

Pred_Error_BCI_Velocity

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1 Abstract

For the first part of the results we can cite the presented work at CHI2019.

2 Introduction

3 Results

3.1 IPQ and RT as well as Velocity for different directions and Congruency, Feedback type

3.2 Classification LDA performance

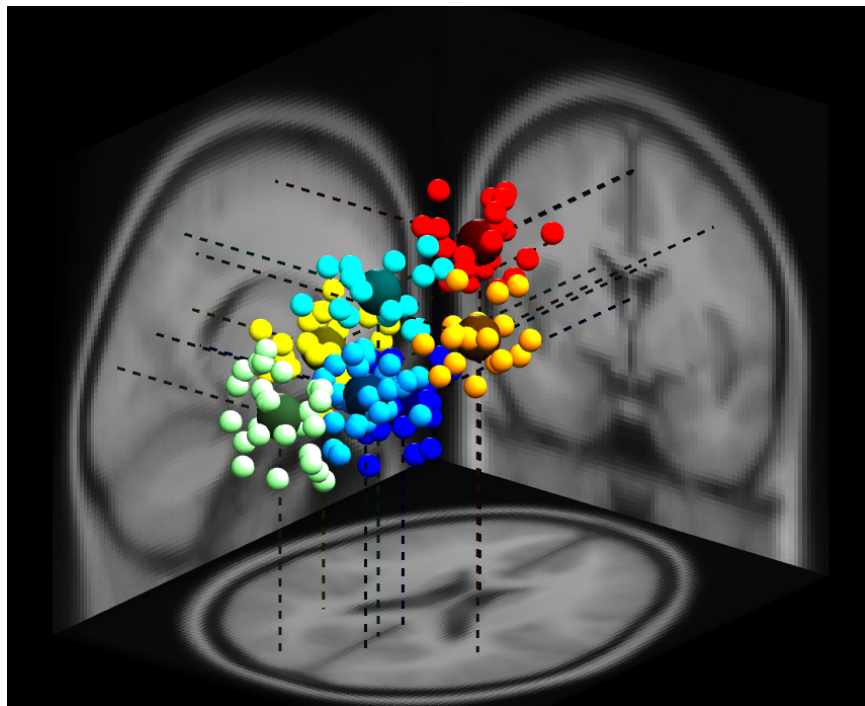
3.3 Classifier Localization and BCI weighted clustering

Several IC source clusters showed event-related changes in power. The numbers of subjects contained in each cluster as well as Tailarach coordinates of the cluster centroids are given in Table 1.

Table 1: IC clusters and cluster centroid locations

Talairach coordinates	Nr. of subjects	Cluster	Cortical location	Brodmann area
1, -55, 60	17	10	Parietal cortex	BA7
-13, -93, 20	21	11	Occipital cortex	BA18
7, -70, 26	21	16	Parietal cortex	BA31
3, 1, 62	21	21	Medial Frontal Gyrus	BA6

Talairach coordinates	Nr. of subjects	Cluster	Cortical location	Brodmann area
-30, -46, 28	21	36	WM	none
38, -44, 48	13	69	Inferior Parietal cortex	BA40
2, -42, 12	21	72	Posterior cingulate	BA29



3.4 Parametric ERP of classifier weighted cluster with velocity

parametric ERSP regressing velocity on both, mismatch and match trials.

4 Discussion

4.1 Limitations

4.2 Outlook

4.3 Summary

5 Methods