

instantly connect  
**people everywhere**  
to what's most meaningful to them

<http://twitpic.com/135xa> -  
There's a plane in the  
Hudson. I'm on a ferry  
going to pick up the  
people. Crazy.

**15 Jan 09**

**Janis Krums @jkrums**



<b><u>Magnitude</u></b>	<b>9.0</b>
<b><u>Date-Time</u></b>	<b>Friday, March 11, 2011 at 05:46:24 UTC</b> Friday, March 11, 2011 at 02:46:24 PM at epicenter <a href="#">Time of Earthquake in other Time Zones</a>
<b><u>Location</u></b>	38.297°N, 142.372°E
<b><u>Depth</u></b>	30 km (18.6 miles) set by location program
<b><u>Region</u></b>	NEAR THE EAST COAST OF HONSHU, JAPAN
<b><u>Distances</u></b>	129 km (80 miles) E of <b>Sendai, Honshu, Japan</b> 177 km (109 miles) E of <b>Yamagata, Honshu, Japan</b> 177 km (109 miles) ENE of <b>Fukushima, Honshu, Japan</b> 373 km (231 miles) NE of <b>TOKYO, Japan</b>
<b><u>Location Uncertainty</u></b>	horizontal +/- 13.5 km (8.4 miles); depth fixed by location program
<b><u>Parameters</u></b>	NST=350, Nph=351, Dmin=416.3 km, Rmss=0.1 sec, Gp= 29°, M-type=centroid moment magnitude (Mw), Version=A
<b><u>Source</u></b>	USGS NEIC (WDCS-D)
<b><u>Event ID</u></b>	usc0001xgp





**Barack Obama** ✓  
@BarackObama



Following

Four more years.  
[pic.twitter.com/bAJE6Vom](http://pic.twitter.com/bAJE6Vom)

← Reply ↻ Retweet ★ Favorite ⋮ More



**811,575**  
RETWEETS

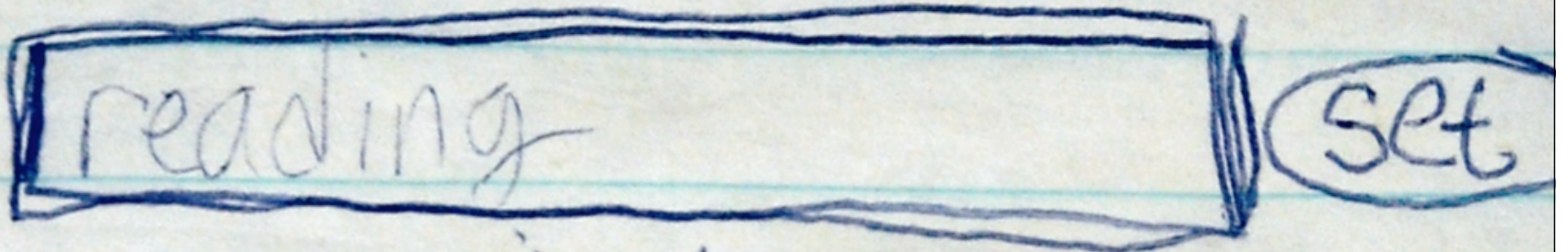
**302,583**  
FAVORITES



8:16 PM - 6 Nov 12

Flag media

# STATUS



→ name    email    phone number  
                  \*                   \*

- in bed
- going to park





[Sign in](#) Remember me · [Forgot password?](#)

New to Twitter? [Sign up](#)

[Sign up for Twitter](#)

# what's a tweet?

it's a short message that's sent through 

48 characters  
+1 for the bird



140 characters max

`sizeof (1 tweet)` = 140 characters  
≈ 200 bytes





**Soichi Noguchi 野口 聡一**

@Astro\_Soichi

Follow



<http://twitpic.com/17dfqb> - 今晚の東京湾の様子です。東京都心は曇ってますが千葉側は晴れてました。では皆さんおやすみなさい。私はこれから京都芸大その他が提案している「宇宙庭」実験の総仕上げにかかります！



