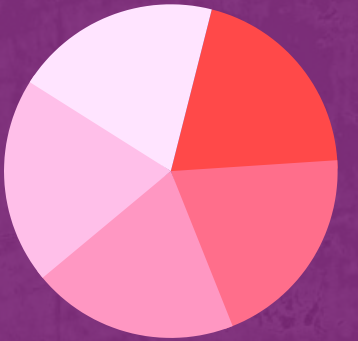


TSWD TEAM 12

A BRIEF INTRODUCTION TO FLOW MAPS AND STEAM GRAPHS



FLOW MAP

'Flow map' originally comes from cartography. It is a combination of maps and flow diagrams, where the width of the arrows is proportional to the flow rate. It is a thematic graph that geographically shows the movement of information or objects from one location to another

KIND OF DATA THAT CAN BE READ -

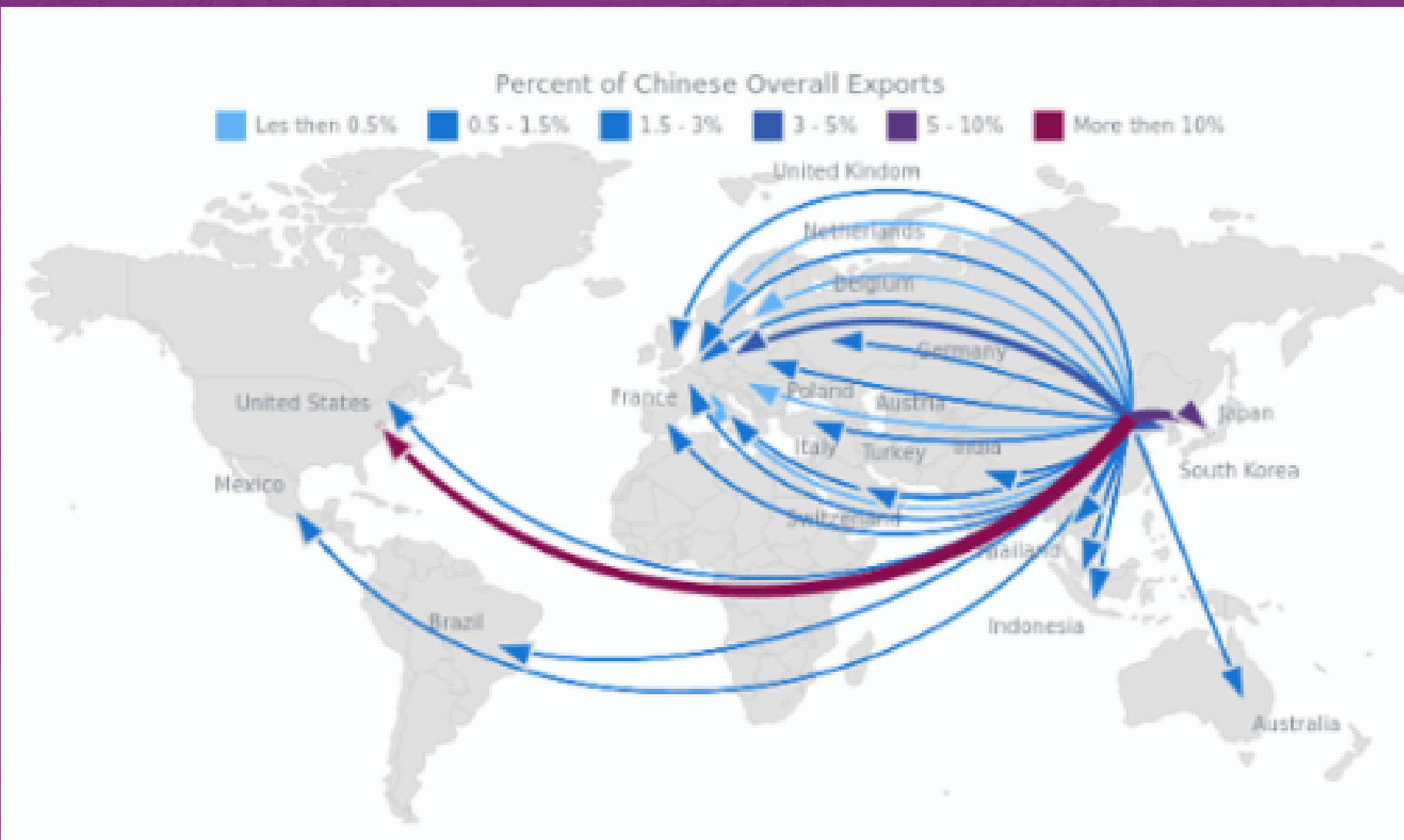
- Changes in weather and traffic patterns
- visuals of historic events and military actions
- coal exports
- Steam flow for a particular region

