

# GIS and Social Media @ Interior

Katelyn Sabochik

Director of New Media  
U.S. Department of the Interior  
February 19, 2010

Manage 1/5 of the Country's landmass and 1.7 billion acres of the Outer Continental Shelf

National Parks, Wildlife Refuges, Multiple Use Lands (BLM), Indian Reservations, Dams and Reservoirs

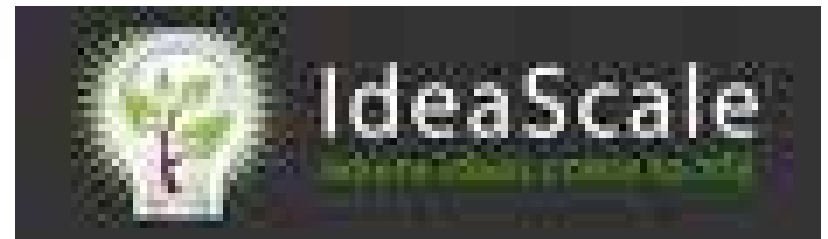
Conservation, Energy Production and Transmission, Wildlife Protection, Recreation, Science, Water Resources





facebook

twitter



flickr

Phenology is the study of recurring plant and animal life cycle stages, or phenophases, such as leafing and flowering of plants, maturation of agricultural crops, emergence of insects, and migration of birds. (Source: USANPN)

Many events sensitive to climatic variation and change

Phenological observations help identify and understand environmental trends associated with climate change

Longstanding network of citizen observers here and abroad

<http://www.usanpn.org/>

Citizen science is a term used for projects or ongoing program of science work in which individual volunteers or networks of volunteers, many of whom may have no specific scientific training, perform or manage research-related tasks such as observation, measurement or computation. (Source: Wikipedia)

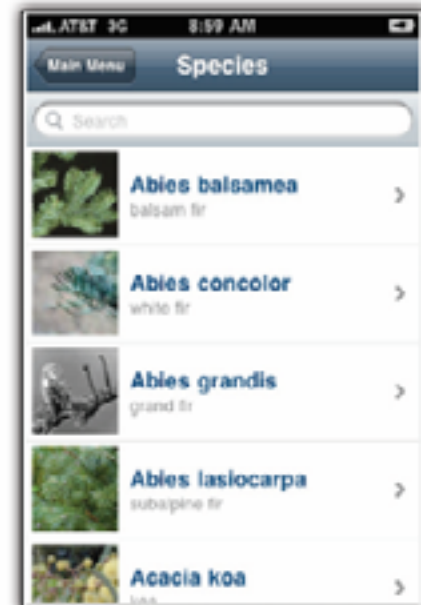
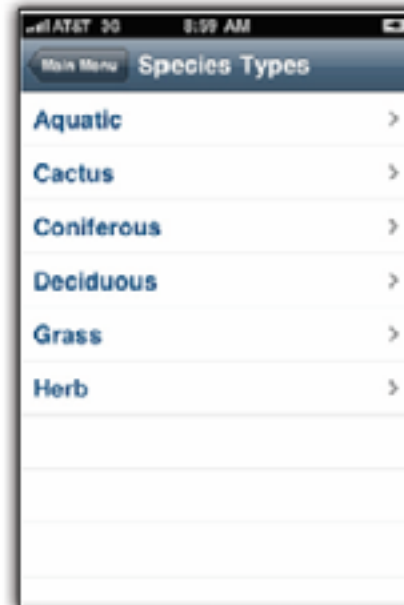
Many citizen science projects involve the observation and reporting of natural phenomena such as animal or plant occurrences, weather conditions, and earthquakes

predates the Web (e.g., the Audubon Christmas Bird Count started in 1896). Social media tools used increasingly to facilitate data collection and sharing

allows observers to remotely collect data, including identity, location, and images of taxa of interest

Observations are uploaded to the University of Chicago and the USAN

Images are sent to Flickr for storage and later use



# USGS Earthquake Data Goes Social

USGS Earthquake Hazards Program has responsibility for recording and reporting earthquake activity worldwide

