



21 Feb 2022



TROPICAL CYCLONE BATSIRAI-22, PRELIMINARY SATELLITE-DERIVED FLOOD ASSESSMENT,

Amoron'i Mania and Vakinankaratra regions, Madagascar





-  Status: Increased water levels and potentially affected roads observed
-  Further action(s): Continue monitoring



MADAGASCAR

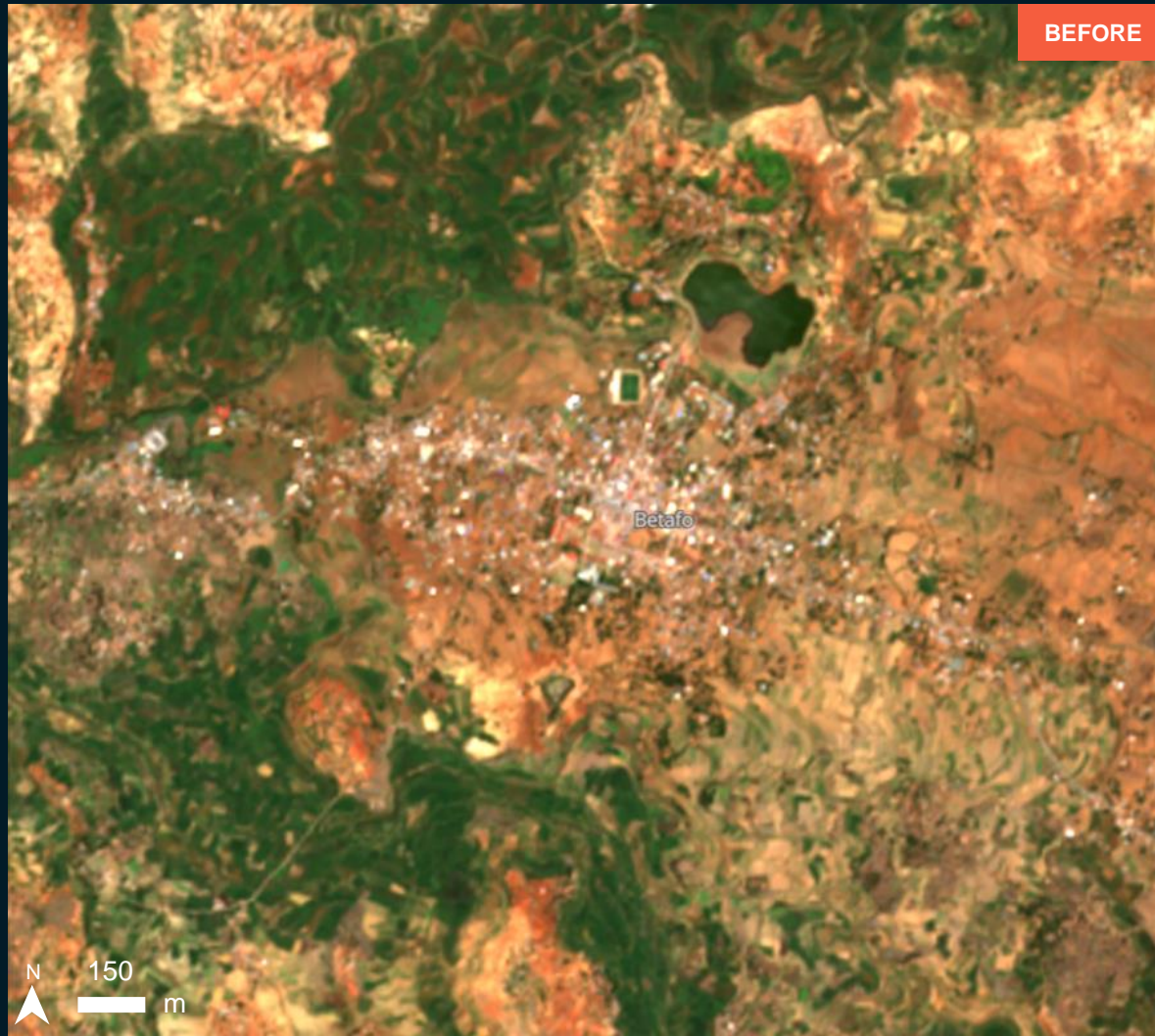


-  Focused Region
-  Region boundary

BETAFO TOWN, BETAFO DISTRICT VAKINANKARATRA REGION

No flood observed

