

8 May 2023

# PRELIMINARY SATELLITE- FLOOD AND LANDSLIDE ASSESSMENT REPORT

Rutsiro and Karongi Districts, Western Province, Rwanda



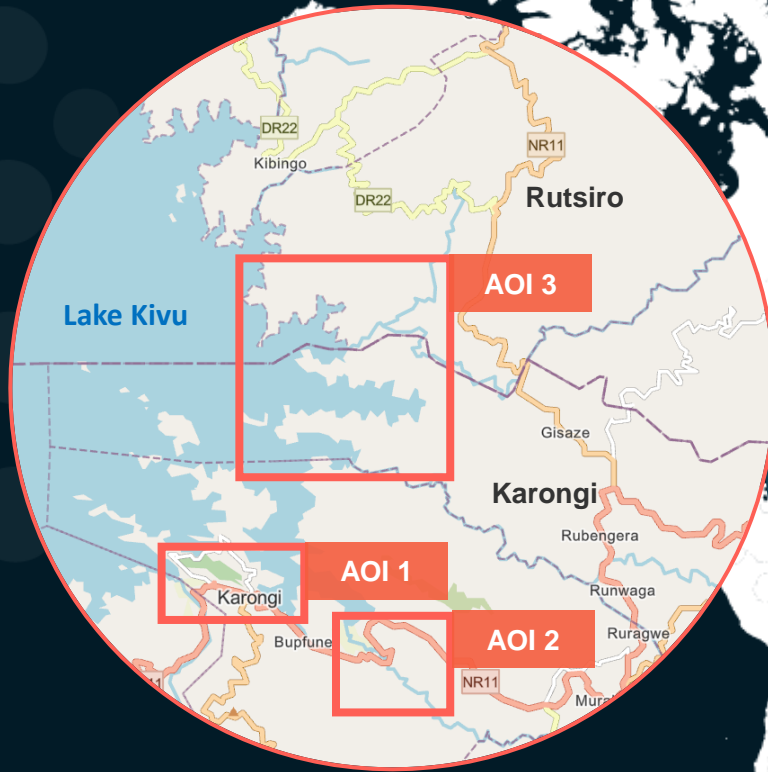
Status: Landslides and affected structures and affected transportation network observed



