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##
## Preprocessed Data from xcp_24p_gsr
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compiled March 29, 2023

DCL events152 positive controls, with matlab convolution and downsampling.

files under **/data/nil-external/dcl/Events152_fMRI_NeuralMechanisms/voxelwiseAnalyses/**

47 people watched movies in four fMRI runs; everyone watched the same movie in each run (four different movies total; same order for everyone). Images were preprocessed with fmriprep (volumes only), then np2 detrended and normalized, and parcel-averaged using the Schaefer2018 400x7 parcellation (`analysisPrep.R`), then XCP engine (24p, gsr). The runs had the same number of volumes for everyone but the movie onsets varied a bit (7.9 to 11.4 seconds); see `e152onsets.txt` and `getOnsets.R`.

Tan Nguyen created the files with PE and Uncertainty statistics experienced by SEM model for each frame of each movie. These stats are every 0.333 seconds, much faster than the BOLD or the TR (1.483 sec). These stats were convolved and downsampled by running `convo_seg_trigger.m`

Aligning the movie and BOLD timeseries properly before correlating has been a challenge, but seems to be sorted now. The first section shows the median correlation for each movie statistic and run at offset 0.
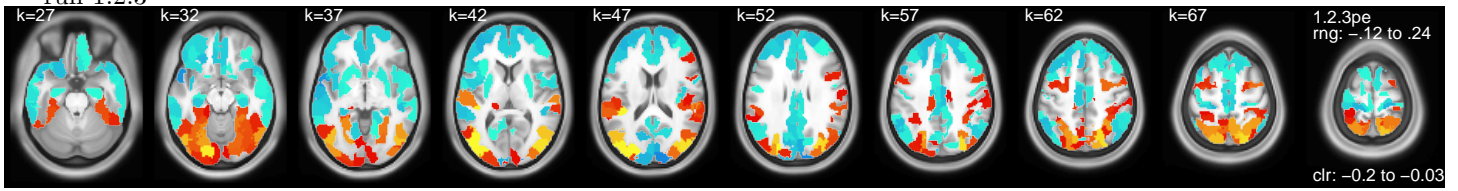
Correlation

−0.2 ▭ −0.03 0.03 ▭ 0.2

Correlation

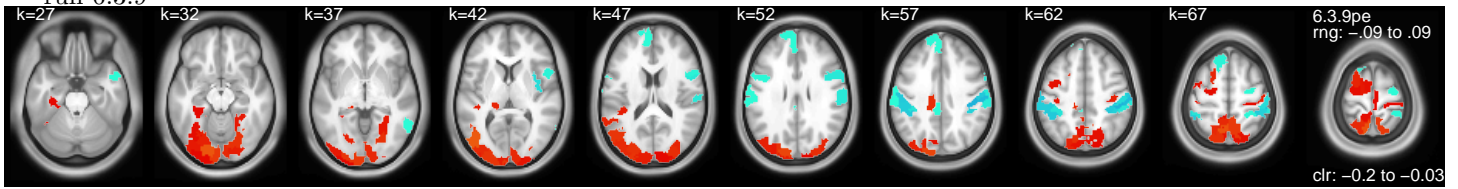−0.2   −0.03   0.03   0.2
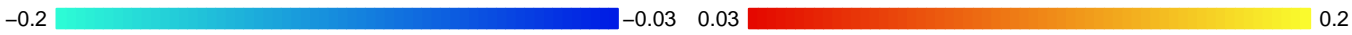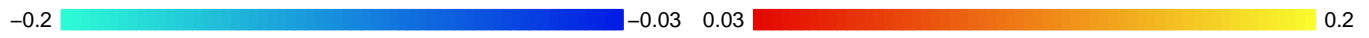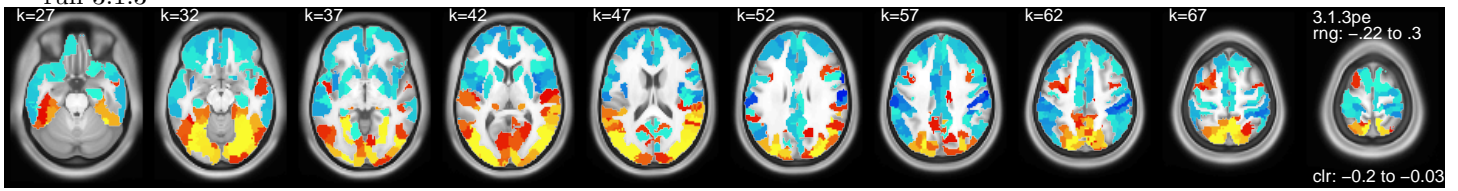
plot pe correlations with parcel timeseries

