Knight DIGITAL MEDIA Center

Diving into Data

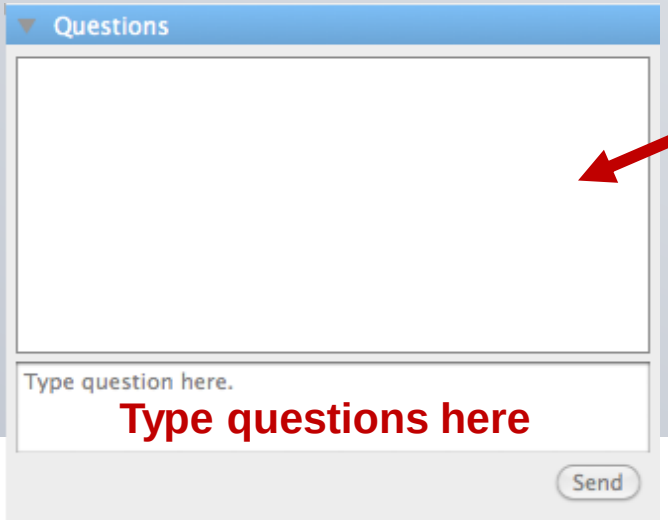
a state-of-the-art tour in civic data visualization

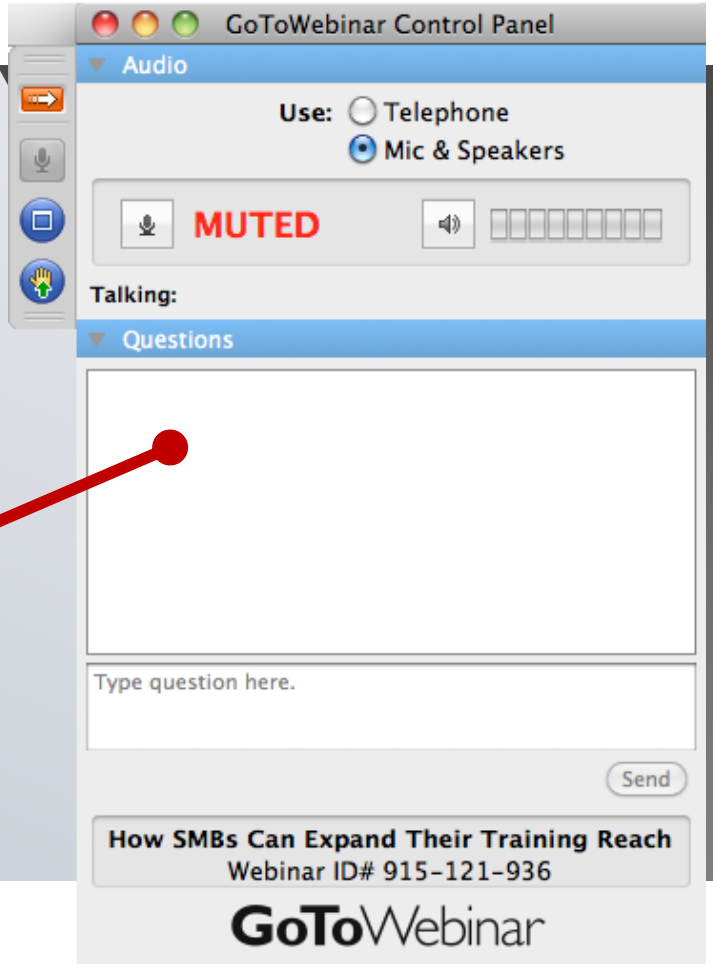
October 30, 2012

Lisa Williams
Placeblogger.com
@lisawilliams

Q & A

Knight DIGITAL MEDIA Center





Placeblogger

I've been there	I'm here now!	I want to go there
admin visited New York	Lisa lives in Austin	admin will visit Tuscon
Tish visited Las Vegas	admin is visiting Vero Beach	admin will live in British Columbia
admin lived in New York	Lisa is visiting New York	admin will live in Oxnard

Where are the blogs?

Placeblogger helps you find **blogs** depending on their **location**. With **Placeblogger**, you can quickly **find and gather all the feeds** from the places you are interested in.

View | Edit | Clone | Export | Dev load | Dev queries | Dev items

Latest Blog Posts

Check out the latest blogposts from all the blogs of Placeblogger

"Recession Depression" calls for stress relief

"Recession Depression" calls for stress relief Regular Massage is becoming a necessity as stress and tension are impacted by the current economic downturn DENVER,...

read more about ""Recession Depression" calls for stress..."

posted on November 9th, 2008
from Dot's Droppings
based in Denver

Placeblogger's Blog

Blogging around the world

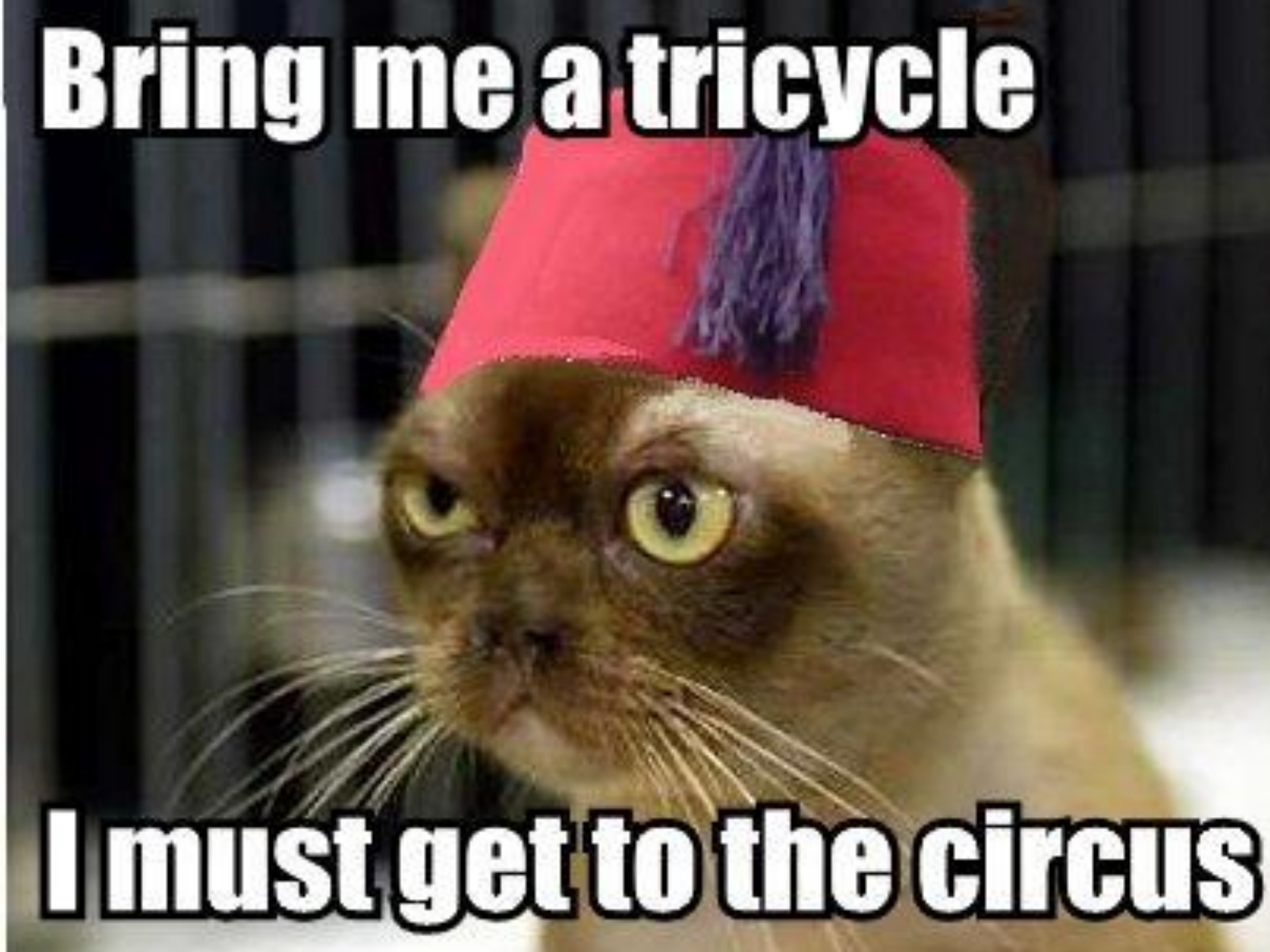
3,000!

The other day, I noticed that we'd received our 3,000th placeblog submission! I don't know exactly which one tipped us into the number 3,000. What's more important, though, is that all of them show us is that there are lots and lots of people who have amazing stories to tell about...

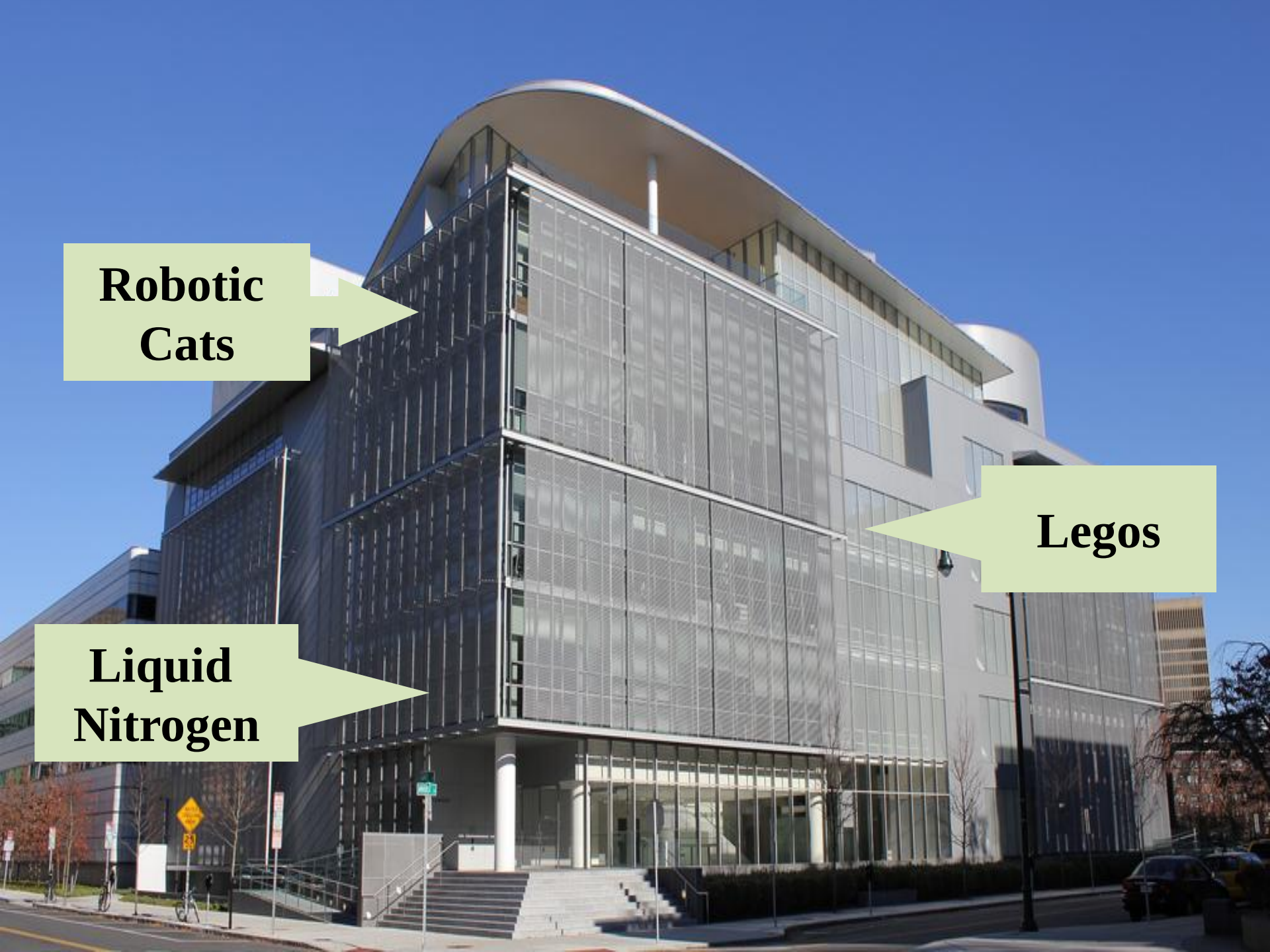
Latest Placeblogs

Add your own

- Manila Blog
- e san
- Chapel Hill Magazine
- Miss Vero's Beach House
- Miss Vero's Beach House
- HattersWorkshop Open Office Blog
- Being Balanda
- West Richland Real Estate Blog
- La Gringa's Blogicito
- The Love Blog by Vancouver Blogger Barbara Doduk


Bring me a tricycle
I must get to the circus

Placeblogger
World HQ
Now with free coffee!
Cambridge, MA


Robotic Cats
Legos
Liquid Nitrogen

LinkedIn

Lisa Williams

CEO and Founder, Placeblogger.com, Fellow, MIT Media Lab Center for Civic Media

Greater Boston Area | Online Media

Join LinkedIn and access Lisa Williams's full profile.

