



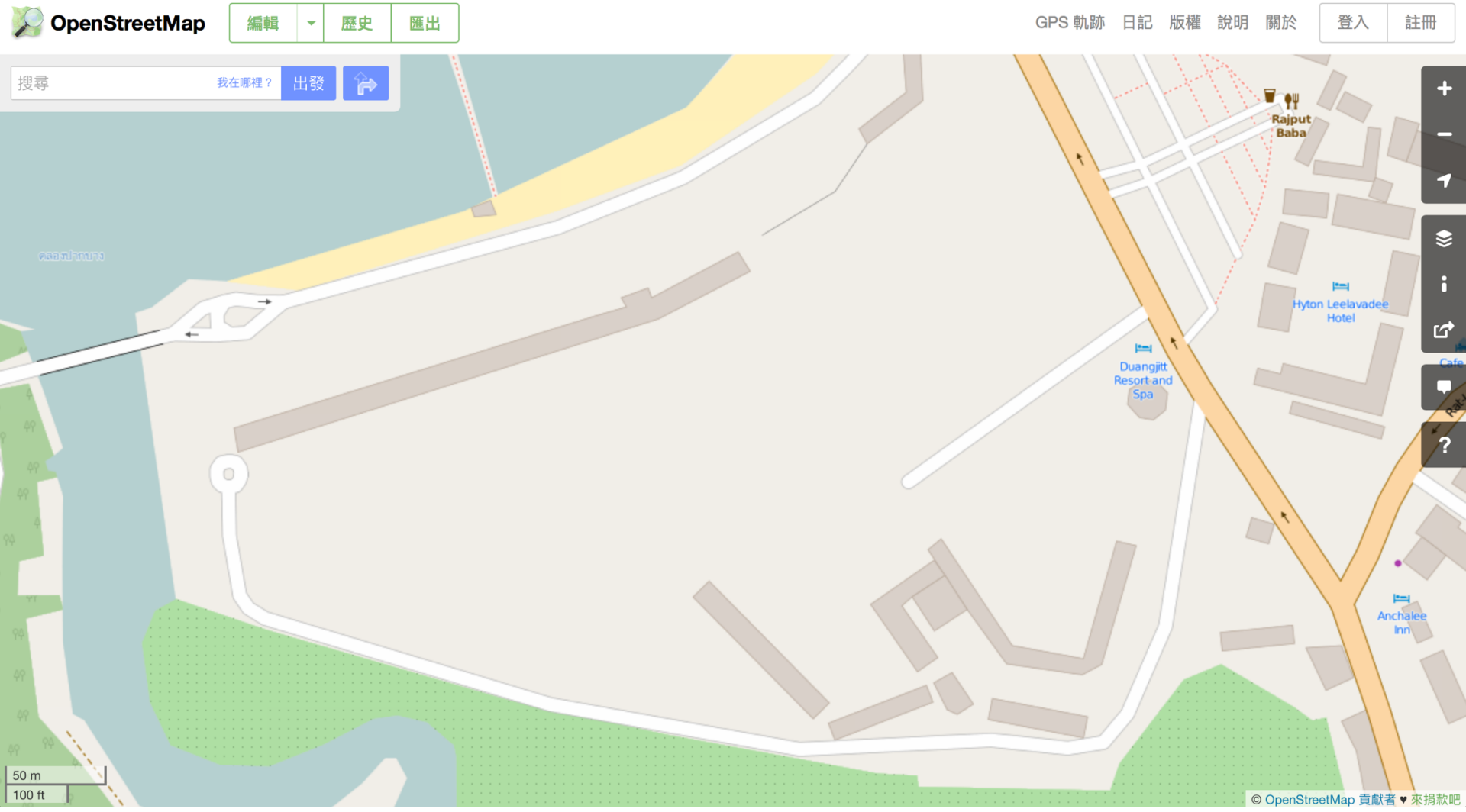
# How ICT and Volunteers can Help for Disaster Resilience and Response

February 26, 2015

Kuo-Yu slayer Chuang  
*slayer@geothings.tw*



# Duangjitt on OpenStreetMap



# Paper Map from Duangjitt



DEATHWISH

# Edit OSM According to Paper Map

 OpenStreetMap

Edit History Export

GPS Traces User Diaries Copyright Help About

 slayer@GeoThings

## Edit feature



Building

Name

Thomkong Restaurant

Building

yes, house, residential...

