

# **SWF-DHS Workshop on Community Remote Sensing: Citizen Science and Social Networks**

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**20 September 2010**

- “A new field that combines remote sensing with citizen science, social networks, and crowd-sourcing to enhance the data obtained from traditional sources. It includes the collection, calibration, analysis, communication, or application of remotely sensed information by these community means.”\*

<http://www.igarss2010.org/CommunityRemoteSensing.asp>

- Mitigation, response, and recovery for natural disasters;
- Routine inputs over time (weather, climate, pollution observations, etc.);
- One-time ground truth to validate remotely sensed data; and
- Bottom-up efforts to influence policy at the local, regional, state, federal and even international levels.

# Questions to Consider

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- What are the data collection, sharing, and storage implications?
- How does one verify information quality, integrity, and accuracy?
- What are the implications for long-term data storage, data format, and retrieval?
- What are the national and international political implications?
- What are the national and international legal implications?
- What are the national and international policy implications?
- What are the national and international administrative/governance implications?
- What are the connections between CRS and other crowdsourcing techniques, such as Open Street Map, Google MapMaker, Wikimapia

# Questions to Consider (2)

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- What are the software and hardware development directions for CRS?
- How does one use crowdsourcing for data analytics?
- How do you attract participants (e.g. volunteers)? What can we learn from allied technical communities for CRS (gaming and others)?
- What metadata are needed?
- What standards are needed?
- What are the data for which citizen input would be most useful?

# Questions to Consider (2)

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- How should the role of training be structured for CRS?
- How can consistency be improved (in citizen mode as well as first responders)?
- How do we best evaluate these processes?
- What are the legal frameworks that support and detract this from this work?
- What is the appropriate interface between social networking technologies and spatial databases?
- How can the agency retain authority?

# Questions to Consider (2)

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- How do we deal with data dissemination?
- What do we want from CRS techniques? What are our goals?
- What are the best methods for ensuring adoption by response agencies?
- How do we ensure sustainability? How do you continue to evolve (Scott's closing remark)
- What are the communities of potential engagement for development and use of CRS?

Secure World Foundation (SWF) is a private operating foundation dedicated to the secure and sustainable use of space for the benefit of Earth and all its peoples.



# What does the Foundation do?

*Promoting Cooperative Solutions for Space Security*

- **Engages** with academics, policy makers, scientists and advocates in the space and international affairs communities to support steps that strengthen global space sustainability.
- **Promotes** the development of cooperative and effective uses of space for the protection of Earth's environment and human security.
- **Acts** as a research body, convener and facilitator to advocate for key space security and other space related topics and to examine their influence on governance and international development.

- **Space sustainability**
  - Protection of continued utility of space resources
- **Policy development in Emerging Space States**
- **Human & environmental security**
  - Development and disaster assistance
  - Environmental change
- **Planetary threats**
  - Mitigating the threat of collision from a Near-Earth Object (NEO) through the establishment of effective international governance for response

**THANK YOU!**

**QUESTIONS?**