OpenStreetMap

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What is OpenStreetMap?

- OpenStreetMap is often called the Wikipedia of maps.
- At its core, OpenStreetMap is grassroots mapping.
  - Regular citizens working together to create the greatest free map of the world.
- OpenStreetMap offers <u>free data</u> under the Open Data Commons Open Database License.

Licensure for data that means...

You are free:

- *To Share*
- *To Create*
- *To Adapt*

As long as you:

- *Attribute*
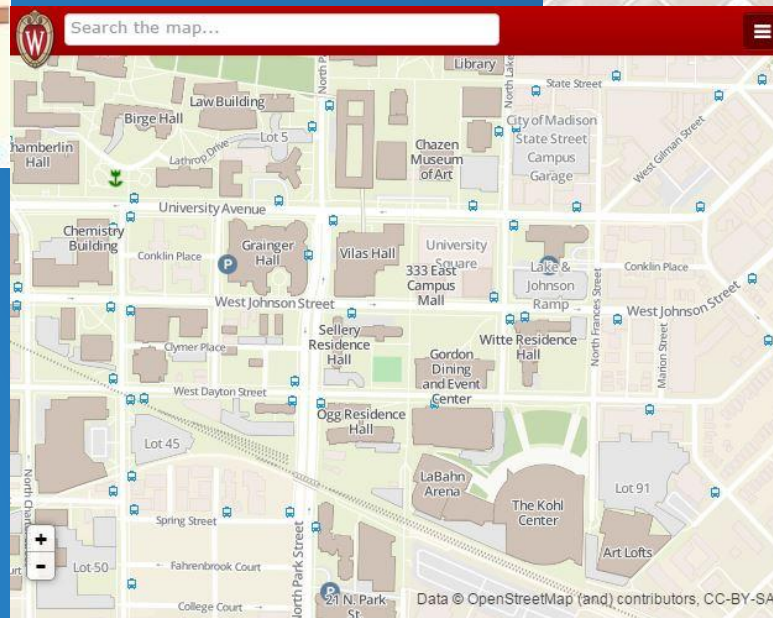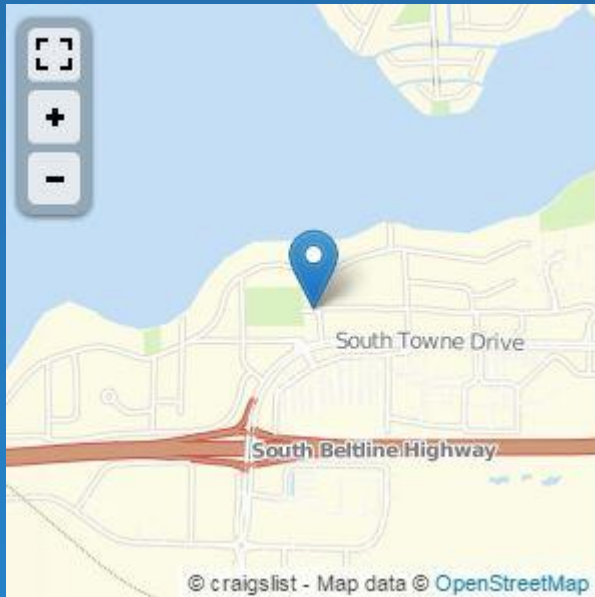- *Share-Alike*
- *Keep open*

Why Contribute to OSM?

