Archival quantitative electroencephalogram data suggests that when BLAST is applied and before/after z-score LORETA analysis is used, there are significant changes in amygdala, insula, and somatosensory function that could explain how BLAST de-escalates the human stress response and also lessens or eliminates body sensations associated with distressing recall or physical pain. Lubar (2016, personal communication) reviewed these data and concurred with the hypothesized conclusions.

qEEG results using a Cognionics Quick-20 Dry Headset, Neuroguide version 2.8.7, and LFT Tools Software for analysis show reduction in electrical activity in a 38-year-old CEO before BLAST application and 30 seconds after BLAST application in an eyes-open resting state condition. ($z = 2.5$, $z = 2.0$)

Reduction in beta activity shown in 3-d voxelated view
Reduction in theta activity shown in 3-d voxelated view

Reduction in delta activity shown in 3-d voxelated view
Brodmann area radar summary map of delta, theta, alpha, alpha1, alpha2, beta, beta1, beta2, beta3, and high beta activity before BLAST (left) and after 30 seconds of BLAST (right)

Theta ($z=2.0$)