Levels

1

Address

123 Street

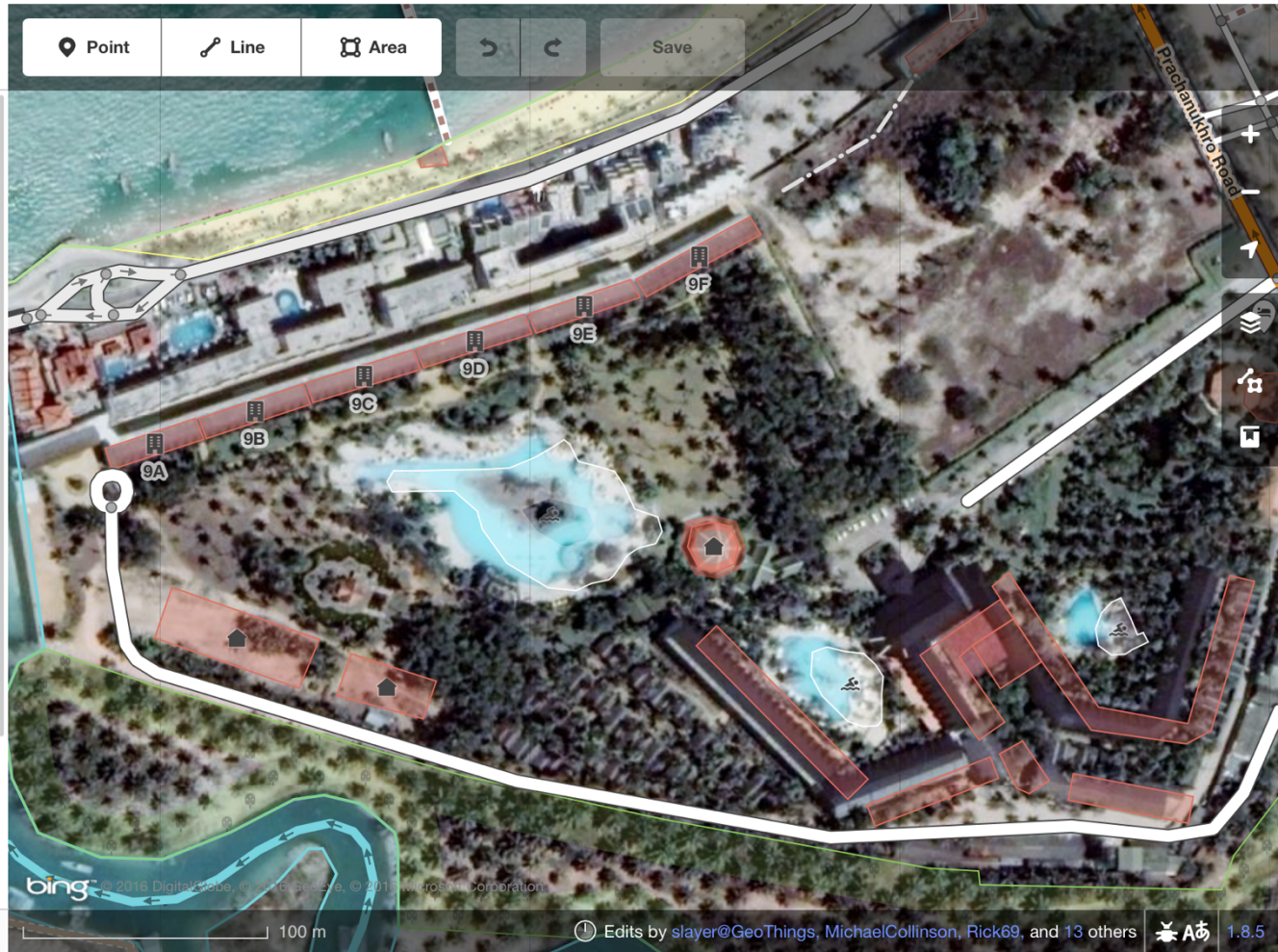
City

Postcode


All tags (3)

**building** yes

**building:levels** 1



Edits by slayer@GeoThings, MichaelCollinson, Rick69, and 13 others

 1.8.5



# Update on OpenStreetMap

The screenshot shows the OpenStreetMap web interface. The browser address bar displays `openstreetmap.org`. The top navigation bar includes the OpenStreetMap logo, **Edit**, **History**, and **Export** buttons. On the right, there are links for **GPS Traces**, **User Diaries**, **Copyright**, **Help**, and **About**, along with a user profile for `slayer@GeoThings`.