- Who knows your neighborhood better than you? Or your commute route? Or your favorite bike path? Or your local coffee shop?
- OpenStreetMap allows people like you to share *local knowledge* that makes the best map possible.
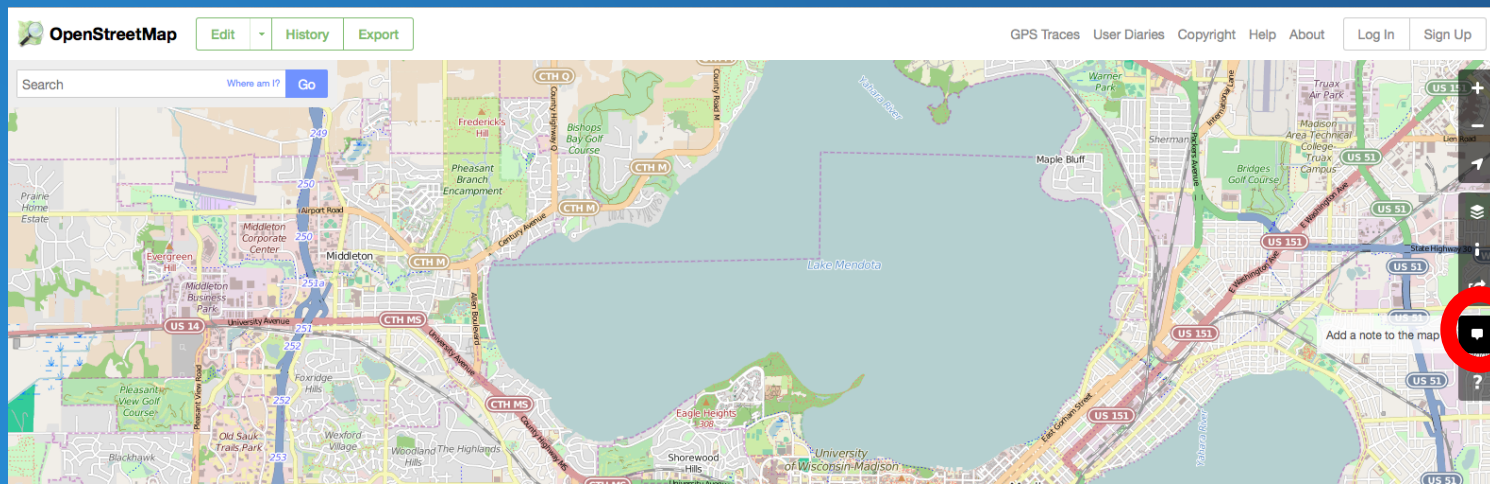
Who Uses OSM Data? Examples:

How to Contribute to OSM

- Go somewhere:
  - Take a GPS receiver and log your route.
  - Use Walking Papers or Field Papers and manually annotate features.
- Trace satellite imagery.
- Add a note on the OSM homepage.

Humanitarian OSM Team (HOT)

- HOT is an associated project of OSM.
- HOT provides maps for:
  - Disaster response
  - Disaster preparedness
  - Disaster risk reduction
  - Development
- Work is performed around the world by tracing, complemented with on-ground responders and natives.

Why Map for HOT?

- Mapping allows response coordinators to determine where to prioritize resources.

- Workers are provided with paper maps and offline data for smartphones and gps units to access locations and estimate population.

