

27 September 2022


TROPICAL CYCLONE FIONA-22

PRELIMINARY SATELLITE-DERIVED DAMAGED ASSESSMENT



Higüey City, Region Yuma, The Dominican Republic

 Status: Damaged structures and affected transportation network observed

 Further action(s): continue monitoring

THE DOMINICAN REPUBLIC



- Region boundary
- Province boundary
- Area of interest

AOI 1- HIGUEY CITY, PROVINCIA LA ALTAGRACIA, REGION YUMA

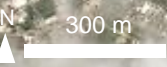
Riverbank erosion and affected transportation network



See enlarge image on next page
(AOI 1-1)



See enlarge image on next page
(AOI 1-3)

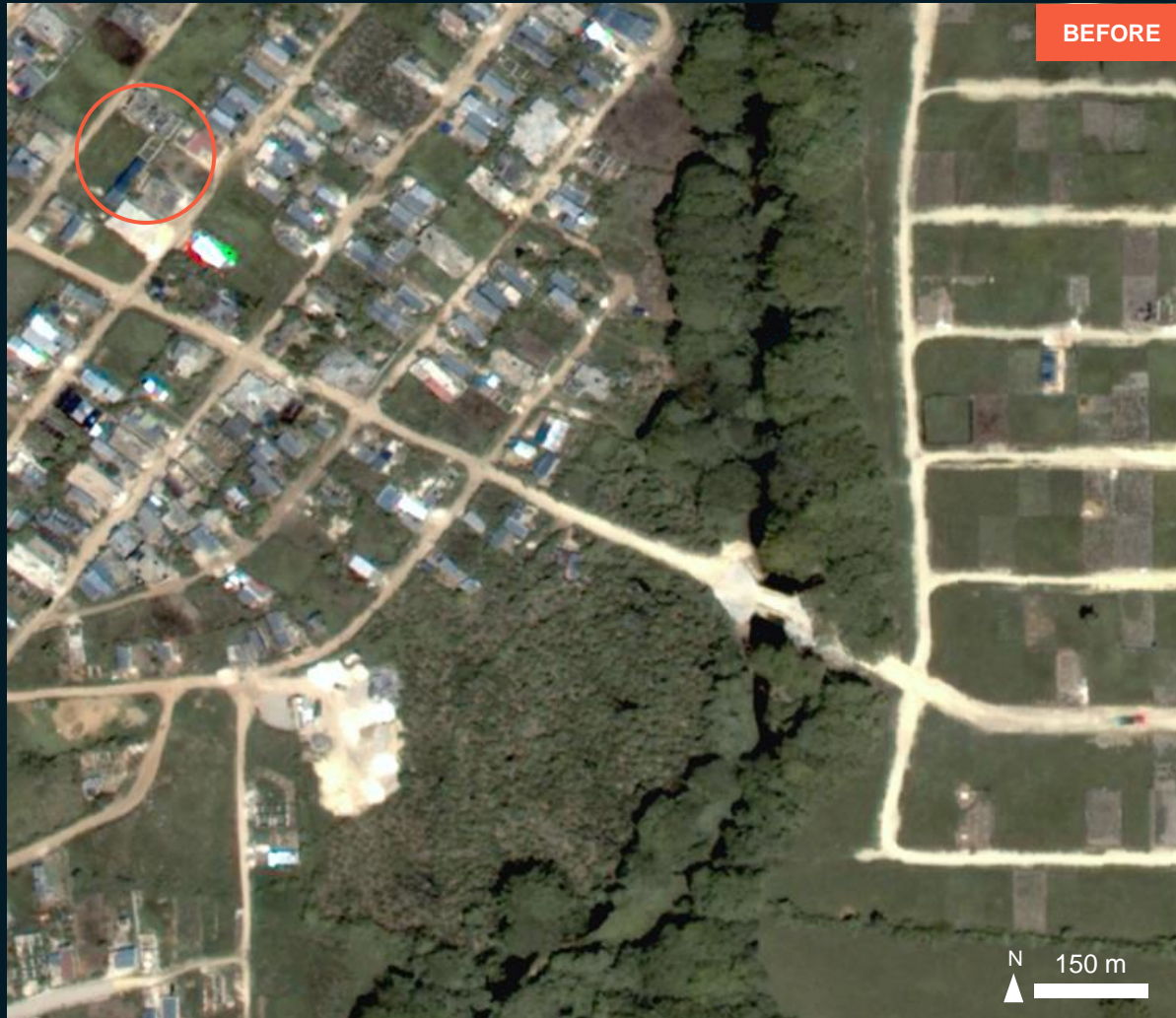
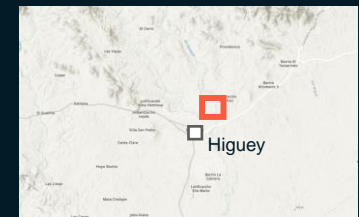