HOW TO READ THE DATA -

- The arrows show direction, while the width illustrates the quantity so it basically denotes the location and the volume of the data.

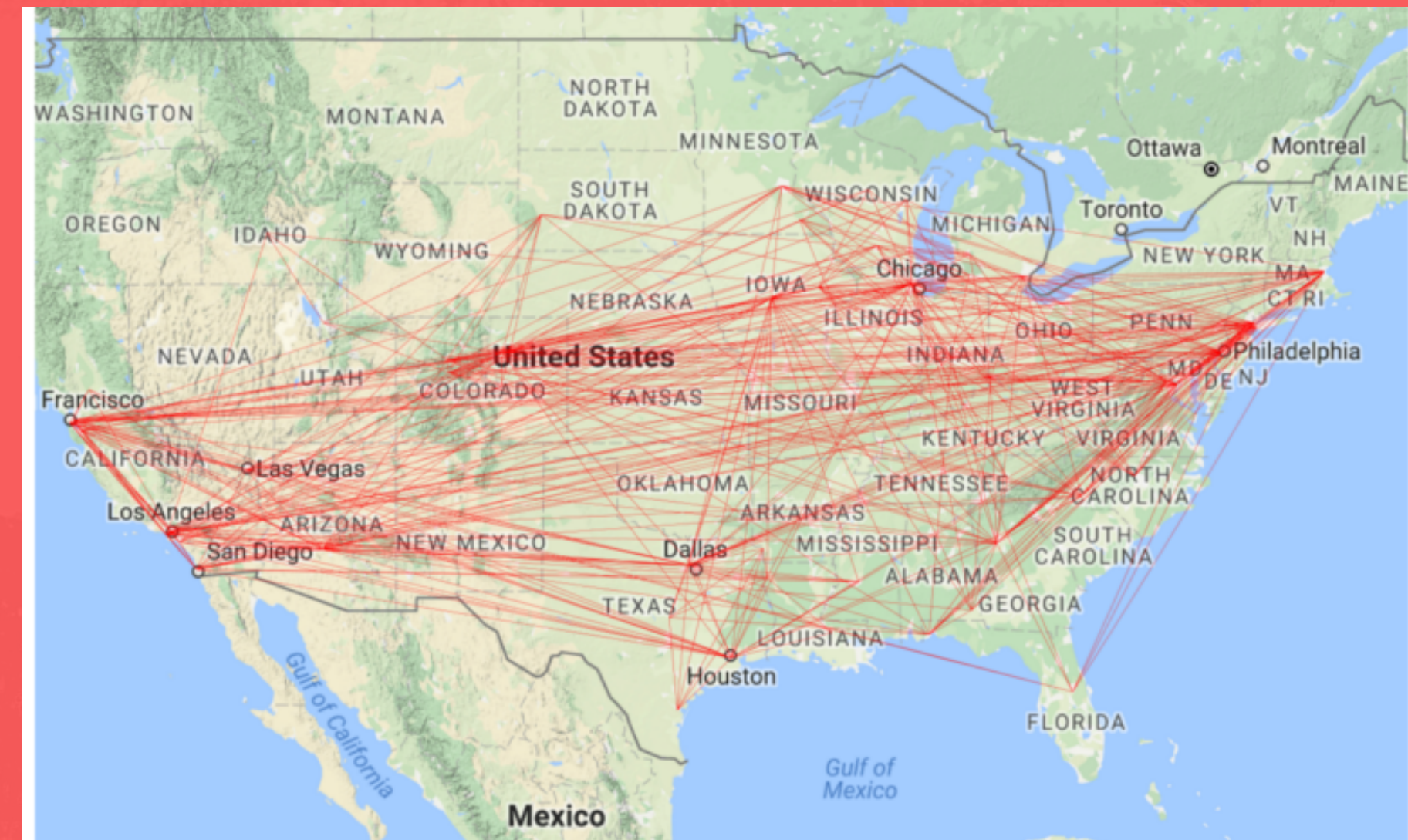
Advantages

1. Can show both Qualitative and Quantitative values.
2. Flow maps can use both linear and logarithmic values to display widths. It is important to choose the apt values for accurate representation.



Disadvantages

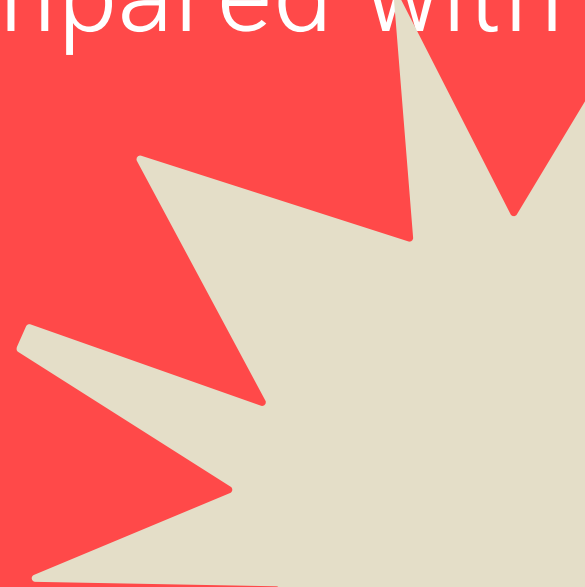
1. It can be difficult to plot accurately
2. Interpretation of the graph is strenuous as it can look visually cluttered.



- MARKS - MARKS CAN BE THE DIRECTED "LINES" ON THE FLOW MAP.
- ATTRIBUTES - WIDTH/SIZE OF THE LINE WHICH TELLS ABOUT THE FLOW OF THAT LINE.

Common errors encountered while reading it -

- It is usually clustered, so it difficult to label them which causes confusion.
- If the flow rate or width is almost same, the reader can't distinguish between them.
- The length of the line cannot be accurately interpreted or compared with the other lines when it is observed.



STEAM GRAPH

A Steam Graph is a type of stacked graph which is displaced around a central axis, resulting in a flowing organic shape. Stream Graphs display the changes in data over time of different categories through the use of flowing, organic shapes that somewhat resemble a river-like stream.

