Spatial Preprocessing: Demo

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Spatial-preprocessing

- Realignment
- Coregistration
- Segmentation
- Normalize
- Smoothing



Realignment

- Create a folder "realignment"
- Click on Realign drop down list and select "Realign (Est & Res)"
- Click on "data" and select "New Session"
- Highlight "Session", then select "Specify Files"
- Highlight all the fMRI images in fM00223 folder. There are 96 images
- Save your job as "realign.mat"
- Click on "Run" button



Coregistration

- Create a folder "coregister"
- Click on Coregister drop down list and select "Coregister (Estimate)"
- Click on "Reference Image". Then click on "Select Files" button to select meanfM00223_004.imag
- Click on "Source Image" and then select sM00223_002.img
- Save your job as "coregister.mat"
- Click on green arrow to execute your work



Segmentation

- Create a folder "segment"
- Click on "Segment" button
- Click on the "Data" field, and then click on "Select Files" button
- Highlight the registered anatomical image, e.g., sM00223_002.img
- Save your job as "segment.mat"
- Press "Run" button



Normalize

- Create a folder "normalize"
- Click on "Normalise" drop down list and select "Normalise (Write)"
- Select "Data" and then select "New Subject"
- Highlight "Parameter File"
- Select the sM00223_0020_seg_sn.mat
- Highlight "images to write" and select all the images starting with "rfM*.img"
- Save your job as "normalize.mat"
- Press "Run" button to execute your work



Smoothing

- Create a folder "smooth"
- Click on "Smooth" button
- Select "Images to Smooth" and select all the images starting with "wrfM*.img"
- Click on "FWHM" and change [8 8 8] to [6 6 6]
- Save your job as "smooth.mat"
- Press "RUN" button to execute your work