AOI 1-1 HIGUEY CITY, PROVINCIA LA ALTAGRACIA, REGION YUMA

Damaged bridge and structures

Image center:

18°38'34.2"N
68°42'37.1"W



WorldView-2 / 11 Apr. 2022



Pléiades / 25 Sep. 2022

AOI 1-2 HIGUEY CITY, PROVINCIA LA ALTAGRACIA, REGION YUMA

Destroyed structures and potentially affected bridge along the waterway

Image center:

18°38'23.4"N
68°41'57.9"W



WorldView-2 / 11 Apr. 2022



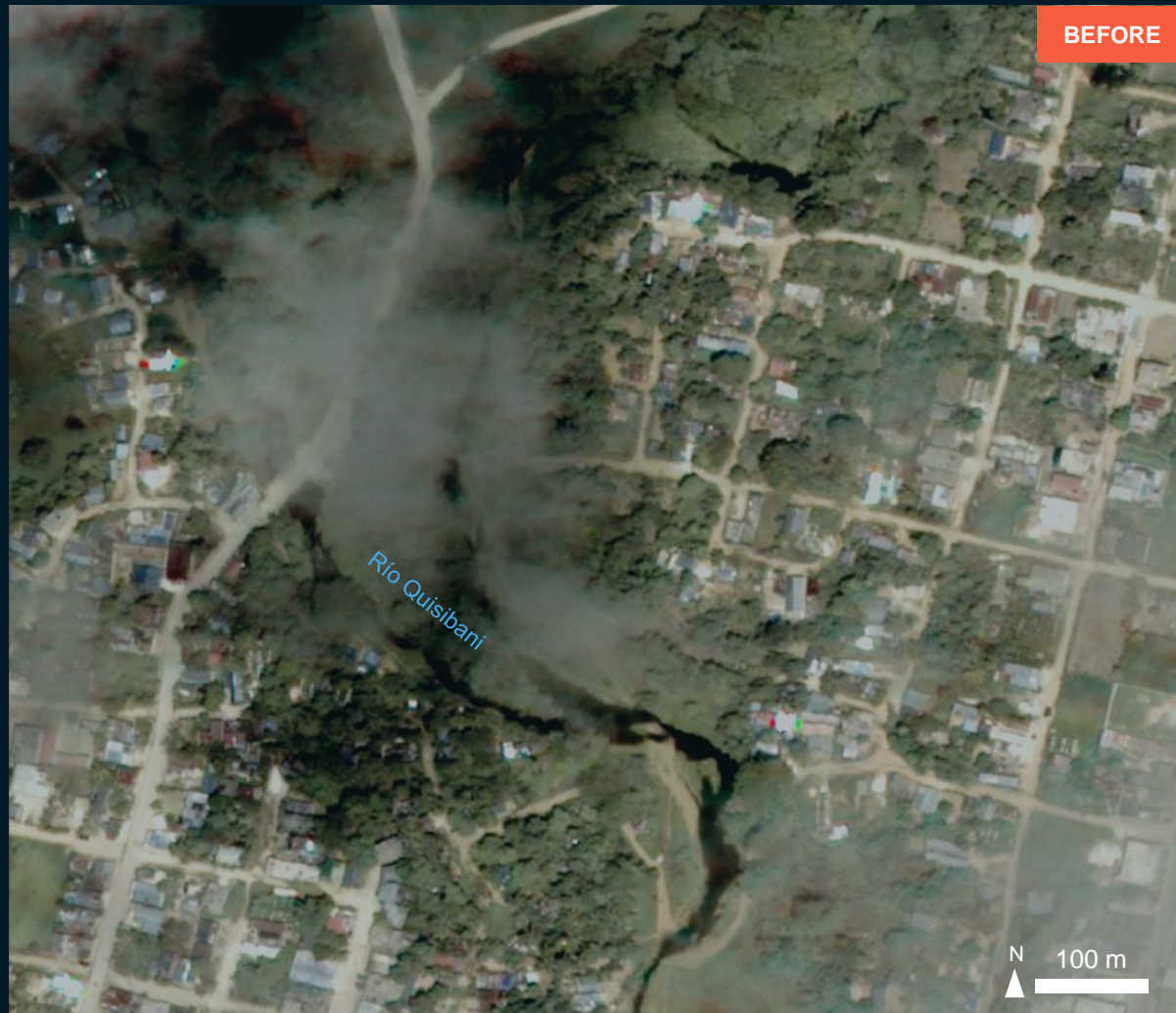
Pléiades / 25 Sep. 2022

AOI 1-3 HIGUEY CITY, PROVINCIA LA ALTAGRACIA, REGION YUMA

Washed away area along waterway

Image center:

18°38'02.2"N
68°42'09.8"W



WorldView-2 / 11 Apr. 2022



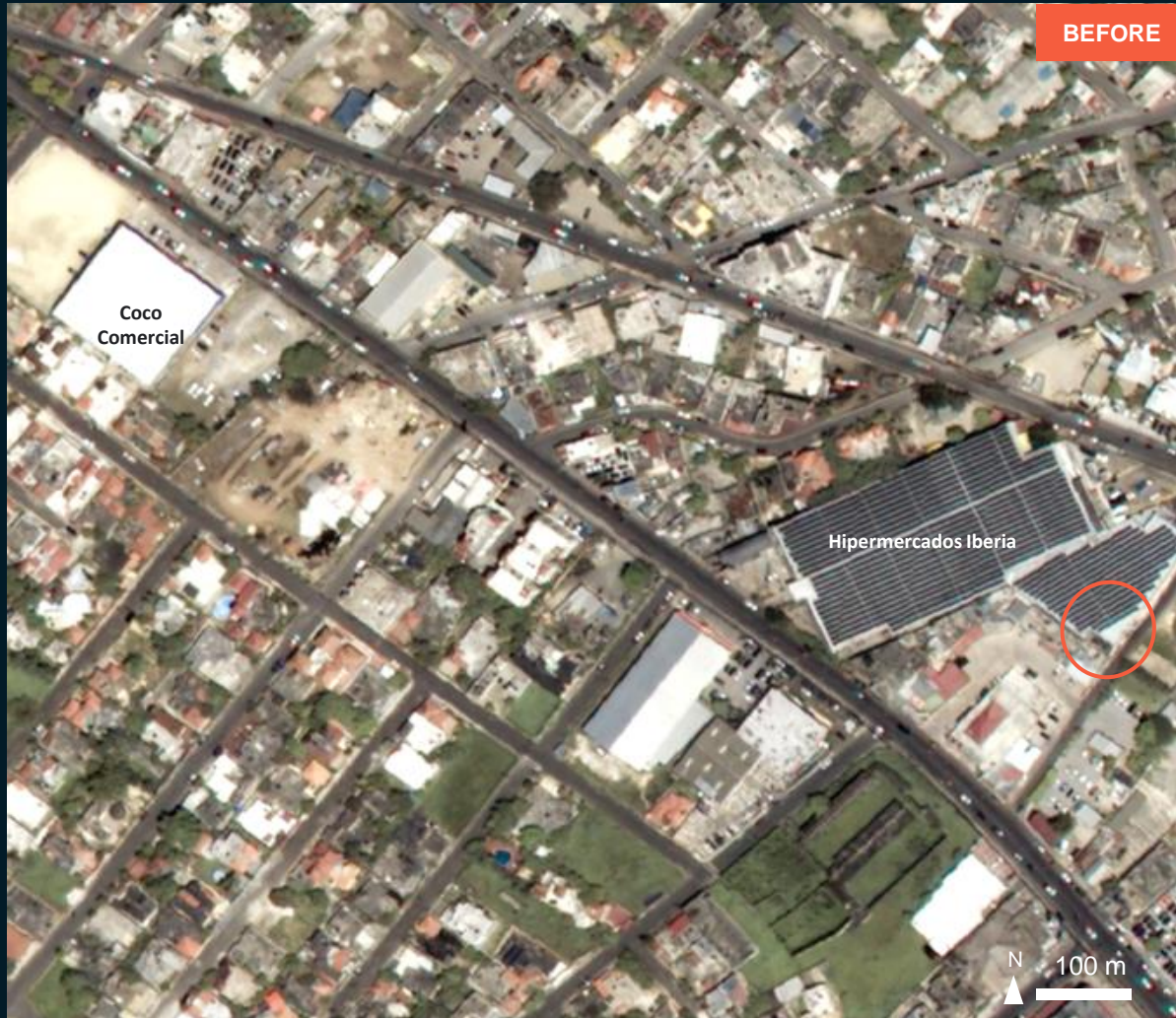
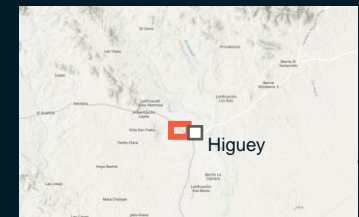
Pléiades / 25 Sep. 2022

