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## Preprocessed Data from xcp_24p
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compiled February 20, 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 finally parcel-averaged using the Schaefer2018 400x7 parcellation (`analysisPrep.R`). 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`.

The correlations here follow the same logic as `/knitr/parcelCorrelations/movieParcelCorrelations.rnw`, but with Matt's matlab code for convolving and downsampling the framewise movie measures, `/matlab_resampling/Bezdek_resampling.m`. Tan Nguyen created the files with PE statistic 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).

Aligning the movie and BOLD timeseries properly before correlating has been a challenge, but seems to be sorted now. The first section gives shows the median correlation for each movie statistic and run at offset 0, which should be (and is) best. A selection of the other offsets are shown on later pages, and it's clear the correlation gets worse as the offset increases.

Correlation



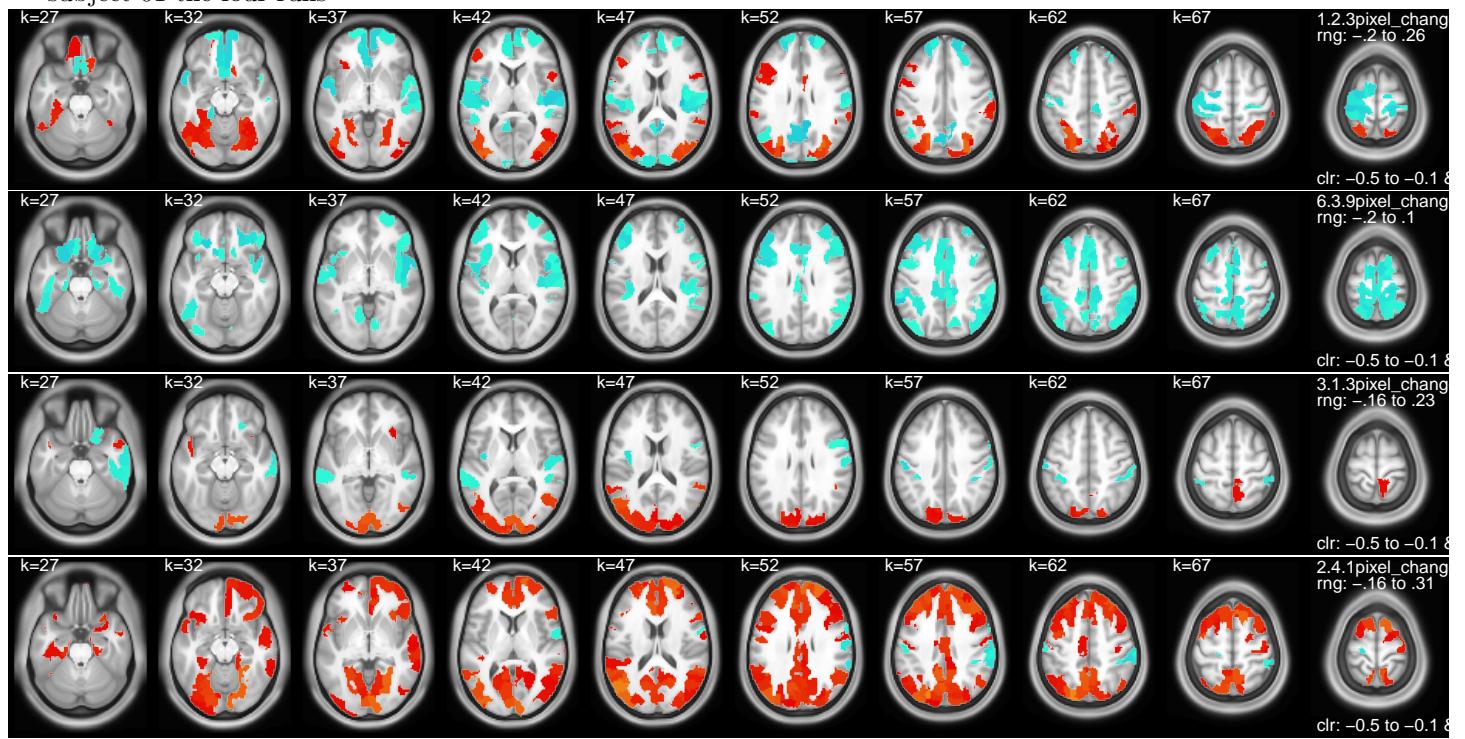
Correlation



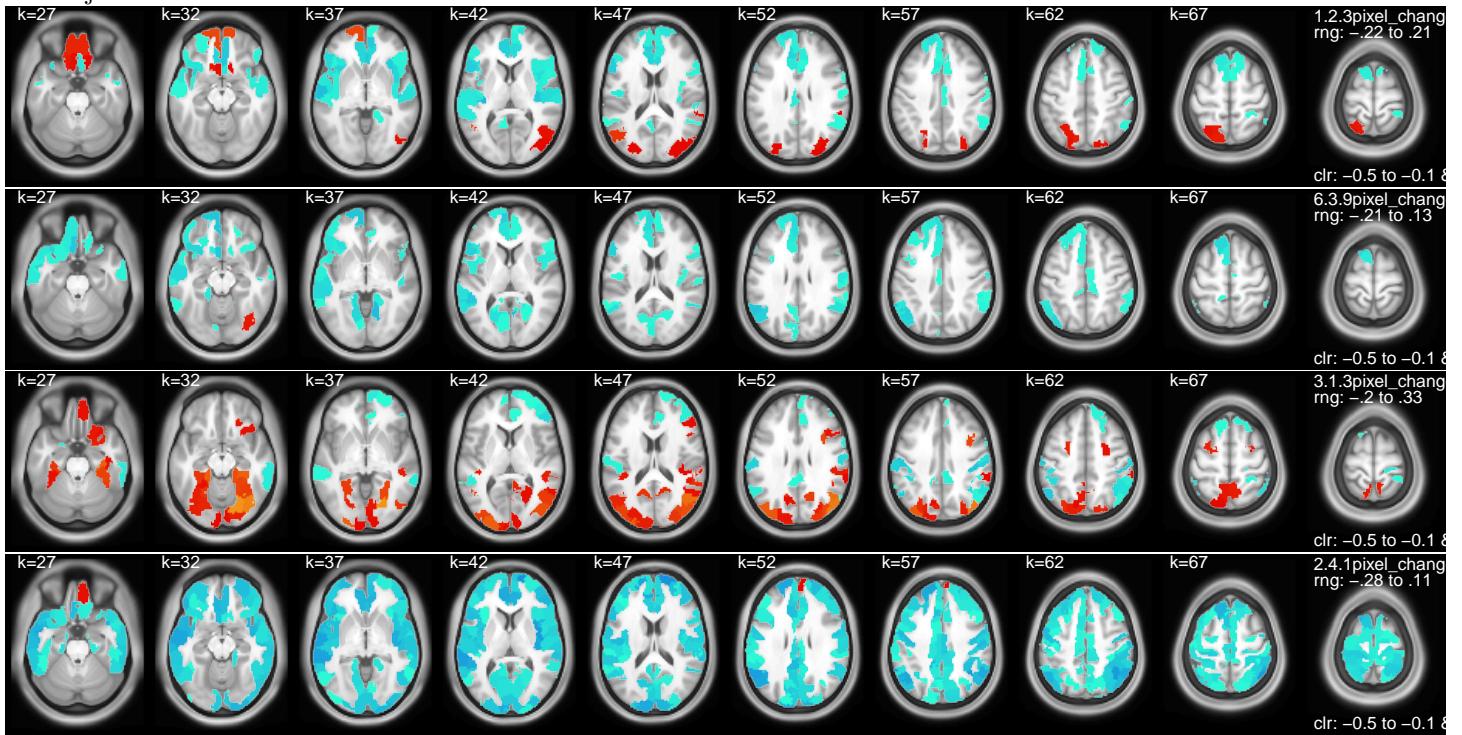
Grouping by Subject

calculate pixel change mean correlations with parcel timeseries

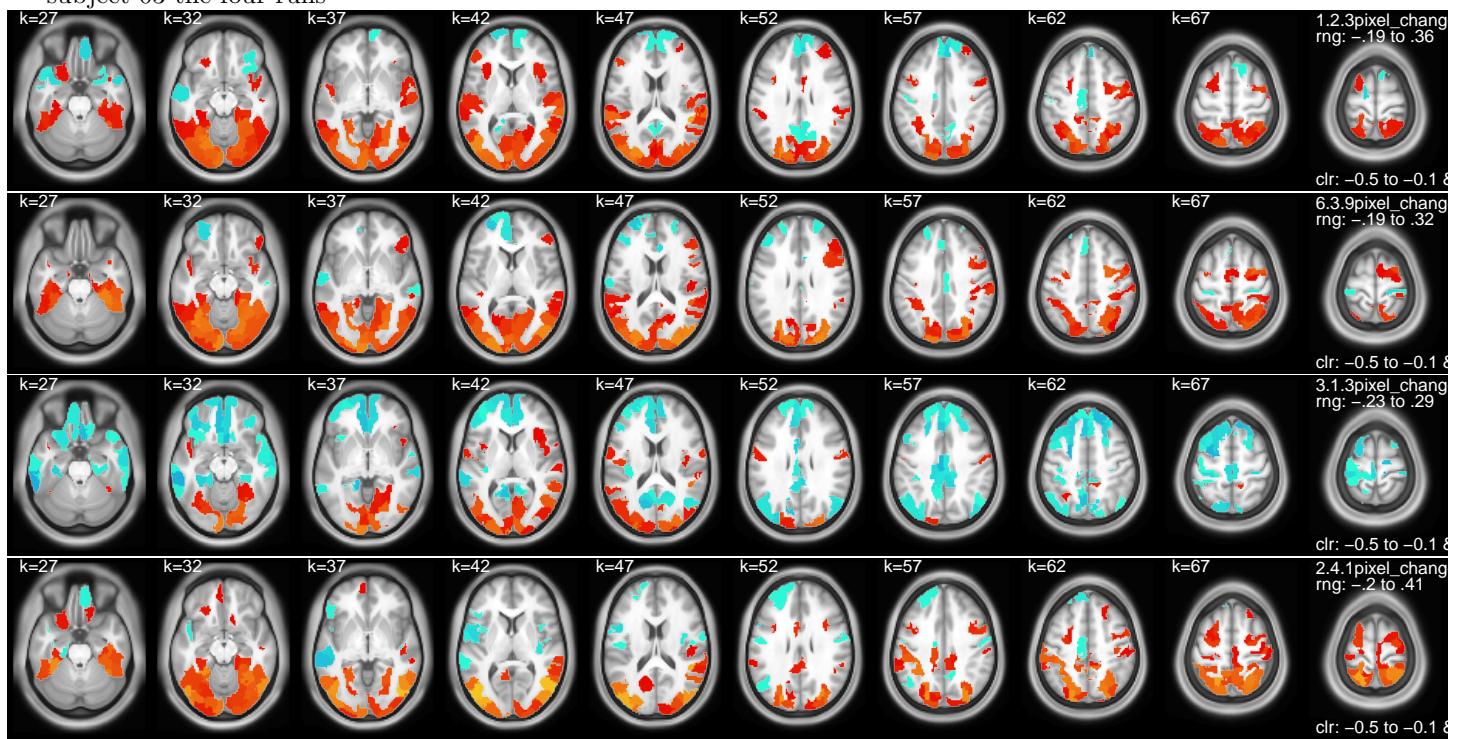
subject 01 the four runs