- Pre and post-damage assessments are completed from map data.
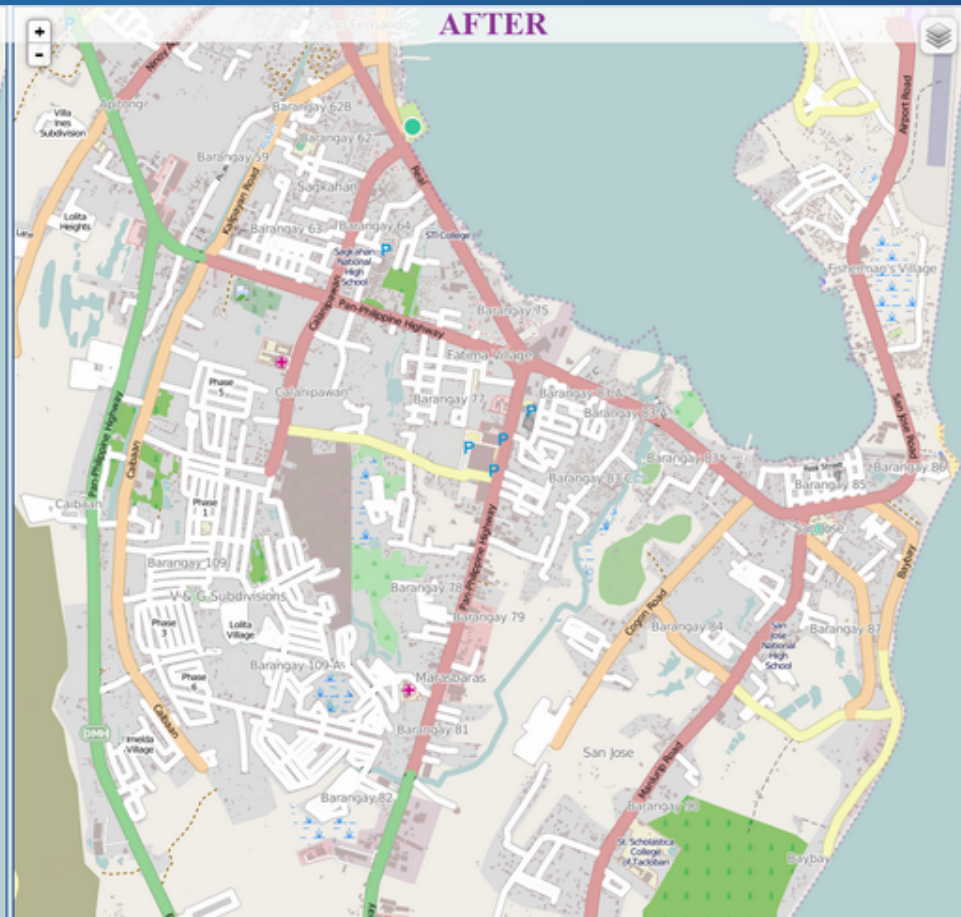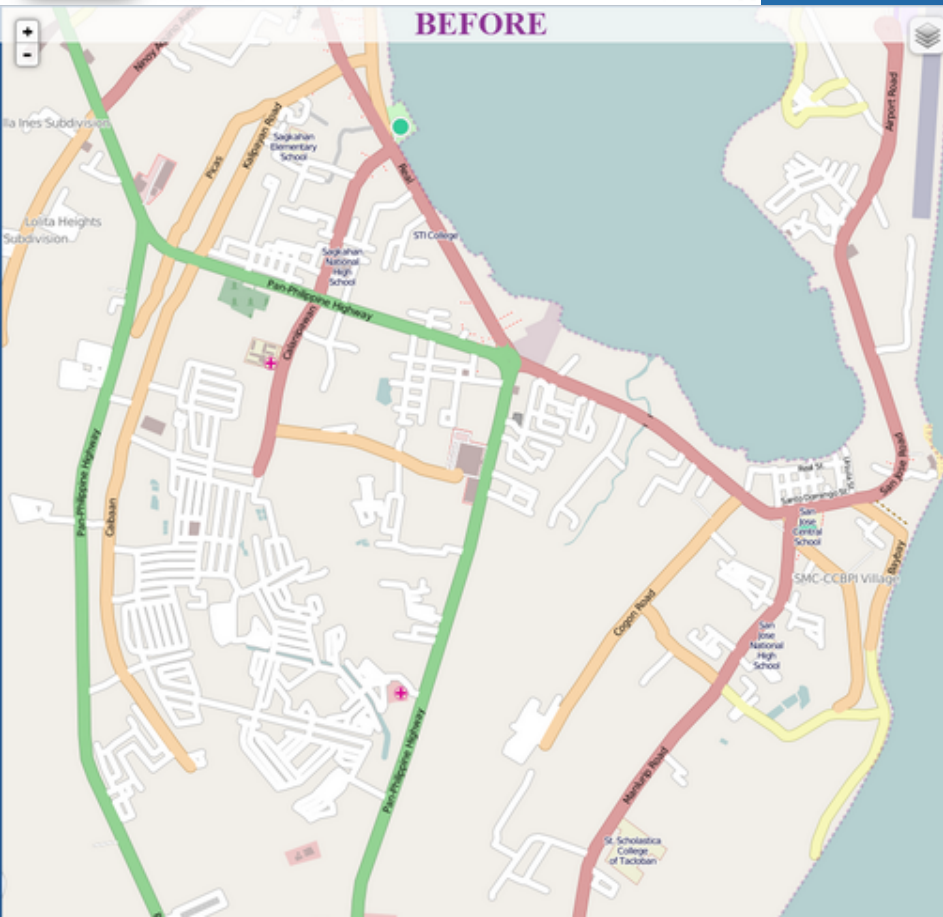
