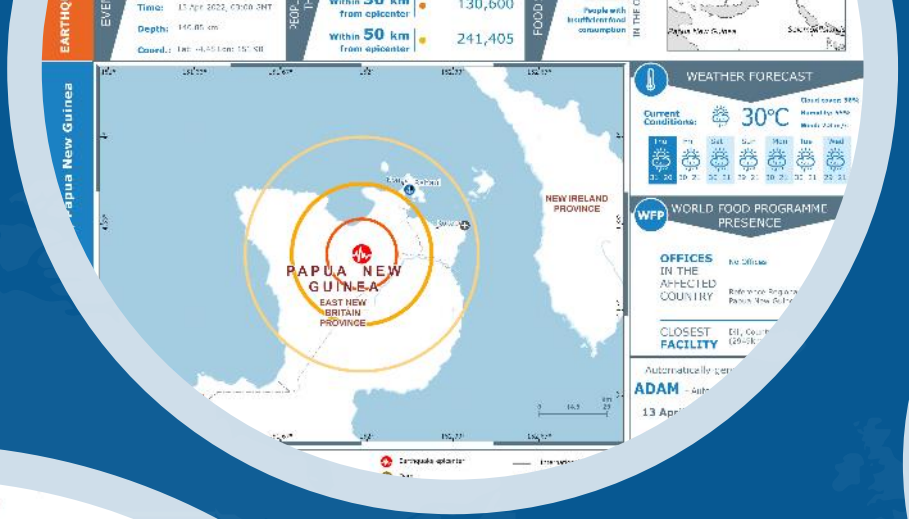
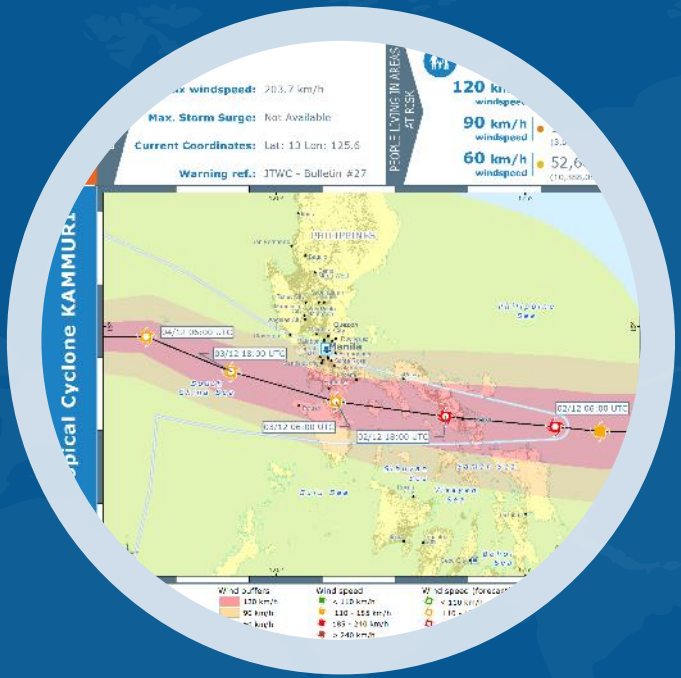
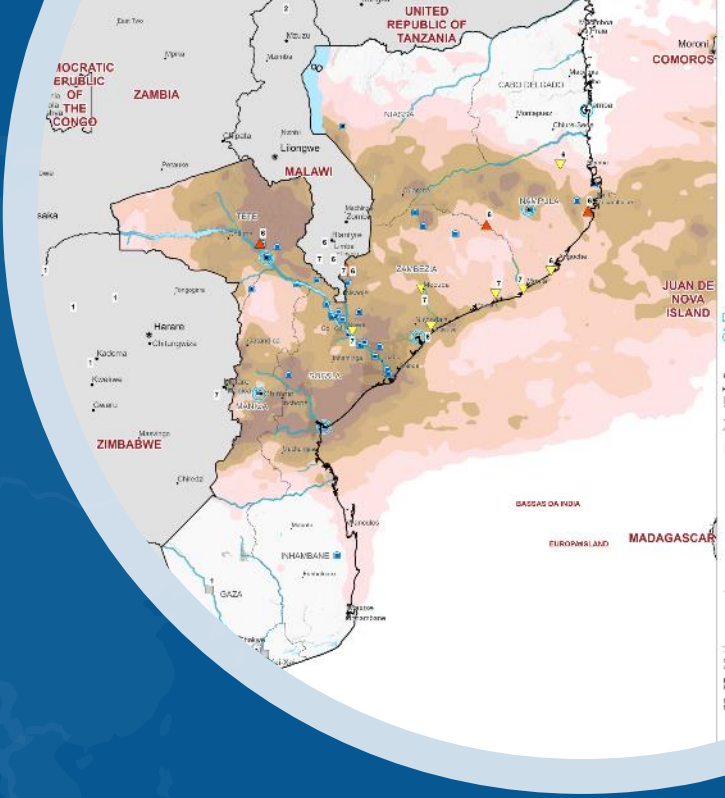
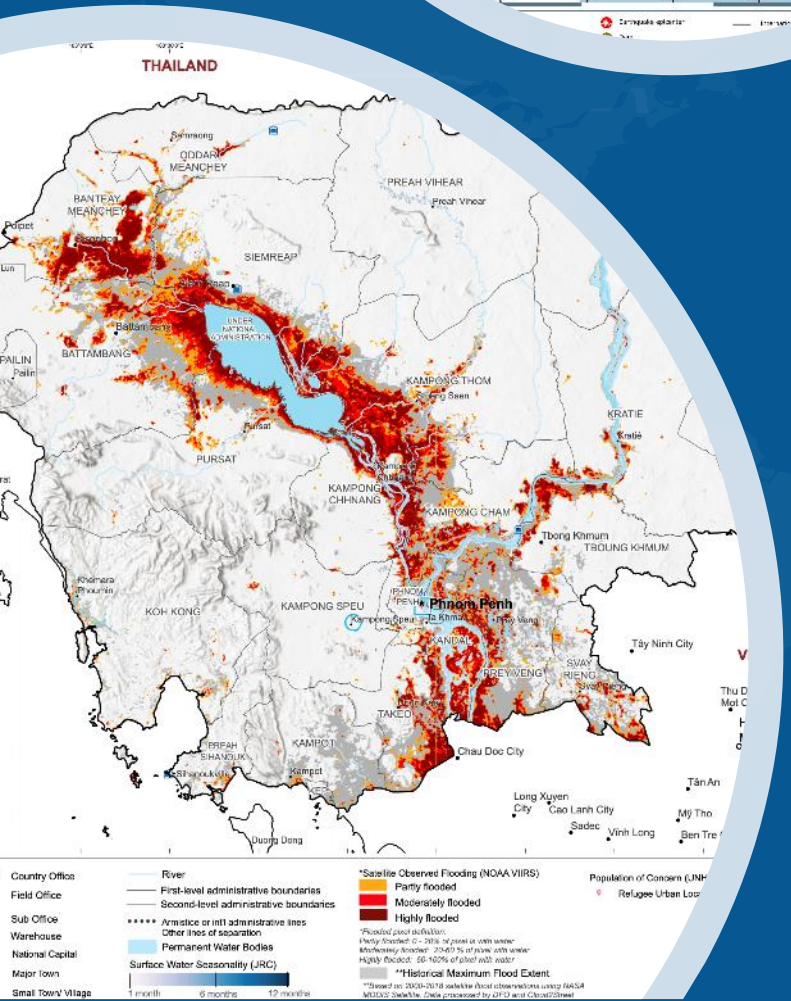








