



Getting started with data visualization tools

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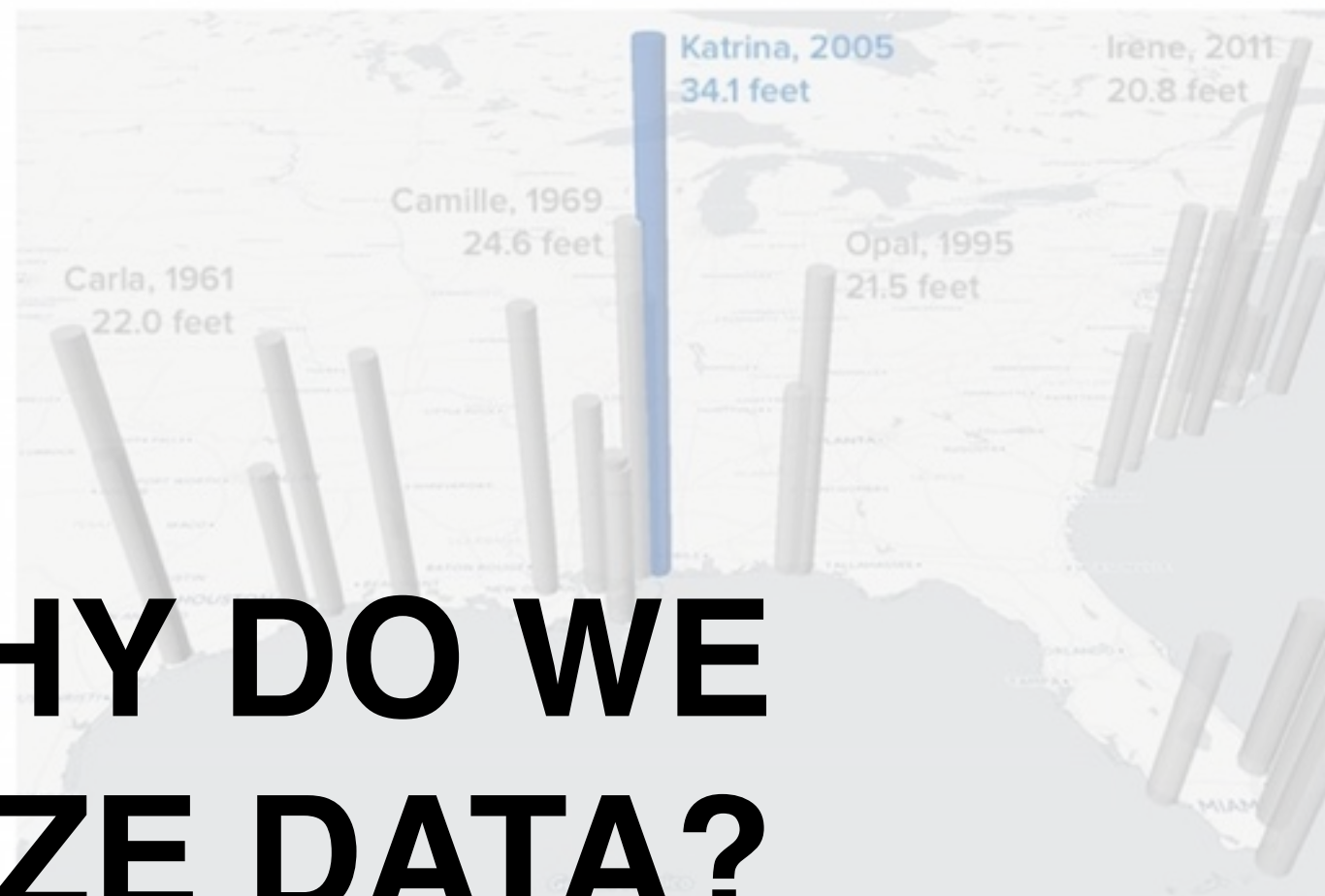
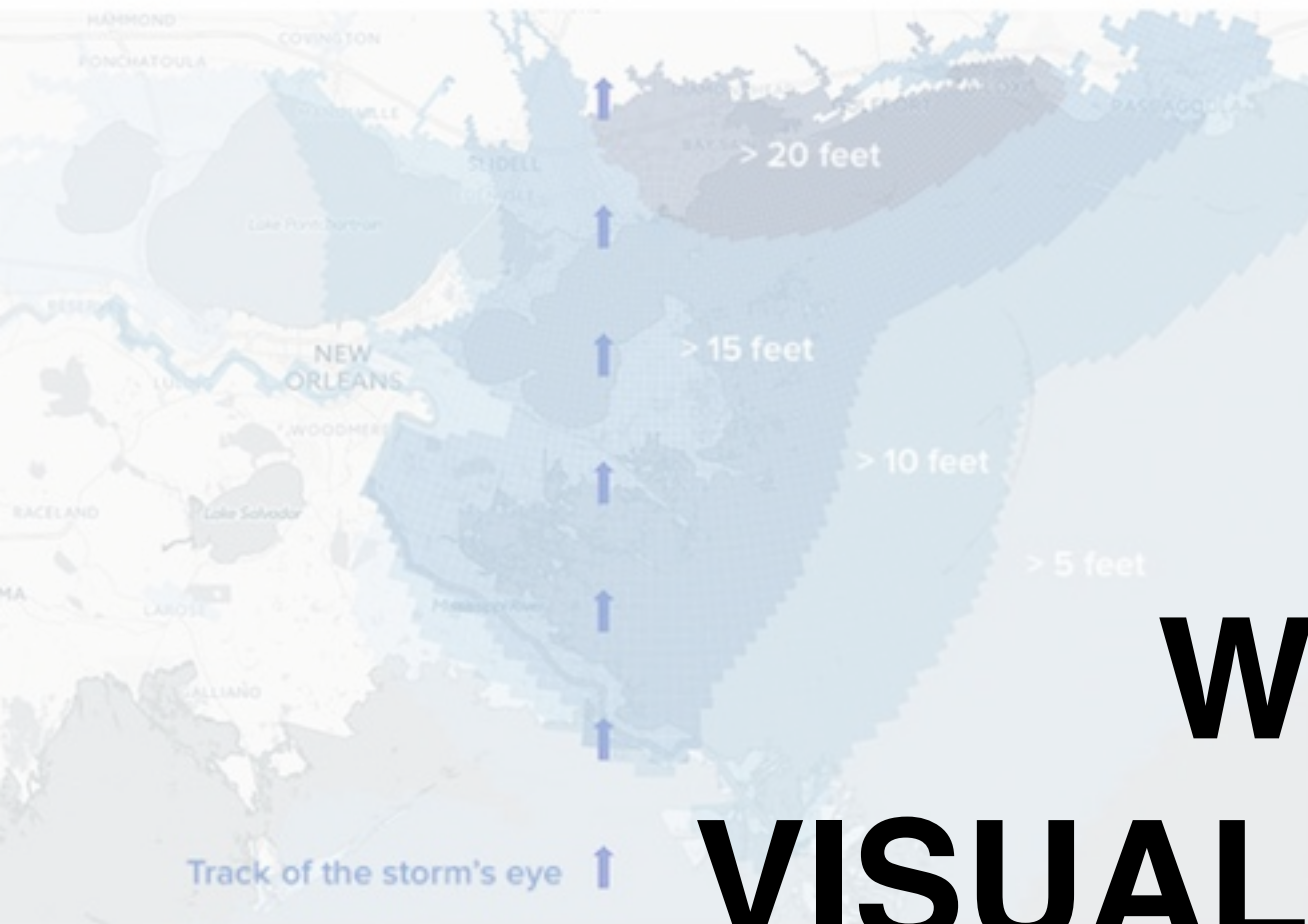
The background features a light gray world map centered on the Atlantic Ocean. Overlaid on the map are several large, semi-transparent gray triangles pointing in various directions, creating a geometric pattern.

