

# Web and Broadcasting in The Time of Disaster: Lessons, Studies, and Future Actions

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# Agenda

- In a Nuts Shell
- The Triple Disaster
- Events So Far
  - Great East Japan Earthquake Big Data Workshop - Project 3 | I
  - Symposium on Web and TV 2012
  - Big Tent Sendai: The Role of Technology in Disaster Preparedness and Relief
  - Sendai Dialogue
- Topics
- Next Steps (with Quick Poll)

# In a Nuts Shell

- Disaster mitigation is a fundamental requirement for media.  
At least among Asian and African countries.
- However, huge disaster in a region affects all countries.  
Because economics of countries are tightly linked due to globalization.
- Standards are important.  
The importance of interop increases dramatically in the time of disaster.  
Standards can help saving people.
- Some combination of the Web and broadcasting can be a solution.
- Japan has captured use cases and issues through the triple disaster.
- I would like to clarify what we can do inside W3C and what we should do outside W3C on this topic.

# The Triple Disaster



<http://www.youtube.com/watch?v=BLLcNitr3cg&feature=related>

[http://www.youtube.com/watch?v=U\\_M86cxHZdw&feature=related](http://www.youtube.com/watch?v=U_M86cxHZdw&feature=related)

<http://www.youtube.com/watch?v=TwwTs28mM4E&feature=related>

# Developing News: NYC Airport (not Fisherman's Wharf)



Contribution from Mark Vickers

[Additional pictures on NYT.](#)

# My Take Aways from the Events Thus Far (One linears)

- Great East Japan Earthquake Big Data Workshop - Project 311  
→ SNS is a new good tool. But we need more linked data.
- Symposium on Web and TV 2012  
→ Broadcasting and the Web can compensate each other.
- Big Tent Sendai: The Role of Technology in Disaster Preparedness and Relief  
→ Standards are definitely important to collaborate each other in the time of disaster.
- Sendai Dialogue  
→ World Bank encourages every governments to spent more money for disaster preparedness and mitigation.

# Great East Japan Earthquake Big Data Workshop - Project 3 | 1

- Facts & Figures
  - Hosted and Led by Google Japan and Twitter Japan
  - @Online
  - > 300 participants
  - Sept 12 - Oct 28, 2012
  - Partners :
    - The Asahi Shimbun Company
    - JCC Corp.
    - ZENRIN DataCom CO., LTD.
    - Japan Broadcasting Corporation (NHK)
    - Honda Motor Co., Ltd.
    - Rescuenow Inc.

# Great East Japan Earthquake Big Data Workshop - Project 311

- Discussions
  - For the "The Great East Japan Earthquake Big Data Workshop: Project 311," participants will be provided data that was produced during the week following the earthquake. They will reexamine this data, discuss what can be done to prepare for future disasters, and apply it to service brainstorming

