


20 Dec. 2024




PRELIMINARY SATELLITE- DERIVED DAMAGE ASSESSMENT (M7.3 Dec. 17, 2024 VANUATU EARTHQUAKE)



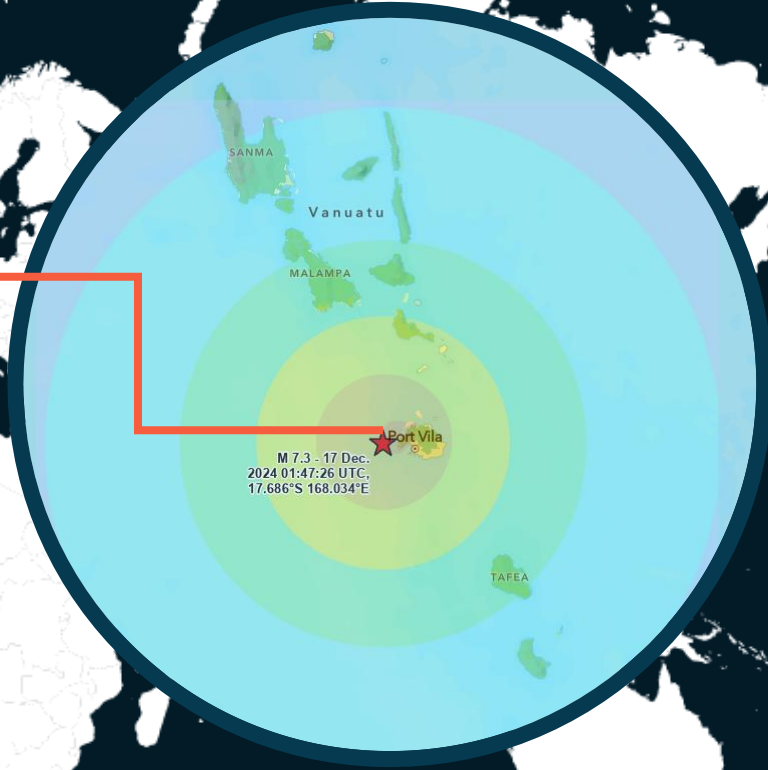
Port Vila, Vanuatu

 Status: Collapsed structures and affected roads, including landslides, have been observed.