Image center:
46°51'14.009"E
19°50'13.181"S



Sentinel-2/ 6 Dec 2021



Sentinel-2/ 19 Feb 2022

BETAFO DISTRICT, VAKINANKARATRA REGION

Image center:
46°53'4.222"E
19°45'23.763"S



Increased water in agricultural areas and potentially affected road



Sentinel-2/ 24 Dec 2021



Sentinel-2/ 19 Feb 2022

BETAFO DISTRICT, VAKINANKARATRA REGION

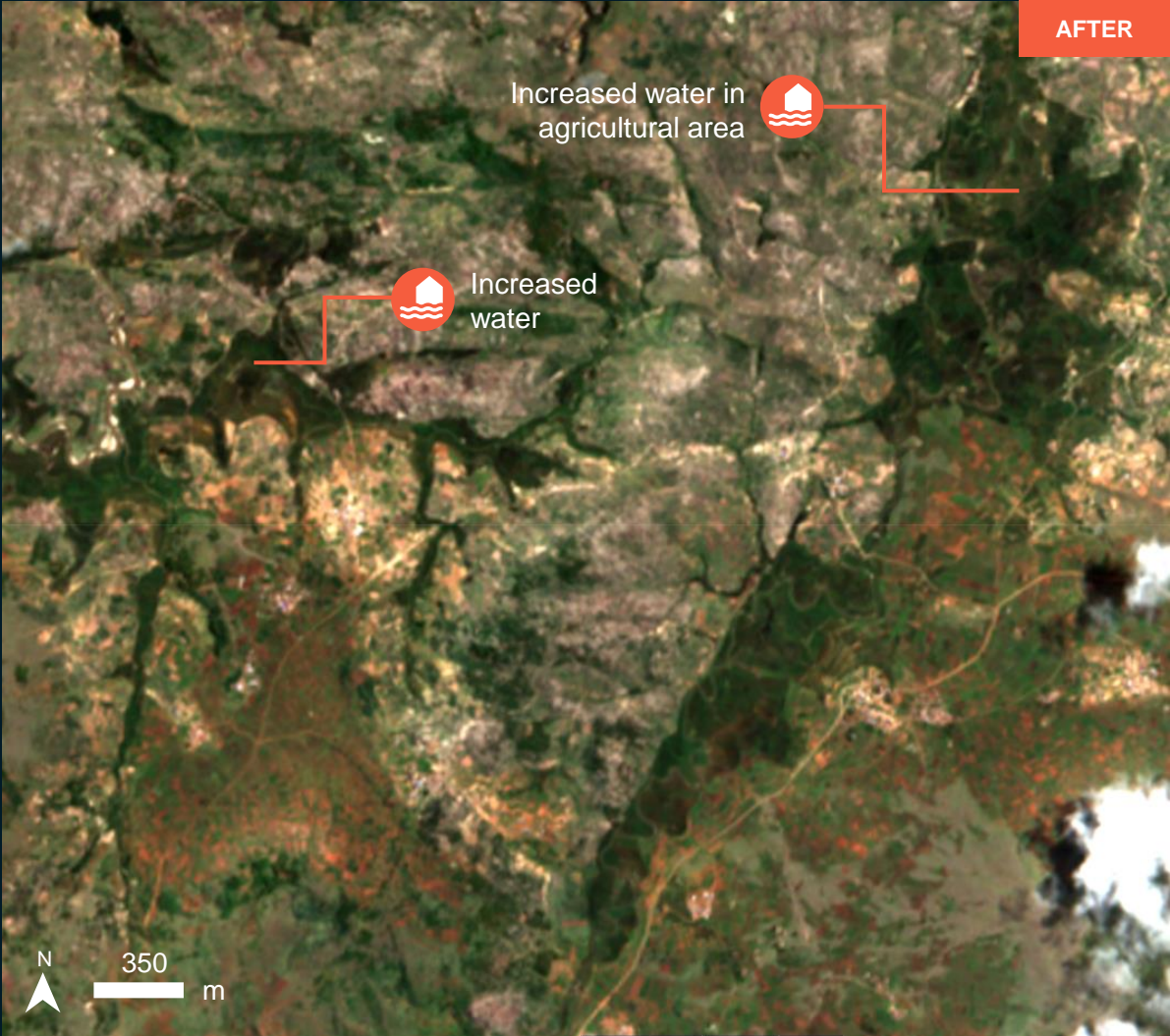
Image center:
46°55'15.931"E
19°44'49.796"S