Soichi Noguchi 野口 聡一

@Astro\_Soichi

Follow



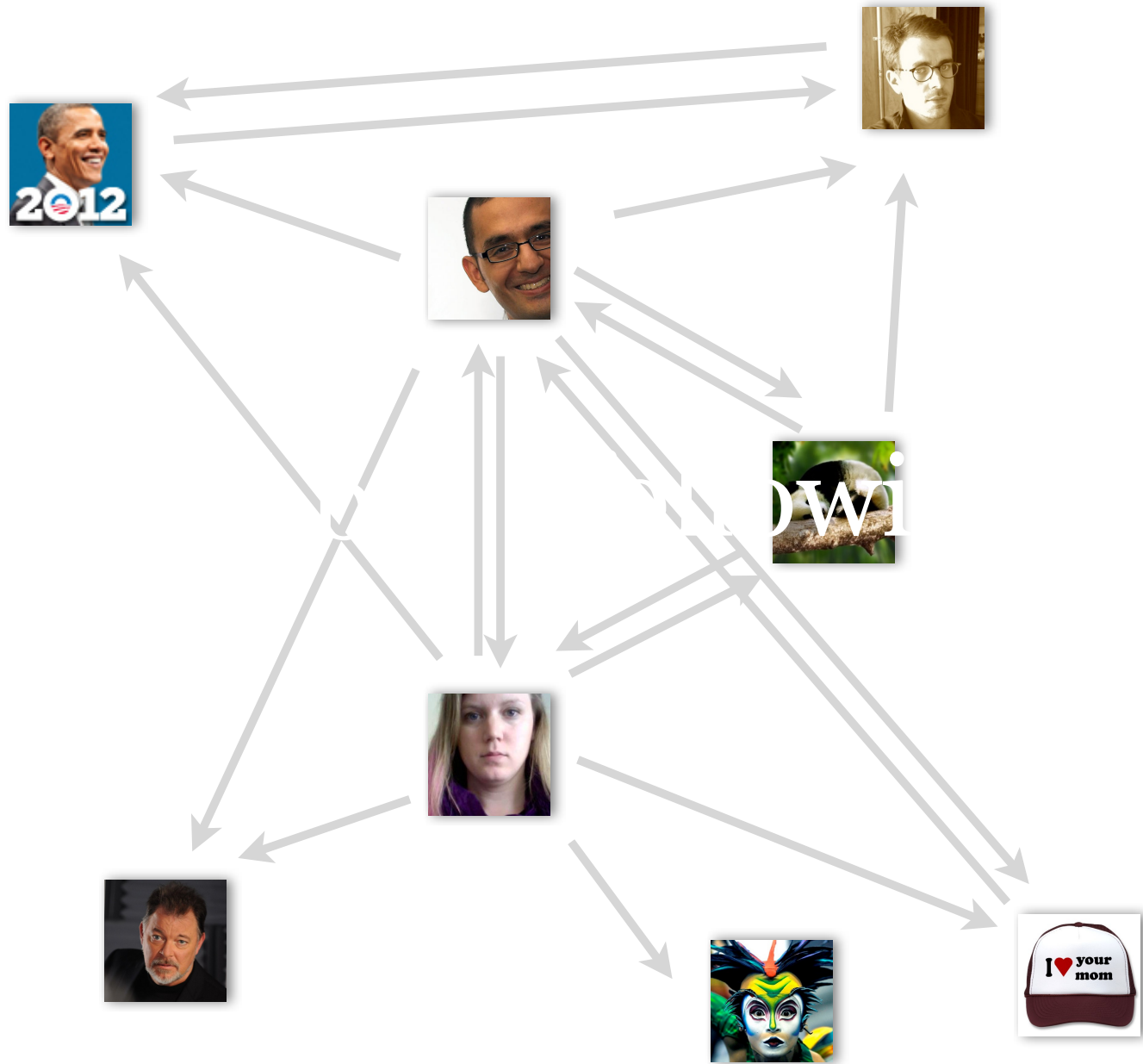
<http://twitpic.com/17dfqb> - 今晚の東京湾の様子です。東京都心は曇ってますが千葉側は晴れてました。では皆さんおやすみなさい。私はこれから京都芸大その他が提案している「宇宙庭」実験の総仕上げにかかります！




