

WHAT IS PAST
IS PROLOGUE



The Web Intelligence Machine

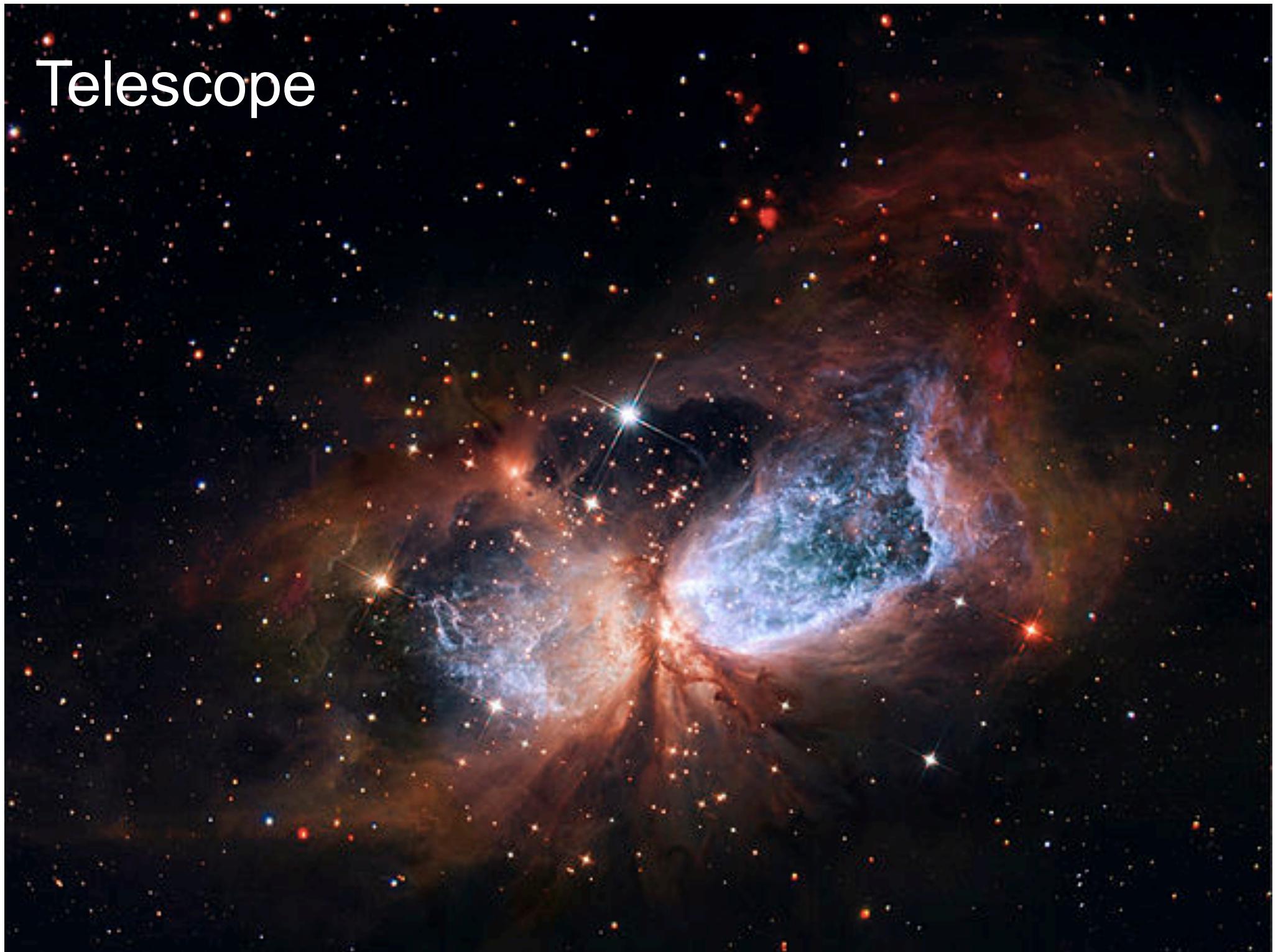


Staffan Truvé
CTO and co-founder
Recorded Future

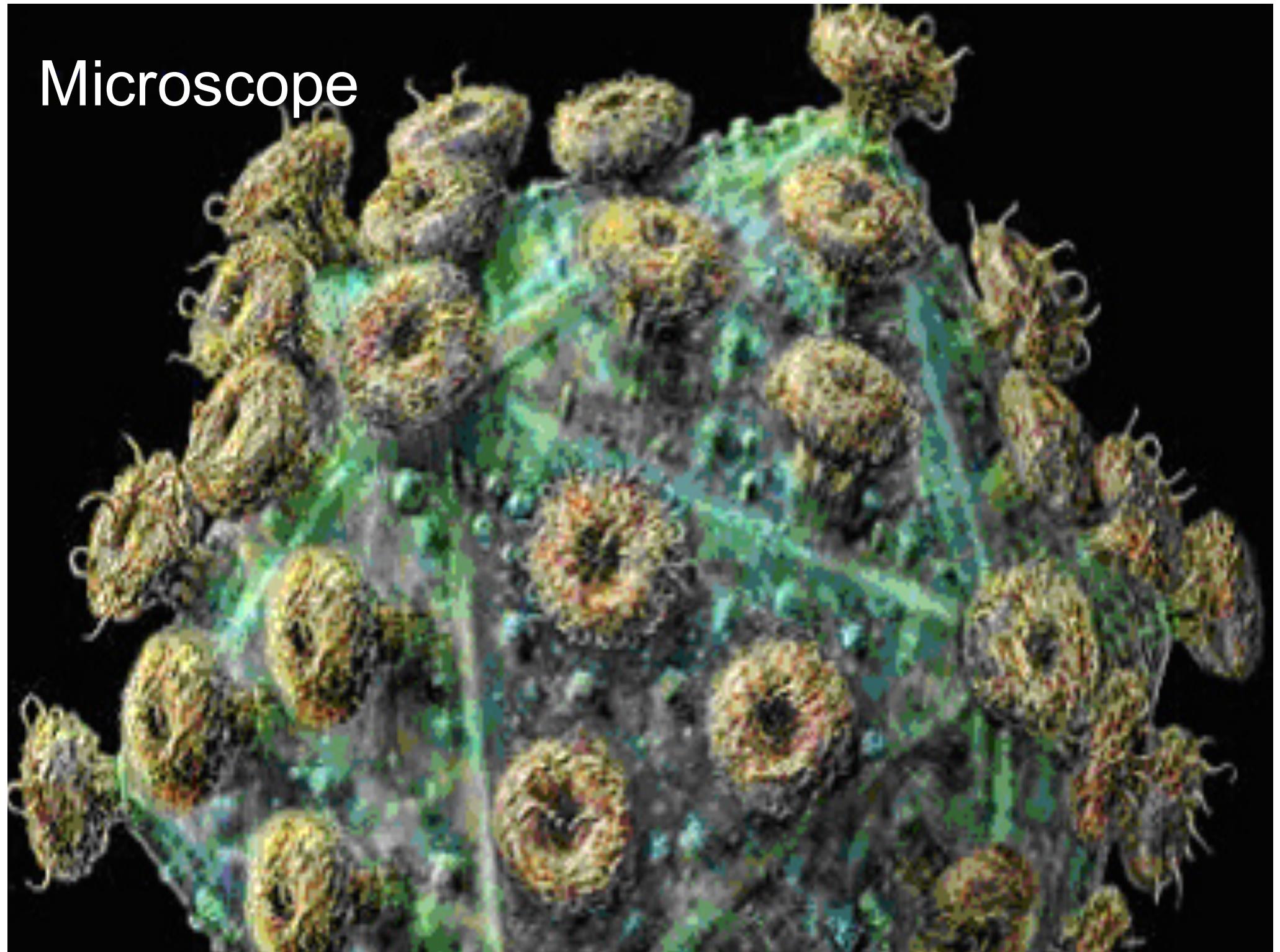
Recorded Future



Telescope



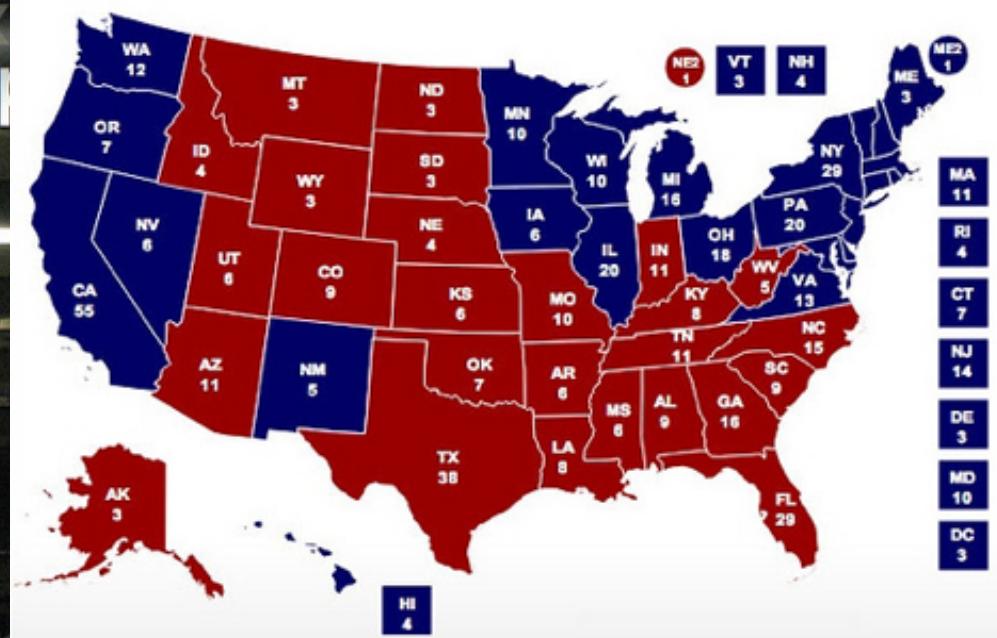
Microscope



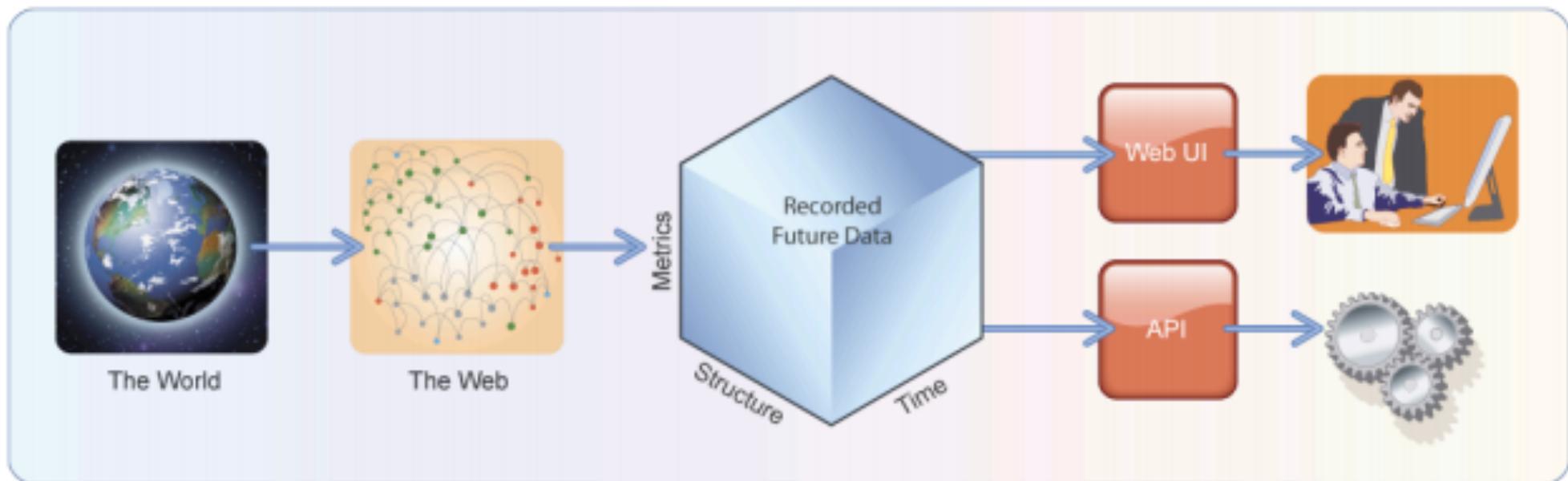
Time for a
Macroscopic







Web Intelligence





Or can you?

10



2005



2013

How?

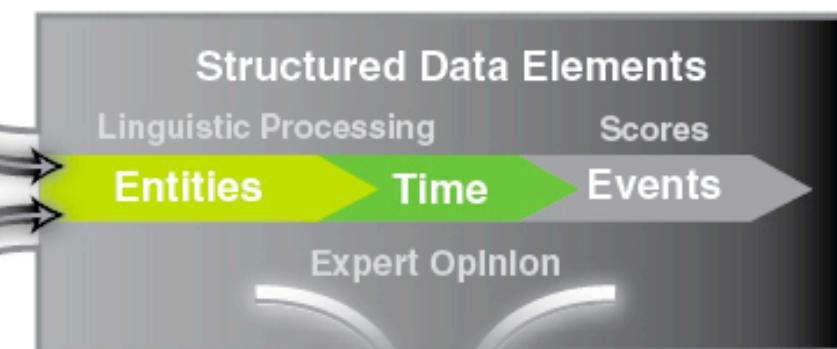
Inside the Web Intelligence Machine

Drought and malnutrition hinder **next spring's** expansion plans in Kabul...



"Kuo expects that Apple will introduce an iPhone 5S around **June or July** of this year"

"...opposition organizers plan to meet on **Thursday** to protest..."