Further action(s): continue monitoring



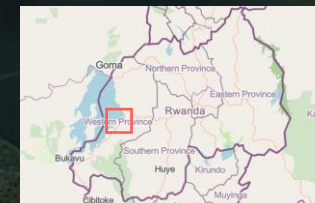
# RWANDA





# AOI1- KARONGI TOWN, KARONGI DISTRICT, WESTERN PROVINCE

Damaged road and affected structures



**UNOSAT**  
United Nations  
Satellite Centre



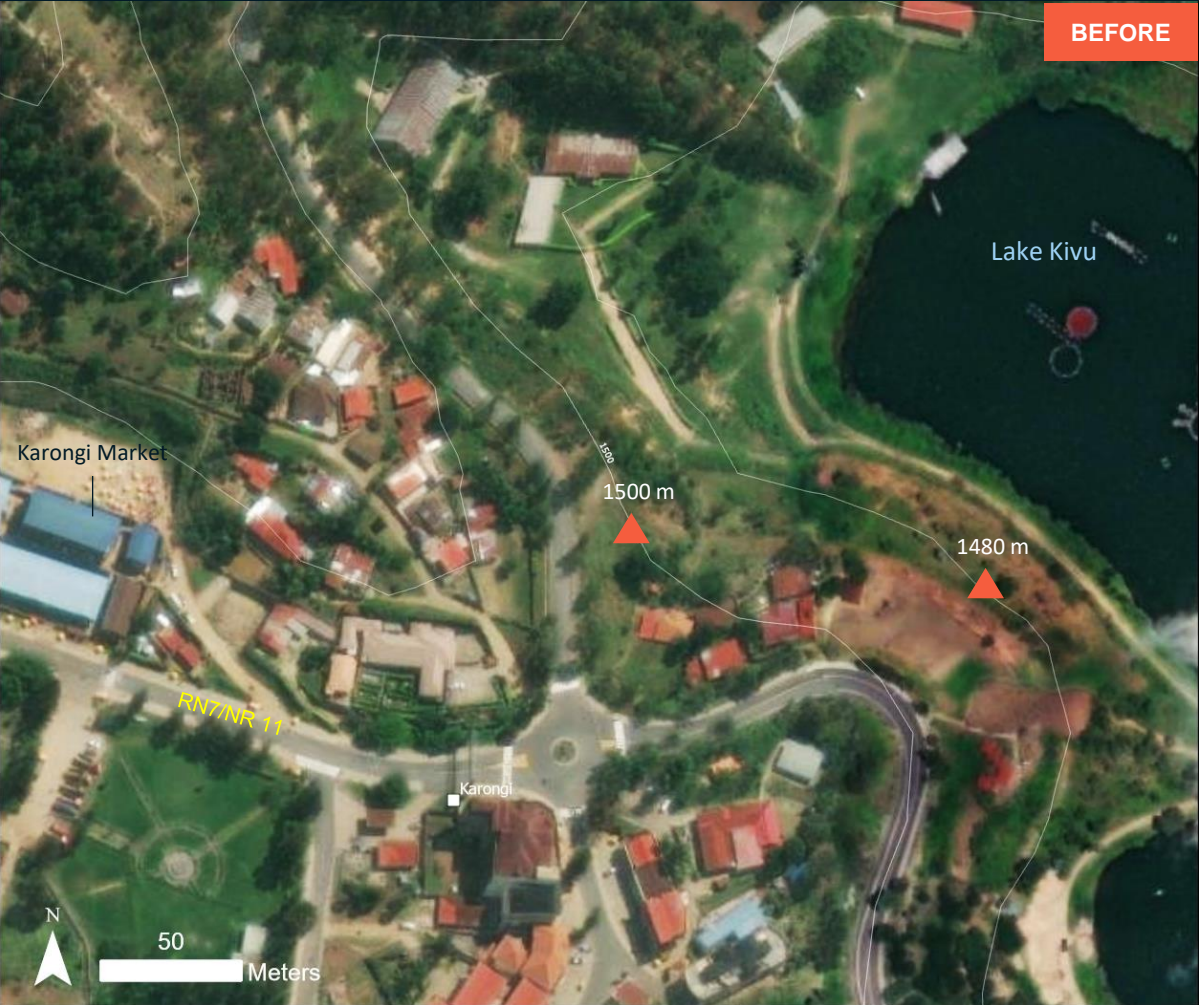
Pleiades image acquired on 7 May 2023, 08:26 UTC  
Image Center: 2°04'19"S 29°21'12"E