Advanced Disaster Analysis and Mapping

ADAM Project

ADAM's Family

ADAM Earthquake

- Shake Intensity
- Epicenter Map
- Population Impact Table (by shake intensity)

ADAM Tropical Storm

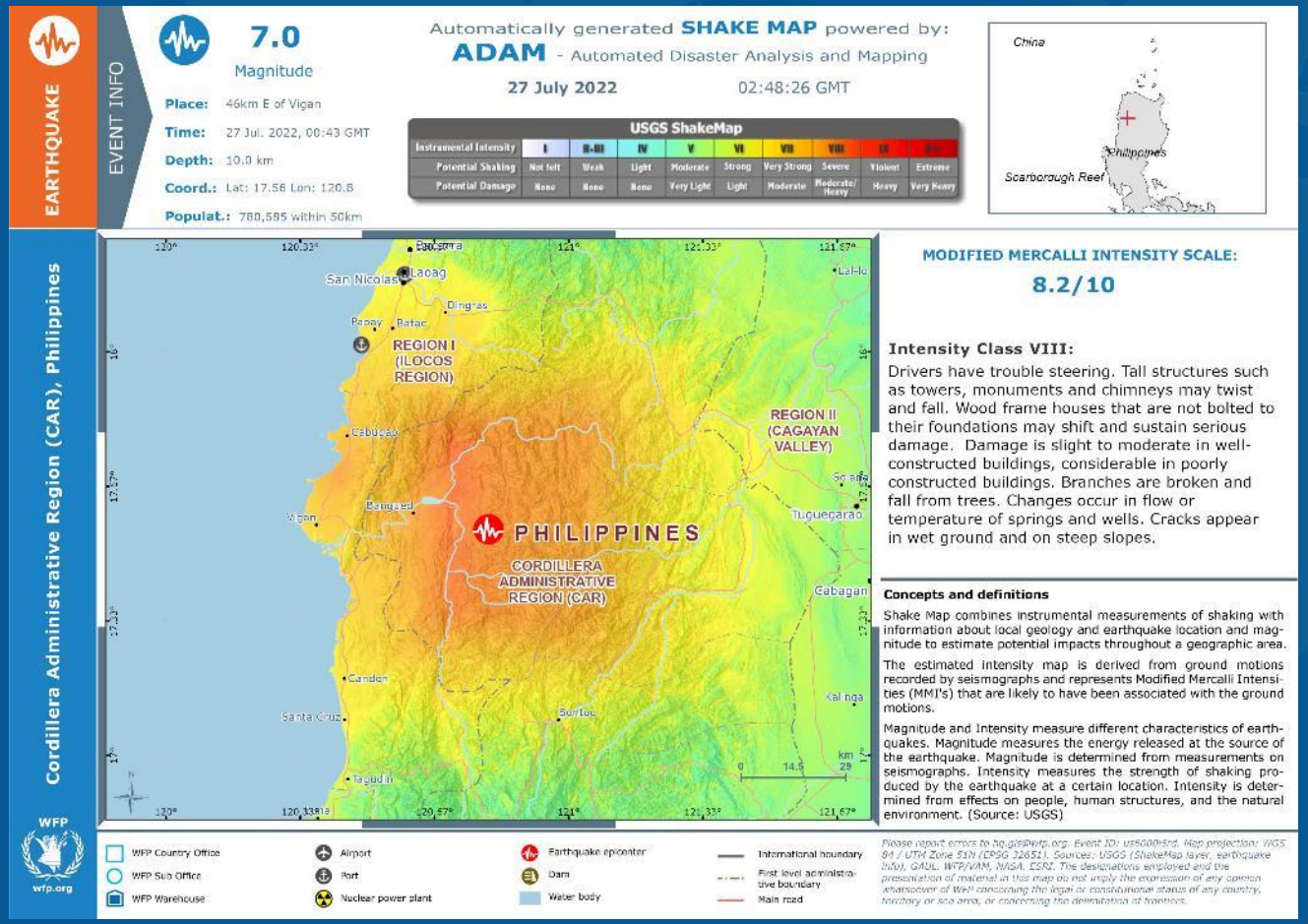
- Storm Trajectory Map
- Rainfall Forecast Map
- Population Impact Table (by windspeed)