AOI 1-4 HIGUEY CITY, PROVINCIA LA ALTAGRACIA, REGION YUMA

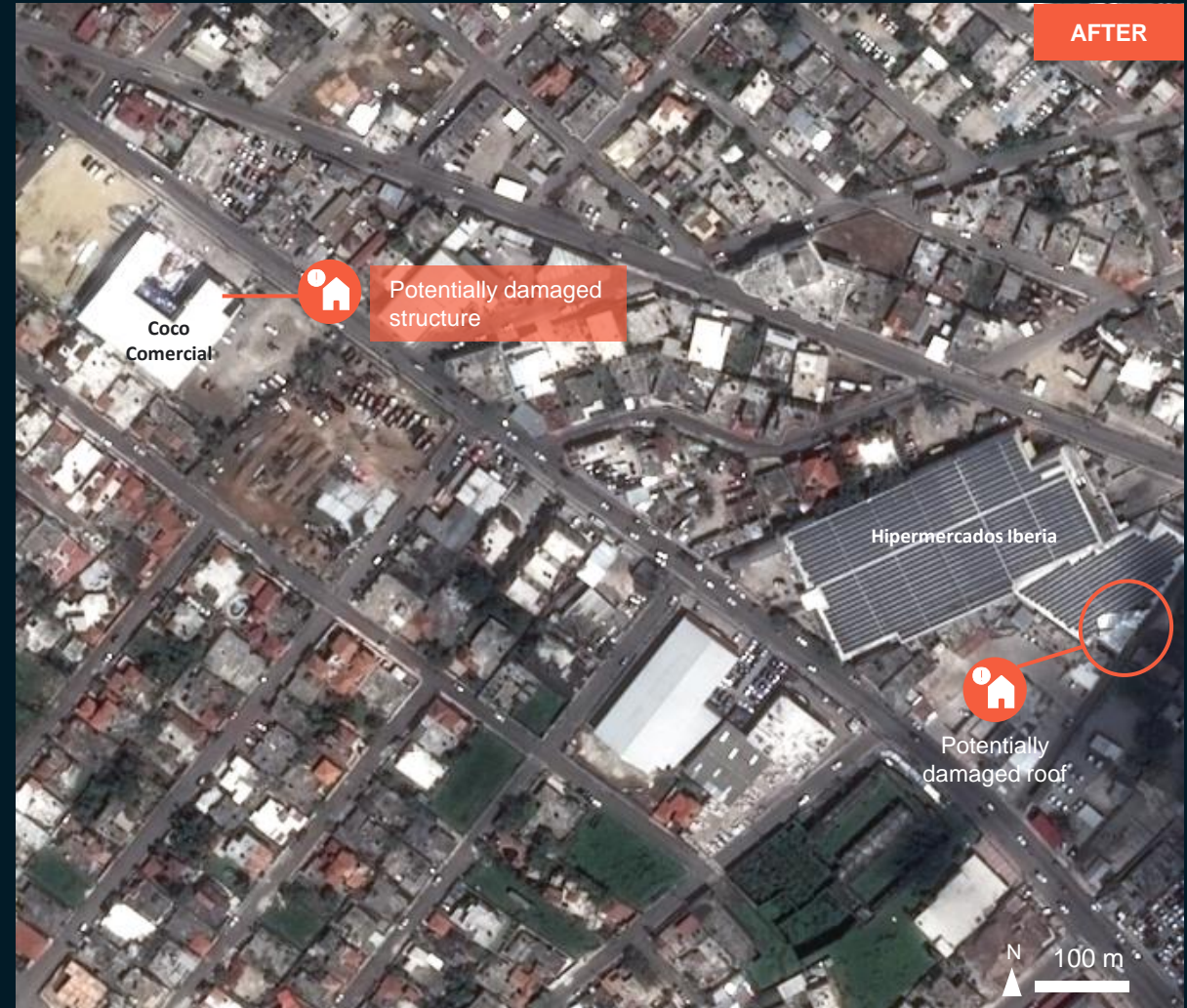
Damaged facility buildings

Image center:

18°37'14.0"N
68°43'33.6"W



WorldView-2 / 11 Apr. 2022



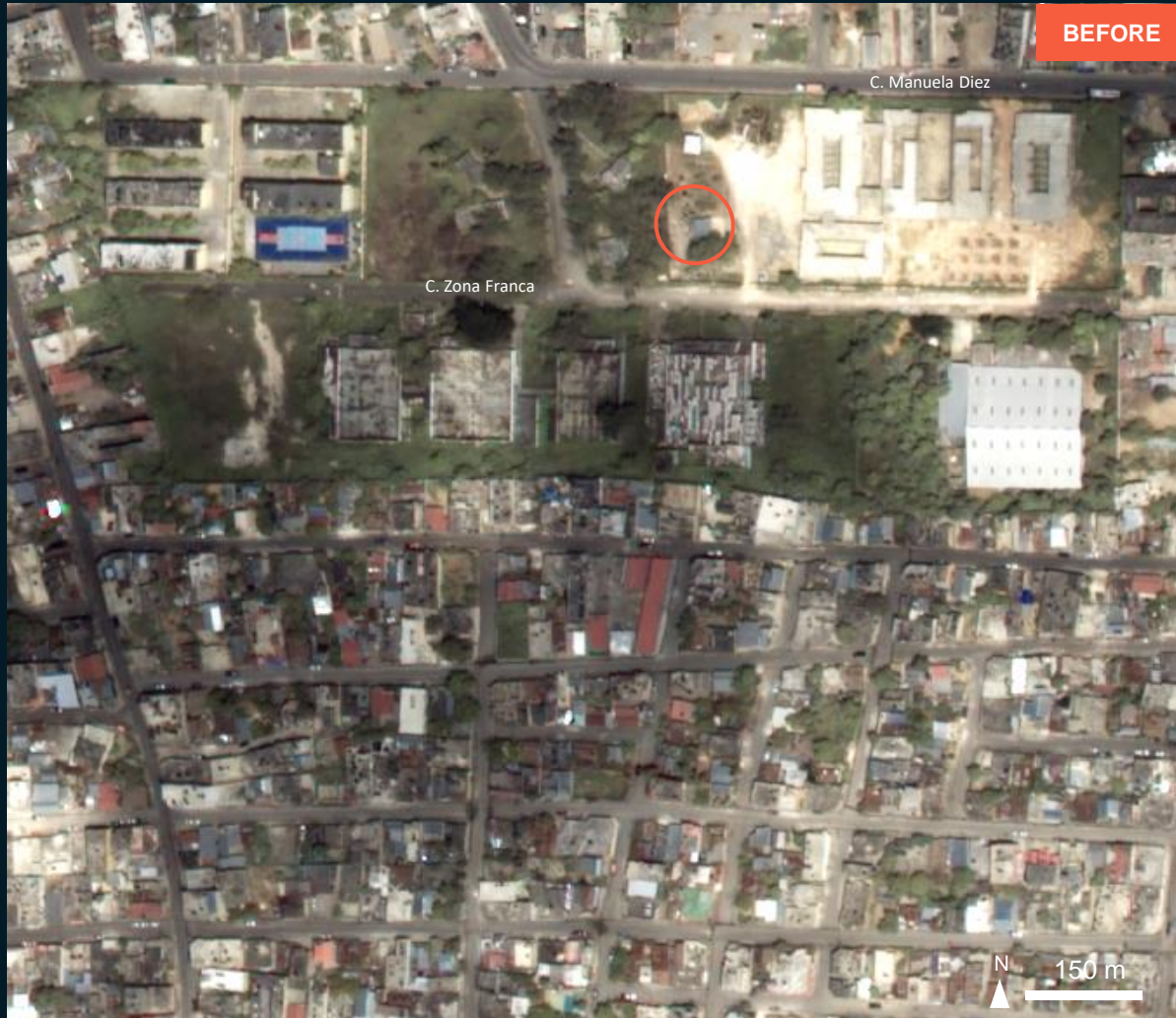
Pléiades / 25 Sep. 2022

AOI 1-5 HIGUEY CITY, PROVINCIA LA ALTAGRACIA, REGION YUMA

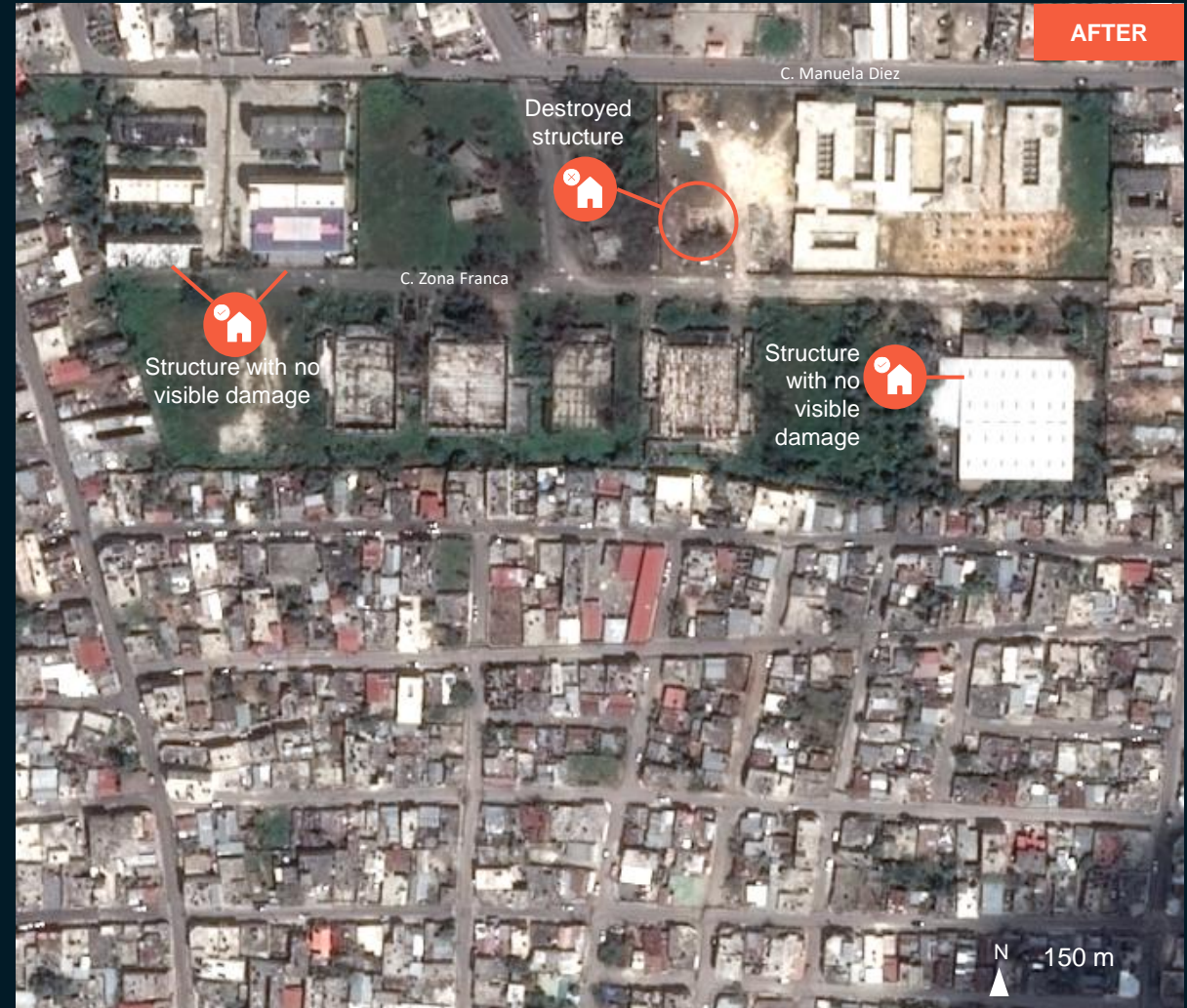
Destroyed structure