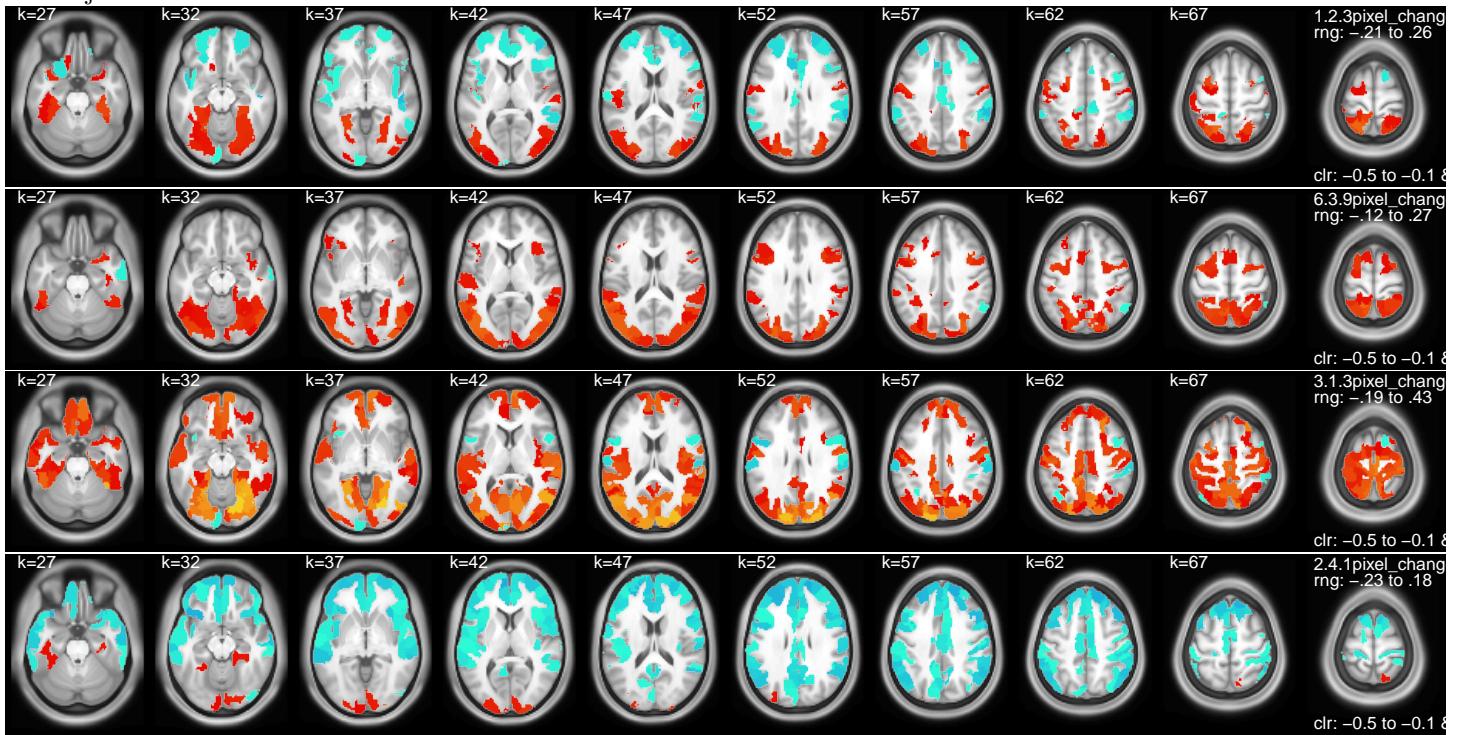
subject 02 the four runs



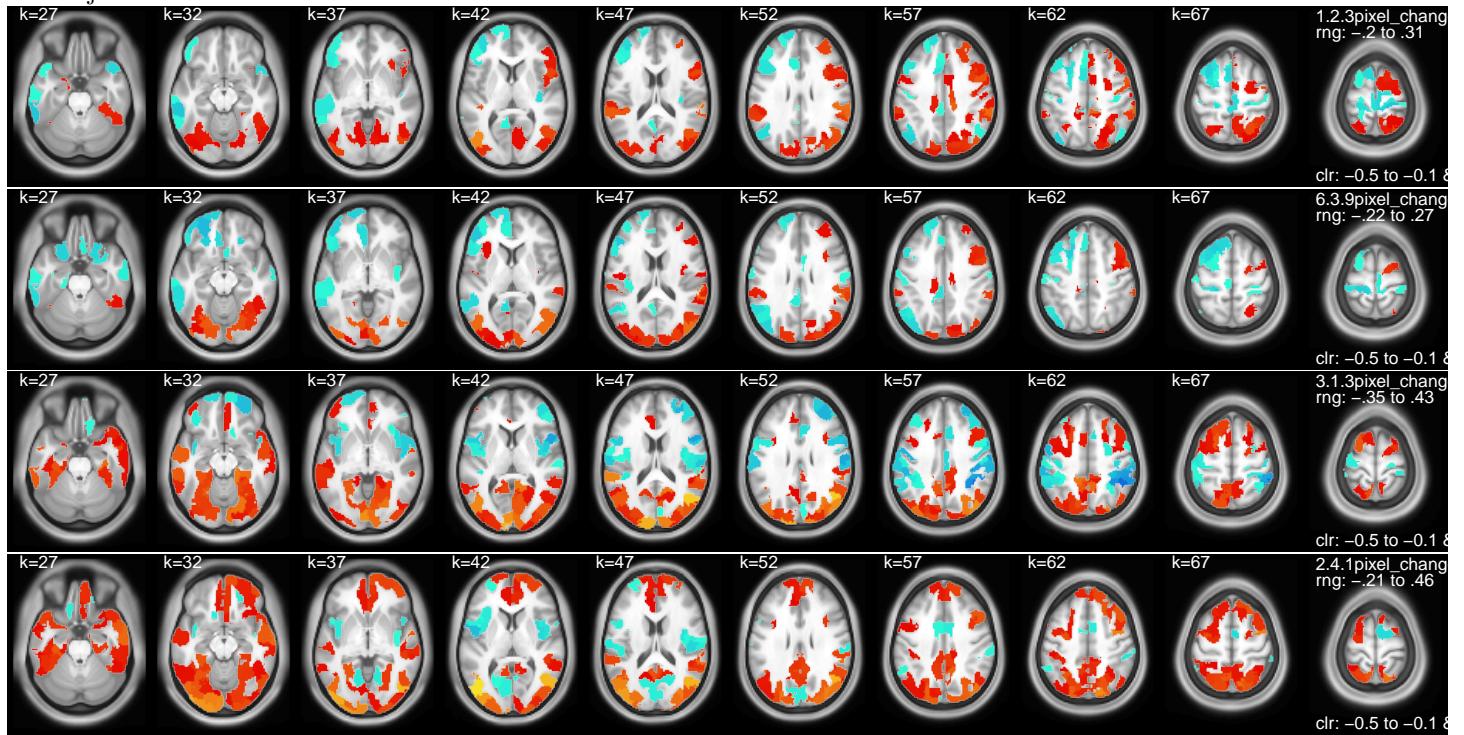
subject 03 the four runs



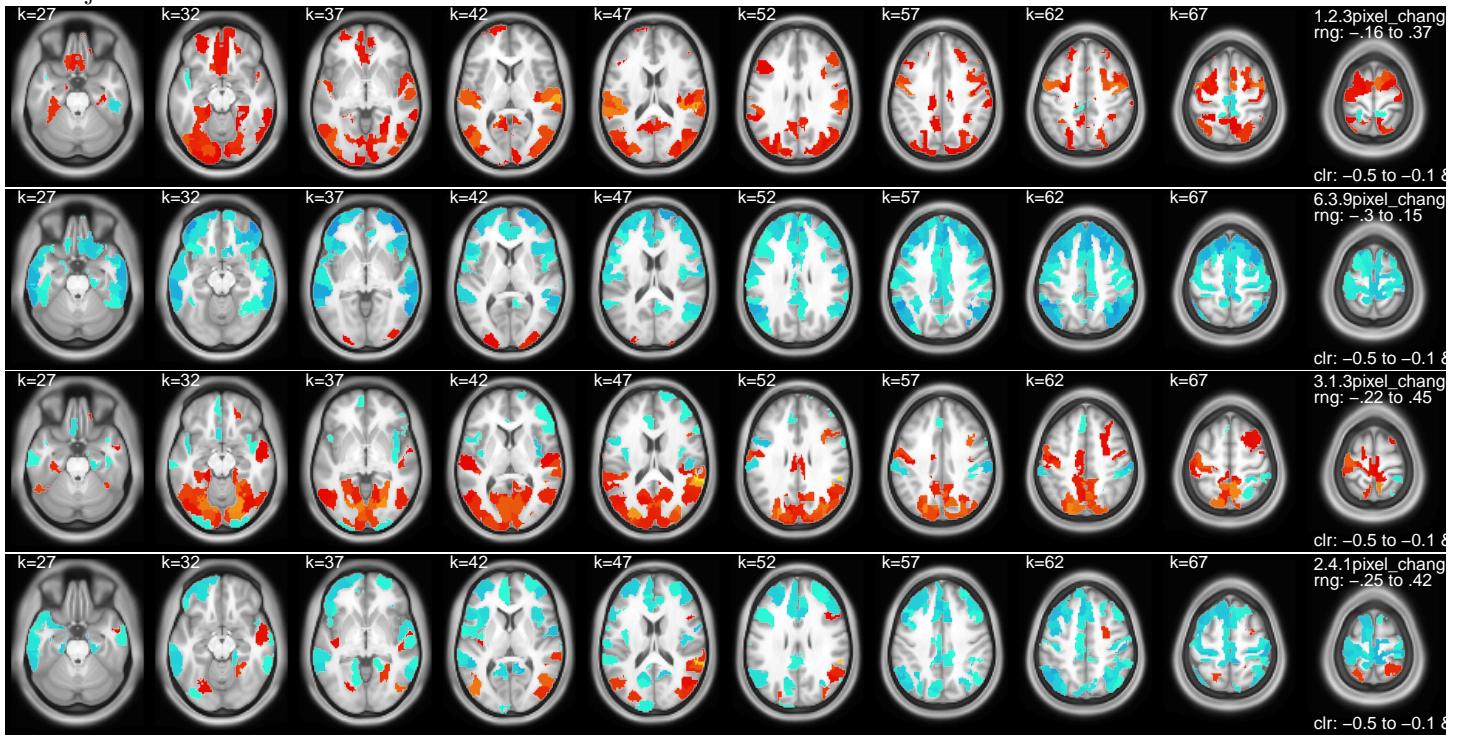
subject 04 the four runs



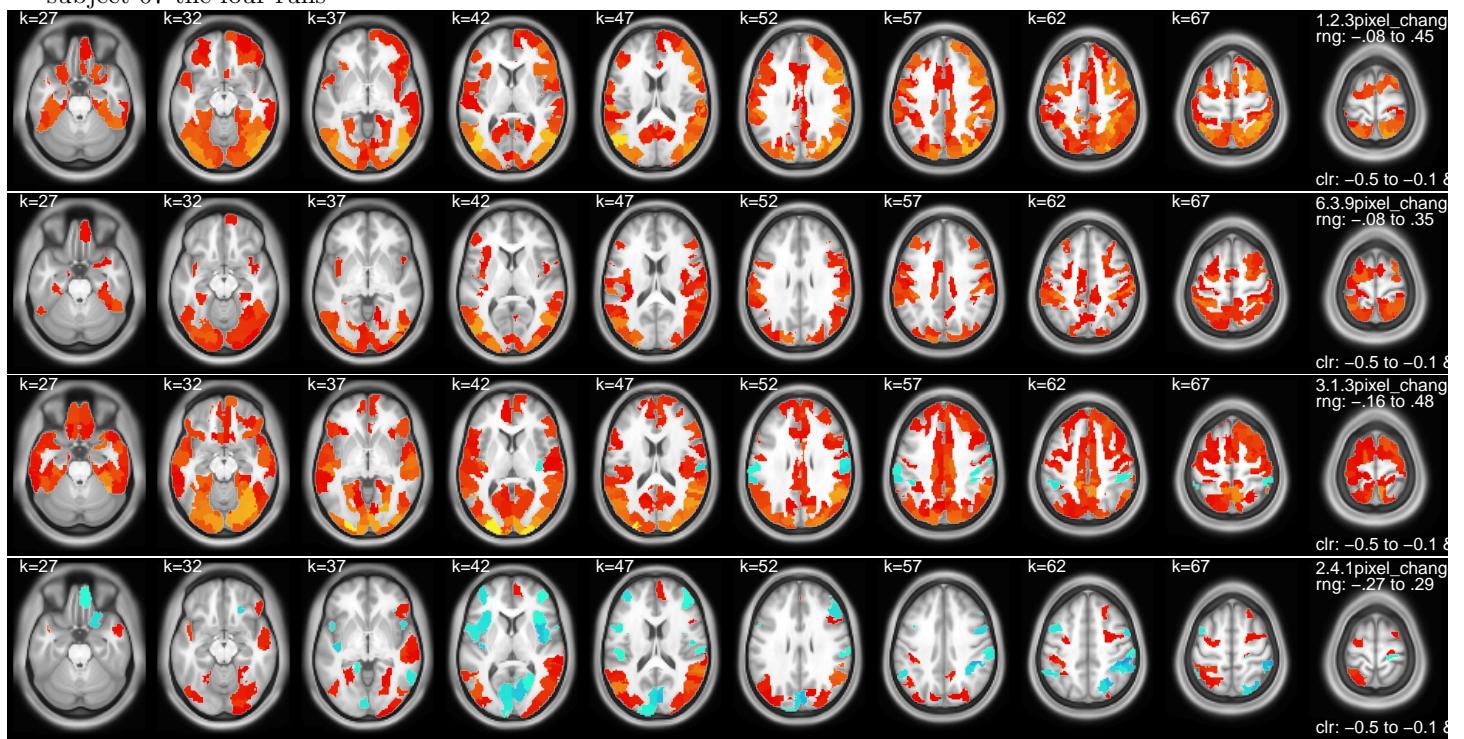
subject 05 the four runs



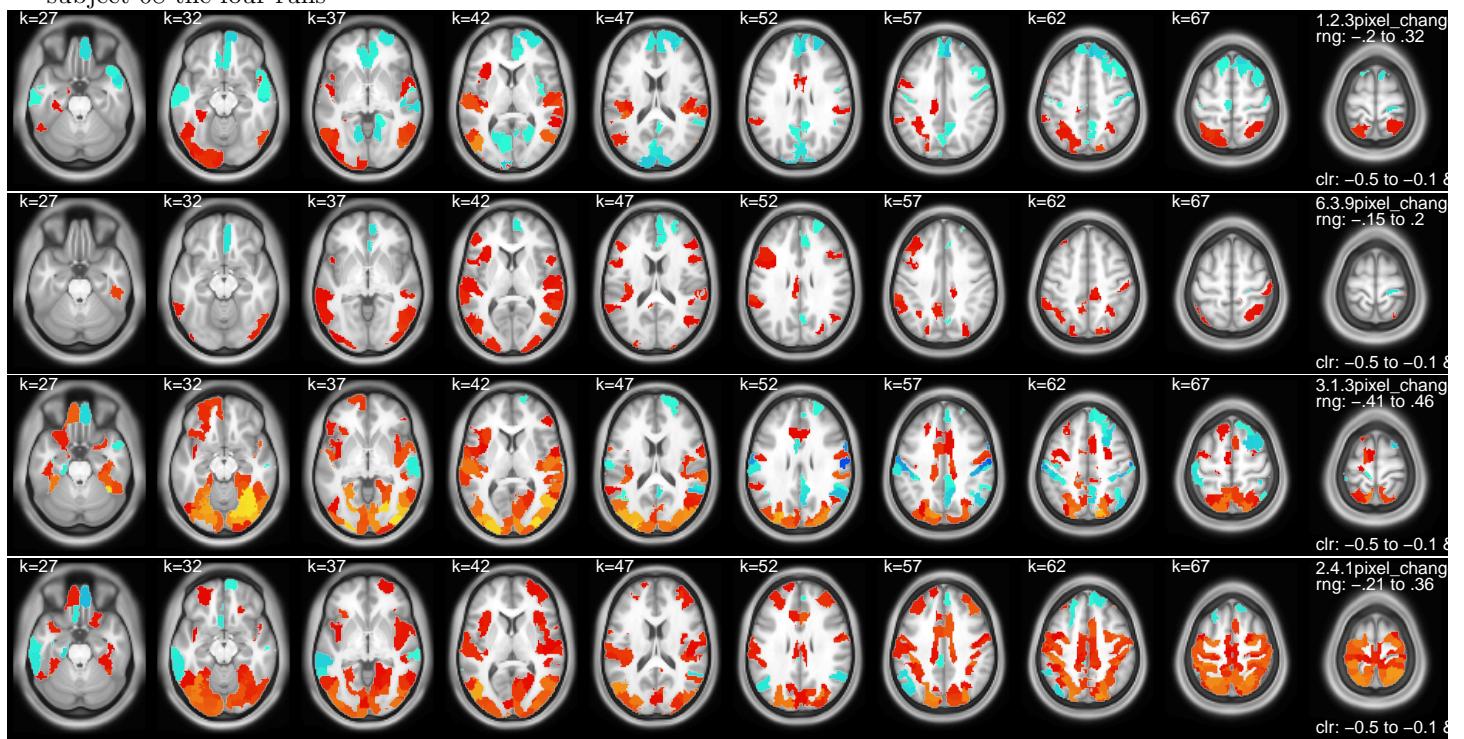
subject 06 the four runs



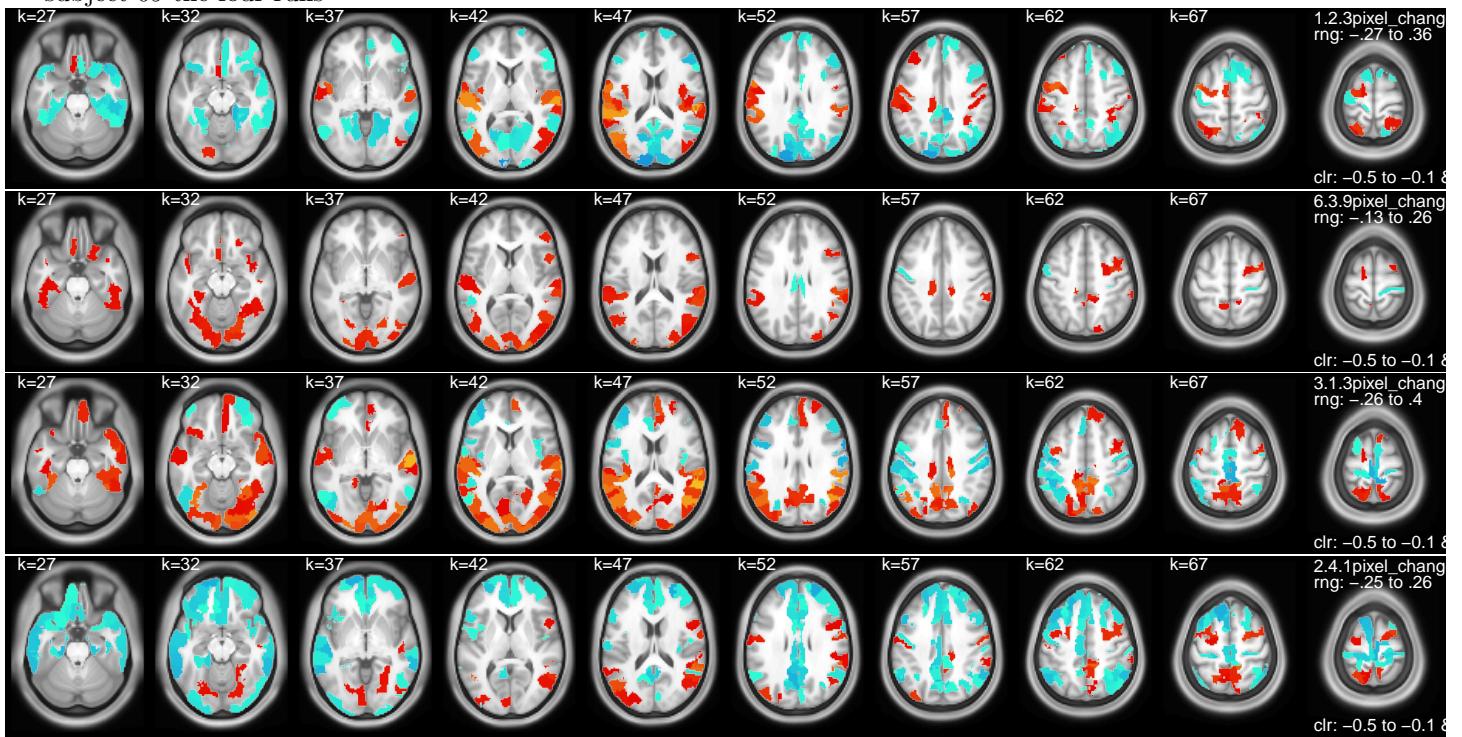
subject 07 the four runs



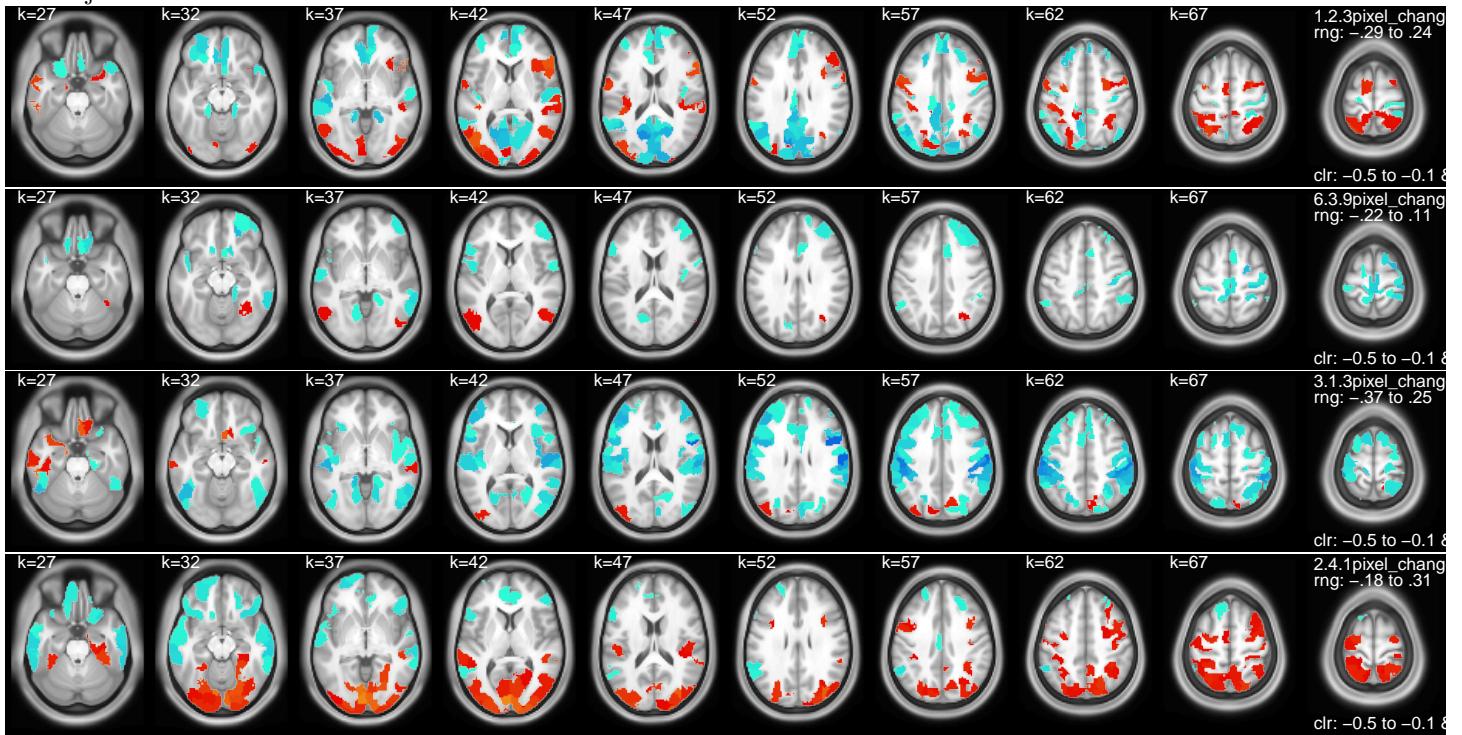