Seismographs monitor, record, and transmit data about quakes as they occur

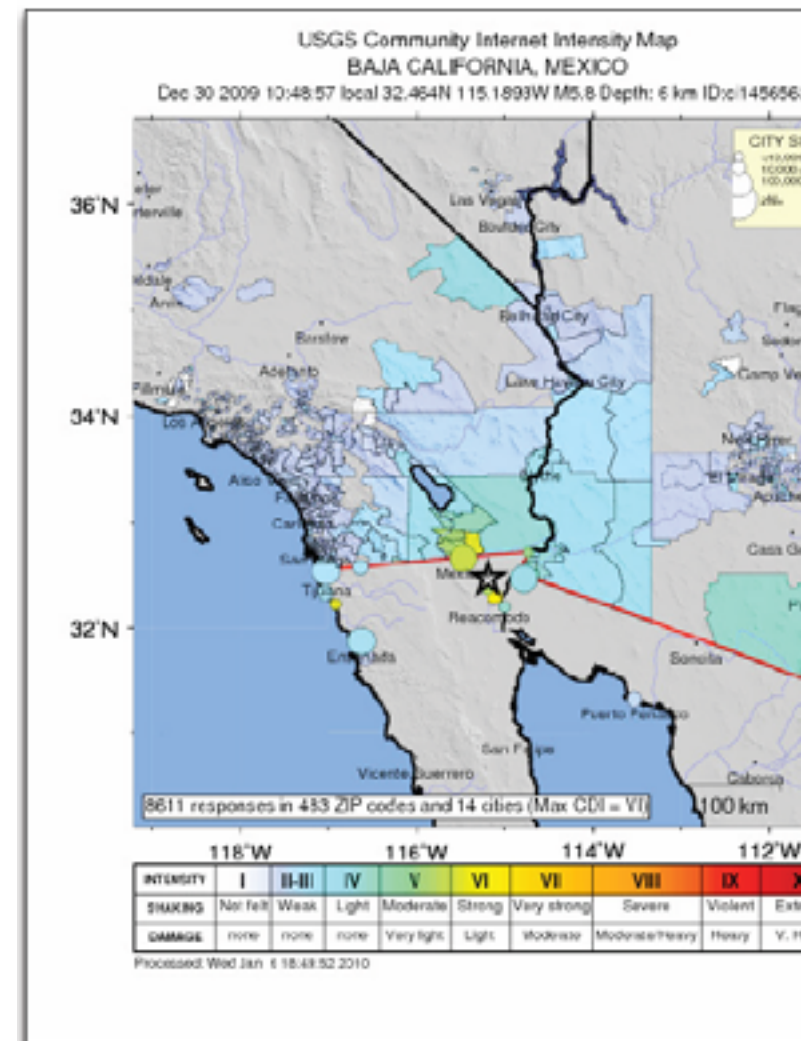
Reviewed data are made available through onsite and third-party channels using various traditional and social media tools including:

- Newsfeeds
- Twitter
- Maps (including Google Earth and Google Maps-based mashups)
- Gadgets and other Web Apps

The public are encouraged to report what they felt during an earthquake through a series of web forms

Observations are combined with other sensor-derived data and plotted on maps showing number of citizen responses, location, estimated intensity, and more

<http://earthquake.usgs.gov/earthquakes/dyfi/>





# Extend the Reach of “Did You Feel It”

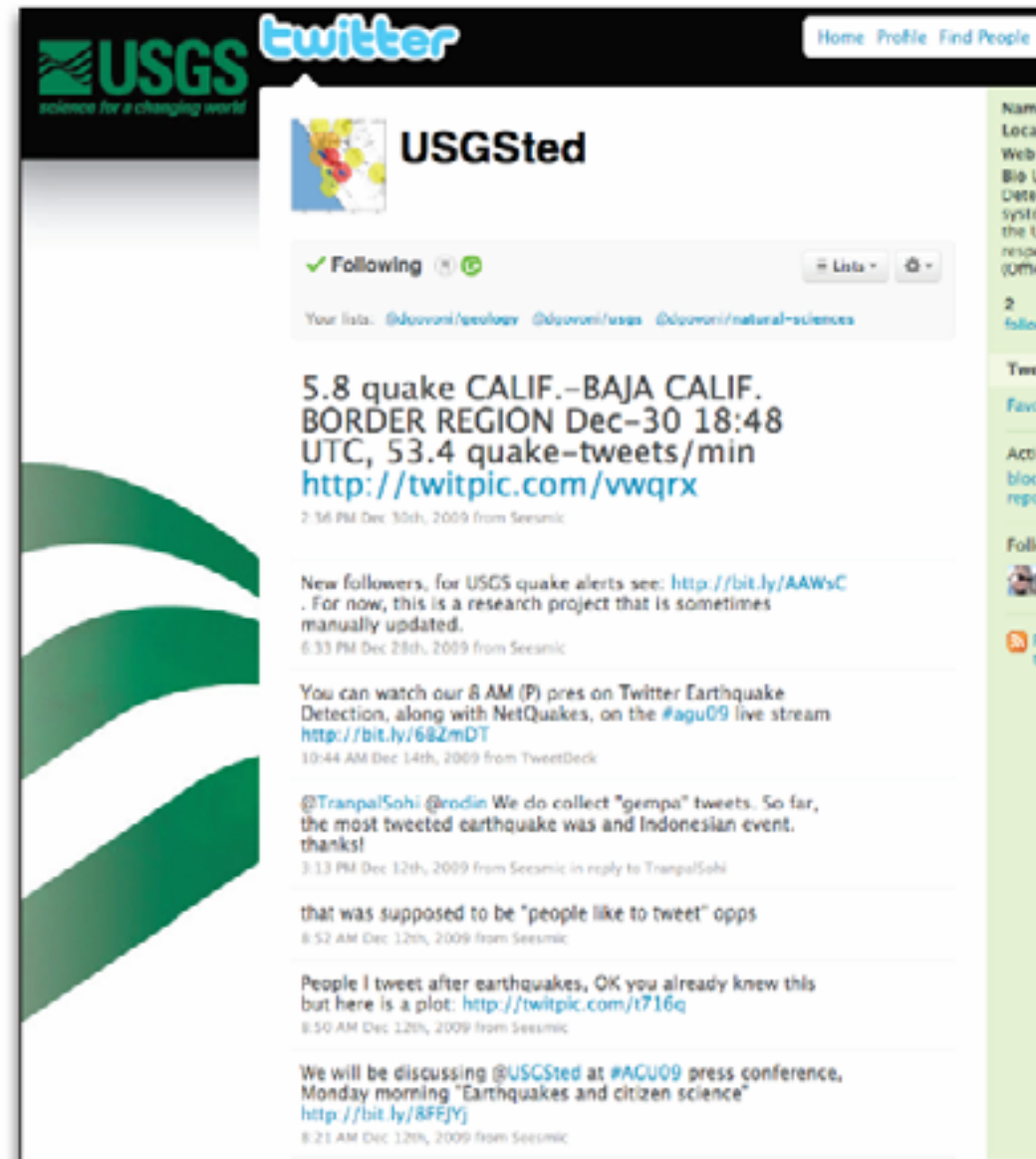
USGSted: Prototype to facilitate  
quake reporting and tracking

