

Can New Technologies Save Us from the Unthinkable?



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Perspectives Can New Technologies Save Us from the Unthinkable?



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“No one ever expects the Spanish Inquisition”



Up in the Air



A completely different perspective



Black Swans and White Whales



“We never imagined it could be this bad”



Unrest at Popocatepetl, Mexico (2012)



Maybe all swans are white.



Domino Effect



We need a bestiary.

Main Event



Primary Impact



Primary Impact



Primary Impact



Primary Impact



Primary Impact

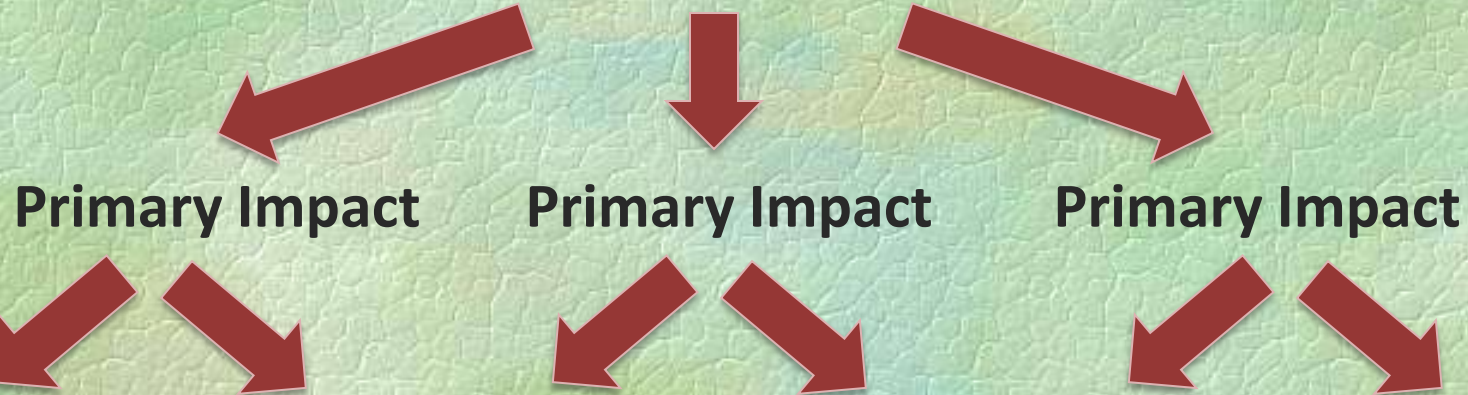
“The Unthinkable”

Domino Event



Pakistan (2010)

Main Event



Secondary Impact Secondary Impact Secondary Impact Secondary Impact Secondary Impact Secondary Impact

“The Unthinkable”

Cascade Event



Japanese Earthquake and Tsunami (2011)



Daichi Fukushima Nuclear Facility (2011)

Normal Event

Normal Event



Main Event



Primary Impact

Primary Impact

Primary Impact

“The Unthinkable”

Compound Event

3 July 2012 Last updated at 14:39 GMT



Power outages persist for 1.4m amid US heatwave

Some 1.4m storm-struck households in the eastern US are without electricity for a fourth day amid sweltering temperatures.

Three people have already died from heat-related deaths in Maryland, as crews from as far as Quebec and Oklahoma battle to restore power.

Utilities are warning that a number of places could still be without electricity by Friday.

Some Independence Day celebrations have been cancelled near Washington DC.

Traffic lights remain out in many areas of Maryland and Virginia, creating commuting headaches.

Severe storms hit a 500-mile (800-km) area on Friday, knocking out power in parts of US states from Indiana to Delaware.