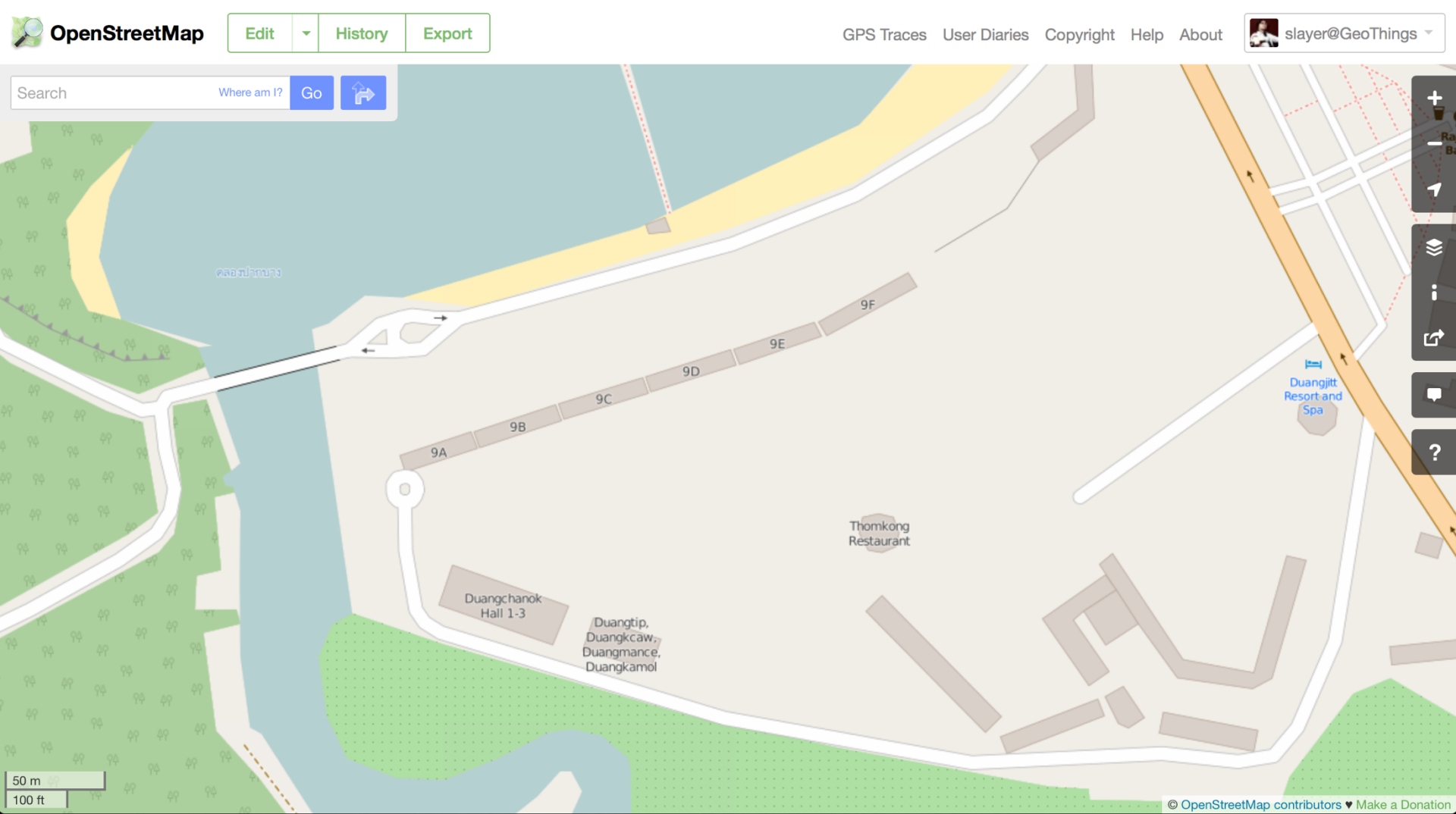
A modal dialog box is centered on the screen, displaying a loading icon and the text: **Uploading changes to OpenStreetMap.**

The background map shows an aerial view of a residential area with several buildings outlined in red. The buildings are labeled with alphanumeric codes: 9A, 9B, 9C, 9D, 9E, and 9F. A road labeled "Prachanok Road" is visible on the right side of the map. The map includes a scale bar for 100 meters and a copyright notice for Bing, 2016 DigitalGlobe, 2016 GeoEye, and 2016 Microsoft Corporation. At the bottom right, it says "Edits by Johnny Carlsen, Russ McD, MichaelCollinson, and 11 others" and shows a zoom level of 1:8.5.

On the left side of the interface, there is a "Save Changes" panel. It contains a "Changeset comment" field with the text "Updates to Duangjitt Resort and Spa". Below this, a message states: "The changes you upload as `slayer@GeoThings` will be visible on all maps that use OpenStreetMap data." There are **Save** and **Cancel** buttons. Below the message, a section titled "10 Changes" lists the following items:

- Deleted Building
- Created Building: 9A
- Created Building: 9B
- Created Building: 9C
- Created Building: 9D
- Created Building: 9E
- Created Building: 9F
- Created Building: Duangchanok Hall 1-3
- Created Building: Duangtip, Duangkaw, Duangmance,

# Updated after 30min on OSM



# Disaster Resilience with Volunteers



**MISSING  
MAPS**

## Step 1.

Remote volunteers trace satellite imagery into OpenStreetMap



## Step 2.

Community volunteers add local detail such as neighborhoods, street names, and evacuation centers



## Step 3.

Humanitarian organizations use mapped information to plan risk reduction and disaster response activities that save lives

