

Branched Structure Analyses in NeuroLucida Explorer

ANALYSIS NAME	Whole neurons	Trees	Segments	Somas	Spines	Synapses	Varicosities	Nodes	Markers	Endings	Branch ordering	Bins/Intervals	Perimeter	Area	Shape	Process length	Process surface area	Process volume	Process tortuosity	Process diameter	Quantity	Angles	Coordinates	Point type	Complexity	Distance	Length	Density	Diameter	Distance to branch	Distance along branch	Distance from root to structure	Surface area	Volume	Thickness		
Neuron Summary	•			•	•		•		•			•	•	•	•	•	•	•	•	•	•	•	•	•													
Segment		•	•		•				•																												
Segment Points		•			•				•																												
Each Tree		•	•		•		•		•	•						•	•	•			•																
Tree Totals			•		•		•		•	•						•	•	•			•																
Individual Tree		•			•		•		•	•						•	•	•			•																
Terminal Distance	•	•							•																												
Layer Length					•		•									•					•																
Nearest Terminal	•								•																												
Terminals		•			•				•							•	•	•			•																
Tree Intervals					•	•			•		•										•																
Individual Marker	•	•	•						•		•										•																
Marker Totals									•		•										•																
★ Spines		•			•				•		•										•																
Nodes		•					•											•			•																
★ Synapse			•			•			•												•																
★ Varicosities		•					•		•												•																

- ◆ Includes Feret max, Feret min, aspect ratio, compactness, convexity, form factor, roundness, solidity.
- ▲ Process: Axon, dendrite, and/or apical dendrite
- End, center, or beginning
- ★ Synapses, varicosities, and some spine measurements are only available with NeuroLucida 360.