A few minutes from publishing to analysis

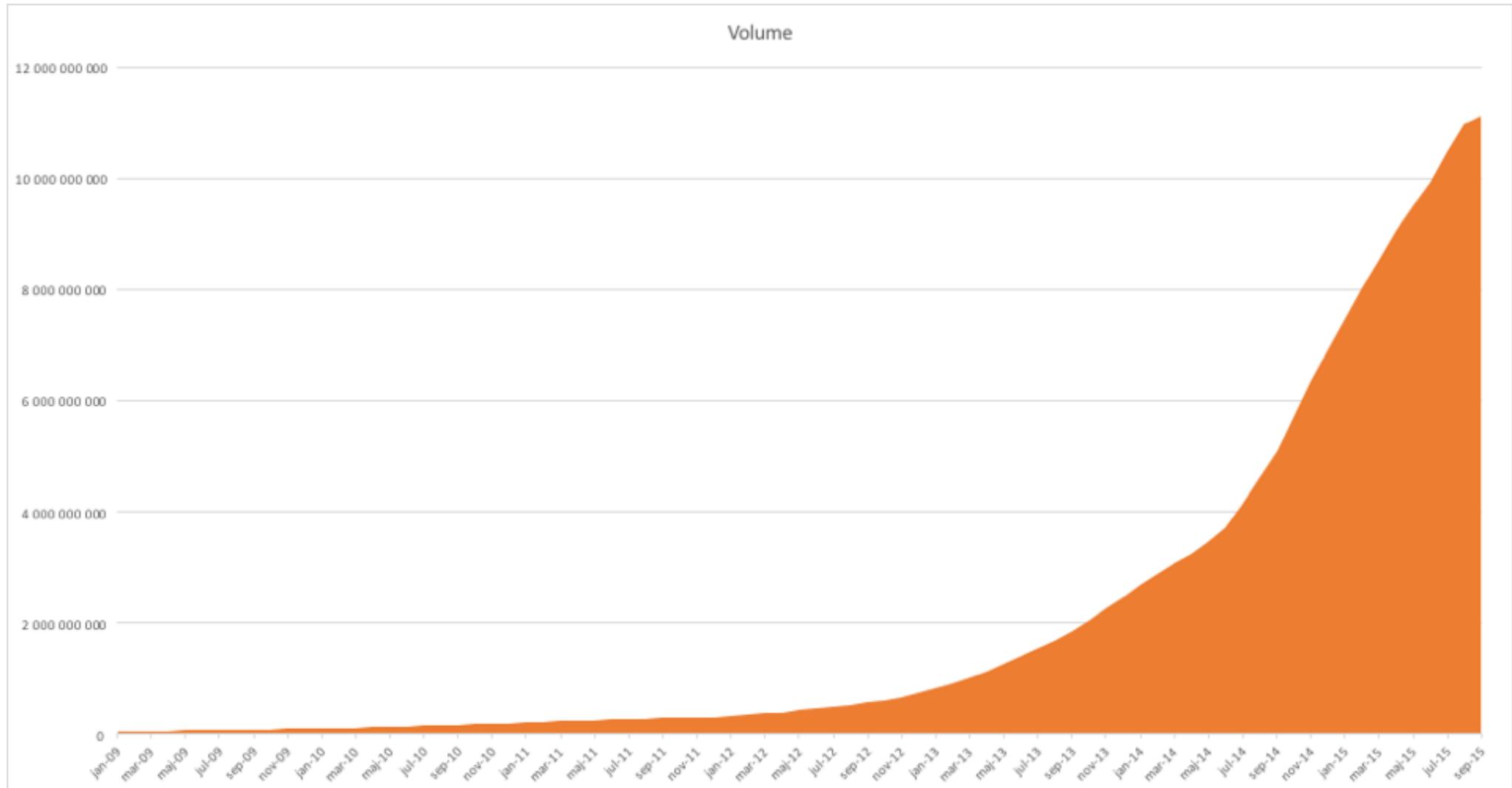
Recorded Future Premium
Online Analysis

Recorded Future API
Customer Analytic Environment

www.recordedfuture.com



Default Exponential Data Volume Chart



(current growth rate 0.5B facts/month)

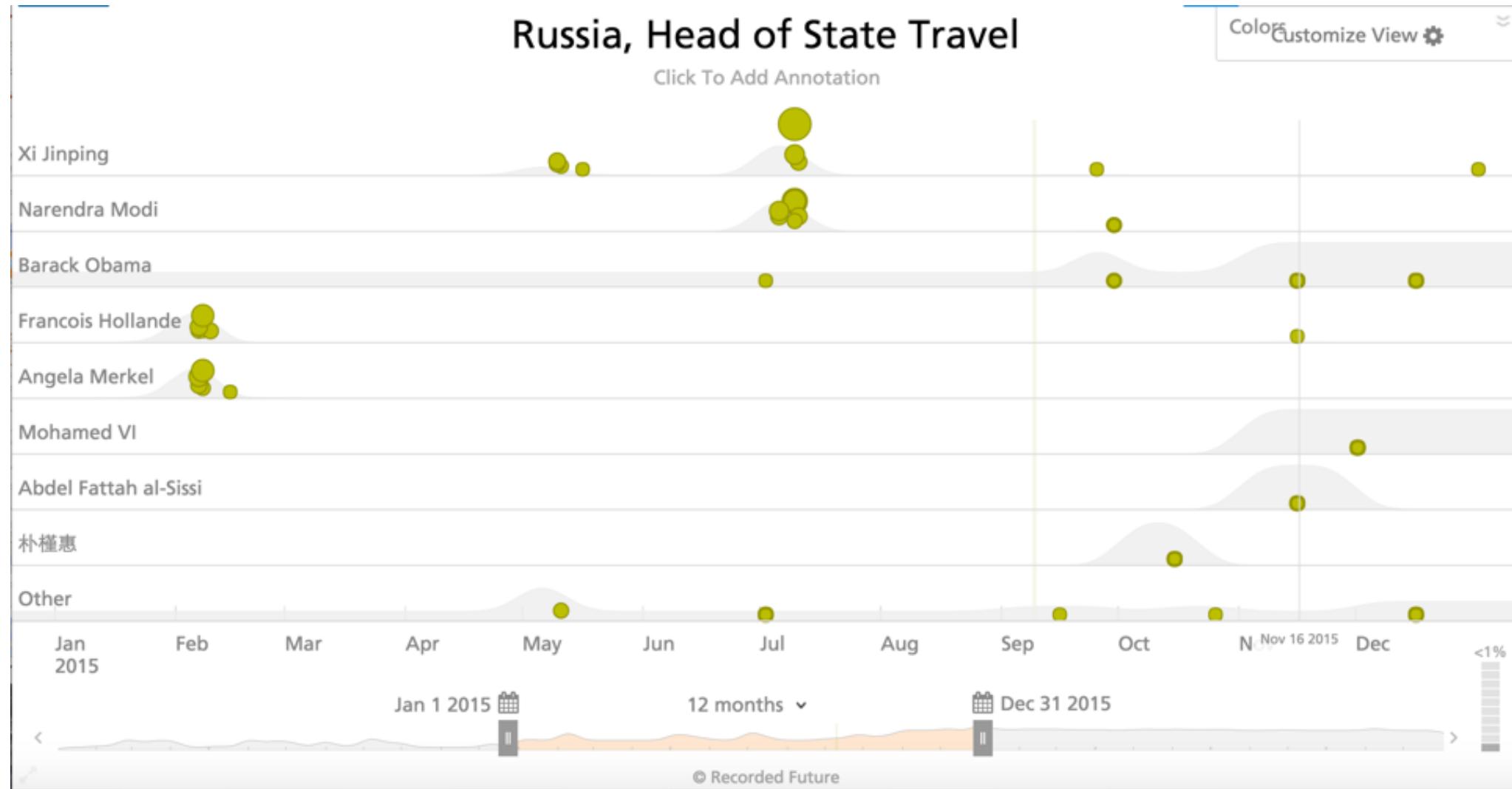
Why build tools for analysts?

- Clever people
- Way too much to read
- Cannot master all languages
- Need to shift focus from search to analysis



Some questions you cannot (easily) ask a search engine

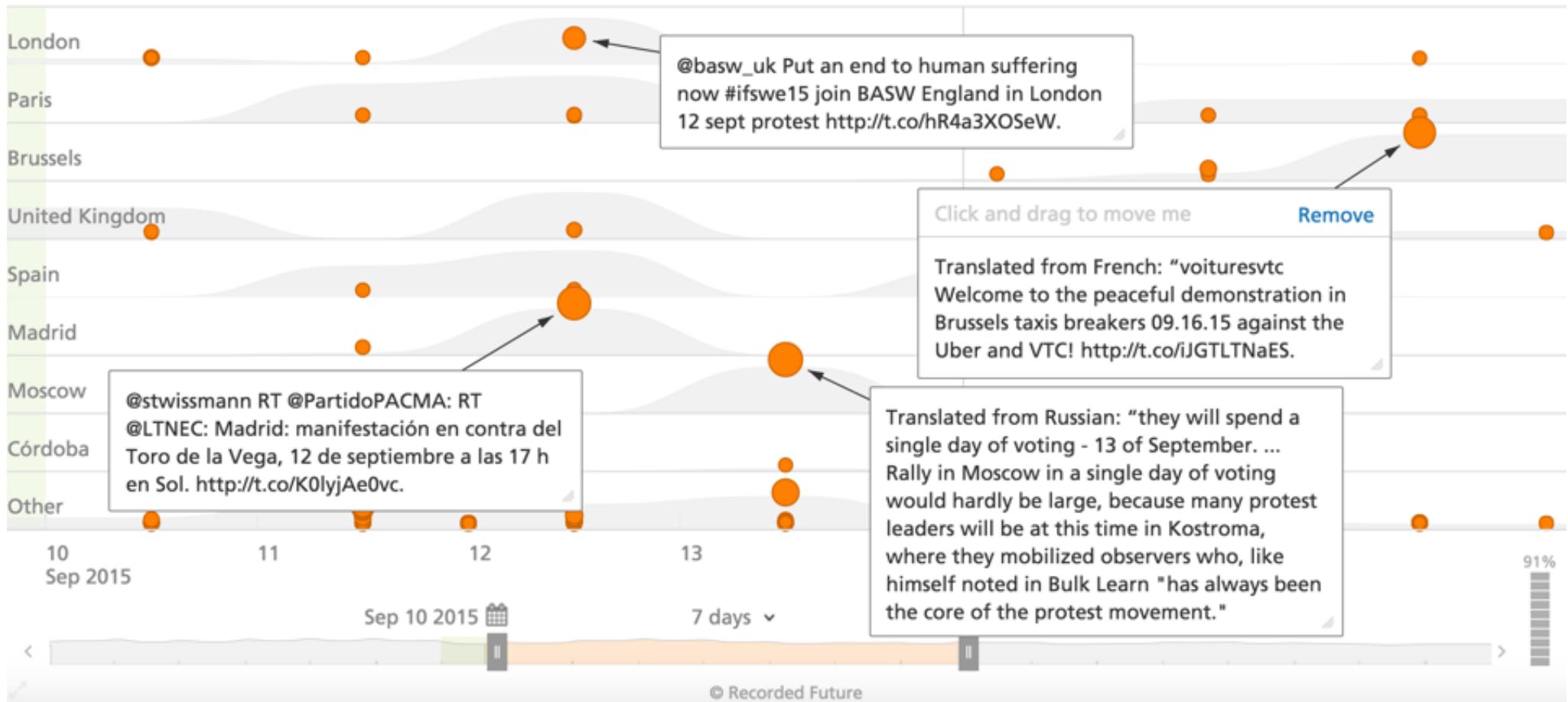
- Which heads of state travel to Russia in 2015?
- What protests are planned in Europe the next 7 days?
- What companies are expanding in India / Africa?





[Customize View](#)