Haiti Earthquake 2010
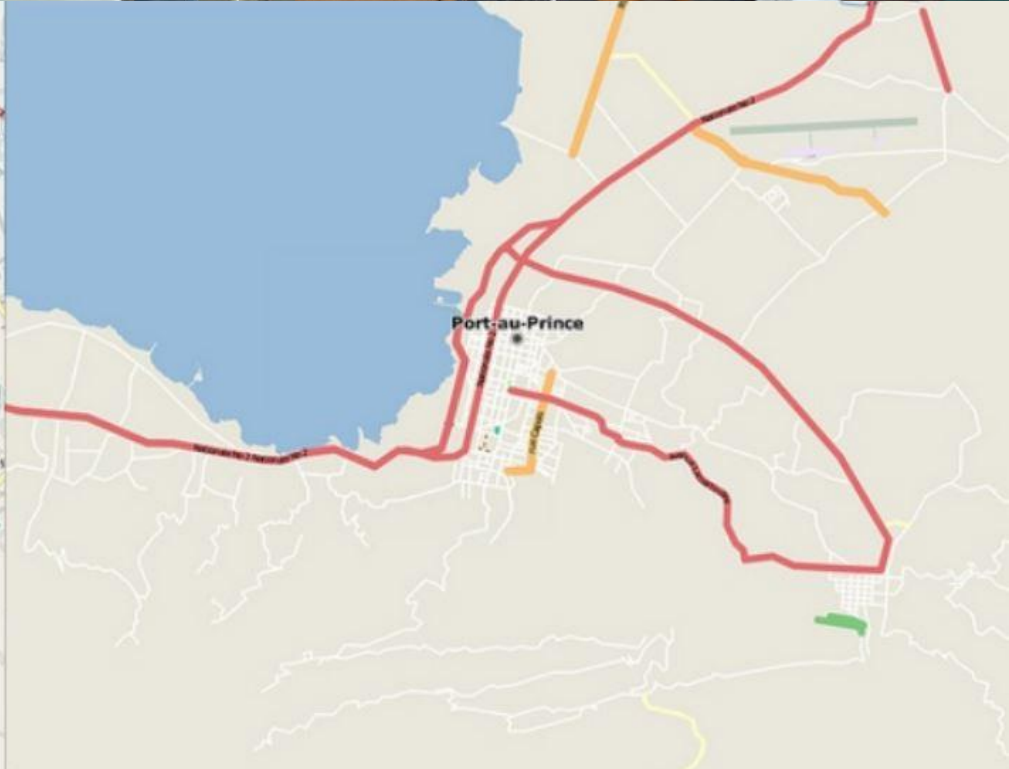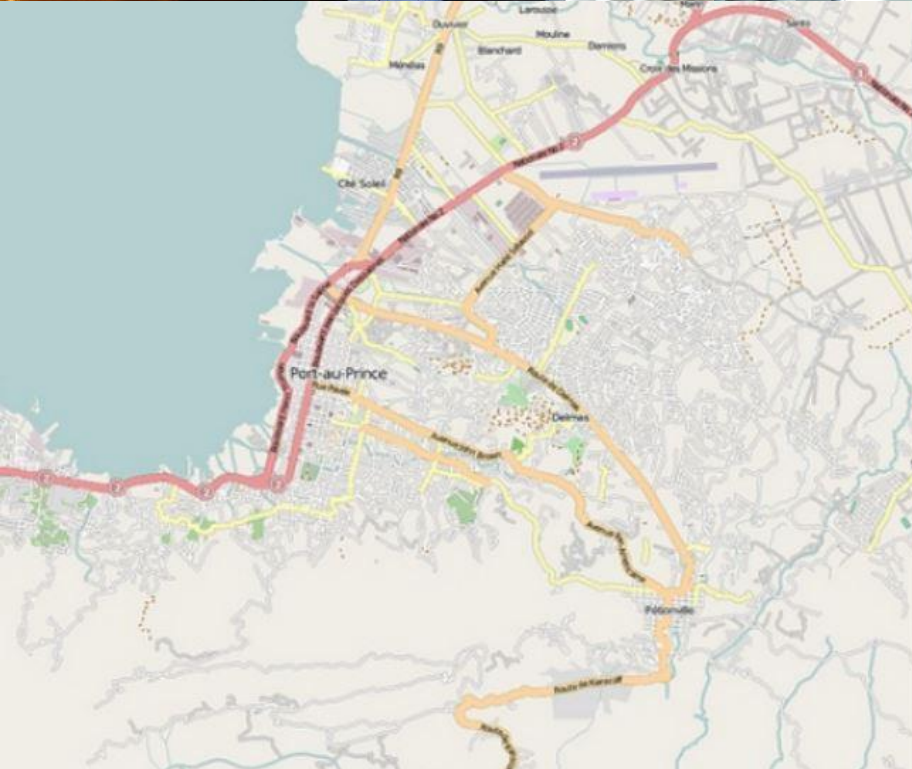
Philippines Typhoon Haiyan

