

Table S2 Basic structure of inputs and outputs of functions in *stats_cal* module in NeuroRA. The variable definitions are shown in Table S3.

stats()	
– to conduct the statistical analysis for results of EEG-like data	
shape of input data: [<i>n_subs</i> , <i>n_chls</i> , <i>n_ts</i> , 2 ^{<i>b</i>}]	shape of output data: [<i>n_cons</i> , <i>n_cons</i>]
stats_fmri()	
– to conduct the statistical analysis for results of fMRI data (searchlight)	
shape of input data: [<i>n_subs</i> , <i>n_chls</i> , <i>n_ts</i> , 2 ^{<i>b</i>}]	shape of output data: [<i>n_cons</i> , <i>n_cons</i>]
stats_iscfmri()	
– to conduct the statistical analysis for results of fMRI data (ISC searchlight)	
shape of input data: [<i>n_ts</i> , <i>n_subs</i> /(2!×(<i>n_subs</i> -2)!), <i>n_x</i> , <i>n_y</i> , <i>n_z</i> , 2 ^{<i>b</i>}]	shape of output data: [<i>n_ts</i> , <i>n_x</i> , <i>n_y</i> , <i>n_z</i> , 2 ^{<i>b</i>}]
stats_stps()	
– to conduct the statistical analysis for results of EEG-like data (for STPS)	
shape of input data: <i>corr1</i> : [<i>n_subs</i> , <i>n_chls</i> , <i>n_ts</i>] <i>corr2</i> : [<i>n_subs</i> , <i>n_chls</i> , <i>n_ts</i>]	shape of output data: [<i>n_chls</i> , <i>n_ts</i> , 2 ^{<i>b</i>}]
stats_stpsfmri()	
– to conduct the statistical analysis for results of fMRI data (searchlight)	
shape of input data: <i>corr1</i> : [<i>n_subs</i> , <i>n_x</i> , <i>n_y</i> , <i>n_z</i>] <i>corr2</i> : [<i>n_subs</i> , <i>n_x</i> , <i>n_y</i> , <i>n_z</i>]	shape of output data: [<i>n_x</i> , <i>n_y</i> , <i>n_z</i> , 2 ^{<i>b</i>}]