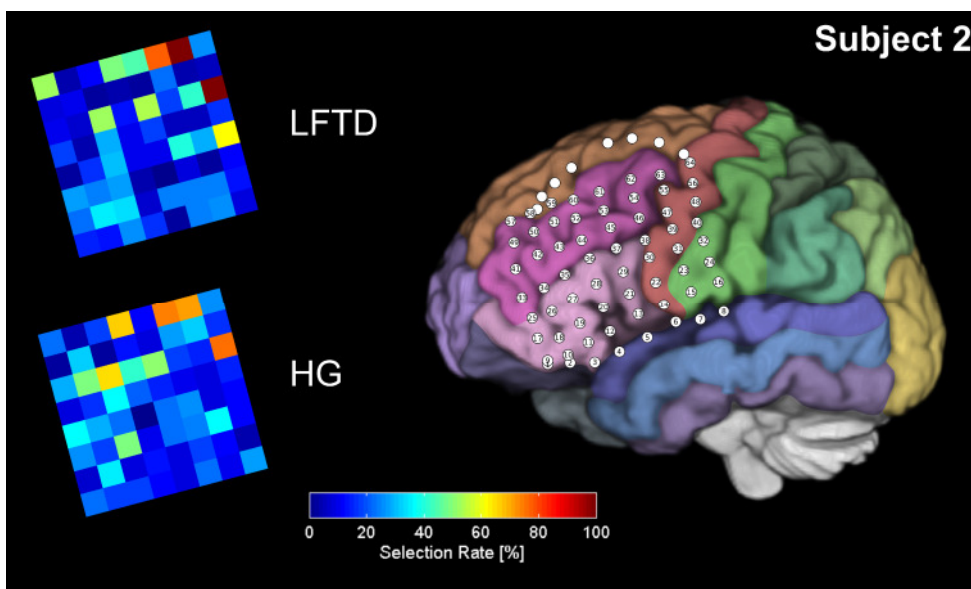
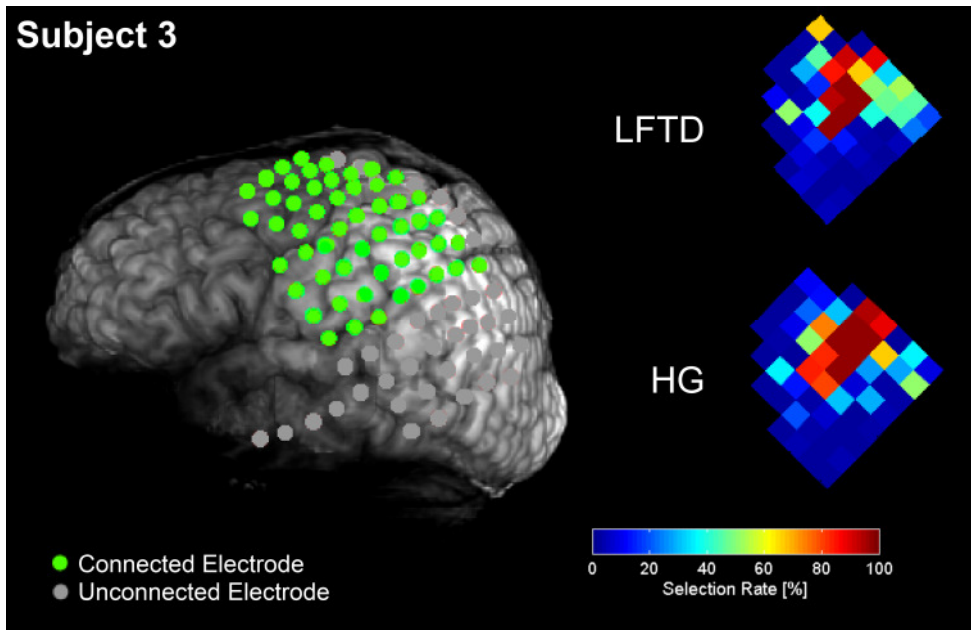


