What is a sunburst graph?

- Expansion of the donut chart to include hierarchical information
- Alternative to other space-filling techniques like TreeMaps
- Designed and evaluated by John Stasko
How is data encoded?

- Center is a root node
- Each slice coming off of that is a child of that root
- Each of those slices can have their own children
- As we expand outward from the center, we are going deeper in each tree
- So the angle sweep corresponds to the value of each node
- Additional encodings possible like varying the width of the slice for additional dimensionality
Angular Detail Method
Detail Outside Method
Detail Inside Method
Our Implementation

(go/sunburst)
Pros and Cons

Pros:

- Great for navigating hierarchical data
- Shown to be more effective at visualizing a “large” dataset
- Doesn’t lose the middle layers of hierarchy
- More intuitive and easier to learn than alternatives (e.g. TreeMap)

Cons:

- Hard to estimate the exact value using arc length
- Small, periphery arcs can be hard to see/analyze without interaction
- Not as space-filling as alternatives
TreeMap vs Sunburst
References

http://www.cc.gatech.edu/~john.stasko/papers/ijhcs00.pdf

http://www.cc.gatech.edu/gvu/ii/sunburst/


http://www.cc.gatech.edu/~john.stasko/papers/infovis00.pdf