

Preliminary damage response following the M7.5 Indonesia Earthquake-Tsunami

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M7.5 INDONESIA

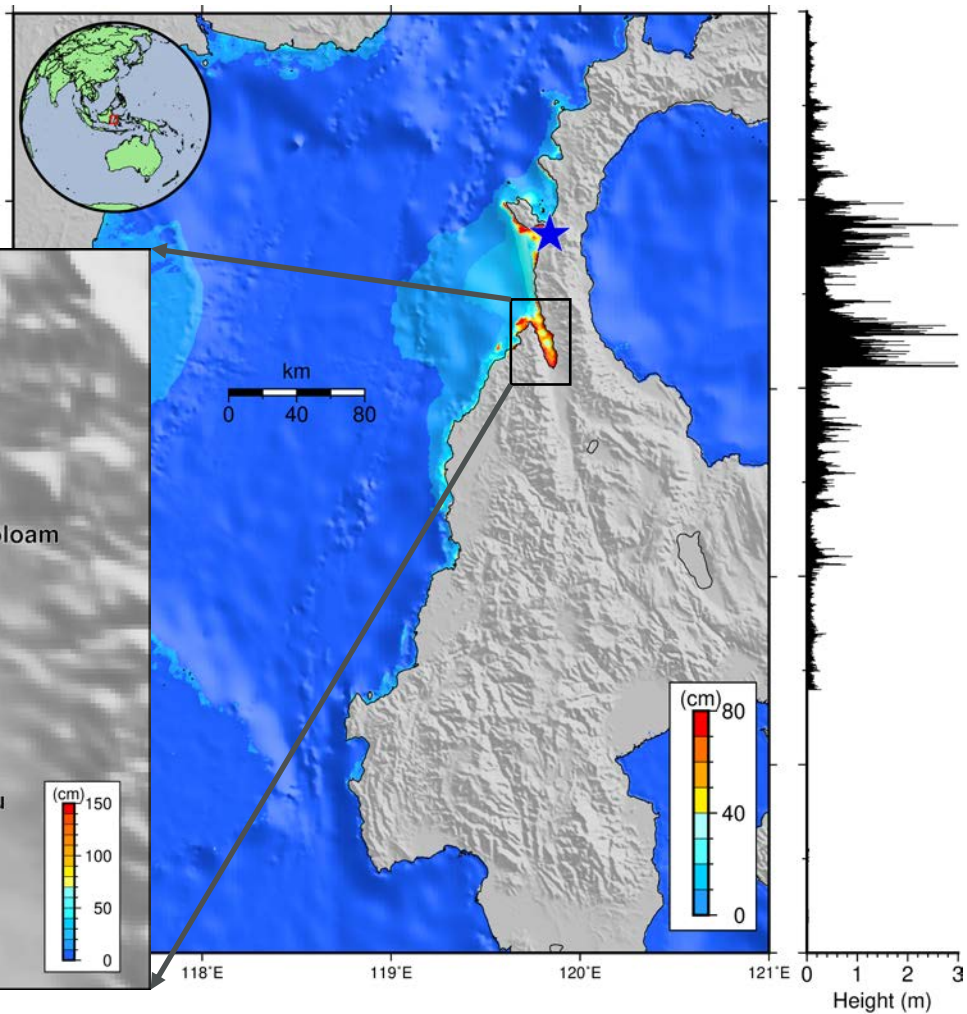
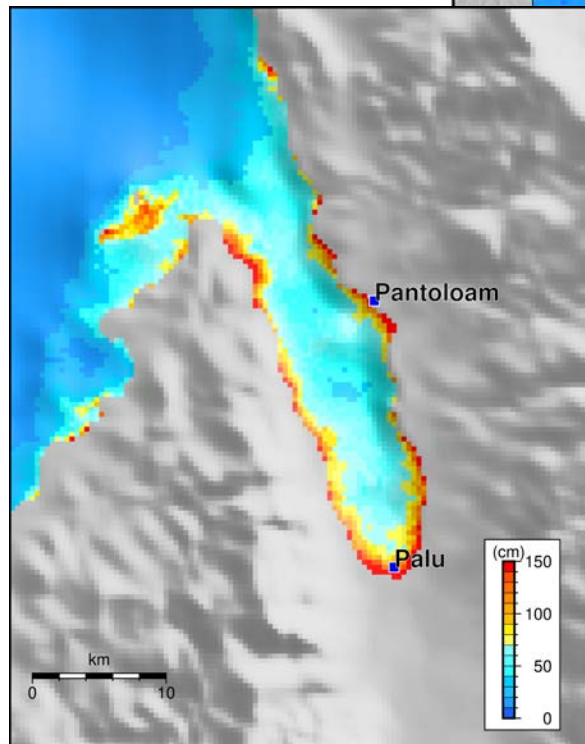
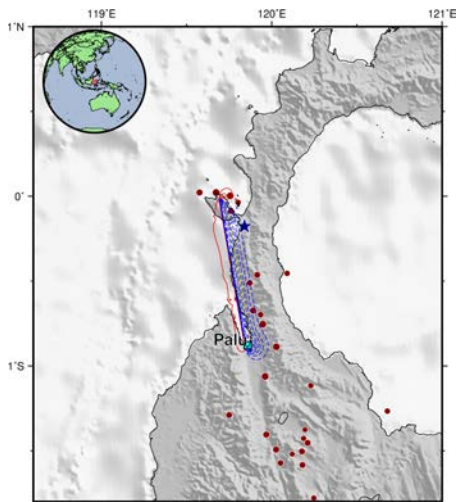
EARTHQUAKE & TSUNAMI