- November 7th, 2013: Initial activation and 10,000 buildings traced in the first day.

- November 8th: Typhoon Haiyan passes over.

- By November 15th: 900 mappers contributed more than 2 million objects to the map.
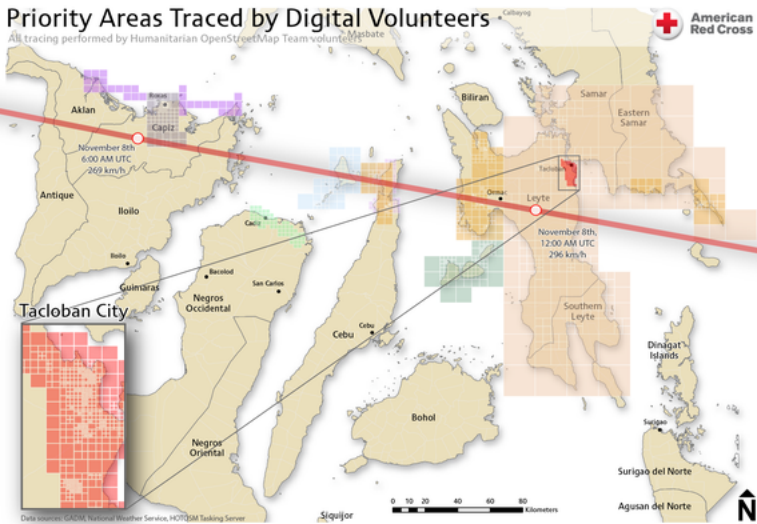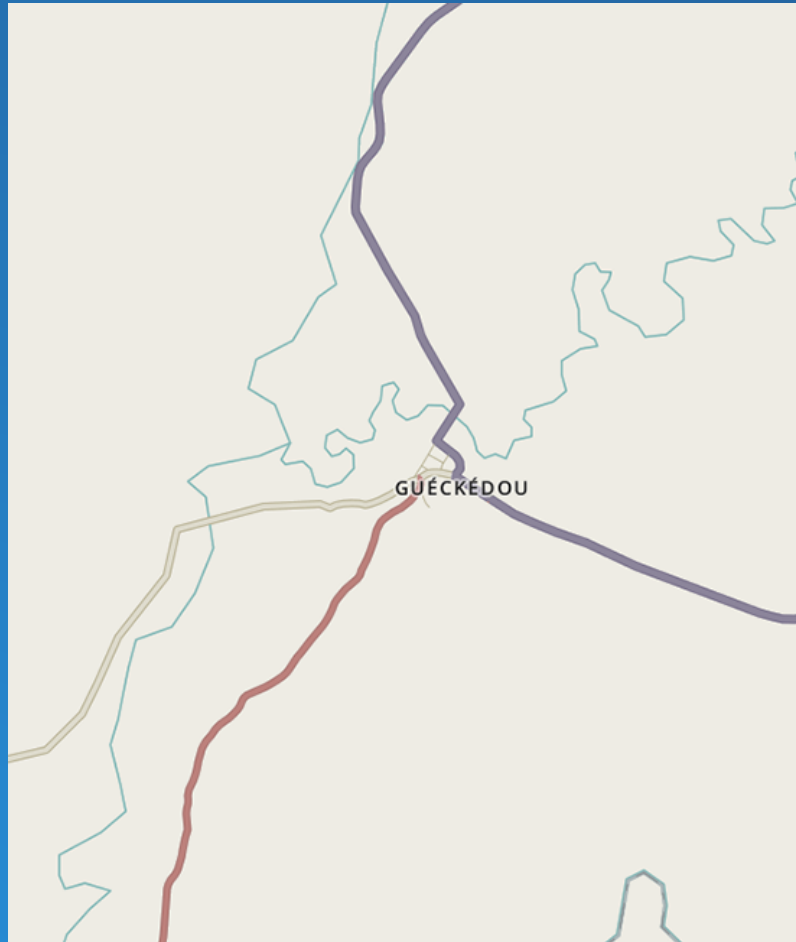
Philippines: Typhoon Haiyan

West Africa: Ebola

- Started in March 2014 to mobilize against a very contagious and deadly epidemic.

- Priority is to locate, isolate, and trace suspected cases.

- Response difficult due to lack of map data in the region and heavily forested areas.