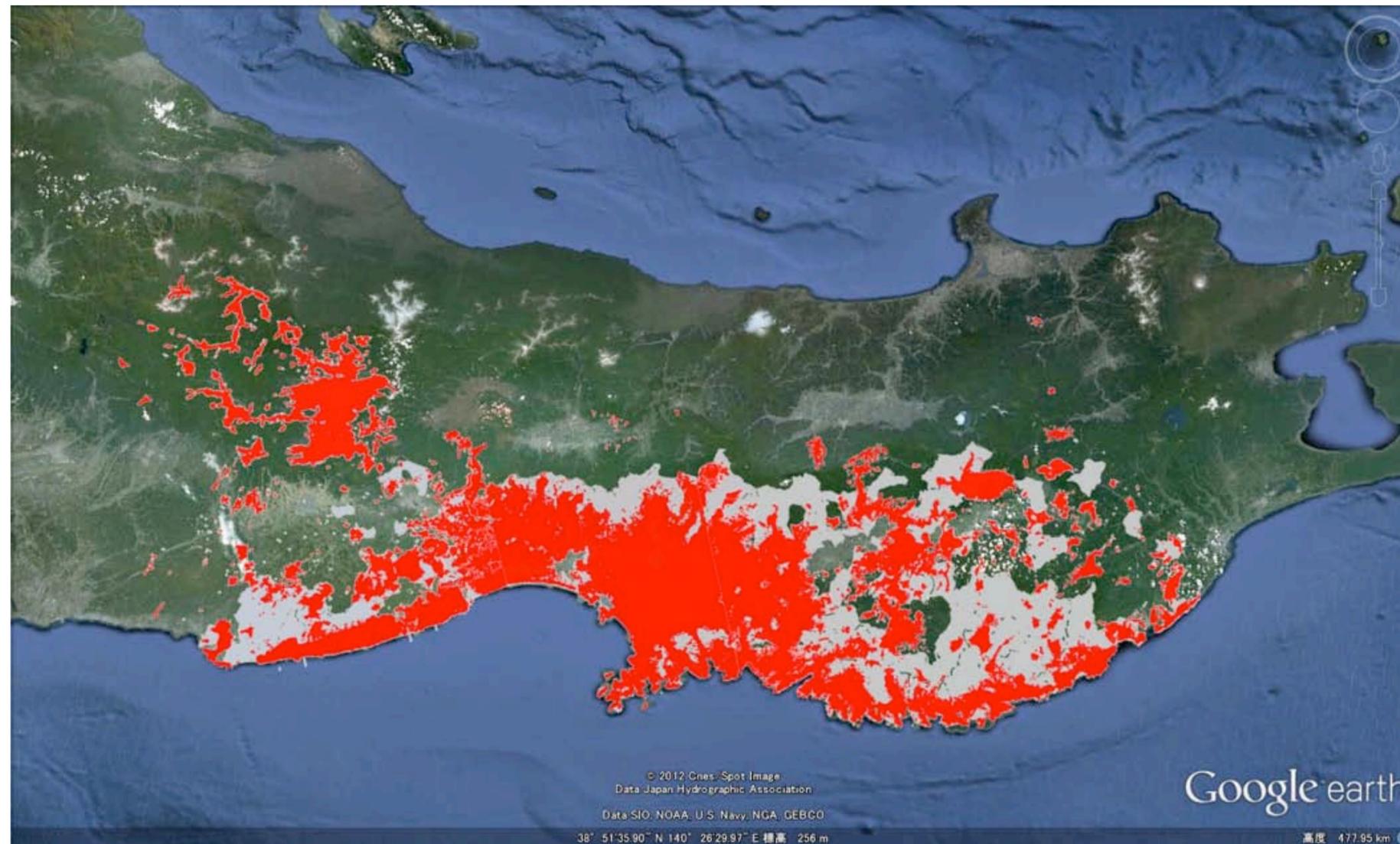
# Great East Japan Earthquake Big Data Workshop - Project 3 | 1

- **Shared Big Data**

- Asahi Shimbun newspaper articles from the week after March 11 (source: The Asahi Shimbun Company)
- Google Insights for Search (source: Google Japan Inc.)
- Text summary of television broadcasts made just after the Great East Japan Earthquake (source: JCC Corp.)
- Tweets from the week after March 11 (source: Twitter Japan K.K.)
- Transcripts of the audio broadcasted by NHK-G in the 24 hours following the disaster and a ranking of frequently used words (source: Japan Broadcasting Corporation)
- Honda Internavi traveled roads data (source: Honda Motor Company, Ltd.)
- Rescuenow's railroad operation information and various disaster-related information (source: Rescuenow. Inc.)
- Traffic congestion statistics (source: ZENRIN DataCom Co., Ltd.)
- ...etc

# Great East Japan Earthquake Big Data Workshop - Project 3 | I

- Takeaways
  - Shows the area where telephone services (including mobile phones) were interrupted as a result of the triple disaster