WHY DO WE VISUALIZE DATA?

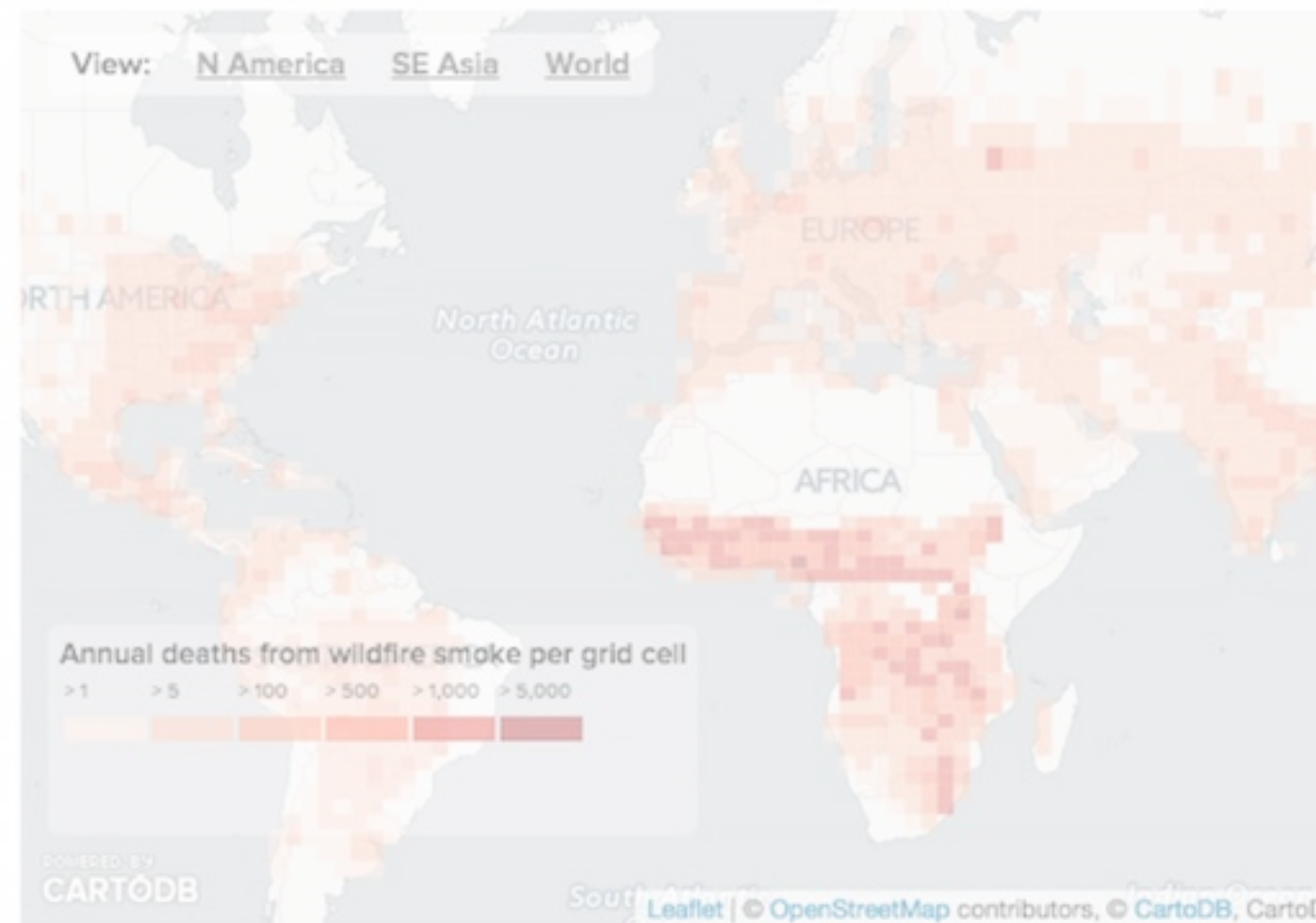
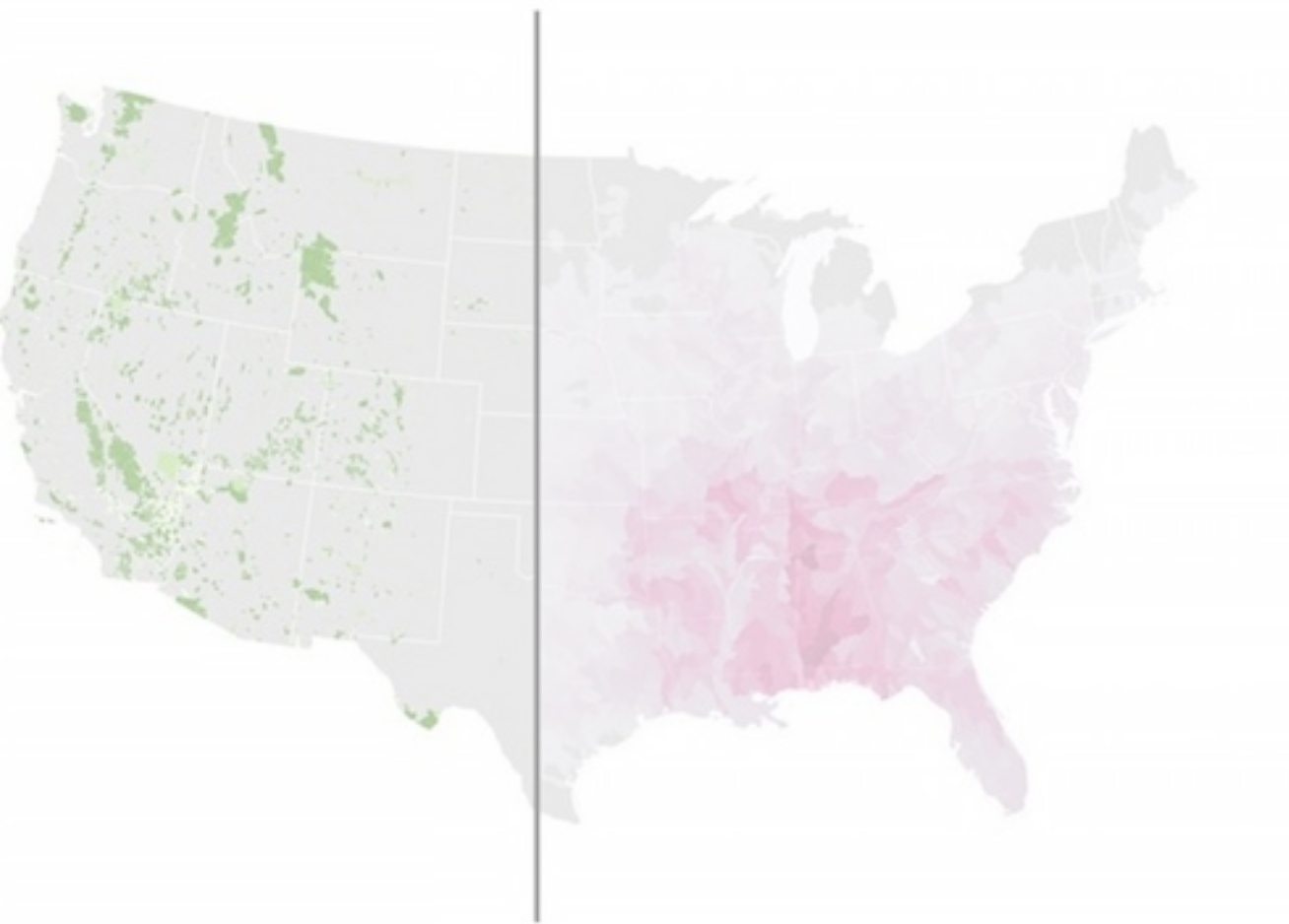
HOW DO THE PROS DO IT?