West Africa: Ebola
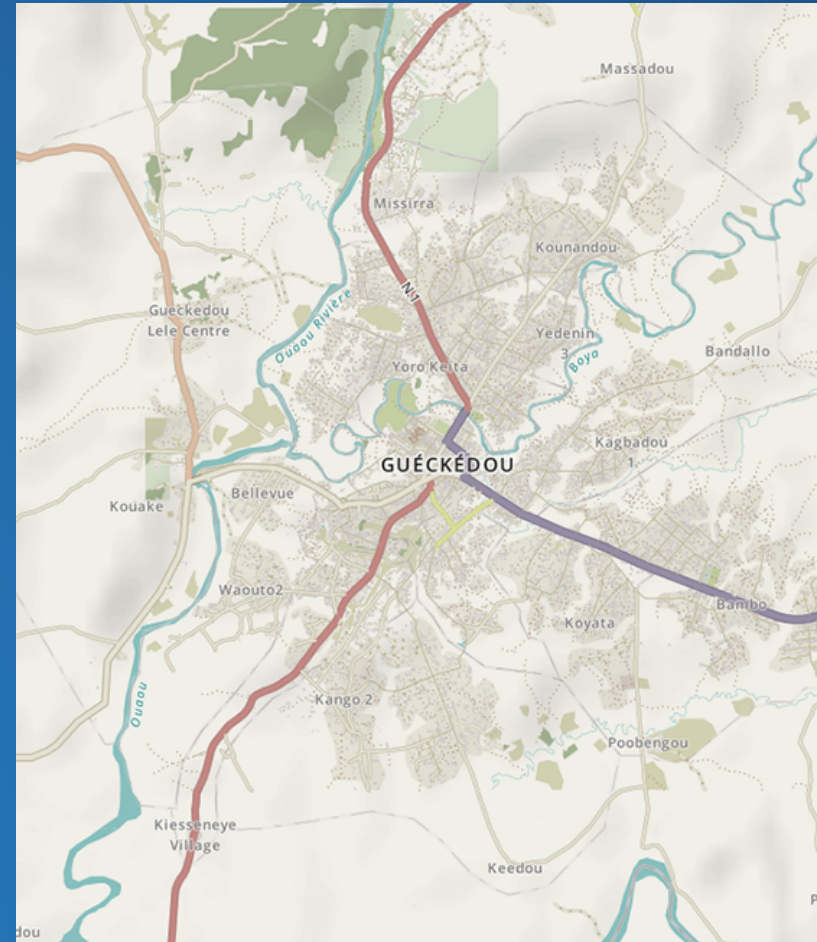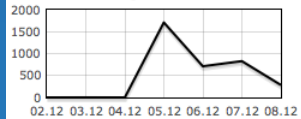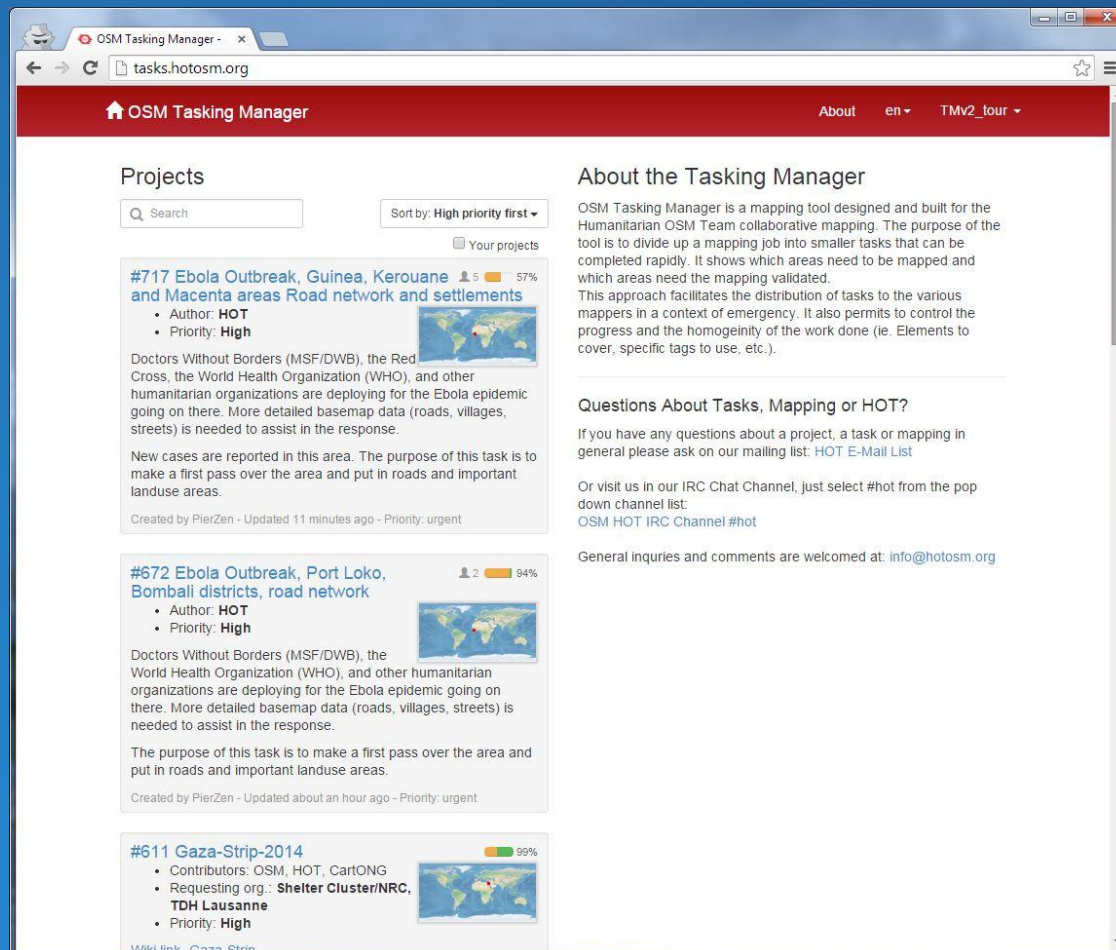