Related Stories

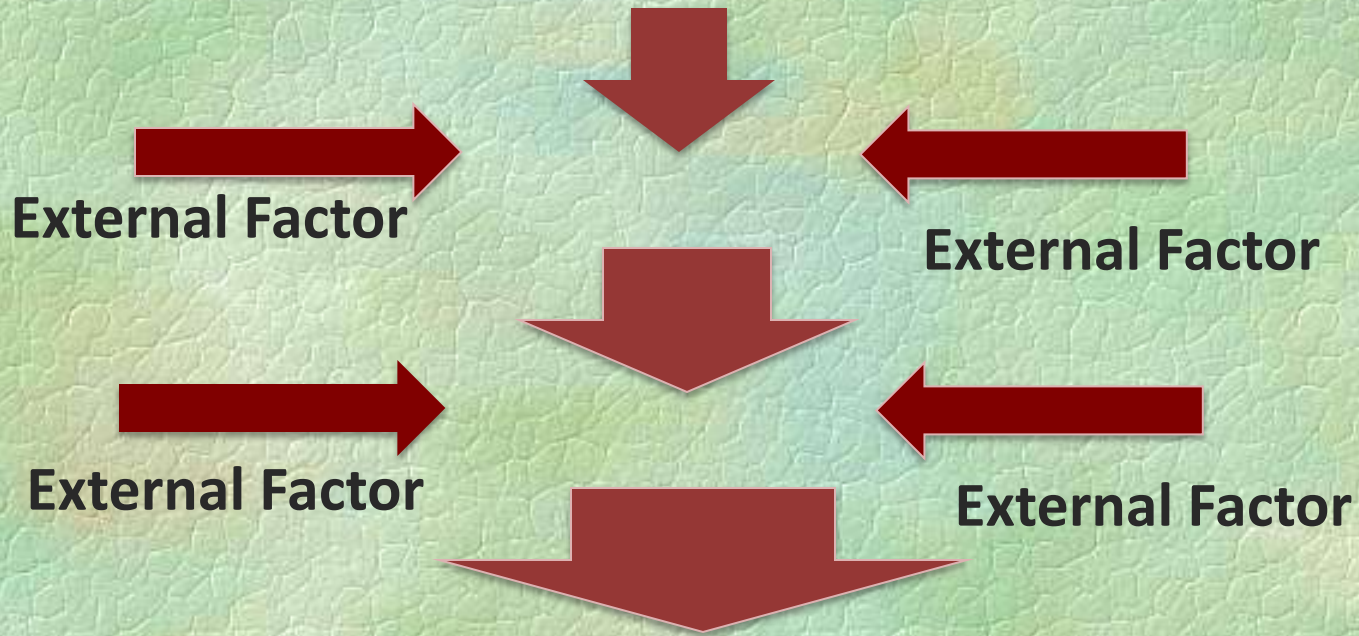
▶ [What is a derecho?](#)

[In pictures: US storm misery](#)

[State emergencies after US storms](#)

Washington D.C. power outage

Normal Event



“The Unthinkable”