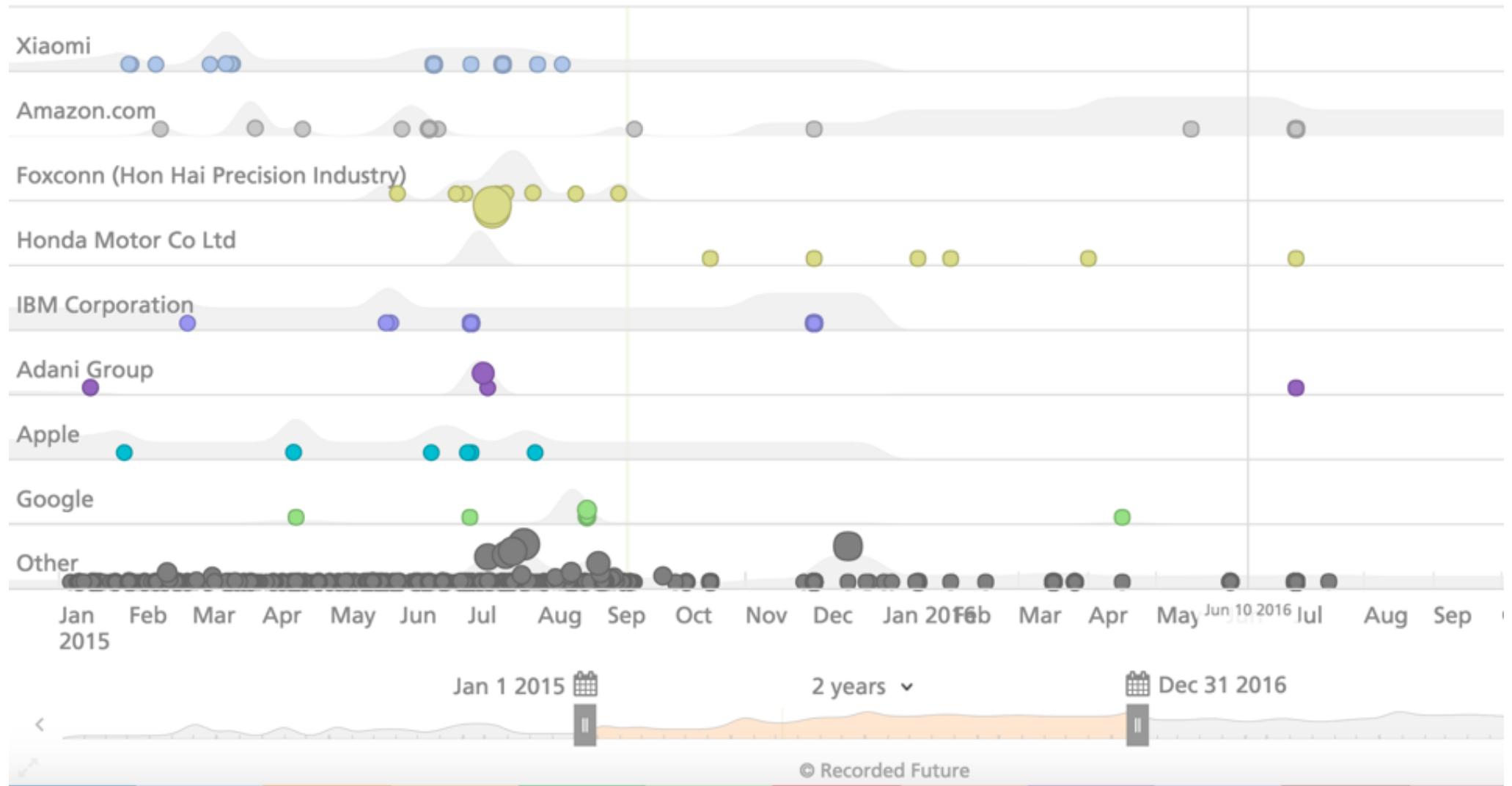

Europe Protest

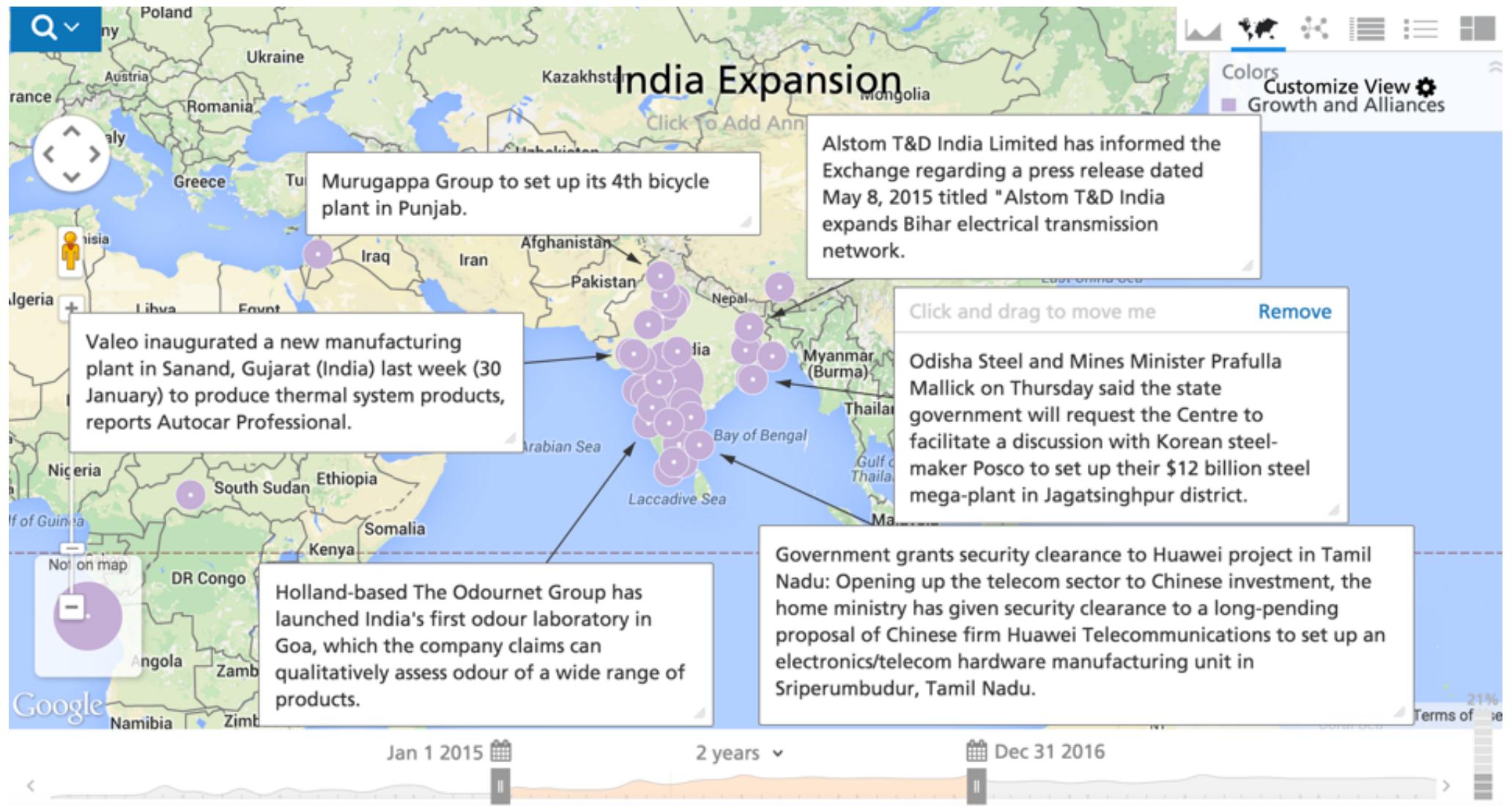
[Click To Add Annotation](#)


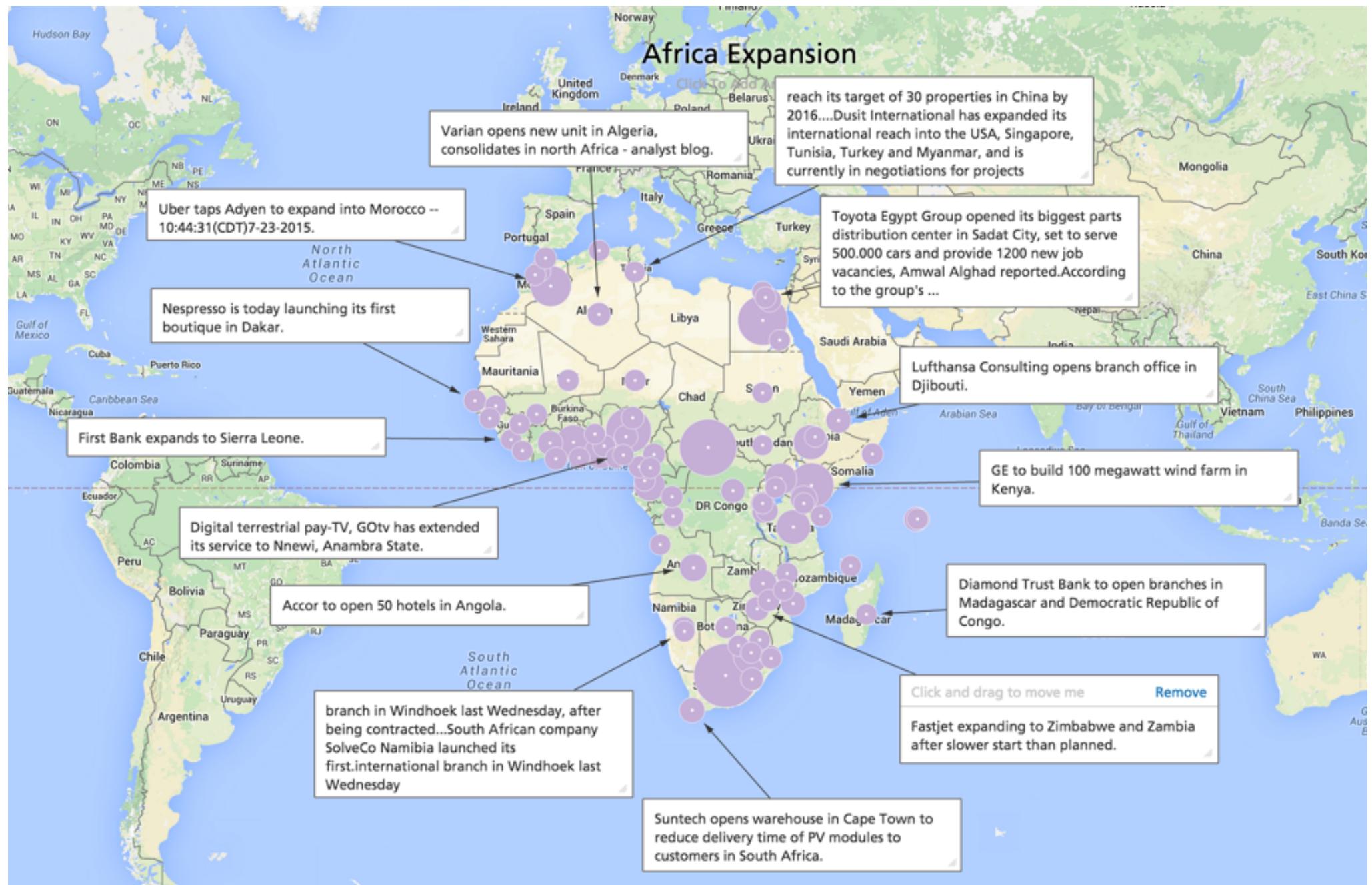
India Expansion

Click To Add Annotation

Colors







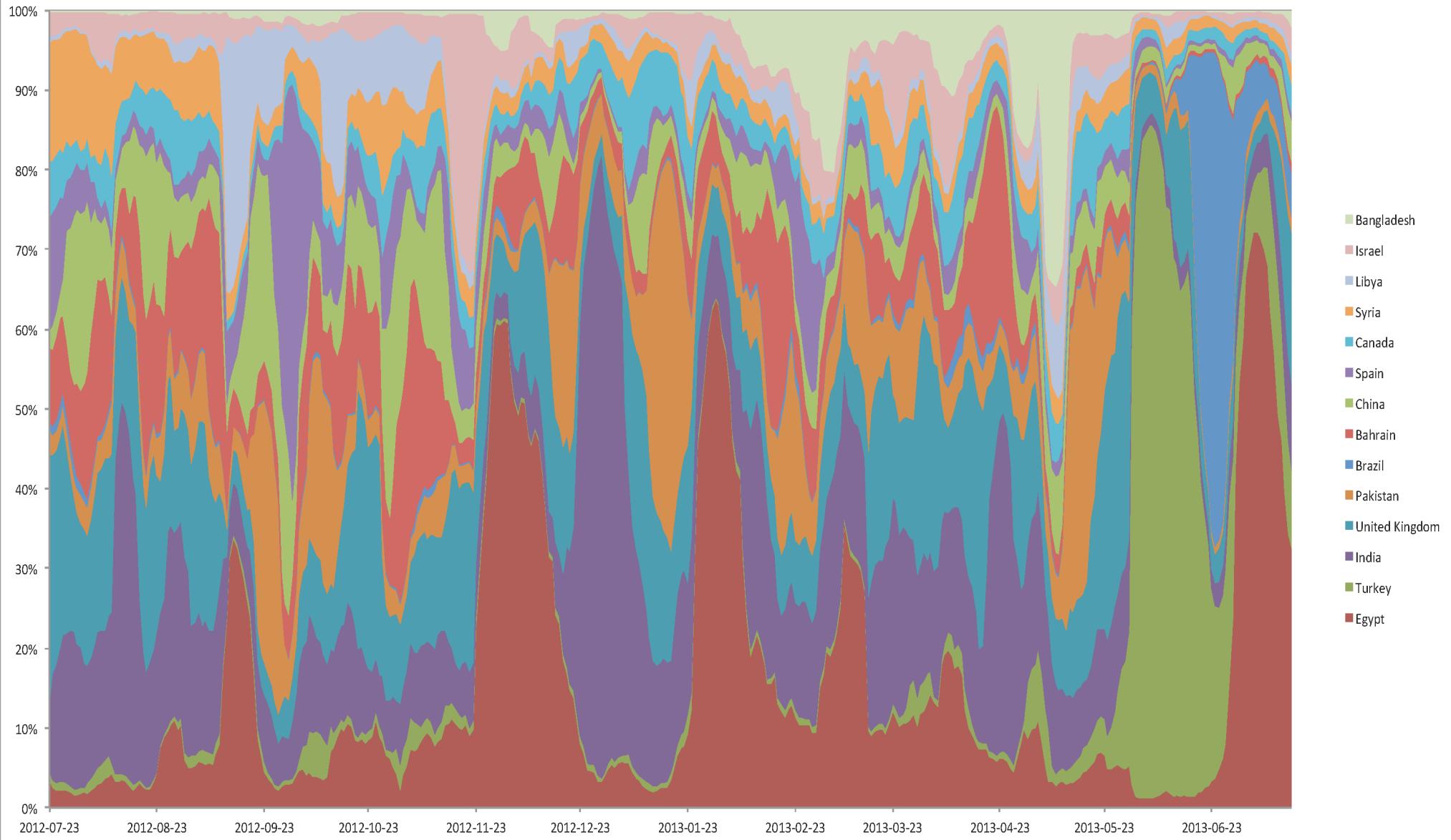


Quick live demo!

