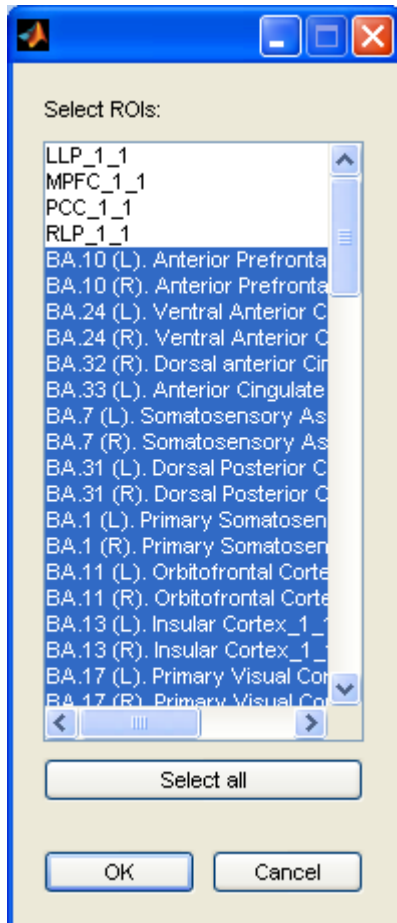


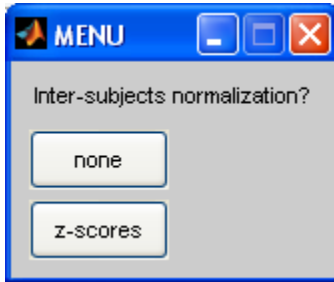
Conn To Graph Metrics

Single Subject Demo for connectivity class 3/16/10

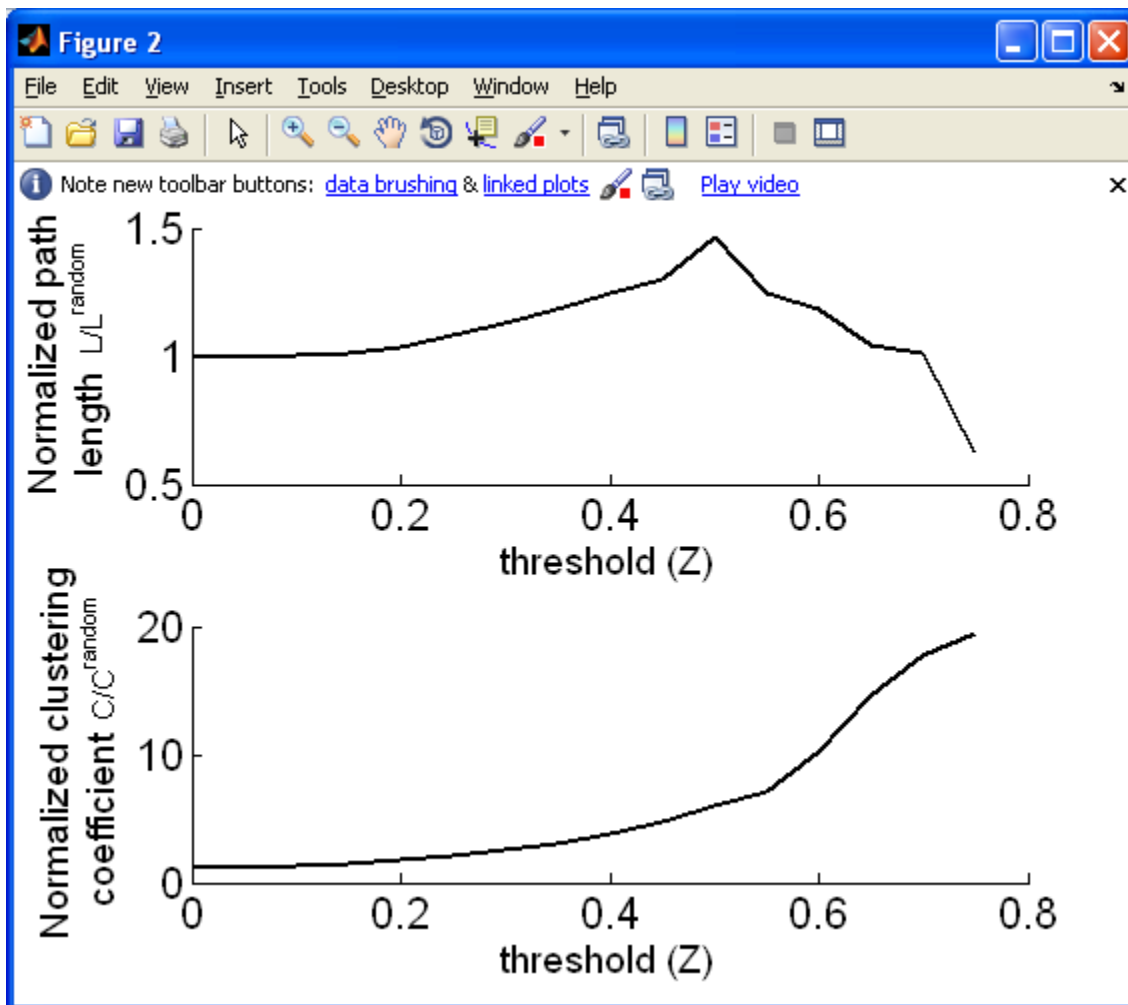
1. >> conn_network
2. Select resultsROI_Condition001.mat (lives in ANALYSIS_01)
3. Select all but Fox ROIs to avoid redundancy



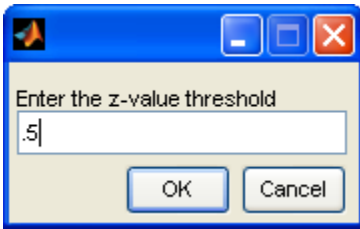
4. Select "None" for inter-subject normalization



5. View path length and clustering coef



6. Select Z threshold



Note: Typically want path length around 1 and high clustering coefficients (indicative of small world properties) – for example here you can select $Z = 0.5$ for thresholding

7. **View Results File (resultsROI_Condition001.csv, lives in ANALYSIS_01)** describing normalized average path length, clustering coefficients, and degree centrality network-level topological properties, as well as the same measures computed separately for each node (ROI).

Subject #	Average path distance	Normalized average path dist	Average clustering coefficient	Normalized average degree	Average degree	Average p	Average c	degree	Average p
1	3.491117	1.465003	0.5474	5.938799	7.619048	4.444444	0.333333	3	3.654321

In addition a UCINET format file (resultsROI_Condition001_Subject001.dl) is created which can be used to display the pattern of network connectivity using external software (e.g. SONIA)