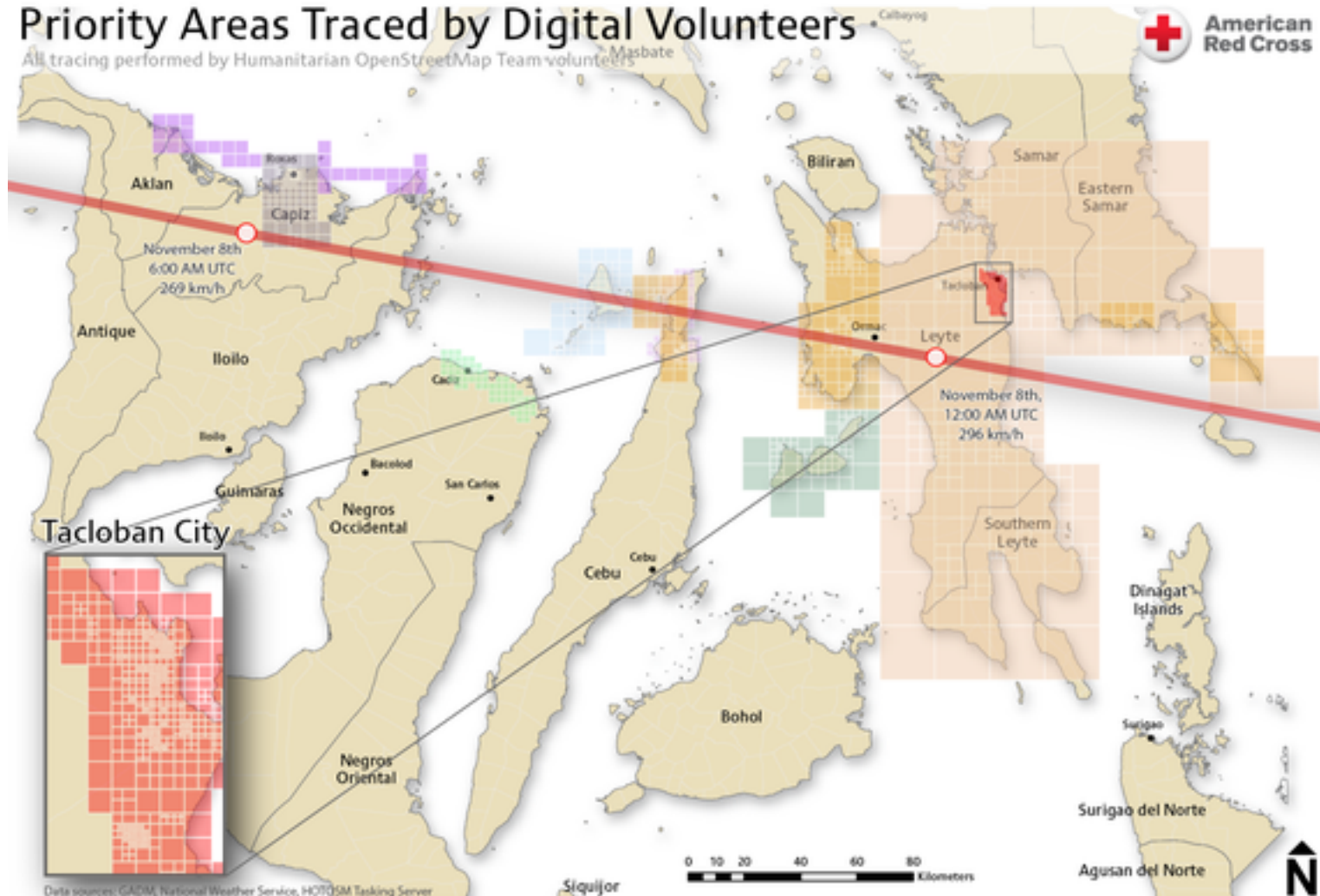




# Before Haiyan hit Philippines

## Priority Areas Traced by Digital Volunteers

All tracing performed by Humanitarian OpenStreetMap Team volunteers



# Remote Mapping Activity

您正在分享螢幕畫面

OpenStreetMap Tools: More tools, Data, Selection, Prints, Imagery, Windows, About

0 11.6 m

這個縮放等級沒有拼貼

過濾條件已使用  
1,716 objects disabled  
關閉過濾條件對話盒以查看所有的物件。

直播

圖層  
資料圖層 1  
Tasking Manager - #1258

標籤 / 成員

+ 加入 編輯 刪除

Sel.: Rel.:0 / 路徑:0 / 節點:1  
關係: 2

邊界[6] ("Mascota", 7 成員, 不完整)  
邊界[6] ("Talpa de Allende", 6 成員, 不完整)

驗證的結果

選擇 Lookup 驗證 修正 忽略

過濾隱藏: 0 停用: 1,716

E H 文字 I M  
boundary = \*

群組通訊

great job Taichi-san!  
It's mapping party, it should be noisy 😊

OpenStreetMap ... 下午8:19  
I got a 400 error to login

FURUHASHI Tai... 下午8:19

我 下午8:20  
strange!!

OpenStreetMap ... 下午8:20  
ok It works now.

黃裕翔 下午8:20  
good idea  
feel much conf.

Satoshi IIDA 下午8:23  
7.5M EQ in INdia-Pakistan-Afghanistan...