subject 08 the four runs



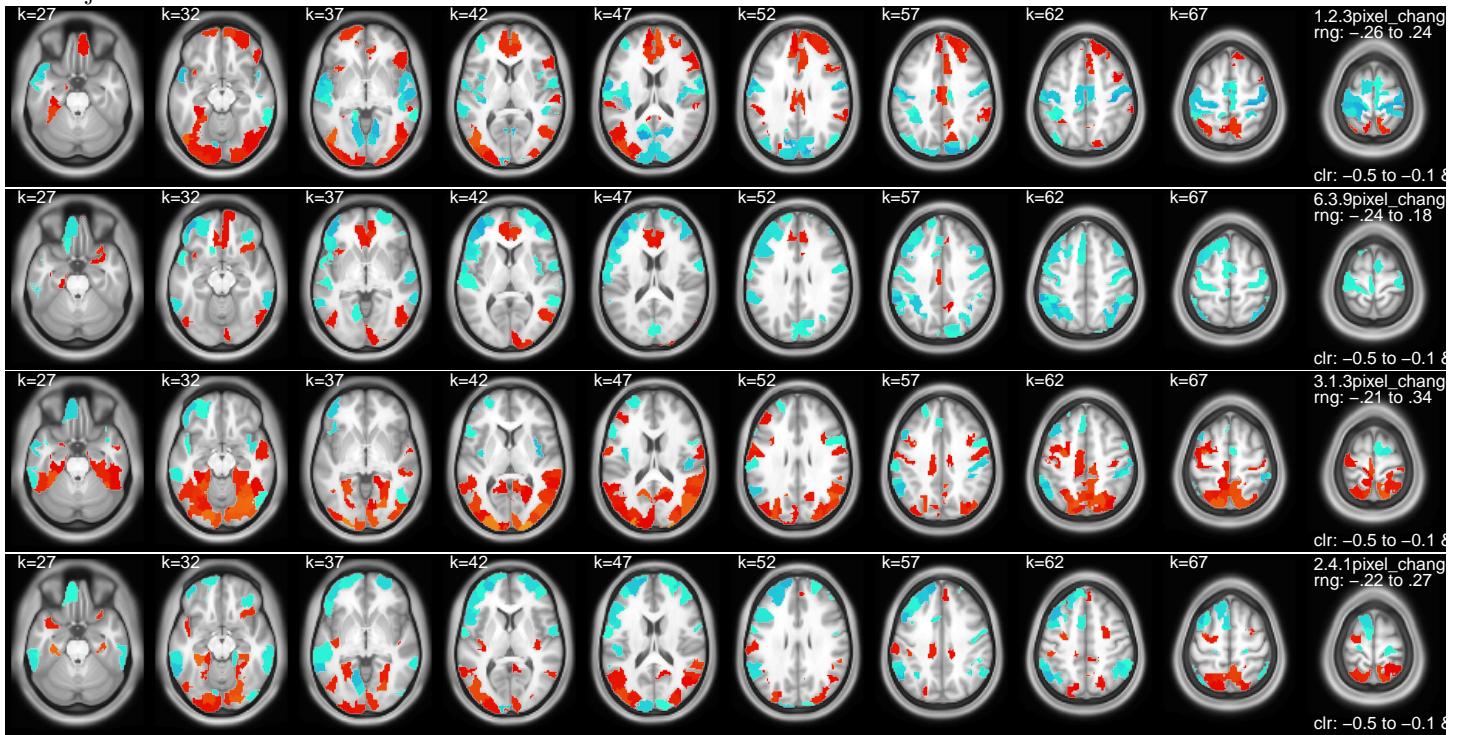
subject 09 the four runs



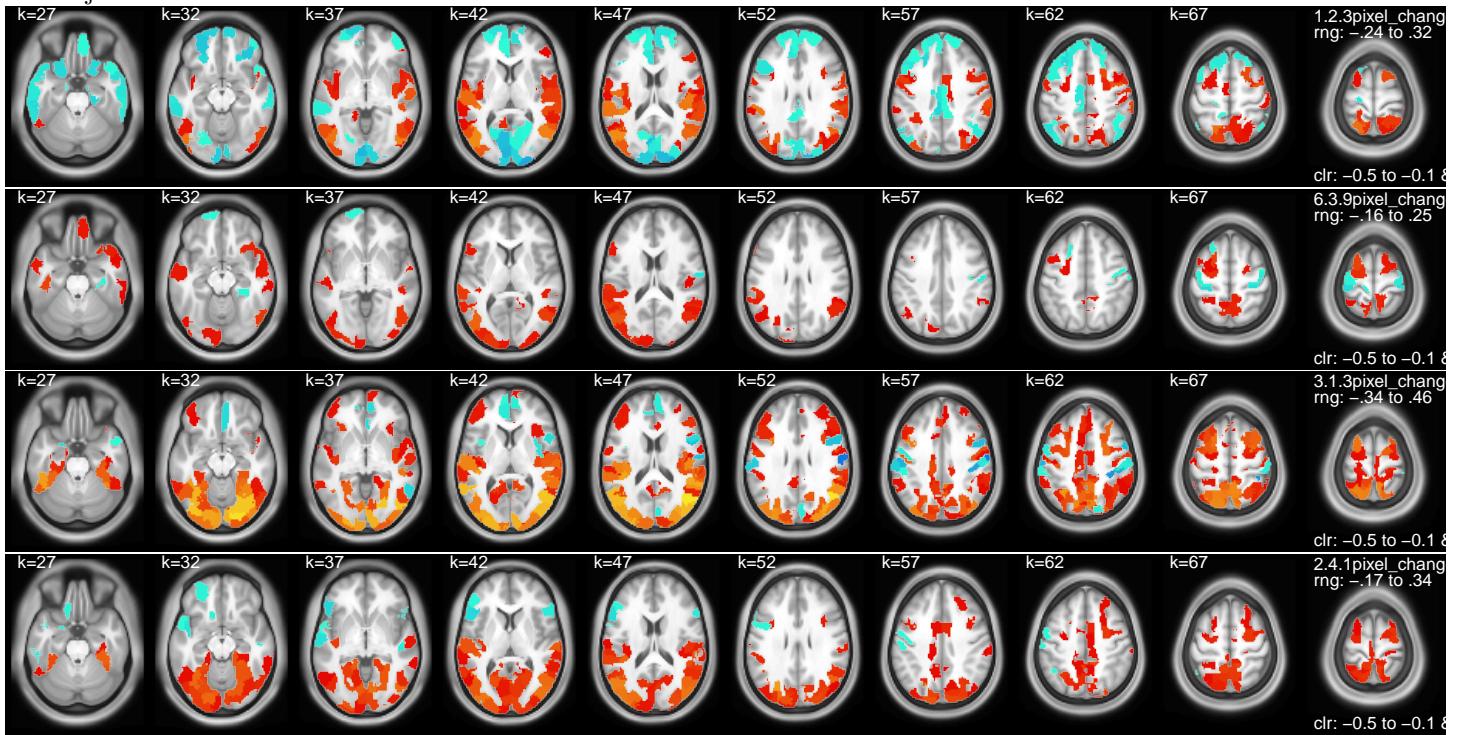
subject 11 the four runs



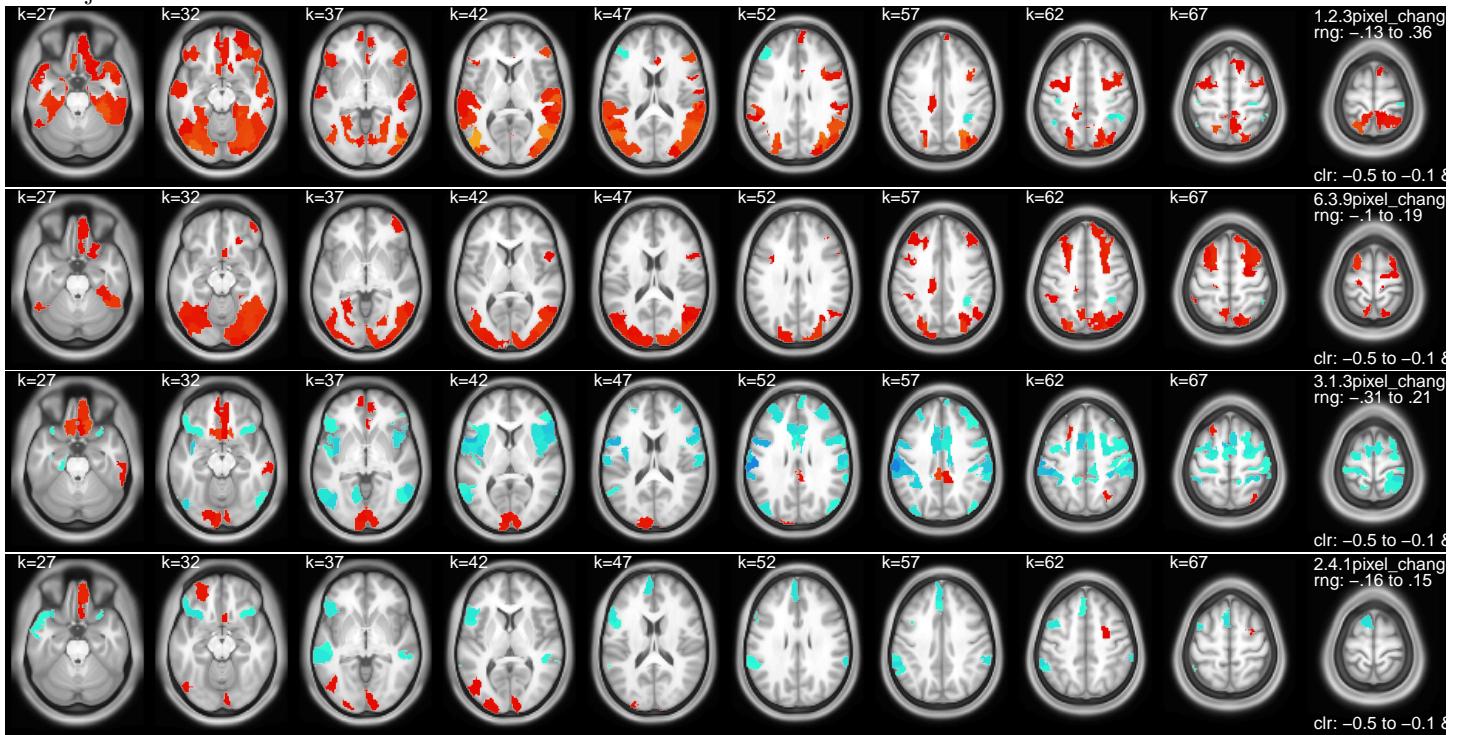
subject 12 the four runs



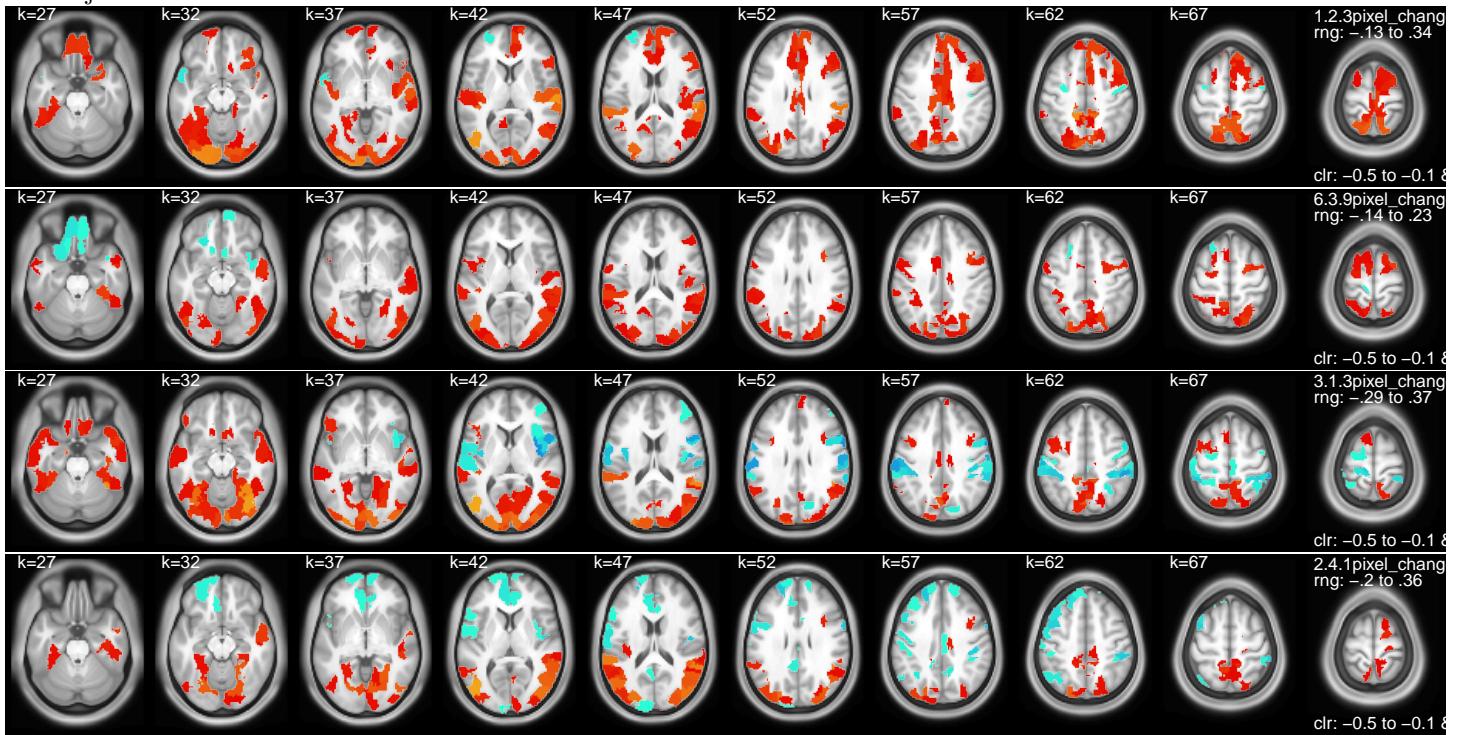
subject 13 the four runs



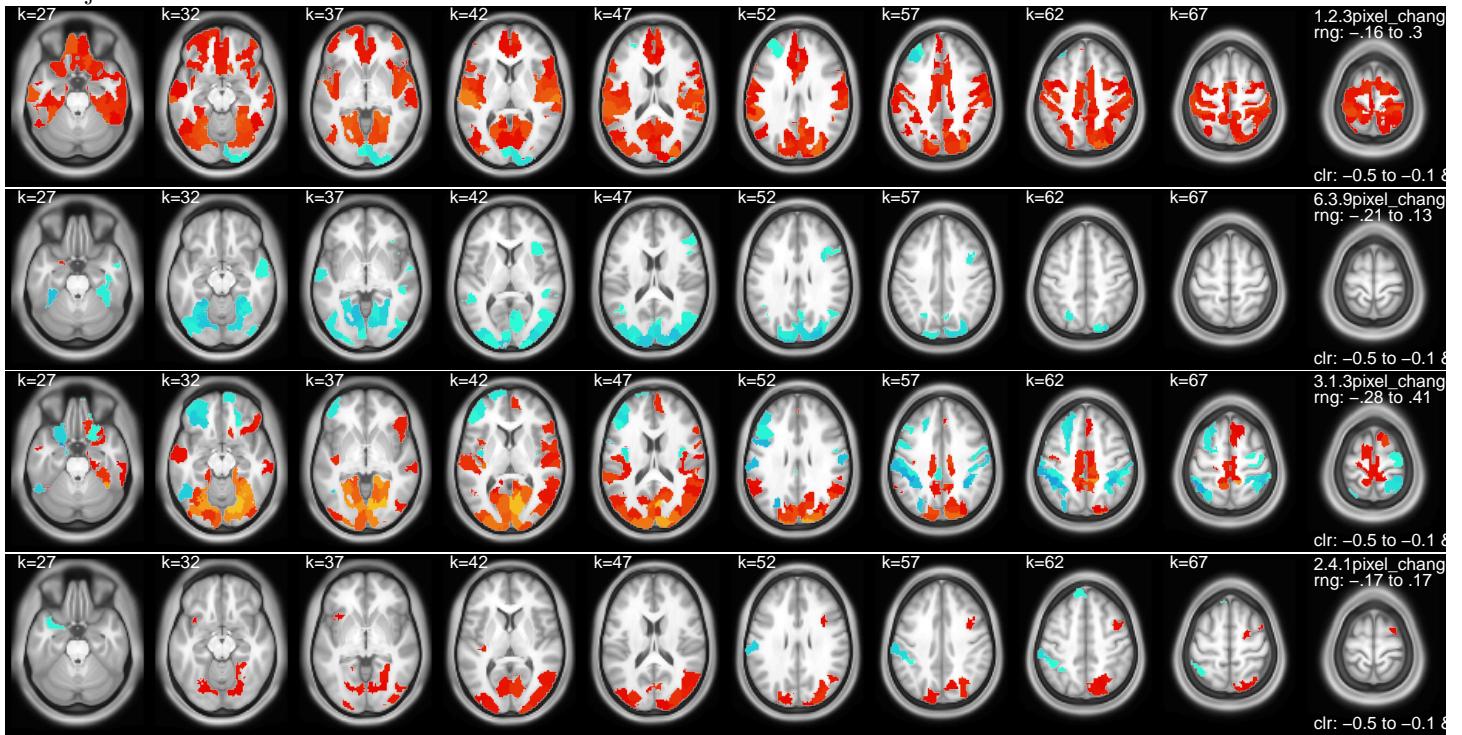
subject 14 the four runs



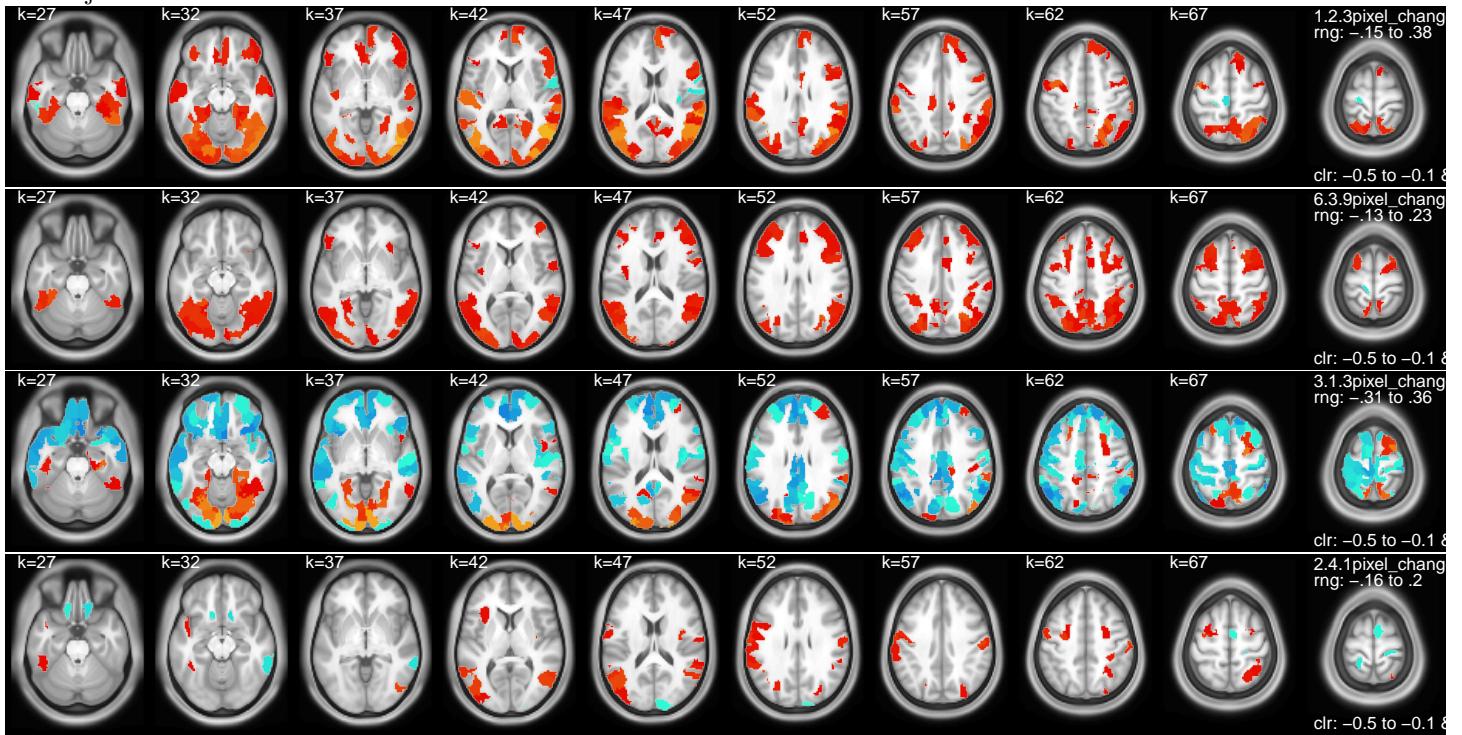
subject 15 the four runs



