



NeuroDesigner

Introducing NeuroDesigner® – Fire  (Pre-Release)

NeuroDesigner-Fire is an experimental EEG data visualization tool that processes, organizes, and stores EEG data imported from an EDF file. The EDF import is template driven so a user determined number of channels can be imported and mapped to typical 10-20 system locations.

NeuroDesigner-Fire has no dependencies on any other application except for an EDF file, and includes its own independently crafted EDF, EEG signal processing and LORETA/sLORETA code library's.

Z-scores are not currently implemented.

Some of the metrics generated so far:

	<i>uV²</i>	<i>Laplacian</i>	<i>sLORETA</i>
<i>Absolute Power</i>	X	X	X
<i>Amplitude Asymmetry</i>	X	X	
<i>Coherence</i>	X	X	X
<i>FFT</i>	X	X	X
<i>Peak Frequency</i>	X	X	
<i>Phase</i>	X	X	X
<i>Power Ratio</i>	X	X	
<i>Relative Power</i>	X	X	X

The data is organized and stored into a database file that is linked to the subject that it was recorded from. The data can easily be retrieved and used to generate various reports and visualizations. The sLORETA voxels are referenced to Brodmann areas. Collections of these voxels representing those Brodmann areas, are then used to characterize networks, symptoms, and concerns. These collections and their values are used for analysis, protocol development and trend assessment.

Overview video:

<https://neurodesigner.com/wp-content/uploads/2021/06/NDF-1.mp4>