

# How we do data visualization at Twitter

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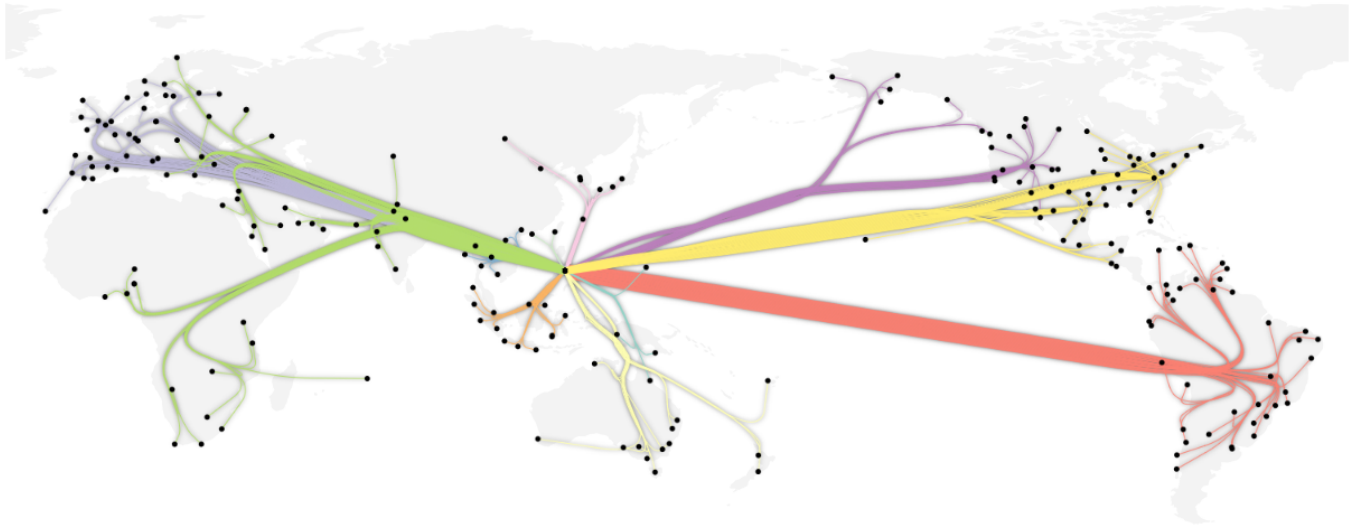


Fig. 1. A Graph showing geolocated Tweets supporting the Philippines after Typhoon Haiyan struck. <http://twitter.github.io/interactive/philippines>

**Abstract**—At Twitter, the Visual Insights team has been working with the Media, Comms and Government teams on different visualizations for big events that happened around the world. Combining storytelling, data analysis and advanced graphics techniques, we aim to translate the way people around the world have reacted on Twitter to an event into images. These visualizations include political engagement during the State of the Union Address, the world's response to the Typhoon Haiyan in the Philippines, Twitter's IPO roadshow videos, the celebration of the 50 year anniversary of Doctor Who, tweets during the Euro Soccer Cup, the Olympics, and more. Each event poses new challenges for us at different levels. One of our goals is to show how Twitter echos the pulse of the planet at any given moment via the unique conversational and real-time aspects of our platform. We also focus on engagement, whether it is about playfulness, storytelling, interaction or deep insights. Finally, the adoption factor is key: for our visualizations the Web is the best delivery platform and we use all graphics standards: 2D Canvas, WebGL, SVG and HTML based on the requirements of each visualization and accounting for factors like: number of elements in the screen, shape complexity, interaction, mobile support, libraries available and more. Through the exposition of some of our work, we will describe the workflow we use to create interactive public-facing visualizations at Twitter. We will go through a pipeline which includes stages of research of novel visualization techniques, design and planning for an event, data gathering and processing, prototyping and publishing visualizations.

**Index Terms**—Data visualization, Social network, Real-time, Web.