Astro\_Soichi

TwitPic

Flag this media



 **@DanaDanger**  
Dana Contreras

**Tweet!**

1 min ago via [Twitter for iPhone](#) ☆ Favorite ↻ Retweet ↩ Reply



**sounds easy, right?**

trick question



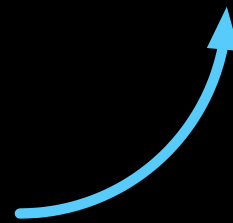


5.0E6 tweets  

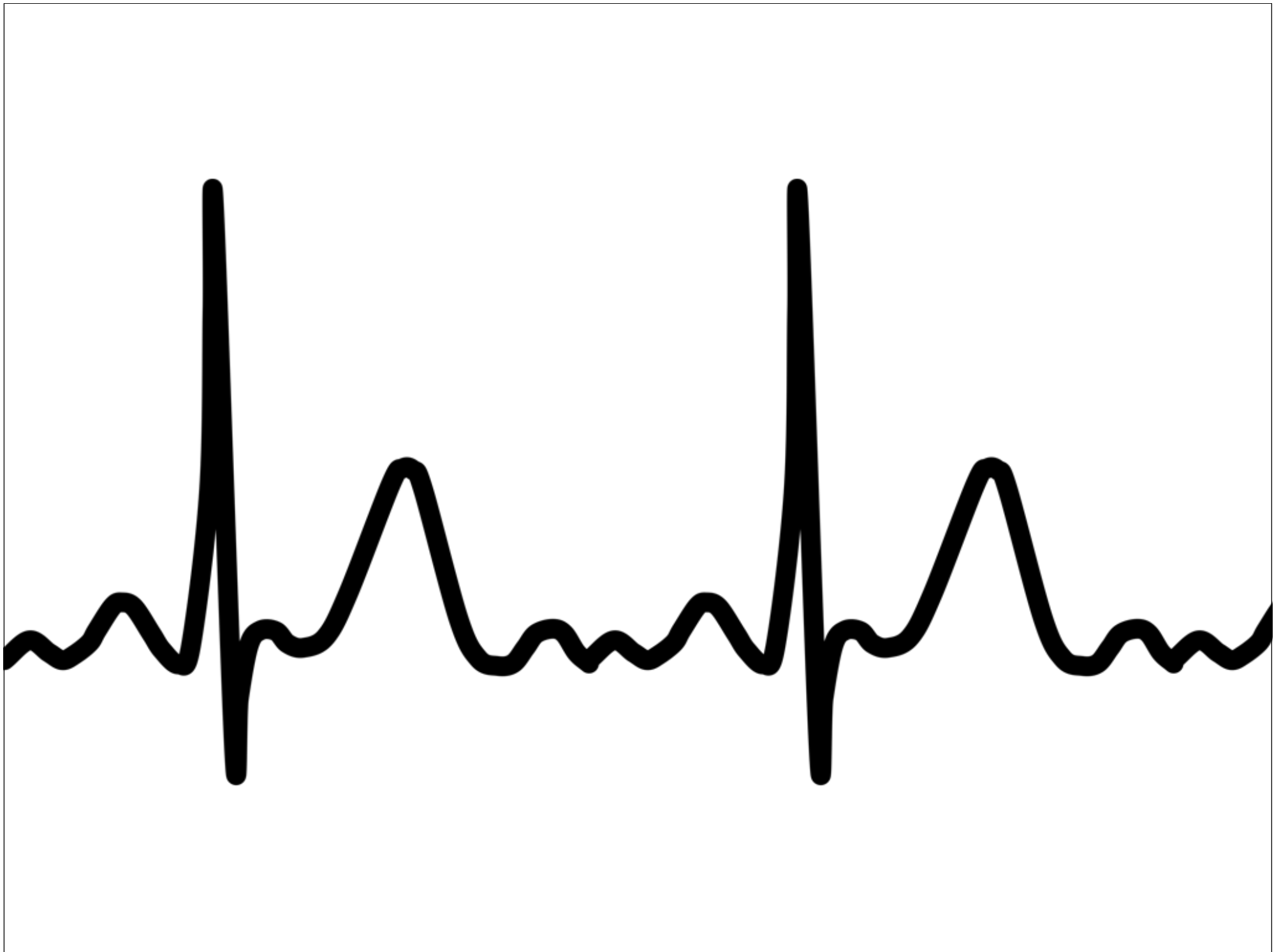
---

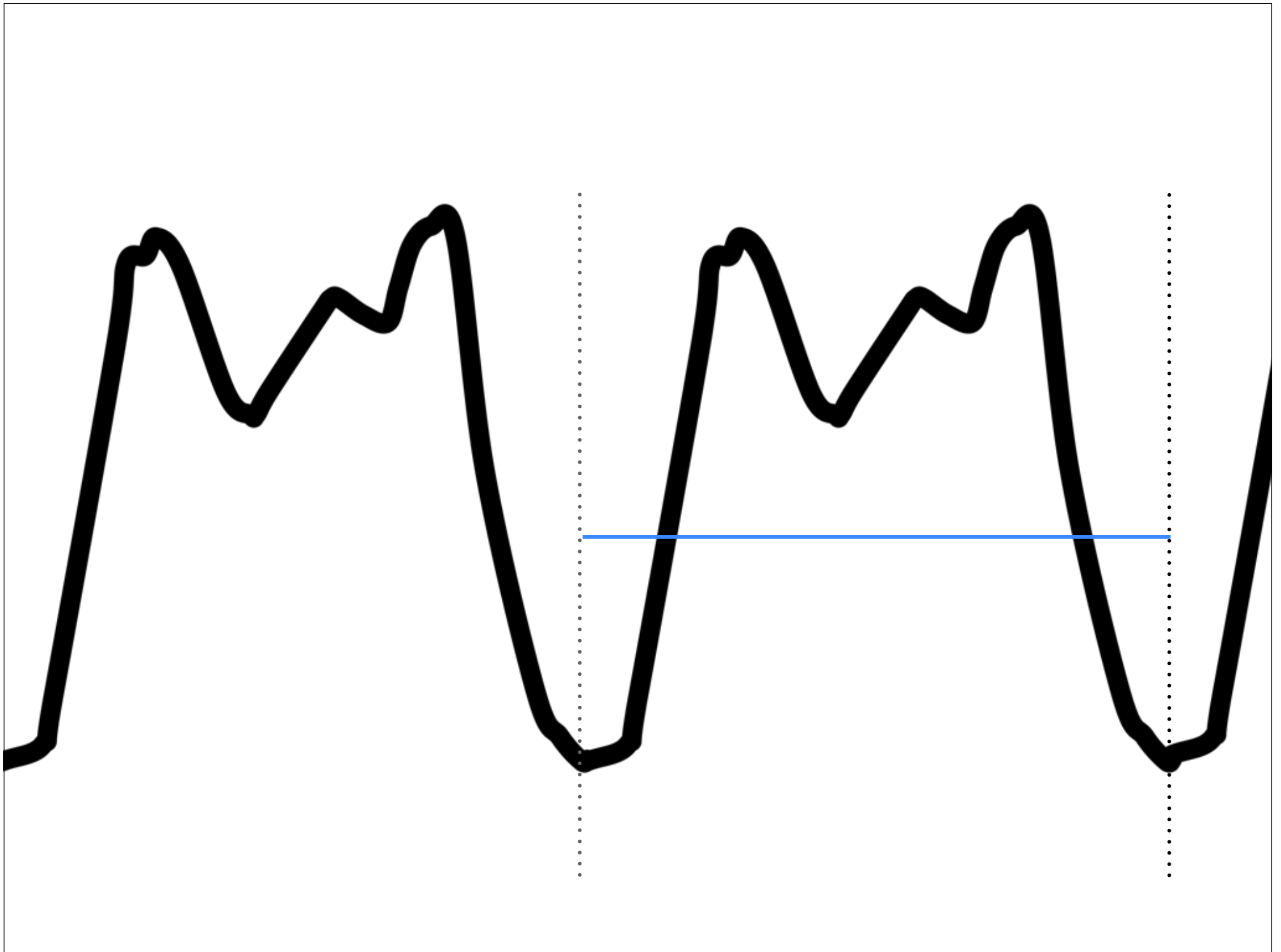
day

steady state



my heart beats  
**90,000**  
times a day





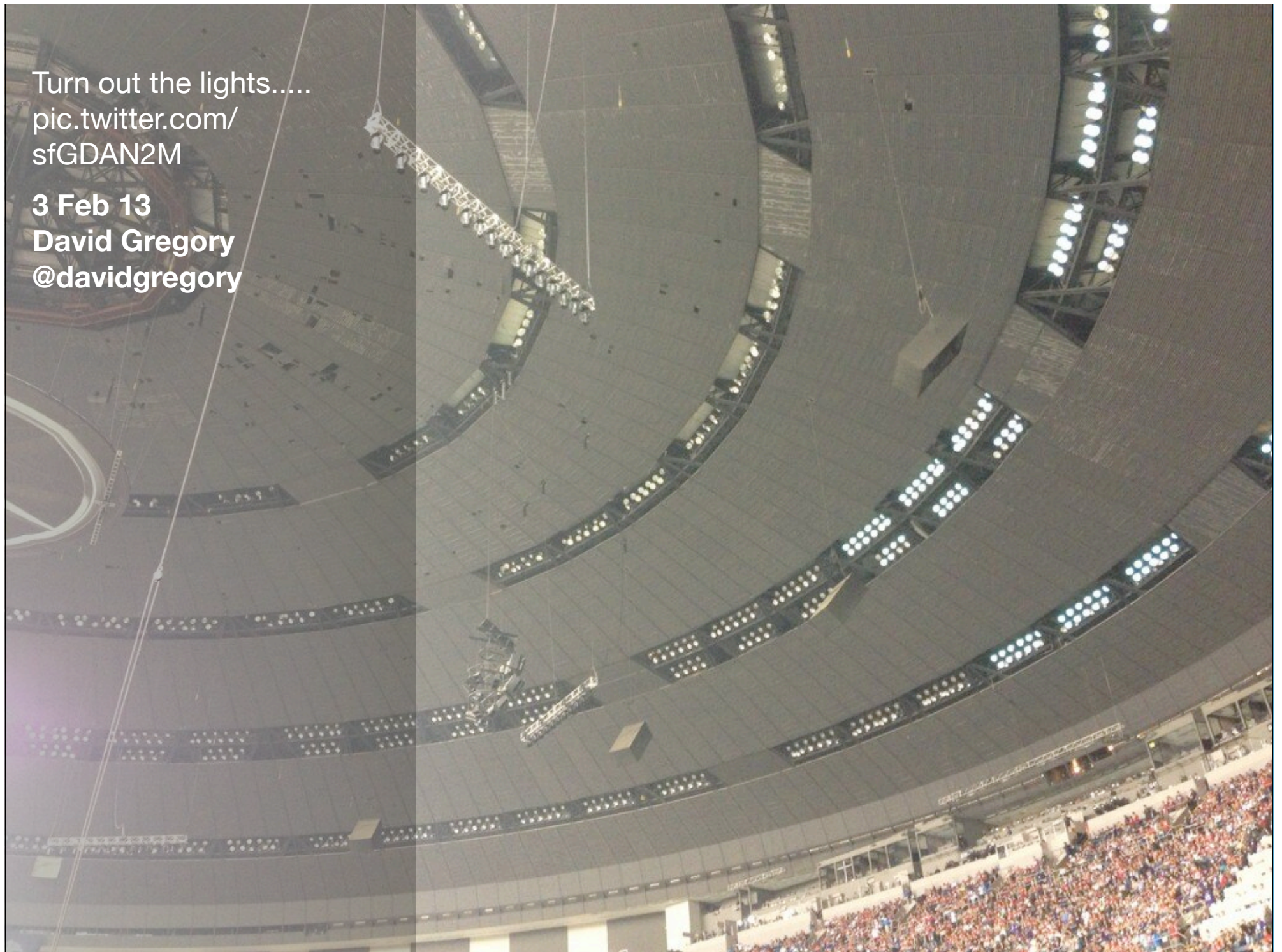
Turn out the lights.....

[pic.twitter.com/  
sfGDAN2M](https://pic.twitter.com/sfGDAN2M)

