TROPICAL CYCLONE EMNATI-22 PRELIMINARY SATELLITE-DERIVED DAMAGE ASSESSMENT

Iakora Commune, Iakora District, Ihorombe Region, Madagascar

Status: Inundated agricultural area and affected transportation network observed

Further action(s): Continue monitoring
MADAGASCAR

Region boundary
Area of interest
Commune boundary

Antananarivo
IAKORA DISTRICT
Ranotsara Nord
Iakora
Begogo

AOI

Area of interest
Commune boundary
Region boundary
AOI1 IAKORA TOWN, IAKORA COMMUNE, IAKORA DISTRICT, IHOROMBE REGION

Floods along the Ionaivo river / Affected facilities

Pleiades image acquired on 2 March 2022
Image Center : 46°39'40.903"E 23°5'2.741"S
100 m

Inundated agricultural land
Inundated road
Affected road
Affected bridge
Overflow
AOI1 IKOKRA TOWN, IKOKRA DISTRICT, IHOROMBE REGION

Floods along the Ionaivo river

Before: Sentinel-2 30 Jan. 2022

After: Pléiades 2 Mar. 2022

Image center:
46°39’41.634”N
23°5’54.175”S
AOI1 IAKORA TOWN, IAKORA DISTRICT, IHOROMBE REGION

Inundated agricultural area and affected road

Before:

- ESRI Basemap/ WroldView-2/ 22 Jul. 2019
- Image center: 46°39'17.884"E 23°5'56.829"S

After:

- Pléiades/ 2 Mar. 2022
- Iakora District

Inundated agricultural land
Potentially affected bridge
Affected road
Road number 18

AOI1 IAKORA TOWN, IAKORA DISTRICT, IHOROMBE REGION

Inundated agricultural area and affected road

Before:

- ESRI Basemap/ WroldView-2/ 22 Jul. 2019
- Image center: 46°39'17.884"E 23°5'56.829"S

After:

- Pléiades/ 2 Mar. 2022
- Iakora District

Inundated agricultural land
Potentially affected bridge
Affected road
Road number 18
AOI1 IAKORA TOWN, IAKORA DISTRICT, IHOROMBE REGION

Inundated agricultural area and affected road

BEFORE

Pléiades/2 Mar. 2022

AFTER

Inundated agricultural area and affected road

ESRI Basemap/WorldView-2/22 Jul. 2019

Image center:
46°39'45.449"E
23°6'4.963"S

Iakora District
AOI-2 NORTHERN PART OF IAKORA TOWN, IAKORA COMMUNE, IAKORA DISTRICT, IHOROMBE REGION

Flooding along the Ionaivo river / Inundated road

Inundated road

Inundated agricultural land

Overflow

See inset for close view
AOI-3 NORTHERN PART OF IAKORA TOWN, IAKORA COMMUNE, IAKORA DISTRICT, IHOROMBE REGION

Flooding along the Ionaivo river and inundated road

UNOSAT

Iakora District

Inundated area

Overflow

Road

Inundated road

Inundated area

Pléiades image acquired on 2 March 2022
Image Center: 46°39'49.694"E  23°4'28.426"S
SUMMARY OF FINDINGS

• Inundated road along the Ionaivo river observed as of 2 March 2022;

• Inundated agricultural land along the Ionaivo river observed as of 2 March 2022;

• Potentially affected bridge observed in Iakora town, Iakora district, Ihorombe region as of 2 March 2022;

• No widespread structural damage observed in Iakora town, Iakora district, Ihorombe region as of 2 March 2022.
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Data sources:

(1) Satellite Image (Post-event)
Satellite: Pleiades
Imagery Date: 2 March 2022
Resolution: 50 cm
Copyright: ©CNES (2022), distribution Airbus D&S
Source: Airbus DS

(2) Satellite Image (Pre-event)
Satellite: Sentinel-2B
Imagery Date: 30 January 2022
Resolution: 10 m
Copyright: Contains modified Copernicus Sentinel data [2022]
Source: ESA
ESRI based map

(3) Ancillary data
Administrative boundaries: Madagascar National Disaster Management Office (BNGRC)
Analysis: United Nations Satellite Centre (UNOSAT)
Production: United Nations Satellite Centre (UNOSAT)