我 下午8:24  
Is there any tasking going on?

Satoshi IIDA 下午8:24  
no tasks yet.  
there is a report on HOT ML from manning.

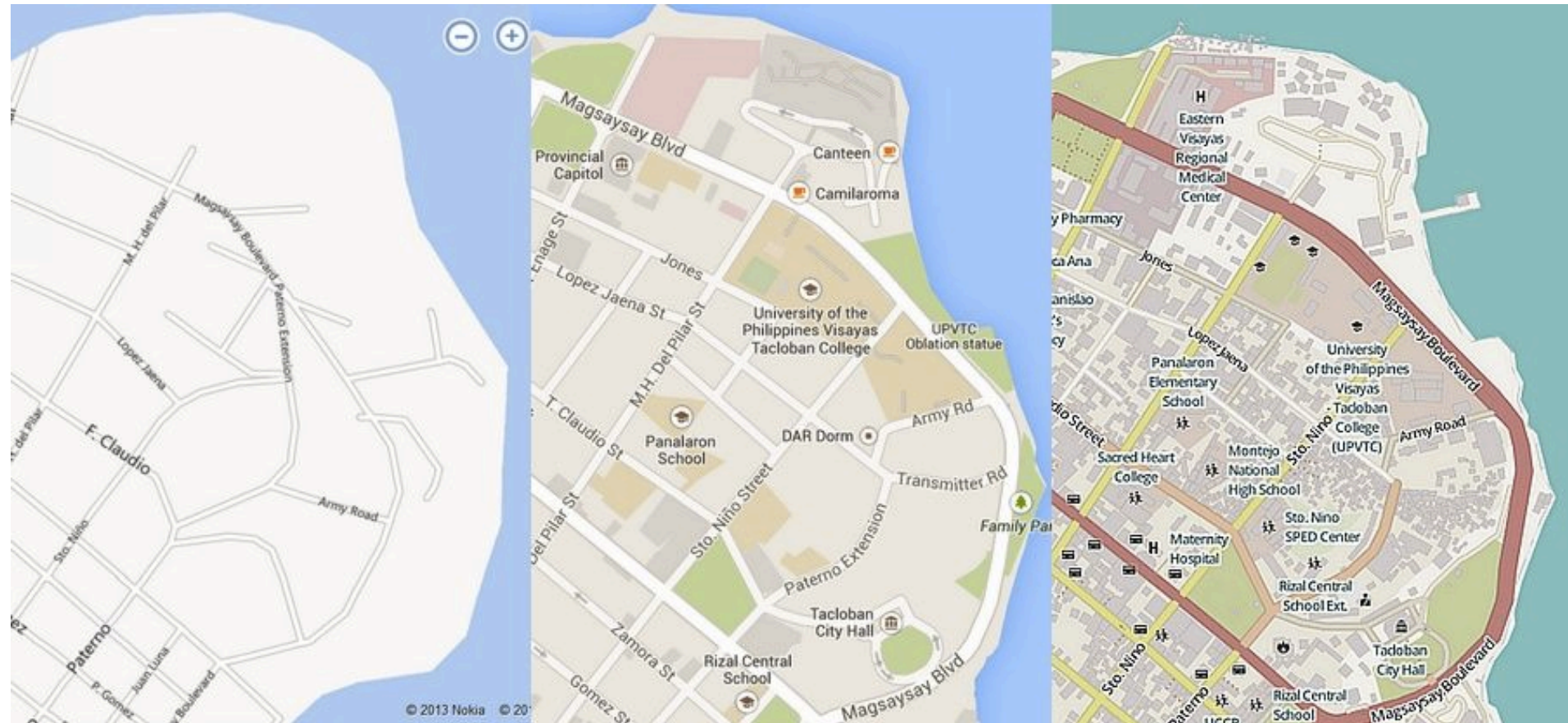
我 下午8:25  
I map so slow

黃裕翔 下午8:28  
too much echo can't hear clearly  
I mean mcdlee  
if the color of road is gray,  
it prob. be highway=unclassified

