

SDA Project

- Check for connectivity between brain regions: do a cross-correlation between two EEG signals over time
- Can also do connectivity matrices to display *pairwise connectivity strength between electrodes*

BRAIN WAVES:

- Gamma waves: unsure whether they are increased or decreased in schizophrenic patients (some studies find that more severe schizophrenics have less intense gamma oscillations, other studies find the opposite)
- Beta waves: reduced power but increased frequency
- Alpha waves: reduced power and coherence

<https://pmc.ncbi.nlm.nih.gov/articles/PMC3122299/#sec5>

- Theta/beta waves: increased
 - More slow wave activity in schizophrenic patients (particularly in central and frontal areas, and some temporal regions) <https://bmcpsy psychiatry.biomedcentral.com/articles/10.1186/1471-244X-7-44>

Pathophysiology: Slow waves in ASWA may reflect:

- ♦ Impaired thalamocortical pathways.
- ♦ Reduced synaptic connectivity.
- ♦ Neuroinflammation or structural brain changes

BRAIN REGIONS:

- Prefrontal lobe
- Medial temporal lobe
- High association between schizophrenia and disruptions of connections between cortical brain regions.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4235761/>