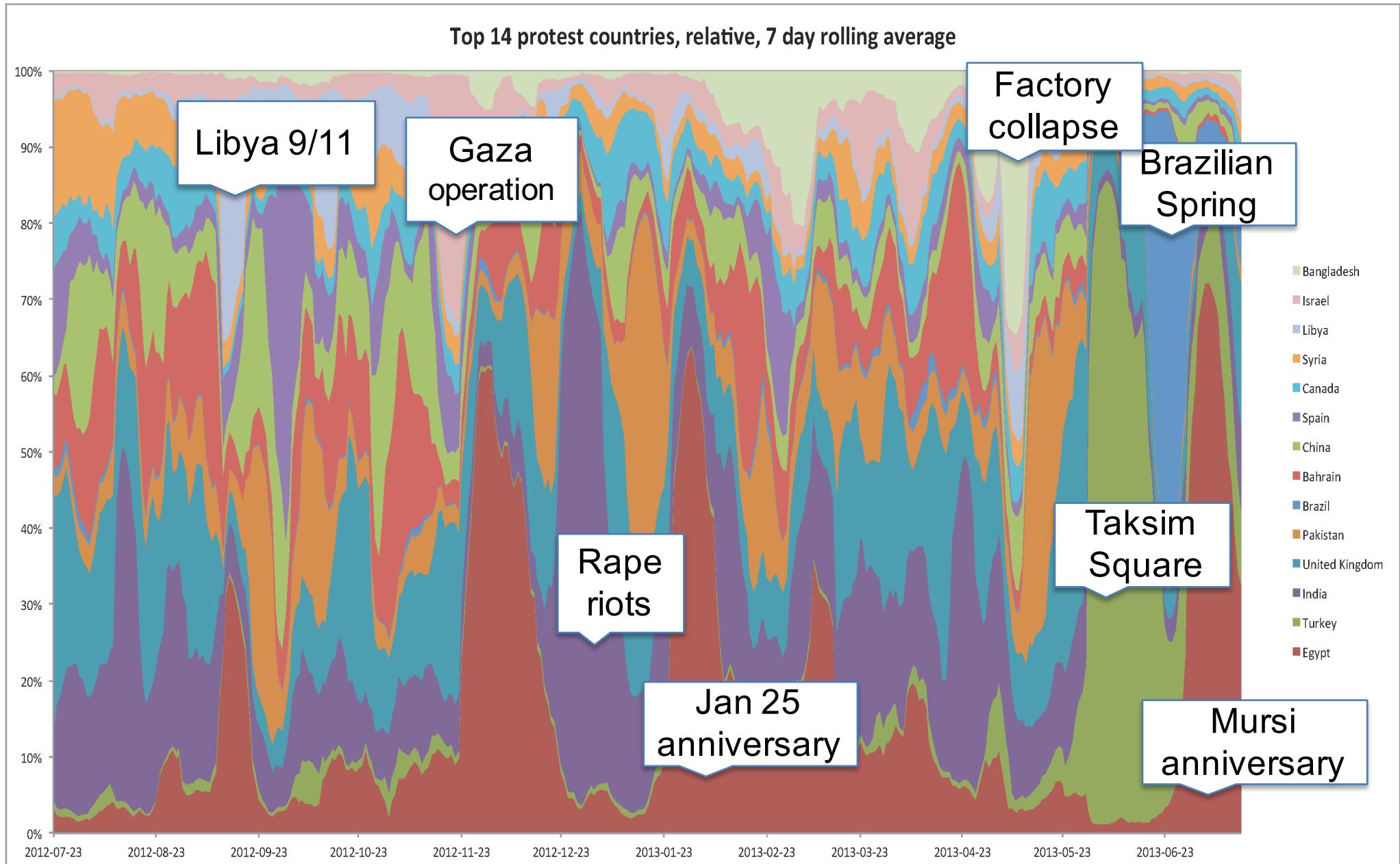
Quantitative and Predictive Analytics

A year of protests

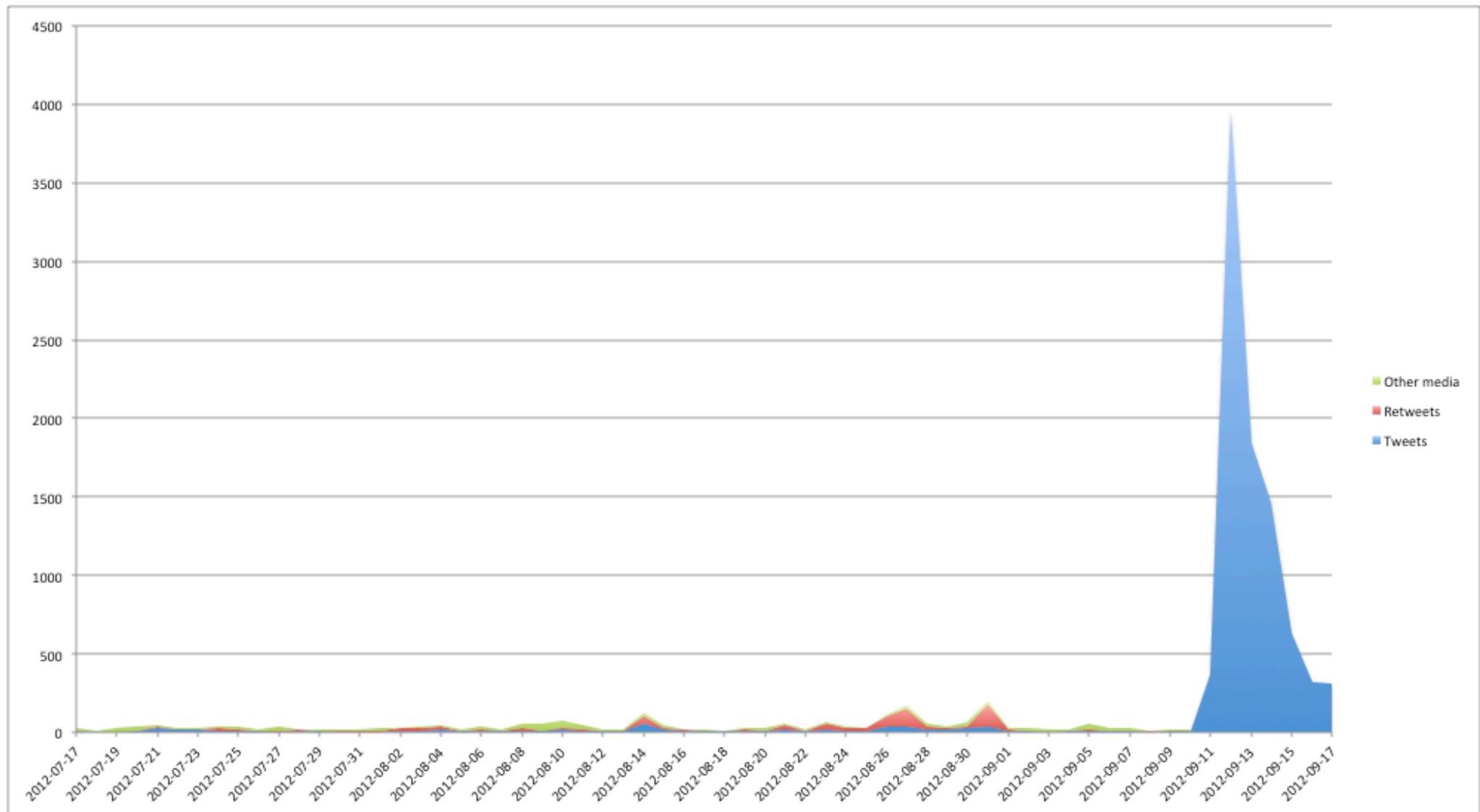
Top 14 protest countries, relative, 7 day rolling average



