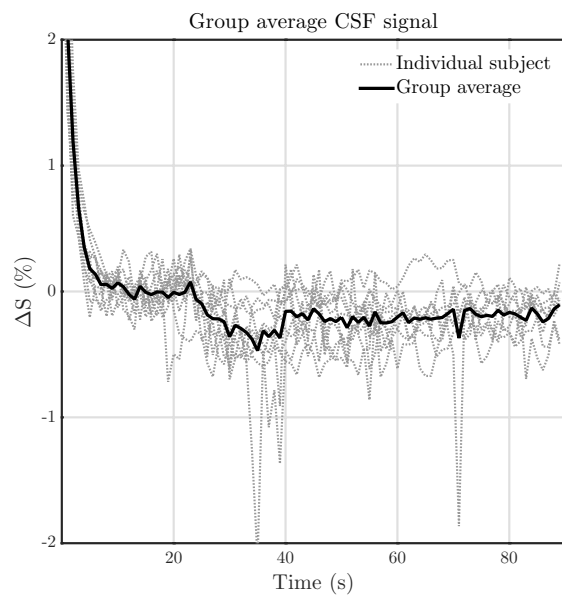
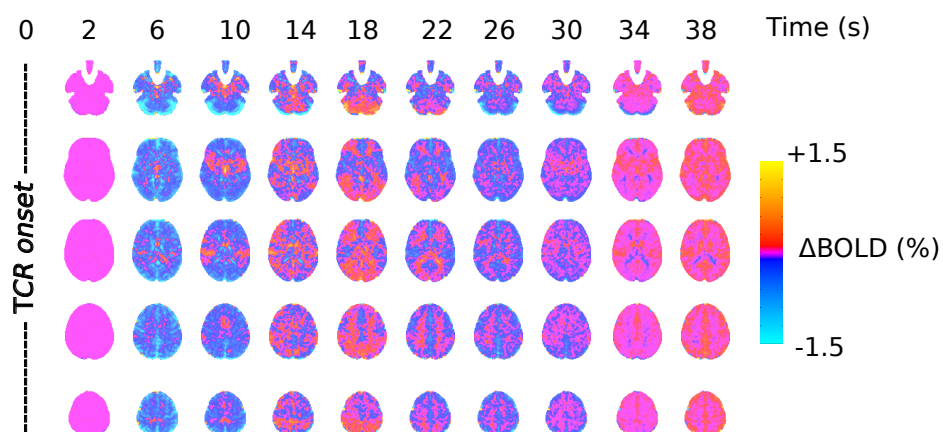


1. Supplementary material

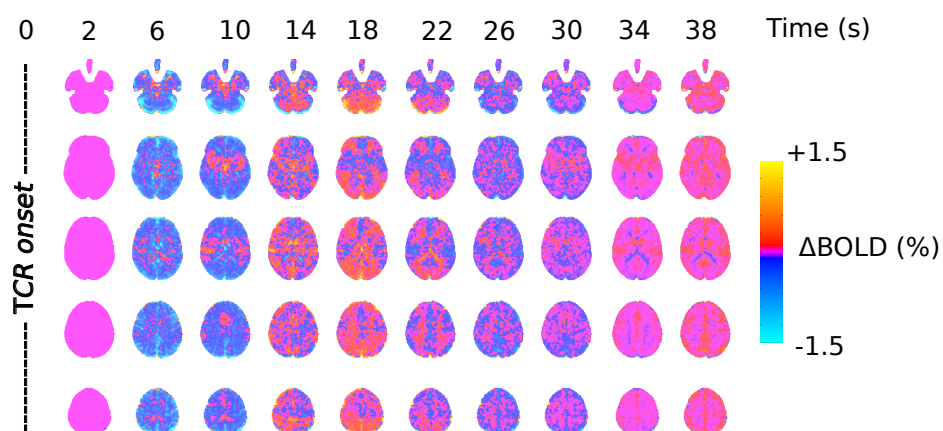


S1: Group average and individual subject lateral ventricle CSF signals. Following TCR onset (20s), there is evidence of a small and sustained signal reduction, but this has only a very small percentage signal change, and there is significant between subject variability. Thus, removal of the CSF signal as part of ANATICOR does not significantly influence the HRF_{TCR} results.

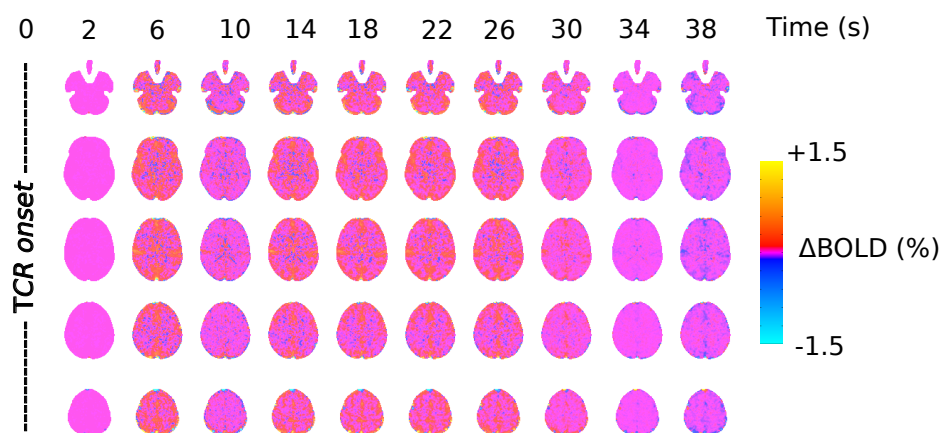
A) Group averaged spatiotemporal response (without $P_{ET}CO_2$ correction)