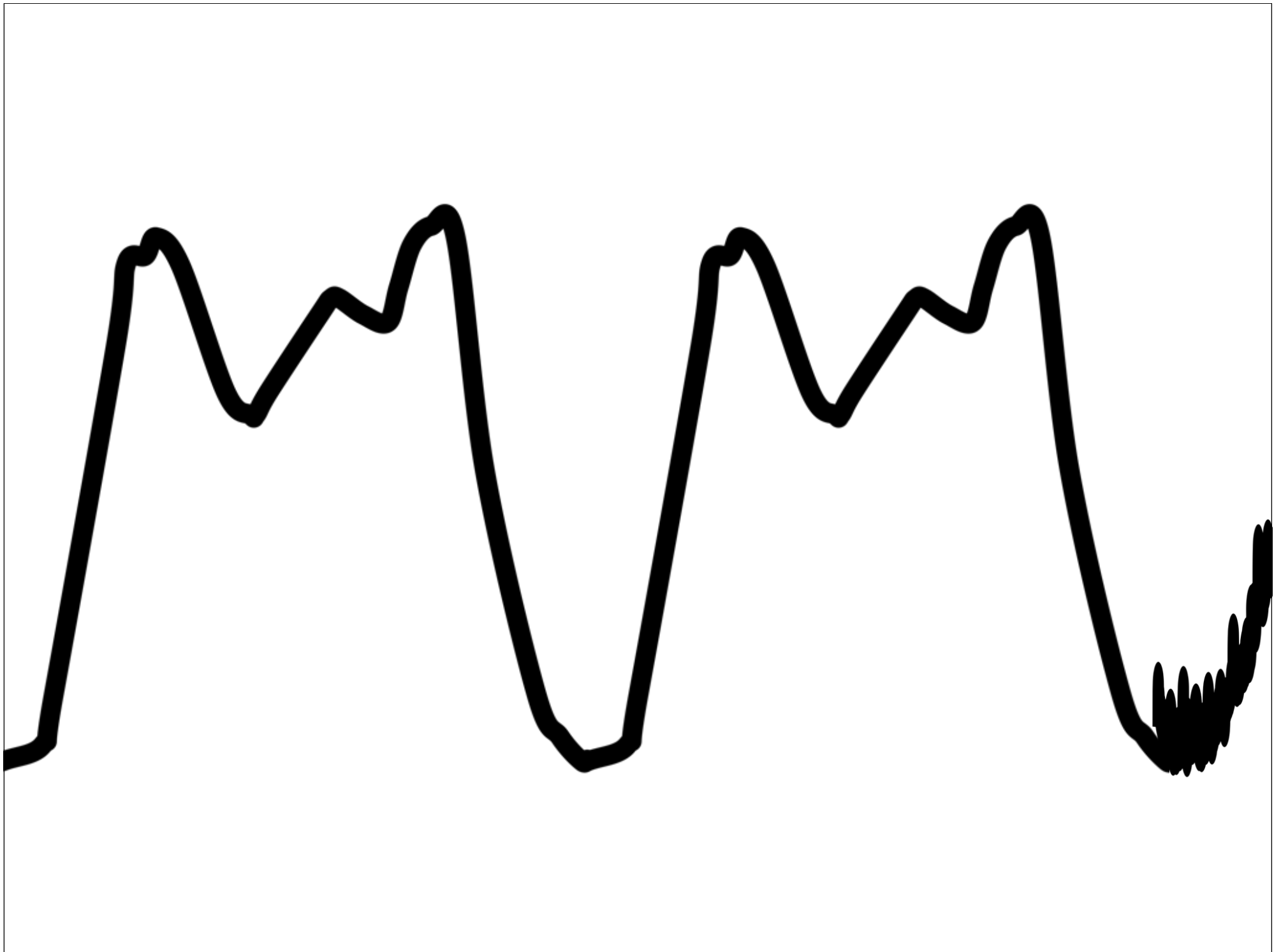
**3 Feb 13**

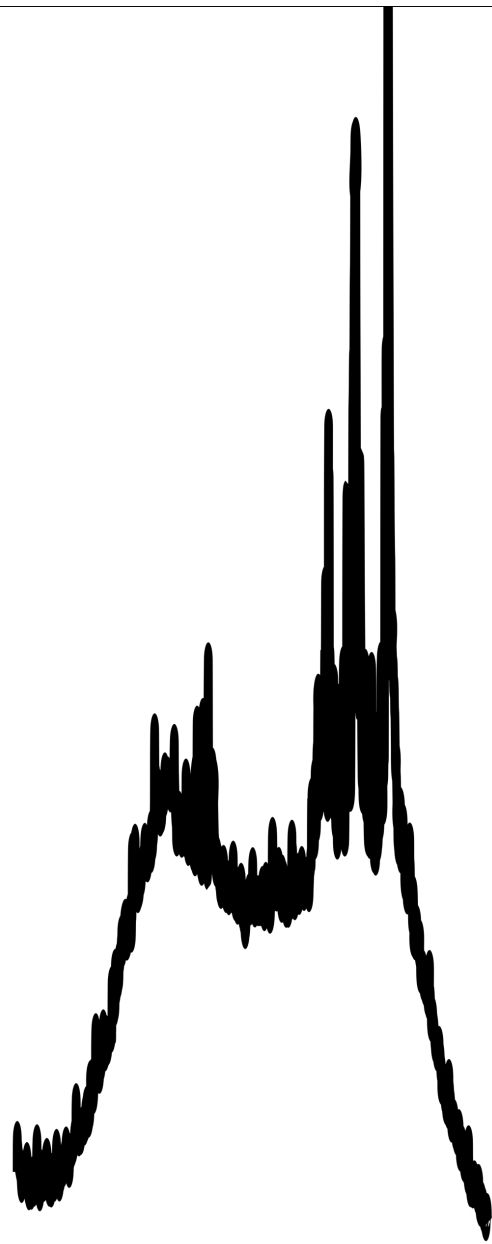
**David Gregory**

**@davidgregory**

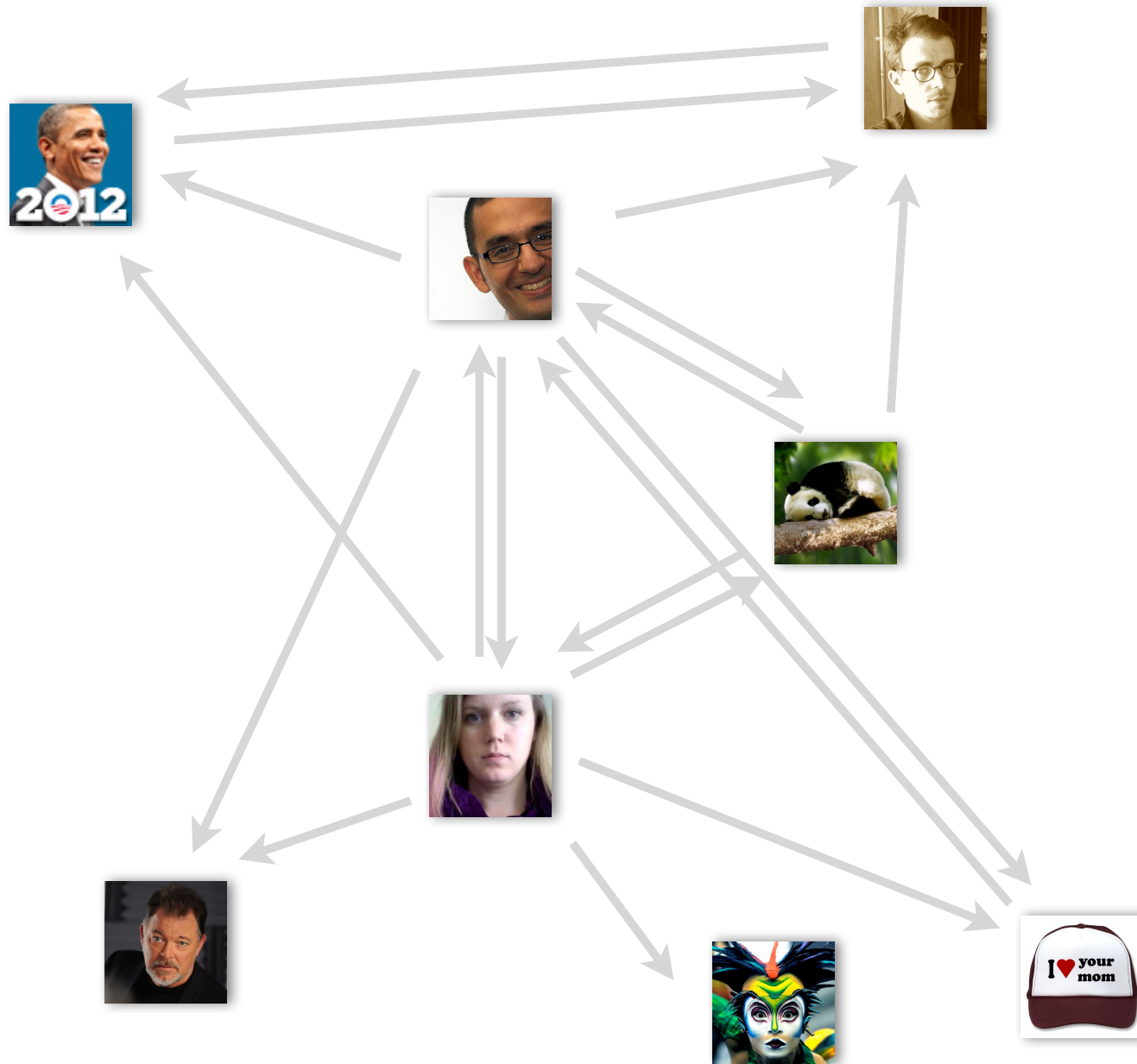












**What's the max vertex degree?**

A. 0

B. 10

C. 1 million

D. There is no max





@justinbieber

36 million followers



@ladygaga

35 million followers



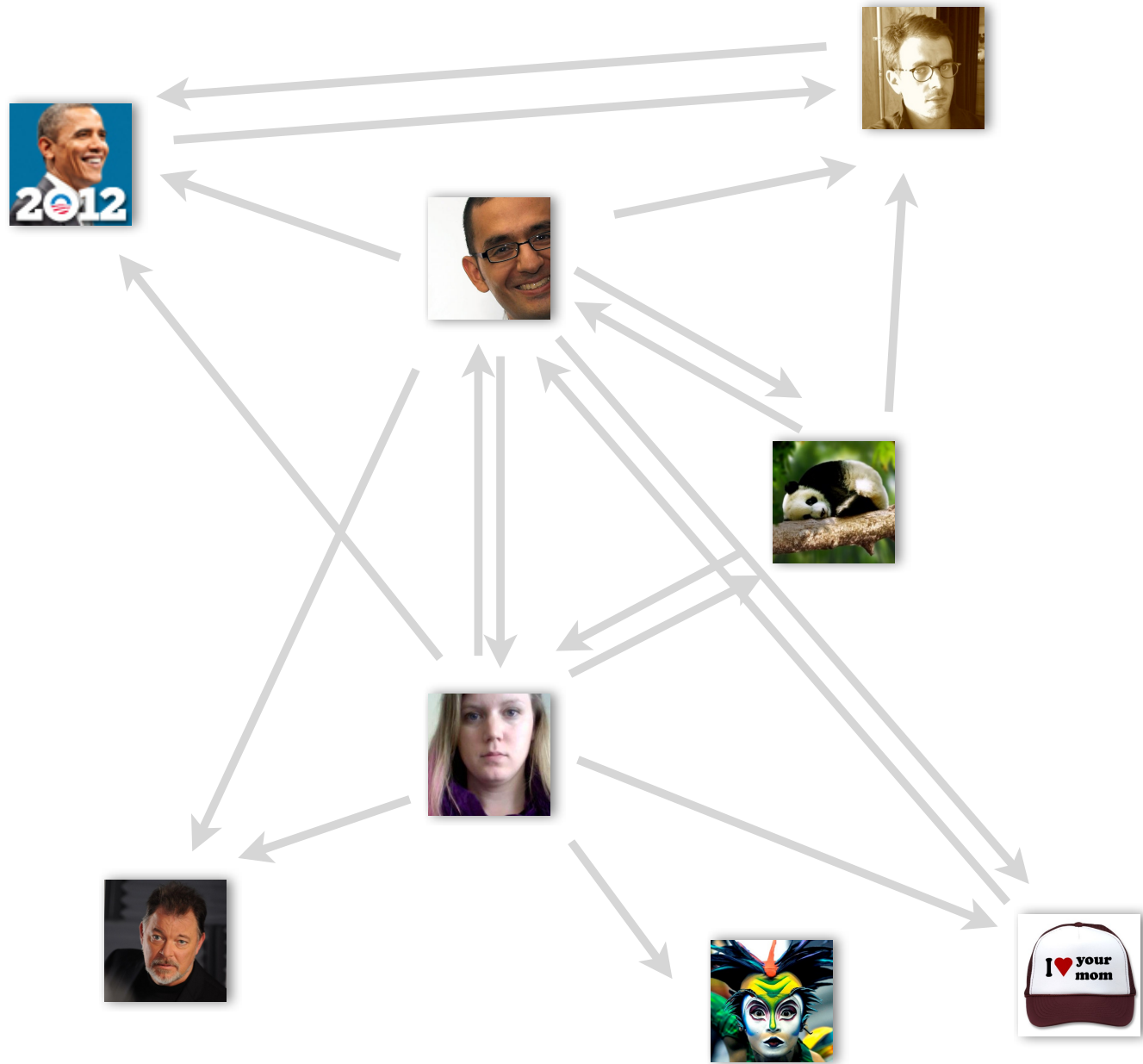
@BarackObama

28 million followers



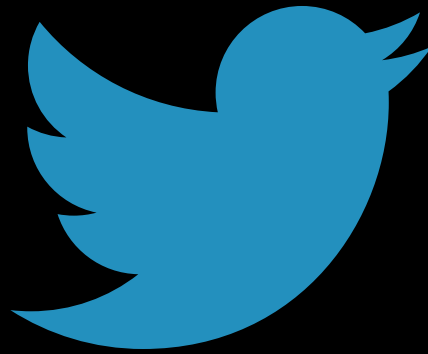
@rIotun

0.000002 million followers



about  
**BILLIONS**  
of deliveries a day

**We have a lot of data**



**User generated**

Tweets, DMs, follows,  
favorites

---

**System generated**

User behavior, activity,  
system-level metrics, logs

**What are the questions we  
want to answer?**





Twitter   
@twitter

 Follow

Now you can click on ticker symbols like **\$GE** on [twitter.com](https://twitter.com) to see search results about stocks and companies

12:34 AM - 31 Jul 12

1,195 RETWEETS 253 FAVORITES



\$GE



Have an account? [Sign In](#)



Email

Password

Sign up

Tweets >

People >



Popular images & videos

These results include media shared by people you don't follow.

Display media

Who to follow · Refresh · View all



LA LA  @lala

20 new Tweets



**Keith McCullough** @KeithMcCullough

15 Mar