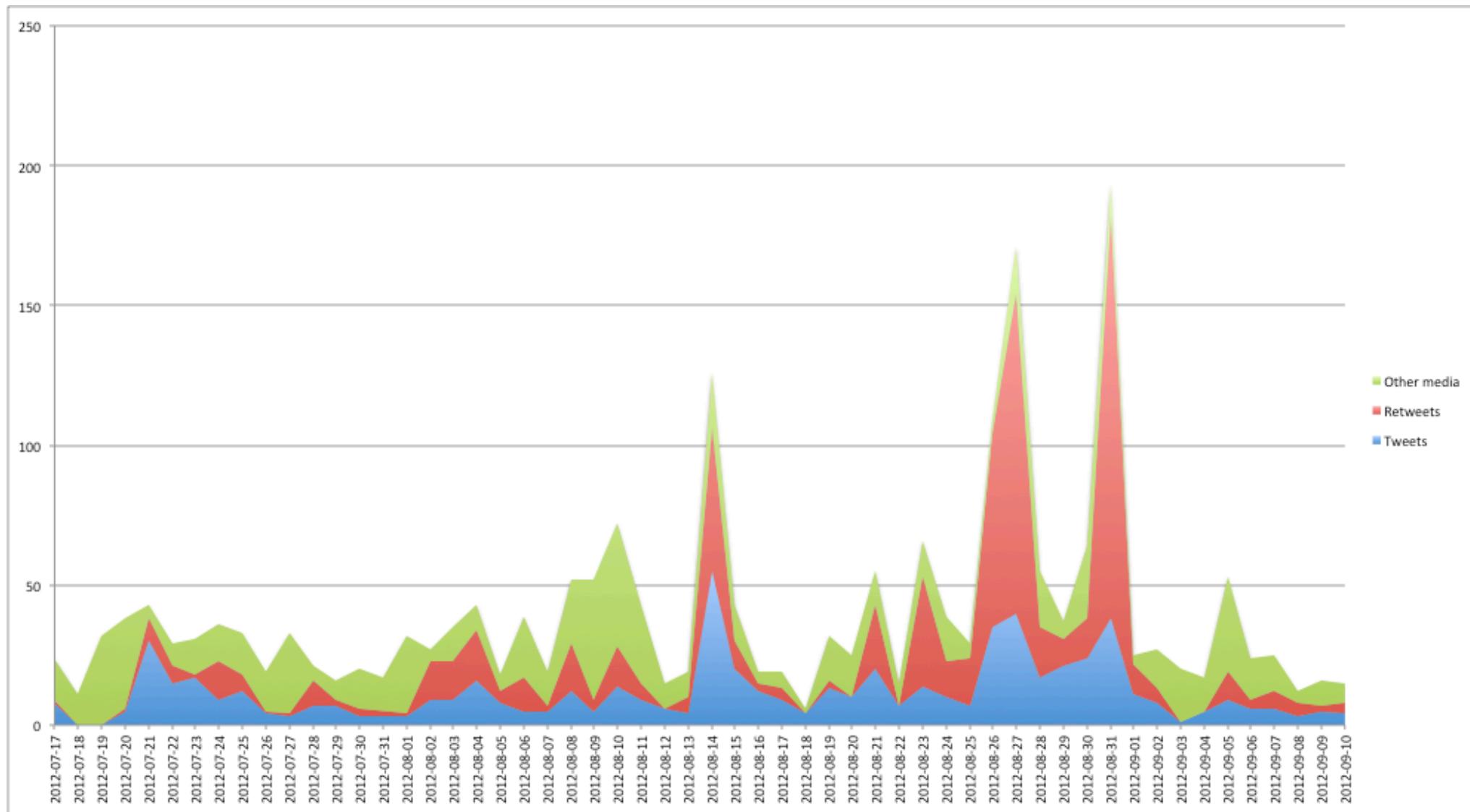
Global Protests – 12 months



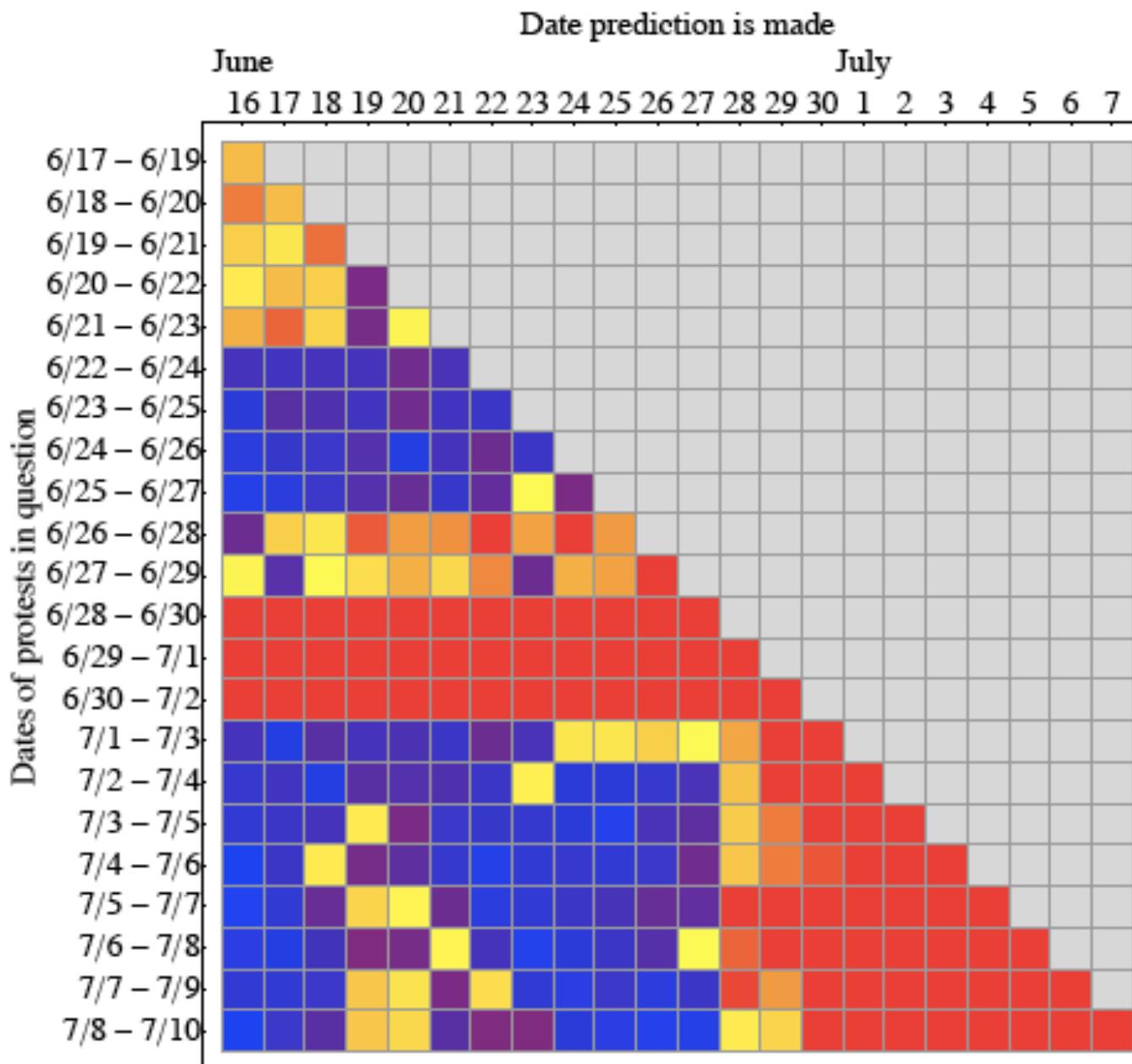
Protests in Libya -- 2012



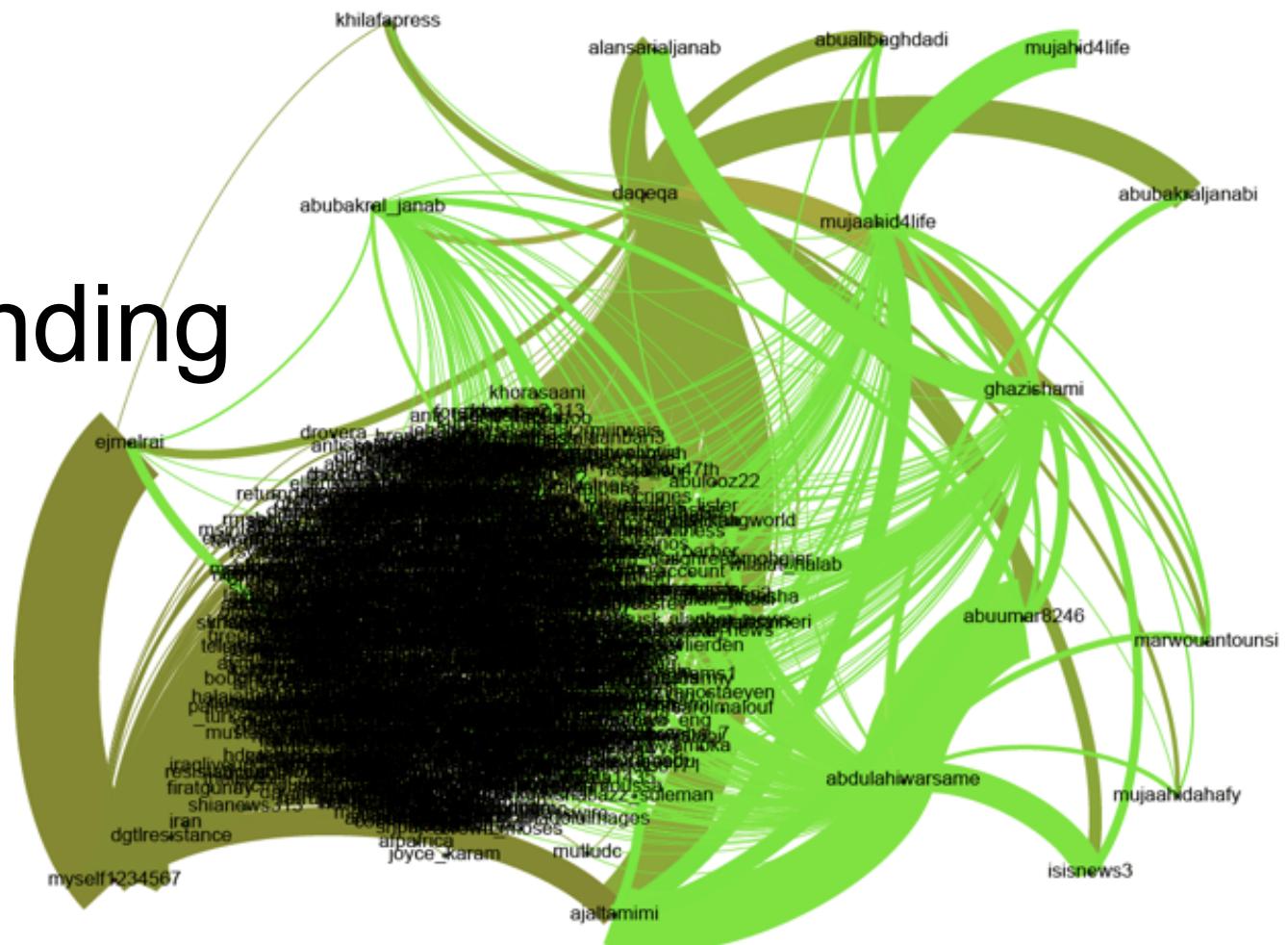
Protests in Libya



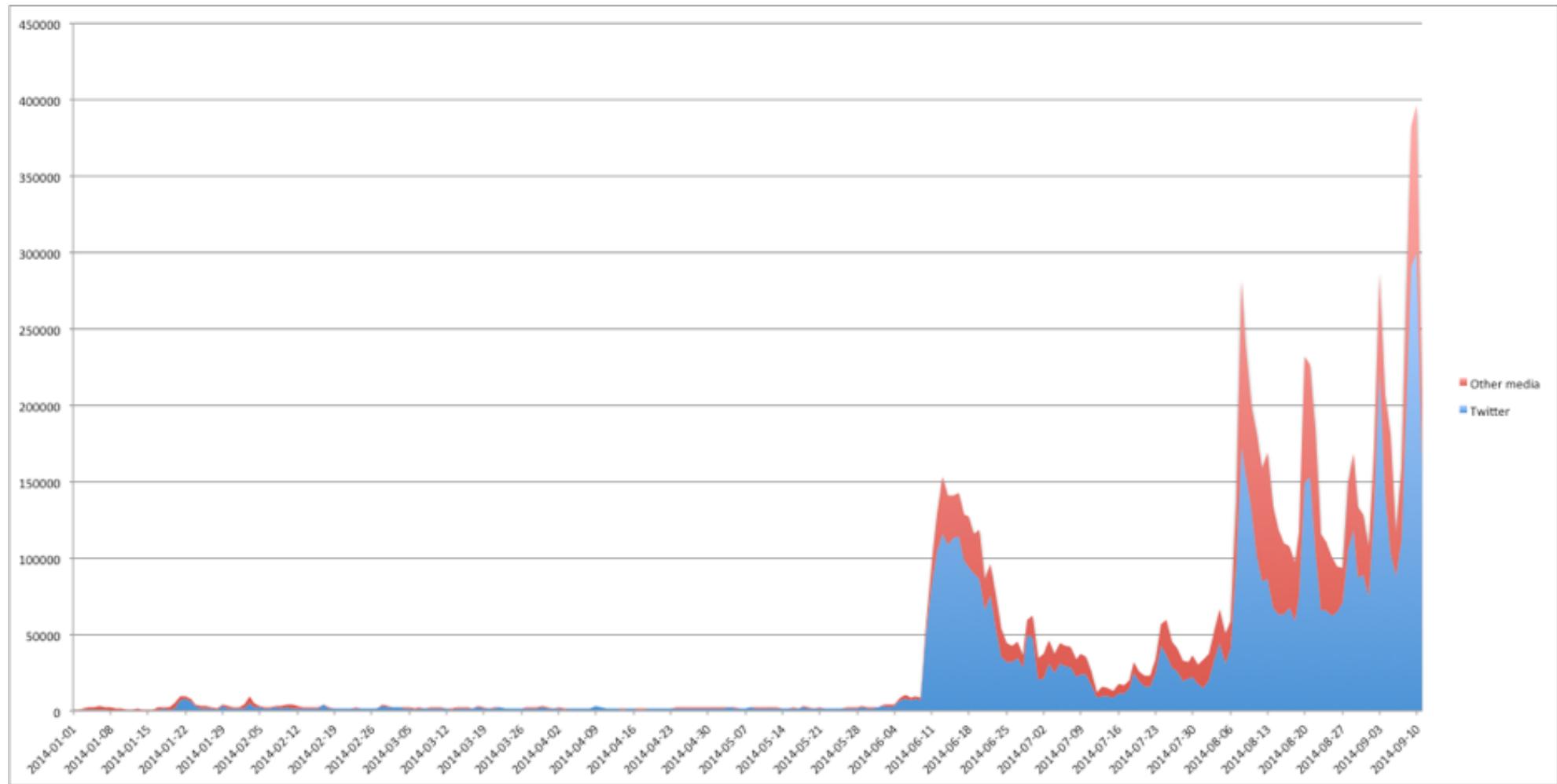
Predicting Egyptian Protests

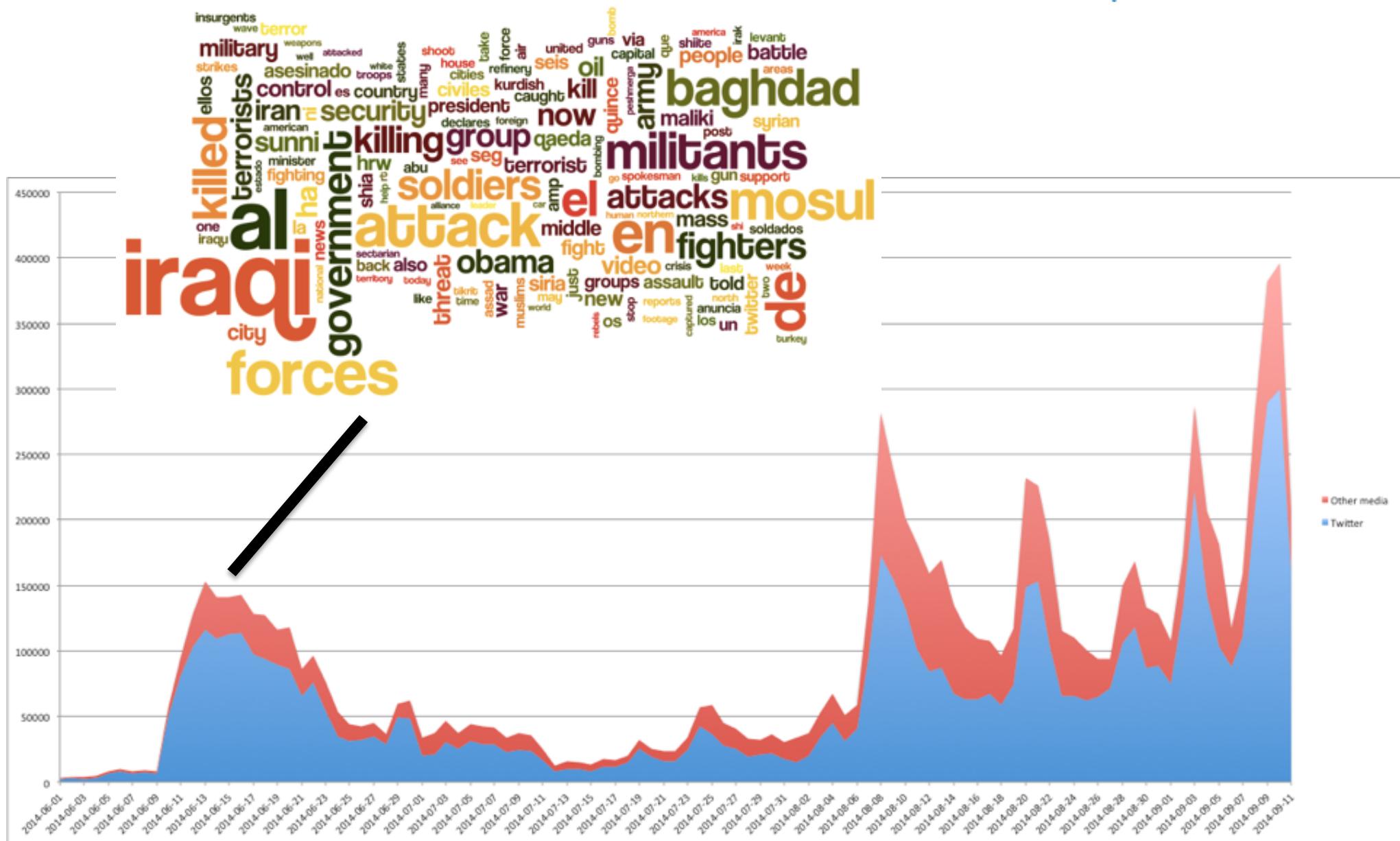