Image center:

18°36'04.5"N
68°42'30.3"W



WorldView-2 / 11 Apr. 2022



Pléiades / 25 Sep. 2022

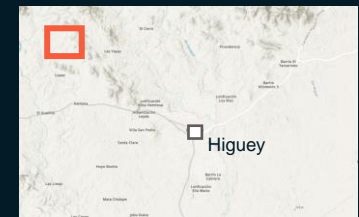
AOI 1-6 PROVINCIA LA ALTAGRACIA, REGION YUMA

8.5 km from Higuey City

Damaged structures

Image center:

18°39'24.11"N
68°46'48.68"W



BEFORE

N 100 m

WorldView-3 / 27 Jan. 2022



AFTER

N 100 m

Pléiades / 25 Sep. 2022

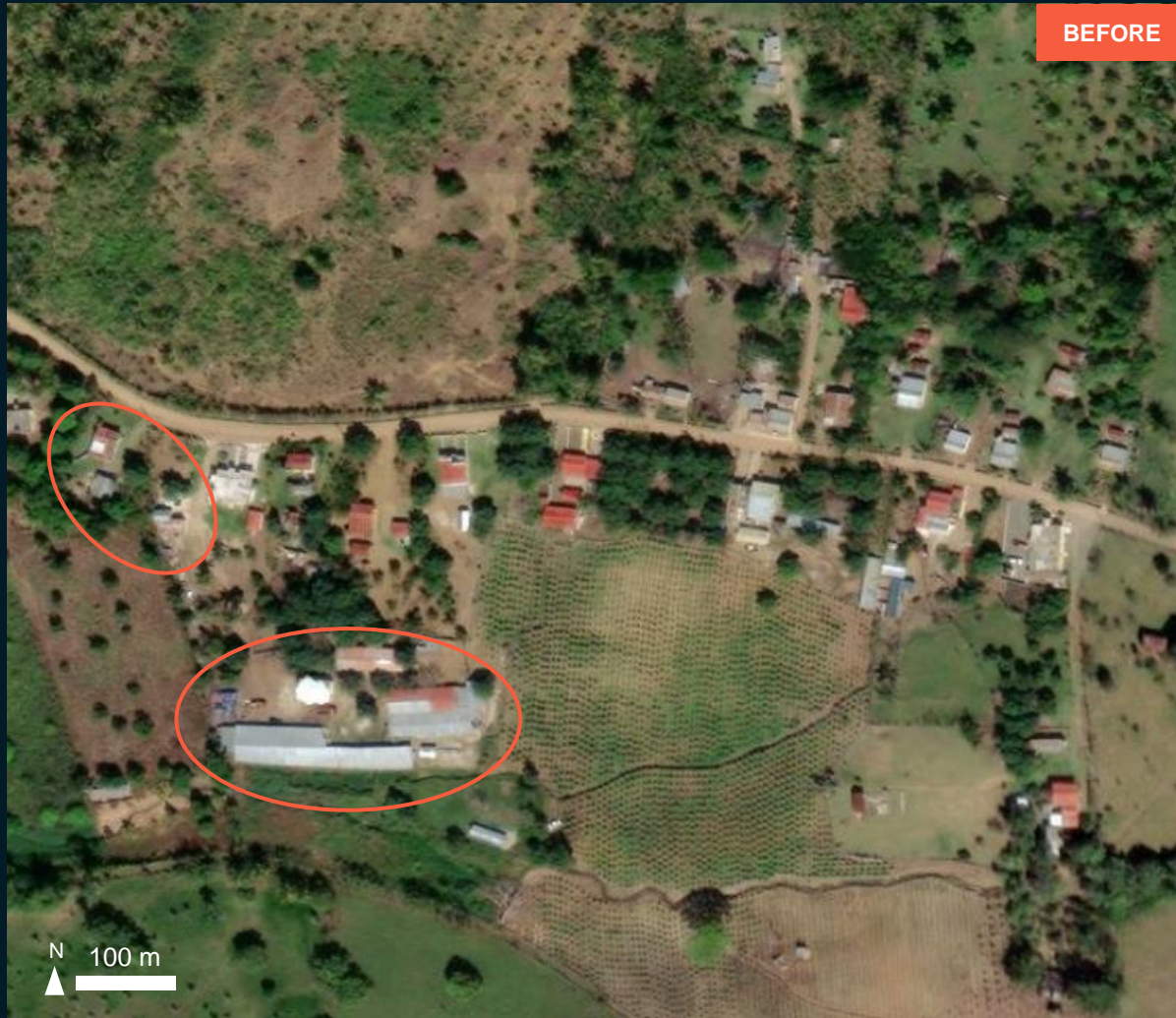
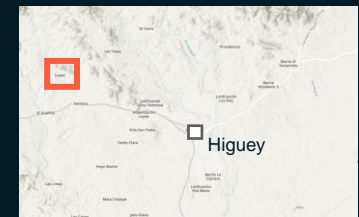
AOI 1-7 PROVINCIA LA ALTAGRACIA, REGION YUMA