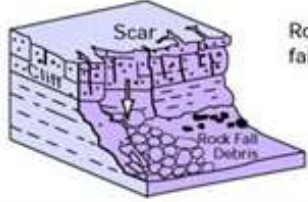
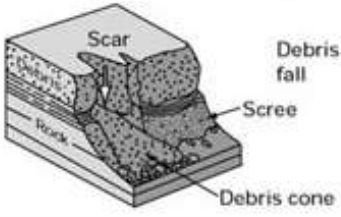
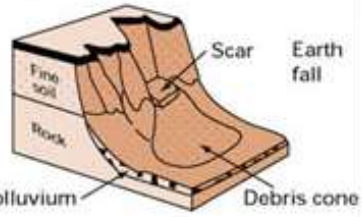
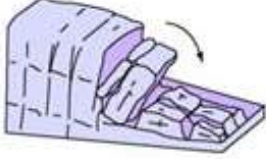
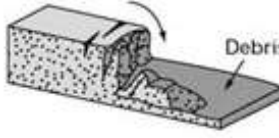
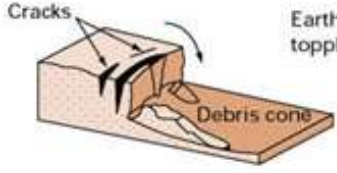
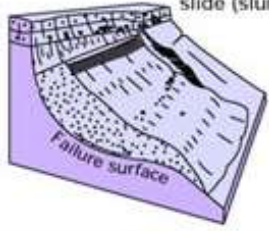
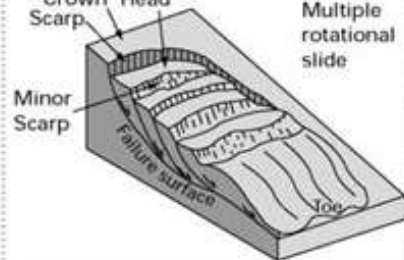
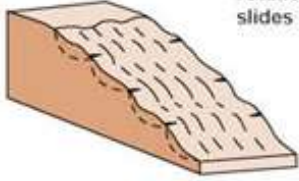
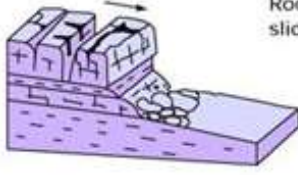
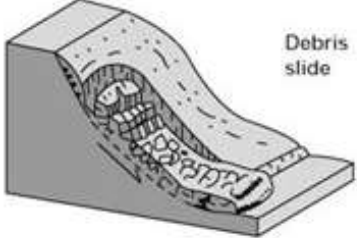
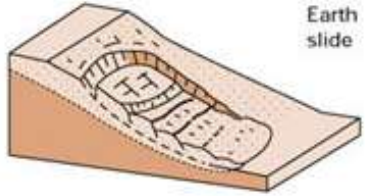
Perfect Storm Event



Eyjafjallajokull cancellations



Grimsvotn Eruption (2012)

FALLS	 <p>Scar Rock fall Rock Fall Debris</p>	 <p>Scar Debris fall Scree Debris cone</p>	 <p>Scar Earth fall Colluvium Debris cone</p>
	 <p>Rock topple</p>	 <p>Debris topple Debris cone</p>	 <p>Cracks Earth topple Debris cone</p>
SLIDES	 <p>Single rotational slide (slump) Failure surface</p>	 <p>Crown Scarp Head Scarp Multiple rotational slide Failure surface Minor Scarp</p>	 <p>Successive rotational slides</p>
	 <p>Rock slide</p>	 <p>Debris slide</p>	 <p>Earth slide</p>
Translational (Planar)			

Landslide types.

**“Those that fail to learn from history,
are doomed to repeat it.”**

--George Santayana



Flooding in Sacramento, CA (1862)



Flooding in Florence, Italy (1966)