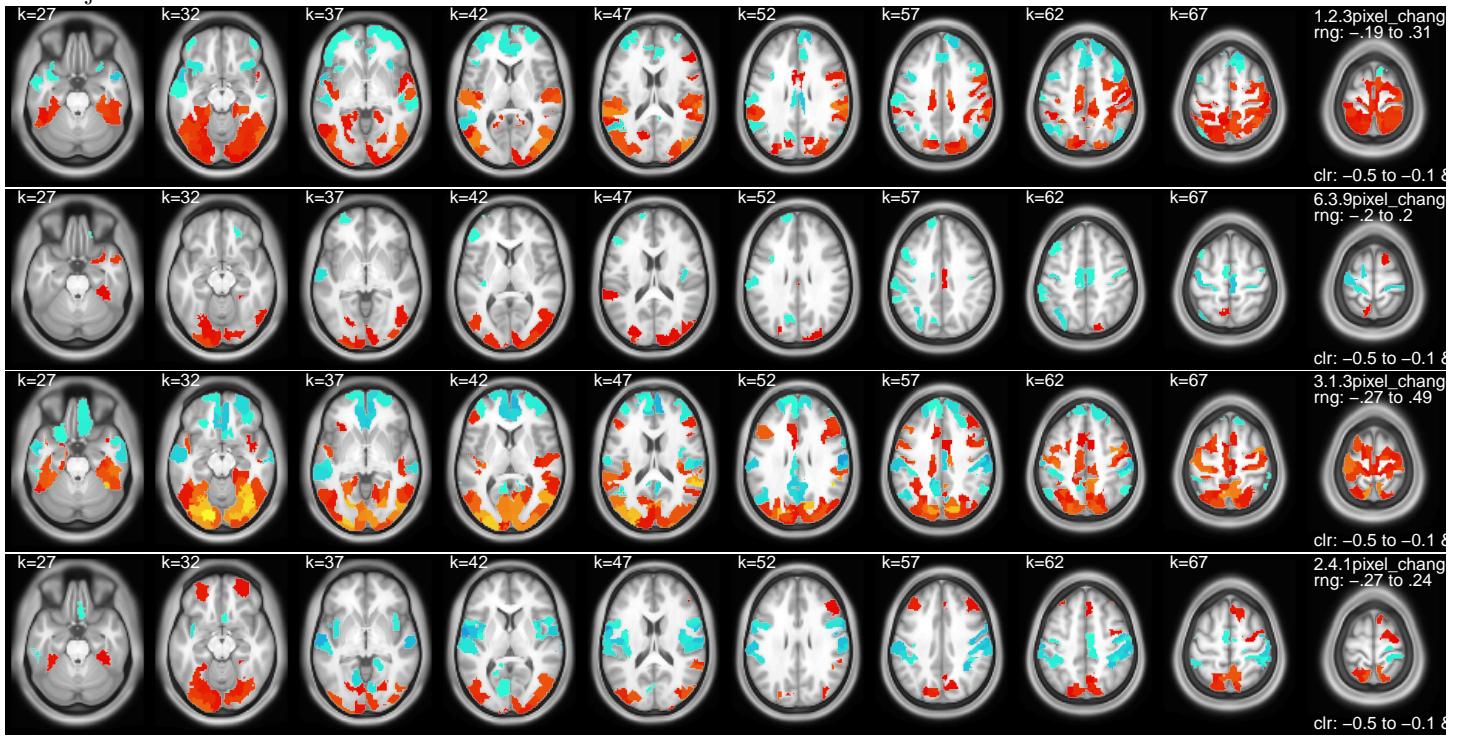
subject 16 the four runs



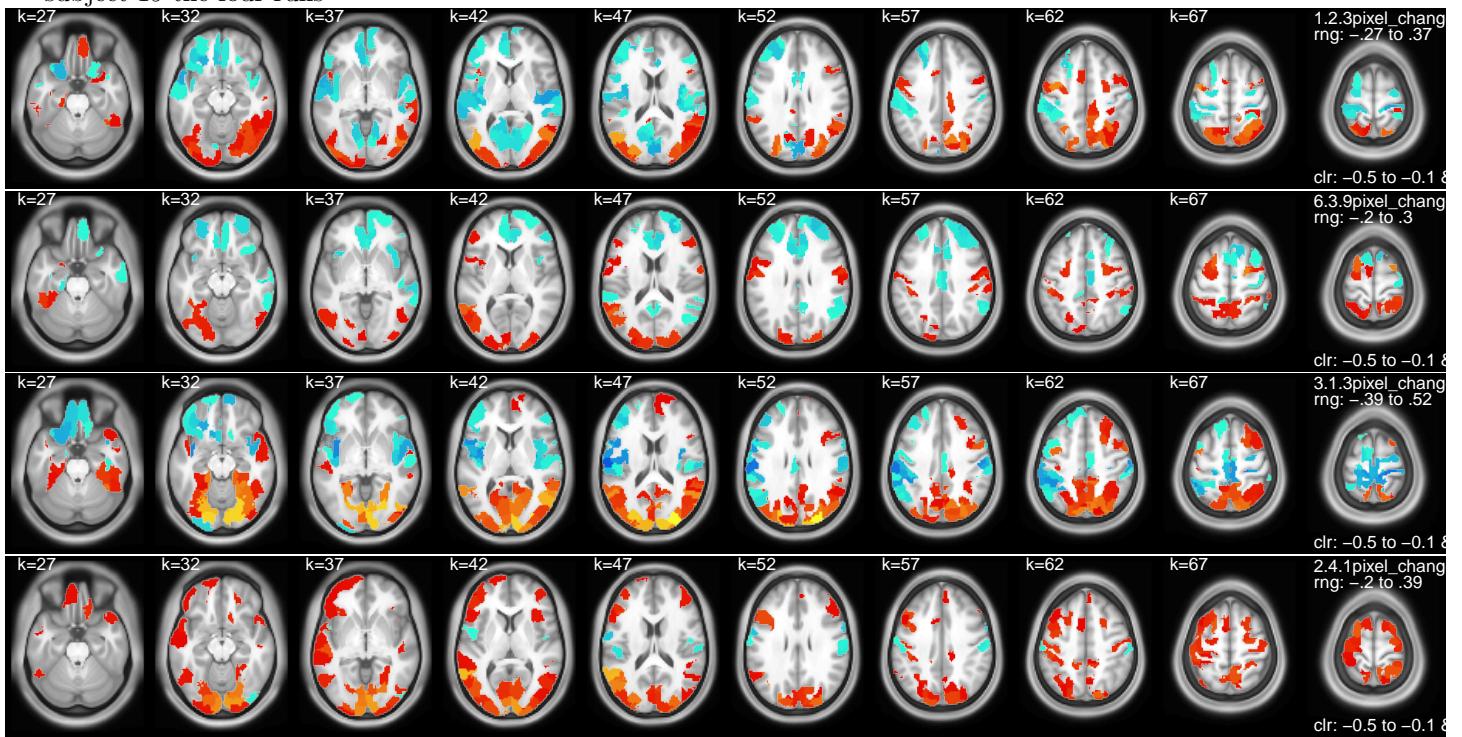
subject 17 the four runs



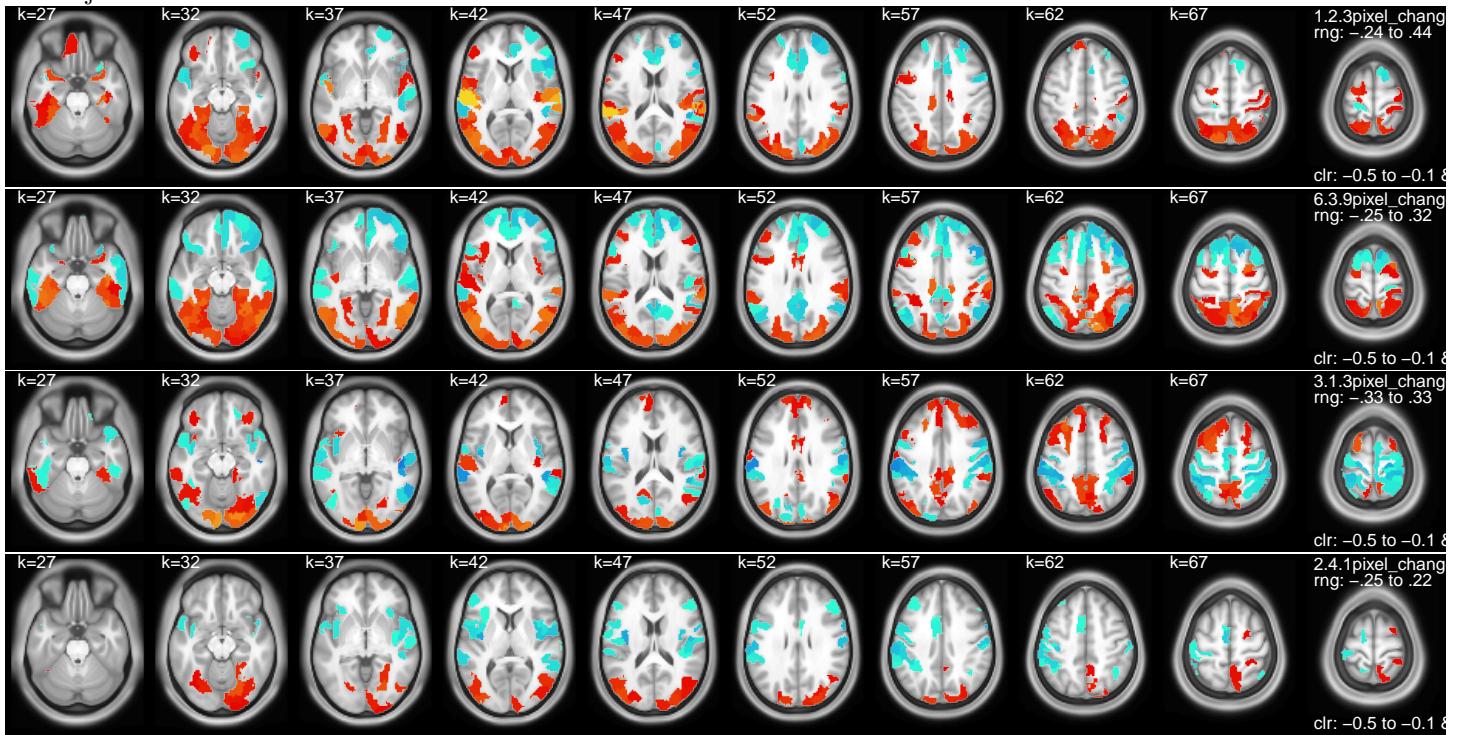
subject 18 the four runs



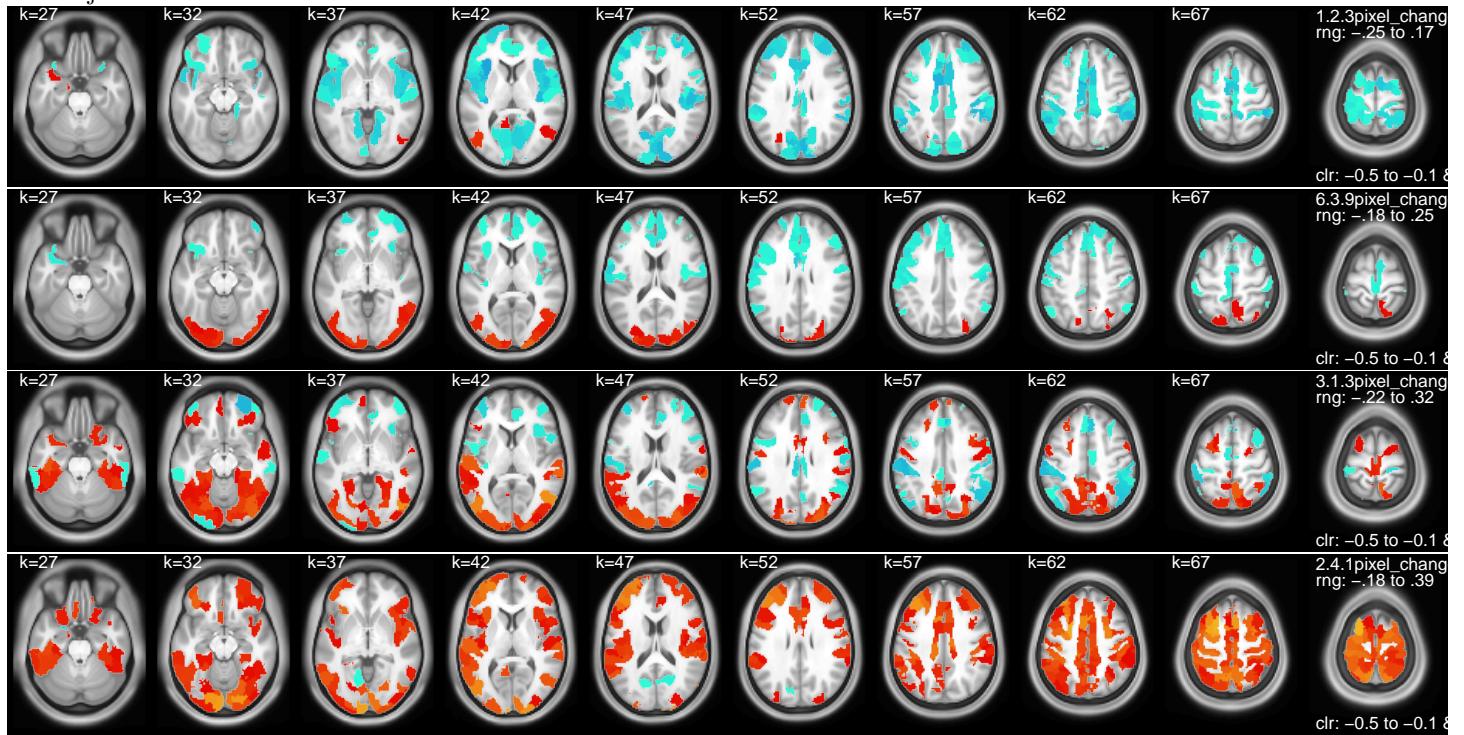
subject 19 the four runs



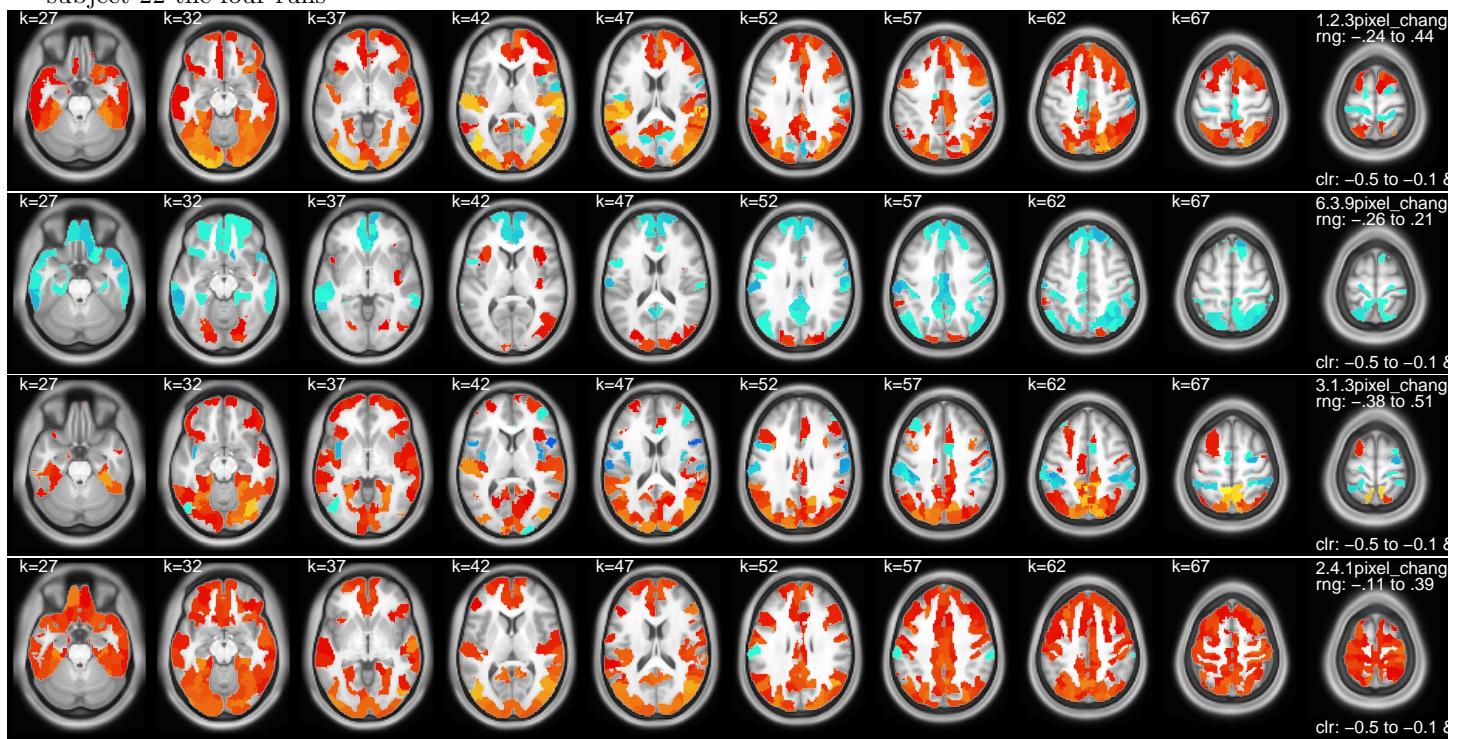
subject 20 the four runs



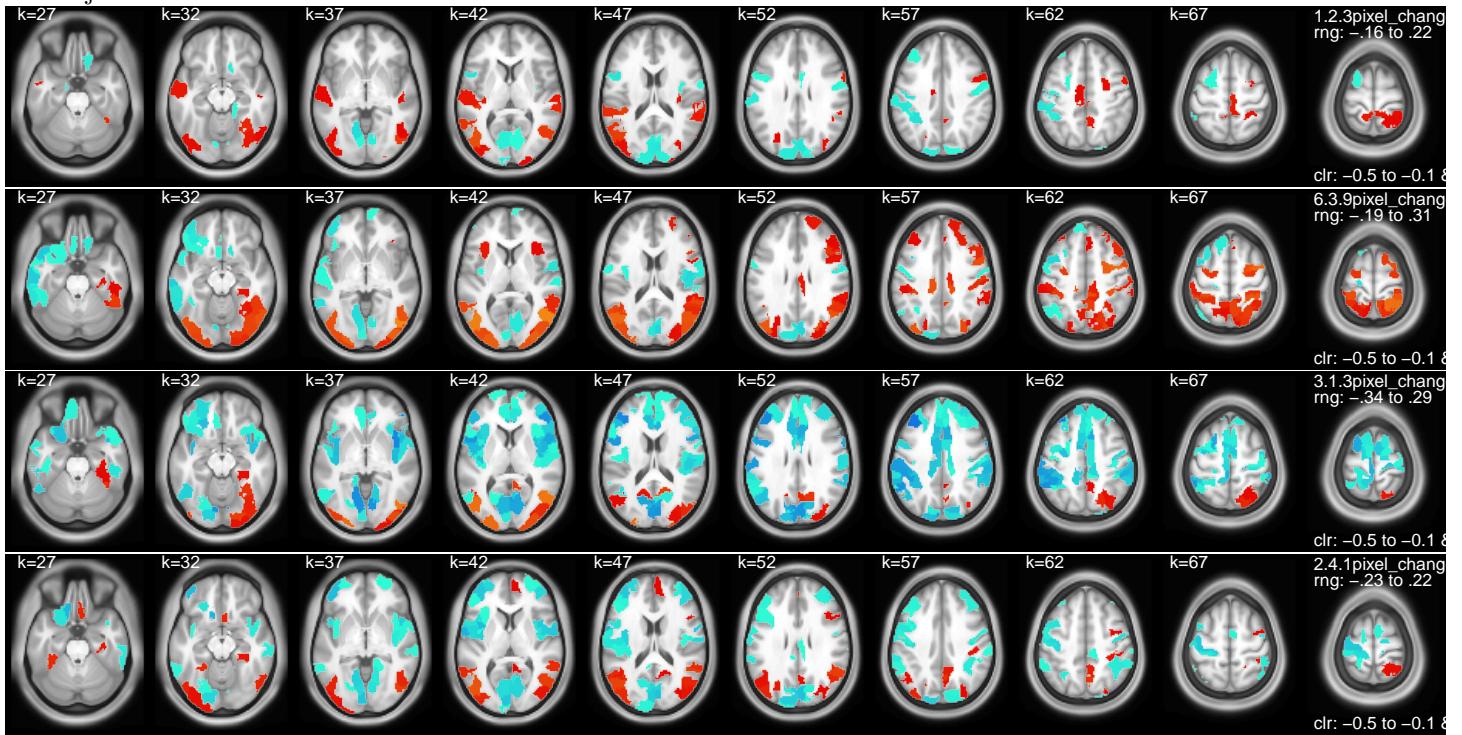
subject 21 the four runs