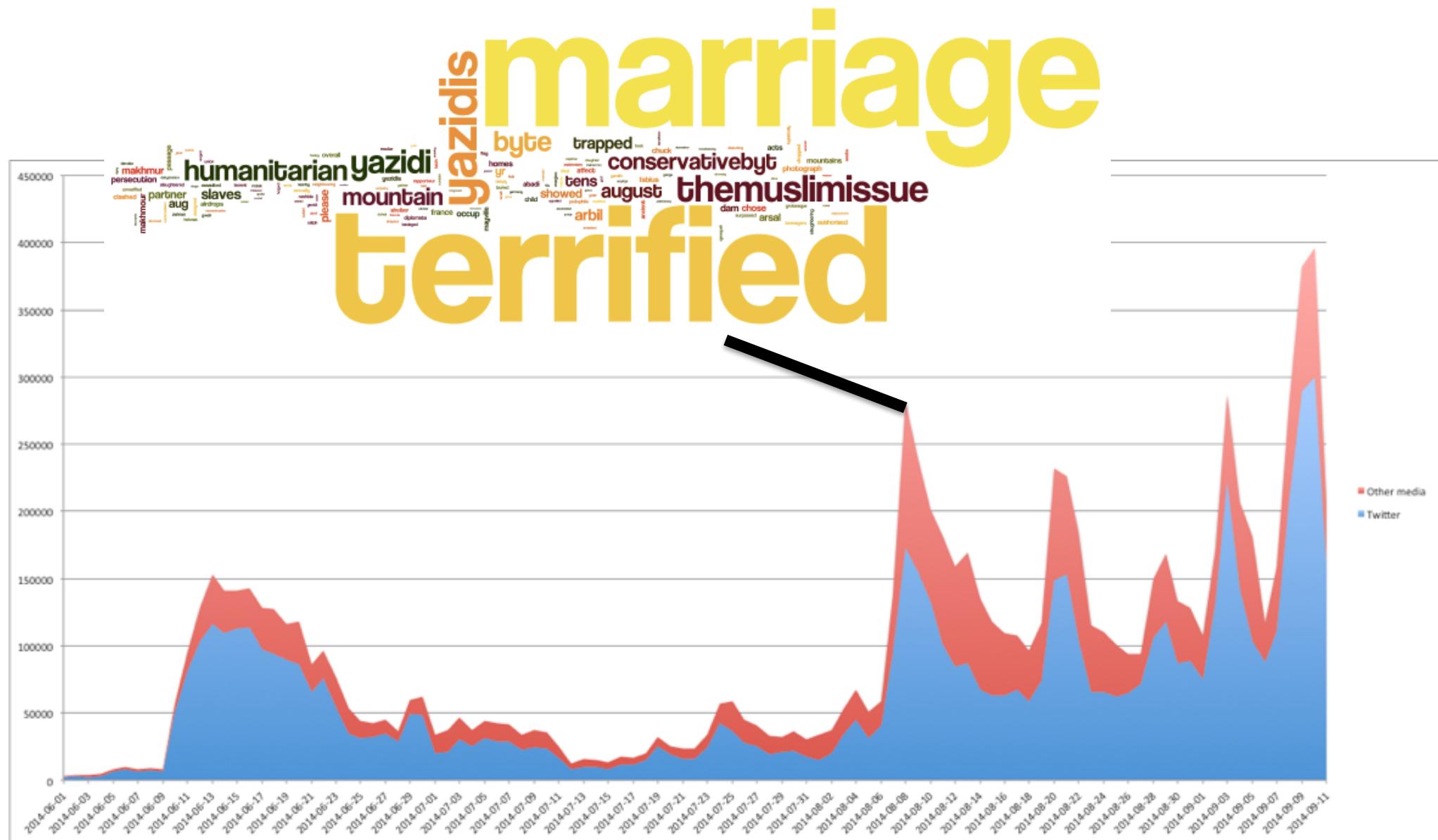
Understanding ISIS on Twitter



Ramping up - ISIS in media in 2014



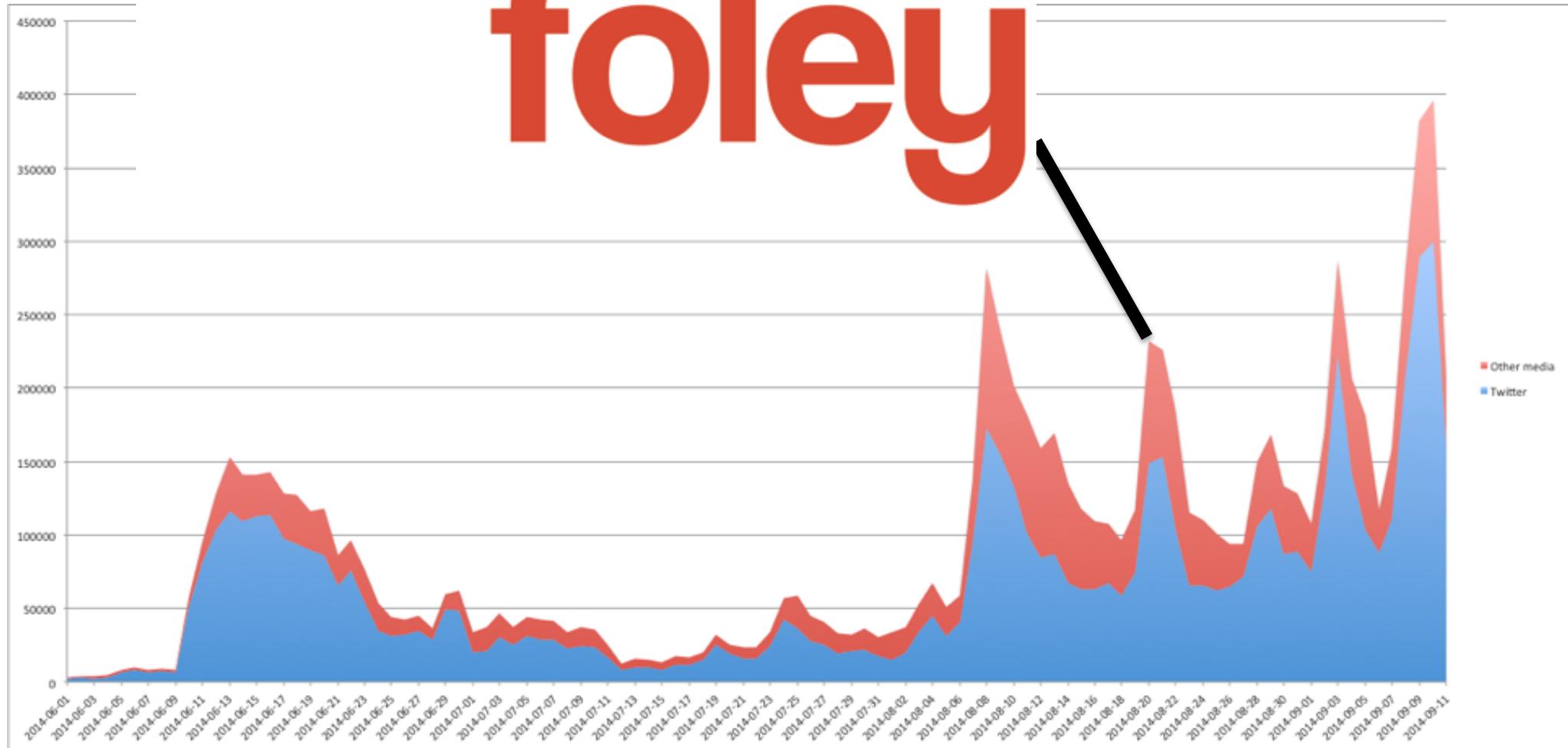


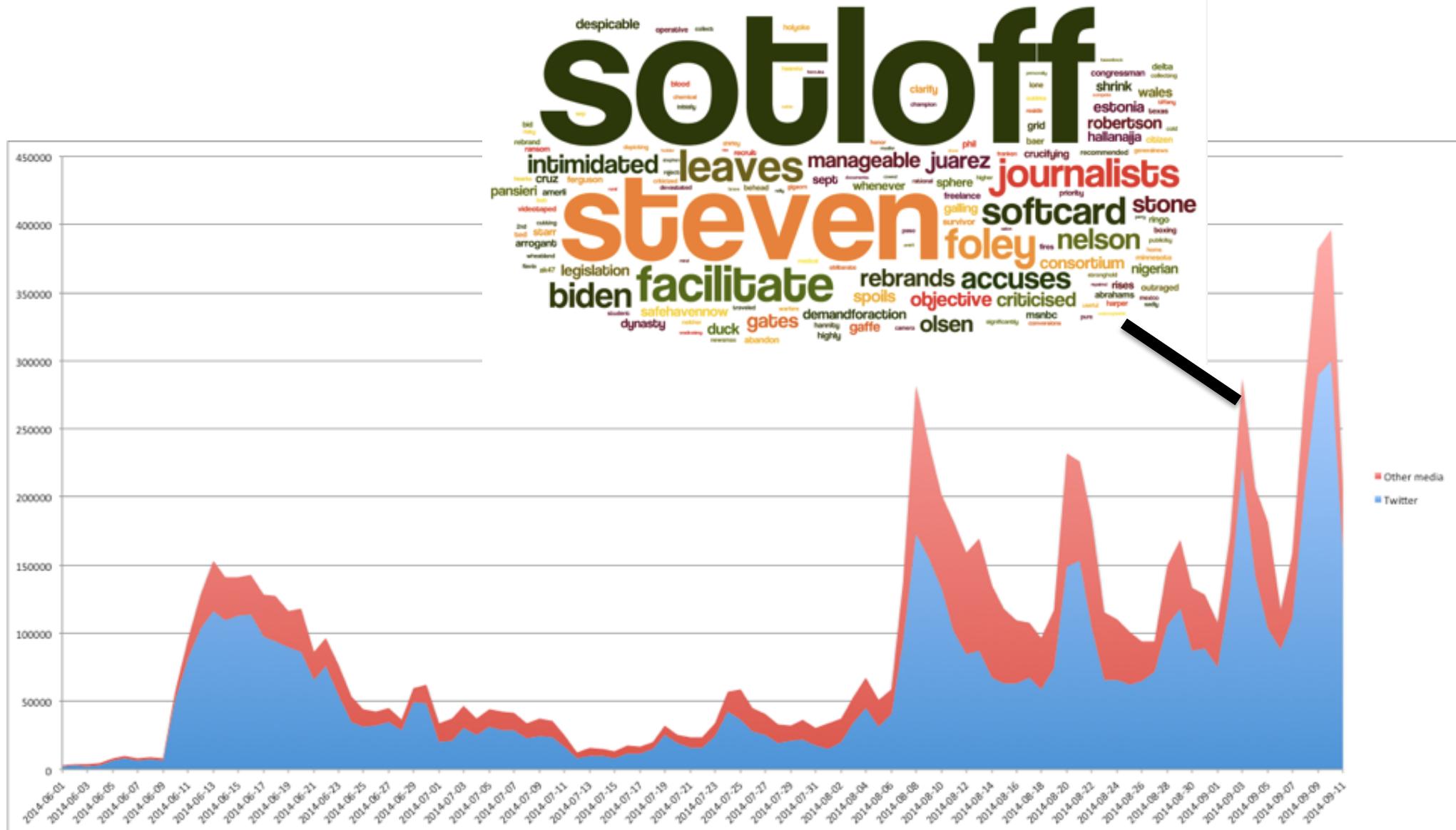


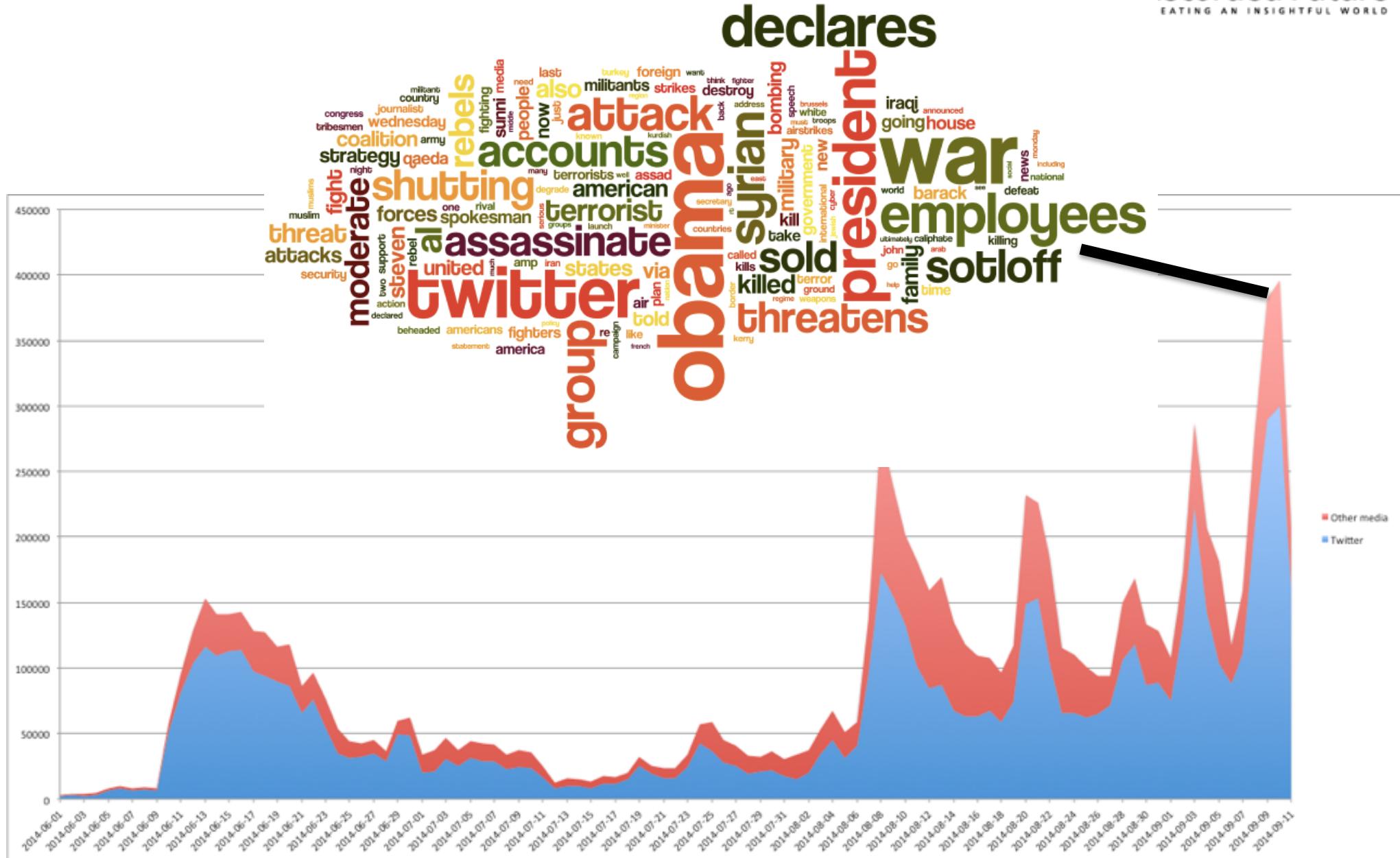
encourage
embrace
ceo
sotloff
protester
moral
tolerance
photjournalist
circulated
random
perry
mainland
jamesfoley

