

# FLOOD AFFECTED AREAS IN METRO MANILA REGION AND RIZAL PROVINCE, PHILIPPINES

Analysis with RADARSAT-2 data acquired on 28 Sept. 2009

This map illustrates satellite-detected areas likely affected by flood water in Metro Manila Region and Rizal Province, Philippines, as based on change detection methods using RADARSAT-2 data acquired over the area on 28 September 2009 and ESRI data from 2007. The newly released ASTER global elevation model (GDEM) was also used in the flooding analysis. This flood assessment is a preliminary analysis & has not yet been validated in the field.

Disaster coverage by the International Charter 'Space and Major Disasters'. For more information on the Charter, which is about assisting the disaster relief organizations with multi-satellite data and information, visit [www.disasterscharter.org](http://www.disasterscharter.org)



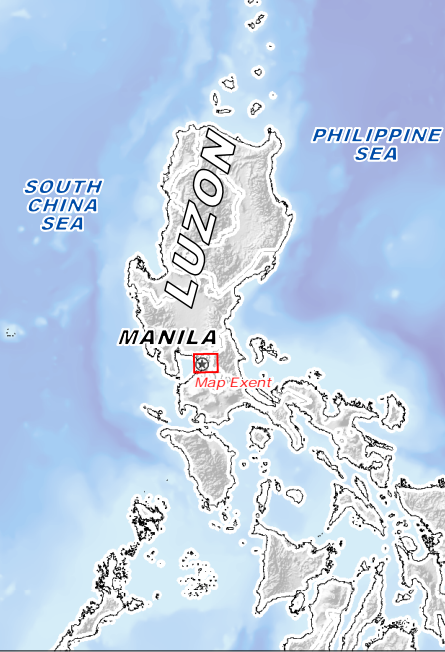
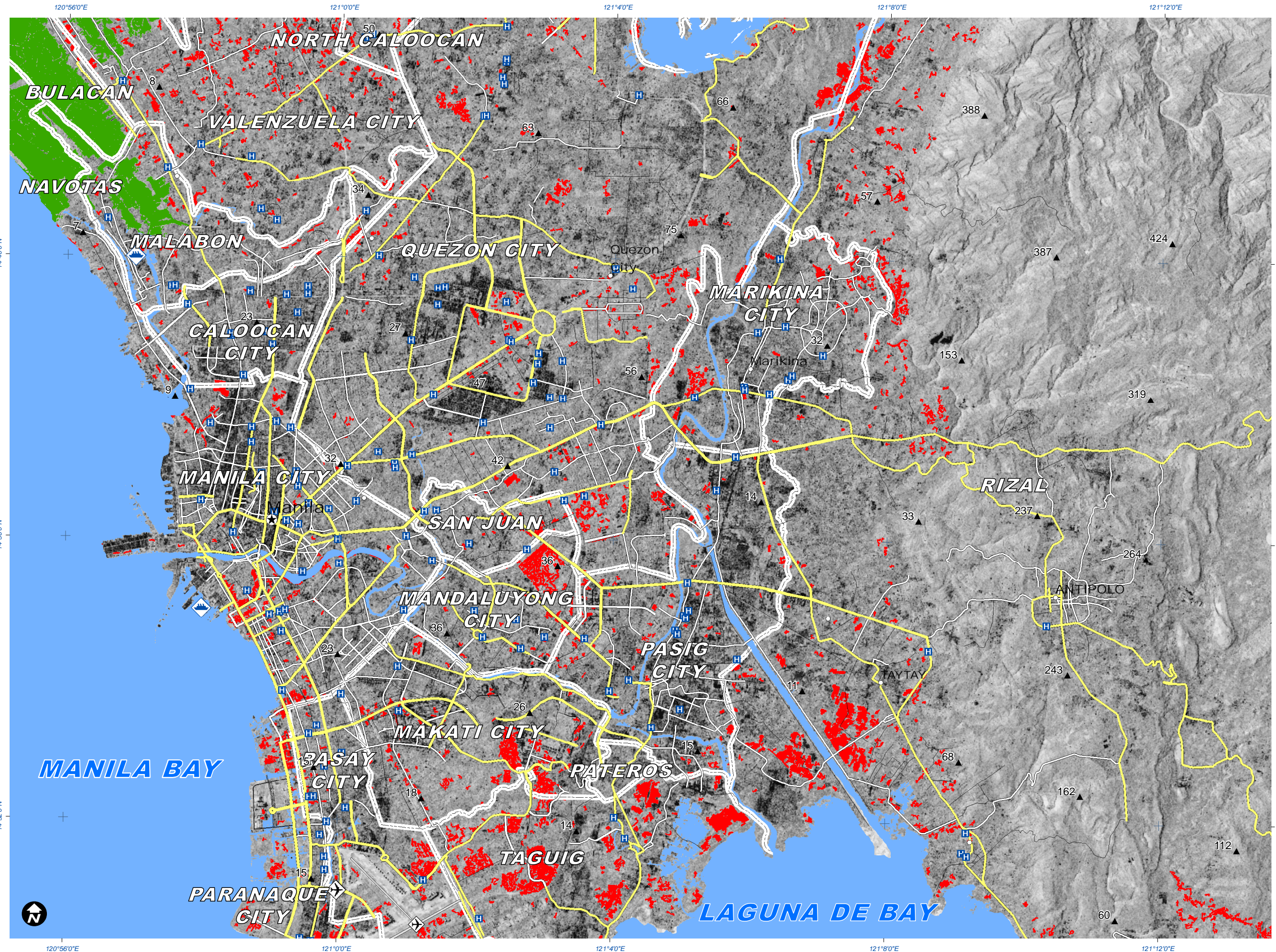
Tropical Cyclone



29 September 2009

Version 1.0

Glide No: TC-2009-000205-PHL



**Legend**

★ Capital	Local Government
○ Major city	Primary Rd.
✈ Airfield	Secondary Rd.
⚓ Port	Tertiary Rd.
H Hospital	Railroad
▲ Spot Height (m)	

**SATELLITE ASSESSMENT CLASSIFICATION:**

- Possible Flood Water / Flood Affected Area (28 Sept. 2009 - RADARSAT-2)
- Pre-Crisis Standing Water (ESRI-2007)
- Agricultural Field (28 Sept. 2009 - RADARSAT-2)

**Map Scale for A3: 1:100'000**

0 0.5 1 2 3 4 Kilometers

Satellite Data (1) ..... RADARSAT-2  
Imagery Dates ..... 28 September 2009  
Resolution ..... 3 m  
Copyright ..... RADARSAT-2 @ MDA 2009  
Credit ..... Canadian Space Agency  
Elevation Data ..... ASTER GDEM  
Resolution ..... 27m  
Source ..... METI & NASA 2009  
Other Data ..... OSM, ESRI, USGS, NGA  
Flood Analysis ..... UNITAR / UNOSAT  
Map Production ..... UNITAR / UNOSAT  
Projection ..... UTM Zone 51 North  
Datum ..... WGS-84

The depiction and use of boundaries, geographic names and related data shown here are not warranted to be error-free nor do they imply official endorsement or acceptance by the United Nations. UNOSAT is a program of the United Nations Institute for Training and Research (UNITAR), providing satellite imagery and related geographic information, research and analysis to UN humanitarian & development agencies & their implementing partners.

**unitar**  
United Nations Institute for Training and Research

**UNOSAT**

Contact Information: [unosat@unitar.org](mailto:unosat@unitar.org)  
24/7 Hotline: +41 76 487 4998  
[www.unosat.org](http://www.unosat.org)