Philippines Typhoon Ruby
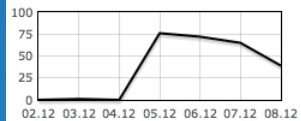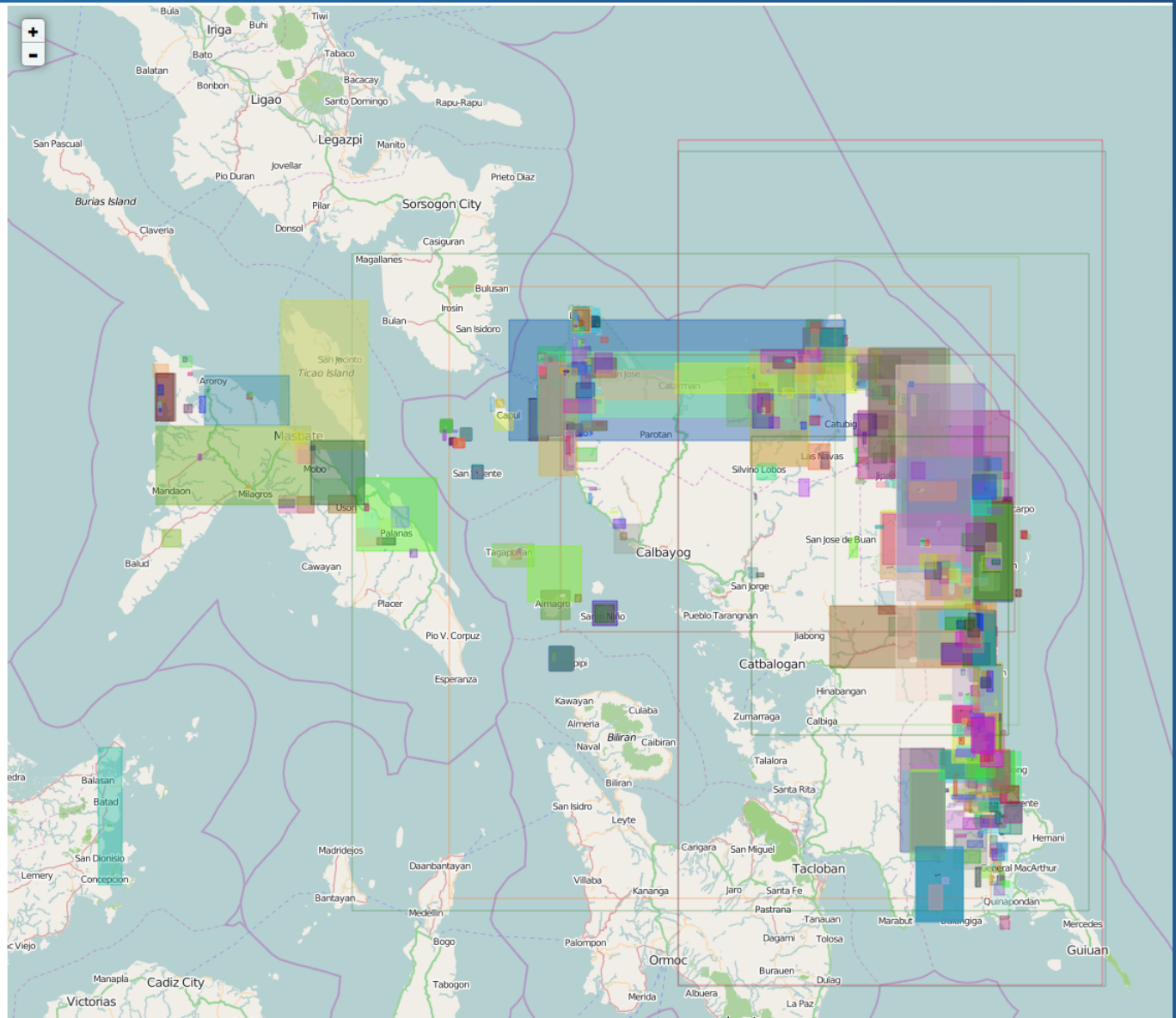
Logistics of Disaster Mapping