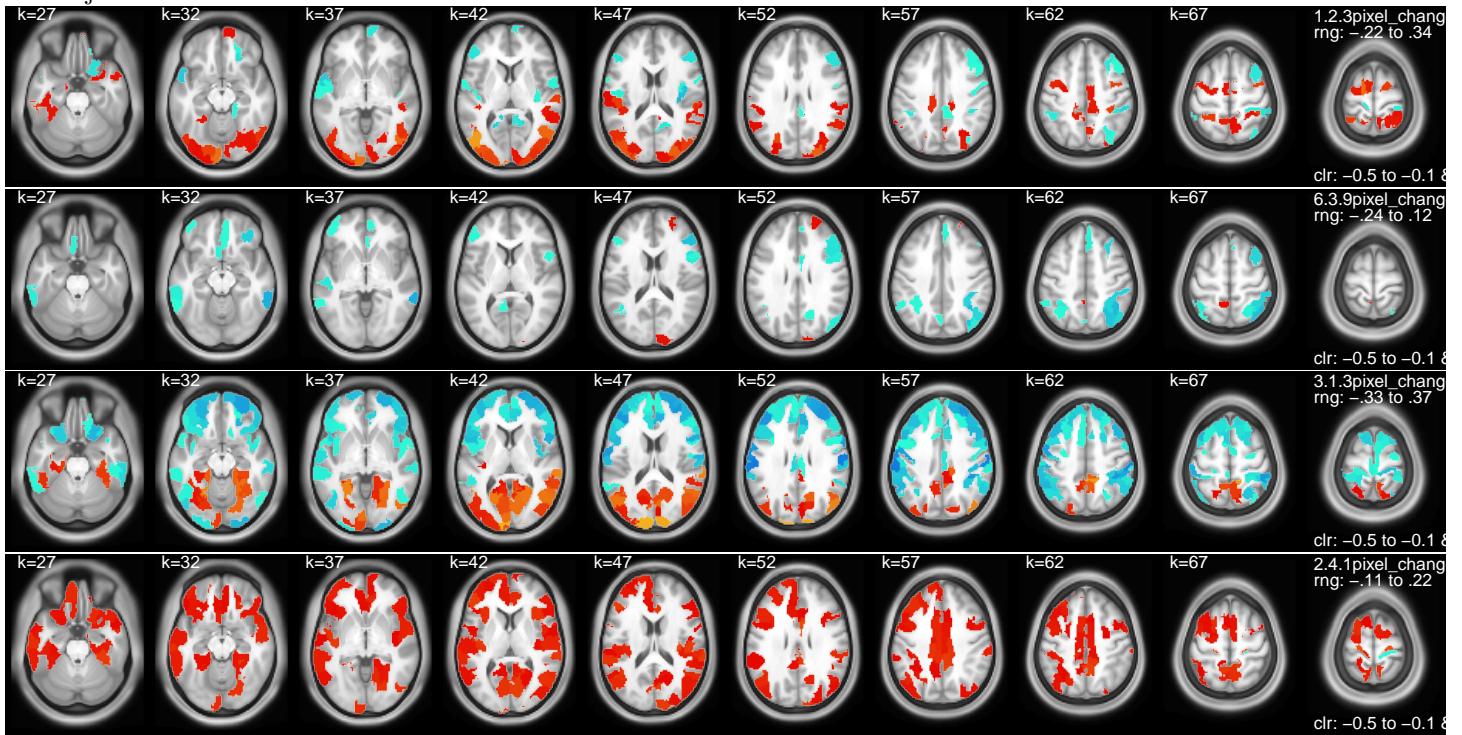
subject 22 the four runs



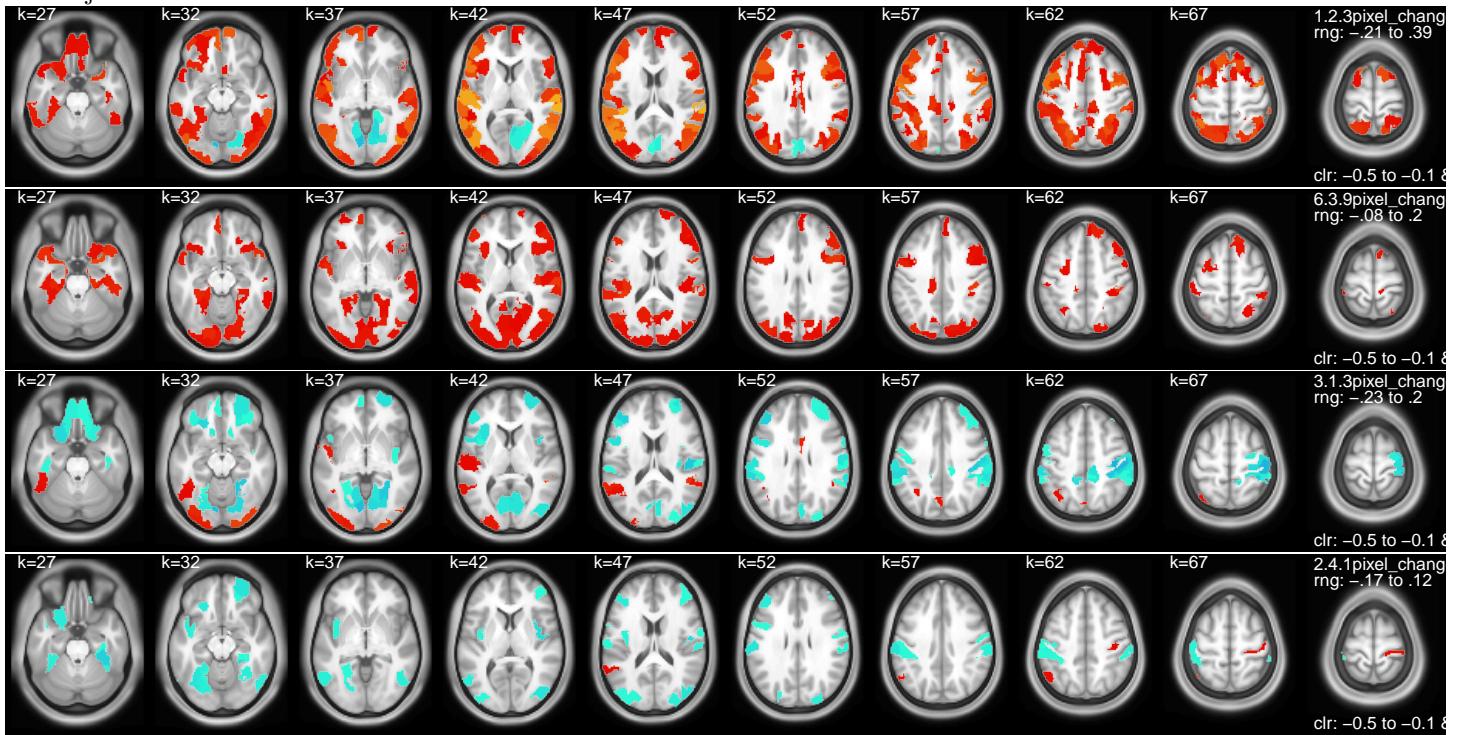
subject 23 the four runs



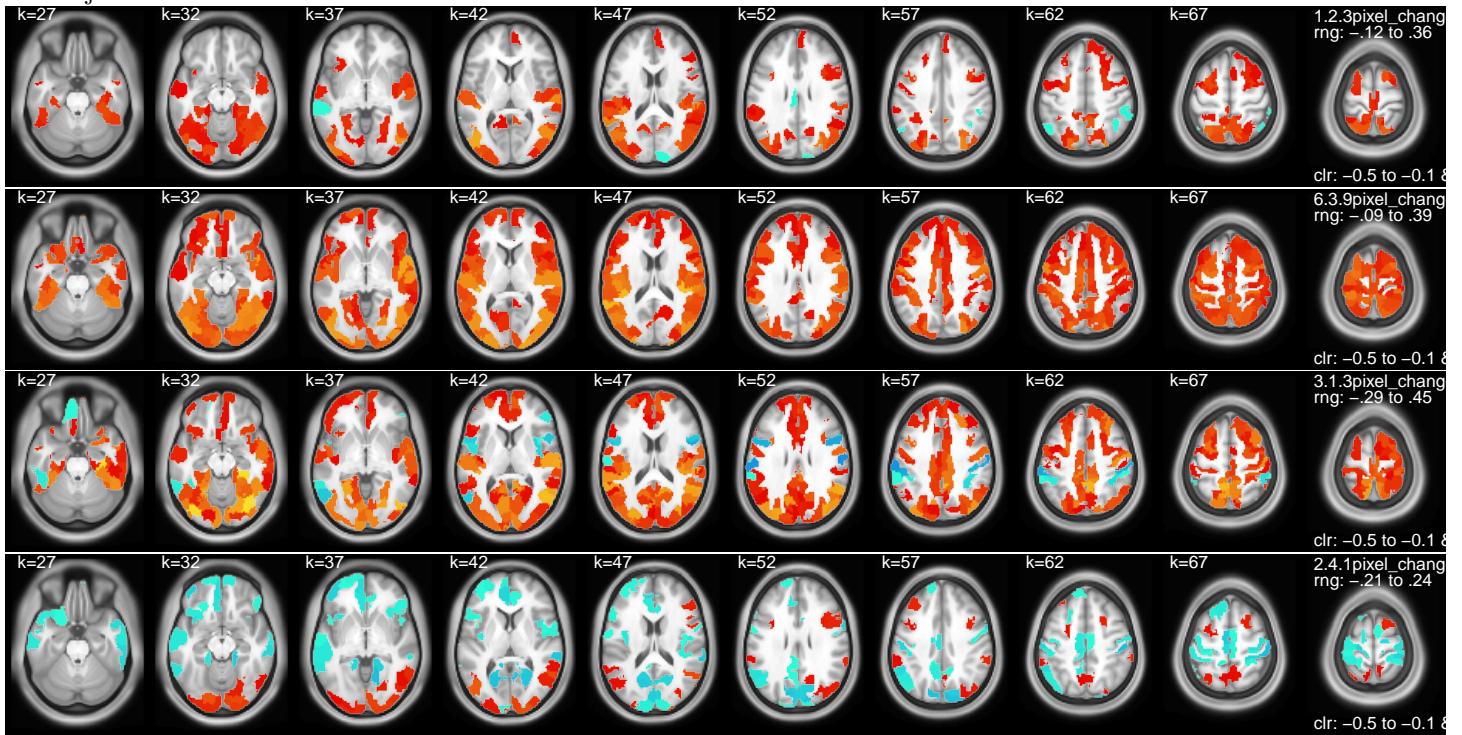
subject 24 the four runs



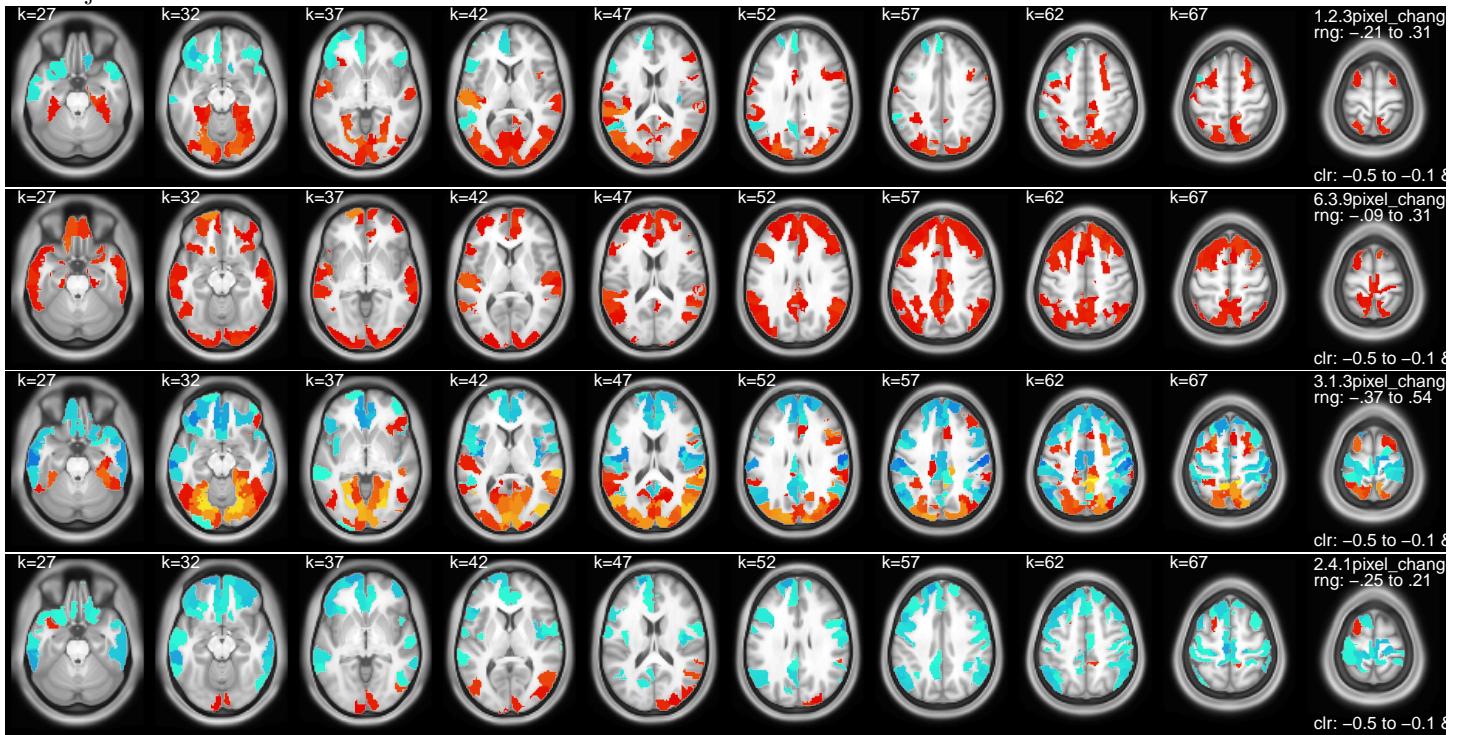
subject 25 the four runs



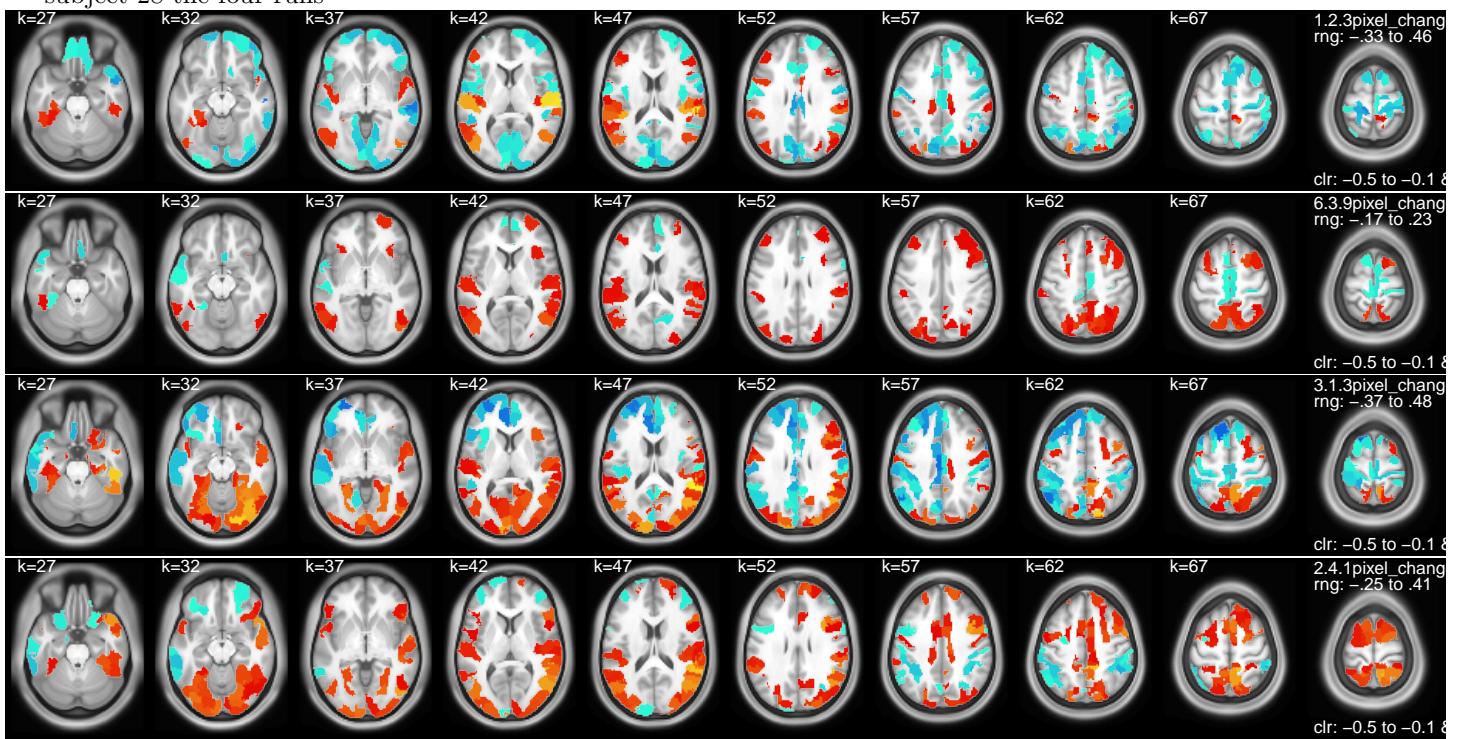
subject 26 the four runs



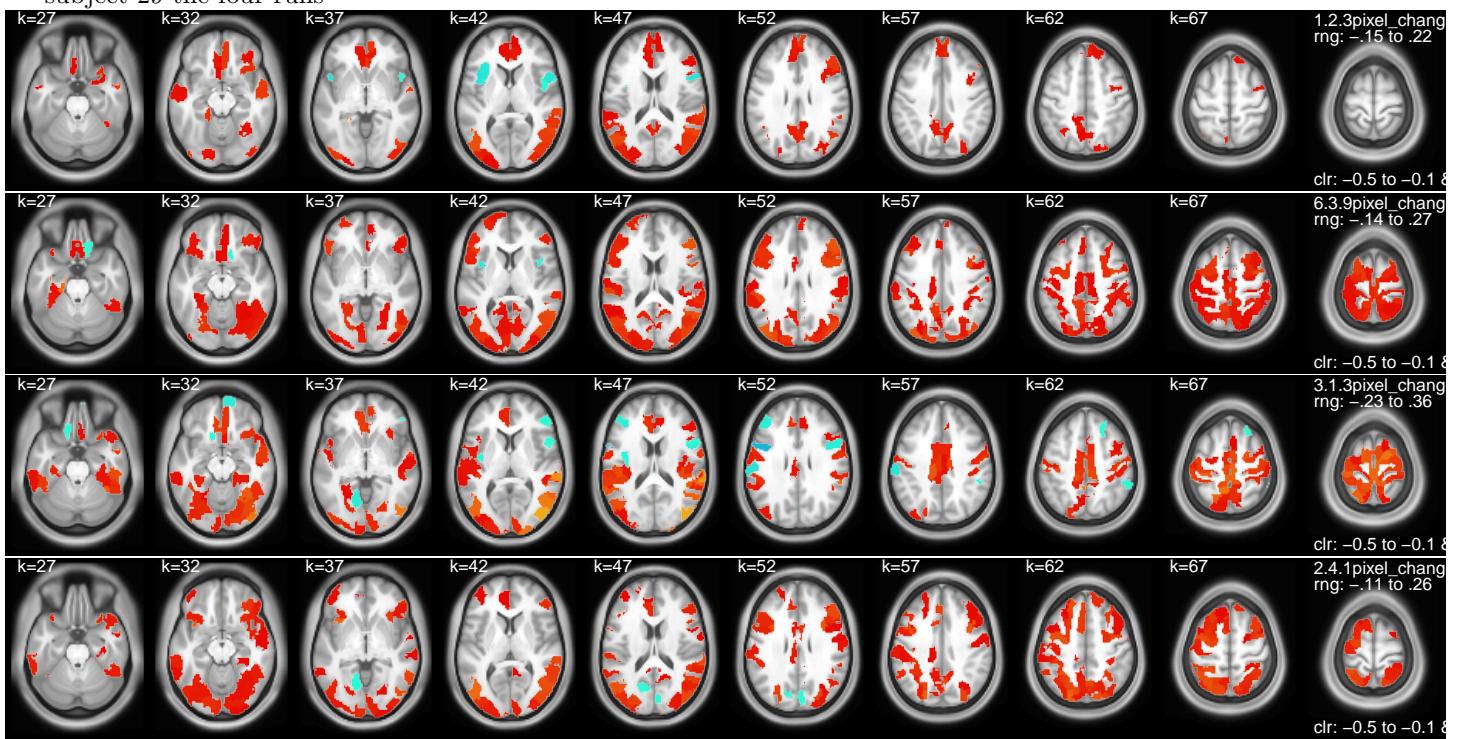
subject 27 the four runs



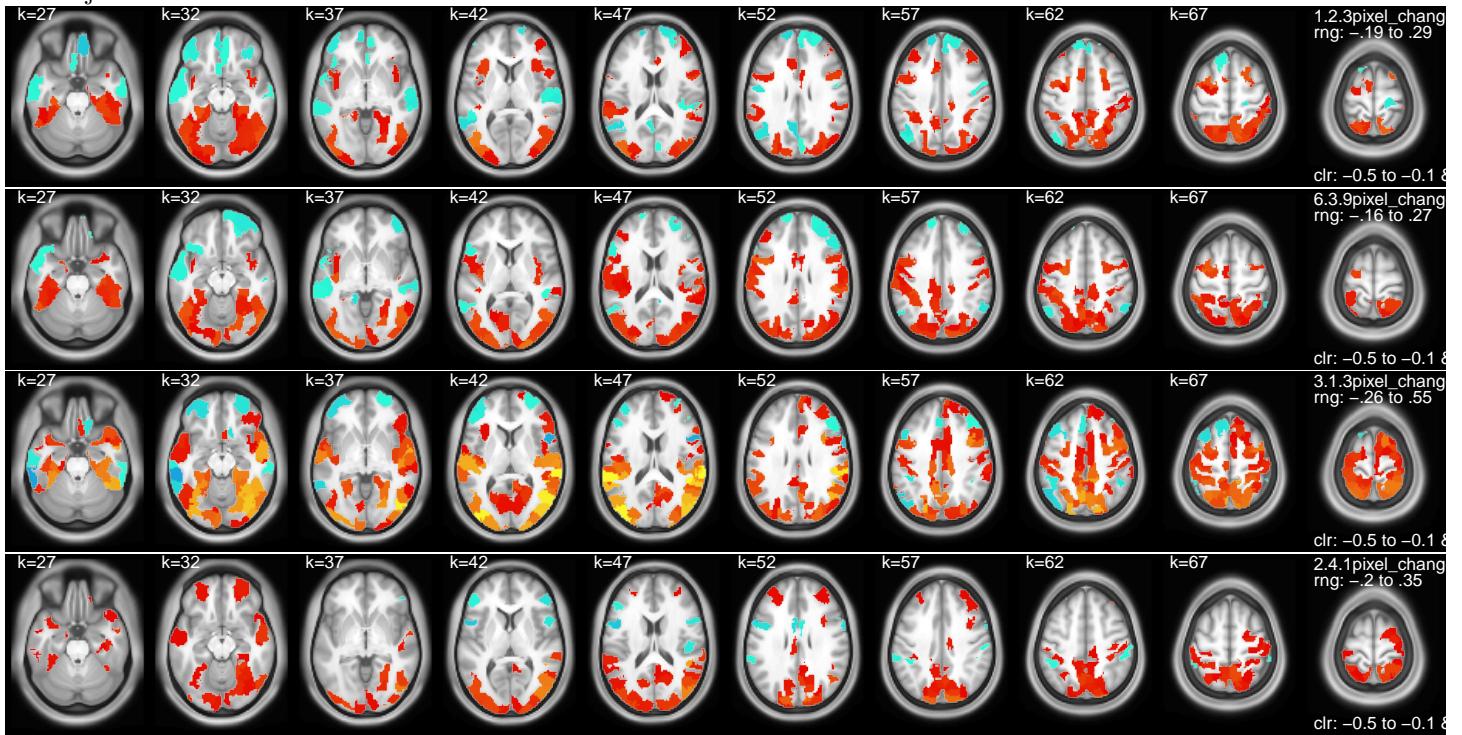