8.2 km from Higuey City

Destroyed and damaged structures

Image center:

18°38'45.9"N
68°46'56.5"W



WorldView-3 / 27 Jan. 2022



Pléiades / 25 Sep. 2022

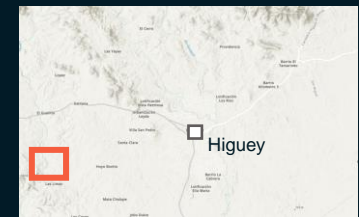
AOI 1-8 PROVINCIA LA ALTAGRACIA, REGION YUMA

8.5 km from Higuey City

Riverbank erosion and potentially affected structures

Image center:

18°36'13.14"N
68°47'38.98"W



BEFORE



AFTER

Riverbank erosion

Potentially affected structures

Riverbank erosion

SUMMARY OF FINDINGS

- Riverbank erosion and washed away along rivers/streams in Provincia La Altagracia, Region Yuma observed as of 25 Sep. 2022;
- Impact on vegetation along waterways/streams in Provincia La Altagracia, Region Yuma observed as of 25 Sep. 2022;
- Damaged structures in Higüey City, Provincia La Altagracia, Region Yuma observed as of 25 Sep. 2022;
- Potentially damaged structures of facilities building in Higüey City, Provincia La Altagracia, Region Yuma observed as of 25 Sep. 2022;
- Destroyed bridge observed in Higüey City, Provincia La Altagracia, Region Yuma as of 25 Sep. 2022;
- Affected road observed in Higüey City, Provincia La Altagracia, Region Yuma as of 25 Sep. 2022;

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Data sources:

(1) Satellite Image (Post-event)

Pléiades : 25 Sep. 2022 (15:18 UTC)

Resolution: 50 cm

Copyright: ©CNES (2022), Distribution Airbus DS.

Source: Airbus DS

(2) Satellite Image (Pre-event)

Satellite Data : WorldView-2

Imagery Dates : 11 Apr. 2022

Copyright: 2022 Digital Globe

Source: USGS

Satellite Data : WorldView--

Imagery Dates : 27 Jan. 2022

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Source: ESRI Basemap

(3) Ancillary data

Administrative boundaries: Oficina Nacional de Estadística

Analysis: UNITAR-UNOSAT

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