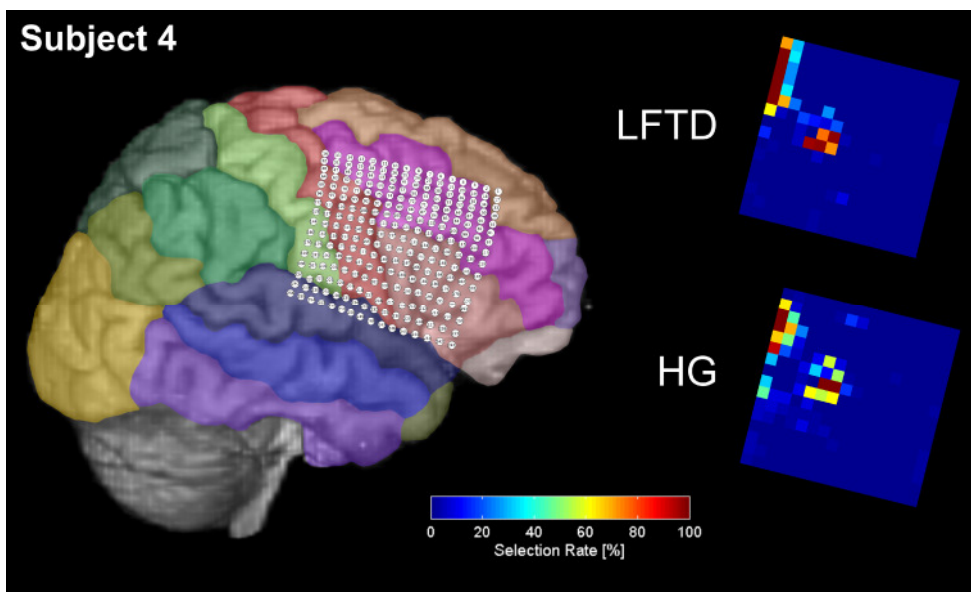
SI-Fig. 1. Grid placement for subject 1 and channel selection maps for both, LFTD and HG features. Suspected epileptic focus at posterior parietal-occipital.



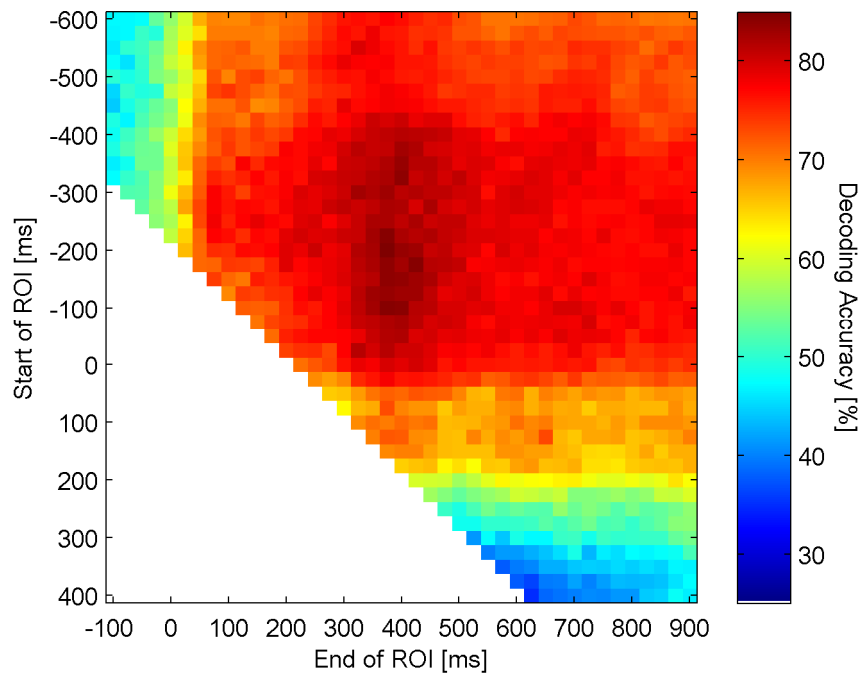
SI-Fig. 2. Grid placement for subject 2 and channel selection maps for both, LFTD and HG features. No seizure focus has been delineated.