- Mapping is coordinated through a tasking manager that partitions areas to be mapped into small tiles.

- Instructions are provided for mapping priorities.

- Once completed, tiles are then validated by users.

- TM maintained by volunteers on GitHub.
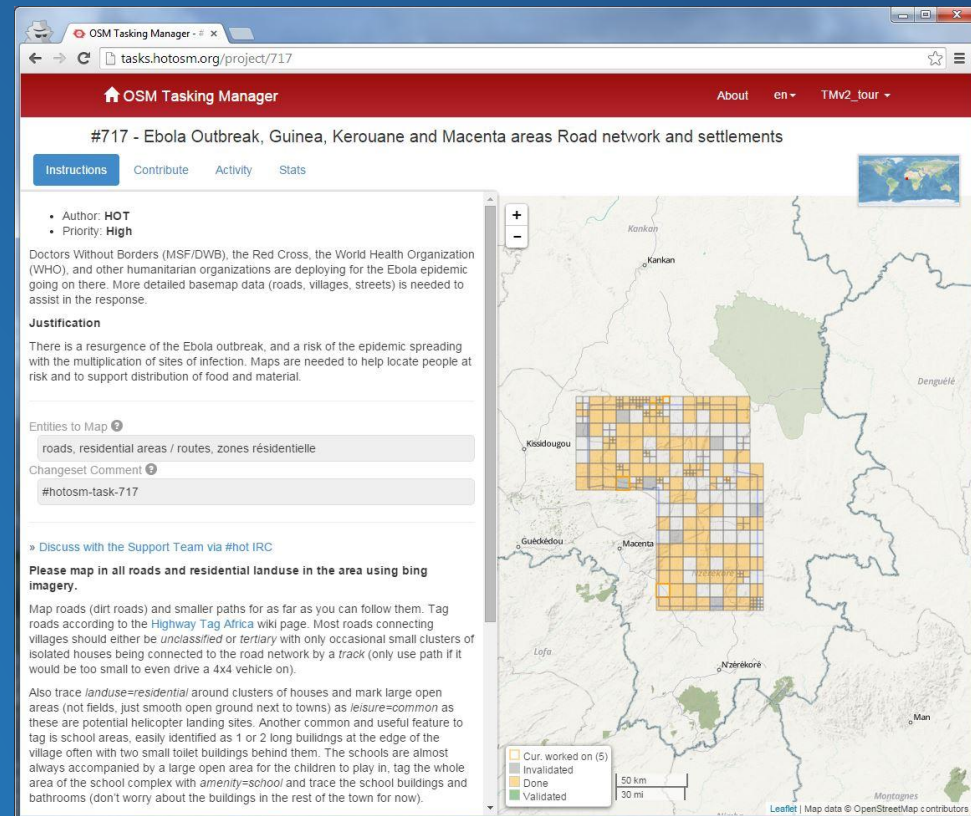
How to Map for HOT

Log in at http://tasks.hotosm.org and pick a task!

Map Editing with Carl

http://tasks.openstreetmap.us