**\$WMT** looks just like **\$GE** - uber bullish, waiting on price signal to buy both

Expand



**David Greenberg** @greenbergcap

14 Mar

Free Trading Tips and News Letter - WWW. [Greenbergcapital.com](http://Greenbergcapital.com)  
**\$MRK \$GE \$AMX** Sign up Today !

Expand



**howardlindzon** @howardlindzon

14 Mar

Like it's 1896: Dinosaurs of the Dow still have room to roam  
[stks.co/s5Mx](http://stks.co/s5Mx) via @globeandmail **\$GE \$NL \$DIA**"

Expand



**Benzinga.com** @Benzinga


13 Mar

Apple Considering Two Options for its Cash Pile: [stks.co/t5FF](http://stks.co/t5FF) **\$AAPL \$GE**

View summary

AAPL x

Dataminr

in partnership with 

ALL

MARKET 2%

NEWS/BLOG 26%

CHATTER 72%

Streaming

Apply Date Range

SIGNALS

- BG** 5:43

**Apple's 'Budget' iPhone Expected To Have Same 4-Inch Display As iPhone 5: Contrary To Some Rumors Suggesting A...**

appleinsider.com.feedportal.com
- BG** **SSNLF** 0:28

**How The Samsung Galaxy SIV Stacks Up Against iPhone 5 & Competitors [Spec-By-Spec]**
- BG** **GOOG** **SSNLF** MAR-14 23:08

**Apple, Google, Samsung Plan To Go Green With New Campuses \$AAPL \$GOOG \$SSNLF #Tech**

appleinsider.com
- MBG** 6:06

Here's @danfrakes's updated buying guide for finding the best iPad keyboard:

macw.us
- STK** 6:04

The "new" shares bot on Wed for possible weekend cash plans will be sold Tuesday at the close no matter outcome. \$aapl