As a LinkedIn member, you'll join 150 million other professionals who are sharing connections, ideas, and opportunities. And it's free! You'll also be able to:

- See who you and **Lisa Williams** know in common
- Get introduced to **Lisa Williams**
- Contact **Lisa Williams** directly

View Full Profile

Lisa on LinkedIn:
linkedin.com/in/lisawilliams

Lisa on Twitter:
@lisawilliams

twitter

Search

Have an account? Sign in

Lisa Williams

@lisawilliams

CEO & Founder of Placeblogger, MIT Media Lab fellow, into the future of news. My learning-to-code blog:
http://lifeandcode.tumblr.com .

ÜT: 42.365894,-71.16047 · http://linkedin.com/in/lisawilliams

Follow

8,565 TWEETS

1,562 FOLLOWING

3,693 FOLLOWERS

Life and Code

A learn-to-program blog written with journalists in mind

HOME WHY ARE YOU LEARNING TO CODE? I WANT TO CODE - HOW DO I GET STARTED?
GREATEST HITS ARCHIVES RSS ASK ME ANYTHING

POSTINGS

ximena vengoechea: Is coding the new Latin?

ximenavengoechea:

> If coding were a fashion accessory, it would be the latest "it" bag on the cover of every glossy magazine. From Codeacademy to Treehouse, coding has been trending like crazy, and with good reason. With the rise of the internetz coding has become a coveted skill, and with this economy it...

Great post. Read it.

Leave an answer Answer

Logged in as **theblackleatherbelt** (log out)

POSTED 8 HOURS AGO REBLOGGED FROM XIMENAVENGOECHEA WITH 3 NOTES PERMALINK SHARE

ABOUT ME

Lisa Williams

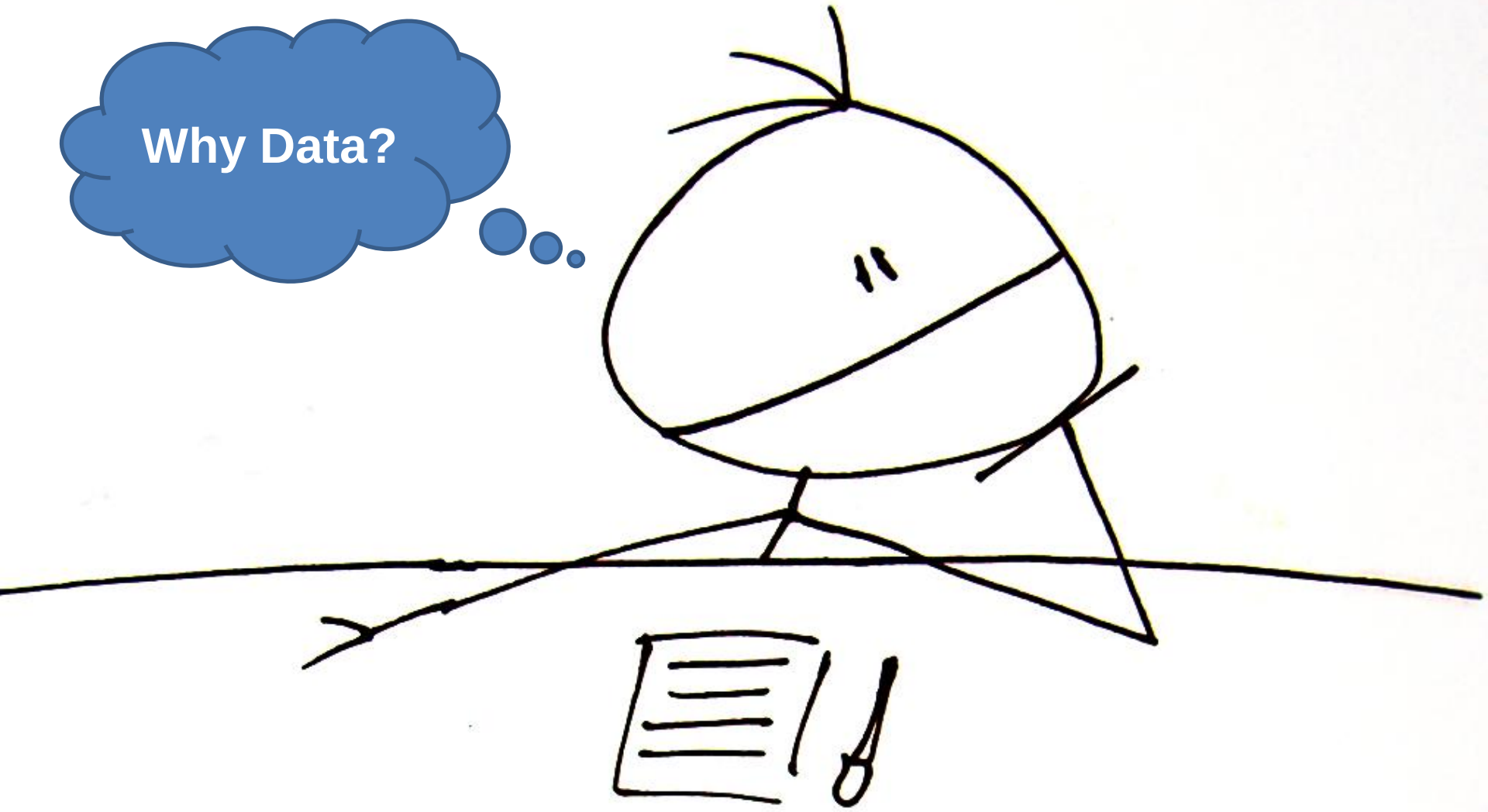
Founder of Placeblogger.com | Winner of Knight News Challenge | Center for Civic Media, MIT Media Lab | Cambridge, MA

SEARCH

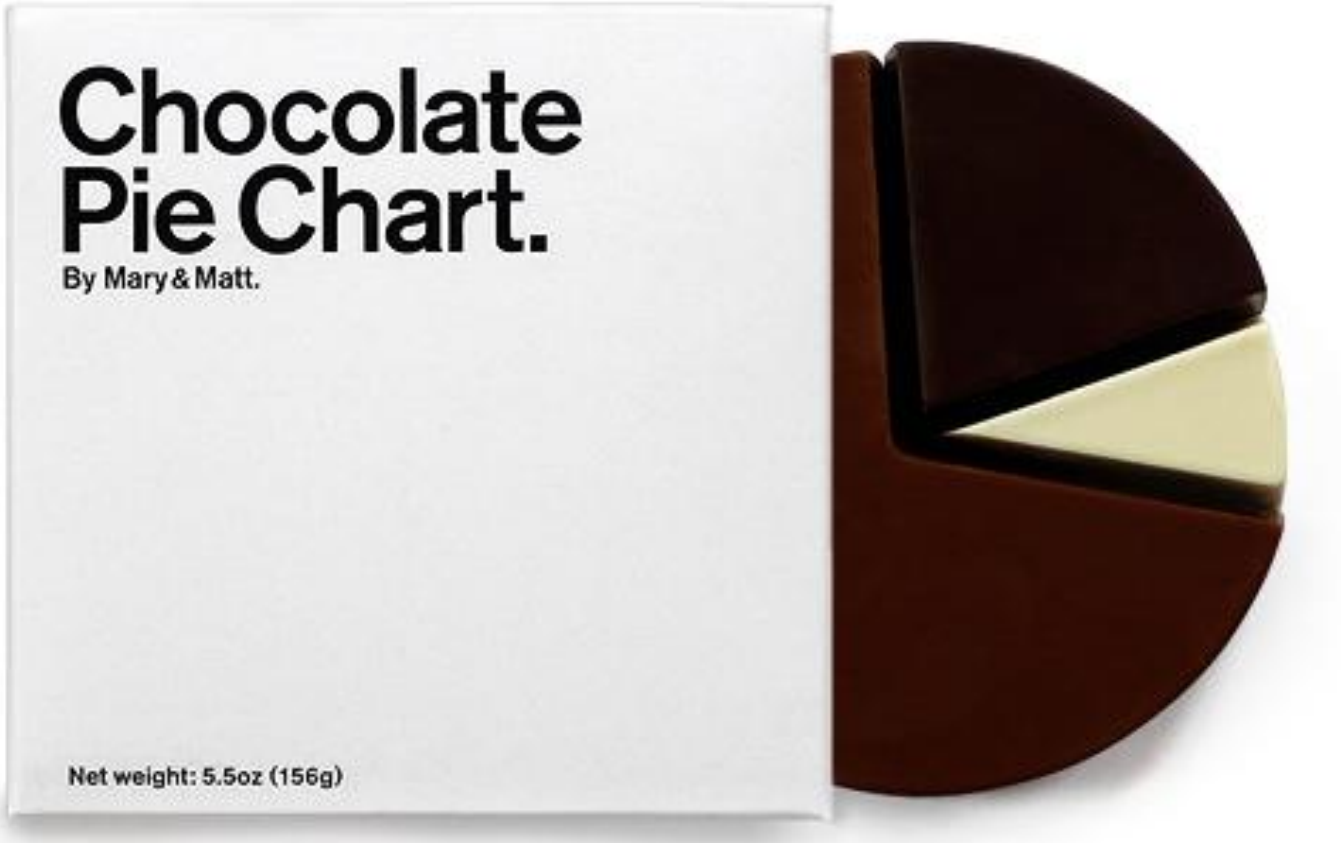
http://lifeandcode.tumblr.com

KEEP
CALM
AND
CARRY
ON

GET EXCITED AND MAKE THINGS


Why Data?

Persuasive, Visual, Shareable


Chocolate
Pie Chart.
By Mary & Matt.
Net weight: 5.5oz (156g)

Data visualization is expressive

The Billion Dollar O-Gram
David McCandless
$440 US Defence Budget
$80 China
$11 Russia
$465 Feed and educate every child on Earth for 5 years
$3000 Iraq War estimated total
$200 Africa's entire debt to the West
$60 Iraq War Predicted Cost 2003
$102 Iraq War 06
$133 Iraq War 07
$352 Walmart Revenues
Walmart Profits $11
$206 Big Tobacco Settlement
$515 Per year to shift the entire world to solar power and renewable energies
$230 Manned mission to Mars
$316 Bribes received by Russian officials
$76 Nintendo market value
$175 Google
$46 Bill Gates
$15 Facebook
$300 Yearly amount given to charity by Americans
$520 OPEC earnings
$320 Global illegal drug market
$385 Worldwide Advertising Spend
$534 Global Pharmaceutical Market
$41 Bejing Olympics
$54 Feed every child in the world for a year
$32 Video Games Market
OPEC Climate Change Fund $3
$29 Gift Cards
$16 Yoga Spend
$21 Save the Amazon
$97 Internet Porn Industry
$103 Foreign aid given by world's major nations
$20 Online Advertising
$4 Erectile Dysfunction
$19 Anti-depressants
$21 Gifts to doctors
Spending
Earning
Donating
Fighting
Crying
Illing

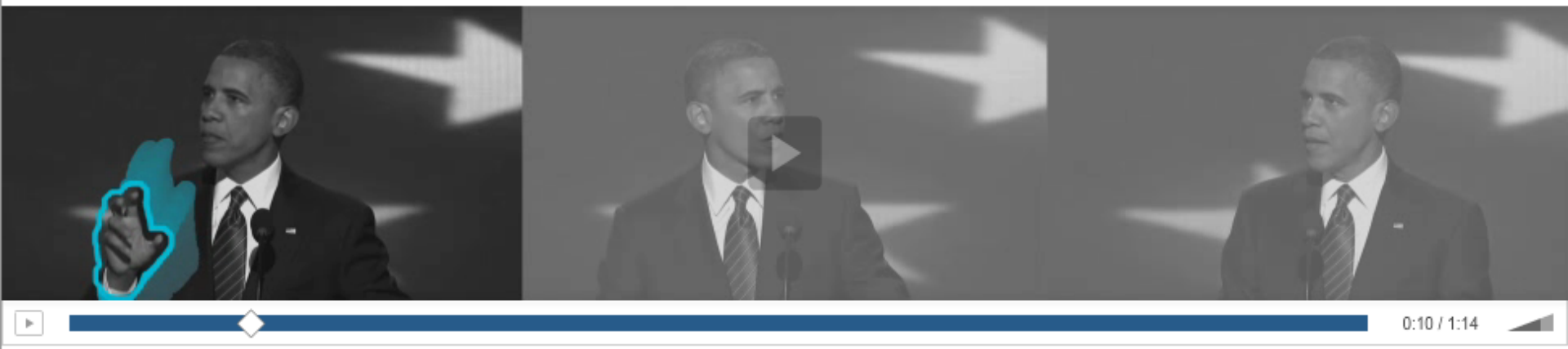
Data visualization is persuasive

Map, as of Wednesday:

WNYC Snow Map
Tool: Fusion Tables
Intermediate

Obama's Gestures

Romney's Gestures



Mr. Obama uses a more controlled style than Mr. Romney does. While the force of his movements can prompt the viewer to support the argument put forth, controlled movements can also make the

When Obama used the **Waving a Ball** gesture during his convention acceptance speech

In this movement, the president moves his forearm in an arc from the elbow with his palm open.

