

Correlated Noise Bias analysis

tests were run on 3 scans of resting state data. Each scan had 128 time samples and a volume of 92x112x32 voxels

I used the Design matrix of a slow ER paradigm (5 different event types separated by 4-12 s) from another scan and computed different contrasts and f-test for two different models

- Model 1 is the model in which each EV is a condition
- Model 2 is the Main effect model in which the first EV represents all the events and EVs 2 to 5 represent the difference between different events (in the context of somatosensory experiments, digits 2-5 and digit 1)

two parameters were studied

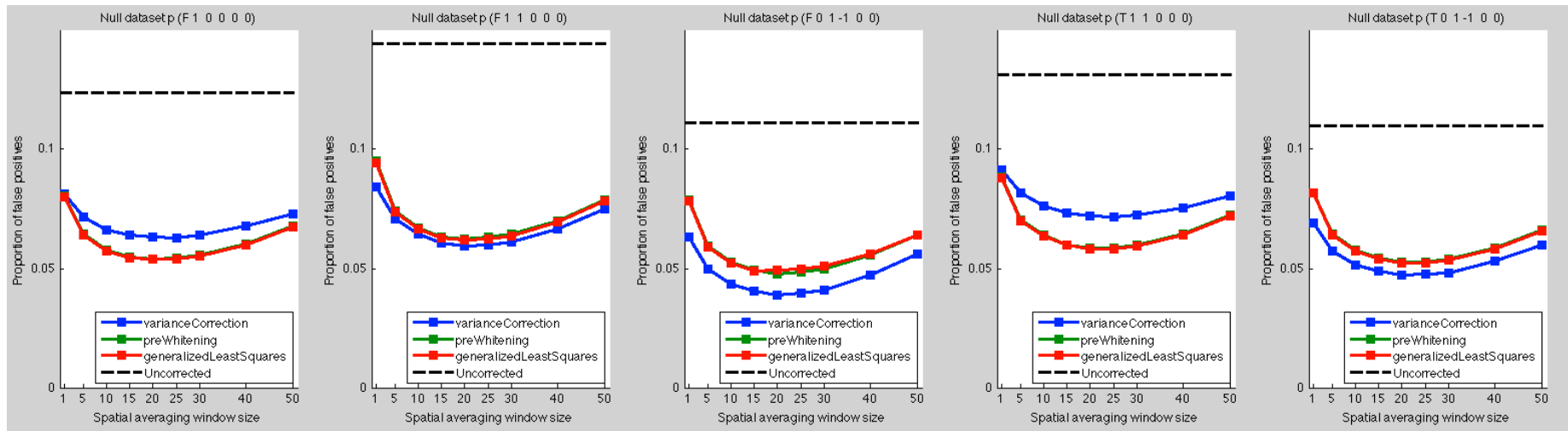
- the type of correction
- the size of the voxel set on which the covariance matrix of the residual is estimated (within-slice square of side = 1 to 50 voxels around each voxel)

Computing times

<u>covariance correction</u>	<u>2h36</u>
<u>Generalized Least Squares</u>	<u>6h42</u>
<u>Pre-Whitening</u>	<u>9h58</u>

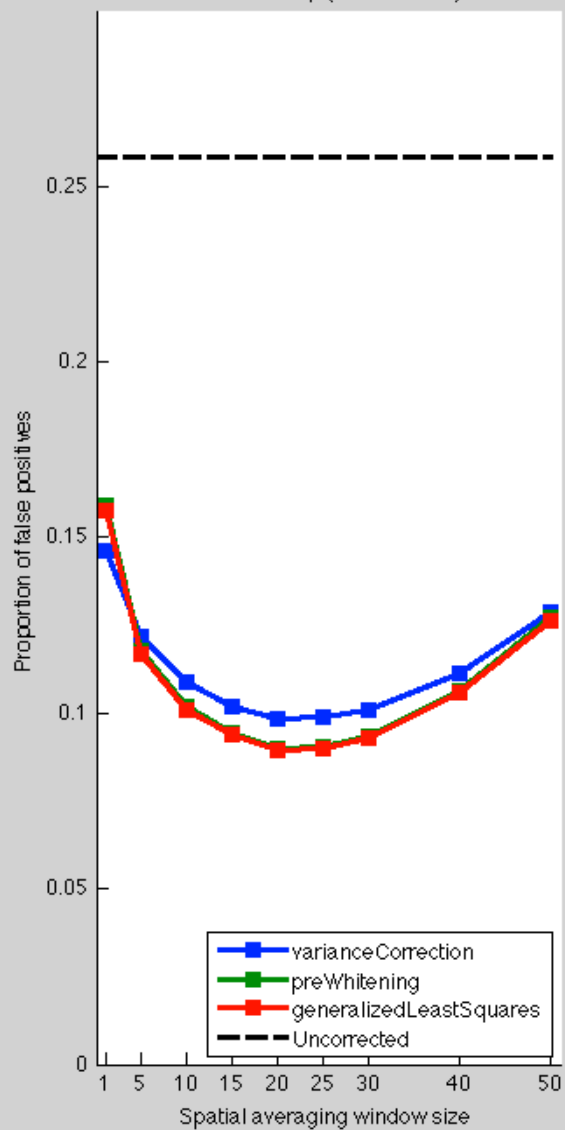
Effect of different corrections and spatial extent of the covariance matrix estimation

Model 1

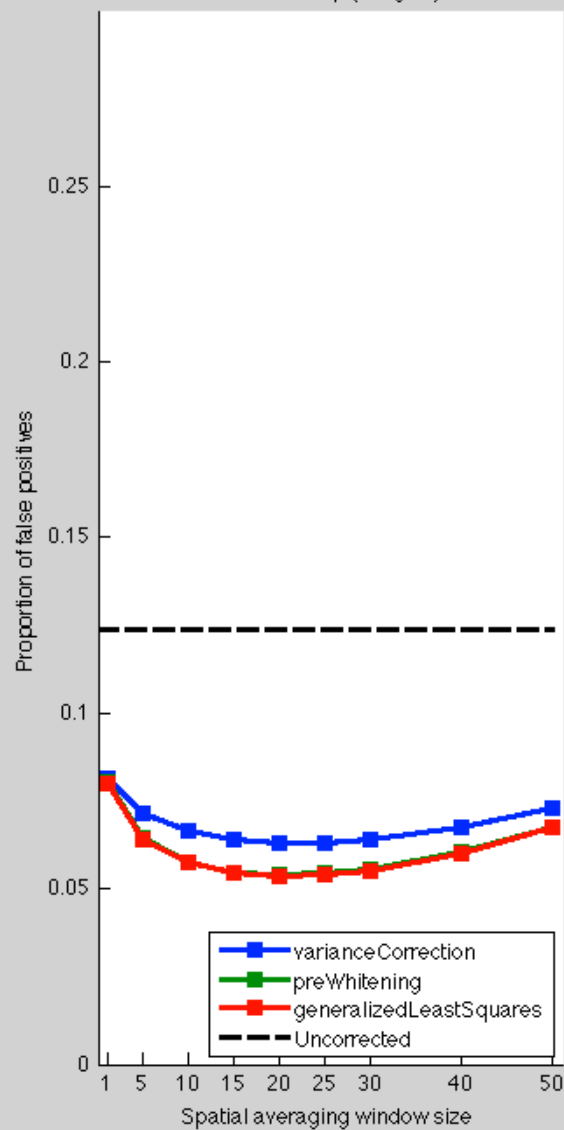


Model 2

Null dataset p (F 0 1 1 1 1)



Null dataset p (T digit 1)



Null dataset p (T 1 1 0 0 0)

