

INTENSITY OF BUILDING DAMAGES IN DOWNTOWN PORT-AU-PRINCE, HAITI

Earthquake
7.0M

15 February 2010
(19:30:00 UTC)

Version 2.0



Glide No:
EQ-2010-000009-HTI

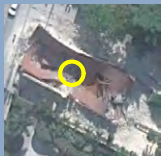
Damage analysis of individual buildings based on post-earthquake aerial photos and pre-earthquake satellite imagery

Map & Analysis Description

This map presents an interpolated building damage intensity surface as assessed from both satellite and aerial survey imagery covering downtown Port-au-Prince, Haiti. Damaged buildings were classified according to visually-assessed damage levels. This work is done at the request of UNDP, and in support of the UN-led efforts in the aftermath of the Haiti earthquake. Swisstopo and the Remote Sensing Laboratories (RSL) at the University of Zurich provided extensive pre-crisis building data in direct technical support of this UN damage analysis. Initial reference data were received from collaborative centers (European Commission JRC with the support of the Stability Instrument; Sertit/Space Charter) and other supporting entities (ITHACA, DLR, OSM). This analysis will be validated in the field during PDNA and recovery activities.

Building Damage Classification

The four damage Levels: Destroyed, Severe Damage, Moderate Damage and No Visible Damage. This damage assessment was made with standard image interpretation methods. Detected damages are likely to represent minimum estimates; actual building damages may be larger due to limits in spatial and spectral resolution of available satellite and aerial imagery.



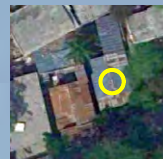
DESTROYED:
All or most of building structure collapsed



SEVERE DAMAGE:
Part of building structure collapsed, such as part of roof or one or more fallen walls



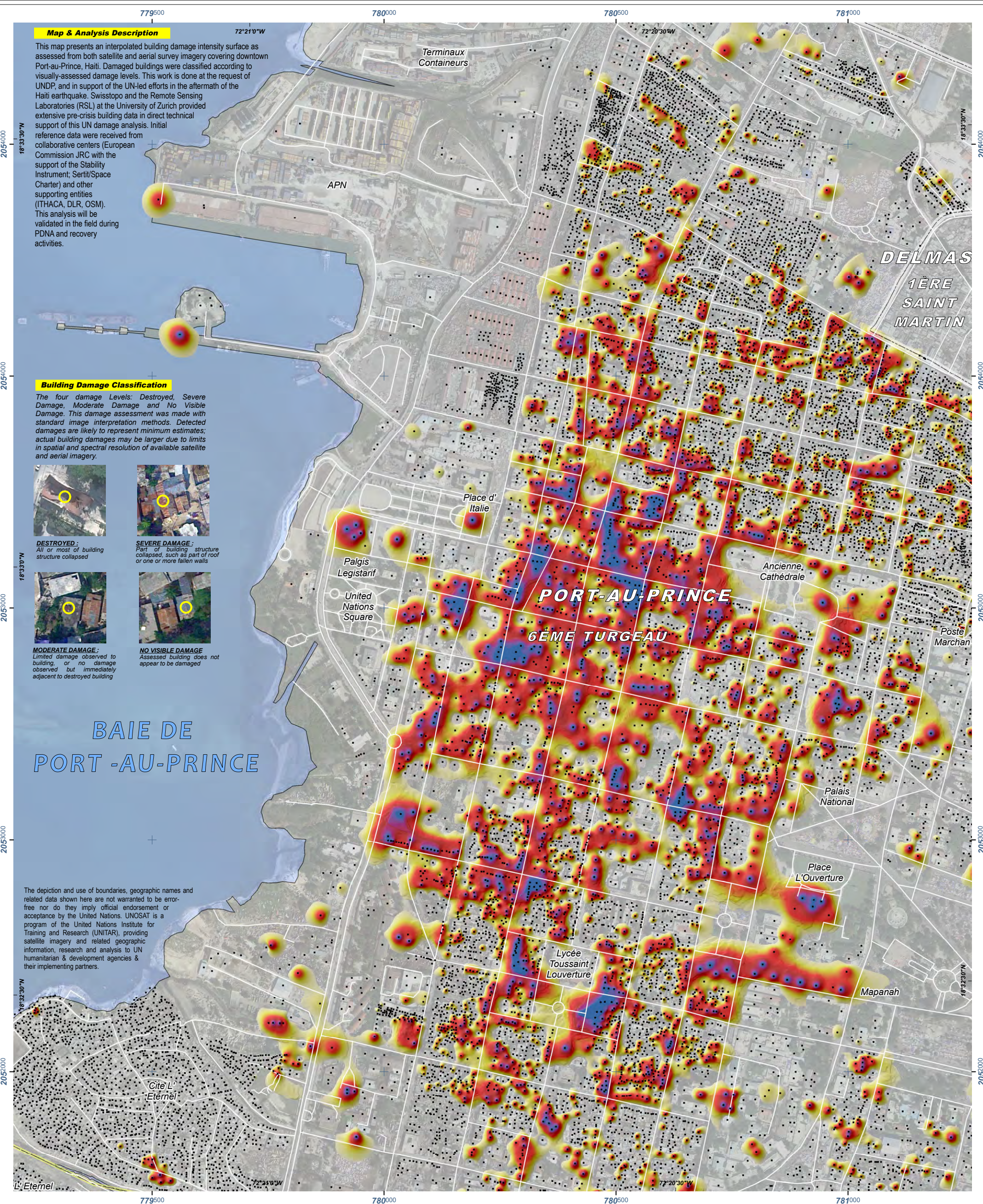
MODERATE DAMAGE:
Limited damage observed to building, or no damage observed but immediately adjacent to destroyed building



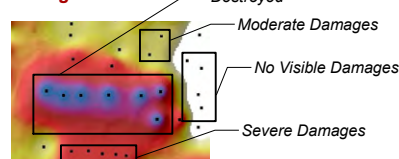
NO VISIBLE DAMAGE:
Assessed building does not appear to be damaged

BAIE DE
PORT-AU-PRINCE

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.



Interpolated Building Damage Surface



Satellite Data	WorldView-2
Imagery Dates	19 Dec. 2009 / 7-15 Jan. 2010
Resolution	50cm
Copyright	DigitalGlobe
Aerial Photos	NOAA / Google
Imagery Date	18 Jan / 21 Jan 2010

Copyright	NOAA / Google
Source	USGS / ERDAS APOLLO WMS
Building Data	Swisstopo/RSL-Zurich/UNOSAT
Landcover Data	CNIGS, Infoterra, OSM, OCHA
Road & Urban Data	Open Street Map
Place Names	OCHA, Google Map Maker

Other Data	MINUSTAH, USGS, NGA
Elevation Data	ASTER GDEM
Source	METI & NASA 2009
Damage Analysis	UNITAR / UNOSAT
Map Production	UNITAR / UNOSAT
Projection	UTM Zone 18 North - NAD-83

Map Scale for A3: 1:7,500 (A4 Print Scale 1:10,500)

UTM grid coordinates given in 500m intervals



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