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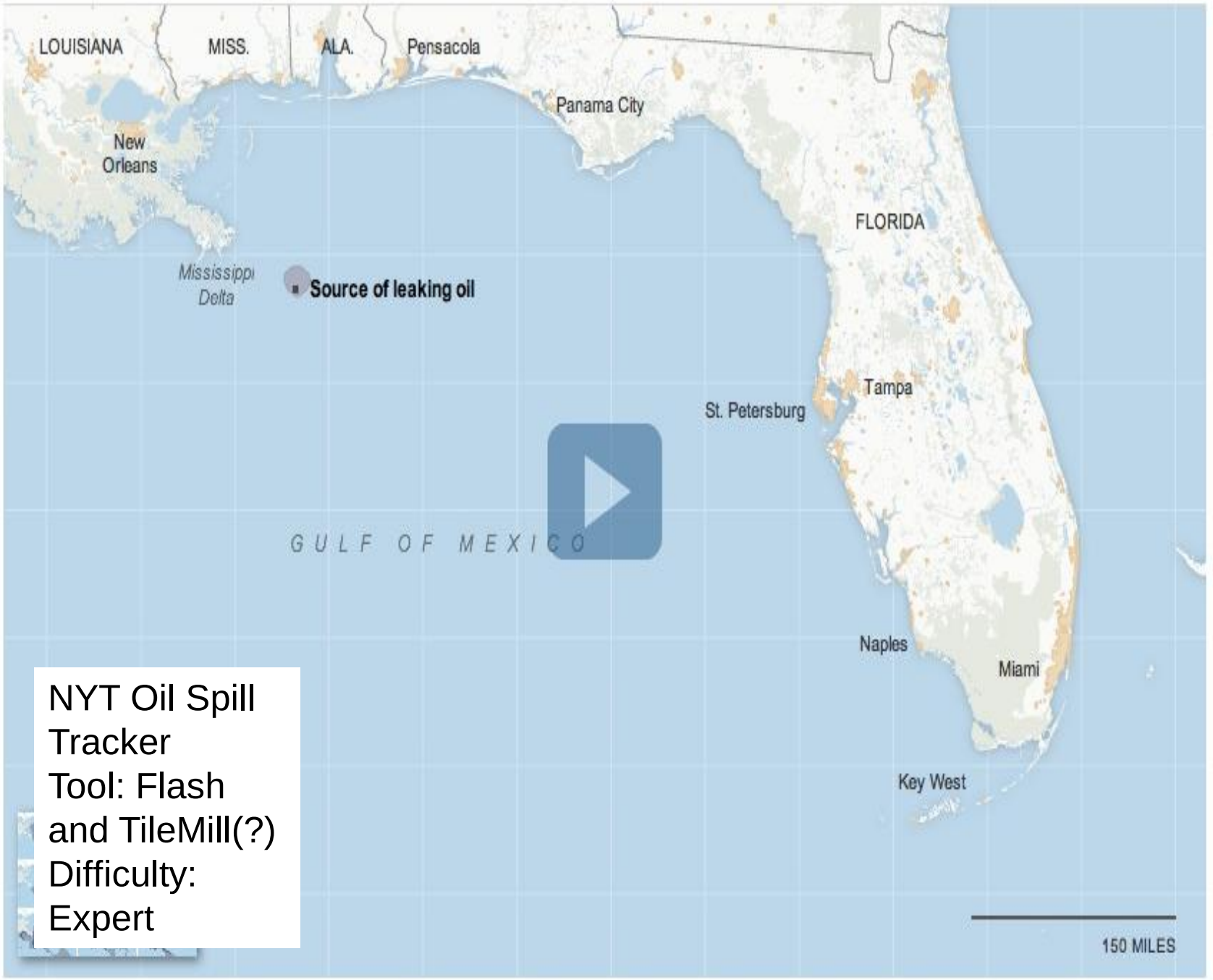
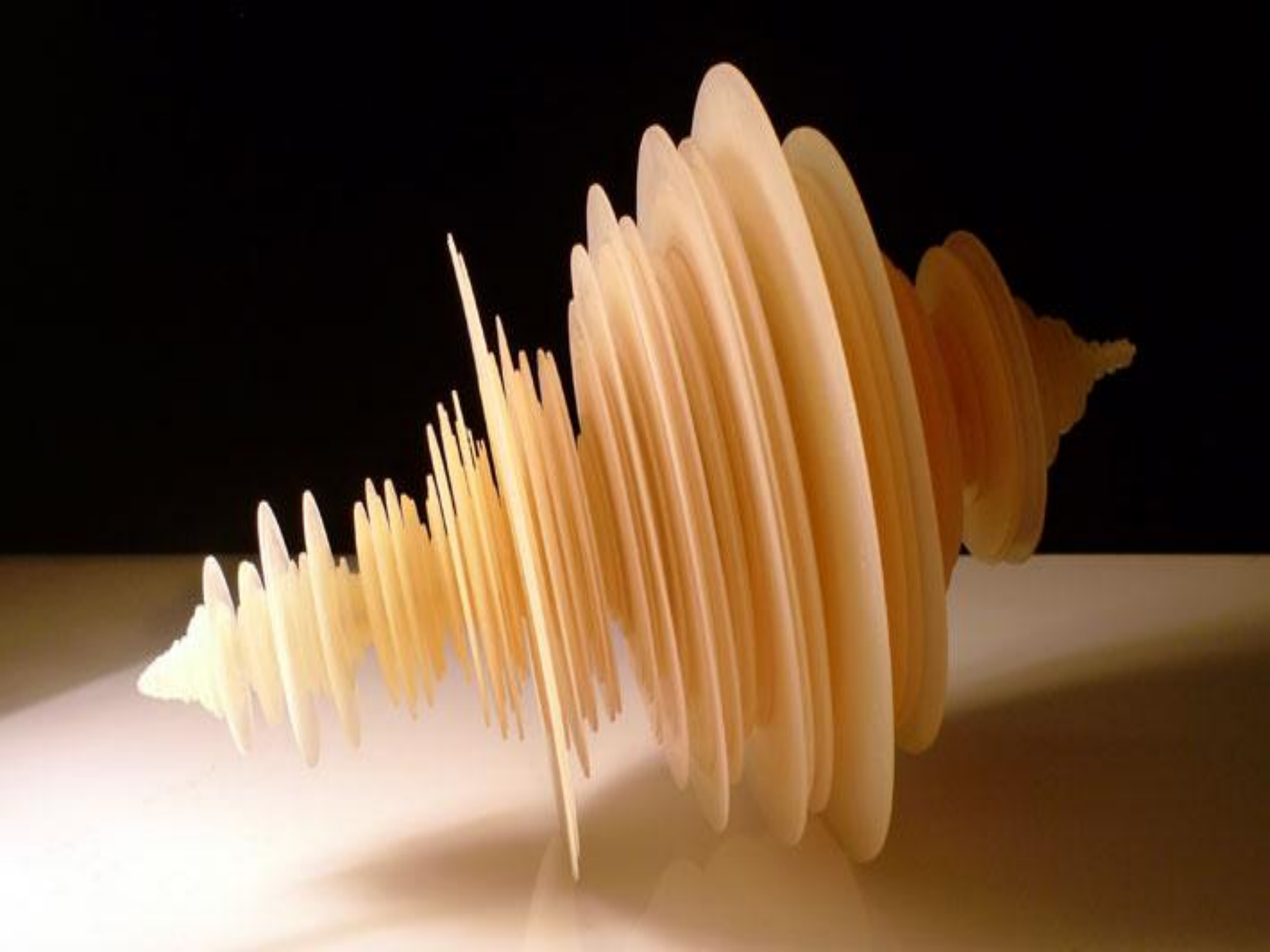


NYT Oil Spill Tracker
Tool: Flash and TileMill(?)
Difficulty: Expert



Data visualization is shareable

wind map

October 26, 2012
1:59 am EDT
(time of forecast download)

top speed: **32.1 mph**
average: **7.3 mph**

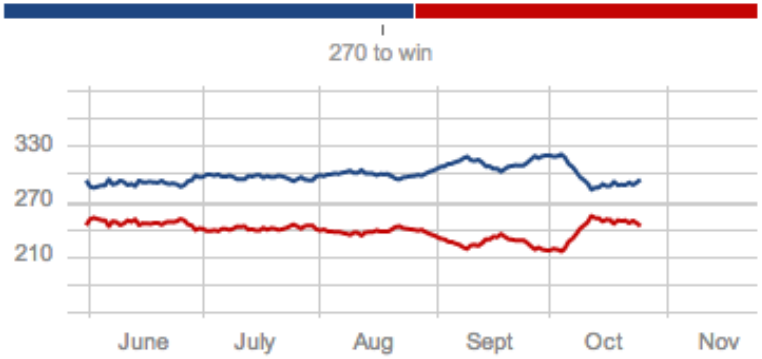
1,200,000

FiveThirtyEight Forecast

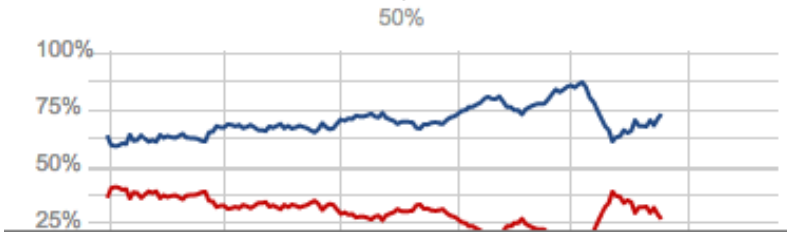
Updated 10:54 PM ET on Oct. 25

President Nov. 6 Forecast	President Now-cast	Senate Nov. 6 Forecast

Barack Obama		Mitt Romney
294.1	**Electoral vote**	243.9
+2.5 since Oct. 18		-2.5 since Oct. 18



73.1%	**Chance of Winning**	26.9%
+2.7 since Oct. 18		-2.7 since Oct. 18



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Because data is *more available* now than ever before

DATA.GOV
EMPOWERING PEOPLE

Search Data.gov SEARCH

HOME | ABOUT | DATA | APPS | COMMUNITIES | METRICS | OPEN GOVERNMENT | BLOG

Latest Datasets

- FY2011 Compensation and Pension by...
- Gravesite locations of Veterans and...
- Gravesite locations of Veterans and...
- Gravesite locations of Veterans and...
- Gravesite locations of Veterans and...
- Gravesite locations of Veterans and...
- Gravesite locations of Veterans and...
- Gravesite locations of Veterans and...
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- Gravesite locations of Veterans and...

DATA AND APPS

- 378,529 raw and geospatial datasets
- 1,264 government apps
- 236 citizen-developed apps
- 103 mobile apps
- 180 agencies and subagencies
- Suggest a dataset or app!
- 2011 Next Generation Data.gov is

COMMUNITIES

Come explore, discuss, meet others in the same field, and develop the data and apps in the community that you care about. Join in the discussions by going to communities, some of which are listed below, that interest you.

EDUCATION | ENERGY

OPEN GOVERNMENT

First open source code released for the Open Government Platform delivered by the governments of India and the U.S. Find out more and then download the code.

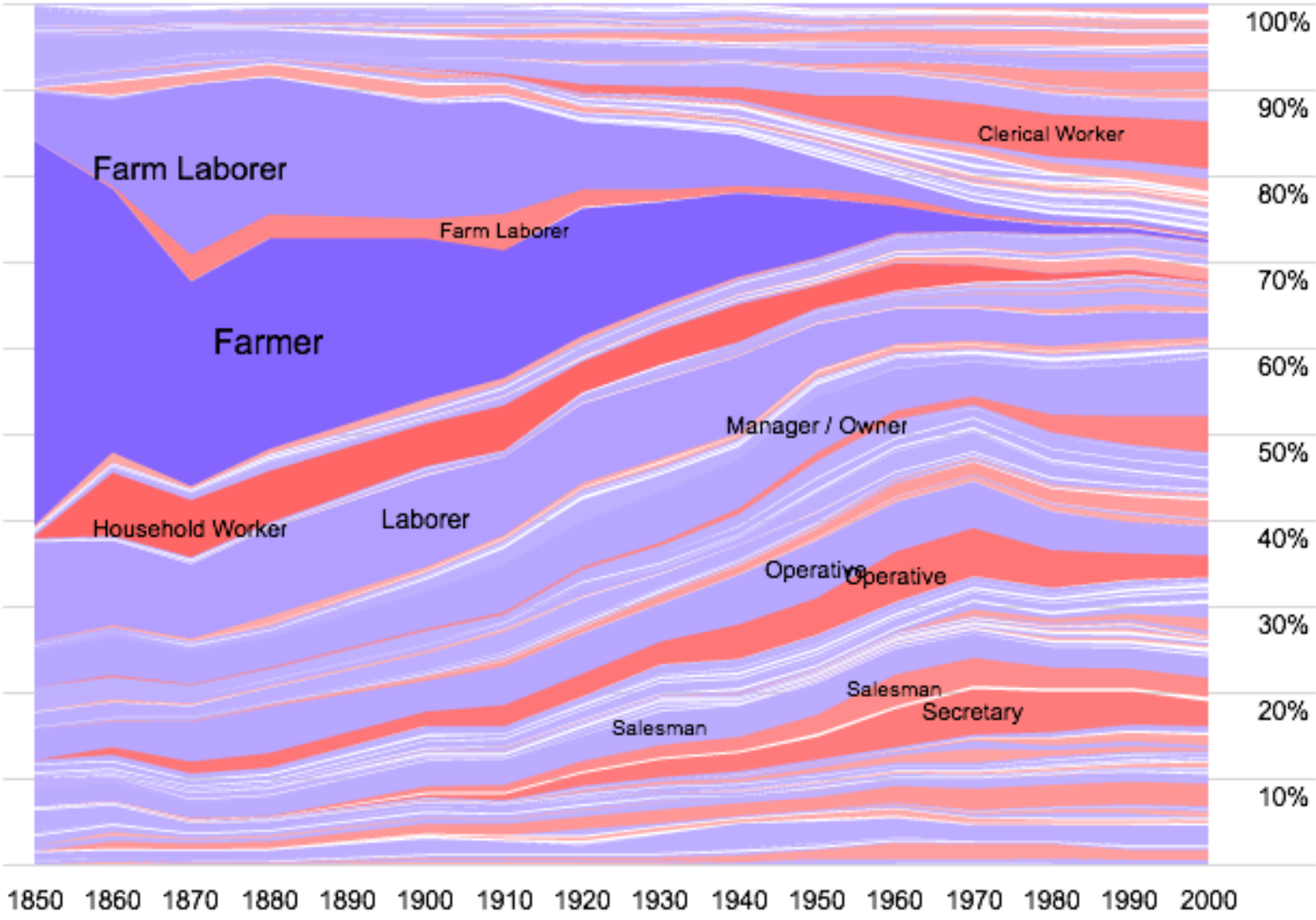
The 2012 International Open Government Data Conference will be held July 10-12 at the World

Job Voyager

Reported Occupations - U.S. Labor Force, 1850 - 2000 (source: http://ipums.org)

> ✕

● All ● Male ● Female



World Health Organization

Global Health Observatory Data Repository

Themes | Data Repository | Countries | Metadata

Search

- World Health Statistics
- Environmental health
- Epidemic prone diseases
- Equity
- Global Information System on Alcohol and Health
- Health systems
- Health-related Millennium Development Goals
- Health workforce
- HIV/AIDS
- Immunization
- Injuries and violence
- Malaria
- Mortality and burden of disease
- Neglected Tropical Diseases
- Noncommunicable diseases
- Nutrition

Welcome to the Global Health Observatory

The GHO data repository provides access to over 50 datasets on priority health topics including mortality and burden of diseases, the Millennium Development Goals (child nutrition, child health, maternal and reproductive health, immunization, HIV/AIDS, tuberculosis, malaria, neglected diseases, water and sanitation), non communicable diseases and risk factors, epidemic-prone diseases, health systems, environmental health, violence and injuries, equity among others. In addition, the GHO provides on-line access to WHO's annual summary of health-related data for its 194 Member states: the World Health Statistics 2012.