Increased water in agricultural areas



Sentinel-2/ 24 Dec 2021



Sentinel-2/ 19 Feb 2022

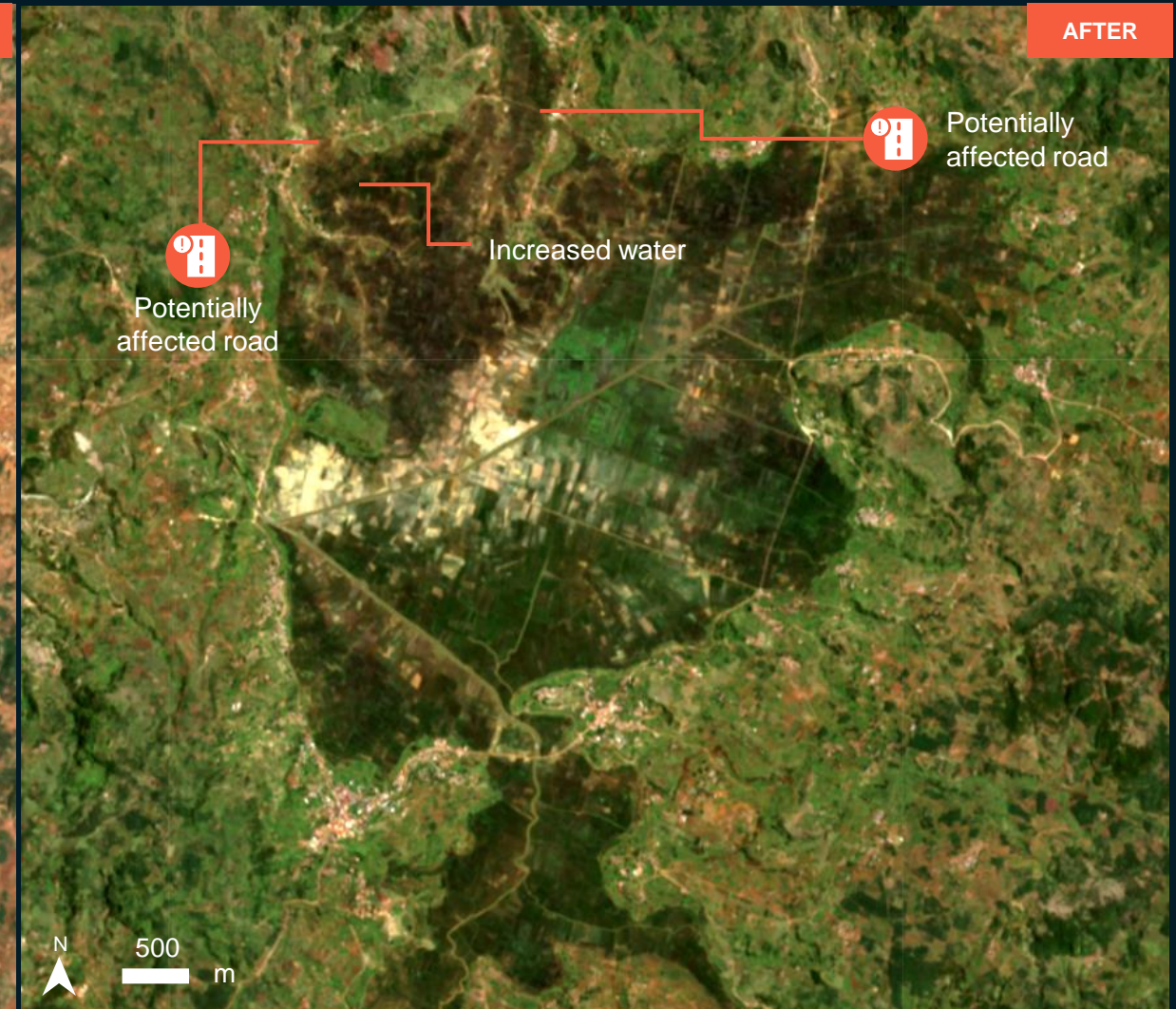
BETAFO DISTRICT, VAKINANKARATRA REGION

Increased water and potentially affected roads

Image center:
46°57'41.052"E
19°31'50.254"S



Sentinel-2/ 6 Dec 2021



Sentinel-2/ 17 Feb 2022

FARATSIHO TOWN, FARATSIHO DISTRICT, VAKINANKARATRA REGION

Increased water and potentially affected road

Image center:
46°57'19.289"E
19°23'44.253"S



Sentinel-2/ 6 Dec 2021



Sentinel-2/ 17 Feb 2022

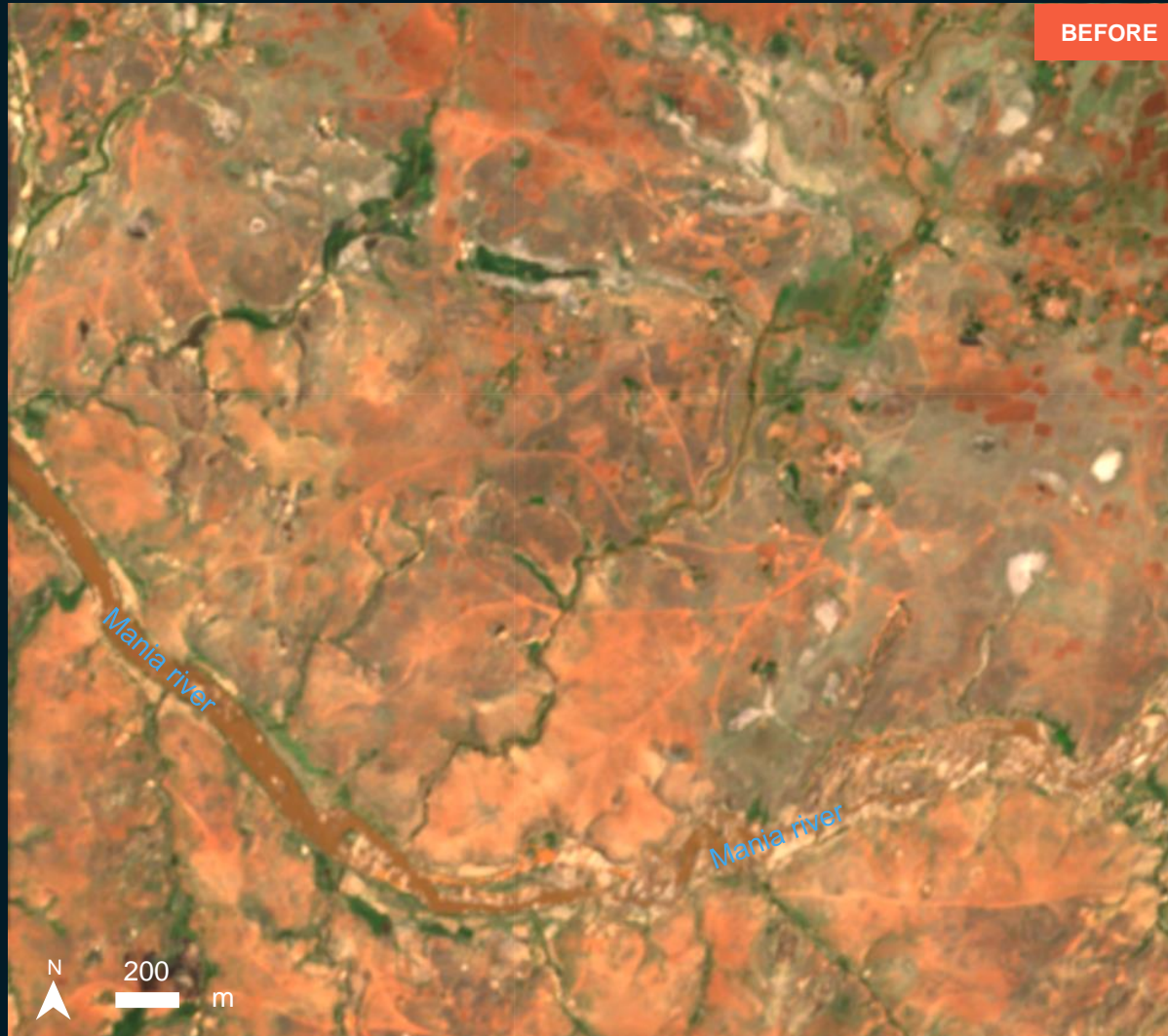
AMBATOFINANDRAHANA DISTRICT, AMORON I MANIA REGION

