

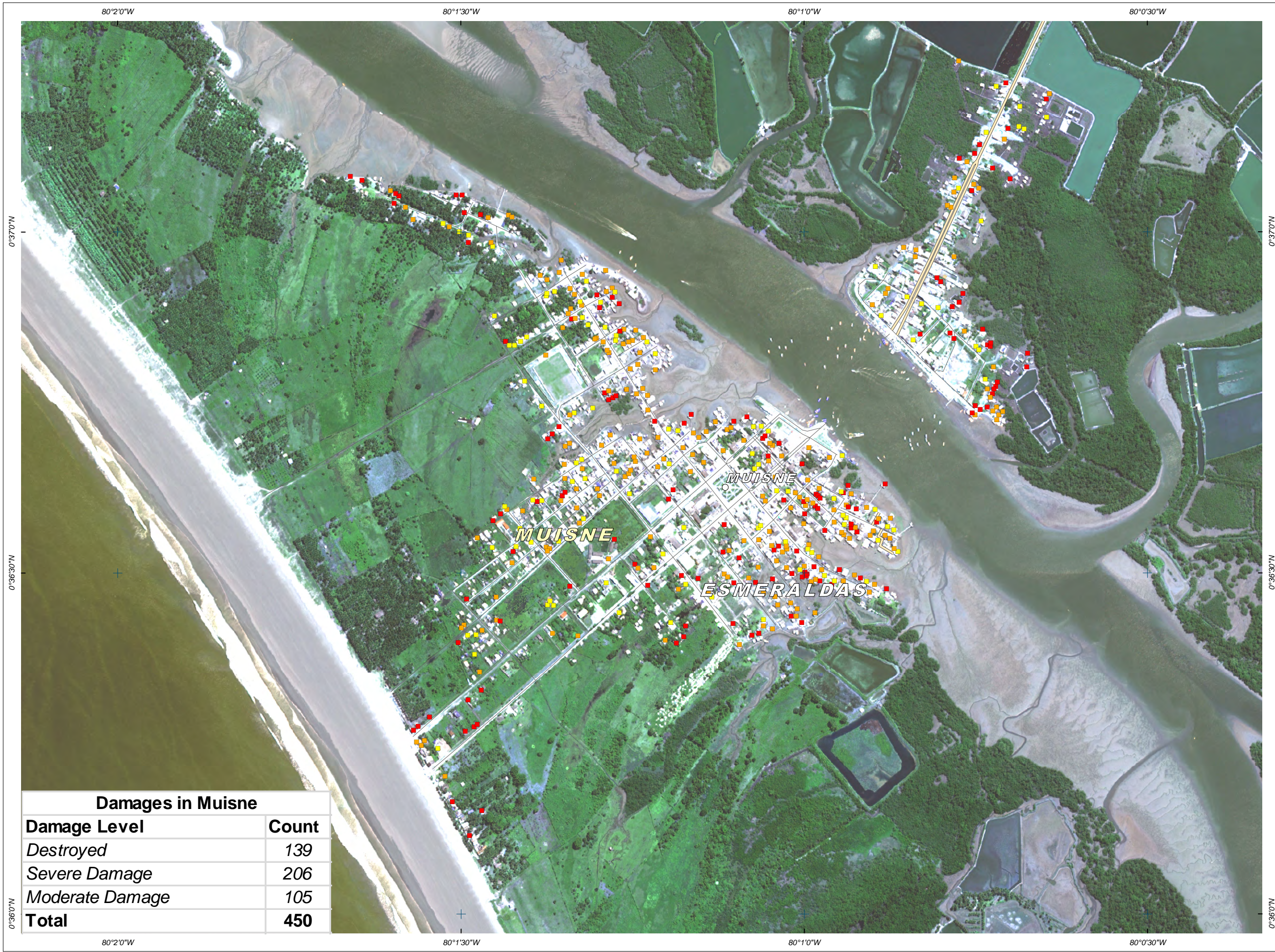
# DAMAGE ASSESSMENT OF MUISNE, ESMERALDAS PROVINCE, ECUADOR

Analysis with Pleiades Data Acquired 20 April 2016 and WorldView-3 Data Acquired 12 March 2016.

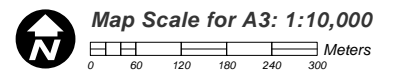
This map illustrates satellite-detected, potential damaged structures in Muisne, Esmeraldas Province, Ecuador. The analyzed area is located approximately 30 km north of the 16 April 2016 Muisne earthquake mainshock epicenter. This analysis is carried out using Pleiades satellite image acquired 20 April 2016 and a WorldView-3

image acquired 12 March 2016. UNITAR-UNOSAT identified 450 potentially damaged structures of which 139 are destroyed, 206 severely damaged, and 105 moderately damaged. This is a preliminary analysis and not yet been validated in the field. Please send ground feedback to UNITAR-UNOSAT.

**Earthquake**  
 Production Date: 22/04/2016  
 Version 1.0  
 Glide Number: EQ-2016-000035-ECU



- LEGEND**
- Destroyed
  - Severe Damage
  - Moderate Damage
  - Town
  - ★ Epicenter
  - Secondary Road
  - Local/Urban Road



Satellite Data (1): Pleiades  
 Imagery Date: 20 April 2016  
 Resolution: 50 cm  
 Copyright: CNES (2016), Distribution AIRBUS DS  
 Source: Airbus Defence and Space  
 Satellite Data (2): WorldView-3  
 Imagery Date: 12 March 2016  
 Resolution: 50 cm  
 Copyright: Digital Globe, Inc  
 Source: USGS/HDSS  
 Road Data : OpenStreetMap (via bbbike.com)  
 Other Data: USGS, UNCS, NASA, NGA  
 Analysis : UNITAR / UNOSAT  
 Production: UNITAR / UNOSAT  
 Analysis conducted with ArcGIS v10.3

Coordinate System: WGS 1984 UTM Zone 17N  
 Projection: Transverse Mercator  
 Datum: WGS 1984  
 Units: Meter

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 and development agencies and their implementing partners.

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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)



Damages in Muisne	
Damage Level	Count
Destroyed	139
Severe Damage	206
Moderate Damage	105
<b>Total</b>	<b>450</b>

## UNOSAT

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