We value your feedback, please use the **feedback** link, available on every data view, to suggest new data formats or structures, raise issues on data, or to make any other comment or suggestion.

Disclaimer

Please note that this is a beta service, as such, it is not authoritative and the full content of the Global Health Observatory database is not yet available through these functions.

Many of these datasets represent the best estimates of WHO using methodologies for specific indicators that aim for comparability across countries and time; they are updated as more recent or revised data become available, or when there are changes to the methodology being used. Therefore, they are not always the same as official national estimates, although WHO whenever possible will provide Member States the opportunity review and comment on data and estimates as part of country

Data Catalog

SHARE

The World Bank's Open Data initiative is intended to provide all users with access to World Bank data. The data catalog is a listing of available World Bank datasets, including databases, pre-formatted tables, reports, and other resources.

Policy on Access to Information

Access to Information

Featured Collections

World Development Indicators

The primary World Bank collection of development indicators compiled from officially-recognized international sources.

World Bank Finances

Datasets related to the World Bank's finances, with tools to filter, visualize, share, and embed data.

GenderStats

The Gender Statistics database provides indicators on key gender topics. Themes included are demographics, education, health, labor force, & political participation.

Global Economic Prospects

Country-level data on the short-, medium, and long-term outlook for the global economy and the implications for developing countries and poverty reduction.

Les données | La licence | La démarche | Le forum | > Les Applis

kezako ?

Bienvenue sur ParisData, le site de la politique Open Data de la Ville de Paris. Vous trouverez ici l'ensemble des jeux de données publiés par les services de la Ville sous licence libre. Ce catalogue s'enrichira dans les semaines à venir de nouveaux jeux de données, et ...

> en savoir +

Construisons

ensemble ce projet.
Partageons nos attentes et nos idées de nouveaux services sur le forum
> Accéder au forum

Données les plus récentes | Données les plus téléchargés

Données récentes | Thèmes | Recherche

Les notices les plus réservées en 2011
25/10/2012
CSV
Mo
téléchargement(s) : 10

1000 titres les plus empruntés par bibl...
25/10/2012
CSV
Mo
téléchargement(s) : 36

On en parle...
l' Open Data à Paris

Auregann 4 jeux de données statistiques sur les #bibliothèques de Paris http://t.co/I1KiEalh via @opendataParis
16 hours ago

AgentNum Projet #OpenData #Paris à l'honneur lors du prochain #DataApero du 05/11 à 19h

Data Catalog
Frequently Asked Questions
Terms of Use

Select Department
Select Online Service

Welcome to the first iteration of the City of Ann Arbor's Data Catalog website. This site is part of our ongoing commitment to enhance citizen participation and local government transparency. We are pleased to make City datasets freely available to the public in machine-readable formats.

We expect the Data Catalog site to grow over time as we add additional datasets to the catalog. Your use of the datasets available on this site is governed by the City's Terms of Use. By downloading the data, you are agreeing to these Terms of Use. When creating these datasets the City has been careful to respect privacy and security concerns.

For questions or comments concerning the City of Ann Arbor Data Catalog please contact the City's IT Director.

If you have suggestions for new datasets or enhancements to existing datasets please send your request to DataCatalog@A2gov.org.

Agency/Unit	Metadata	CSV	PDF	DOC	RSS/ GeoRSS	KML/ KMZ	SHP	Map
AAGIS	Building Footprints							
AAGIS	City Boundary							
AAGIS	City Owned Land							
AAGIS	DDA Boundary							
AAGIS	Floodplain							
AAGIS	Floodway							
AAGIS	Future LandUse							
AAGIS	Greenbelt Boundary							
AAGIS	Greenbelt Properties							

Sign up for Data Catalog e-mail updates

Agency/Unit - Agency or service unit where the data originates.

Metadata - Data and information that is used to describe datasets.

CSV - File format that is used by spreadsheet, database, and

datacatalogs.org

Login Register

Find data catalogs

Browse Groups About

a comprehensive list of open data catalogs curated by experts from around the world.

Recently Changed Catalogs

- ParisData
- Mississauga, Ontario
- Prince George, British Columbia
- Data Publica
- Calgary, Alberta

View revision log »

268 registered data catalogs available.

Find data catalogs

Knight DIGITAL MEDIA

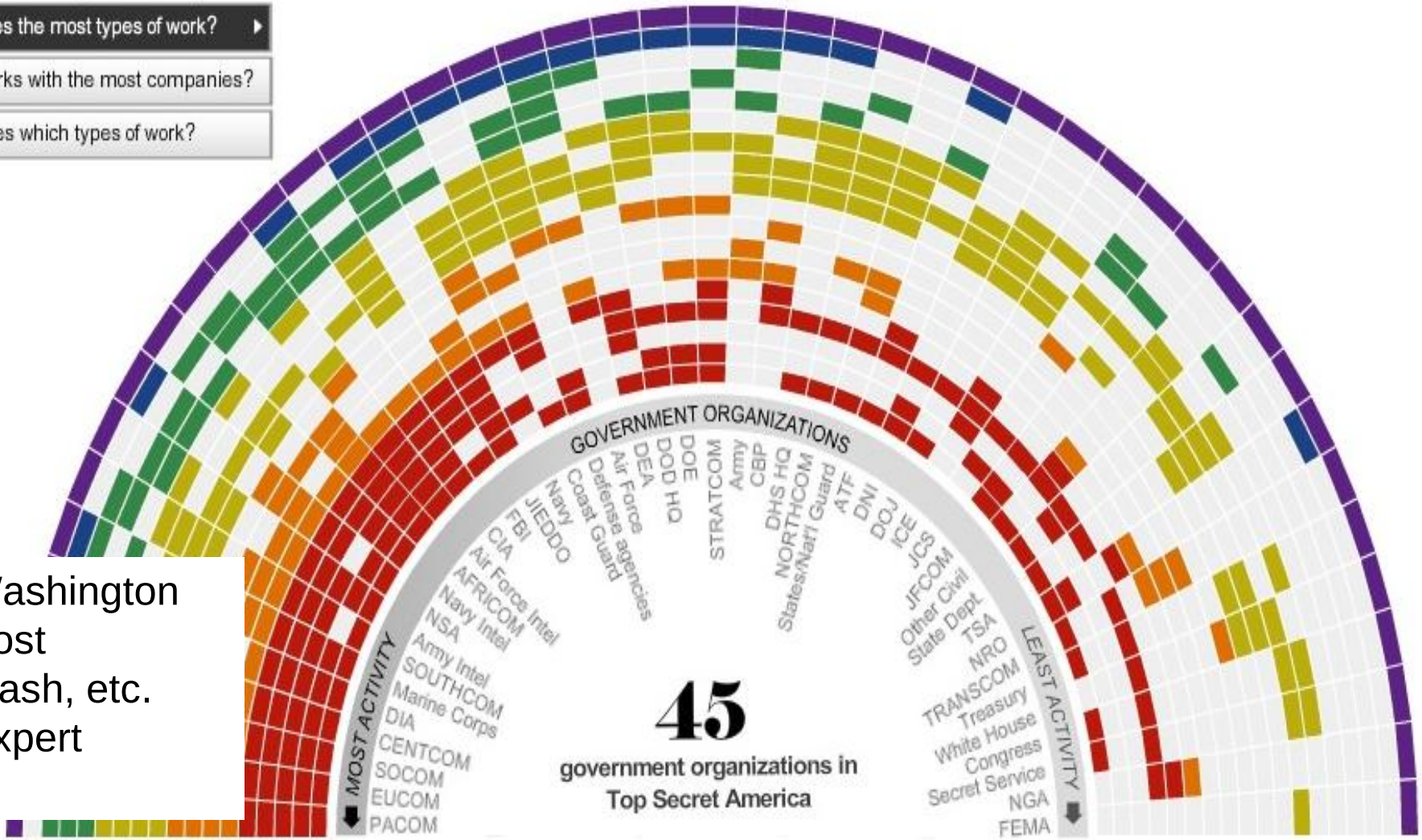
The Top Secret Network of Government and its Contractors

Explore the relationships between government organizations and the types of work being done in Top Secret America. Need help?

Government Organizations | Intelligence | Military | Homeland Security | Unconventional Warfare | Weapons Technology | Support and Admin | Featured Companies*

Sort government organizations by:

- Who does the most types of work?
- Who works with the most companies?
- Who does which types of work?



Washington Post
Flash, etc.
Expert

Comments | Share This: | Need Help? | *Notes/Credits | Fullscreen

Because data visualization is *easier* than ever before

Many Eyes

An experiment brought to you by **IBM Research** and **the IBM Cognos software group**

Listing Visualizations

Subscribe

Showing 1-30 of 143437

Previous 1 2 3 4 5 6 7 8 9 ... 4781 4782 Next

Explore

- Visualizations
- Data sets
- Comments
- Topic centers
- My stuff
  - My topic centers
  - My watchlist
  - My contributions
  - Messages to me

Participate

- Create a visualization
- Upload a data set
- Create a topic center

Learn more

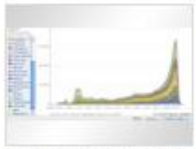
- Quick start
- Visualization types
- Data format and style
- About Many Eyes
- FAQ
- Blog

Contact us

- Contact
- Report a bug

Sort by date | Sorted by rating

★ 14 🎓



Monday July 9 2007, 02:17 PM
Movie Genres 1888-2012 Count

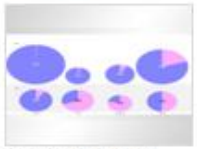
★ 11 🎓

Tuesday July 10 2007, 06:39 AM
Alcohol Consumption Worldwide

★ 12 🎓 1

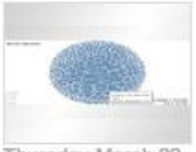
Thursday July 19 2007, 01:55 PM
Shakespeare's favourite words

★ 11 🎓



Saturday July 28 2007, 10:01 AM
Survival on the Titanic

9 🎓



Thursday March 22 2007, 05:59 PM
Upload Flower

9 🎓

Friday November 9 2007, 05:02 PM
The Shifting of Ireland's Population to Dublin

★ 8 🎓

Thursday January 25 2007, 01:58 PM
Co-Occurrences of Names in the New Testament (more complete data