1966

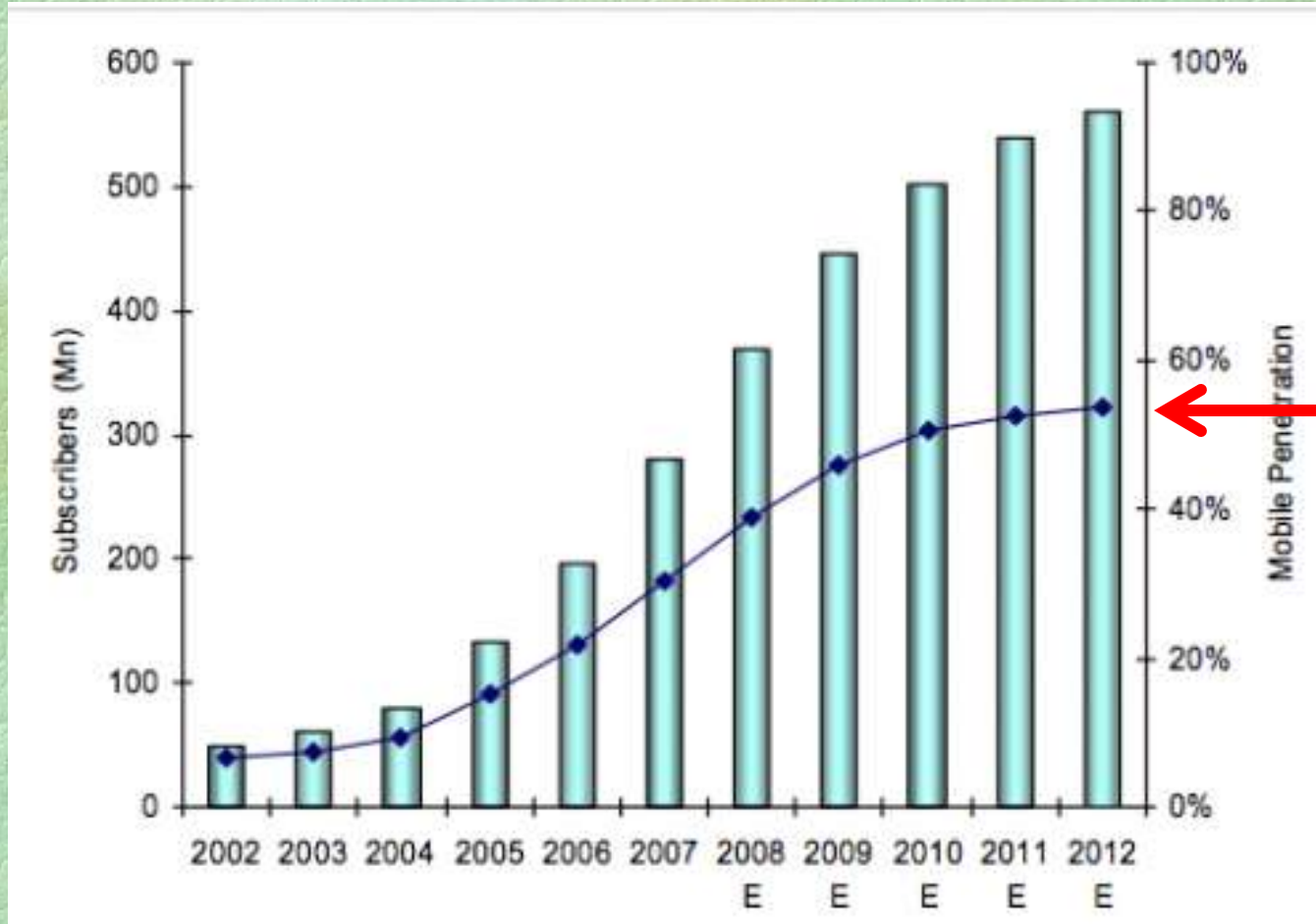
1557

**500-year
floods
really
happen!!**



Growing potatoes in the Andes.

Using new technology.



Mobile Phone Penetration in Africa

Acqua Alta

High Water in Venice



Piazza San Marco



Acqua Alta



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VENICE ACQUA ALTA SMS WARNING SERVICE

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Ads by Google

The city of Venice offers a **free SMS warning service** for everyone who wants to be notified when acqua alta (high water) is upcoming. This service is not reserved to Venetians only but is available also for people (Italians or not) who need to be informed about tide forecast.

For example, if you are in Venice on vacation you can plan your visit in a better way if you know that there will be acqua alta.

- » The service notify you by SMS every time a tide level of 110 cm or higher is forecasted
- » Subscriptions to this service expire 30th june every year

- » Home
- » Transports
- » Accommodation
- » Food & drink
- » Museums
- » Shopping
- » Events
- » Webcams
- » Photos
- » Video
- » Maps
- » **High W. (Acqua Alta)**

Description
Forecast

SMS Alert



Flooding in Montpelier, Vermont



Google groups

Montpelier Alerts

Flood Warning for Washington County

Options

★ 1 message - [Collapse all](#)

Eric Scharnberg [View profile](#)

[More options](#) Mar 23, 12:20 pm

To all Montpelier Residents:

The National Weather Service has issued a flood warning for this area until 3:30 pm today.

Montpelier officials have observed that rivers are high and are on alert. Property owners should take note of potential basement flooding.

The link to the Montpelier river gauges and more information can be found on the City's website at

<http://www.montpelier-vt.org/page/399.html>

Montpelier Flood Alert

Flooding in Bangladesh

Disaster-prone Bangladesh trials cell phone alerts

 Recommend

 Be the first of your friends to recommend this.