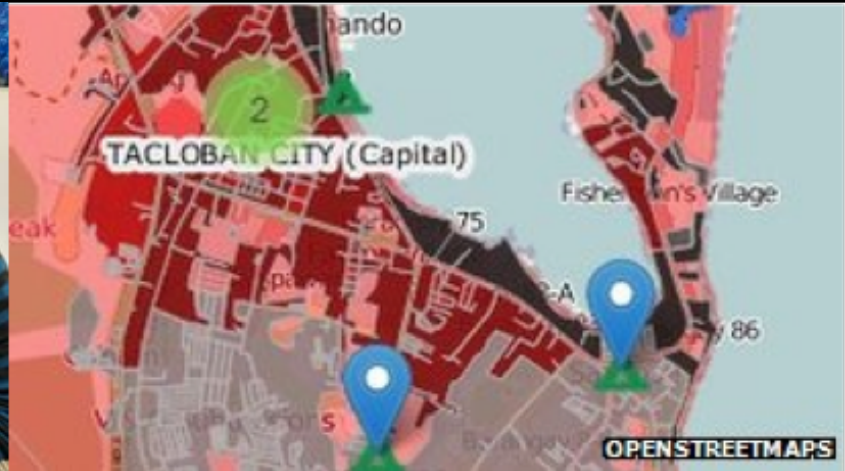
在此輸入即時通訊訊息或連結



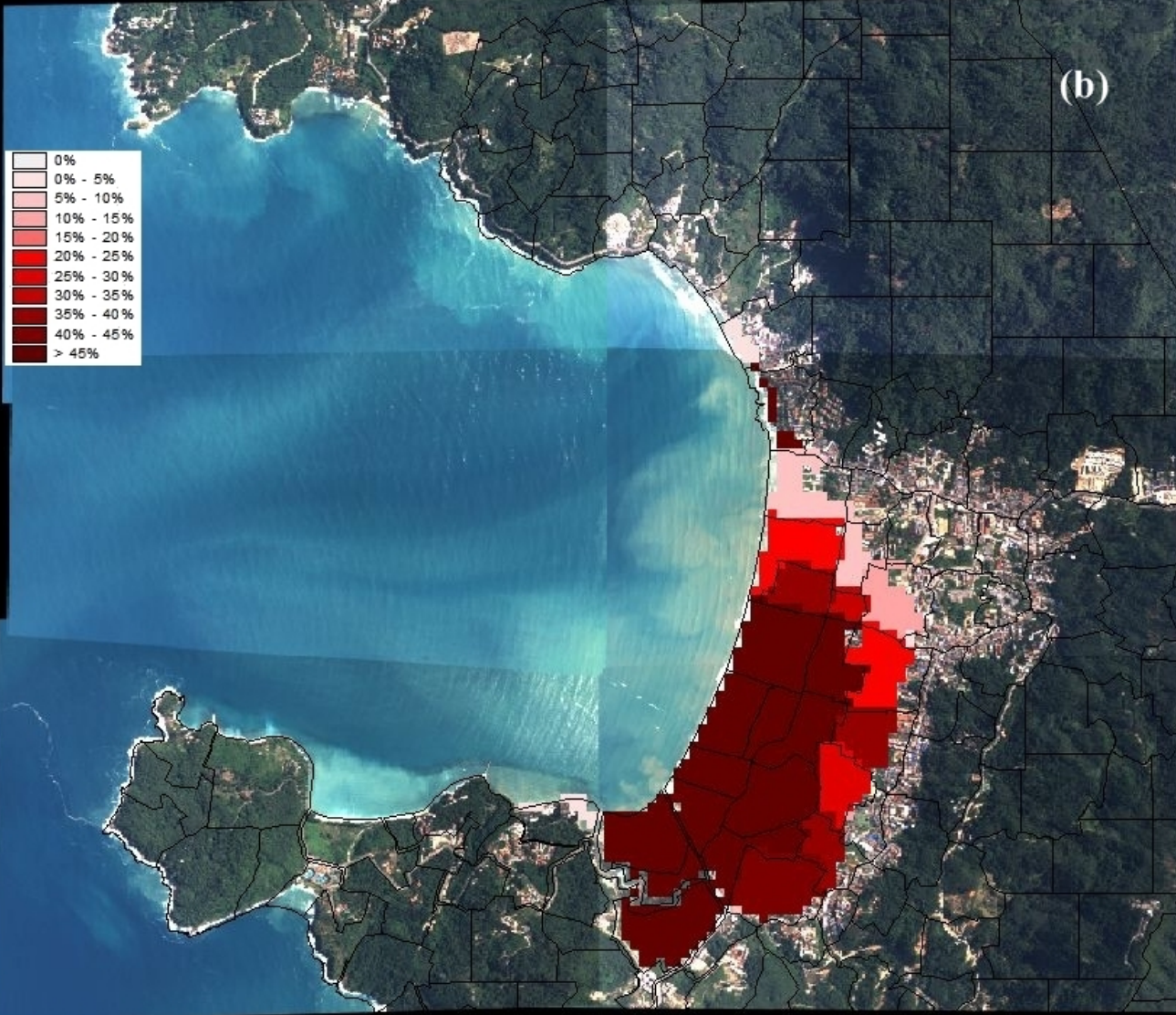
# Tacloban on OSM by Mappers



# OSM for Humanitarian Organization



# Hazard Risk Map



# Evacuation Map

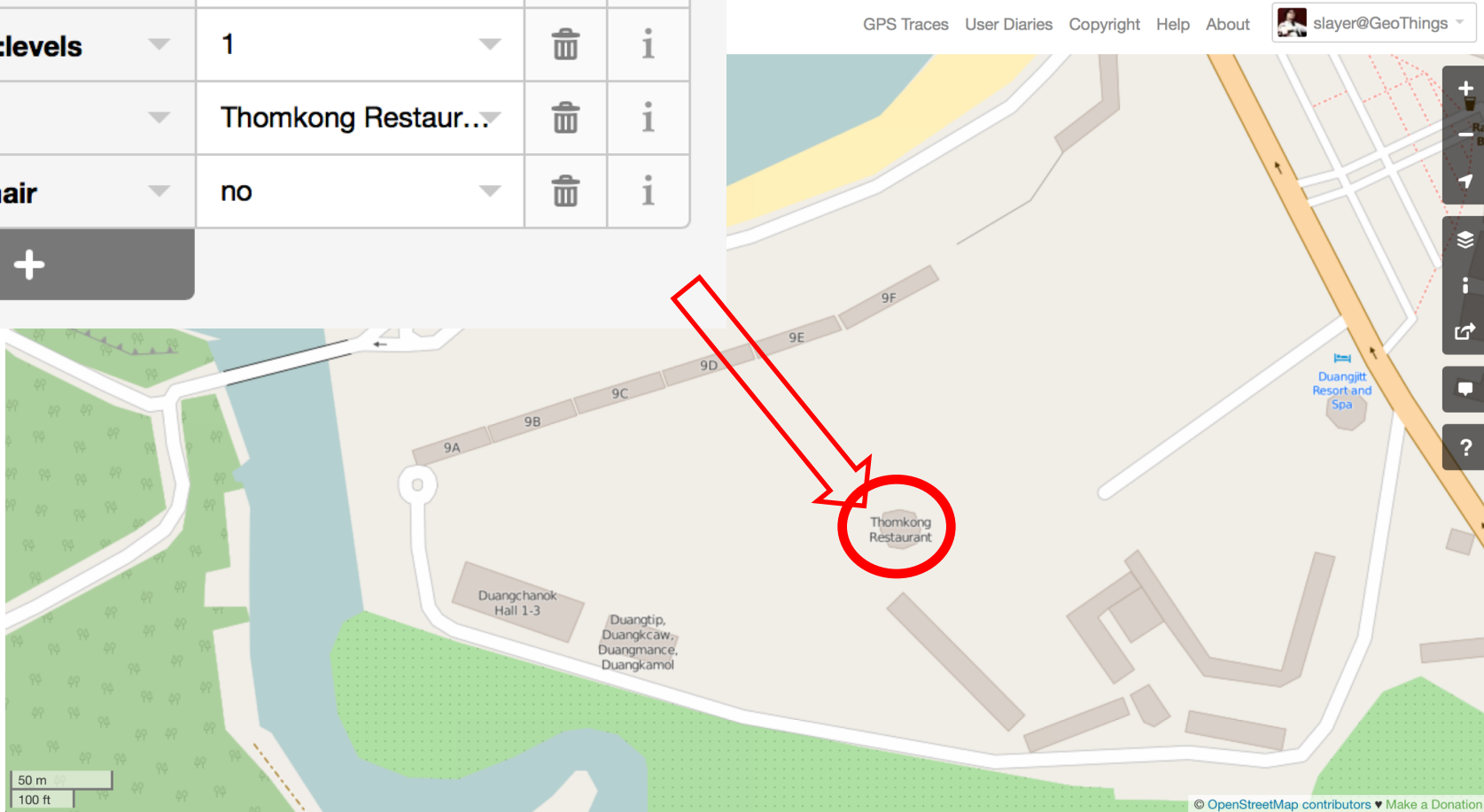


# OSM Tags for Thomkong Restaurant

## ▼ All tags (4)

<b>building</b>	commercial		
<b>building:levels</b>	1		
<b>name</b>	Thomkong Restaur...		
<b>wheelchair</b>	no		

**+**



# Additional Tags for Emergency Response

Proposed Tags for Emergency Response	Value
emergency:amenity	social_facility
emergency:social_facility	shelter
emergency:shelter_type	Earthquake
emergency:operator	Phuket Emergency Response Center
emergency:social_facility:opening_hours	closed
emergency:social_facility:capacity	100
emergency:social_facility:phone	+66 76 366 333





# Evacuation Map with Navigation

The screenshot displays the OpenStreetMap interface. At the top left, the 'OpenStreetMap' logo is visible, along with 'Edit', 'History', and 'Export' buttons. The top right contains navigation links: 'GPS Traces', 'User Diaries', 'Copyright', 'Help', 'About', and a user profile for 'slayer@GeoThings'. A search bar is located on the left side of the map area. The map itself shows a complex of buildings and a road network. A yellow person icon is positioned on a road segment labeled '9B'. A red line with an arrowhead indicates an evacuation route starting from the person icon, moving south, then east, and finally north towards a building labeled 'Thomkong Restaurant'. Other buildings are labeled 'Duangchanok Hall 1-3' and 'Duangtip, Duangkaw, Duangmance, Duangkamol'. A blue area on the right is labeled 'Duangjitt Resort and Spa'. A scale bar in the bottom left shows '50 m' and '100 ft'. The bottom right corner has a copyright notice: '© OpenStreetMap contributors ♥ Make a Donation'.