BEST PRACTICES

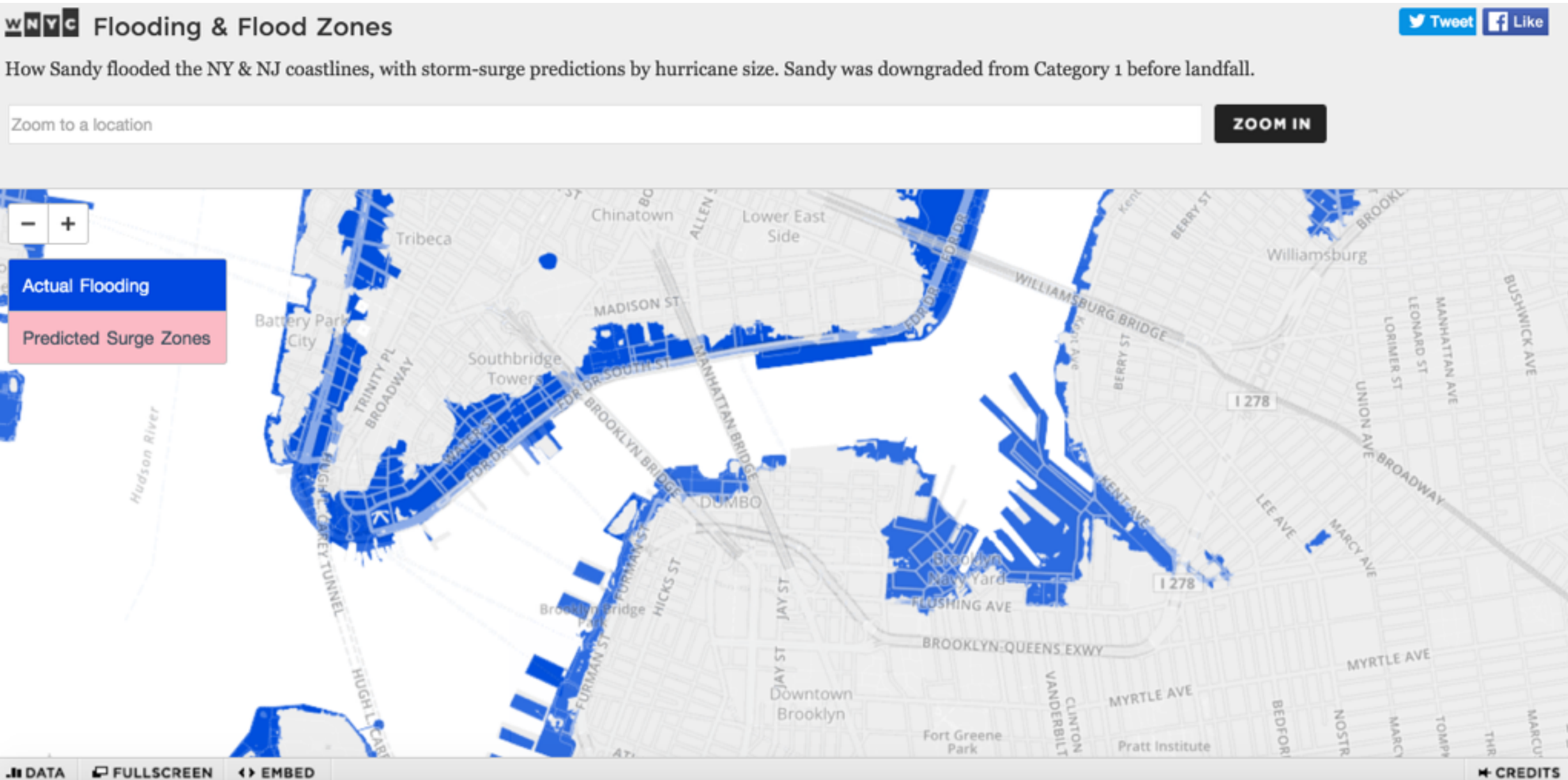
WORKSHOP



WHY DO WE VISUALIZE DATA?