NEW DELHI | Wed Jun 24, 2009 11:50am IST

(Reuters) - Tens of thousands of mobile users in Bangladesh's flood and cyclone-prone areas will now receive advance warning of an impending natural disaster through an alert on their cell phones, a government official says.

Bangladesh -- one of the world's most densely populated countries -- is highly vulnerable to natural disasters, including cyclones, storm surges, droughts, floods and earthquakes, which often affect millions of people.

In a bid to minimise loss of life and damage to property, Bangladeshi authorities have signed an agreement with two mobile operators in the country to provide disaster early warning alerts to subscribers.

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Bangladesh trial alert system

Planting Rice in Nepal



Rice planting in Nepal



Onset of the Summer Monsoon



Flooding in Buenos Aires, Argentina



Buenos Aires flood



Flooding on the Mississippi River

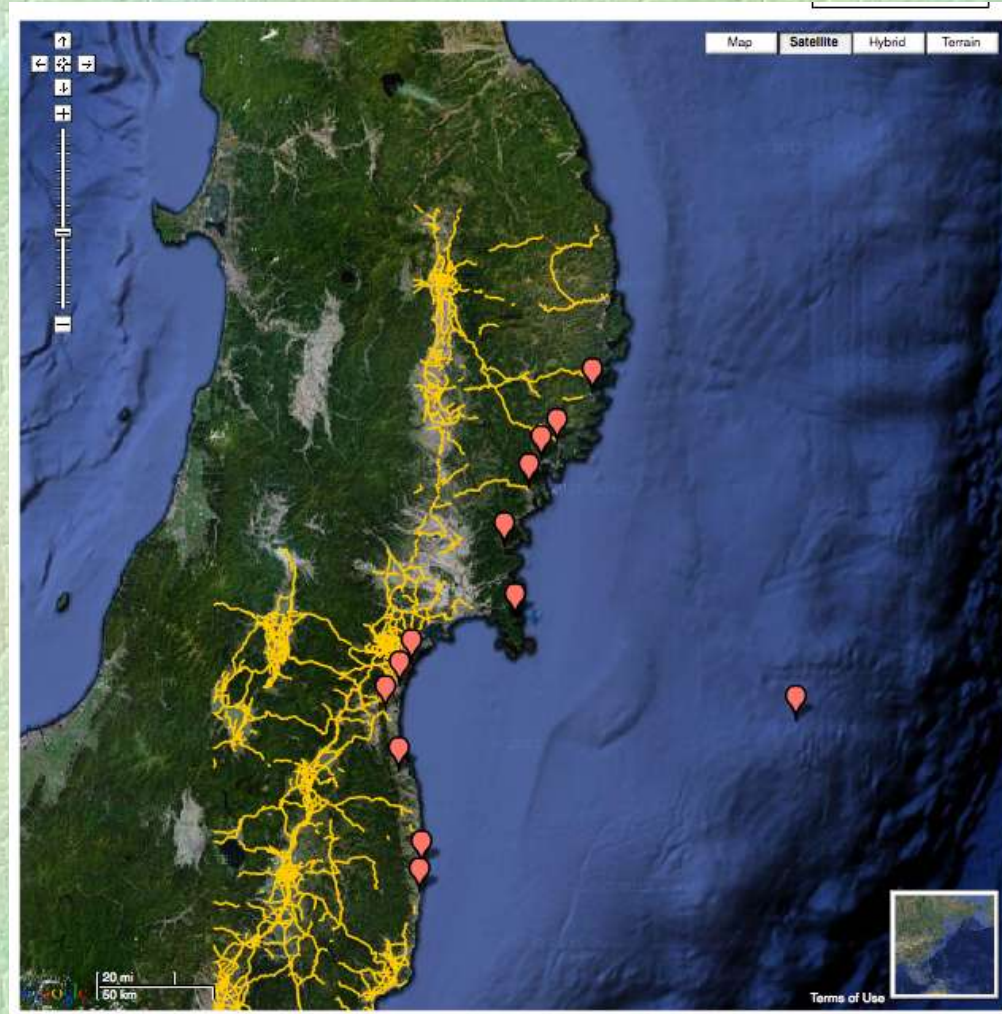


Levee breach



Citizen patrols ???

