21 DECEMBER 2020

PRELIMINARY SATELLITE-DERIVED DAMAGE ASSESSMENT
CENTRAL AND WESTERN DIVISIONS, VITI LEHU ISLAND AND NORTHERN
DIVISION, VANUA LEHU ISLAND, FIJI

STATUS: Evidence of damaged buildings, infrastructure and land detected

FURTHER ACTION(S): CONTINUE MONITORING
OVERVIEW / BASED ON AOIs ASSESSED

Date of assessment validity: 21 December 2020

Impact and severity*:
- undetected
- limited impact potentially detected
- significant impact potentially detected

Potentially affected elements at risk (indicate all that are applicable):
- buildings - residential
- buildings - commercial/industry
- vulnerable structures (e.g., schools, hospitals, water, sanitation, power stations, etc.)
- internally displaced persons (IDP) camps
- transportation network
- agriculture
- other:

Data sources:
(1) pre-event (reference) image: WorldView2/ 1 January and 13 December 2020
GEOEYE-1 / 22 October 2020
Bing basemap

Copyright:2020 Digital Globe
Source : USGS-HDDS

(2) post-event images:
Pleiades / 19 and 20 December 2020

Copyright : CNES (2020), distribution Airbus D&S
Source : Airbus DS

(3) baseline data:
Fiji Islands Bureau of Statistics

* disclaimer (i.e. assessment yet to be validated with field-based information)
AOI 1-1 BUA TIKINA, BUA PROVINCE, NORTHERN DIVISION: DAMAGED STRUCTURES OBSERVED

Image Center:
178°43'6.589"E
16°40'7.811"S

WorldView-2 / 13 December 2020

Pleiades / 19 December 2020
AOI 1-2 BUA TIKINA, BUA PROVINCE, NORTHERN DIVISION: DAMAGED STRUCTURES OBSERVED

BEFORE

AFFECTED VEGETATION
DAMAGED STRUCTURES

AFTER

DAMAGED STRUCTURES

WorldView 2/ 13 December 2020

Pleiades/ 19 December 2020
AOI 1-3 BUA TIKINA, BUA PROVINCE, NORTHERN DIVISION: DAMAGED STRUCTURES OBSERVED

BEFORE

Image Center:
178°42'26.107"E
16°41'19.763"S

After

Damaged roof

Damaged structures

WorldView 2/ 13 December 2020

Pleiades/ 19 December 2020
AOI 1-4 BUA TIKINA, BUA PROVINCE, NORTHERN DIVISION: DAMAGED STRUCTURES OBSERVED

BEFORE

AFTER
AOI 1-5 BUA TIKINA, BUA PROVINCE, NORTHERN DIVISION: DAMAGED STRUCTURES OBSERVED

Before: 

WorldView 2/ 13 December 2020

After: 

Pleiades / 19 December 2020

Image Center:

178°35'40.311"E
16°39'46.305"S

Damage roof
AOI 1-6 BUA TIKINA, BUA PROVINCE, NORTHERN DIVISION: DAMAGED STRUCTURES OBSERVED

BEFORE

AFTER

Image Center:
178°36'50.145"E
16°47'50.28"S

WorldView-2 / 13 December 2020

Pleiades / 19 December 2020
AOI 2-1 BA PROVINCE, WESTERN DIVISION: NO WIDESPREAD DAMAGE OBSERVED
AOI 3-1 NAITASIRI AND SUVA TIKINA, REWA AND NAITASIRI PROVINCE, CENTRAL DIVISION: NO DAMAGED STRUCTURES OBSERVED
AOI 3-2  SUVA TIKINA, REWA PROVINCE, CENTRAL DIVISION: NO DAMAGED STRUCTURES OBSERVED

BEFORE

AFTER

WorldView-2/ 1 January 2020

Pleiades/ 20 December 2020
AOI 3-3 SUSA TIKINA, REWA PROVINCE, CENTRAL DIVISION: NO DAMAGED STRUCTURES OBSERVED
SUMMARY OF PRELIMINARY OBSERVATIONS AND FURTHER ACTIONS

Date of assessment validity: 21 December 2020

- Widespread severe damage observed in Bua province, Northern division, Vanua Levu Islands as of 19 December 2020 (AOI1),
- No major visible structural damage could be observed in Ba and Rewa provinces, Western division, Viti Levu as of 20 December 2020 (AOI2 & 3).

Further/ anticipated actions from UNOSAT:
- no impact detected/ discontinue monitoring over specific AOI
- potential impact detected
  - continue monitoring over specific AOIs
  - full assessment to be conducted
- more data and/ or information needed to confirm impact severity

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