run 1.2.3

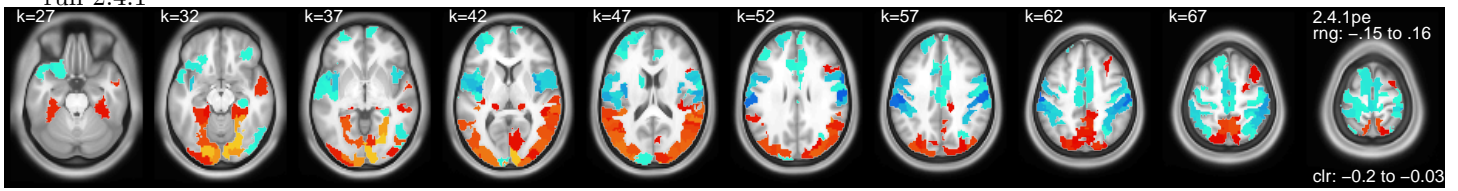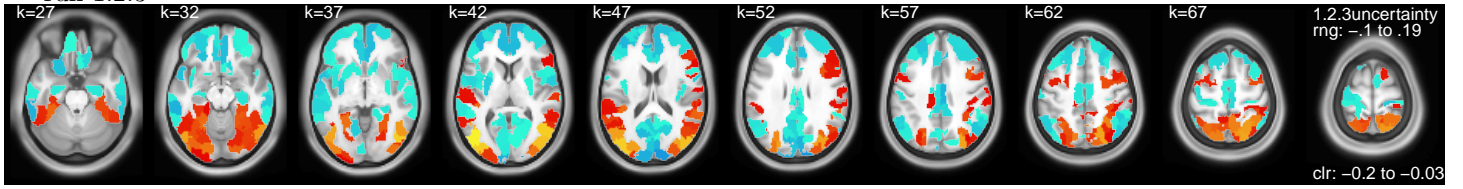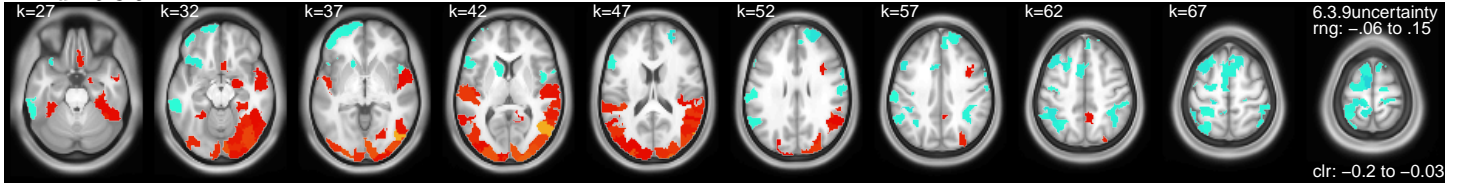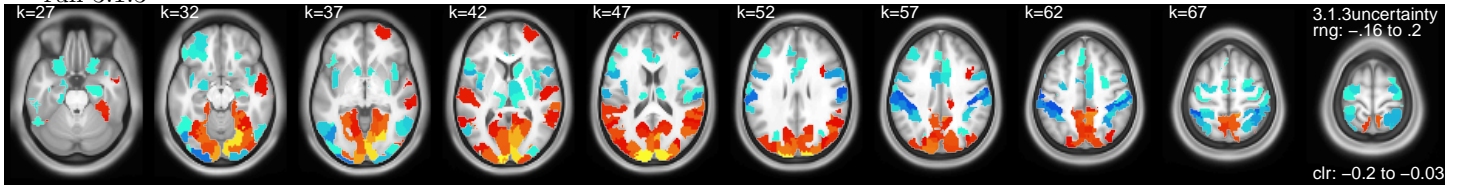run 6.3.9

run 3.1.3

run 2.4.1

plot uncertainty correlations with parcel timeseries

run 1.2.3

run 6.3.9

run 3.1.3

run 2.4.1