- MN** 6:04

Alleged iPad thief sends bizarre photos to owner
- MBG** 6:03

Is the iPad Ready for a Challenge in the Enterprise?: We're coming up on the third anniversary of Apple's rele...

dthin.gs
- MBG** 6:03

Is the iPad Ready for a Challenge in the Enterprise? -by @ahess247

dthin.gs
- MKT** **LM** 6:01

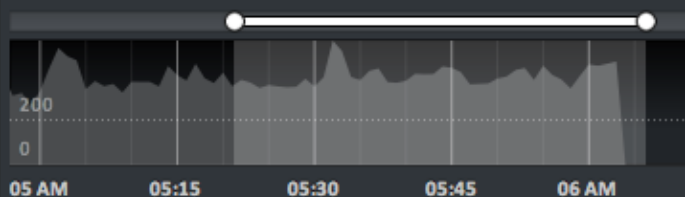
Bill Miller, Legg Mason financial guru, just talked AAPL and he defined why he, like many others, is talking options and leverage!

Summary

Latest (45m)

MESSAGE GRAPH

AAPL



MESSAGES

- MKT:** RT @CNNMoney It's not just Apple's stock losing its shine. CEO Tim Cook dropped to #2 on Glassdoor's tech CEO list. \$AAPL \$FB t... 6:00AM 15X
- MKT:** Commented on: "Apple Vs. Samsung" seekingalpha.com/a/rc39 \$AAPL \$SSNLF 5:58AM 3X
- MN:** Taiwan TSMC manufacturing lb.to/16wXy7f or It is not a Samsung processor Apple A7 iPhone 5S: - Summary gadget smartphone - Cyber Lancia 6:02AM 1X
- MN:** youtube.com/watch?feat... Samsung Galaxy S4! \* Sigh \* goo.gl/a9osL: S4 vs iPhone 5, HTC One, Sony Xperia S, Lumia 920 & BlackBerry Z10 5:55AM 117X
- MN:** RT @mediaguardian So the iPad can't do everything after all... gu.com/p/3ef32/tf 6:01AM 28X
- MN:** RT @USATODAY How Galaxy S4 stacks up to iPhone 5, BlackBerry Z10 usat.ly/Yxu5WD 5:57AM 35X

