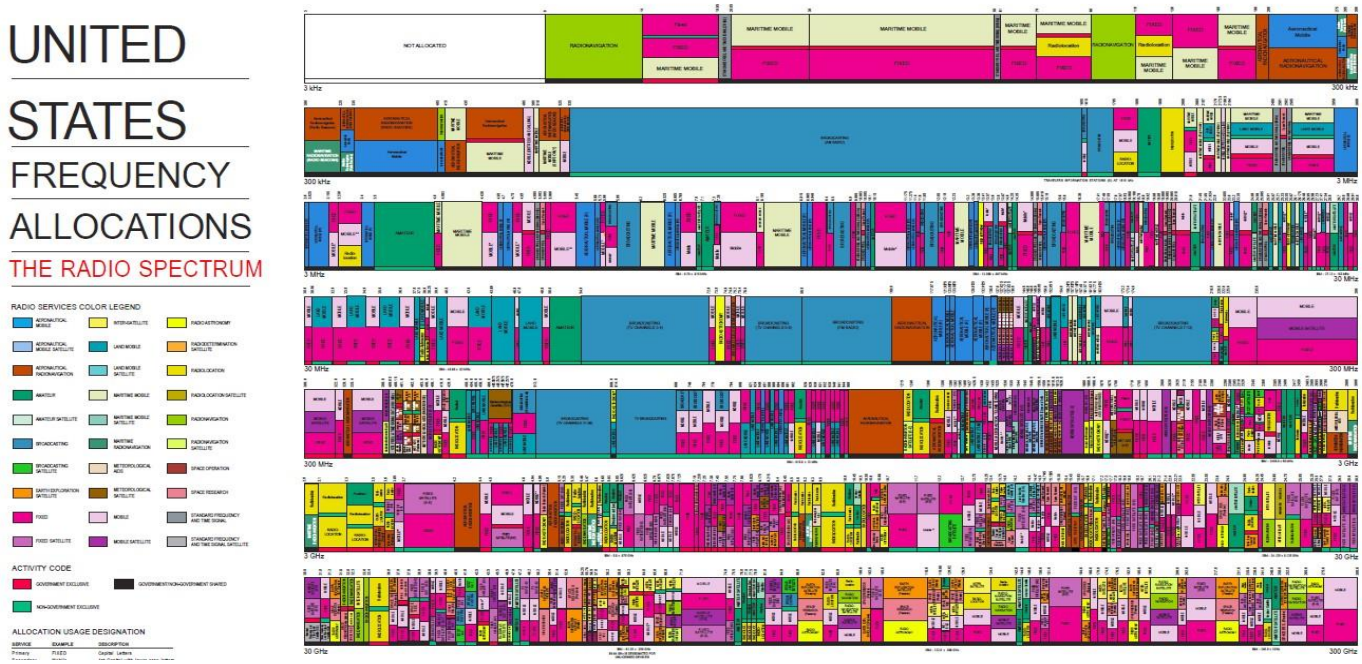
SC 4024 Tutorial 5: Visualization Principles and Interactions

1. Color Encoding for Radio Spectrum Allocation

The following figure shows the visualization for radio spectrum allocation in the United States, which is collected from here: https://www.ntia.gov/files/ntia/publications/2003-allochrt.pdf

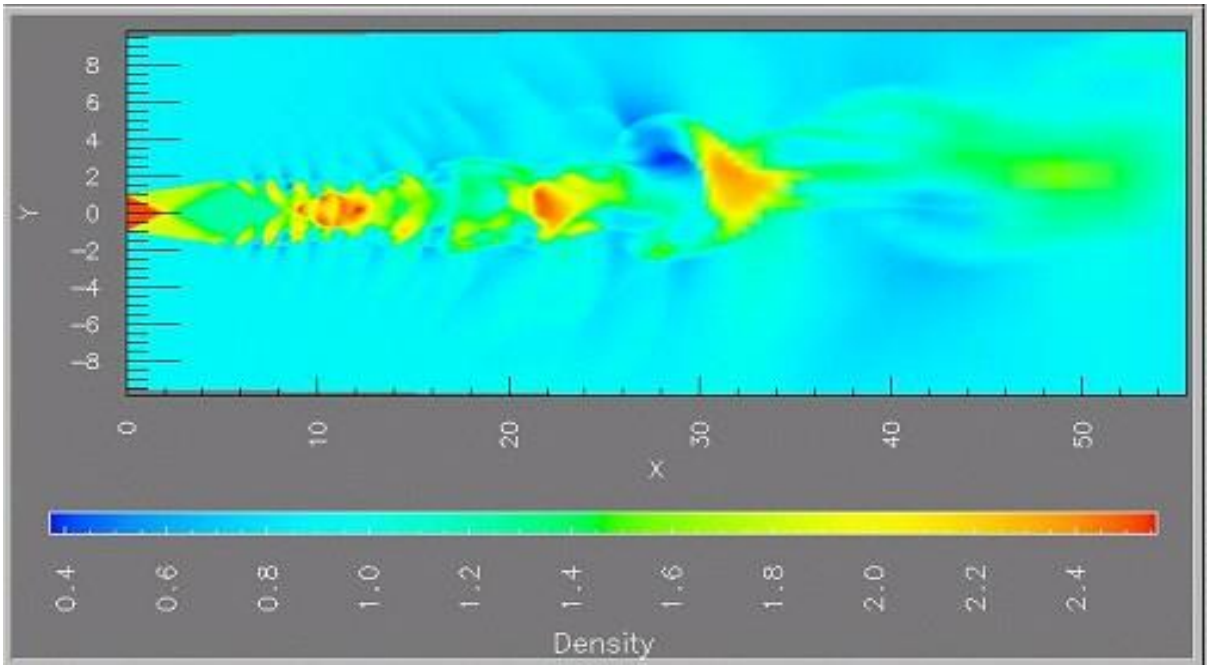


1.1 By referring to the visualization principles and best practices we have learned in this course, please **point out the major issues of the color encoding design** of the above visualization.

1.2 Suppose you are the visualization designer, do you have **any suggestions to address the above issues in terms of color encoding design**?

2. Rainbow Colormaps

A rainbow colormap is based on the order of colors in the spectrum of visible light—the same colors that appear in a rainbow. Below is an example of rainbow colormap, which is used to display the salt density of the sea in a specific area.



2.1 Does the above rainbow colormap look good to you? Why or why not? You are required to provide the detailed justifications.

2.2 If there are issues in the colormap of the above visualization, how should we improve it?