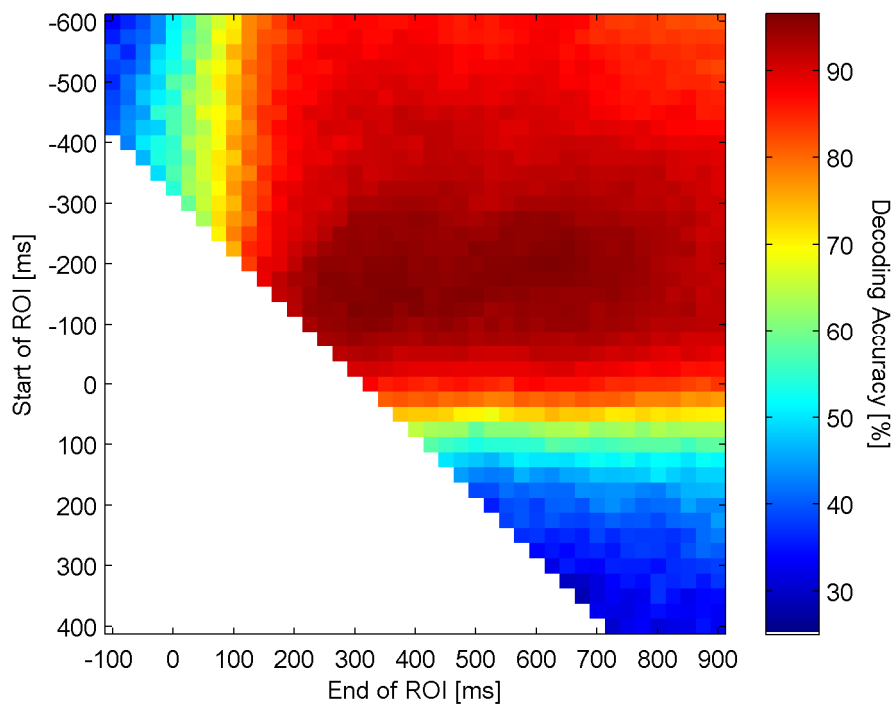
SI-Fig. 3. Grid placement for subject 3 and channel selection maps for both, LFTD and HG features. Suspected epileptic focus at left superior postcentral.



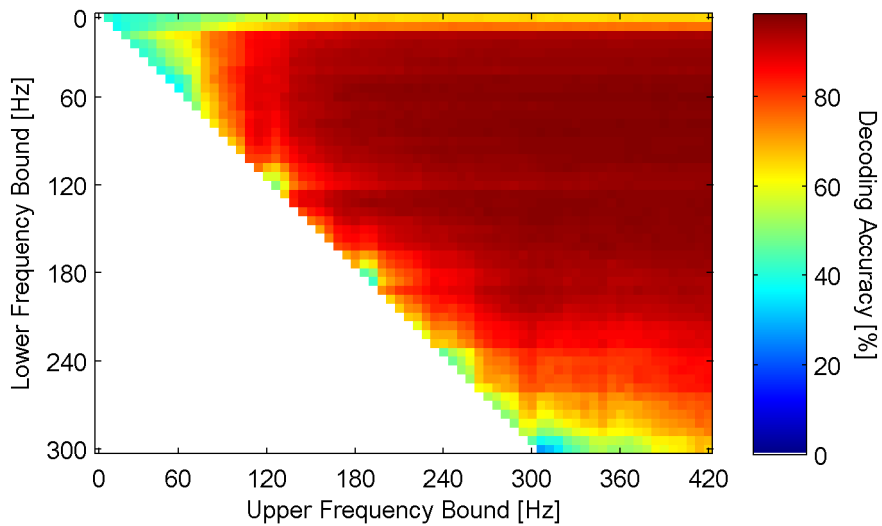
SI-Fig. 4. Grid placement for subject 4 and channel selection maps for both, LFTD and HG features. Suspected epileptic focus at frontal eye field.