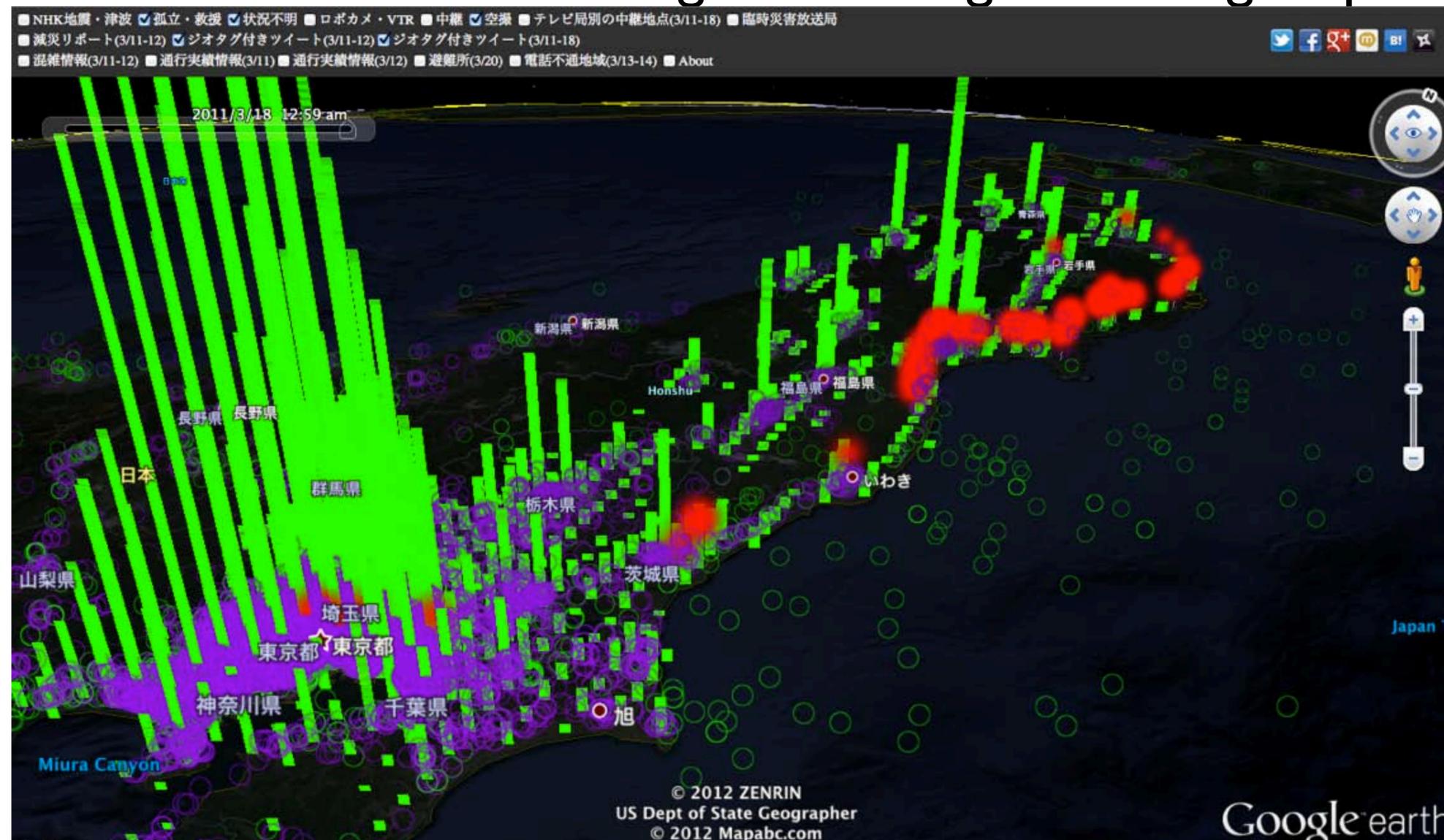


☐ Phones

☐ Mobile

# Great East Japan Earthquake Big Data Workshop - Project 3 | I

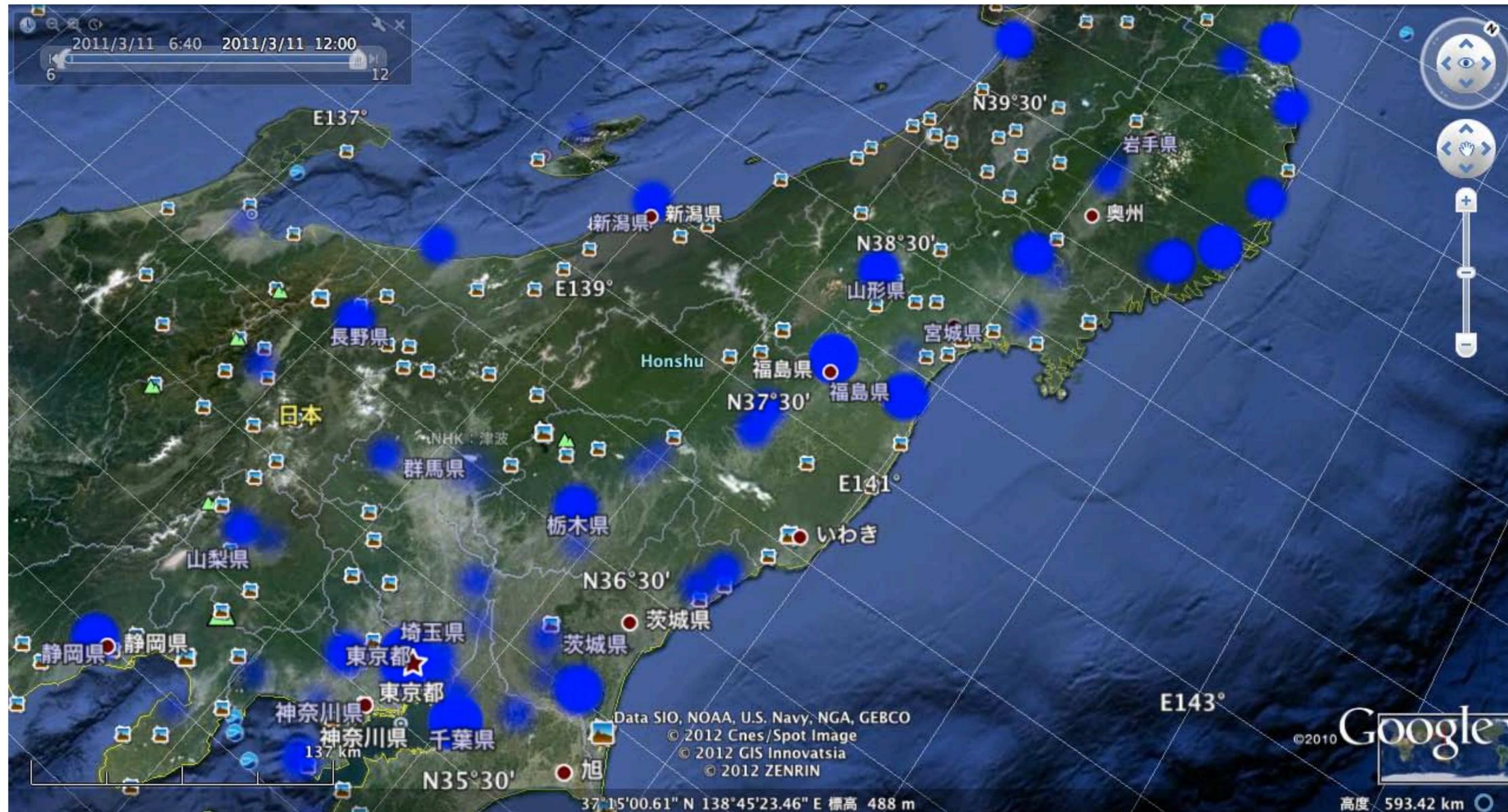
- Takeaways
  - Shows the amount of tweets with geolocation codes 3/11 to 3/18. Red blurry circles show the tweets containing the message of asking help.





# Great East Japan Earthquake Big Data Workshop - Project 3 | I

- Takeaways
  - Shows the place where single broadcaster had provided some information.



# Symposium on Web and TV 2012

- Facts
  - Organized by IPTVF-Japan with W3C and MIC Japan
  - @Fuji Television, Japan
  - > 300 participants
  -

# Symposium on Web and TV 2012

- Discussions
  - Issue Gathering and Analysis
    - General issues
    - Infrastructure
    - Habits/Culture
    - Alternative devices and media
    - Bandwidth
    - Gathering information

# Symposium on Web and TV 2012

- Discussions
  - Relationship with W3C activities
    - Issue 1: New responsibilities or social roles of the Web, Web Standards, W3C or other SDO such as IPTV Forum Japan
    - Issue 2: Control and reduce the traffic of applications dynamically
    - Issue 3: Prioritizing Web services under severe natural disasters
    - Issue 4: Identity and rescue
    - Issue 5: How to gather and link emergency information
    - Issue 6: Smarter combination of mass communication and viral communication through SNS and TV