 Further action(s): Continue monitoring



VANUATU



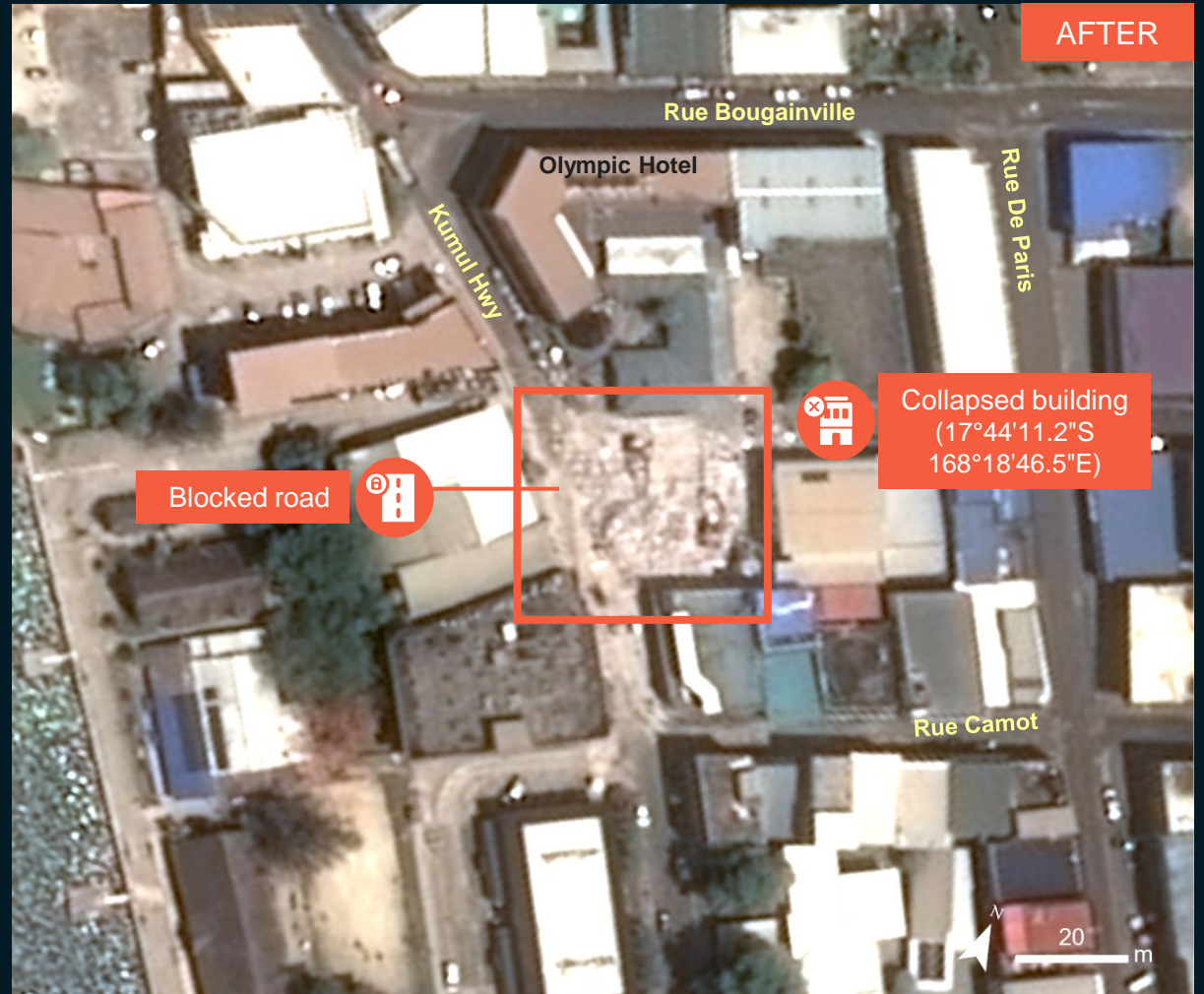
AOI 1: PORT VILLA, SHEFA PROVINCE

Collapsed building and blocked roads