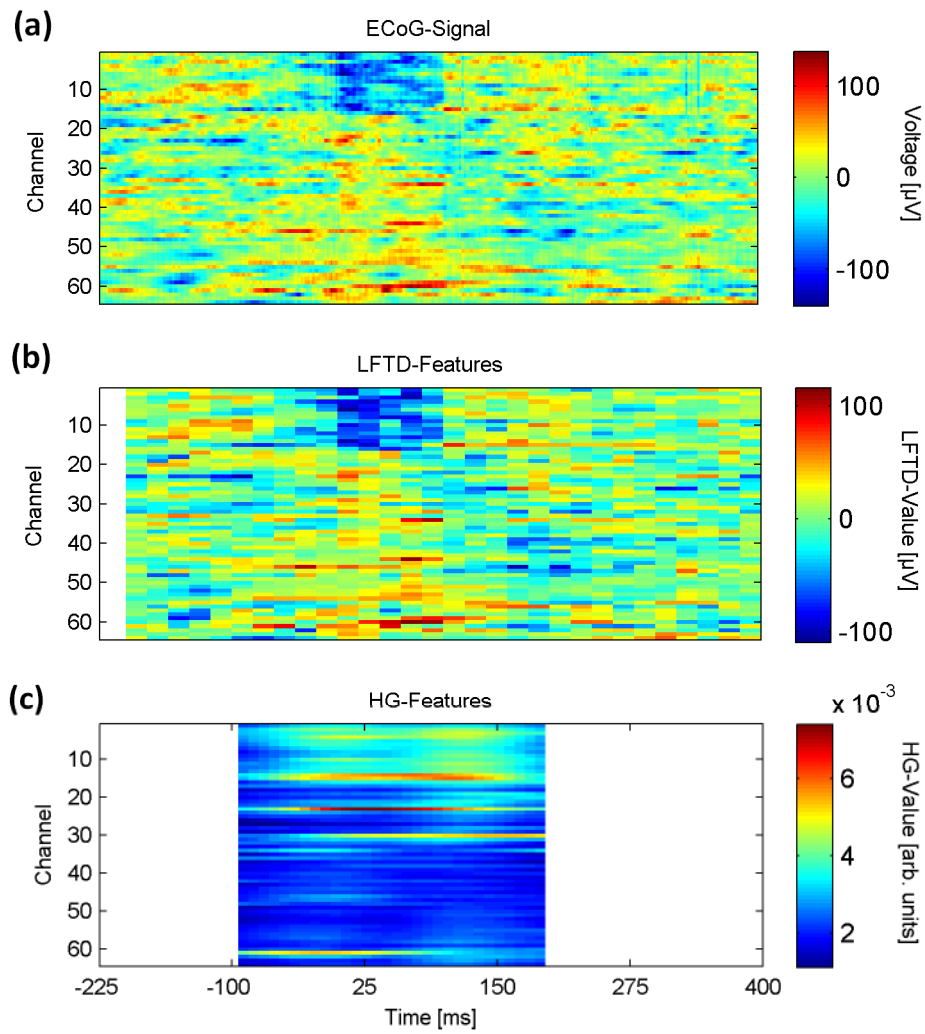
SI-Fig. 5. HMM performances for different lengths and locations of the LFTD ROI (subject 1, session 1). These and similar results for other subjects have been evaluated for optimizing the parameters of the feature space.