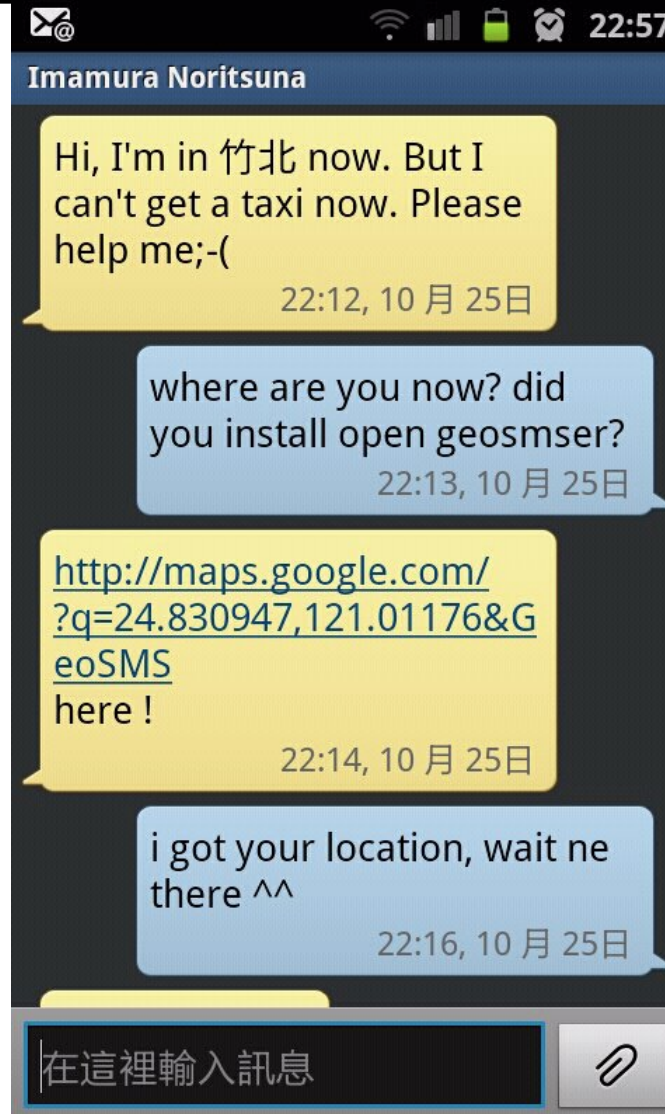
# Story about A Night after Meet-up



from <https://www.flickr.com/photos/pswansen/471225751>



# My Japanese Friend Cannot Find Taxi



# Open GeoSMS works for the First Time



# Report with GeoSMS and get Notified



# That Happens During Emergency

## Service

## Telephone

**Police:**

**191**

**Fire:**

**199**

**Tourist police:**

**1155 or (+66) 076.219.878**

**Marine police:**

**(+66) 076.215.438, 076.211.883**

**Phuket tourist rescue center:**

**(+66) 076.383.907-9**

**Phuket International Hospital Ambulance Service:**

**(+66) 076.210.935**

**Customs:**

**(+66) 076.211.105**

**Diving recompression chambers:**

**(+66) 076.342.518**

**Hyperbaric Services:**

**(+66) 089.871.2335**



# Live Evacuation Map with ICT

The image shows a screenshot of the OpenStreetMap interface. At the top, the OpenStreetMap logo is on the left, and navigation options like 'Edit', 'History', and 'Export' are in the center. On the right, there are links for 'GPS Traces', 'User Diaries', 'Copyright', 'Help', and 'About', along with a user profile for 'slayer@GeoThings'. A search bar is located below the logo. The map itself shows a residential area with buildings, a road, and a river. A red line indicates an evacuation route starting from a yellow person icon, going south, then east, and then north towards a building labeled 'Thomkong Restaurant'. A red circle with a white bar is placed on a road to the left, with a callout box that says 'Road Closed due to Flooding'. A yellow diamond-shaped sign with a black silhouette of a person digging is placed on a road to the right, with a callout box that says 'Construction for Relief'. Another callout box points to the 'Thomkong Restaurant' with the text 'Shelter Here Over-crowded!'. The map includes a scale bar at the bottom left (50m and 100ft) and a copyright notice at the bottom right.

OpenStreetMap

Edit History Export

GPS Traces User Diaries Copyright Help About

slayer@GeoThings

Search Where am I? Go

Road Closed due to Flooding

Construction for Relief

Shelter Here Over-crowded!

Thomkong Restaurant

Duangchanok Hall 1-3

Duangtip, Duangkaw, Duangmance, Duangkamol

Duangjitt Resort and Spa

50 m 100 ft

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# ADB x AIT x GeoThings



Applying Space-Based Technology and Information and Communication Technology to Strengthen Disaster Resilience







How ICT and Volunteers can Help for  
Disaster Resilience and Response

# GeoThings, **the Humanitarian ICT**