Image center:
17°44'11.2"S
168°18'46.5"E



WorldView-2 / 19 October 2024

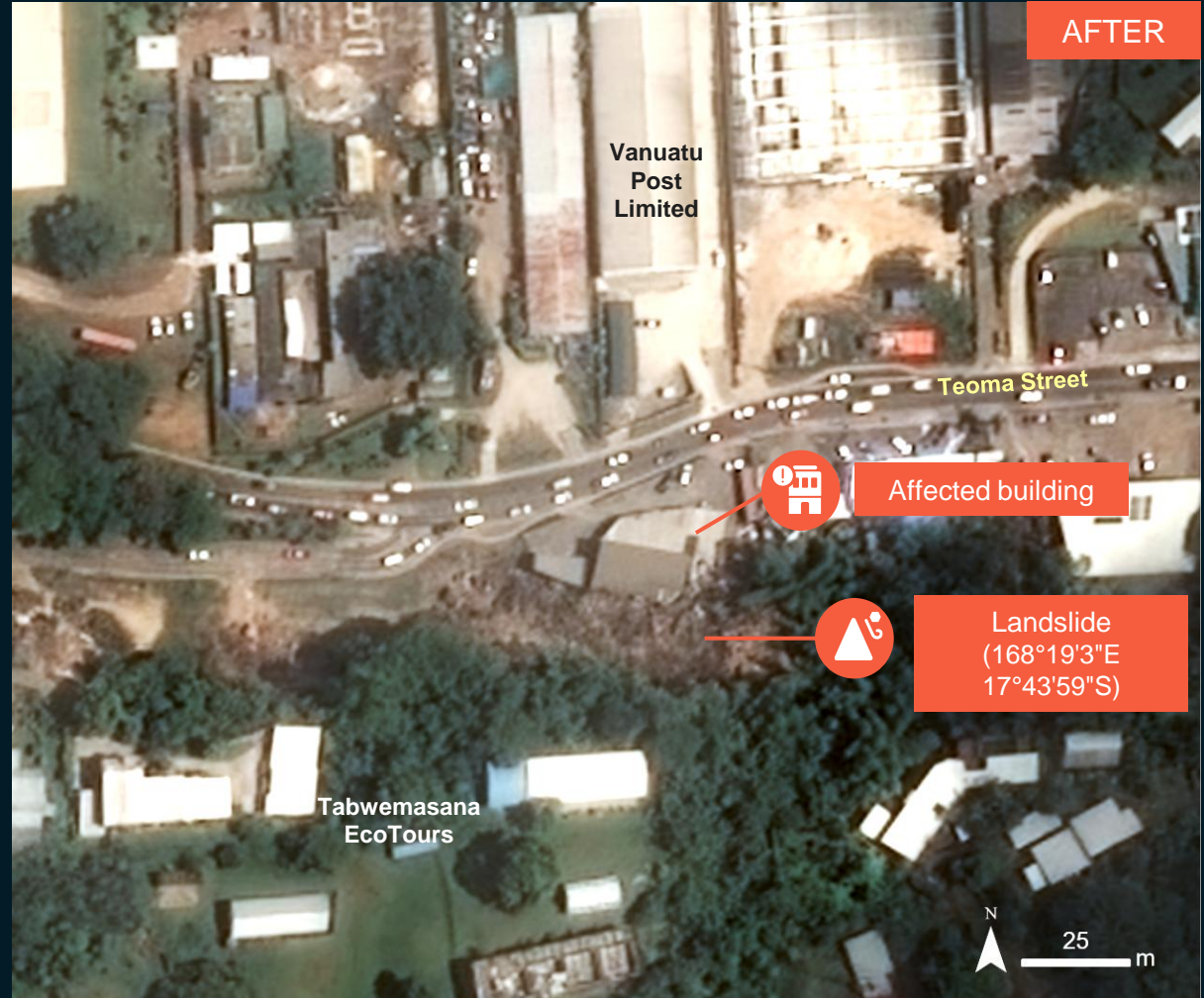
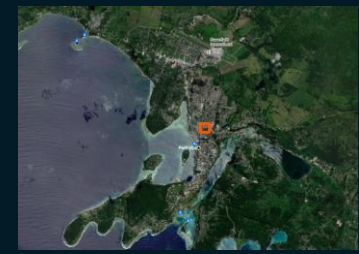