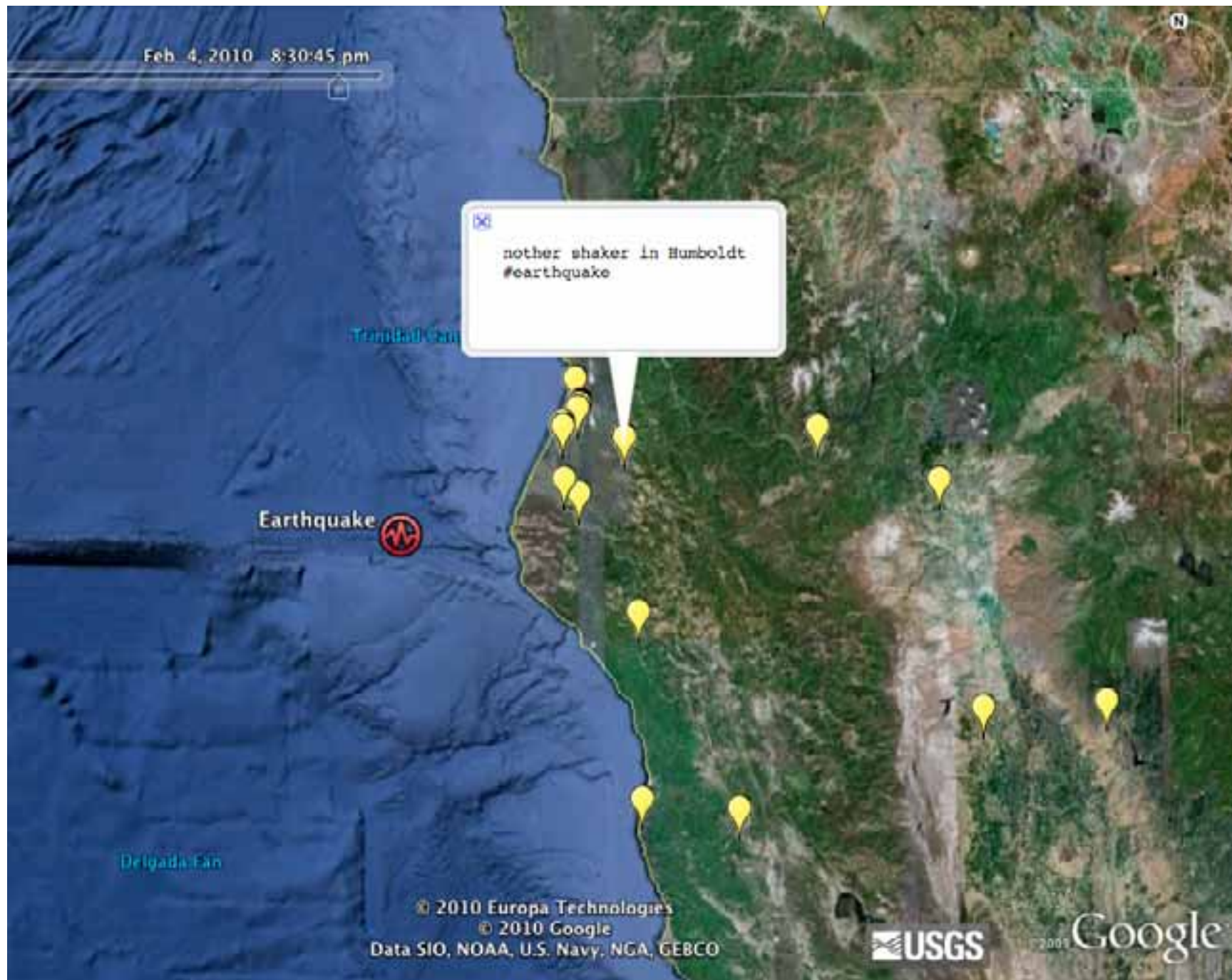
Twitter-based

allows users tweets to be  
tracked and analyzed

Planned iPhone App will allow  
user to record their experience  
and view mashups of others'  
responses

<http://twitter.com/USGSted>





"Mappity Quakes" iPhone App

Third-party re-use of USGS  
data






























"Real-time" data and  
information feeds harvested  
from Earthquake Hazards  
Program

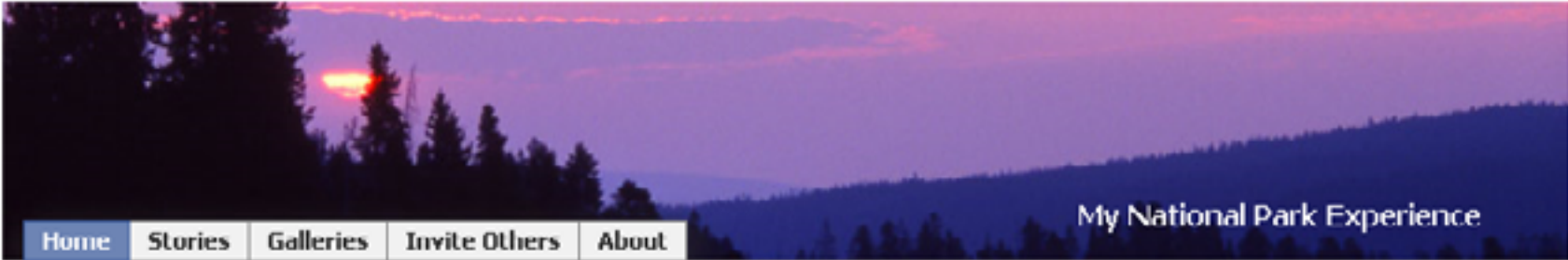
Earthquakes in the last 24  
hours worldwide

OpenStreetMap based view  
and links back to supplemental  
USGS information





**facebook**                             



[Home](#) [Stories](#) [Galleries](#) [Invite Others](#) [About](#)

## My National Park Experience

### Your National Parks


Hello [Katelyn Sabochik](#)! Welcome to the National Park Experience application. You may use this application to share and view stories, experiences and galleries related to your experience our our nations wonderful National Park system.

You have visited 1 park. [\[+\] Add A Story](#) [\[+\] Add A Gallery](#)




### Recent Stories

**Gary Bremen on Biscayne National Park** [Share](#)

Visited: 6-25-1972 | Submitted: 03-09-2009



“ When I was a little boy growing up in South Florida, I spent a lot of time at the Miami Yacht Club on Watson Island. While my dad and brothers were out winning sailing championships, I stayed back ... [Read More](#)


   +4

[Comment](#)

[Read more Biscayne National Park stories](#)  
[Read more of Gary's stories](#)

**Andy Reid on Glen Echo Park** [Share](#)

Submitted: 03-02-2009



“ I love Glen Echo park. I've been going there since 1999 when I used to visit DC to go swing dancing. Every weekend, they have dancing there in their amazing Spanish Ballroom. Back then, the place ... [Read More](#)

### Search For A Park

To search for a park, you may start typing the park's name below.

[Go](#)

### Your Visited Parks

[Great Sand Dunes National Park & Preserve](#)

## Integrating GIS Visualizations of DOI Information

- Energy Production
- Climate Change Information

## Integrating GIS footprints into Web Content Management System

Requires geo-coding all new information (news articles, photos, videos, podcasts) and enables easier access to location-based content.

Making raw GIS data sets available for public use

# Future of GIS and Internet Social Media Research

## Crowd Sourcing and Public Participation

Trail Maintenance Cell Phone Apps

Geo-coding historical photos on Flickr Commons

Tracking bird and animal migration patterns