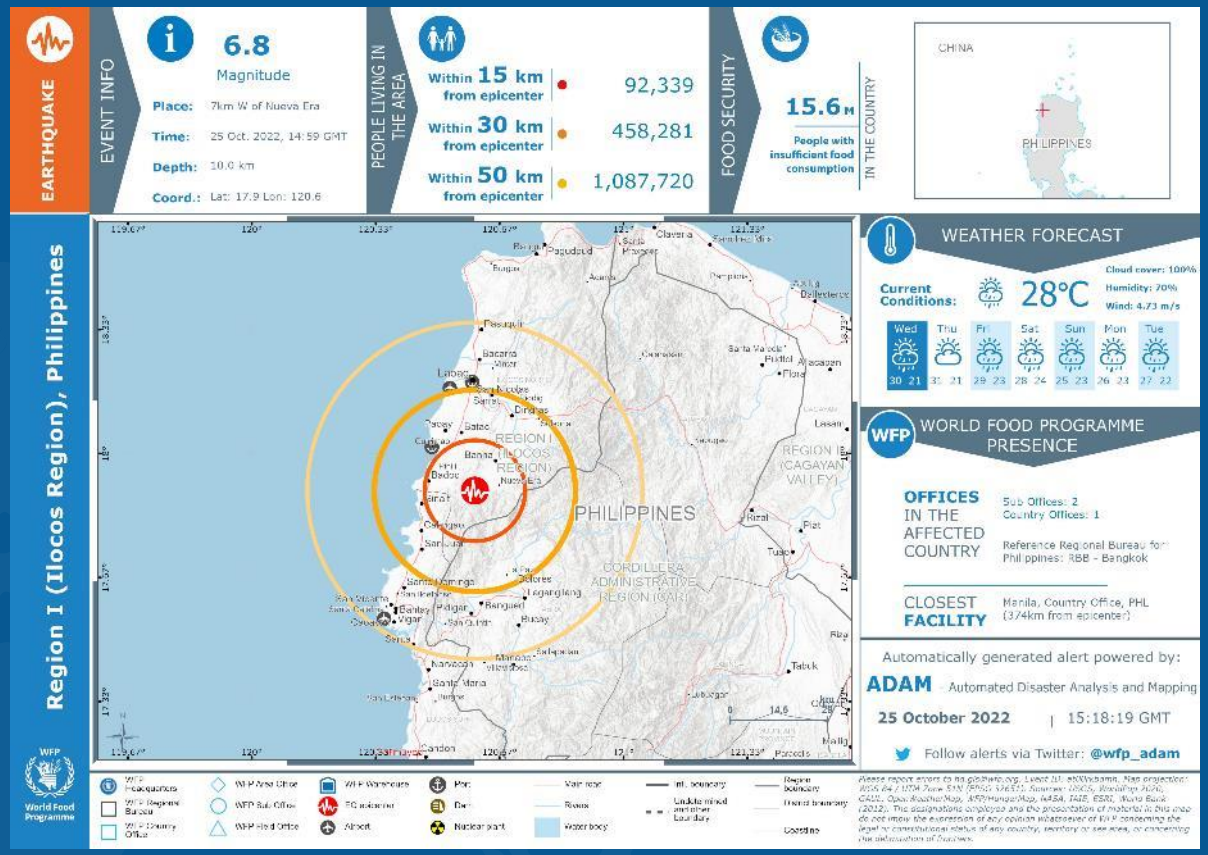
ADAM Floods

- Flood Map/Forecast
- Population and Cropland Impact Map
- Population and Cropland Impact Table

WFP World Food Programme

ADAM Earthquake





Earthquake in Philippines - Preliminary Population Exposure Estimation.

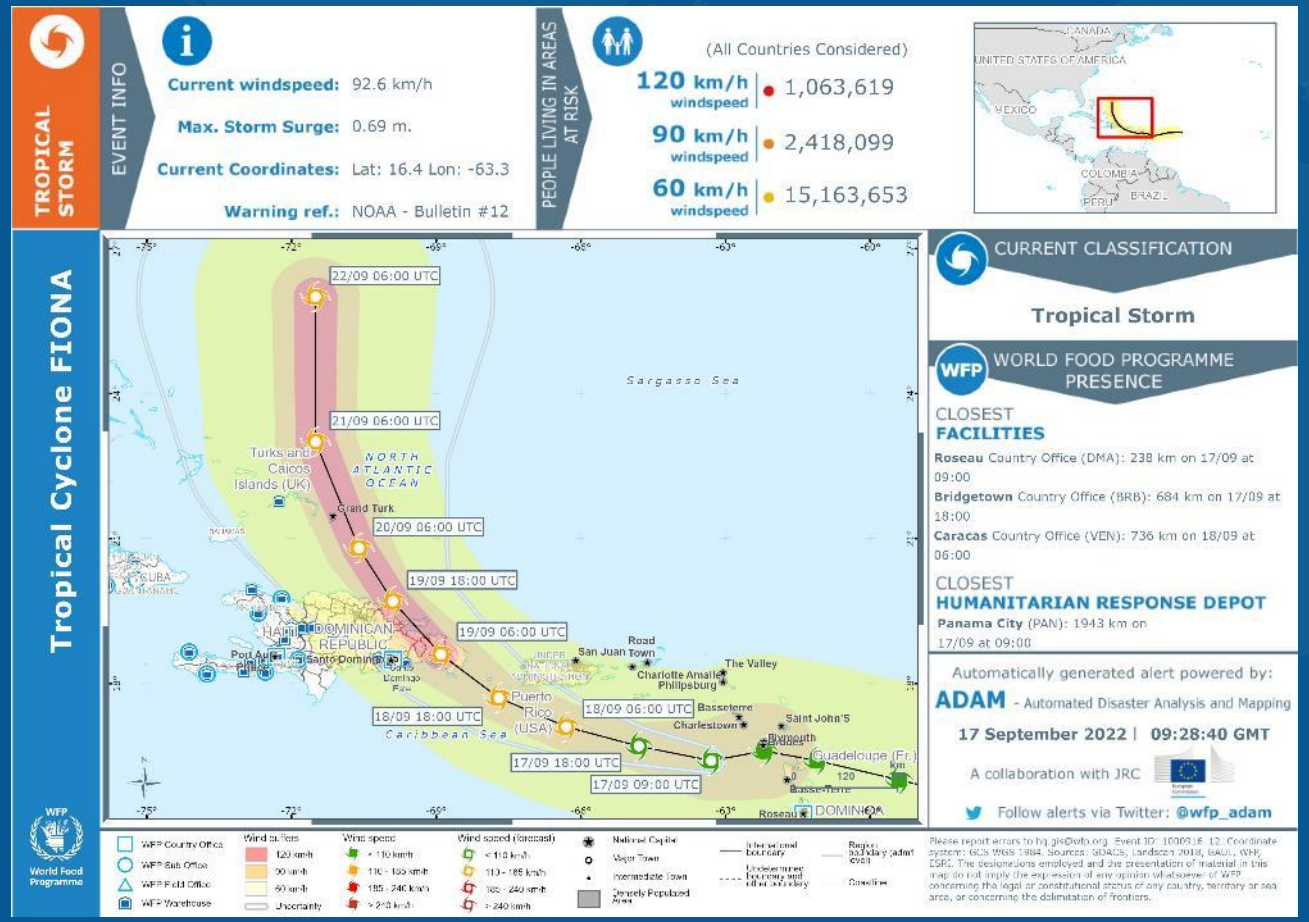
The population exposure, summarized by Admin 0, 1 and 2, has been calculated using a 1km resolution WorldPop raster (WorldPop Database 2020).
Admin boundaries are defined by Gaul 2015 dataset. Impact intensity levels are derived from the ShakeMap, a product of the USGS Earthquake Hazards Program.
This is a preliminary analysis and has not yet been validated in the field.