Pléiades/ 20 December 2024, 10:15 AM Local time

AOI 2: PORT VILLA, SHEFA PROVINCE

Landslide and affected buildings

Image center:
168°19'3"E
17°43'59"S



WorldView-2 / 19 October 2024

Pléaides/ 20 December 2024, 10:15 AM Local time

AOI 3: PORT VILLA, SHEFA PROVINCE

Image center:
17°45'23.0"S
168°18'24.0"E



A road was blocked due to a landslide



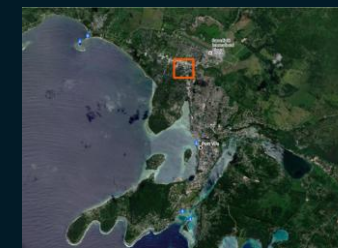
WorldView-2 / 19 October 2024

WorldView-3 / 18 December 2024, 09:54 AM. Local time

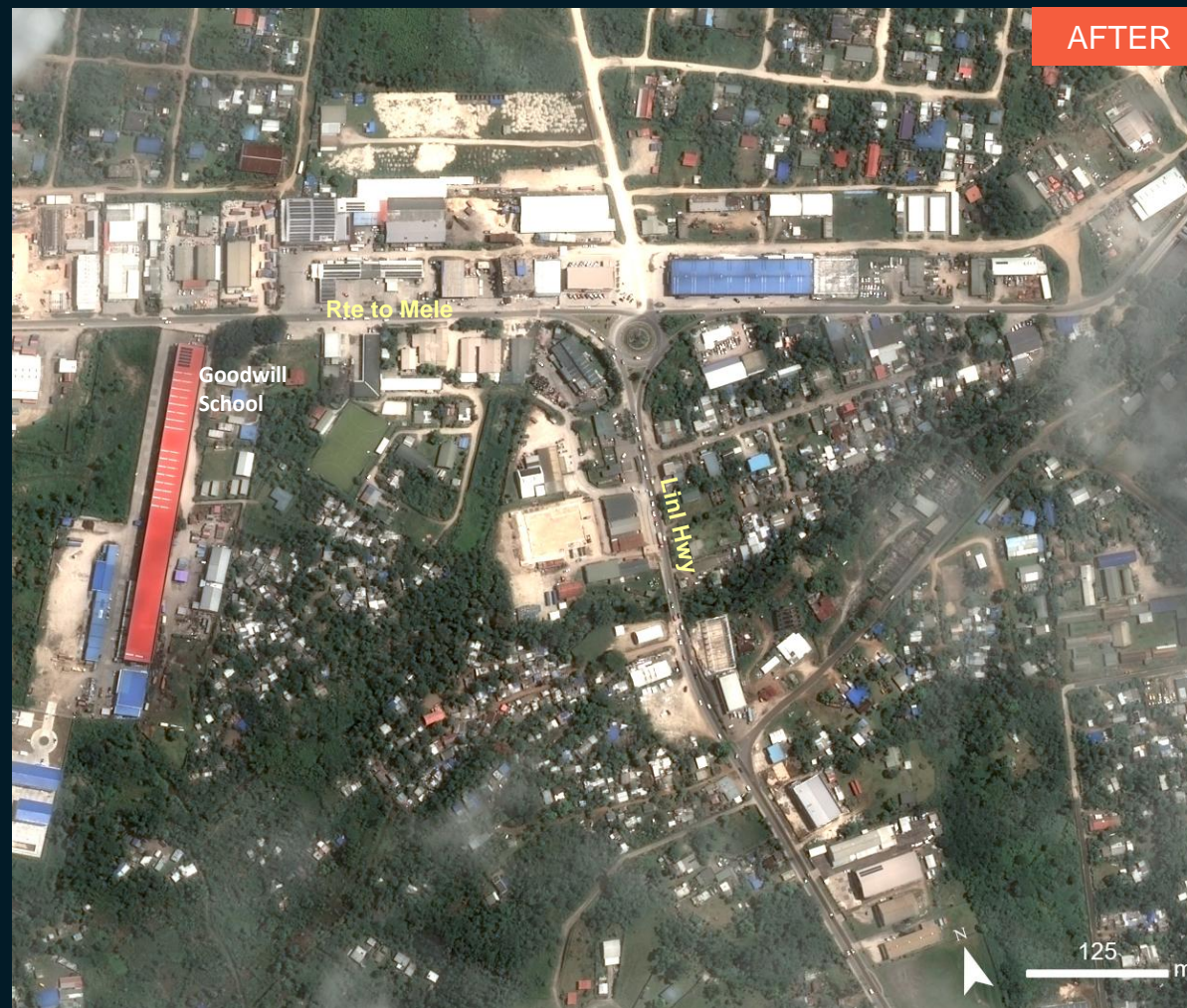
AOI 4: PORT VILLA, SHEFA PROVINCE

No major damaged structure observed

Image center:
168°18'31"E
17°42'25"S



WorldView-2 / 19 October 2024



Pléiades/ 20 December 2024, 10:15 AM Local time

AOI 5: PORT VILLA, SHEFA PROVINCE

No major damaged structure observed

Image center:
17°44'32.9"S
168°19'18.3"E



WorldView-2 / 19 October 2024



WorldView-3 / 18 December 2024, 09:54 AM. Local time

SUMMARY OF FINDINGS

- A collapsed building at 17°44'11.2"S, 168°18'46.5"E has caused debris to block Kumul Highway and Rue Pasteur in Port Vila, as observed on 20 December 2024 at 10:15 AM local time.
- Buildings affected by a possible coseismic landslide were observed at 17°43'59"S, 168°19'3"E in Port Vila, as of 20 December 2024 at 10:15 AM local time.
- A road was blocked due to a landslide at 17°45'23.0"S, 168°18'24.0"E near Ifira Shipping, as observed on 20 December 2024 at 10:15 AM local time.
- No major damage to buildings at Port Vila Central Hospital was observed as of 20 December 2024 at 10:15 AM local time.

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Data sources:

(1) Satellite Image (Post-event): Pléiades

Imagery date: 20 December 2024, 10:15 AM Local time

Resolution: 50cm

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Source: Airbus D&S

(2) Satellite Image (Post-event): WorldView-3

Imagery date: 18 December 2024, 09:54 AM. Local time

Resolution: 30cm

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Source: USGS

(3) Satellite Image (Pre-event): WorldView-2

Imagery date: 19 October 2024

Resolution: 50cm

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Source: USGS

(4) Ancillary data

Populated place: OpenStreetMap

Administrative boundaries: opGIS2: Secretariat of the Pacific Community (SPC), Statistics for Development Division (<http://vanuatu.popgis.spc.int/#l=en;v=map4>)

Analysis: UNITAR-UNOSAT

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