# AOI 1-1 KARONGI TOWN, KARONGI DISTRICT, WESTERN PROVINCE

Affected road

Image center:  
2°04'11.1"S  
29°21'10.7"E

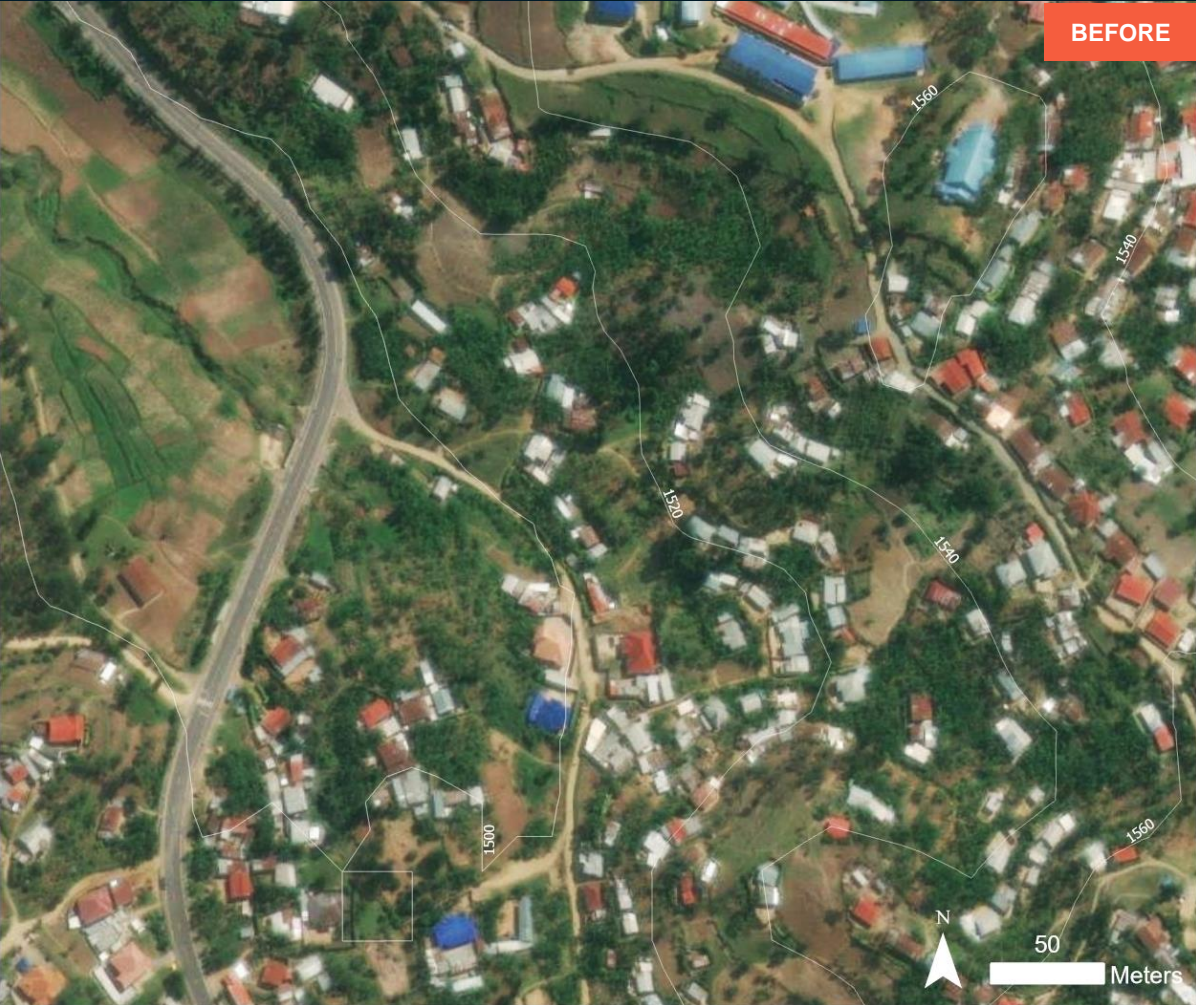




# AOI 1-2 KARONGI TOWN, KARONGI