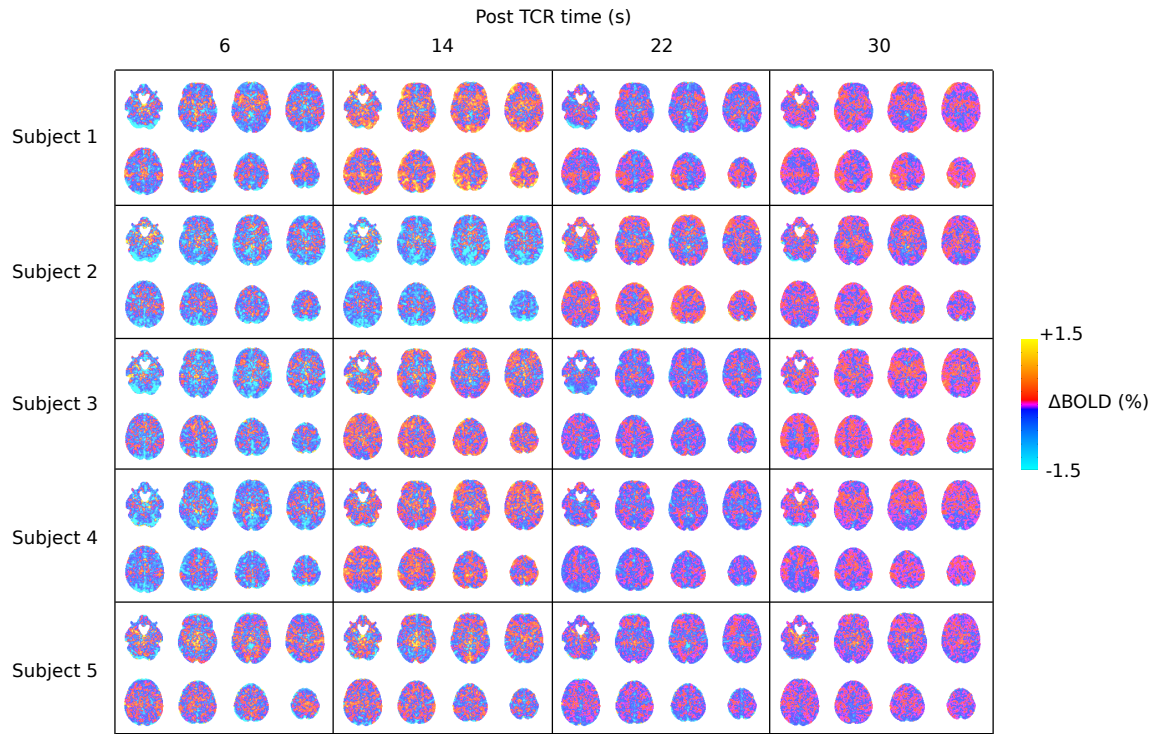
B) Group averaged spatiotemporal response (with $P_{ET}CO_2$ correction)



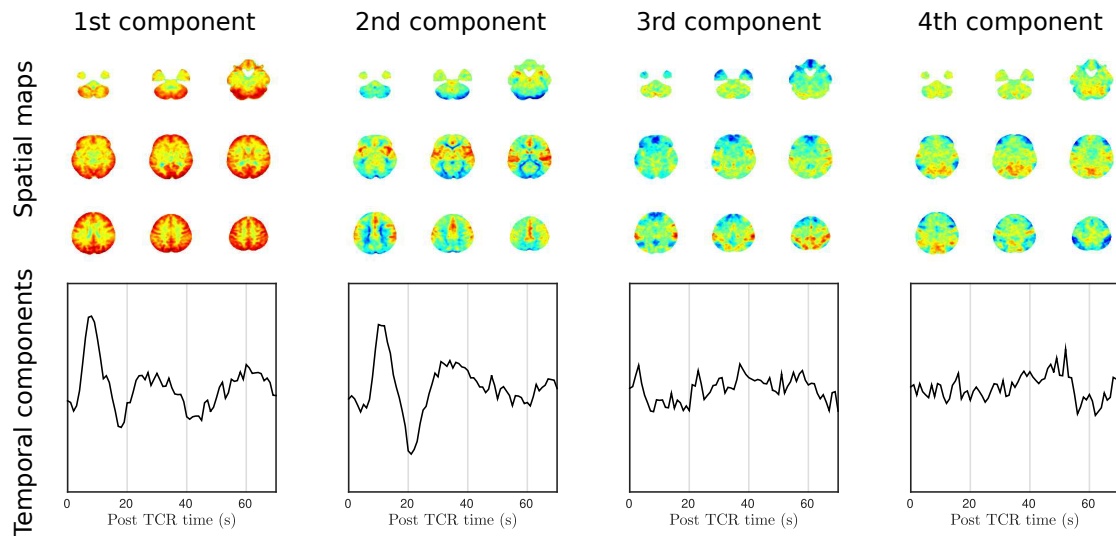
C) Difference in spatiotemporal response (with - without $P_{ET}CO_2$ correction)



S2: A) Spatiotemporal dynamics of the HRF_{TCR} without including $P_{ET}CO_2$ in model. B) Spatiotemporal dynamics of the HRF_{TCR} with $PETCO_2$ included in model. C) Difference due to including $P_{ET}CO_2$ in model.



S3: A presentation of the HRF_{TCR} at 4 different time points for the first 5 subjects in order to show the between subject agreement in the spatiotemporal dynamics.



S4: The spatial maps and time series of the top four components following a PCA decomposition of the group averaged data. N.B. The directionality of the temporal components in the PCA output does not necessarily reflect directionality in the original data.