Honda – Call home



Honda GPS tracks: Open roads



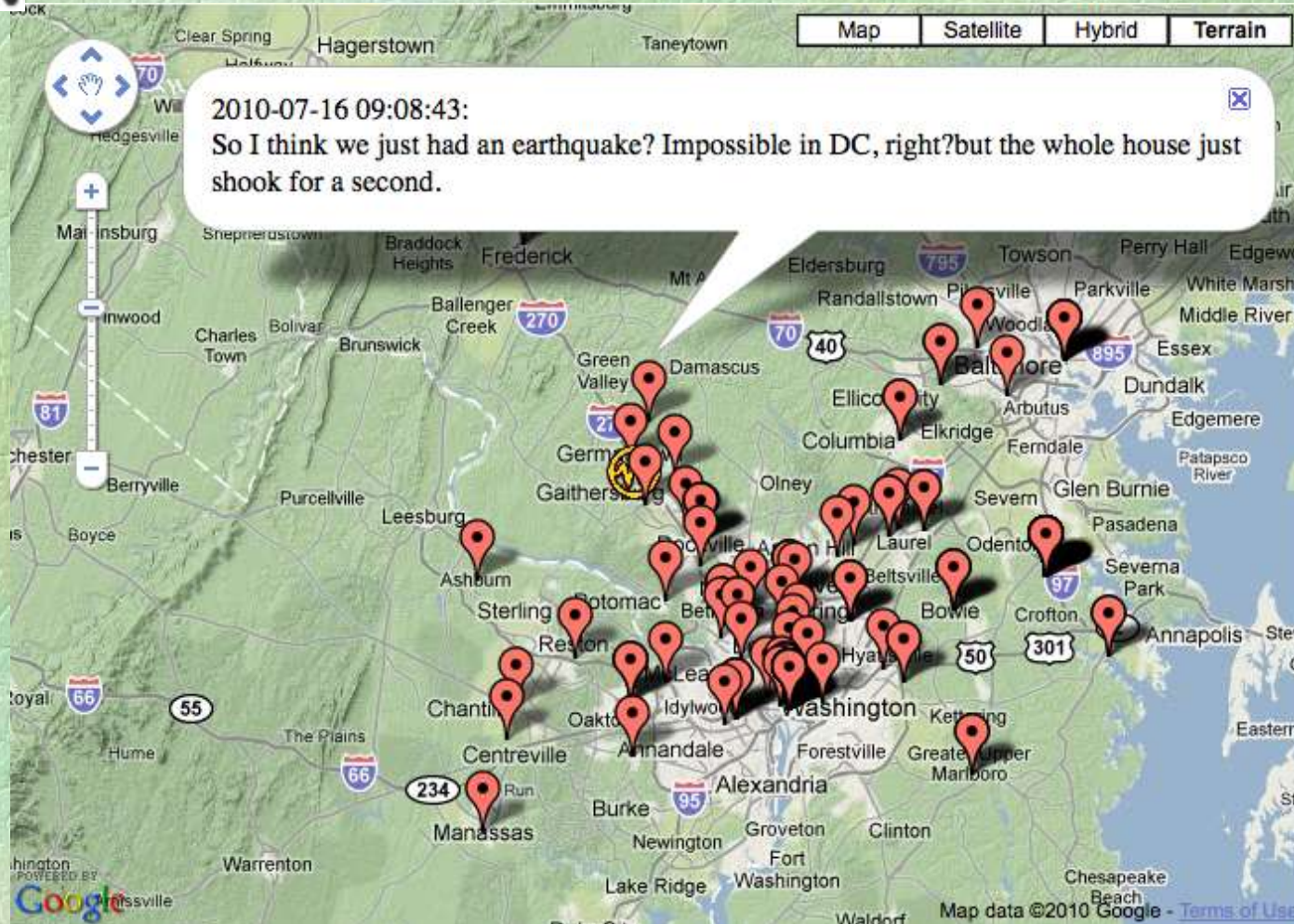
Social Media





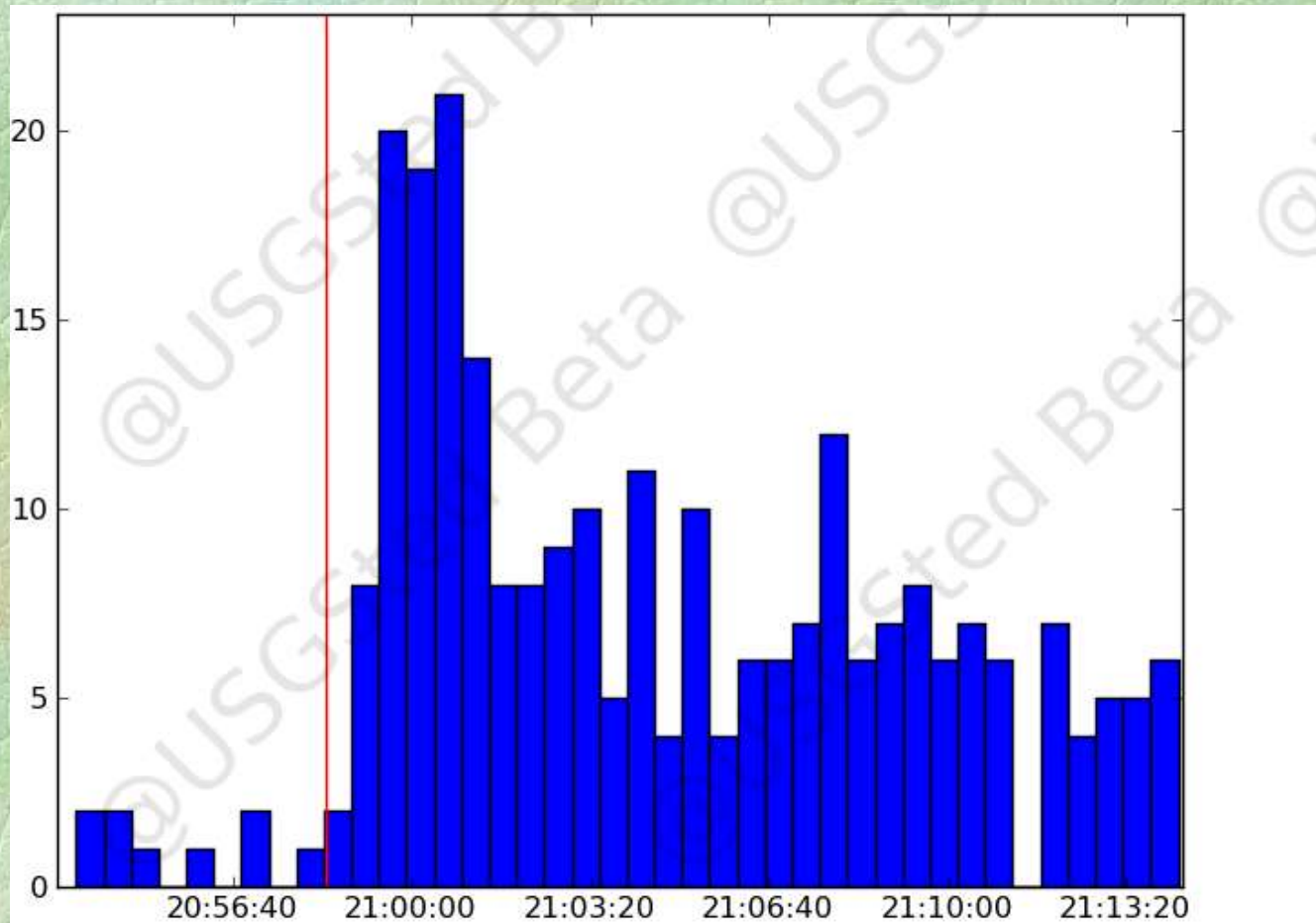
United States Geological Survey

Twitter Earthquake Project



Tweets after the Washington, D.C. Earthquake

Tweet Counts



Time

Twitter calls after D.C. earthquake



CrisisCamp Haiti

Crisis Commons

Random Hacks of Kindness



Geo-Eye Imagery

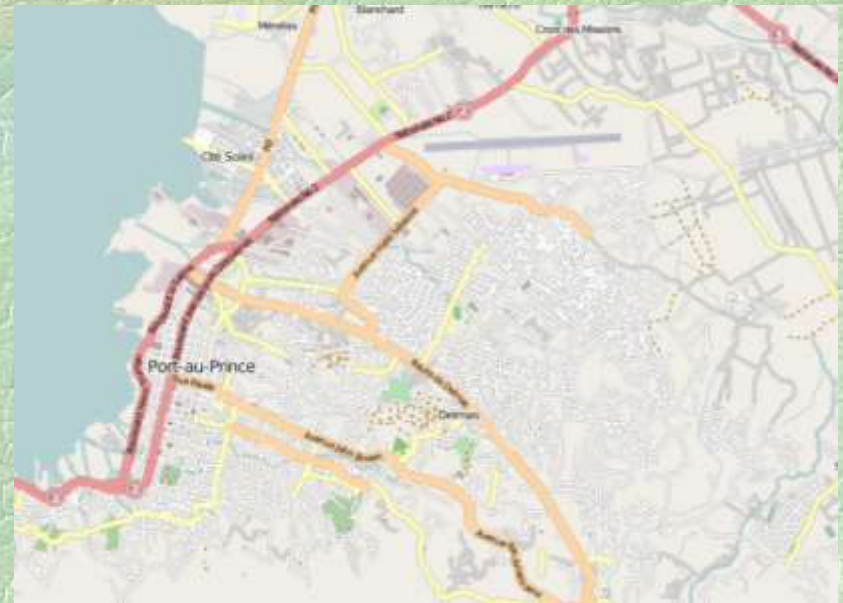


Geo-Eye image of Port au Prince

Need for a good base map



Available



Actual



Tweak The Tweet



TWEET-BEFORE: Mirna Nazaire lives in P-A-P at Bizoton 6#12. Entire neighborhood without food. People are dying.

TWEET-AFTER: #haiti #need food #name Mirna Nazaire lives in #loc PAP at Bizoton 6 #12 #info neighborhood w/o food. People dying



Person Finder

Person Finder: 2011 Japan Earthquake

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What is your situation?

[I'm looking for someone](#)