9 🎓 1

Monday March 15 2010, 11:12 PM
Number of Subprime loans and Average Loan Balance

★ 7 🎓

Friday August 3 2007, 09:47 AM
Candidate Expenditure Matrix

★ 7 🎓

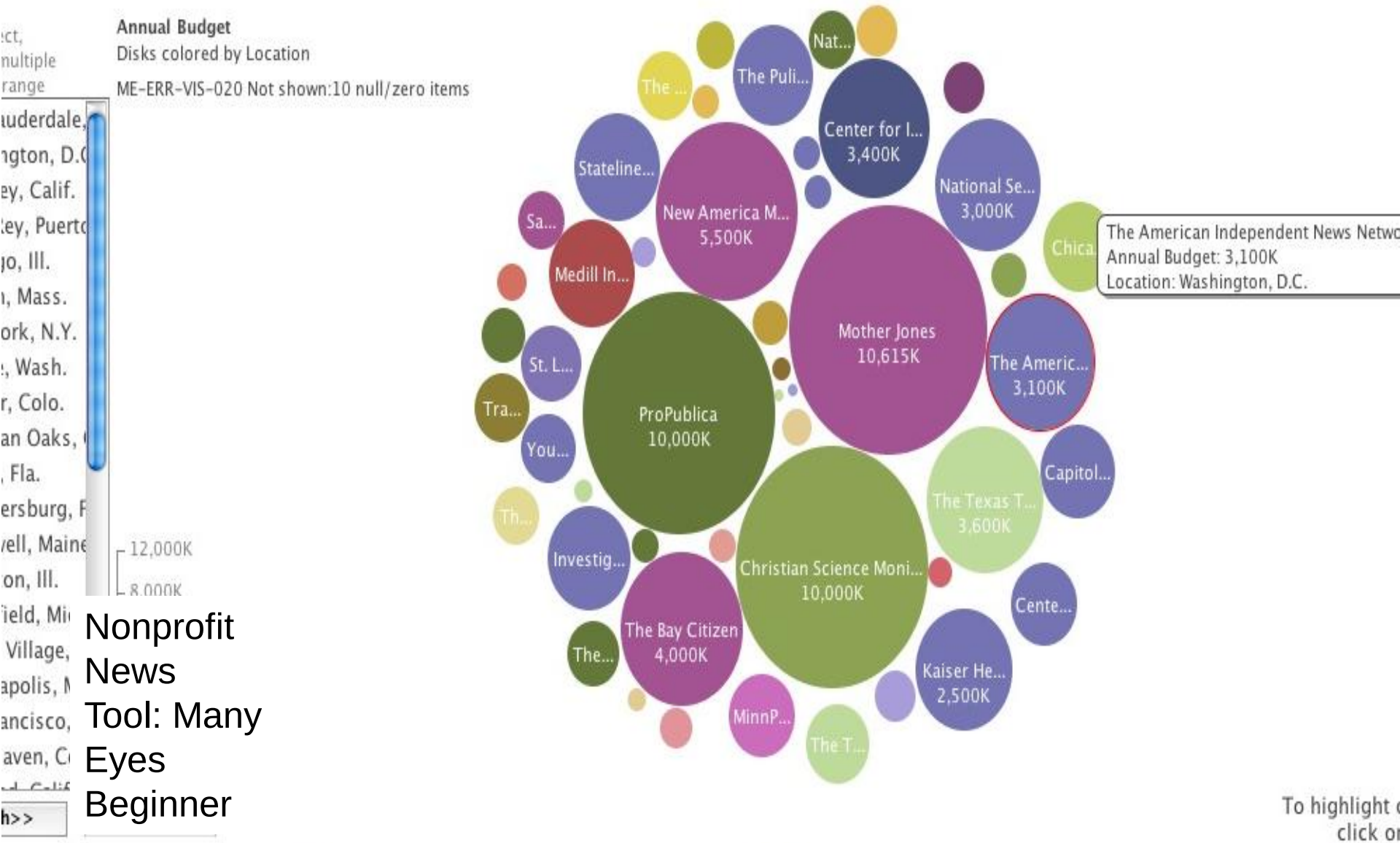
Saturday November 17 2007, 08:22 PM
Dominant Religious Self-Descriptor

★ 7 🎓

Wednesday November 21 2007, 01:38 PM
Distribution of US Foreign Aid over time, 1946-2005

8 🎓 1

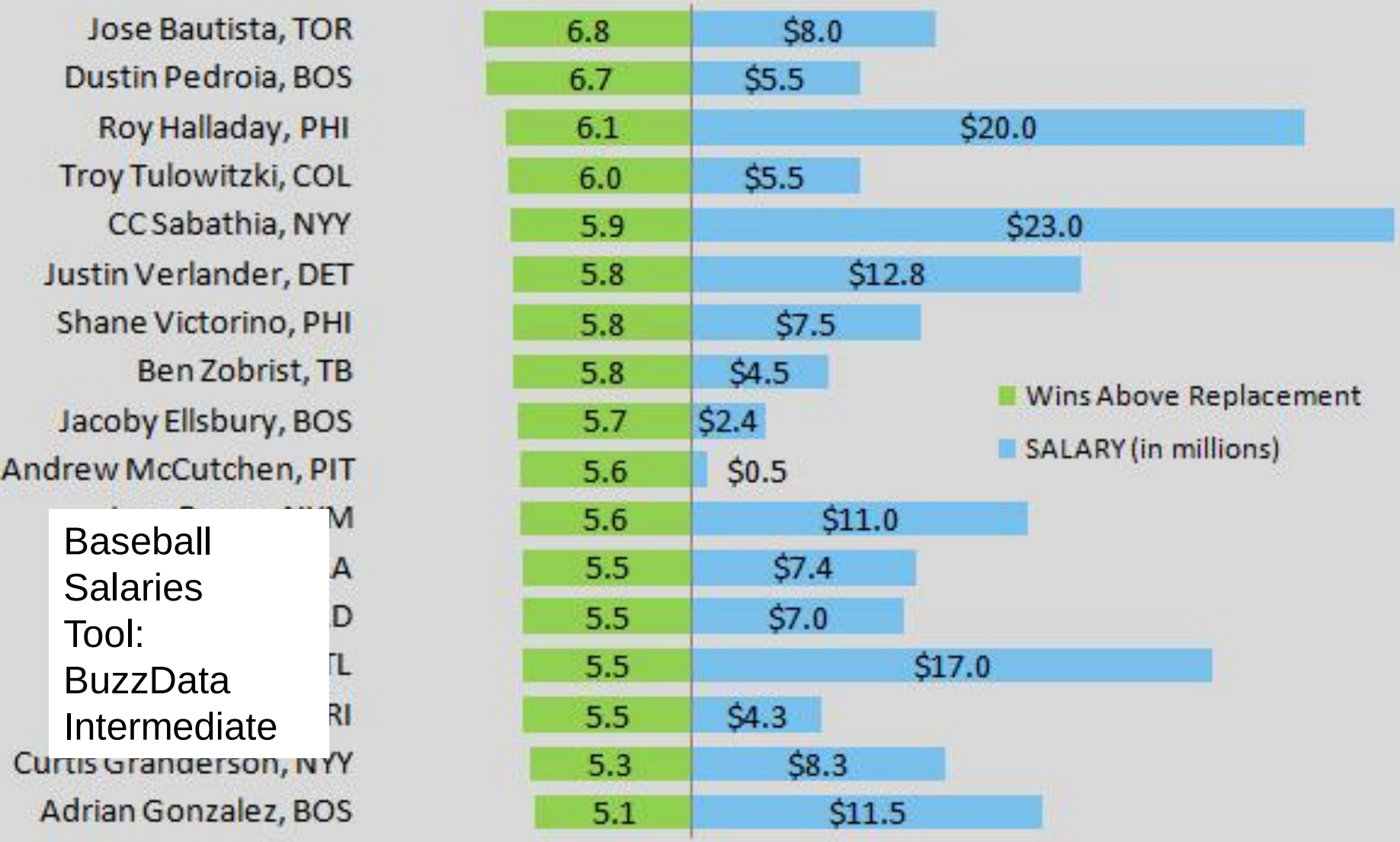
Wednesday March 17 2010, 04:13 PM
2008 Colorado public library technology provision by county


Annual Budget
Disks colored by Location
ME-ERR-VIS-020 Not shown:10 null/zero items
Nat...
The Puli...
The ...
Center for I...
3,400K
Stateline...
New America M...
5,500K
National Se...
3,000K
Sa...
Medill In...
Chica
The American Independent News Netwo
Annual Budget: 3,100K
Location: Washington, D.C.
Mother Jones
10,615K
St. L...
Tra...
ProPublica
10,000K
The Americ...
3,100K
You...
Capitol...
Th...
The Texas T...
3,600K
Investig...
Christian Science Moni...
10,000K
Cente...
The Bay Citizen
4,000K
The...
Kaiser He...
2,500K
MinnP...
The T...
12,000K
8,000K
Nonprofit News Tool: Many Eyes Beginner
To highlight
click o
Size
Annual Budget
Label
Name
Color
Location

Buzzdata
momoko / Open Data Hubs Worldwide
Download
Overview
Data
Admin
Privacy Options
Collaborators
Delete Dataset
Dataset Members
Type in the account name of a BuzzData user or an email address of a non-member to invite them.
Collaborator
Add
Momoko Price Creator
alex.joseph@cybera.ca Collaborator Delete
Alex Howard Collaborator Delete
Azad Amir-Ghassemi Collaborator Delete
James McKinney Collaborator Delete
Map and Data Librarian Collaborator Delete
Saleem Khan Collaborator Delete
Comment

Sports Page Chart of the Day

SALARIES OF BASEBALL'S BEST IN 2011



Baseball Salaries Tool: BuzzData Intermediate

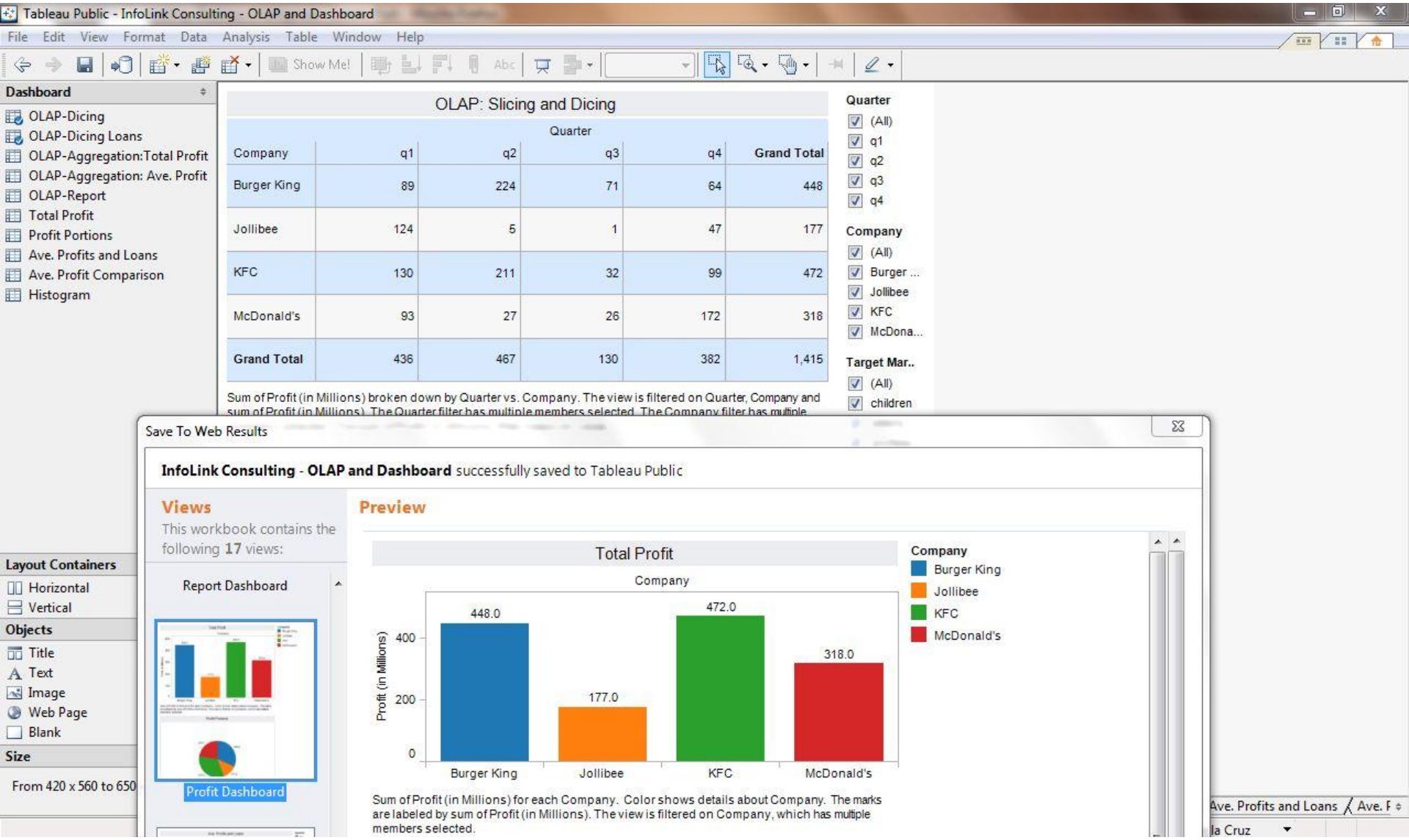


Tableau Public - InfoLink Consulting - OLAP and Dashboard
File Edit View Format Data Analysis Table Window Help
Show Me!
Dashboard
OLAP-Dicing
OLAP-Dicing Loans
OLAP-Aggregation:Total Profit
OLAP-Aggregation: Ave. Profit
OLAP-Report
Total Profit
Profit Portions
Ave. Profits and Loans
Ave. Profit Comparison
Histogram
OLAP: Slicing and Dicing
Quarter
Company q1 q2 q3 q4 Grand Total
Burger King 89 224 71 64 448
Jollibee 124 5 1 47 177
KFC 130 211 32 99 472
McDonald's 93 27 26 172 318
Grand Total 436 467 130 382 1,415
Sum of Profit (in Millions) broken down by Quarter vs. Company. The view is filtered on Quarter, Company and sum of Profit (in Millions). The Quarter filter has multiple members selected. The Company filter has multiple
Quarter
(All)
q1
q2
q3
q4
Company
(All)
Burger ...
Jollibee
KFC
McDona...
Target Mar..
(All)
children
Save To Web Results
InfoLink Consulting - OLAP and Dashboard successfully saved to Tableau Public
Views
This workbook contains the following 17 views:
Report Dashboard
Profit Dashboard
Preview
Total Profit
Company
Profit (in Millions)
448.0
177.0
472.0
318.0
0
200
400
Burger King
Jollibee
KFC
McDonald's
Company
Burger King
Jollibee
KFC
McDonald's
Sum of Profit (in Millions) for each Company. Color shows details about Company. The marks are labeled by sum of Profit (in Millions). The view is filtered on Company, which has multiple members selected.
Layout Containers
Horizontal
Vertical
Objects
Title
Text
Image
Web Page
Blank
Size
From 420 x 560 to 650
Ave. Profits and Loans
Ave. P
la Cruz