Increased water of Mania river

Image center:
46°41'37.334"E
20°15'52.167"S



Amoron I
Mania Region



Sentinel-2/ 24 Dec 2021



Sentinel-2/ 19 Feb 2022

AMBOROMPOTSY TOWN, AMBATOFINANDRAHANA DISTRICT, AMORON I MANIA REGION

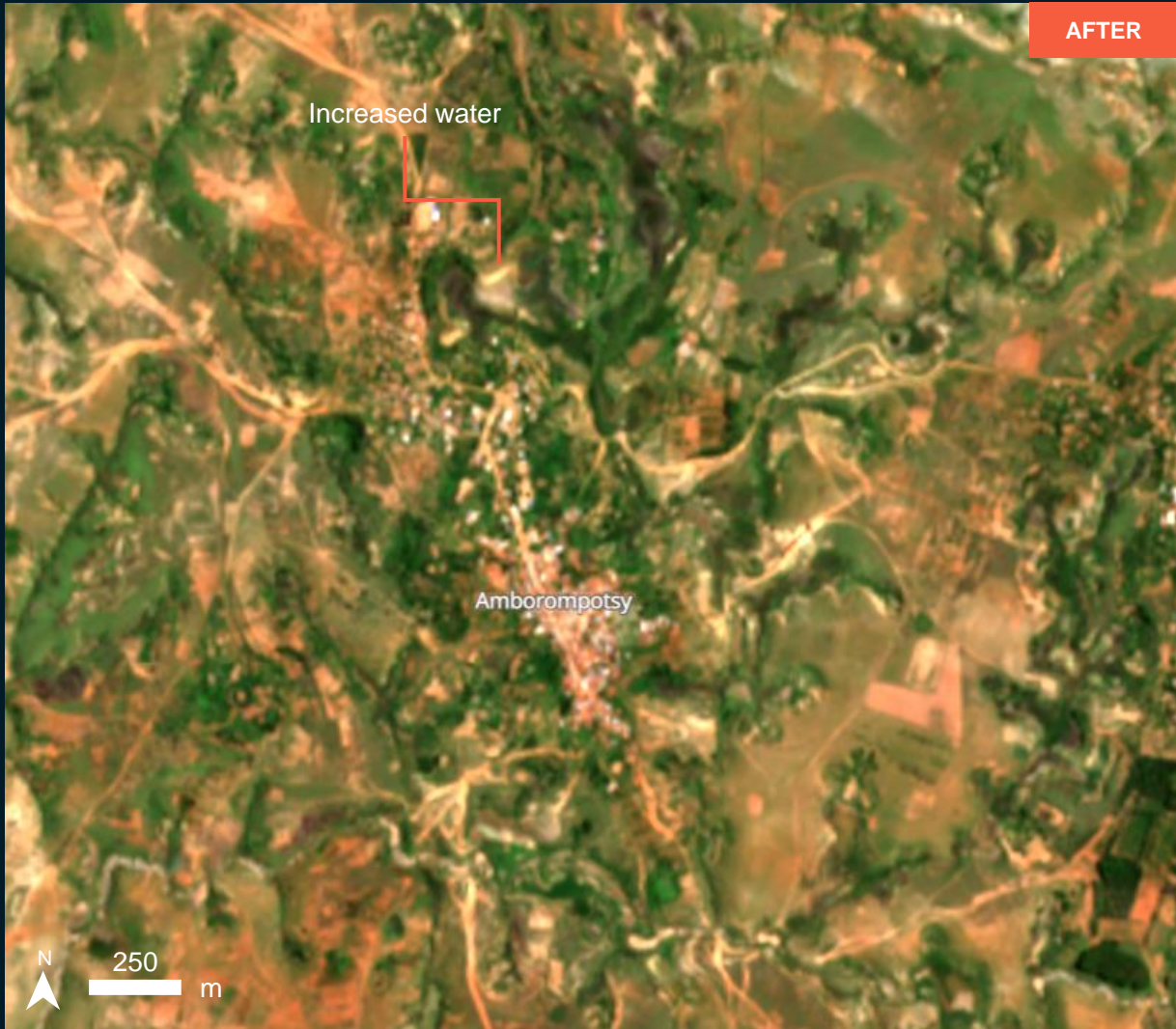
Increased water

Image center:
46°14'54.477"E
20°36'32.875"S



BEFORE

Sentinel-2/ 24 Dec 2021



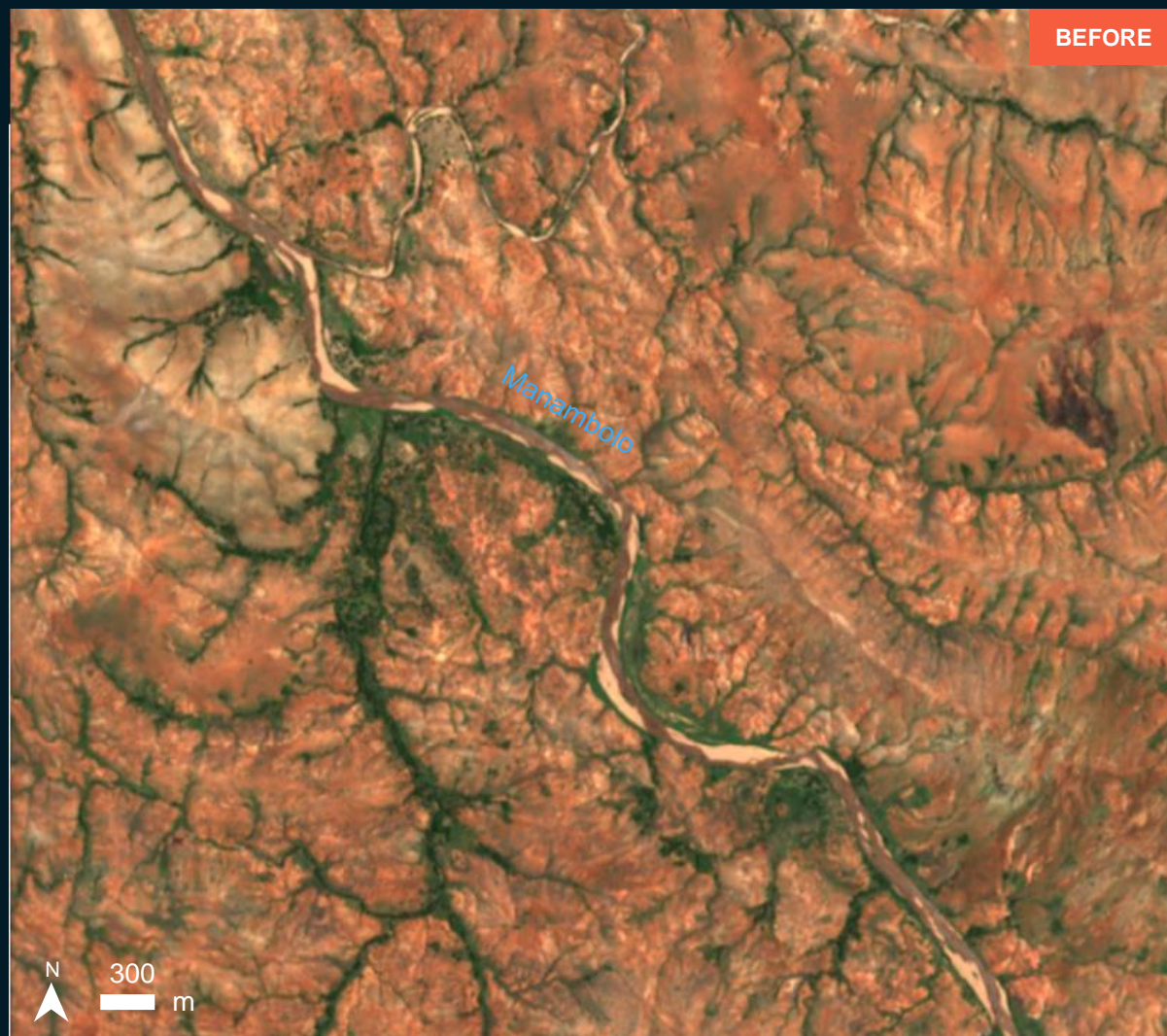
AFTER

Sentinel-2/ 17 Feb 2022

AMBATOFINANDRAHANA DISTRICT, AMORON I MANIA REGION

Increased water of Manambolo river

Image center:
45°55'4.441"E
20°17'33.814"S



Sentinel-2/ 24 Dec 2021