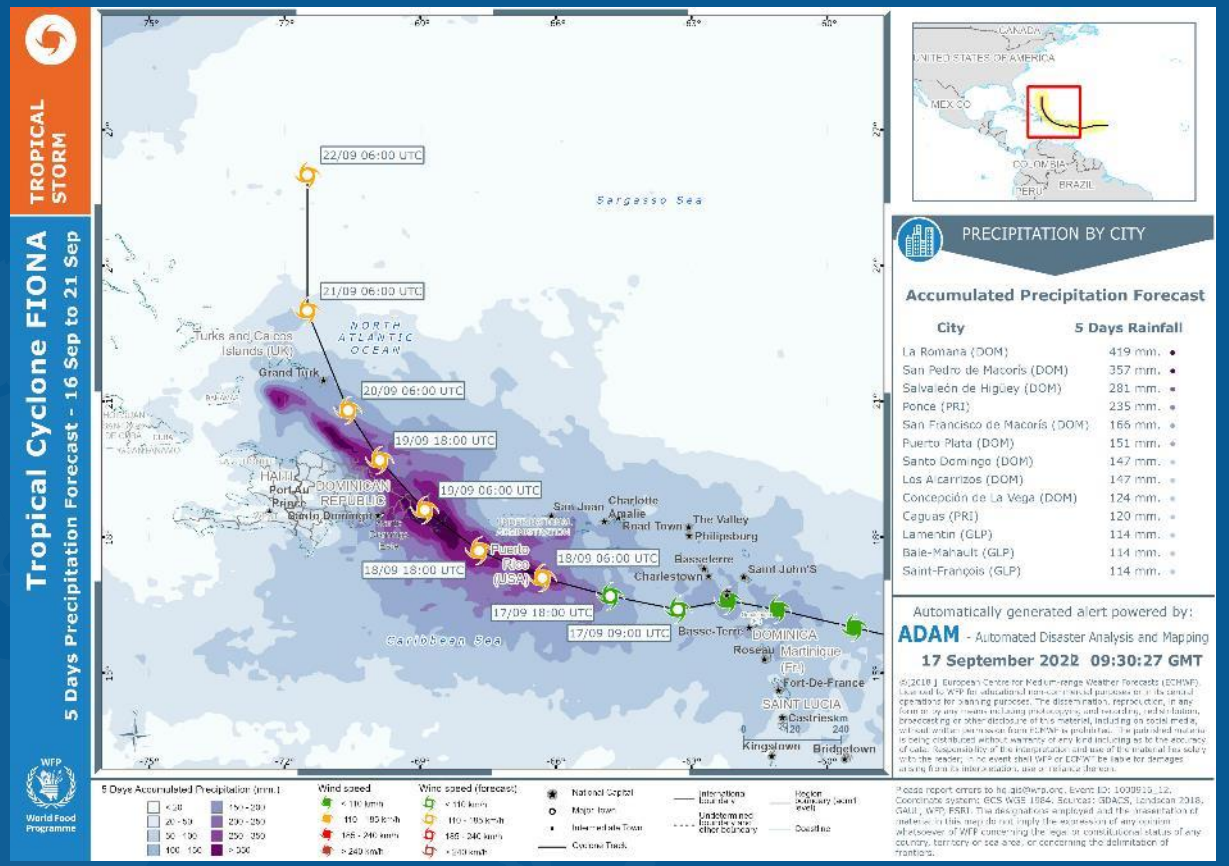
Analysis performed by ADAM (Automated Disaster Analysis and Mapping) on 25-10-2022 at 17:09 UTC.
Contact: hq.gis@wfp.org