ferguson

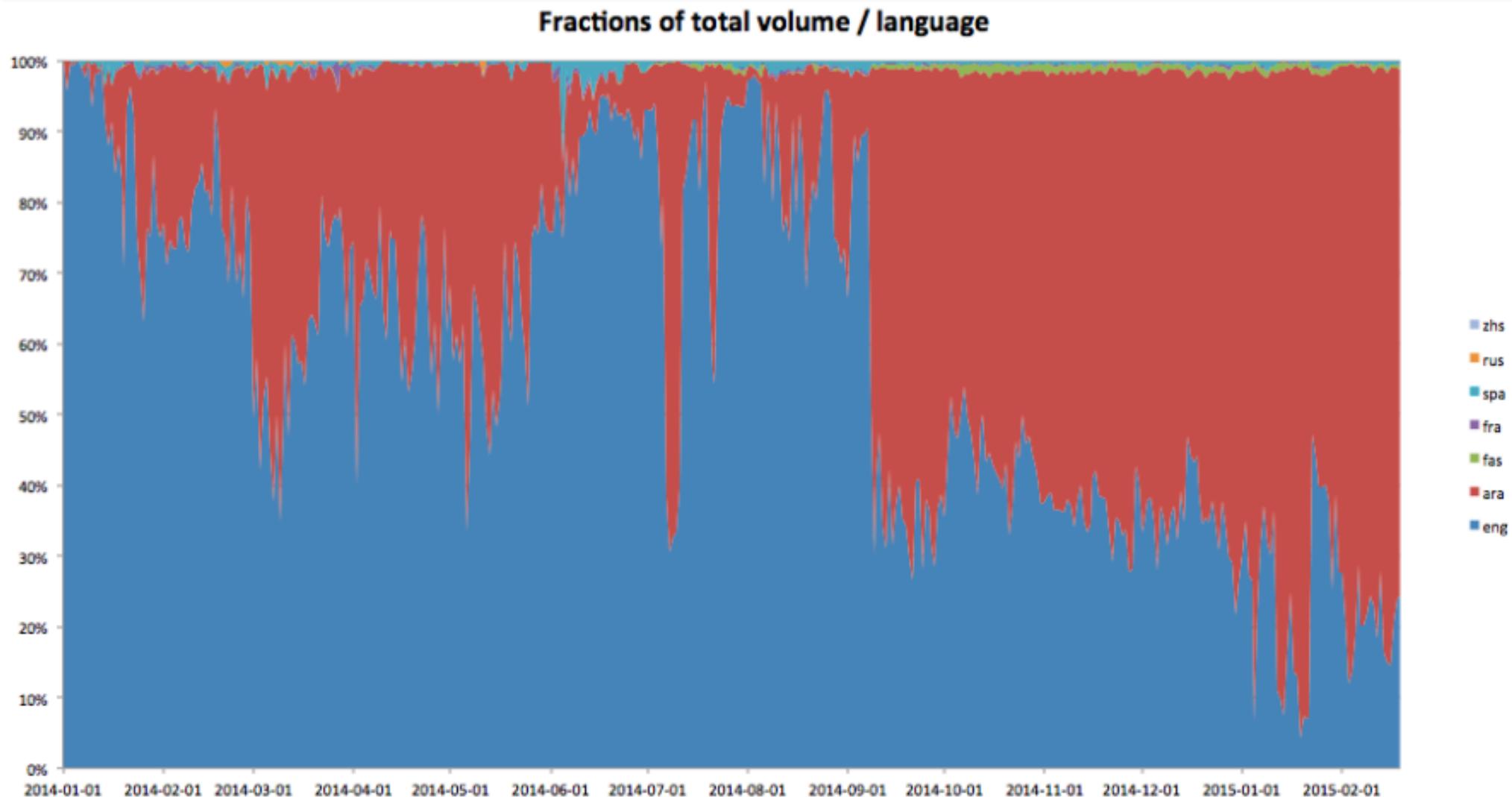
foley





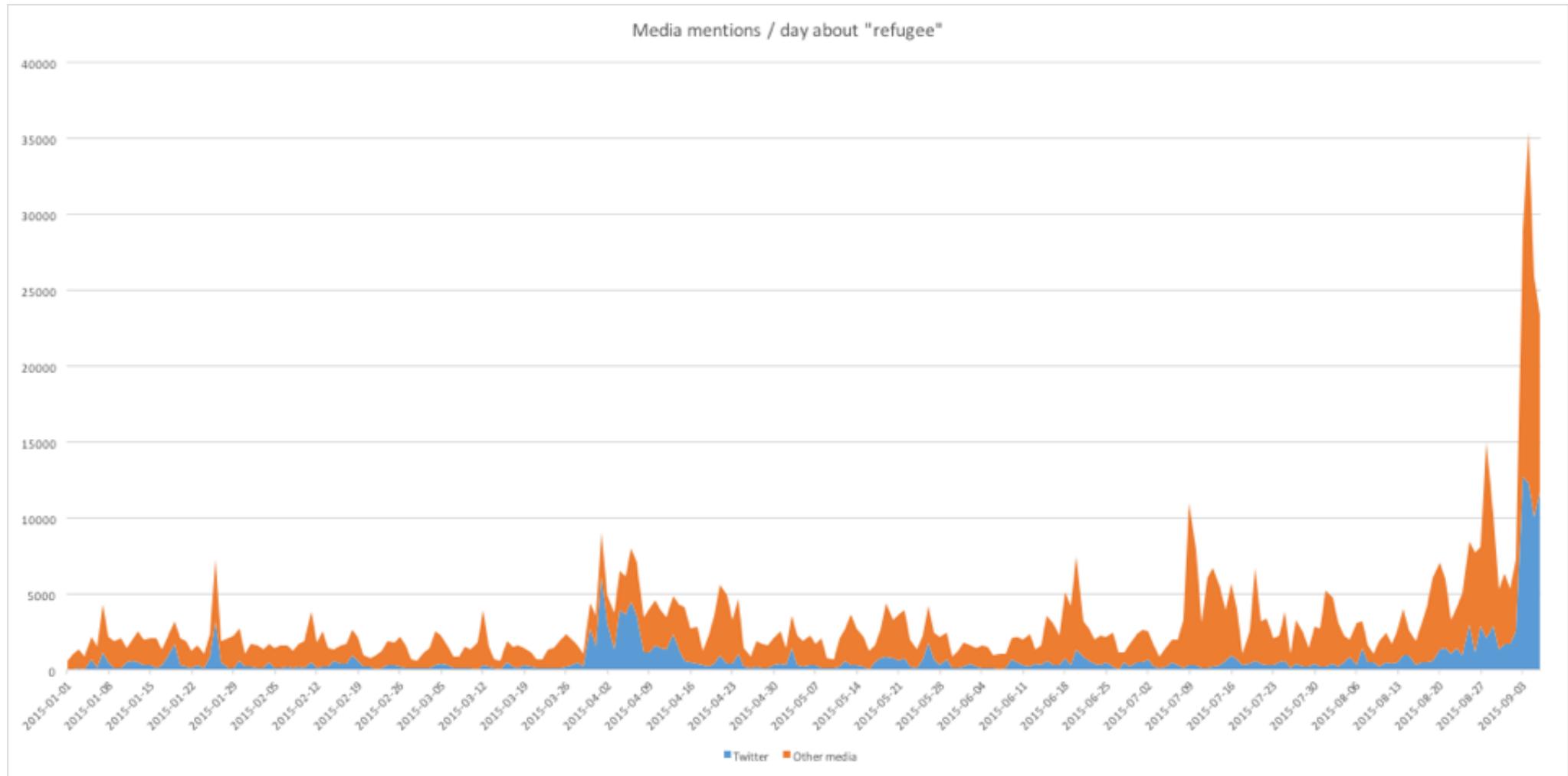


Language & Geography Shift

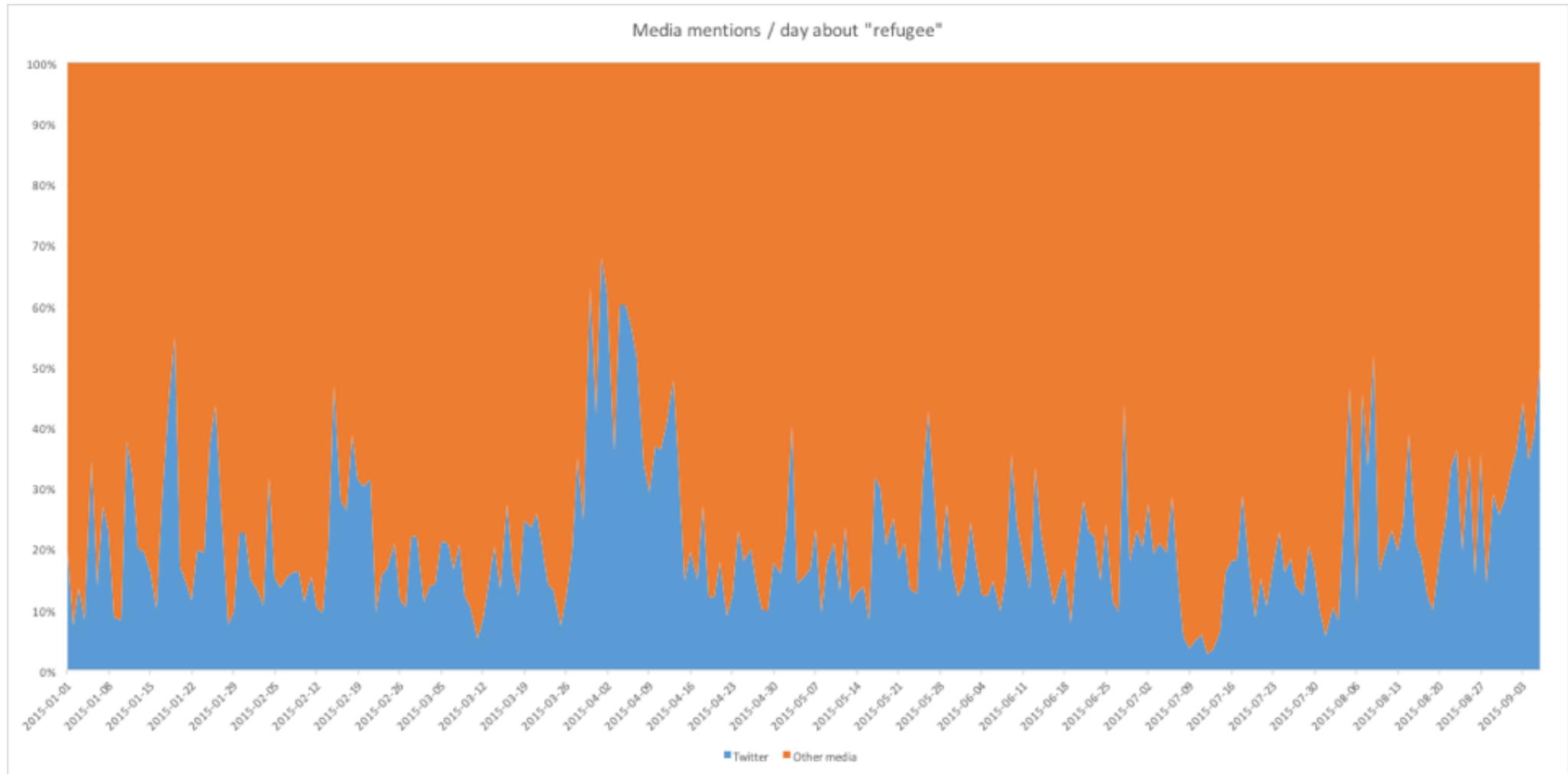


Country	January	February	% increase	Absolute increase	
EGYPT	38 213	184 588	483%	146 375	
UNITED ARAB EMIRATES	12 219	45 651	374%	33 432	
ISRAEL	4 848	17 668	364%	12 820	
JORDAN	5 457	19 118	350%	13 661	
MICRONESIA, FEDERATED STATES OF	11 318	38 998	345%	27 680	
ERITREA	9 648	30 556	317%	20 908	
PALESTINIAN TERRITORY	11 020	33 860	307%	22 840	
GEORGIA	2 113	6 488	307%	4 375	
TUNISIA	2 701	8 018	297%	5 317	
OMAN	3 256	9 119	280%	5 863	
MALTA	3 420	8 301	243%	4 881	
BERMUDA	2 834	6 809	240%	3 975	
MOROCCO	2 058	4 858	236%	2 800	
BAHRAIN	12 789	29 953	234%	17 164	
YEMEN	6 122	13 749	225%	7 627	
SAUDI ARABIA	160 505	328 752	205%	168 247	
UNITED STATES	7 615	14 994	197%	7 379	
IRAQ	22 452	39 030	174%	16 578	
UNITED KINGDOM	13 764	21 981	160%	8 217	
LEBANON	18 613	28 483	153%	9 870	
SYRIAN ARAB REPUBLIC	9 591	13 954	145%	4 363	
KUWAIT	54 927	63 167	115%	8 240	
QATAR	32 871	18 587	57%	-14 284	
GUINEA-BISSAU	25 441	8 734	34%	-16 707	37

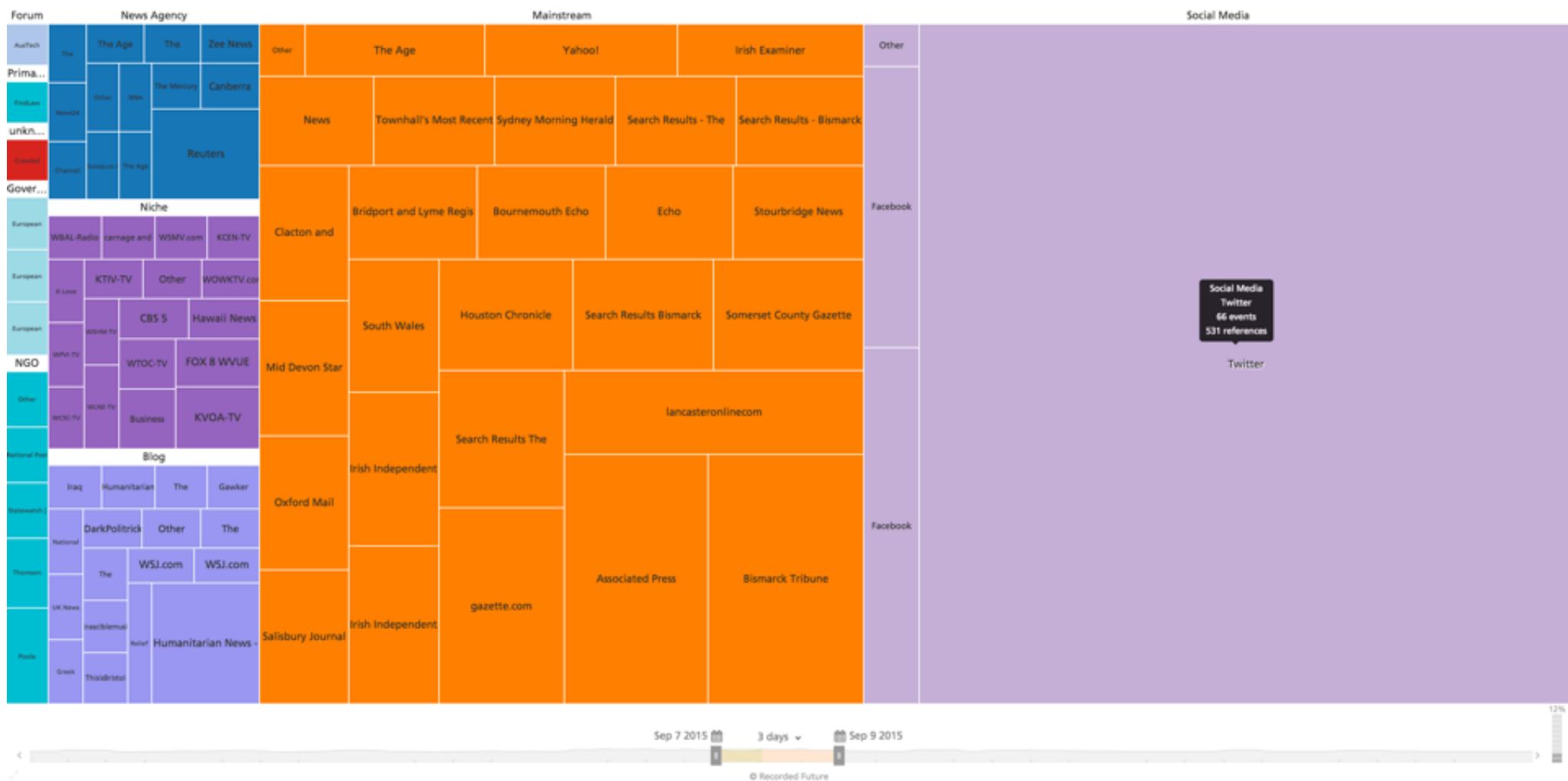
The Refugee Crisis

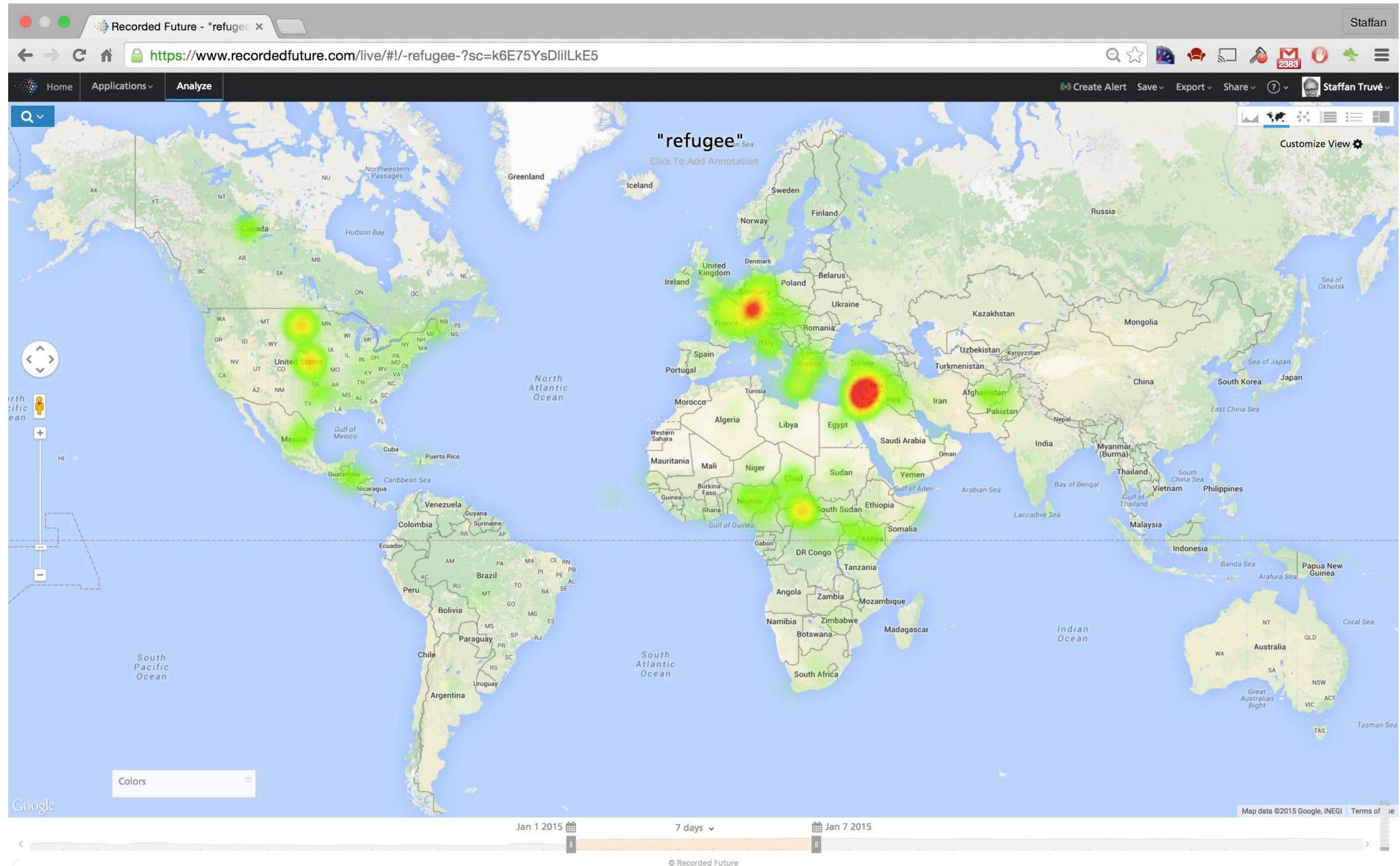


A Big Media Story



Click To Add Annotation





Economic Event Indicators

JAN
15
2015

Bankruptcy

Economic Indicators

“ 11 bankruptcy filing Thursday by a unit of the global...Caesars Entertainment.remain open, despite a Chapter 11 bankruptcy ”

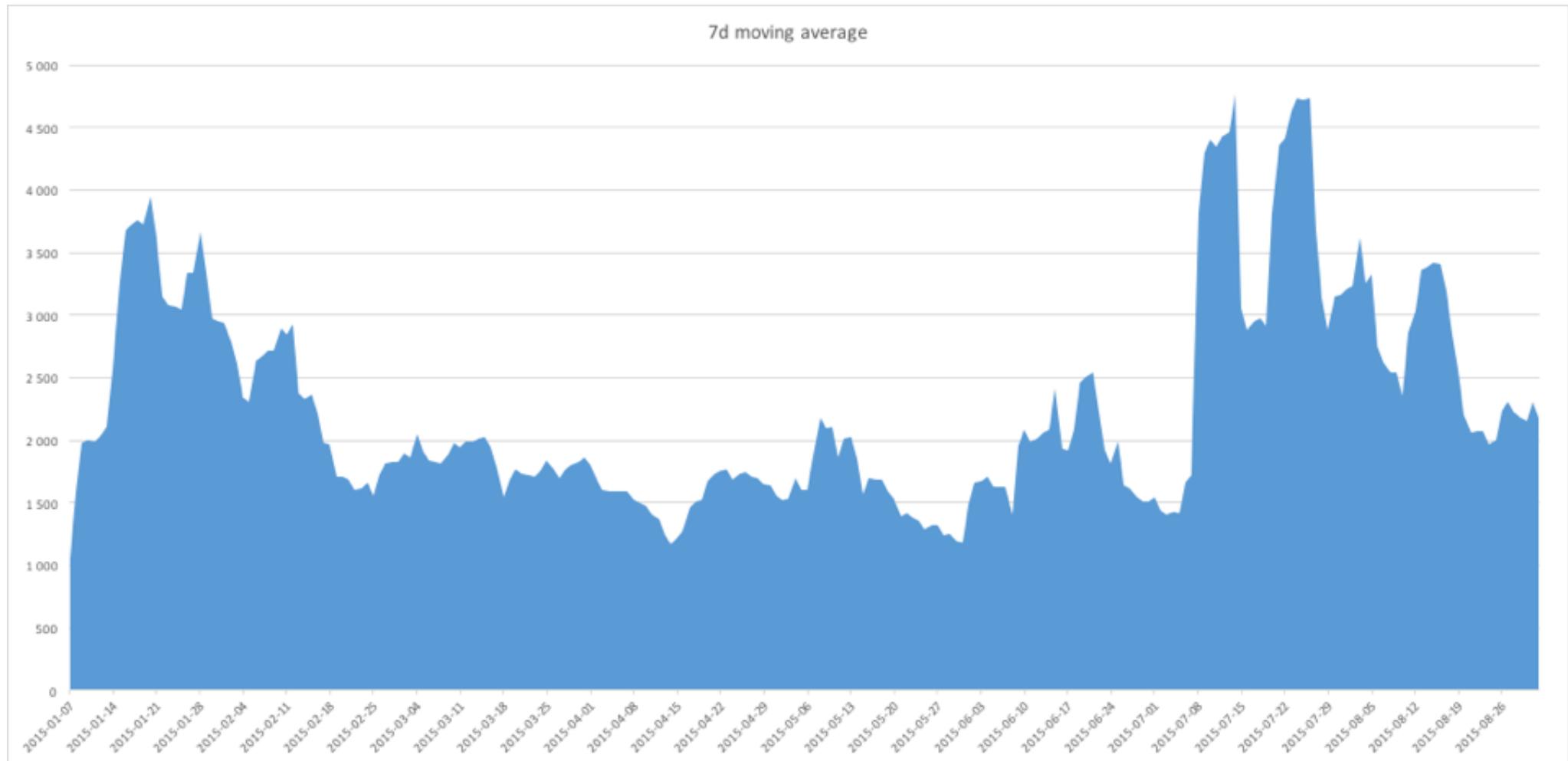
JUL
8
2015

Layoffs

“ Microsoft announced two weeks ago that it was cutting 7,800 jobs to streamline its smartphone hardware business. ”



