A SYNTHETIC DATA EXPERIMENT

A.1 SYNTHETIC DATA VISUALIZATION

Here, we visualize the ground-truth source pairs in synthetic data generated from 4 segments (Figure 8), 8 segments (Figure 9), and 14 segments (Figure 10).

M1 SCV1										
MI SCV2										
MI SCV3										
M1 SCV4										
M1 SCV5										
M2 SCV1										
M2 SCV2										
M2 SCV3										
M2 SCV4										
M2 SCV5										
	M1 SCV1	M1 SCV2	M1 SCV3	M1 SCV4	M1 SCV5	M2 SCV1	M2 SCV2	M2 SCV3	M2 SCV4	M2 SCV5

Figure 8: Visualization of synthetic data (5 sources, 4 segments, 700 observations per segment).

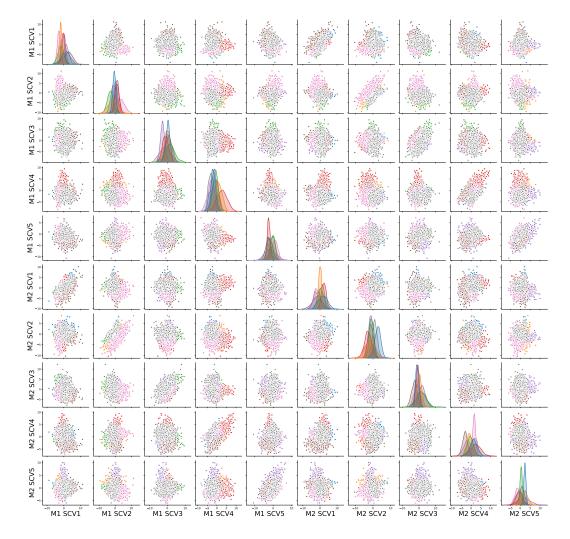


Figure 9: Visualization of synthetic data (5 sources, 8 segments, 350 observations per segment).

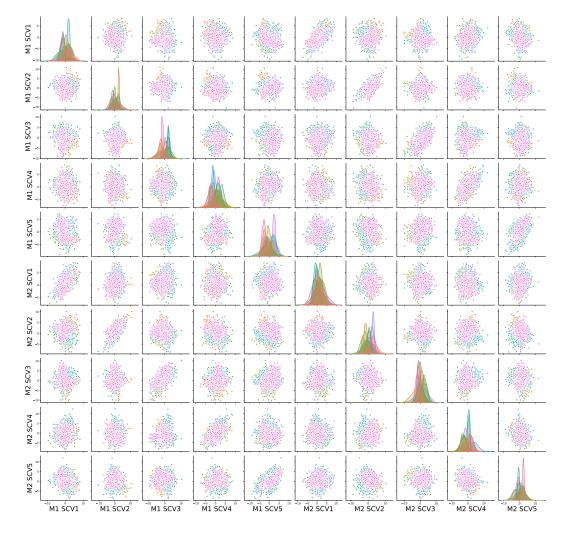


Figure 10: Visualization of synthetic data (5 sources, 14 segments, 200 observations per segment).

A.2 AGGREGATED RDC MATRICES

Here, we present the aggregated RDC matrices across segments for four different data configurations: 5 sources and 4 segments (Figure 11); 5 sources and 8 segments (Figure 12); 15 sources and 4 segments (Figure 13); 15 sources and 8 segments (Figure 14).

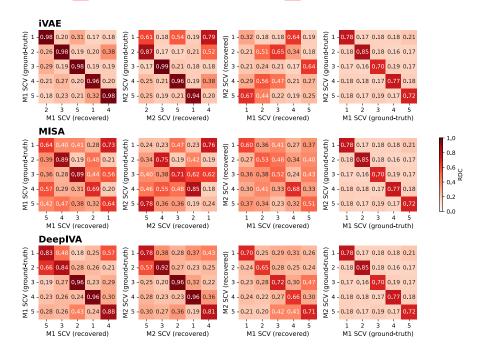


Figure 11: Synthetic data (5 sources, 4 segments): Aggregated RDC matrices across segments between recovered sources and ground-truth sources.

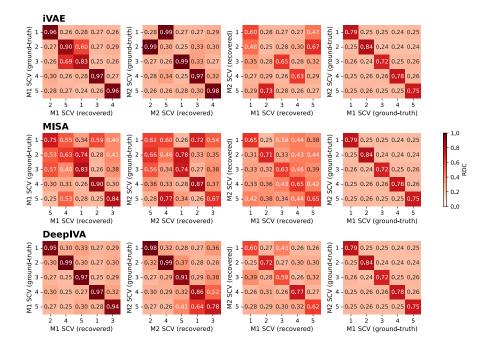


Figure 12: Synthetic data (5 sources, 8 segments): Aggregated RDC matrices across segments between recovered sources and ground-truth sources.

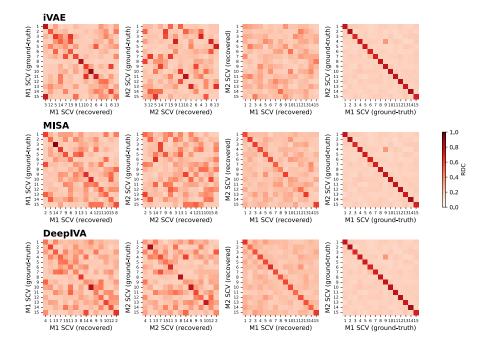


Figure 13: Synthetic data (15 sources, 4 segments): Aggregated RDC matrices across segments between recovered sources and ground-truth sources.

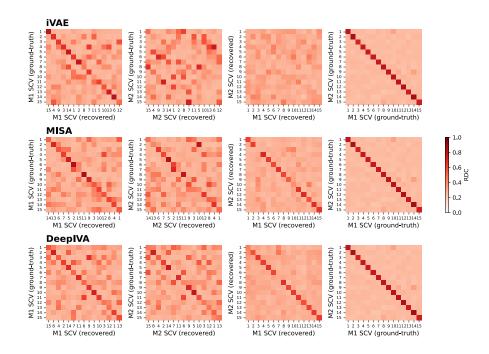


Figure 14: Synthetic data (15 sources, 8 segments): Aggregated RDC matrices across segments between recovered sources and ground-truth sources.

B NEUROIMAGING DATA EXPERIMENT

B.1 SINGULAR VALUE DECOMPOSITION

We perform singular value decomposition on sMRI GM and fMRI ALFF feature maps, respectively. According to Figure 15, we observe that 10 - 20 sources can capture most variance explained. Thus, we choose 15 latent sources for neuroimaging data.

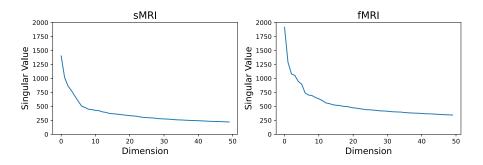


Figure 15: Singular values of neuroimaging data.