**Dynamic Connectivity**

**DATA**

In order to perform the dynFC you will need the denoised ROI timeseries. You can find them here:

**E:\TBI\CONN\Pre\_post\conn\_TBI\_N25\_2sessions\results\preprocessing**

The file for each subject is named ROI\_SubjectXXX\_Condition000.mat

These contain all ROI data for each subject/session right after denoising, concatenated across runs/sessions after all of the denoising steps. There are 290 values per ROI corresponding to the 145 rsMRI scans per session, from 2 sessions per subject (session1=pre, session2=post).

We are interested in the variable 'data' (1x187 cell).

The variable 'names' tells which is the ROI this data comes from

**ANALYSIS**

To run dynFC analysis, extract the values for the ROIs indicated below.

Based on the pre-post rsFC we will select 2 seeds as sources (ROI1):

* R IFG (Right Inferior Frontal Gyrus, 10mm seed)
* R ACC (Right Anterior Cingulate Cortex, 6mm seed)

These correspond to column 169 & 177 in the data structure respectively (you can check this in the name structure).

As targets (ROI2), we will use the regions with a significant pre-post effect in rsFC with the aforementioned sources.

In the table below are listed all combinations for the dynFC analyses:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ROI1** | **mm** | **Data col** | **ROI2** | **mm** | **data col** |
| R IFG | 10 | 169 | Hippocampus L | 6 | 184 |
| N Accumbens R | 6 | 185 |
| R ACC | 6 | 177 | STG L | 6 | 186 |
| Temporal Pole R | 6 | 187 |