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 should change when using STUDY vs single dataset.
Build a STUDY
Build a STUDY, cont'd
Edit dataset info

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:**
  - 

<table>
<thead>
<tr>
<th>Dataset filename</th>
<th>Browse</th>
<th>Subject</th>
<th>Session</th>
<th>Condition</th>
<th>Group</th>
<th>Select by r.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volumes/donnees/data/STUD</td>
<td>...</td>
<td>S01</td>
<td></td>
<td>memorize</td>
<td></td>
<td>All comp.</td>
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<td>S01</td>
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<td>ignore</td>
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<td>All comp.</td>
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<td>S01</td>
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<td>S03</td>
<td></td>
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<td></td>
<td>All comp.</td>
</tr>
<tr>
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<td>...</td>
<td>S03</td>
<td></td>
<td>probe</td>
<td></td>
<td>All comp.</td>
</tr>
</tbody>
</table>

**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
Patients
Group A
Group B
Controls

1x2 paired
Stim A
Stim B

2x2 unpaired
Patients
Old
Group A
Group B
Controls
Young
Group C
Group D

2x2 paired
Stim A
Stim B

2x2 paired & unpaired
Patients
Drug A
Drug B
Controls
Drug A
Drug B
Create design

1x3 design
Build a STUDY, alternative method
Create design

1x3 design

Select study design:
- Ignore vs. Memorize vs. Probe

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

Independent variable 1:
- Stimulus type

Independent variable 2:
- None

Configure:
- Combine selected values
- Paired statistics

Options:
- Use only specific datasets/trials
- Delete all datafiles associated with this STUDY design
- Save the STUDY

Cancel  Ok
### 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

### Subjects

<table>
<thead>
<tr>
<th>c1</th>
<th>c2</th>
<th>c3</th>
<th>c4</th>
<th>c5</th>
<th>c6</th>
<th>c7</th>
<th>c8</th>
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<th>nd2</th>
<th>nd3</th>
<th>nd4</th>
<th>nd5</th>
<th>nd6</th>
<th>nd7</th>
<th>nd8</th>
</tr>
</thead>
</table>

### Independent variable 1

- None
- Group
- Stimulus type
- Presentation
- Session
- Preevent

### Ind. var. 1 values

| audio | blank | both | light | audio - light |

### Independent variable 2

- None
- Group
- Stimulus type
- Presentation
- Session
- Preevent

### Ind. var. 2 values

| Control | Nondual |

### Options

- Add design
- Rename design
- Delete design
- Select all subjects
- Unpaired statistics
- Use only specific datasets/trials
- Delete all datafiles associated with this STUDY design
- Save the STUDY

### Buttons

- Cancel
- Ok
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Exercise...
Create simple ERP STUDY

This interface creates a simple STUDY and computes its condition grand average ERPs. For each subject, trials for each condition must first be stored in a separate dataset. Create other STUDY using the standard editor.

Number of conditions: 3
Number of subjects: 15
Create simple ERP STUDY
Create simple ERP STUDY