CLOUDS

IPHONE	NOKIA	CEO	DOWI
ONE	ANDROID	TECH	A
SAMSUNG	MESSENGER	GLASSDOOR	FF
S4	WINDOWS	APPLE'S	
107	9	4	19



Search

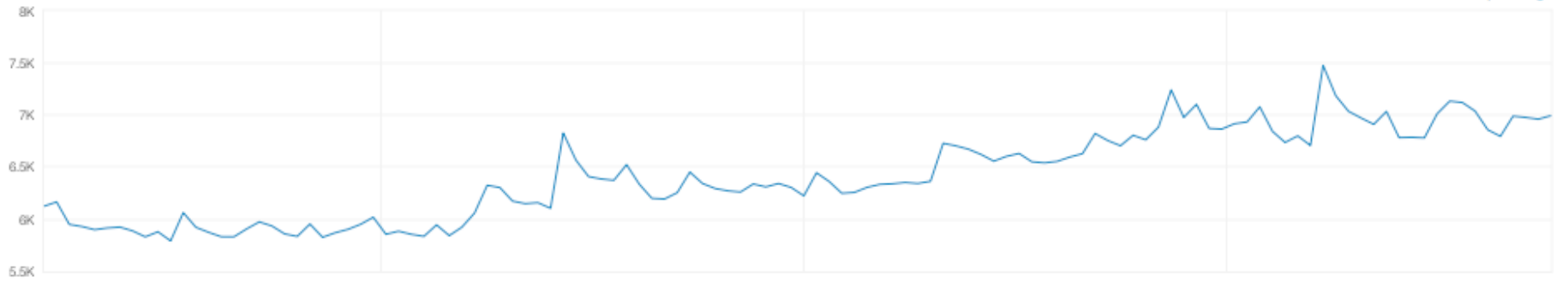
Options

# Dashboard Directory

Sort: **Official** Name Newest Most Viewed Last Updated

## OFFICIAL DASHBOARDS

- |                                      |                                     |                                      |
|--------------------------------------|-------------------------------------|--------------------------------------|
| Manhattan - manhattan.prod.adam ⓘ    | Jubjub v2 SMF1 Prod ⓘ               | hosebird-sitestreams ⓘ               |
| Manhattan - manhattan.prod.athen ⓘ   | Metastore Application Layer ⓘ       | hosebird-streamdot ⓘ                 |
| Manhattan - manhattan.prod.baltar ⓘ  | BlackKite ⓘ                         | hosebird-userstreams ⓘ               |
| Manhattan - manhattan.prod.hotdc ⓘ   | Budgie ⓘ                            | timelineservice ⓘ                    |
| Manhattan - manhattan.prod.omeg ⓘ    | Coop ⓘ                              | Ads DataService ⓘ                    |
| Manhattan - manhattan.prod.prov-1 ⓘ  | Geoduck LocationService Productic ⓘ | Ads Realtime Daemon ⓘ                |
| Manhattan - manhattan.prod.prov-1 ⓘ  | Geoduck LocationService Staging ⓘ   | Charge Processor (Production) ⓘ      |
| Manhattan - manhattan.prod.redwi ⓘ   | Gizmoduck Production ⓘ              | Credit Processor (Production) ⓘ      |
| Manhattan - manhattan.prod.reven ⓘ   | Gizmoduck Staging Load Test ⓘ       | Feature Server Upload Daemon ⓘ       |
| Manhattan - manhattan.prod.spare ⓘ   | Imagebird Server ⓘ                  | Payment ⓘ                            |
| Manhattan - manhattan.prod.spide ⓘ   | Limiter ⓘ                           | SMF1 - ERP EXPORTER (billingserv ⓘ   |
| Manhattan - manhattan.prod.starb ⓘ   | Macaw-Activity (Production) ⓘ       | SMF1 - Spend Server (ads.spendser ⓘ  |
| Manhattan - manhattan.test.green ⓘ   | Macaw-Conversation (Production) ⓘ   | SMF1 - Spend Server (ads.spendser ⓘ  |
| Manhattan - manhattan.test.hotdo ⓘ   | Macaw-Typeahead (Production) ⓘ      | Spend Aggregator (Prod 2) ⓘ          |
| Spiderduck main smf1 prod ⓘ          | Ouroboros Service ⓘ                 | Spend Aggregator (Production) ⓘ      |
| Spiderduck postprocessor smf1 prc ⓘ  | Rainbird Aggregator ⓘ               | ads.admixer metrics ⓘ                |
| Kujaku (smf1 Production) - Tweet T ⓘ | Rainbird Query Service ⓘ            | ads.admixer metrics ⓘ                |
| Macaw-International (Production) ⓘ   | Scoop ⓘ                             | ads.adshard metrics ⓘ                |
| Gazebo ⓘ                             | TweetyPie ⓘ                         | Kestrel ⓘ                            |
| Wilson ⓘ                             | Woodstar (Production) ⓘ             | Kestrel Cross-DC Replication ⓘ       |
| Puppetserver Metrics ⓘ               | deferredrpc ⓘ                       | Observability::Ostrichagg.FinagleM ⓘ |



# Batch **vs** Real-time

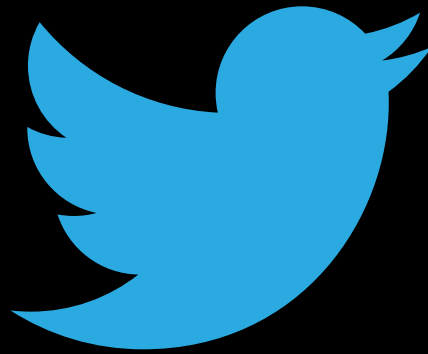
Batch: “A quantity or number taken together”

- think search engine: building the search index
- ‘solved problem’: Google’s MapReduce

Real-time: “Now.This instant”

- knowing what to look for in advance
- Twitter is a specific implementation of a “real-time” system

what happens in the  
**world**  
happens on





**Thank you!**

**Questions?**

**@rilotun**