KIND OF DATA THAT CAN BE READ-

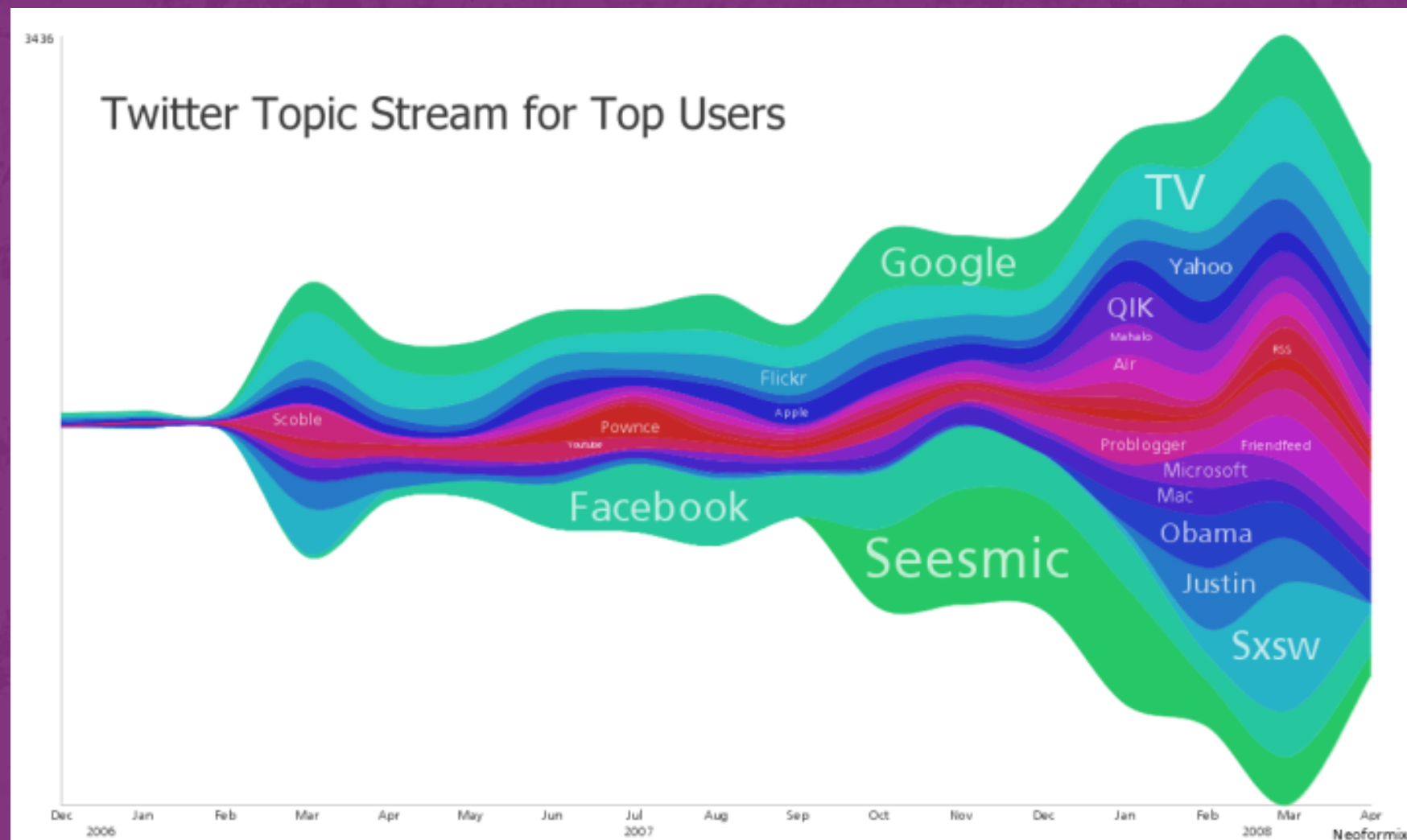
2 or more categorical variables can be depicted on this type of graph.

HOW TO READ THE DATA -

Look out for the peaks and shallow periods for the total values over time. Pick out the various colors and look for peaks and troughs to identify patterns.

