SATELLITES' ON THE MOVE



Project: User Guide

 $\mathbf{B}\mathbf{y}$

Janhavi Chitale

Srikanth Jaikumar

VISUALIZATION-1: SATELLITES IN ORBIT

- 1. Navigate to the following URL on any browser with an active internet connection to open the visualization: http://bl.ocks.org/srikanthjaikumar/raw/341b0e724665df4429fcdacac9a0720f/
- 2. Hover over any rectangle plotted on the map to view descriptive information relating to the launch site as shown below



Fig: Descriptive information on Launch Location of satellite upon hover

3. Select a value of your choosing from the dropdown that appears below for the option 'Enter Satellite Orbit' as shown below



Fig: Selection of values in filters according to user preference

- 4. In a similar manner, proceed for selection of option for 'Enter User of Satellite' and 'Enter Country of Satellite'
- **5.** Click the 'Launch' button appearing in blue to set the satellites selected according to the filters chosen into orbit as shown below

Distance Above The Earth(km)

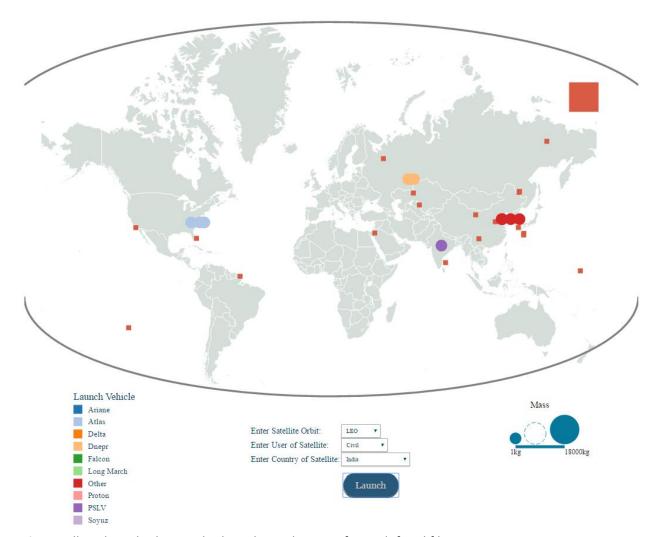


Fig: Satellites launched into orbit based on selection of user defined filters

- **6.** Make use of the legend seen on the bottom left of the screen to relate the to the type launch vehicle used to launch the satellite based on the color of the same
- **7.** Make use of the legend shown on the bottom right of the screen to get an estimate for the launch mass of the satellite according to the circle size seen on the screen
- **8.** Hover over any satellite/circle to view descriptive information about the same shown using a flyout that serves as a tooltip as depicted below

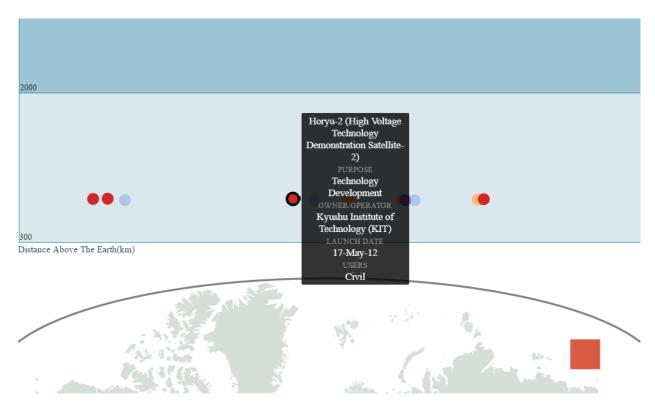


Fig: Tooltip providing descriptive information on satellite

VISUALIZATION-2: ORIGIN OF SATELLITES

1. Navigate to the second visualization by clicking on the hyperlink 'Origin of Satellites' as shown below



Fig: Navigation of link to redirect to second visualization (Origin of Satellites)

2. Hover over any shape plotted on the map to view descriptive information associated with the same



Fig: Descriptive Information associated with location plotted on map upon hover



Fig: Descriptive Information associated with location plotted on map upon hover

3. Select a value for the filters that appear in the dropdown as shown below



Fig: Selection of values in filters according to user preference

- 4. In a similar manner, proceed for selection of option for 'Enter Contractor of Satellite' and 'Enter Launch Site of Satellite'
- 5. Make use of legend to interpret and differentiate between shapes plotted on map as shown below



Fig: Legend to interpret shapes displayed on map

- 6. Press the 'Launch' button to draw the links between the selection options
- 7. Witness the line string drawn between the countries and launch site selected as shown below



Fig: All links between three locations as selected by user represented on map

8. Hover over any arc drawn to in order to highlight the same and to display descriptive information relation to the relation represented by the link using a flyout as shown below



Fig: Arc hovered over by user to highlight link between three locations with tooltip displayed

9. Click on any arc that has been hovered over to witness a circular marker trace the path of the satellite in the following order in which the link is represented

Country of Owner/Operator \rightarrow Country of Contractor \rightarrow Launch Site



Fig: Circular marker tracing the path of the satellite between three locations