7 day moving average, sum of 3 indicators

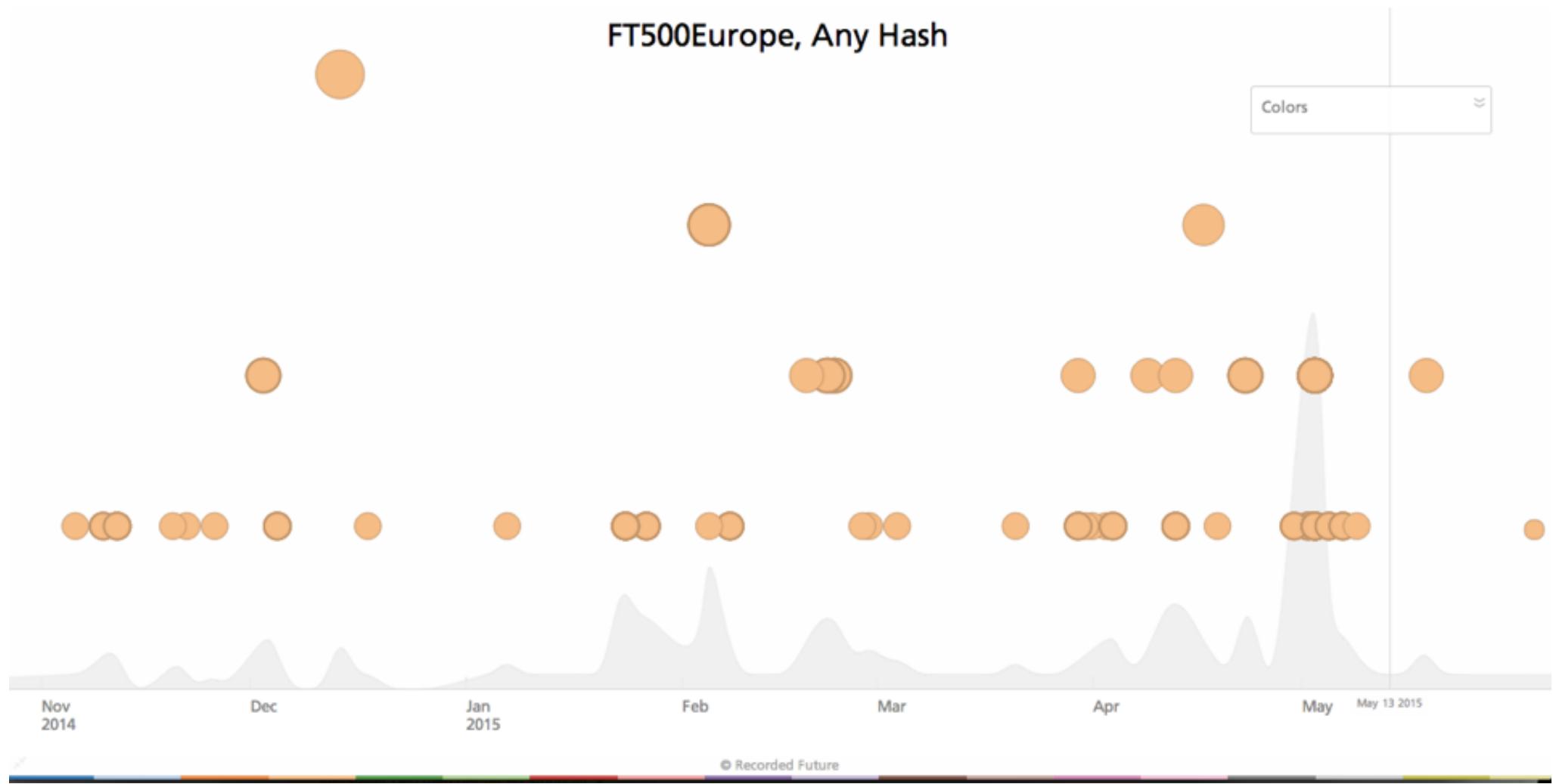




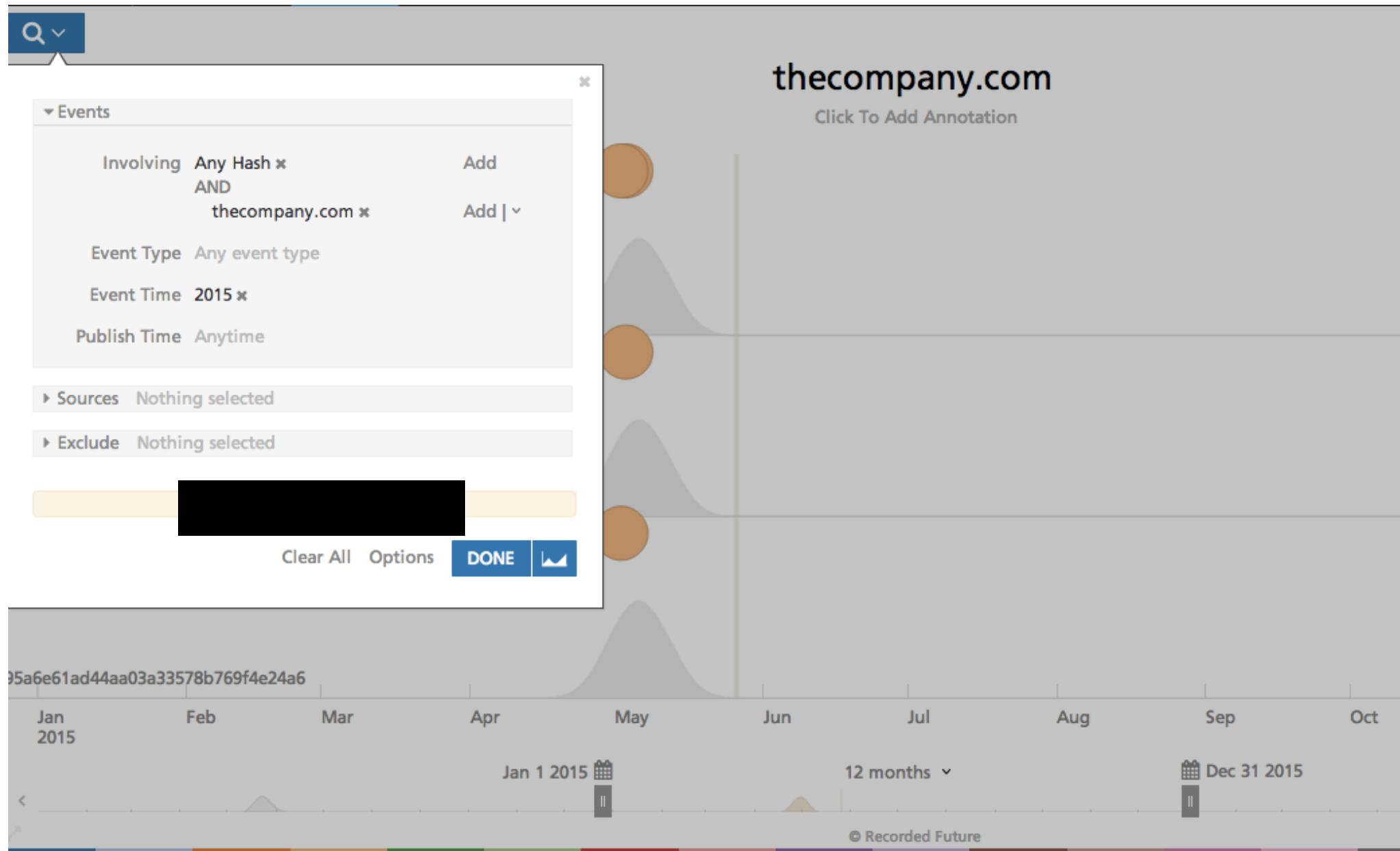
Credential Leaks

Exploring the darker sides of the web

Leaked Credentials



Analyzing an individual company



ications ▾ Analyze

(*) Create Alert Save ▾ Export ▾ Share ▾ ? ▾

Cached Document

Title Untitled

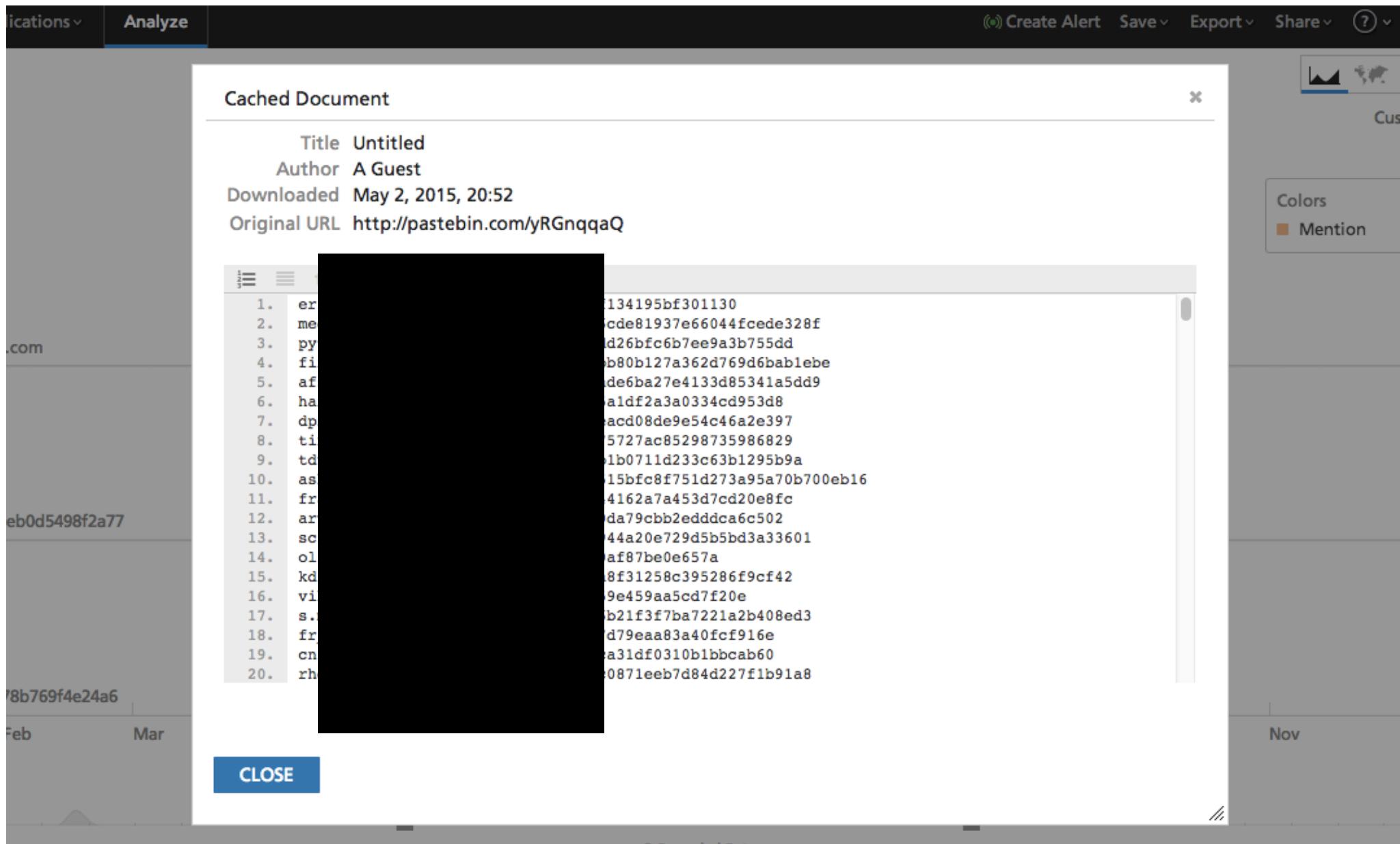
Author A Guest

Downloaded May 2, 2015, 20:52

Original URL <http://pastebin.com/yRGnqqaQ>

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5. af de6ba27e4133d85341a5dd9
6. ha a1df2a3a0334cd953d8
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11. fr 4162a7a453d7cd20e8fc
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CLOSE



Conclusions

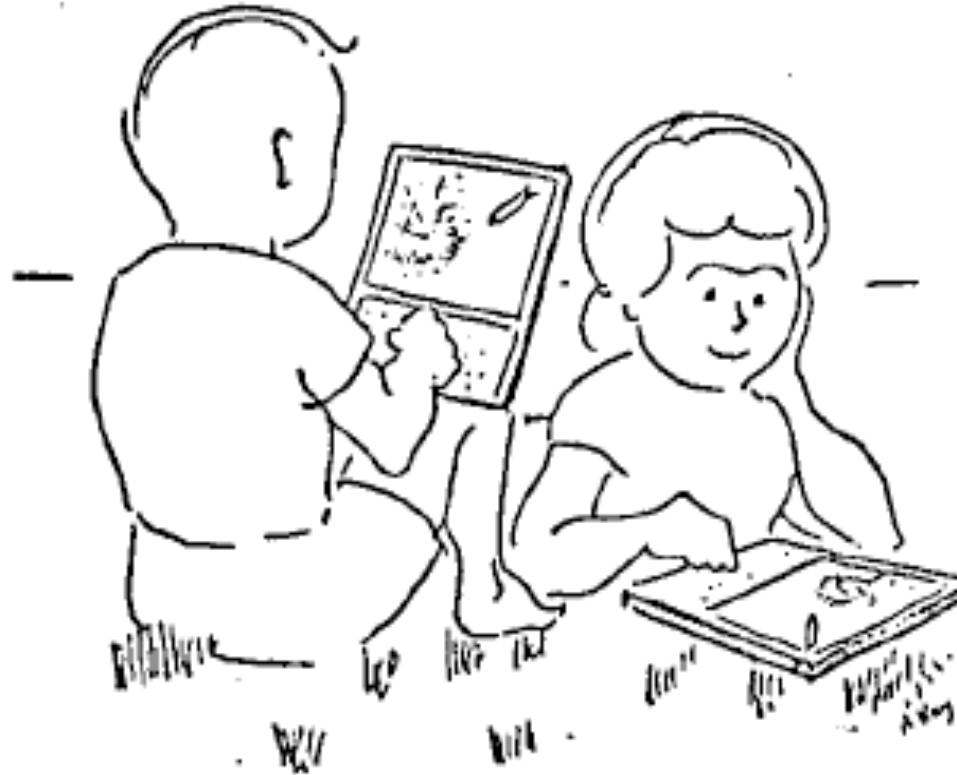
- Web Intelligence supports several modes of analysis
 - "Golden Nuggets"
 - Quantitative
 - Predictive
 - Media analytics
- Real time and interactive
- Application areas include
 - (Competitive) Intelligence
 - Trend analysis
 - Threat intelligence: social unrest / cyber / personal / ...
 - Fraud and credential leaks, IP theft
- Boost performance of human analysts

Conclusion

You CAN use media to understand the world,
BUT you need appropriate methods and tools



truve@recordedfuture.com



Dynabook,
1968

The best way to predict the future is
to invent it! (Alan Kay, 1971)