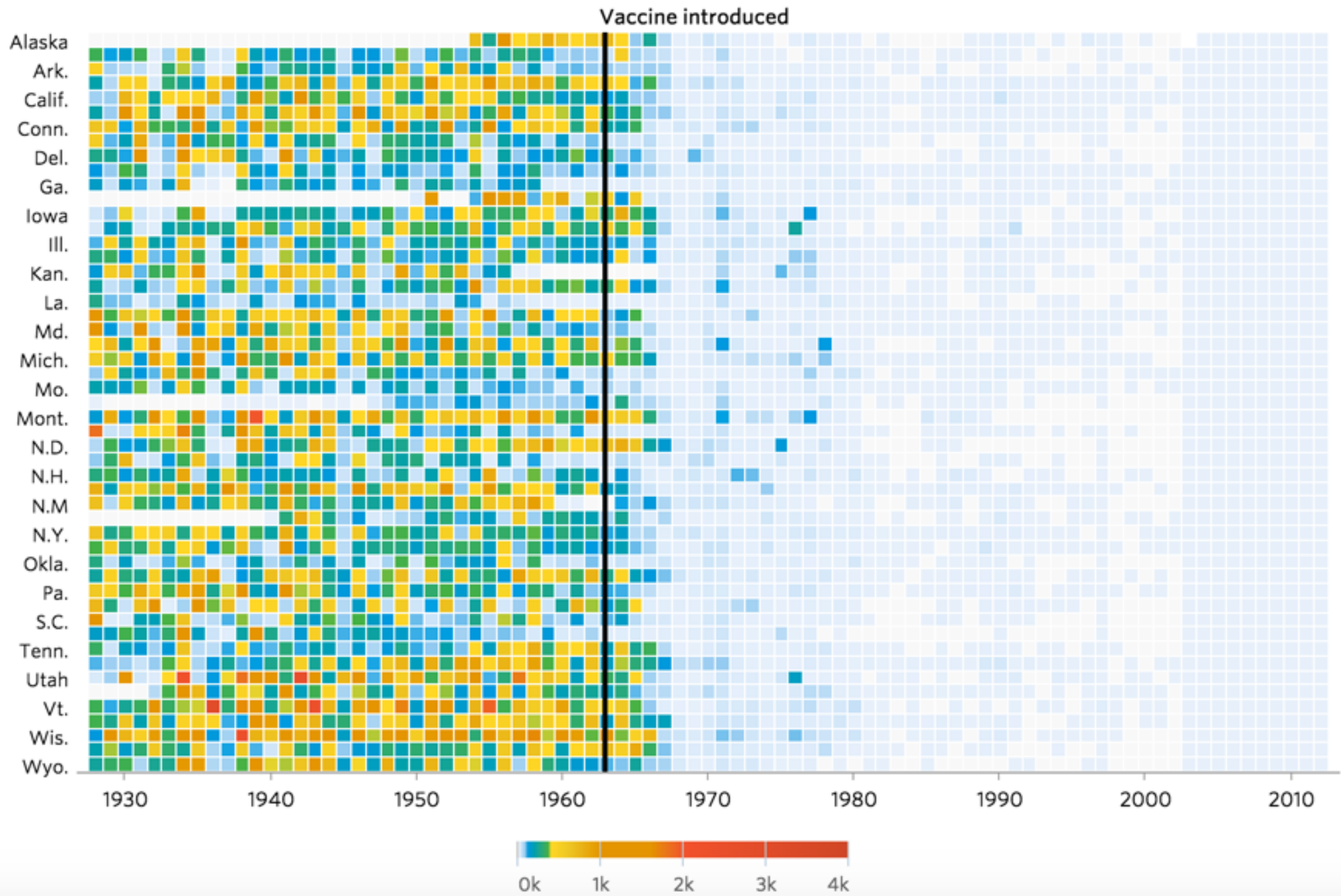


To connect readers to places

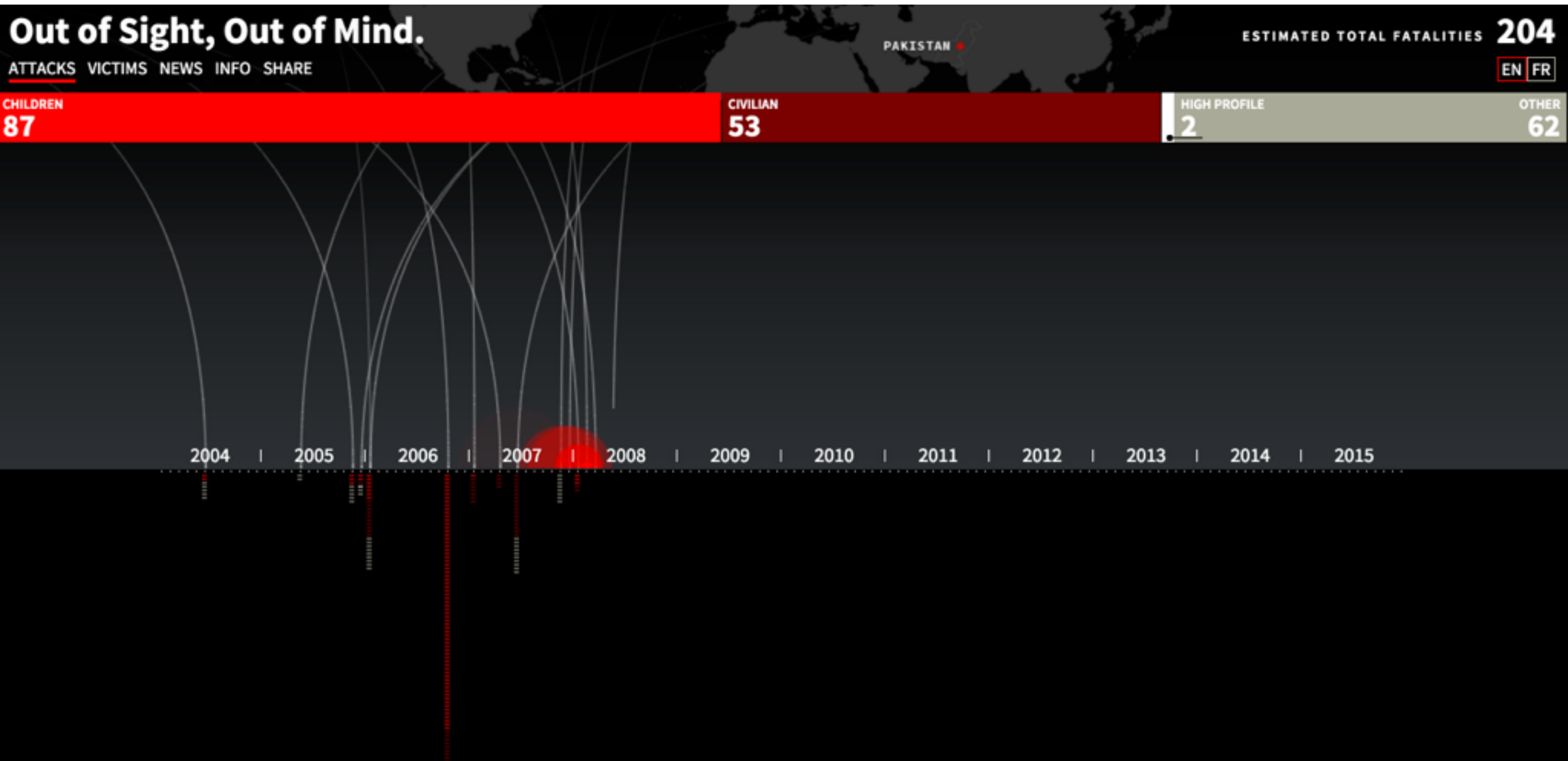


To encode multiple dimensions of information

Measles



To help tell a story



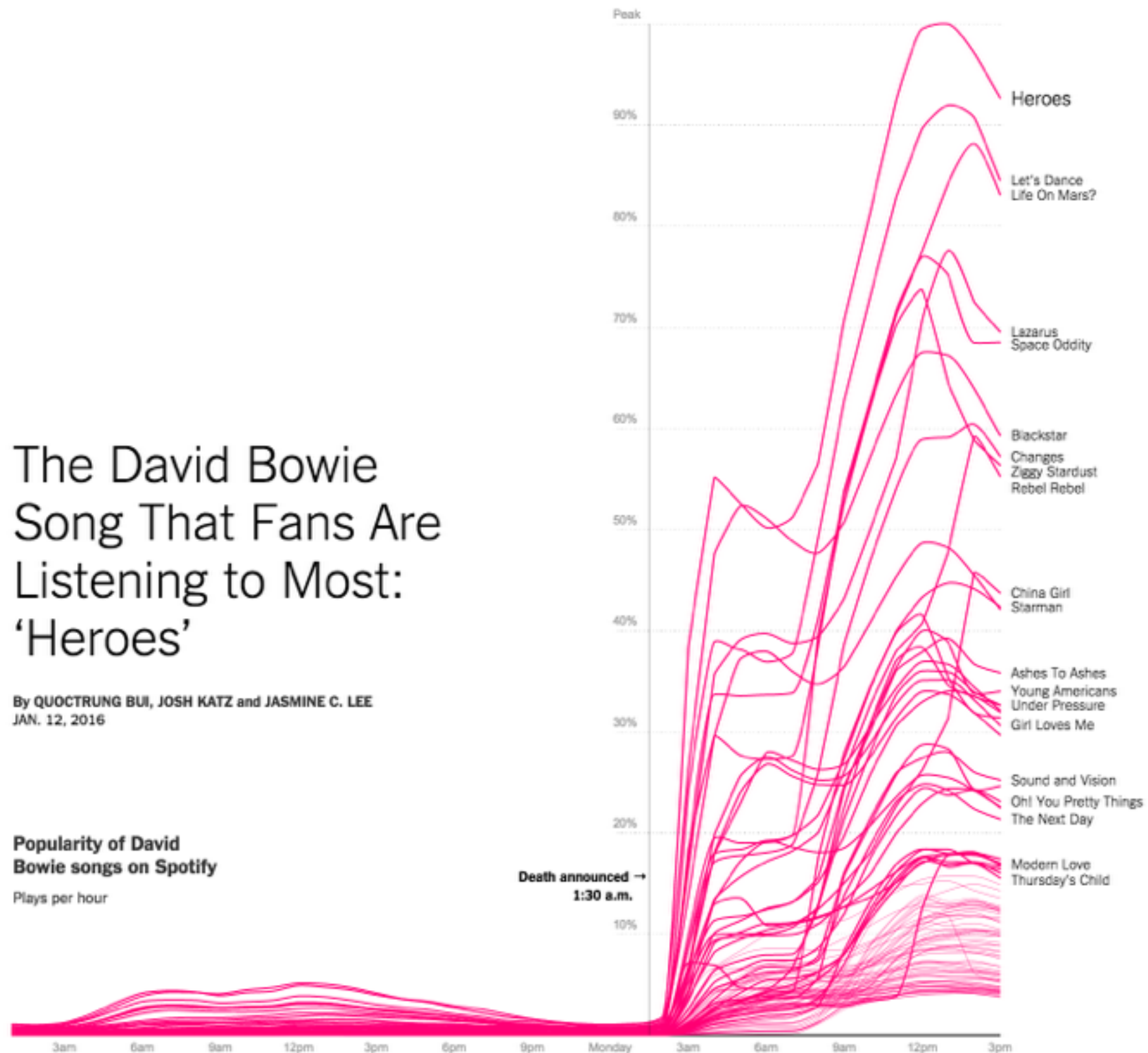
To discover and convey patterns and relationships

The David Bowie Song That Fans Are Listening to Most: 'Heroes'

By QUOCTRUNG BUI, JOSH KATZ and JASMINE C. LEE
JAN. 12, 2016

Popularity of David Bowie songs on Spotify

Plays per hour



Plays are expressed as a percentage of the maximum hourly plays for the leading song.