On September 28, 2018, an M7.5 earthquake occurred in Sulawesi, Western Indonesia, the ground shaking and subsequent tsunami caused severe damage and casualties. The Geoinformatics Unit from RIKEN Center for Advanced Intelligence Project, and the International Research Institute of Disaster Science conducted a preliminary damage mapping using satellite remote sensing imagery and numerical simulation.

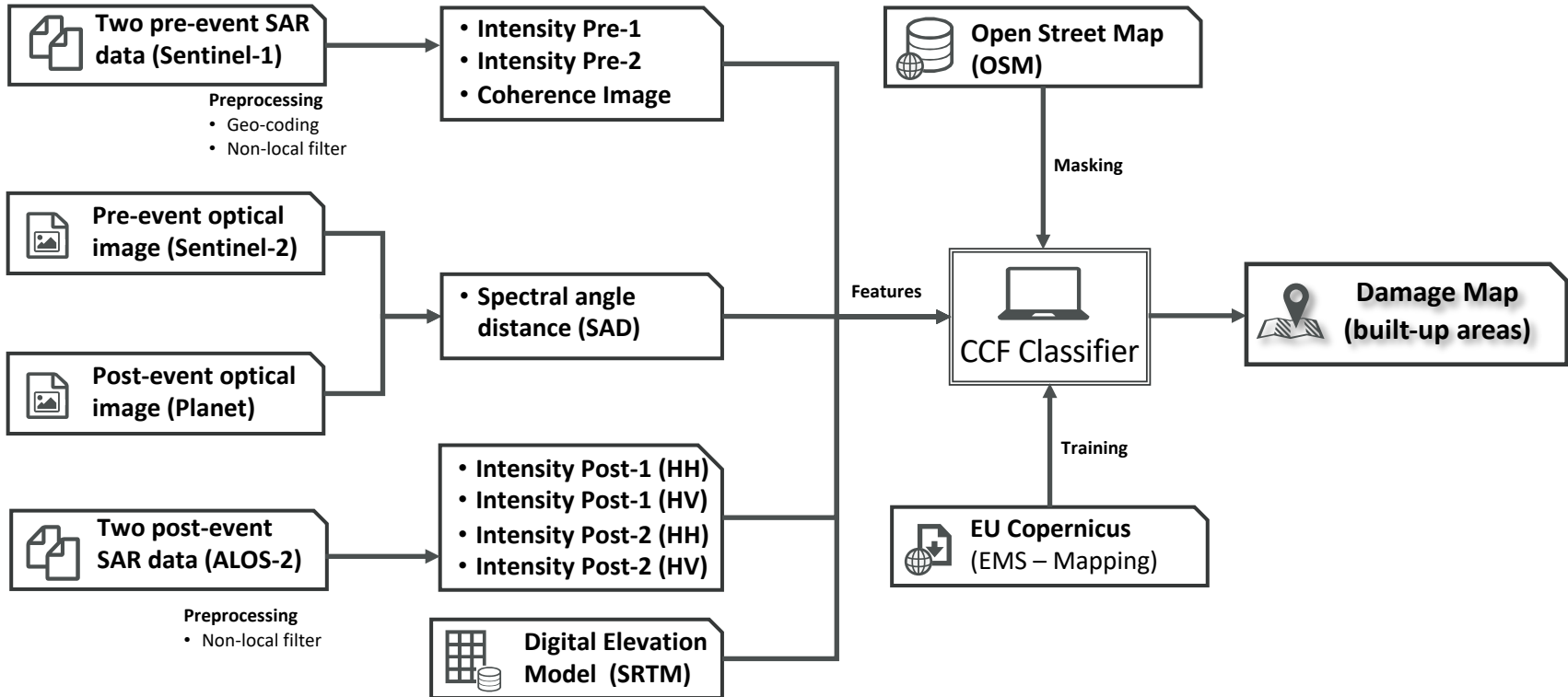


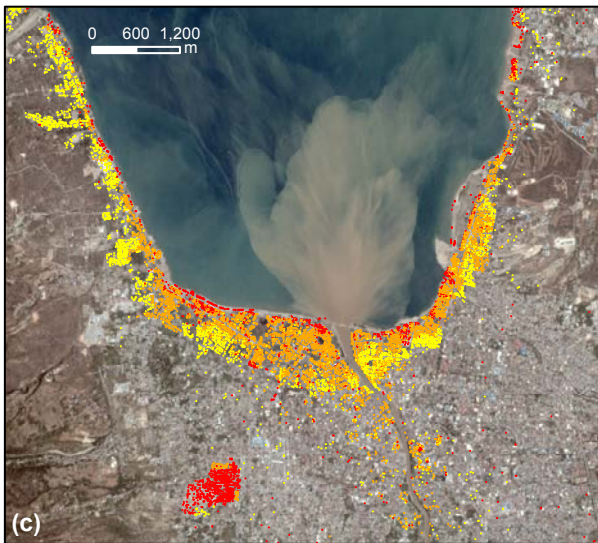
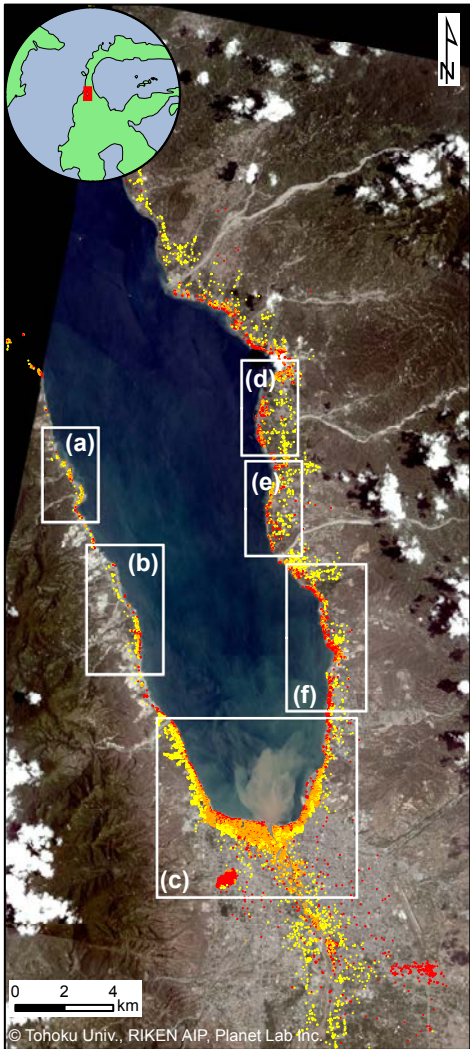
PRELIMINARY TSUNAMI SIMULATION

Fault model



PRELIMINARY DAMAGE MAPPING





Legend

- Destroyed
- Damaged
- Possibly Damaged

Note:
- The background image was provided by Planet Lab Inc.




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 International Research Institute of Disaster Science





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Data Sources
 - The overall image: Sentinel-2 (c) ESA (2018) (acquired on 17/09/2018), Sentinel-1 (c) ESA (2018) (acquired on 07/08/2018)
 - Post-event: Sentinel-2 (c) ESA (2018) (acquired on 02/10/2018), PlanetScope (c) Planet Labs Inc. (2018) (acquired on 01/10/2018), ALOS-2 (c) JAXA (2018) (acquired on 01/10/2018)
 - Building vector layer: OpenStreetMap (c) OpenStreetMap contributors
 - Digital Elevation Model: SRTM 30 m (NASA/JPLGS)
 - Building damage annotation: Copernicus Emergency Management Service - Mapping (EMSR317: Earthquake Impacts) (c) European Union

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