Sentinel-2/ 17 Feb 2022

AMBOROMPOTSY TOWN, AMBATOFINANDRAHANA DISTRICT, AMORON I MANIA REGION

Increased water

Image center:
46°14'54.477"E
20°36'32.875"S



Sentinel-2/ 24 Dec 2021



Sentinel-2/ 17 Feb 2022

SUMMARY OF FINDINGS

- No flood observed in Betafó town, Betafo district, Vakinankaratra region, as of 19 Feb 2022;
- Increased water in agricultural areas and potentially affected road in Betafo district, Vakinankaratra region, as of 19 Feb 2022;
- Increased water in agricultural areas and potentially affected road In Faratsiho Town, Faratsiho District, Vakinankaratra Region, as of 17 Feb 2022;
- Increased water level of Mania river in Ambatofinandrahana district, Amoron I Mania region observed as of 19 Feb 2022;
- Increased water level of Manambolo river in Ambatofinandrahana district, Amoron I Mania region, observed as of 17 Feb 2022;
- Increased water observed in Amborompotsy town, Ambatofinandrahana District, Amoron I Mania Region, as of 17 Feb 2022;

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Data sources:

(1) Satellite Image (Post-event)

Satellite : Sentinel-2A

Imagery Date : 17 February 2022 at 10:12 local time

Satellite : Sentinel-2B

Imagery Date : 19 February 2022 at 10:00 local time

Resolution : 10 cm

Copyright : Contains modified Copernicus Sentinel data [2022]

Source: ESA

(2) Satellite Image (Pre-event)

Satellite : Sentinel-2A and Sentinel-2B

Imagery Date : 16 and 24 December 2021

Resolution : 10 cm

Copyright : Contains modified Copernicus Sentinel data [2021]

Source: ESA

(3) Ancillary data

Administrative boundaries: Madagascar National Disaster Management Office (BNGRC)

Analysis: United Nations Satellite Centre (UNOSAT)

Production: United Nations Satellite Centre (UNOSAT)



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