subject 28 the four runs



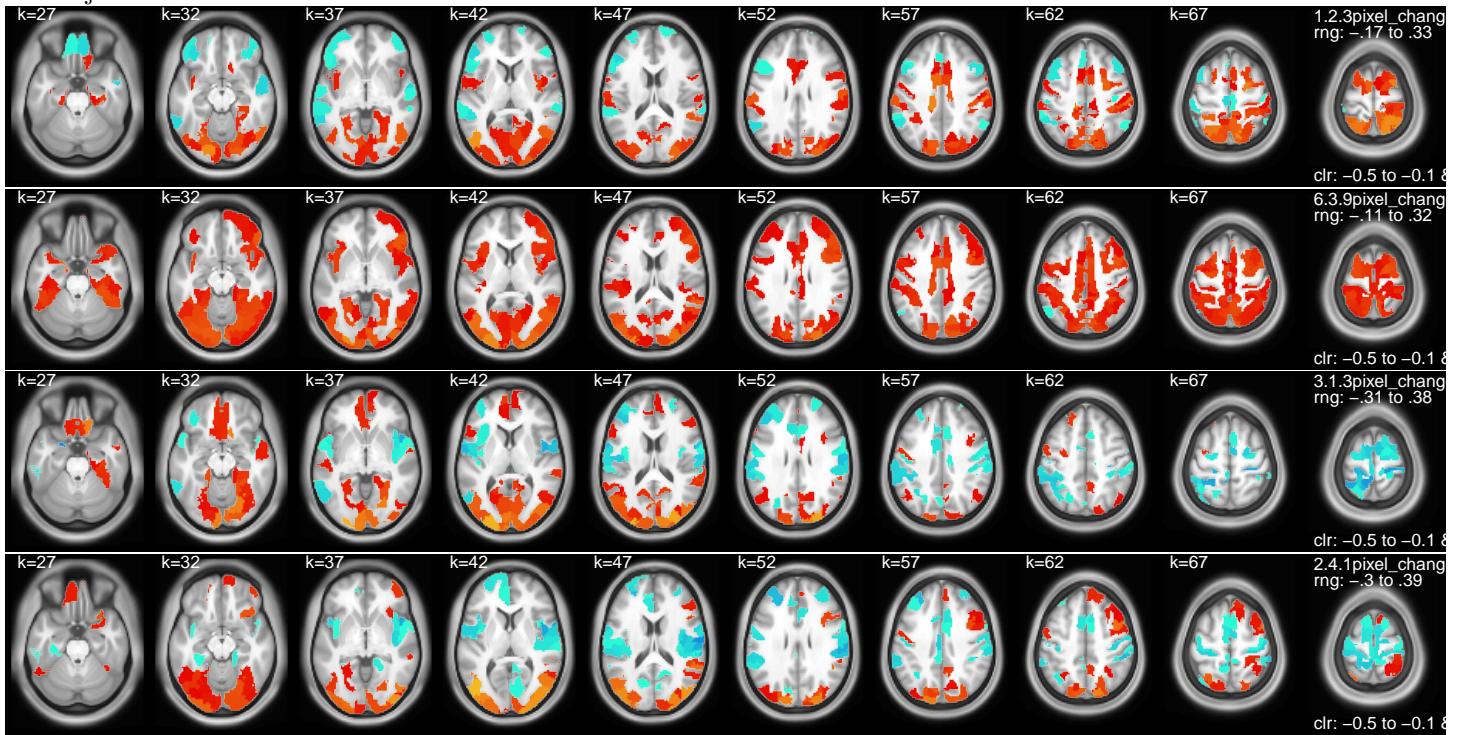
subject 29 the four runs



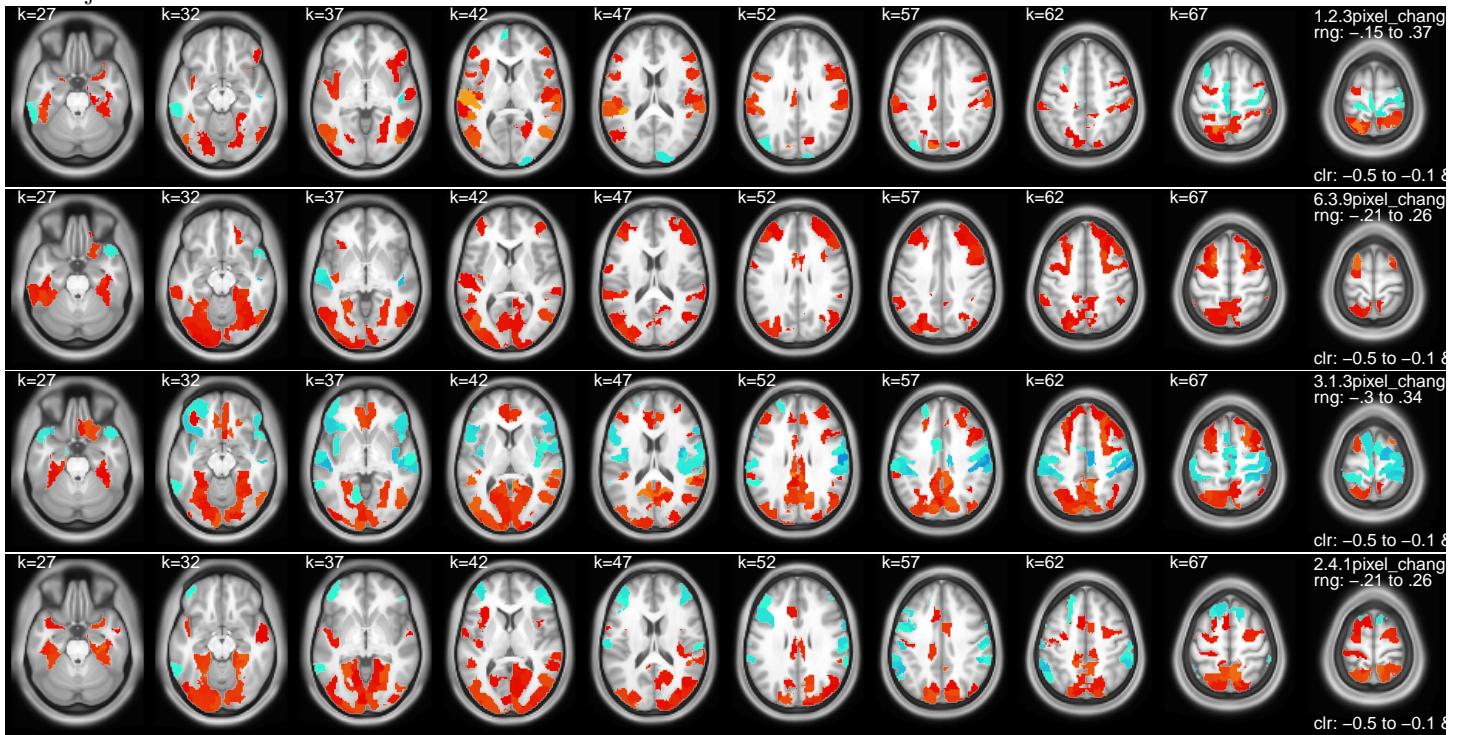
subject 30 the four runs



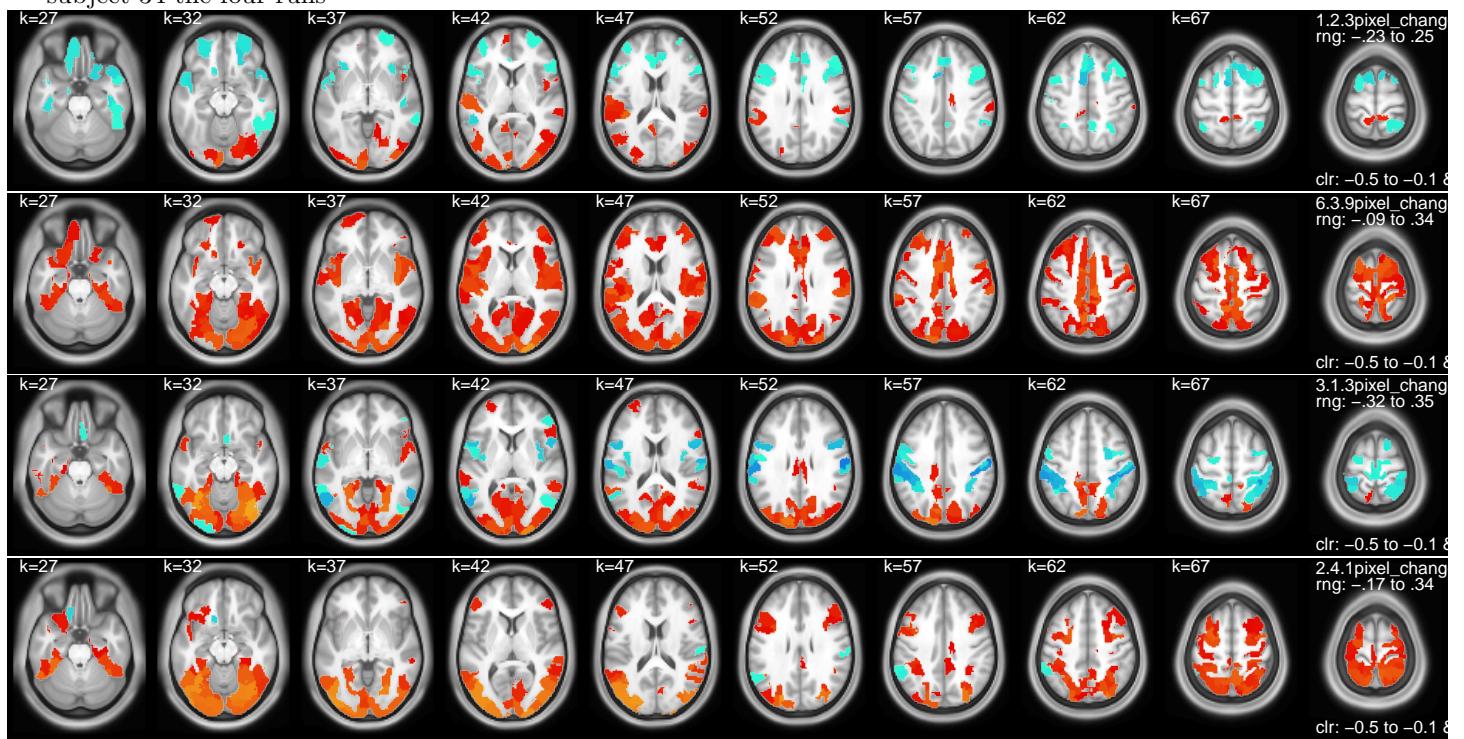
subject 31 the four runs



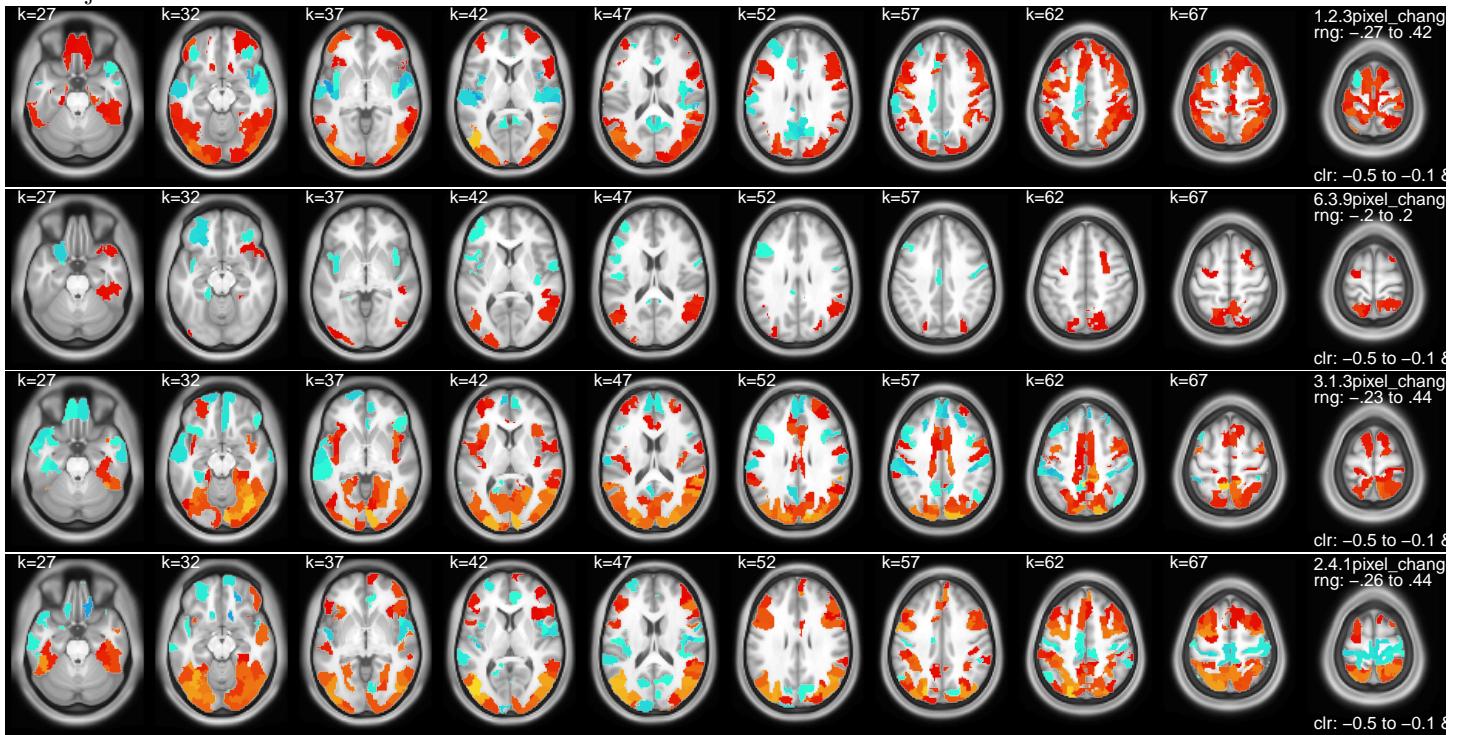
subject 33 the four runs



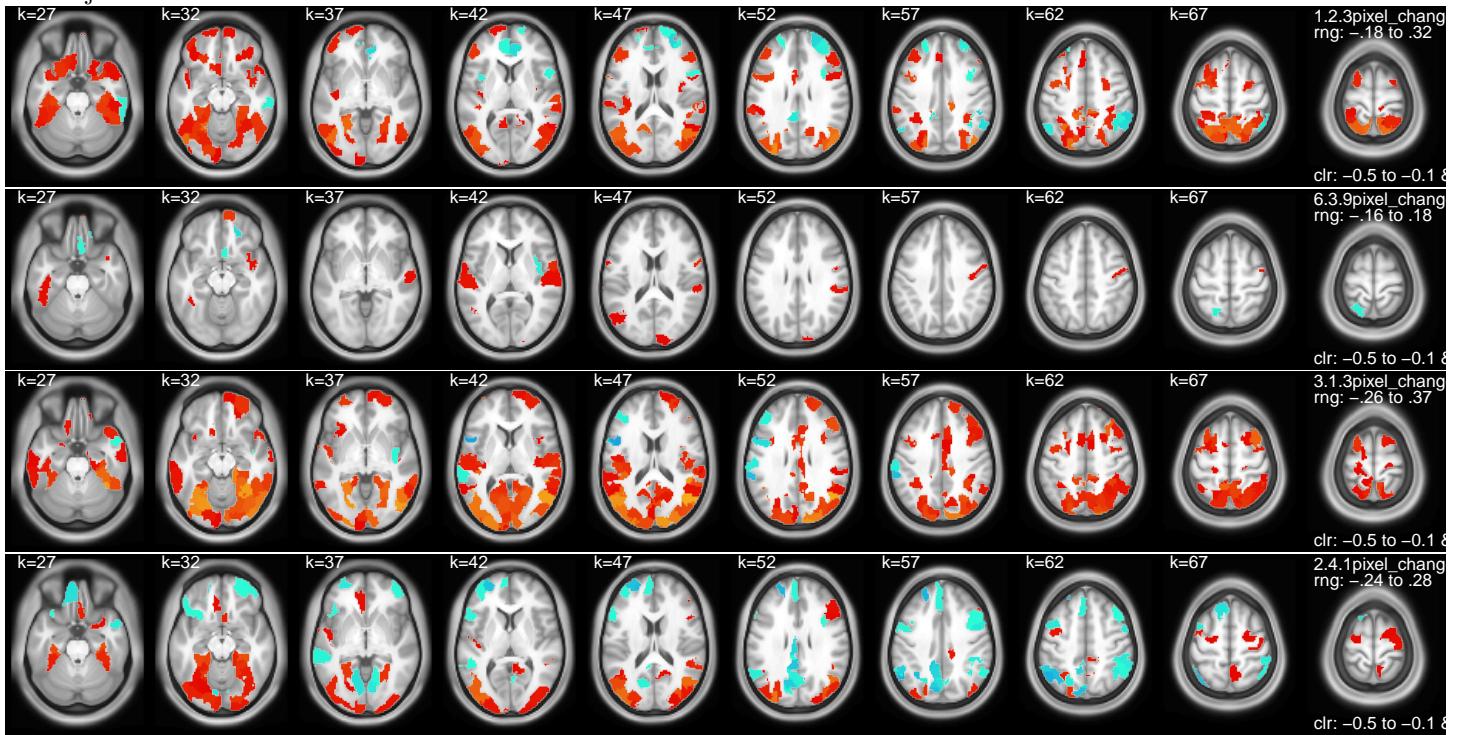
subject 34 the four runs



subject 35 the four runs



subject 36 the four runs



subject 37 the four runs