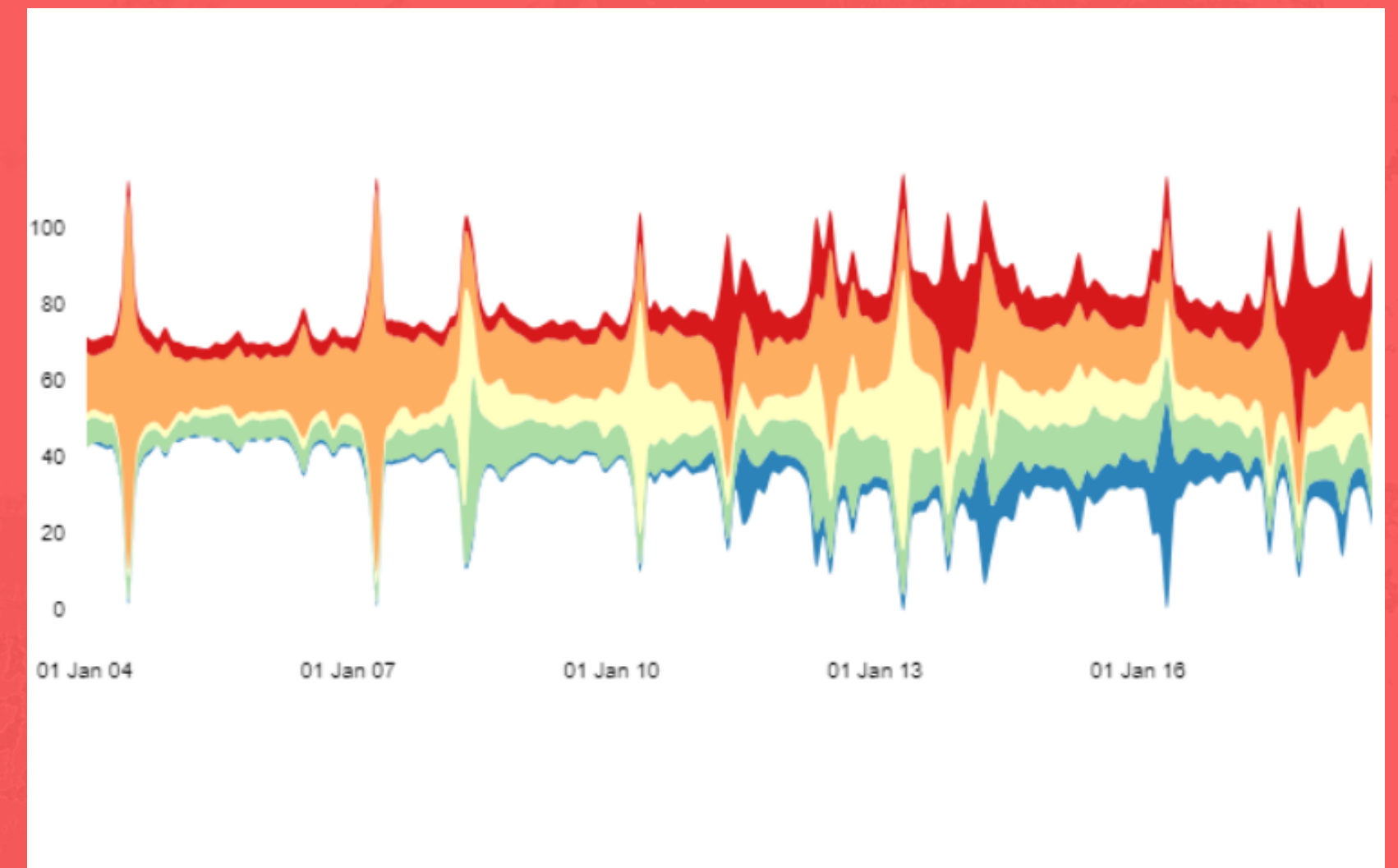
Advantages

1. Stream Graphs are better for giving a more general view of the data.
2. They also tend to work significantly better as an interactive piece rather than a static or printed graphics.



Disadvantages

1. The downside to Stream Graphs is that they suffer from legibility issues, as they are often very cluttered with large datasets
2. It's impossible to read the exact values visualized in a stream graph, as there are no axis to use as reference.



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- MARKS - INDIVIDUAL STREAM.
 - ATTRIBUTES - SIZE, COLOR, AND AREA OF EACH STREAM.

Common errors encountered while reading it -

- The vertical dimension does not depict positive or negative. It is independent of that.
- Don't try to read the values of the height of a slice at any given point, focus on the bigger picture instead.

THANK YOU

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