Compare mortgage servicers

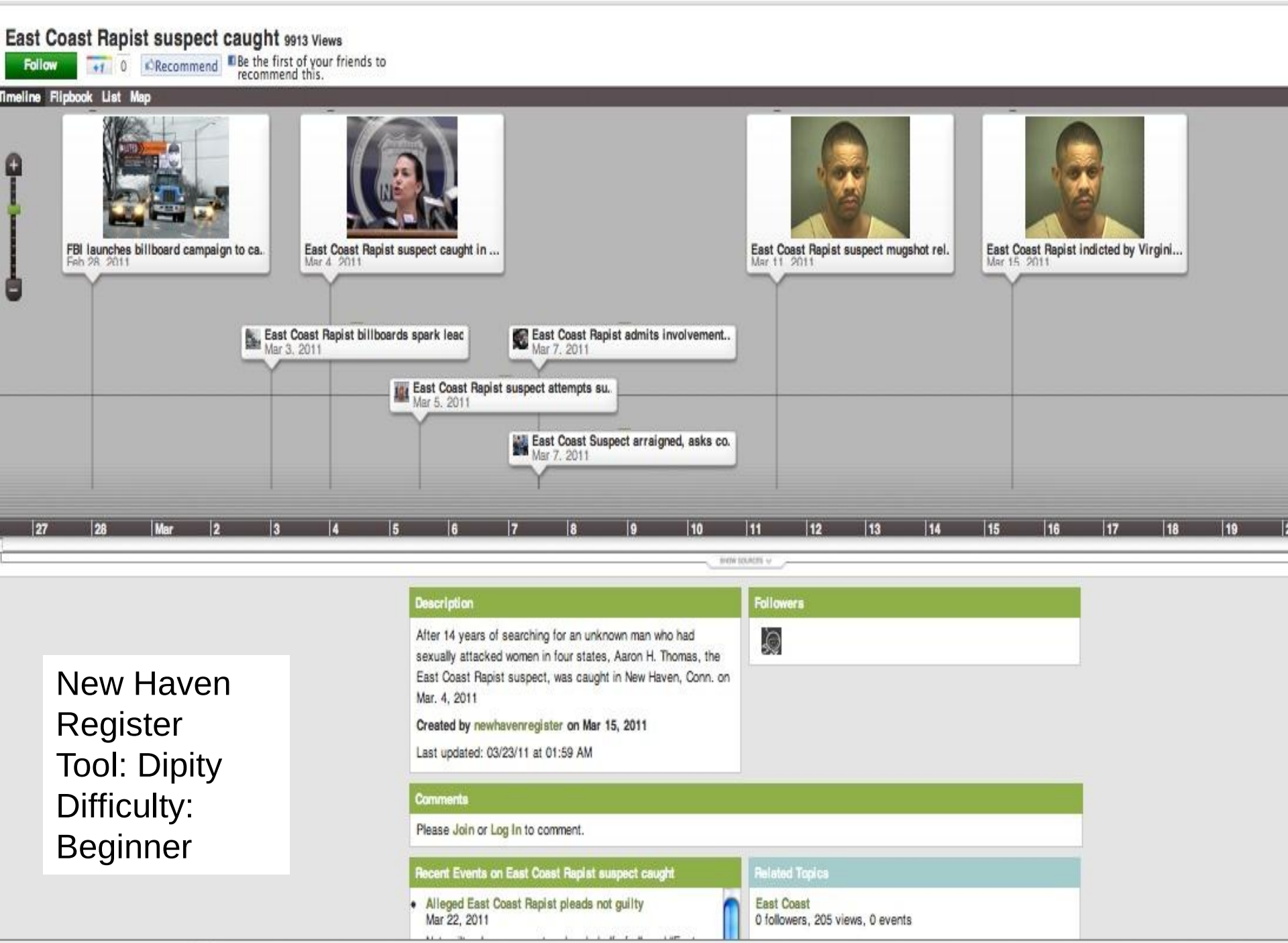
Servicers are ranked by the number of trial modifications started. Click on the color key to see status of modifications by servicer. Or, compare several servicers at once: Click one name, hold the Control (Command on Mac) key down and click the names of other servicers. To de-select at any time, click on white space.

Seattle Times Foreclosure Crisis
Tool: Tableau Public
Intermediate

10 HAMP Servicer Performance Report

Data analysis and visualization by SANJAY BHATT / SEATTLE TIMES STAFF REPORTER

MTBGuru tracks
Map
Satellite
Hybrid
Terrain
Links
Google Code
Google Maps API
Google Earth API
KML
Documentation
Discussion Group
What We're Reading
Google Maps Mania
Google Sightseeing
Google Earth Blog



New Haven Register
Tool: Dipity
Difficulty: Beginner

Q & A

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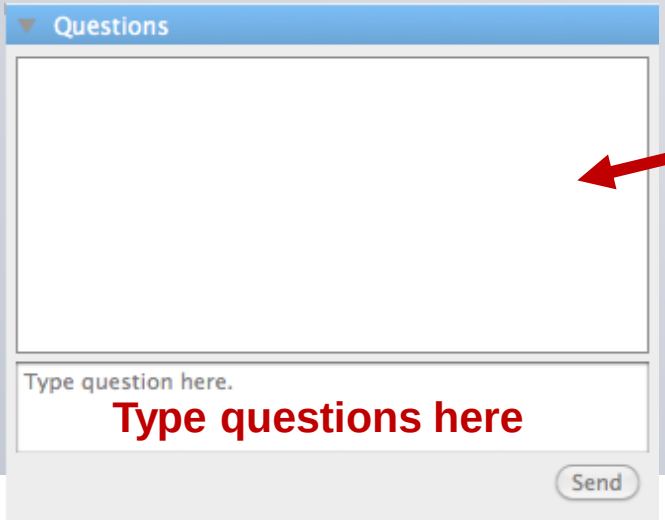
Placeblogger

Lisa Williams
Placeblogger.com
@lisawilliams



Myths about dataviz

Data visualization is new

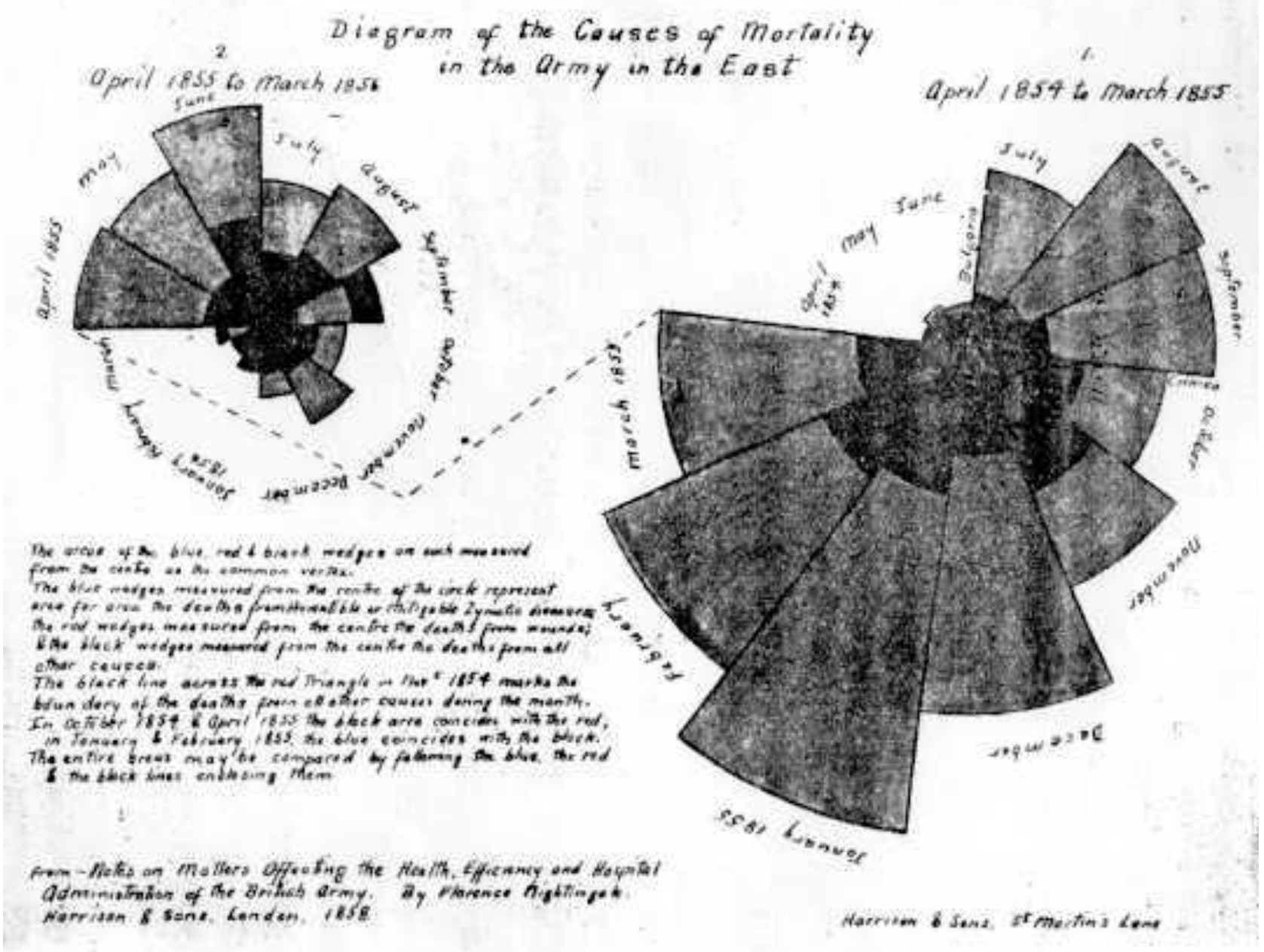
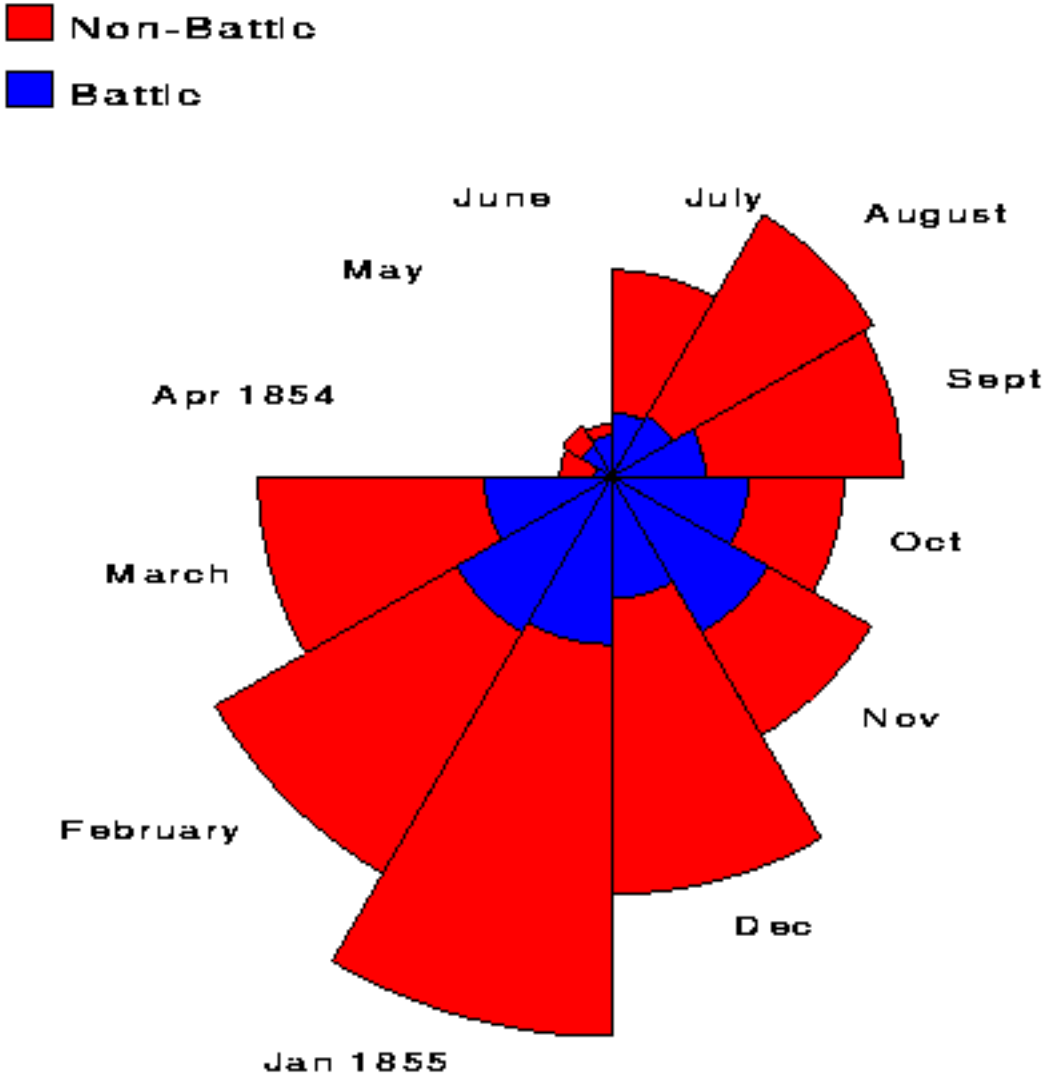


FIG. 8 — The type of graph used by FLORENCE NIGHTINGALE in 1858 to which she gave the name *Coxcomb*.