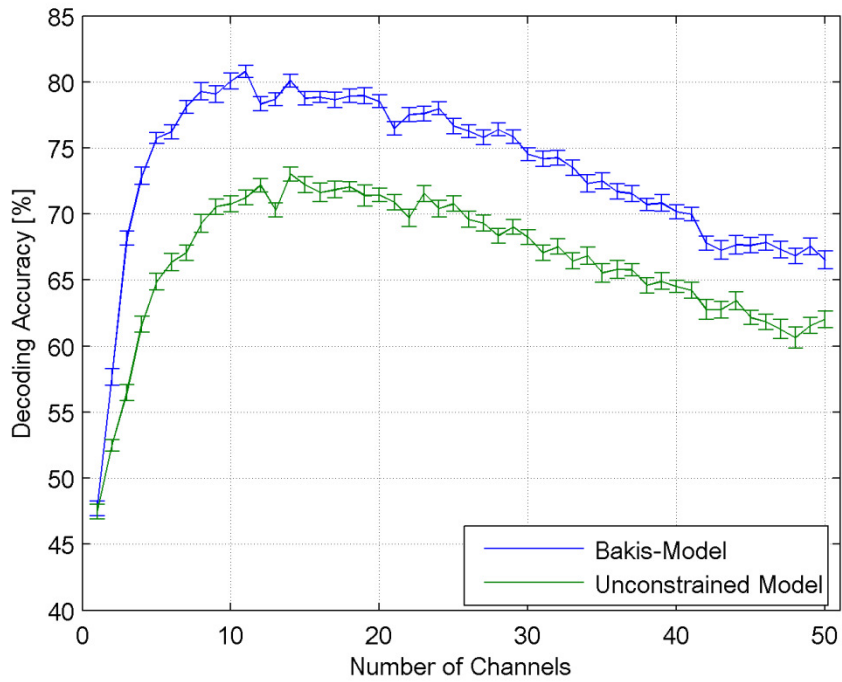
SI-Fig. 6. HMM performances for different lengths and locations of the HG ROI (subject 1 session 1). These and similar results for other subjects have been evaluated for optimizing the parameters of the feature space.



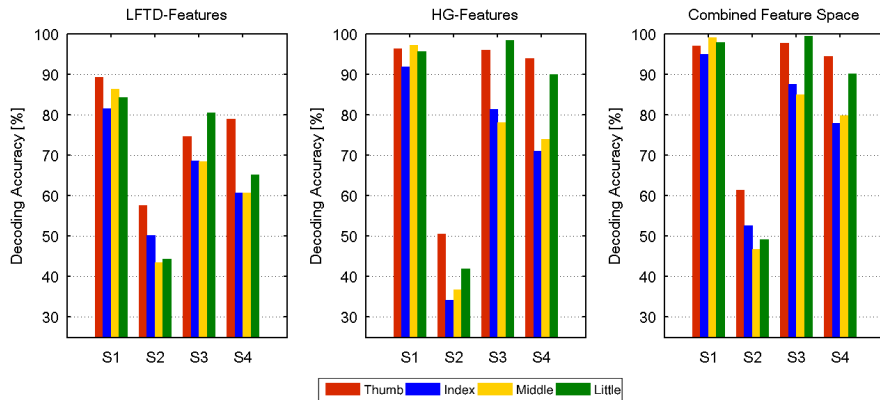
SI-Fig. 7. HMM performances for different lengths and locations of the HG frequency range (subject 1, session 1). These and similar results for other subjects have been evaluated for finding the optimal frequency band.



SI-Fig. 8. (a) Raw 64-channel ECoG signal for a typical trial (subject 1, session 2, middle finger). (b) Extracted LFTD feature sequence after lowpass filtering and downsampling. (c) Extracted HG feature sequence. Each HG feature has been temporally assigned to the time point at the center of its corresponding FFT window.



SI-Fig. 9. HMM performances for a varying number of channels are shown for both, the Bakis model and the unconstrained HMM (subject 3 session 2). Error bars denote the uncertainty computed from several cross-validation runs.



SI-Fig. 10. Mean SVM decoding rates decomposed into true positive rates for each finger. Results are shown for each feature space and averaged across sessions and CV repetitions.