DISTRICT, WESTERN PROVINCE

Potentially affected structures

Image center:  
2°04'20.9"S  
29°20'43.0"E

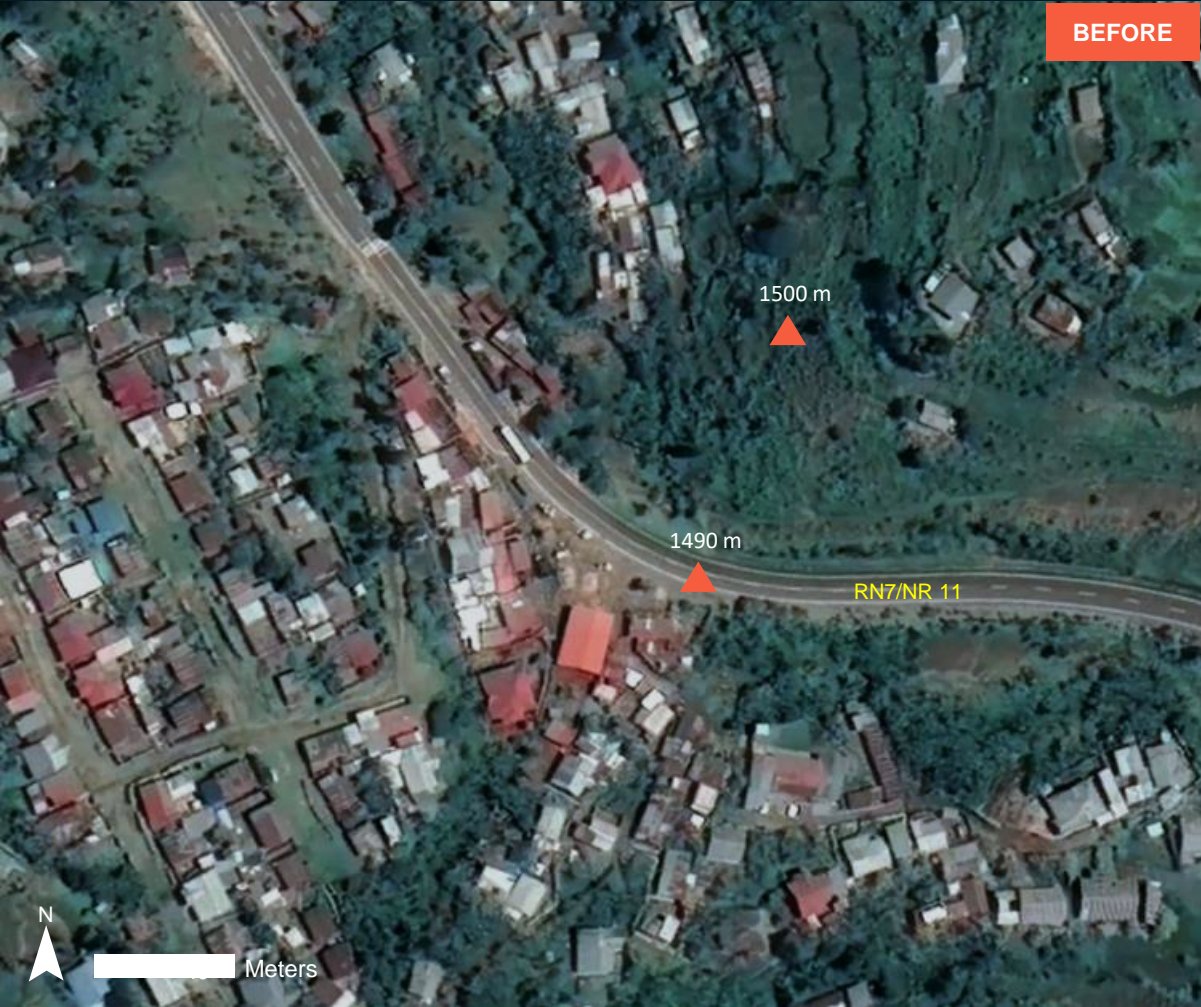
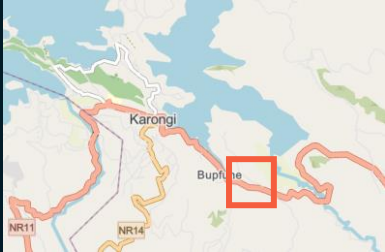