Causes of Mortality in the Army in the East
April, 1854 to March 1855



From: F. Nightingale, "Notes on Matters Affecting the Health, Efficiency and Hospital Administration of the British Army", 1858

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Regular people don’t want data

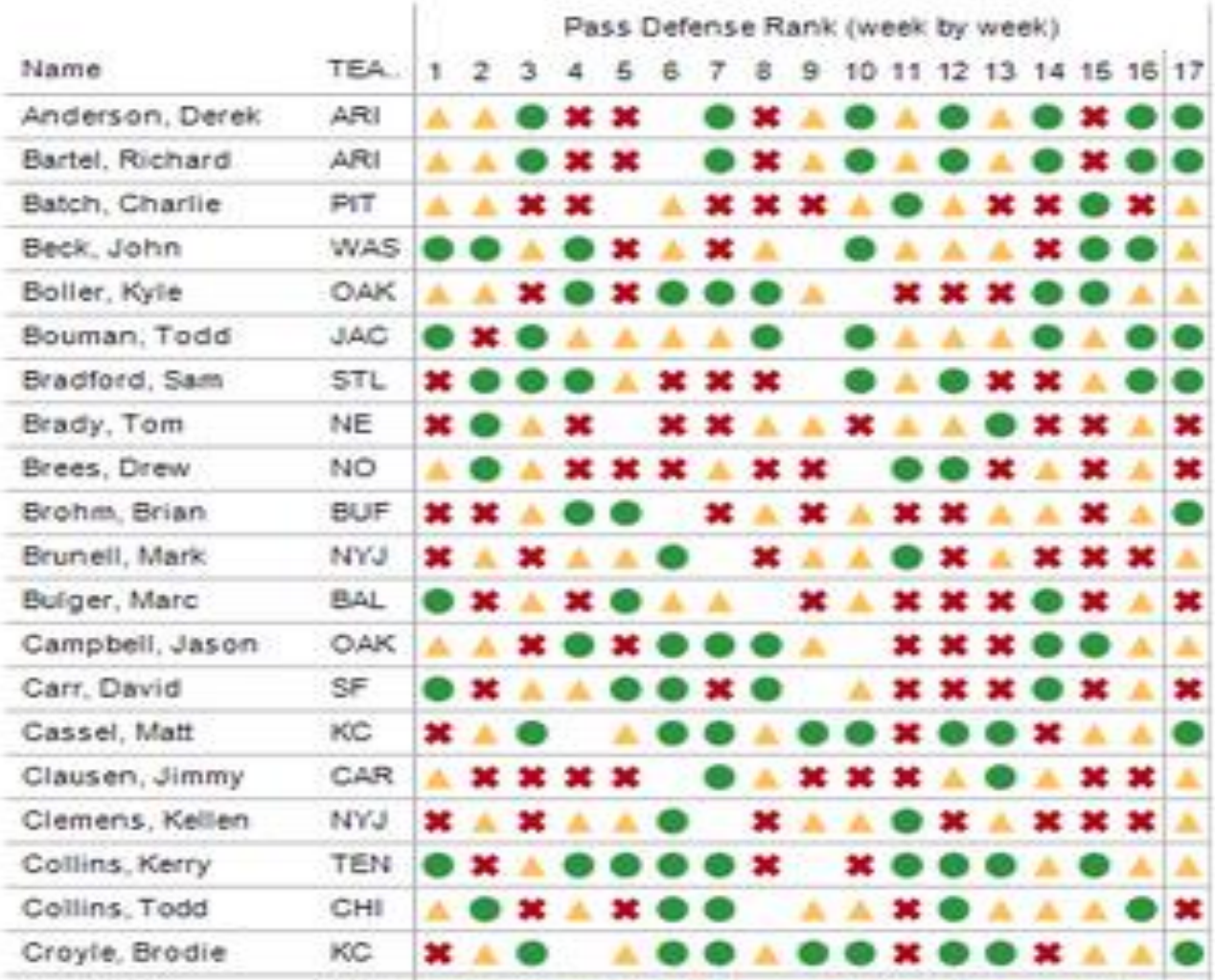
Defensive Matchup Tracker

select or drag to interact

See how tough your players' defensive matchups are for the coming weeks. You can view opposing teams' defensive rankings based on:

- The average number of Fantasy points they have allowed per week to date (by position), or
- The average number of yards they have allowed per week to date (passing or rushing), or
- Dave Richard's projections.

To view projected or actual Fantasy points for a player in a given week, mouse over their circle for the particular week. Fantasy point data (projected and actual) are from AccuScore.



Defensive Rank

- ✖ Top 10 Defenses
- ▲ Middle 12 Defenses
- ● Bottom 10 Defenses

Select Ranking Source

- (•) FPTS Against
- ( ) NFL Yds Against
- ( ) Richard

Select Weeks

- [✓] (All)
- [✓] Completed Games
- [✓] Remaining Games

TEAM

(All)

POS

- (•) QB
- ( ) RB
- ( ) TE
- ( ) WR

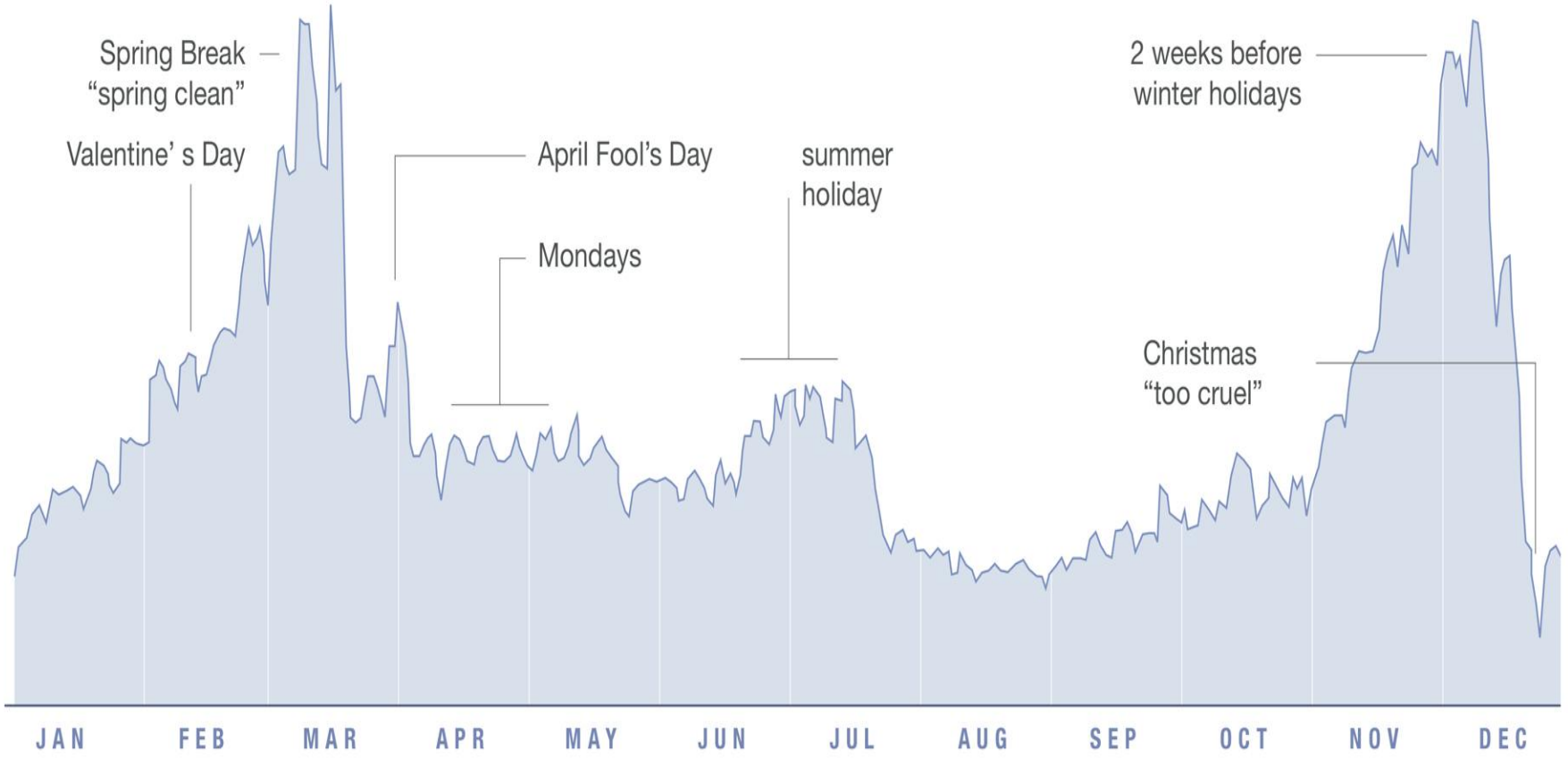
Select Player

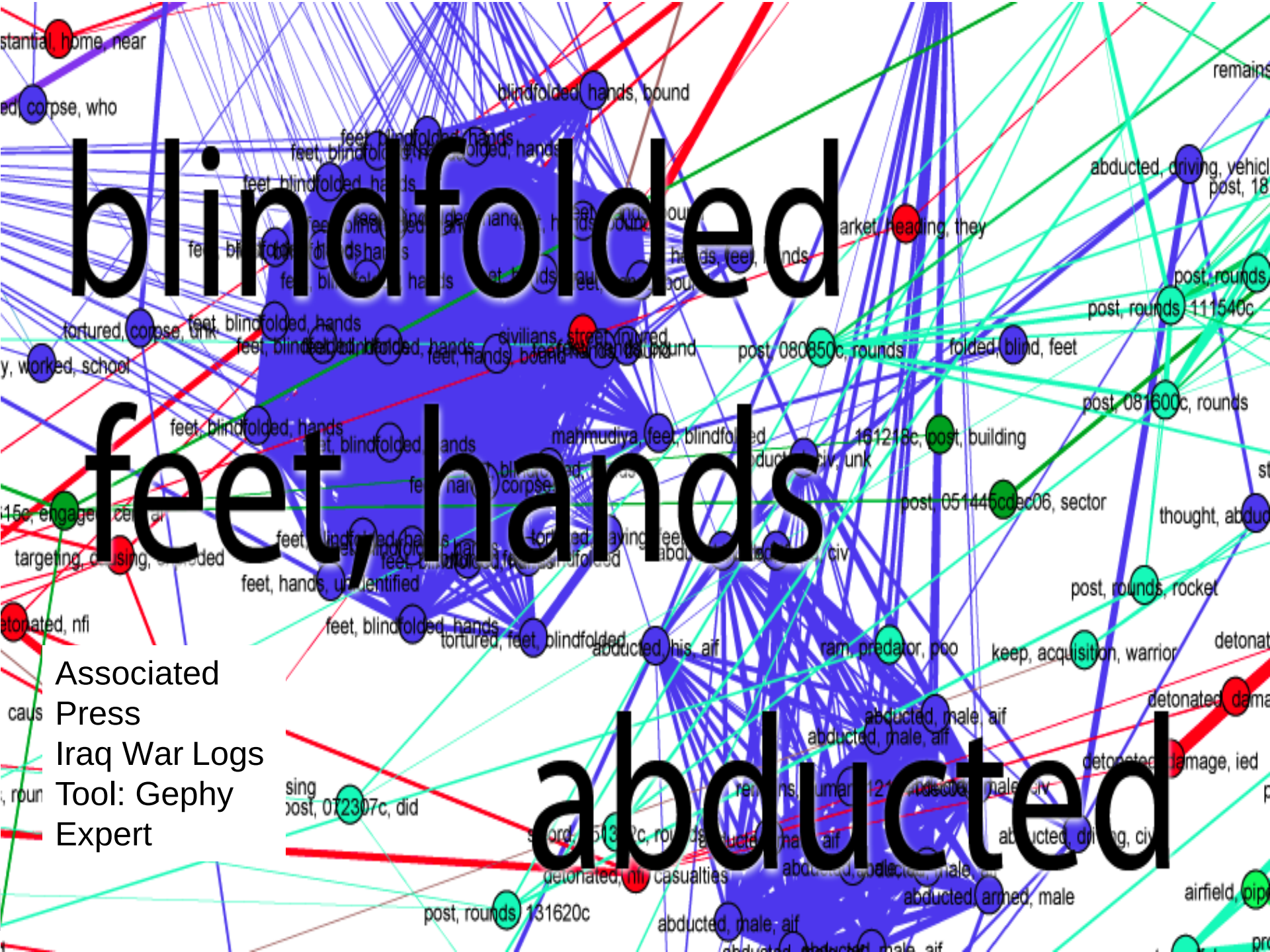
- [✓] (All)
- [✓] Anderson, Derek
- [✓] Bartel, Richard