# Big Tent Sendai: The Role of Technology in Disaster Preparedness and Relief

- Facts
  - Organized by Google and United Nations
  - > 200 participants
  - July 2, 2012
  - @Westin Sendai
  - Partners : adpc, The Asia Foundations, NetHope, World Vision, OCHA, Change Fusion, iSPP

# Big Tent Sendai: The Role of Technology in Disaster Preparedness and Relief

- Discussions
  - Communicating with disaster-affected communities
  - Citizen mapping: impact of crowdsourced contributions on local population
  - From the web to the real world: coordinating logistics of relief and recovery
  - Managing the crowd: benefits and challenges of social media in a disaster
  - The next generation of emergency alerting: using every day technologies to communicate effectively
  - Making use of an archive of disaster data
  - Building Internet networks for resilience
  - How government data can save lives: open data and instant information sharing
  - Working together and moving forward

# Sendai Dialogue

- Facts
  - Organized by World Bank
  - > 200 participants from > 60 countries
  - Oct 19-20th, 2012
  - @Westin Sendai

# Sendai Dialogue

- Discussions
  - Responding to the Challenge of Disaster Risk
  - Mainstreaming Disaster Risk Management in Development Planning
  - Building Resilience by Mainstreaming Disaster Risk Management in International Assistance
  - Disaster Risk Management in a Changing World