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CONTAGION ALERT

That “baby-brain-shrinking virus” has made it to the US

Throughout 2015, a mosquito-borne virus has expanded its reach across Latin America. Now, the Centers for Disease Prevention and Control (CDC) has [confirmed at least eight cases](#) of Zika virus in the US among residents returning from abroad.

Those infected can suffer from red rashes, fever, and joint pain, or they can remain symptomless. The real worry, as Brazil’s health ministry [has been warning](#) its citizens, is the suspicion—as yet unproven—that women who catch Zika may give birth to children with microcephaly, a neurological disorder that gives them abnormally small brains. Many children born with microcephaly die young, and those who survive suffer [serious problems](#), including speech and learning difficulties, trouble with balance and coordination, dwarfism, and seizures.

Occurrence of microcephaly in Brazil



△ T L △ S | Data: Brazil Government Health Portal

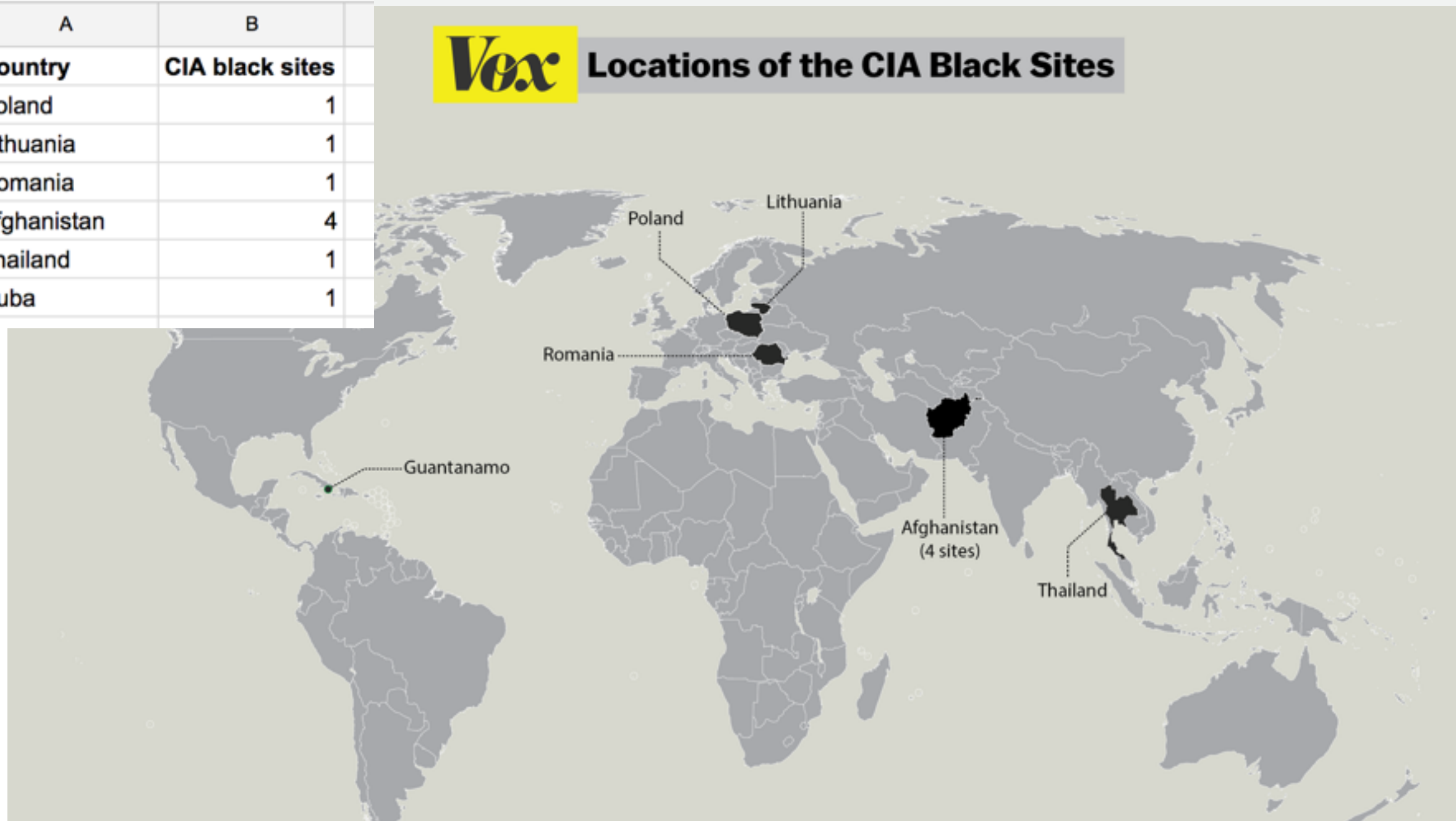
	A	B
1	date	cases
2	2010	153
3	2011	139
4	2012	175
5	2013	167
6	2014	147
7	2015	2975
8		

Share

Map: The CIA's global network of secret torture centers

Updated by *German Lopez* on December 9, 2014, 3:20 p.m. ET [@germanrlopez](#) german.lopez@vox.com

	A	B
1	Country	CIA black sites
2	Poland	1
3	Lithuania	1
4	Romania	1
5	Afghanistan	4
6	Thailand	1
7	Cuba	1



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Treat data as you would a source