Data is boring

Peak Break-Up Times

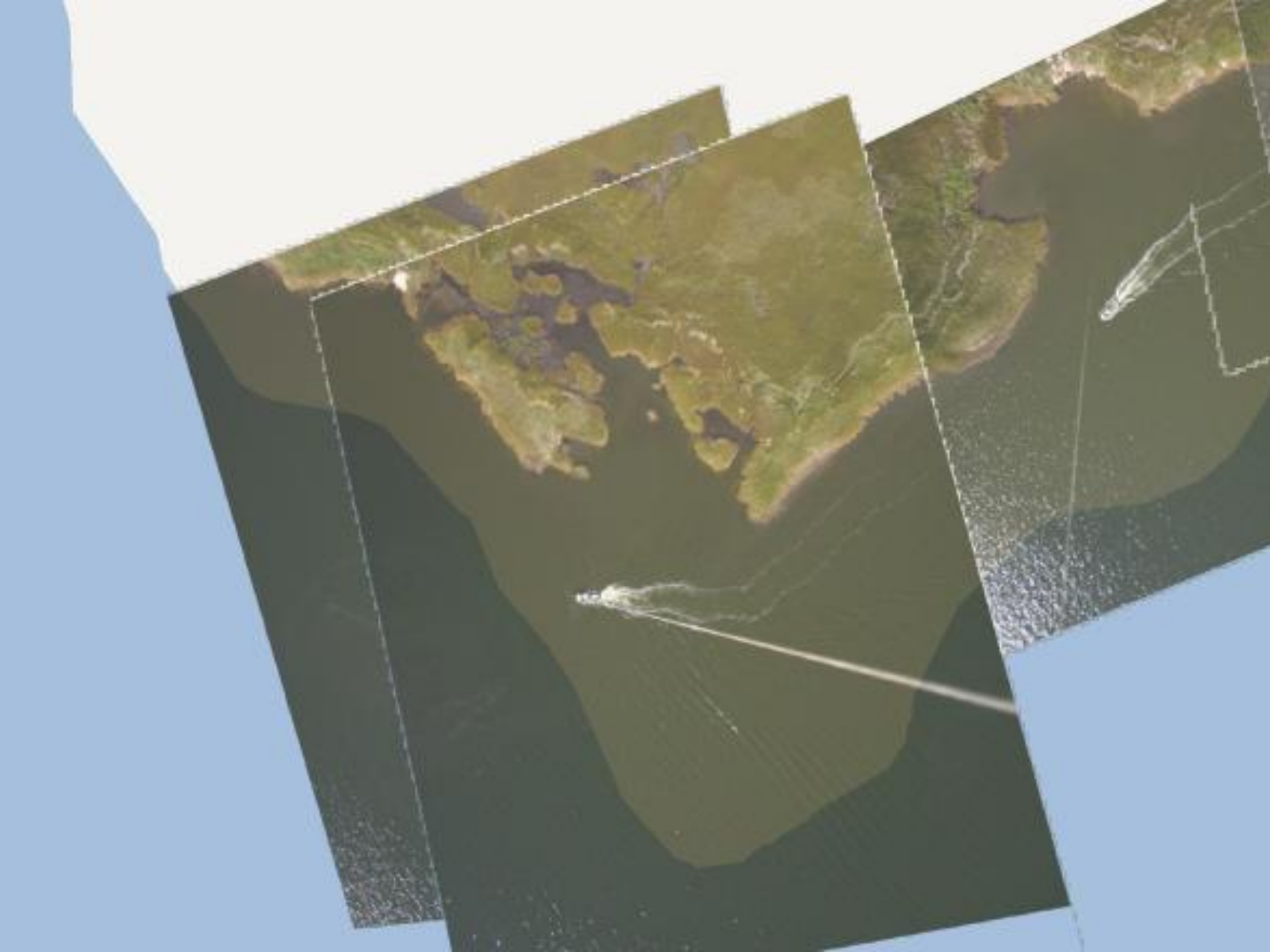
According to Facebook status updates

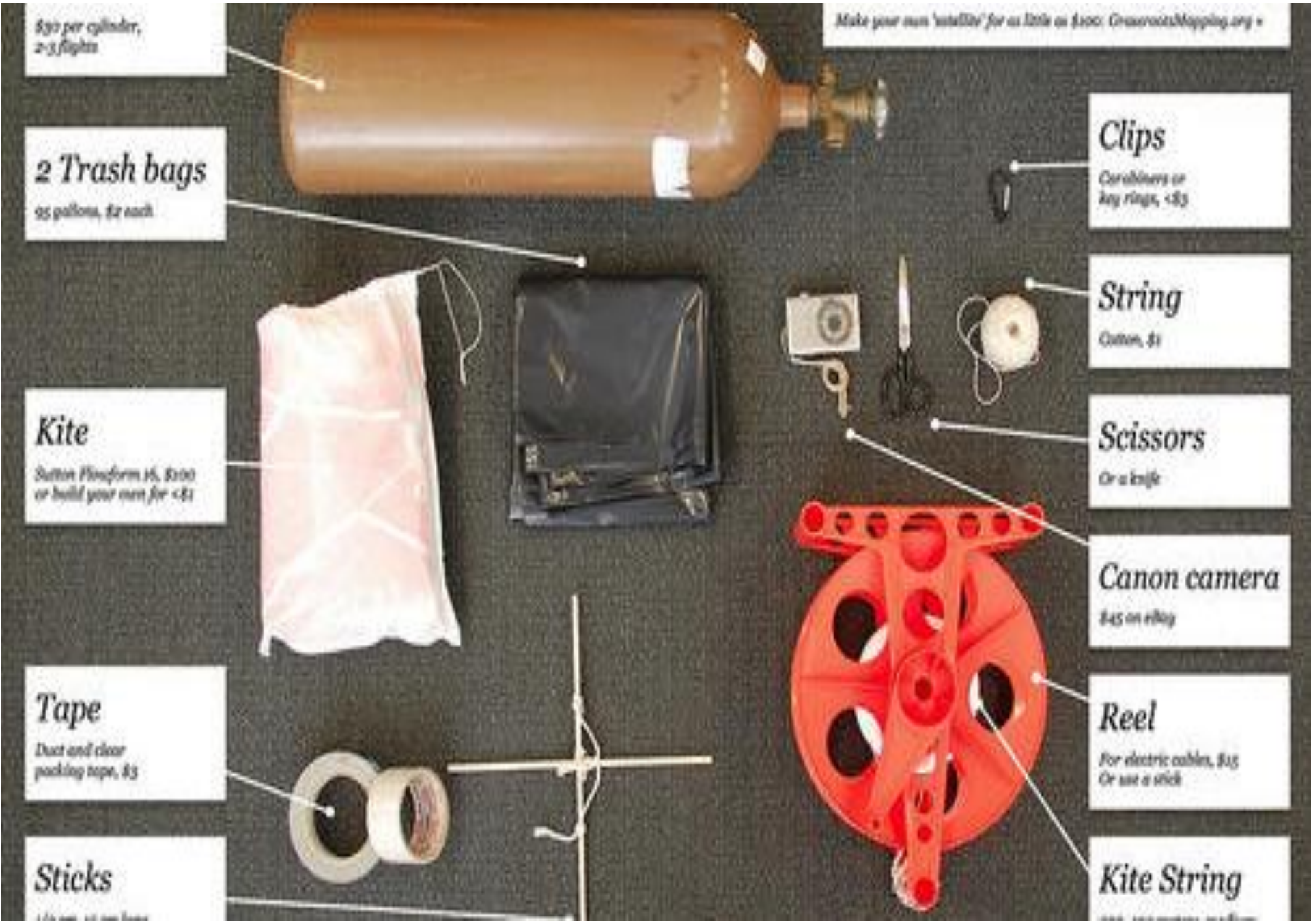



blindfolded
feet, hands
abducted
Associated Press Iraq War Logs
Tool: Gephy
Expert

Data visualization is too hard for regular folks to learn

Grassroots Mapping Tool: Cartagen Knitting




$30 per cylinder,
2-3 flights
Make your own 'satellite' for as little as $100: GreenrocketShopping.org »
2 Trash bags
95 gallons, $2 each
Clips
Carabiners or
key rings, <$3
String
Cotton, $1
Kite
Sutton Flowform 16, $100
or build your own for <$1
Scissors
Or a knife
Canon camera
$45 on eBay
Tape
Duct and clear
packing tape, $3
Reel
For electric cables, $15
Or use a stick
Sticks
Kite String

1 word
2 word
Search:
Showing 200 out of 3037
age art back bad bear beauteous beauty beauty's behold black blessed blood born breast breath
bright bring brow call canst care change child cold cruel day days dead dear death decay deeds deep
delight desire disgrace dost doth dull dumb earth end ere excuse eye eyes face fair
false faults fear find fire flowers form foul found fresh friend full gentle give glass glory good grace
great grow hand happy hate hath head hear heart heart's heaven heaven's heavy hell hold honour
hours ill joy kind leave leaves lie lies life light lines lips live lives living long lose loss lov'st love
love's lovely loves loving made make makes making mayst memory men mind mine
mistress muse nature night o'er outward part parts past pen pity place pleasure poor power praise
precious pride proud prove put rich rose roses sad sake save set shadow shalt shame shouldst show sight sing skill
slave soul speak spirit stand stay store straight strong summer summer's sun swear sweet sweets taught ten
tender thing things thought thoughts thyself till time time's times tis tongue treasure true
truth verse view virtue waste whilst white wilt wit woe words world worst worth writ write wrong youth
Scale:
150
100
50
0

Limits of data visualization

You need to work with the data you have, not the data you wish you had

Thanks!

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Placeblogger

Tumblr:
http://lifeandcode.tumblr.com

Twitter:
@lisawilliams

Lisa Williams
Placeblogger.com

Q & A

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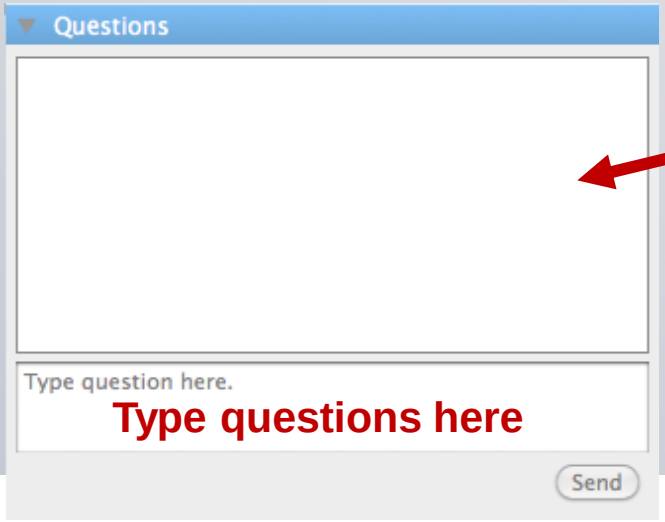
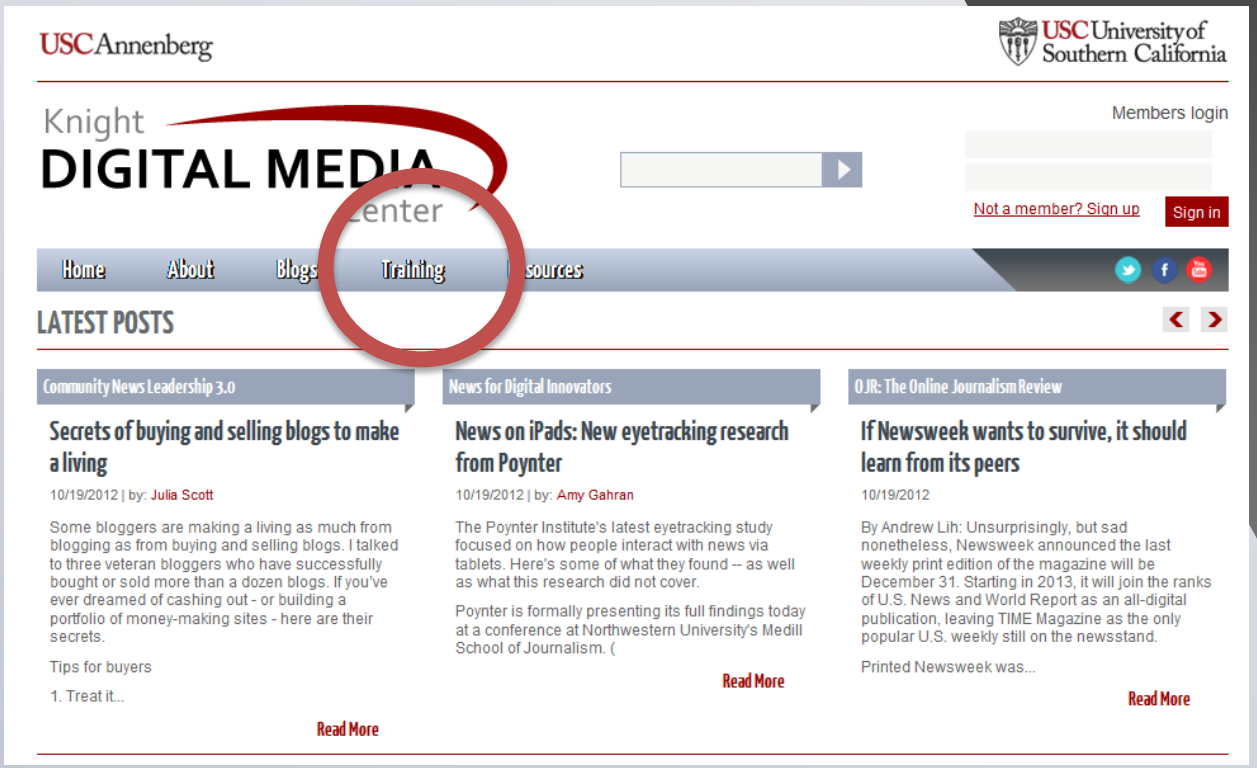
Lisa Williams
Placeblogger.com
@lisawilliams



Future webinars and resources: www.knightdigitalmediacenter.org



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