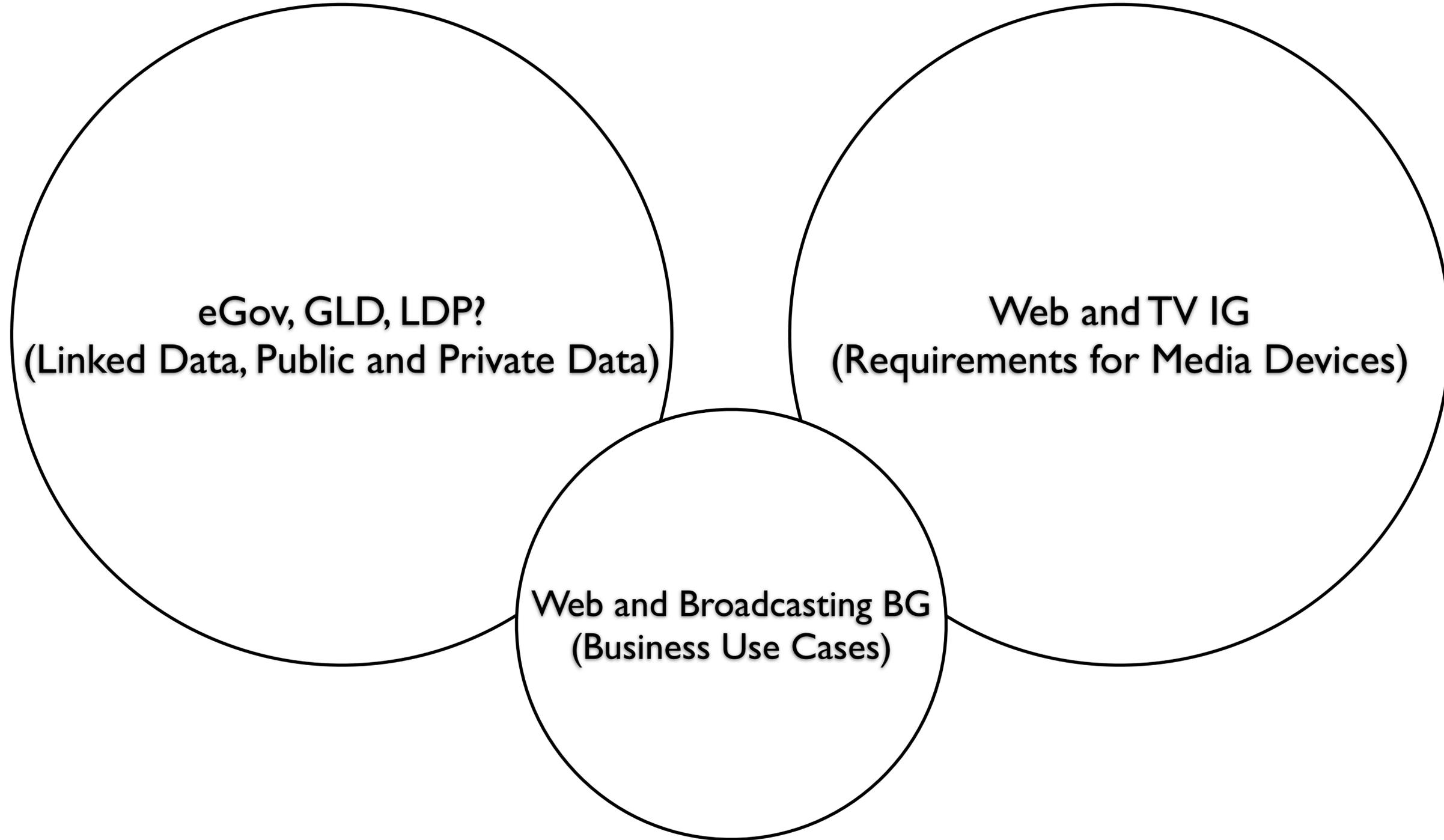
# In a Nuts Shell (again)

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Because economics of countries are tightly linked due to globalization.
- Standards are important.  
The importance of interop increases dramatically in the time of disaster.  
Standards can help saving people.
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# Topics

- What kind of existing and new web standards will help?
- Esp. Can Semantic Web / Linked Open Data help?

# A Possible Scenario?



# Next Steps with Quick Poll

- Continue the discussion in Web and Broadcasting BG?  
→ support: 12
- Continue the discussion in Web and TV IG?  
→ support: 8
- Continue the discussion in other CG/IG/WG?  
→ support: 7
- Continue the discussion in New dedicated CG to gather disaster information experts?  
→ support: 11
- Continue the discussion in other SDOs? (Any suggestion about relevant SDOs?)  
→ support: 0