Don't let function follow form

Sketch your ideas out on paper first

Work in grayscale

Avoid chart junk

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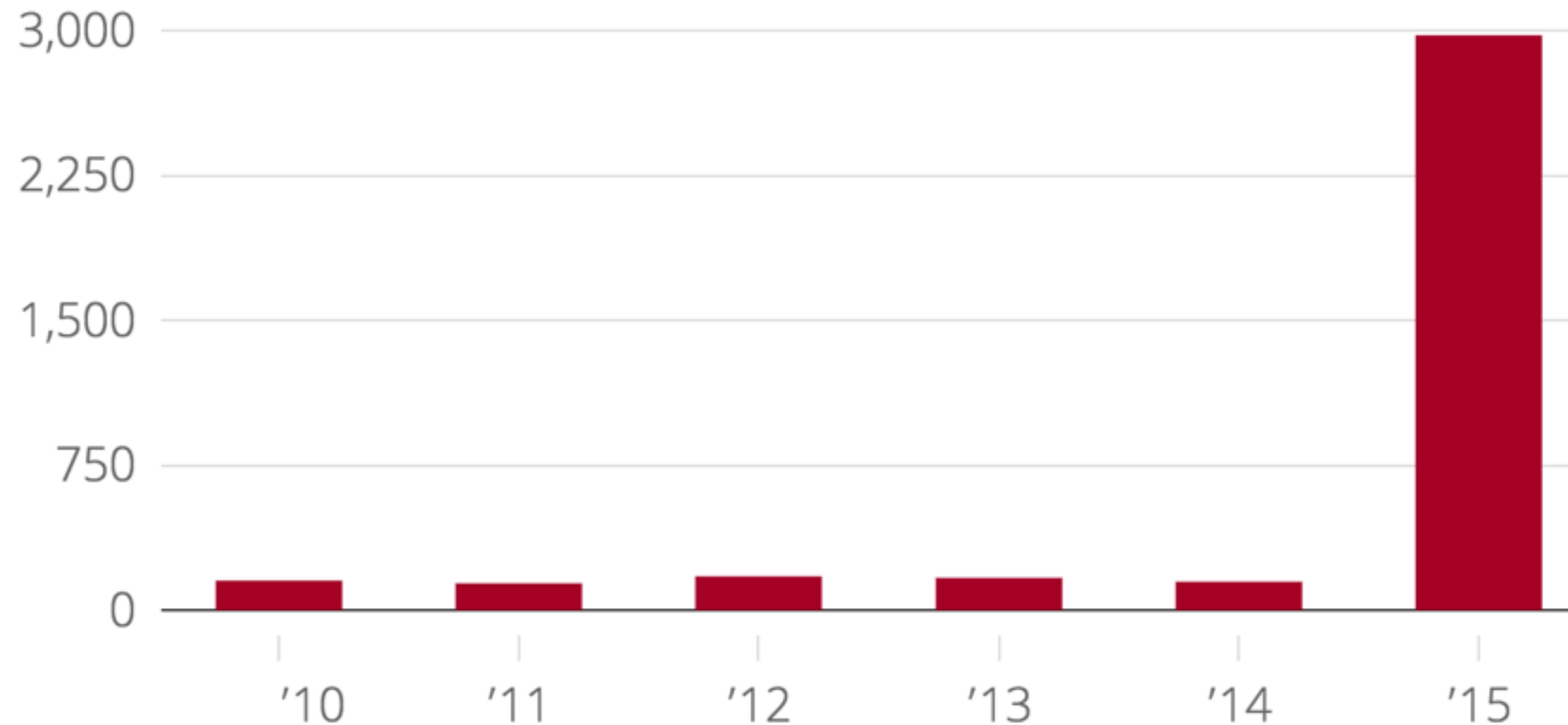
HOW DO THE PROS DO IT?

