

# FLOOD AFFECTED AREAS IN CENTRAL DAKAR, SENEGAL

Flood Analysis with Radarsat-2 Data Acquired on 04 September 2009 & Spot-5 Data Acquired on 11 May 2009

This map illustrates satellite-detected areas of possible flood waters and flood-affected areas within the central section of the capital city of Dakar, Senegal, as based on change detection methods using Radarsat-2 data acquired 4 September and pre-crisis Spot-5 imagery acquired 11 May 2009. Pre-crisis Radarsat-1 from 5 September 2006 was also used. Please note there is an associated high degree of uncertainty for this flood assessment resulting from the dense urban environment and the lack of archived radar data of corresponding sensor characteristics. It is likely that standing water bodies located along narrow streets have been significantly underestimated, and that some detected water bodies shown in the map are errors resulting from the interaction of the satellite radar signals with buildings. This flood assessment is a preliminary analysis & has not yet been validated in the field. Please send ground feedback to UNITAR/UNOSAT.

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)

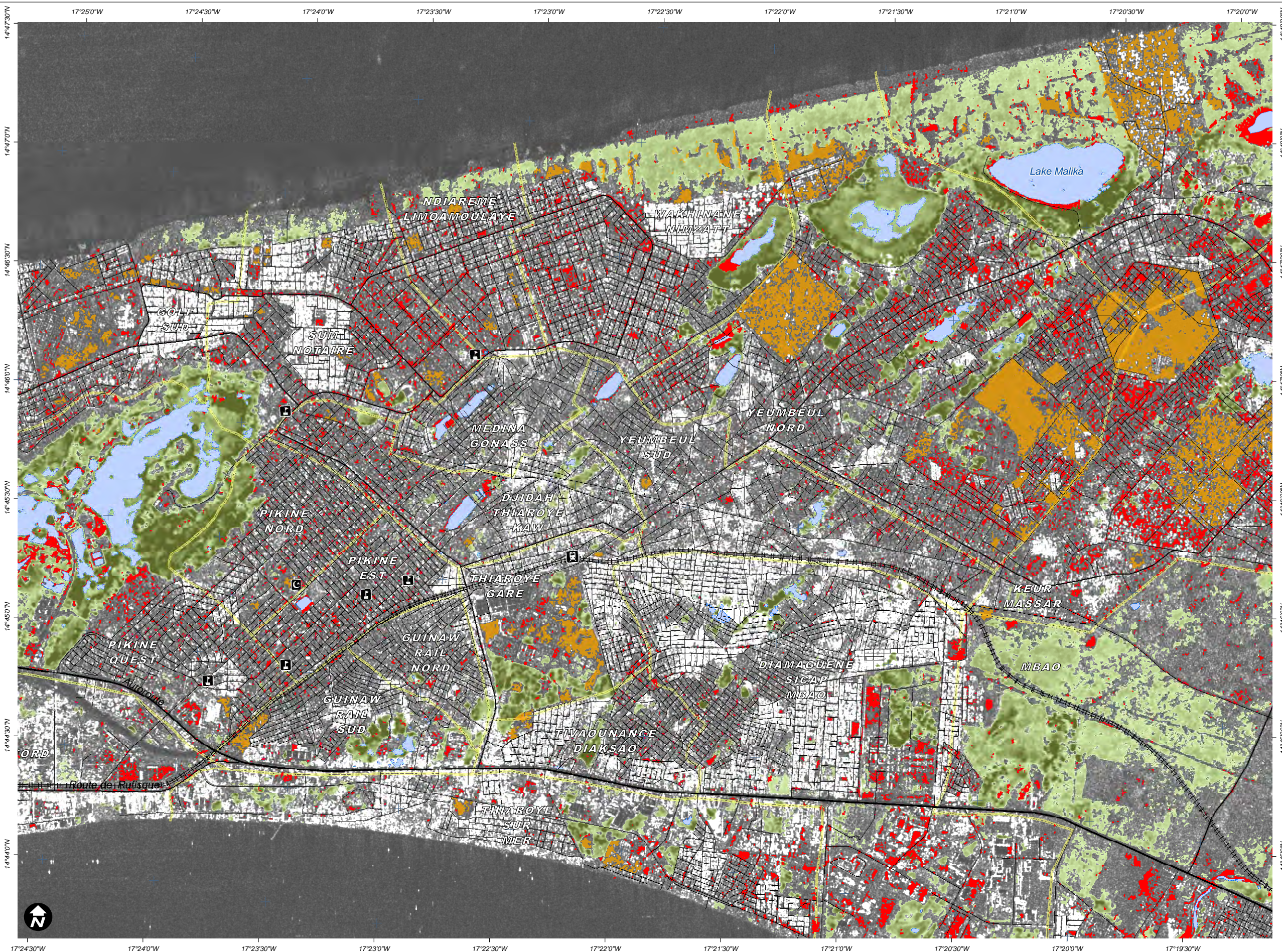


Heavy Rainfall & Flooding 7 September 2009



Version 1.0

Glide No: FL-2009-000164-SEN



**Legend**

	Hospital
	Train Terminal
	School
	Mosque
	Airport
	Port
	Tower
	Commune Boundary
	Primary Road
	Secondary Road
	Minor / Local Road
	Railroad

**SATELLITE ASSESSMENT CLASSIFICATION:**

- Possible Flood Water / Flood-Affected Area (4 September 2009 - Radarsat-2)
- Possible Flood-Affected Area or Saturated, wet soil (4 September 2009 - Radarsat-2)
- Pre-Crisis Standing Waters (11 May 2009 - Spot5)
- Vegetation Cover (Variable Density) (11 May 2009 - Spot5)

**Map Scale for A3: 1:30,000**  
Data Frame Rotated 11 Degrees

0 125 250 500 750 1,000 1,250 Meters

Satellite Data (1)..... Radarsat-2 / 1  
Imagery Dates ..... 4 Sept. 2009 / 5 Sept. 2006  
Resolution ..... 3m / 12.5m  
Copyright ..... RADARSAT-2 © MDA 2009  
Credit ..... Canadian Space Agency  
Satellite Data (2) ..... SPOT-5 (2.5m Panshapened)  
Imagery Date ..... 11 May 2009  
Copyright ..... SPOT Image 2009  
Road Data ..... Google Map Maker 2009  
Other Data ..... OCHA, USGS, NGA  
Flood Analysis ..... UNITAR / UNOSAT  
Map Production ..... UNITAR / UNOSAT  
Projection ..... UTM Zone 31 North  
Datum ..... WGS-84 (EGM-96)

Map Data © 2009 Google - Improve with Google Map Maker

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