Disaster Cluster: Long term sustainability [1]

Submitted by elawsesip on Fri, 2014-02-28 14:05 Thursday, July 10, 2014 - 16:00 to 17:30 Event: Summer Meeting 2014 [2] Session Type: Breakout [3] Collaboration Area: Air Quality [4] Decisions [5] Discovery [6] Energy and Climate [7] Information Technology and Interoperability [8] Visualization [9] Abstract/Agonda:

Abstract/Agenda:

Long term sustainability is crucial to capabilities supporting and enabling disaster lifecycle activities. The overarching objective of the ESIP Disaster Cluster is to facilitate connections and coordinate efforts among data providers, managers and developers of disaster response systems and tools, and end-user communities within ESIP. This session will include report of the working group's activities, presentations that highlight use cases and Disasters & Risk Management (DRM) information architecture, as well as planning for future activities.

Since the January ESIP meeting, the Disasters Cluster has discussed elements of a disasters 'information architecture', especially at the joint ESIP/CEOS WGISS session in April. These topics support the goal of identifying and infusing new Earth observation capabilities (products and services) into end user disaster management systems. This session will look at existing efforts addressing disasters information that we might leverage in discussing and determining the cluster's action plan.

Agenda

Thomas Huang – SWEET and extensions into domains, such as Disasters (15 min) Tyler Stevens – GCMD concept for controlled vocabularies, as related to Disasters (10 min) Matt Austin – NODC efforts on categorizing oceanographic terms (10 min) Dave Jones – ideas for improving interoperability for disasters management (15 min)

All – Discuss action plan for Disasters cluster work and contribution to ESIP as a community (40 min)

What ESIP products do we propose that the cluster address? Can we leverage other ESIP products/activities?

Notes:

Thomas Huang

SWEET 200000 hits per month

SWEET as an Upper Level Ontology

SWEET Instances for Impacts and Relations

-keeps track of definitions and concepts related to disasters

-high level model for flood

-volcanic eruptions

-etc.

Go beyond start searches - sample knowledge base system using SWEET

OSCAR - Ontological system for context artifacts and resources

-system is self growing

- -multifaceted approach to data
- -An iterative process
- -Sources of information

System loads ontology automatically from SWEET

(google knowledge graph)

Explanation of OSCAR in action..

Tie data together via inference and ontology.

Best practices: Keep ontology small, get experts involved

New website is being developed

SWEET 2.4 in the works

sweet.jpl.nasa.gov

THomas Stephens

Global Change Master Directory

up to a 5 level hierarchy

some of the keywords for disasters, within natural hazards

review of the governance process

once accepted, keywords are added during the release cycle

gcmd.gsfc.nasa.gov

Matt Austin

TPIO Technology planning and information for observations

NOAA Observing system integrated analysis value tree explorer

2000 data sources, over 800 products, 72 sites, all using different terms. Had

to reconcile these and link them

17000 nodes

How do I assign the proper ontology?

OSTP is doing the same thing

Created using d3, javascript library. Lots of visualizations that you can do.

Dave Jones

StormCenter Communications inc.

SBIR contract, new, unique idea.

Shares geospatial information into existing system.

Delivered a mapping environment to NWS that can be linked to MEMA's system

In terms of ESIP, this is a vehicle to deliver our data to end users

Can collaborate remotely, and unite disparate COPs

www.stormcenter.com/geo_collab.html [11]

Systems uses all OGC compliant data, kml is good way to share

Impact Based Decision Support Services

Sara Graves

University of Alabama

ED3 Plan Database

Event driven data delivery is a cyber framework to facilitate decision support

What are the event triggers.

Data albums, social media, and other things all feed into this system

System offers a lot of different types of information, summary analytics, summary analytics, and more.

Karen Moe

Possible activities

Trying to get together use cases.

Proposal

Need terminology, classification, relationship

Develop a process to capture end user needs

-describe use cases

-interview/survey to identify information, systems in use

-capture information content

--vocabulary, glossary, unstructured and structured information

--relationships/semantics

Share in ESIP wiki

-possible use USGIN Information Exchange spreadsheet or other consistent format

-Examine information for patterns

Wish list for disaster products..(long)

What is the goal? Let's decide on the next telecom.

Some members that landslide and drought data that is on the wish list.

Need to put disaster wish list on the wiki and get feedback from membership.

Session Leads:

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Notes takers:

Name: <u>Kevin Dobbs</u> [17] Organization(s): <u>University of Kansas</u> [18]

Creative Common License: Creative Commons Attribution 3.0 License **Teaser:** Long term sustainability is crucial to capabilities supporting and enabling disaster lifecycle activities.

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