BEST PRACTICES

WORKSHOP

BUILD A SIMPLE BAR CHART

Occurrence of microcephaly in Brazil

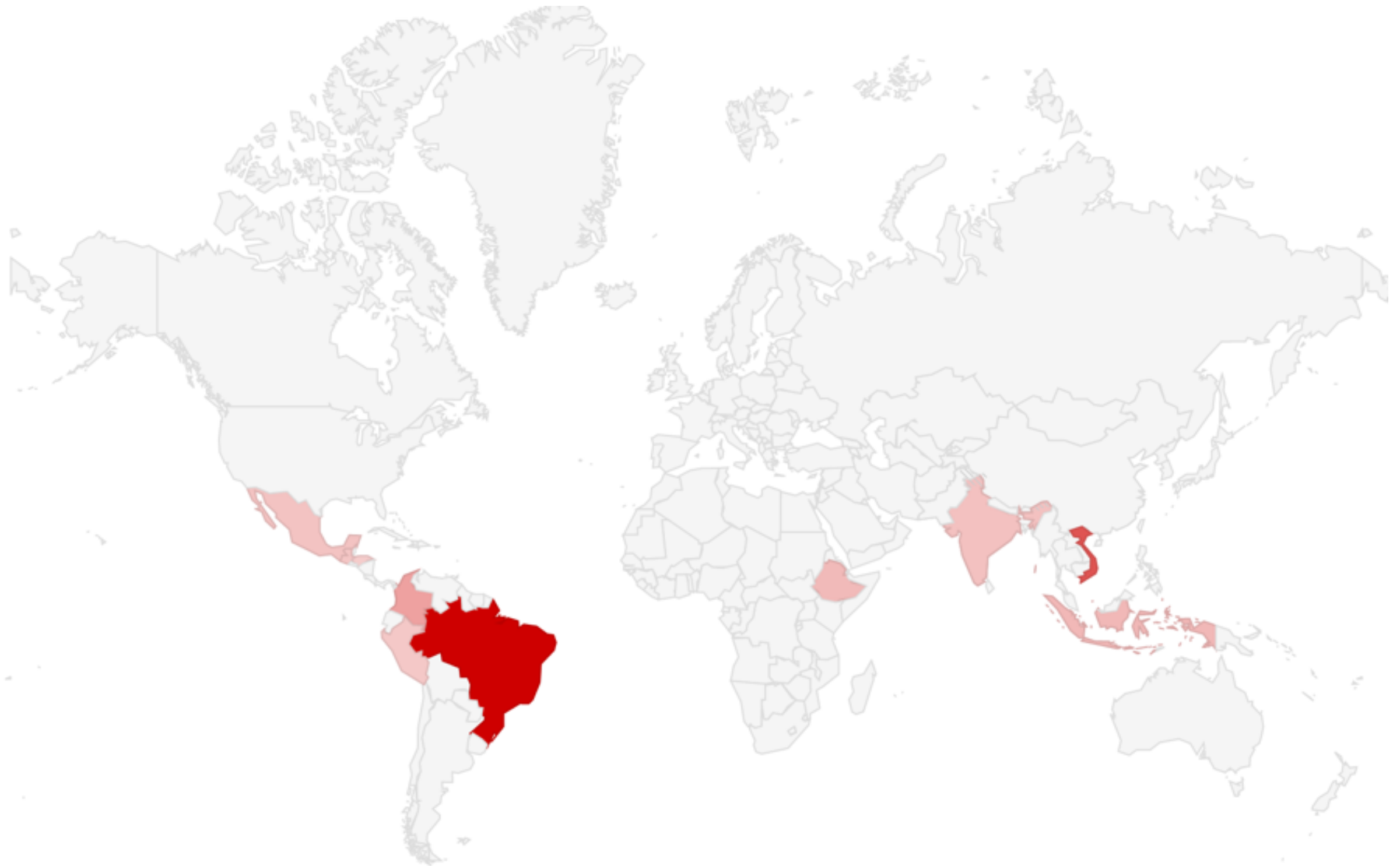


Made with Chartbuilder

Data: Brazil government health portal

<http://bit.ly/niemandataviz>

BUILD A SIMPLE WORLD MAP



<http://bit.ly/niemandataviz>

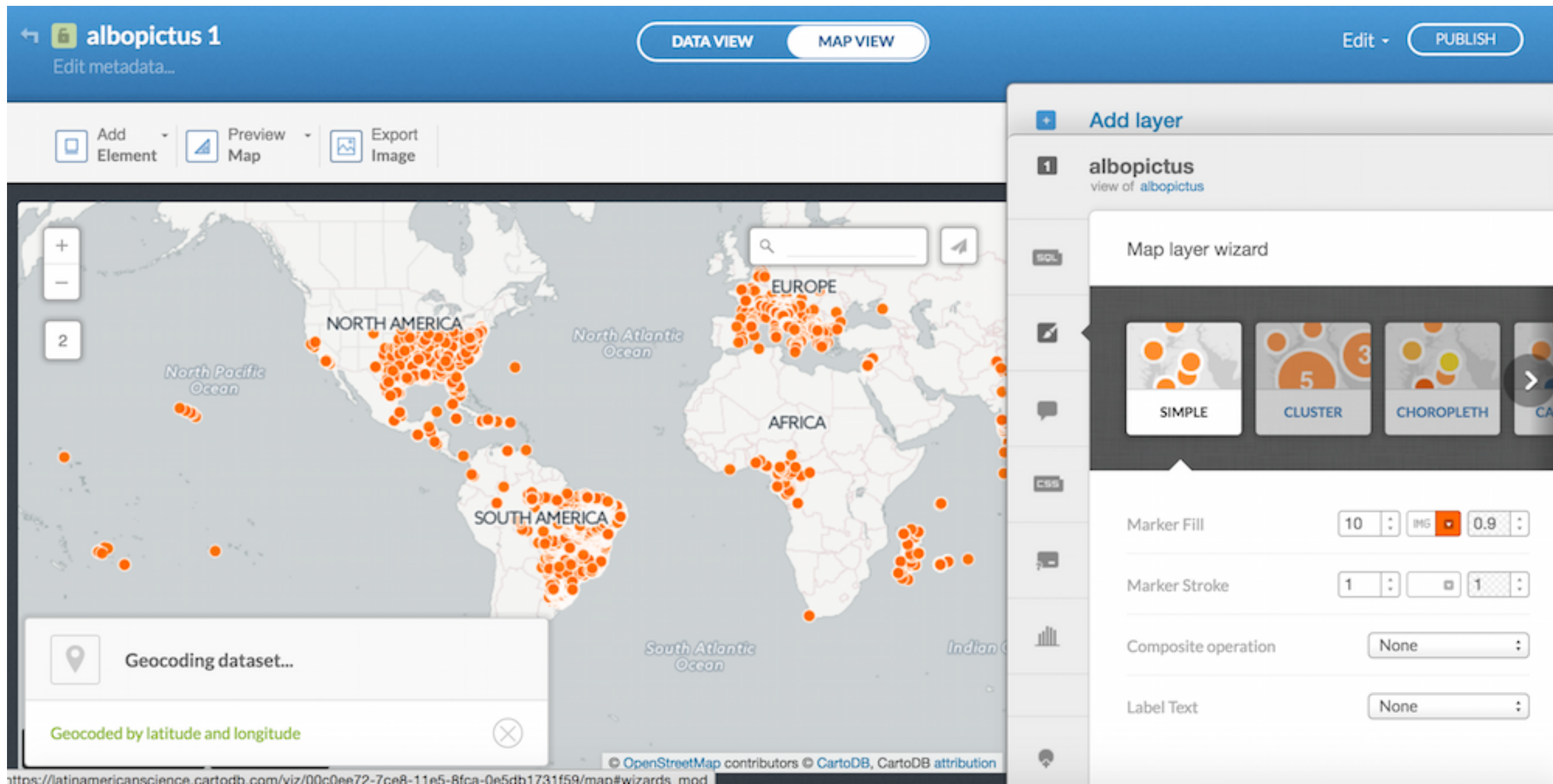
STATE OF THE UNION VISUALIZATION EXERCISE

- Form groups of three
- Find a transcript of the State of the Union speech
- Copy it into DataBasic.io's Word Counter (a word frequency, bigram and trigram counter)
- Explore the data
- Find three or four words and paste them and their frequency into a Google spreadsheet with Word and Frequency as column headers
- Make a bar chart
- What kind of stories would you pitch using this data?

DATA STORY IDEAS WITH HOLLYWOOD BOX OFFICE DATA

bit.ly/hollywoodbudgets

BUILD A ANIMATED HEATMAP WITH CARTODB



[Download data here](#)

RESOURCES

storybench.org

codeacademy.com

lynda.com

visualoop.com

source.opennews.org

thefunctionalart.com

flowingdata.com

visualisingdata.com