# AOI 1-3 BUPFUNE VILLAGE, KARONGI DISTRICT, WESTERN PROVINCE

Affected road and affected structures

Image center:  
2°04'41"S  
29°21'43"E



Google Earth



Pleiades / 7 May 2023



# AOI2- ALONG NYABAHANGA RIVER, KARONGI DISTRICT, WESTERN PROVINCE

Affected area along the Nyabahanga River





# AOI 2-1 ALONG NYABAHANGA RIVER, KARONGI DISTRICT, WESTERN PROVINCE

Affected road and Potentially affected structures

Image center:  
2°05'25.7"S  
29°22'59.4"E



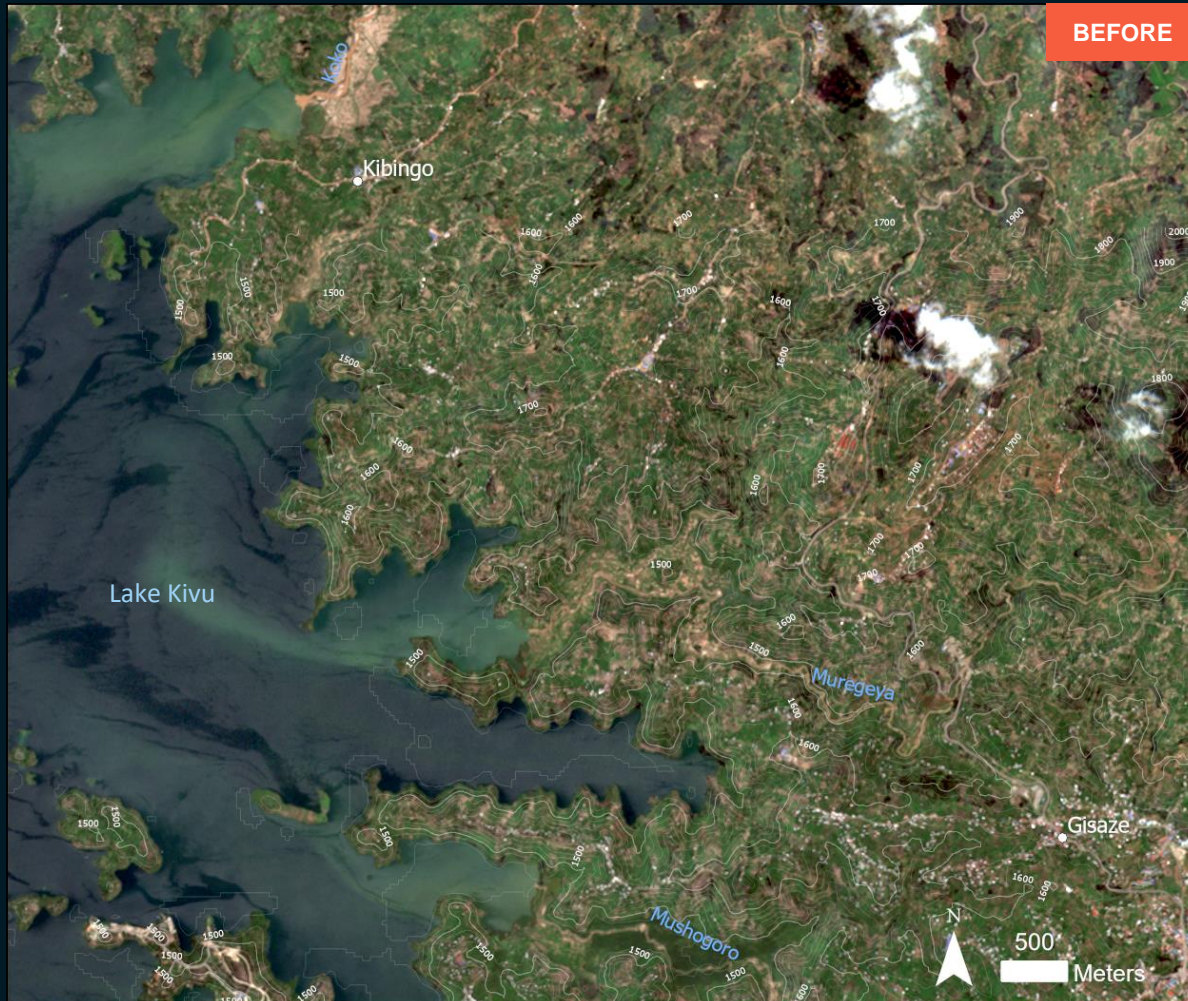


# AOI 3 RUTSIRO AND KARONGI DISTRICTS, WESTERN PROVINCE

Landslides along the Koko, Muregeya, and Mushogoro rivers

Image center:

2°01'12.4"S  
29°22'28.0"E



Sentinel-2/ 8 March 2023



Sentinel-2/ 7 May 2023



# SUMMARY OF FINDINGS

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- Landslides /mudslides and washed away area observed along the Nyabahanga River in Karongi District, and along Koko, Muregeya, and Mushogoro rivers in Rutsiro Western Province as of 7 May 2023;
- Damaged roads and affected structures by landslide/mudslide observed in Karongi Town, Karongi District, Western Province as of 7 May 2023;
- Damaged roads and affected structures by landslide/mudslide observed in Bupfune Village, Karongi District, Western Province as of 7 May 2023;
- Damaged roads and affected structures by landslide/mudslide observed along the Nyabahanga River in Karongi District, Western Province as of 7 May 2023.

*NOTE: This is a preliminary analysis and has not yet been validated in the field.*



# COPYRIGHTS AND SOURCES

## Data sources:

### (1) Satellite Images (Post-event)

Satellite Data : Pleiades

Imagery Date : 7 May 2023

Resolution : 50 cm

Copyright : CNES (2023), distribution Airbus D&S

Source : Airbus DS

### (2) Satellite Images (Post-event)

Satellite Data : Sentinel-2

Imagery Date: 7 May 2023

Resolution: 10 m

Copyright : Contains modified Copernicus Sentinel data [2023]

Source : ESA

### (3) Satellite Images (Pre-event)

Satellite Data : Sentinel-2

Imagery Date: 8 March 2023

Resolution: 10 m

Copyright : Contains modified Copernicus Sentinel data [2023]

Source : ESA

### (4) Satellite Images (Pre-event)

ESRI Basemap

Google Earth

### (5) Ancillary data

Administrative boundaries: National Institute of Statistics of Rwanda (NISR)

Analysis: United Nations Satellite Centre (UNOSAT)

Production: United Nations Satellite Centre (UNOSAT)



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