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# ROI analysis with PPA as an example

cd /fmri/PI/training/Class_Intro_fmRI/

ls

emacs Exercise_ROI_PPA_Analysis.txt &

#####

# Assume that you have finished the group analysis during last lab

cd your_group_directory

cd JohnIndoorOutdoor

cd AnalyScripts

cp deconv2.s deconv_w_PPA.s

emacs deconv_w_PPA.s

# Edit to have "-num_glt 4"
# Add "-gltSYM 'SYM: +indoor +outdoor -2*face' -glt_label 4
'indoor+outdoor-2face'"
# Edit to have "-bucket deconv_Scene_Face_motion_w_PPA"

# Go to the directory: /IOD_003/Afni_analy/

ln -s ../../AnalyScripts/deconv_w_PPA.s .

# Run

deconv_w_PPA.s

# run

afni &

# Identify the index number of the "bucket"
"deconv_Scene_Face_motion_w_PPA"
# that shows the t test between "indoor+outdoor-2 faces".

# Fill "???" in the following command with the index number you just
found. Then run

adwarp -apar T1Volume+tlrc -dpar
'deconv_Scene_Face_motion_w_PPA+orig[??]' -prefix AllScene_2Face_ROI
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# Then you can go through the same procedure for all other subjects.
#Specifically, go to each "Afni_analy" directory, run

ln -s ../../AnalyScripts/deconv_w_PPA.s .

deconv_w_PPA.s

adwarp -apar T1Volume+tlrc -dpar
'deconv_Scene_Face_motion_w_PPA+orig[??]' -prefix AllScene_2Face_ROI

# Now you have finished the preparation steps for individual subject. Now

# Go to the directory "GroupANOVA2". Run

afni

# and create an anatomical ROI called "ROI_para_T1" as we did in class,
labeling
# "1" for right parahippocampal gyrus" and "2" for left parahippocampal
gyrus.

## run the PPA ROI script to create the numbers.

cp ../AnalyScripts/PPA_indiv2.s .

# To understand the script.

emacs PPA_indiv2.s &

# Edit      the following two lines
ln -s ../{$k}/Afni_analy/AllScene_2Face+tlrc.BRIK
{$k}_AllScene_2Face+tlrc.BRIK
ln -s ../{$k}/Afni_analy/AllScene_2Face+tlrc.HEAD
{$k}_AllScene_2Face+tlrc.HEAD

to

ln -s ../{$k}/Afni_analy/AllScene_2Face_ROI+tlrc.BRIK
{$k}_AllScene_2Face+tlrc.BRIK
ln -s ../{$k}/Afni_analy/AllScene_2Face_ROI+tlrc.HEAD
{$k}_AllScene_2Face+tlrc.HEAD

# Run the script:

PPA_indiv2.s

# To undersand the files created,

emacs ROI_PPA_face_per_sig_ch.out.all &
emacs ROI_PPA_indoor_per_sig_ch.out.all &
emacs ROI_PPA_outdoor_per_sig_ch.out.all &

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