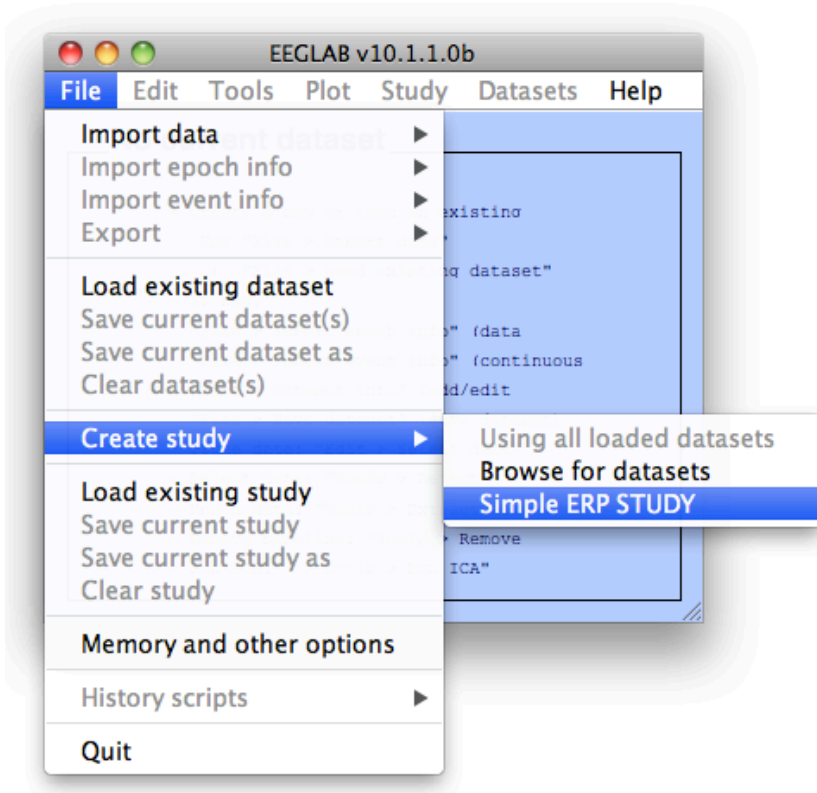
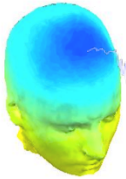
STEP 4

Plot the data

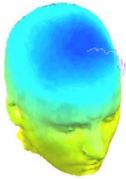
Exercise...



Create simple ERP STUDY



Create simple ERP STUDY



Create a new STUDY set -- pop_studyerp()

Create simple ERP STUDY

STUDY set name:

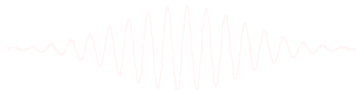
Condition 1 name: Condition 2 name: Condition 3 name:

Condition 1 datasets: ...
 ...
 ...
 ...
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 ...
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Condition 2 datasets: ...
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Condition 3 datasets: ...
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 ...
 ...

When using more than 1 condition, datasets on each line must correspond to the same subject.



Create simple ERP STUDY