[I have information about someone](#)

Currently tracking about 2200 records.

Short URL : <http://goo.gl/sagas> (Mobile OK)
[Additional Partners](#)
[Other Resources](#)

PLEASE NOTE: All data entered by you will become publicly available, and viewable and usable by anyone. Data in the Person Finder includes data entered by users and data entered based upon publicly available information and certain other sources. Google does not review or verify the accuracy of the data.

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Google Person Finder

Person Finder: 2011 Japan Earthquake

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I'm looking for someone

Enter the person's name or parts of the name.

Query Samples

- 日本 太郎 ... Search by the full name
- にっぽん たろう ... Search by the hiragana reading
- Nippon Taro ... Search Japanese names by romaji

Search for this person

Person Finder: 2011 Japan Earthquake

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I have information about someone

Enter the person's given and family names.

Family name:

Given name:

Provide information about this person

Google Person Finder

**We don't yet know what the limits
of the new technology might be...**

...but we need to find out.

One final thought....



“No one ever wants to think about the Spanish Inquisition”

But they would be happy to think about

Sangria

Tapas

Paella

Flamenco

Velazquez

Cervantes

and most other aspects of Spanish culture.

**People will only begin to think about
the unthinkable if they see other
benefits in doing so.**

Wrong way to begin the conversation:

“You need to think about this because otherwise we are all going to die.”

Better way to begin the conversation:

“You need to think about this because addressing this problem will bring the following benefits to your citizens.”



Siyabonga

Dankie

Thank you