Intensity classes for this earthquake:
III: Felt by people indoors. Hanging objects swing back and forth. Vibration from the earthquake may seem like the passing of light trucks. May not be recognized as an earthquake.
IV: Hanging objects swing. Vibration may seem like the passing of heavy trucks or a jolt, like a heavy ball striking the walls. Parked vehicles may rock noticeably. Windows, dishes, doors may rattle and glasses clin
V: Almost everyone feels movement whether inside or outdoors. Sleeping people are awakened. Liquids in containers are disturbed; some are spilled. Small unstable objects are displaced or overturned. Doors s
VI: Felt by all; some are frightened and take cover. People have difficulty walking due to motion. Objects fall from shelves and dishes, glassware and ceramics may be broken. Pictures fall off walls. Furniture mov
VII: People have difficulty standing. Drivers on the road feel their cars shaking. Furniture may be overturned and broken. Loose bricks fall from buildings and masonry walls and cracks in plaster and masonry may

			POPULATION					TOTAL
		INTENSITY	3	4	5	6	7	
ADM0_NAME	ADM1_NAME	ADM2_NAME						
Philippines	ordillera Administrative region (CA	Abra		2.026	59.501	169.125	25.134	255.786
		Apayao		106.105	37.276			143.381
		Benguet	728.388	169.484				897.872
		Ifugao	31.739	47.986				79.725
		Kalinga		282.739	22.218			304.957
		Mountain Province		192.737	155			192.892
	illera Administrative region (CAR) - TOT		760.127	801.077	119.150	169.125	25.134	1.874.613
	Region I (Ilocos region)	Ilocos Norte	430	154.692	474.109	21		629.252
		Ilocos Sur	1.058	221.161	121.557			343.776
		La Union	319.851	462.755				782.606
		Pangasinan	102.211					102.211

ADAM
Tropical Storm





FIONA-22 - Population Exposure Estimation based on bulletin n. 12

The population exposure, summarized by Admin 0, 1 and 2, has been calculated using a 1 km resolution LandScan raster (LandScan Database 2018).
Admin boundaries are defined by Gaul 2015 dataset. Windspeed buffers are produced by GDACS (JRC).
This is a preliminary analysis and has not yet been validated in the field.

Analysis performed by ADAM (Automated Disaster Analysis and Mapping) on 17-09-2022 at 09:28 UTC.
Contact: hq.gis@wfp.org

			POPULATION			TOTAL
		WIND_SPEED	60 km/h	90 km/h	120 km/h	
ADM0_NAME	ADM1_NAME	ADM2_NAME				
Anguilla	Blowing Point	–	786			786
	Dog Island	–				
	George Hill	–	1.650			1.650
	Island Harbour	–	3.003			3.003
	Long Bay Village	–	1.207			1.207
	Scrub Island	–				
	South Hill	–	1.686			1.686
	Stoney Ground	–	4.700			4.700
	The Valley	–	2.418			2.418
Anguilla - TOT			15.450			15.450
Antigua and Barbuda	Barbuda	–	1.885			1.885
	Redonda	–				
	Saint George	–	10.713	10.713		21.426
	Saint John	–	51.244	51.244		102.488
	Saint Mary	–	8.067	8.067		16.134
	Saint Paul	–	10.031	10.031		20.062
	Saint Peter	–	8.526	8.526		17.052
	Saint Philip	–	3.531	3.531		7.062
Antigua and Barbuda - TOT			93.997	92.112		186.109

ADAM Flood
Forecast

Day 0 – next 14 days

ADAM Flood
Impact Analysis

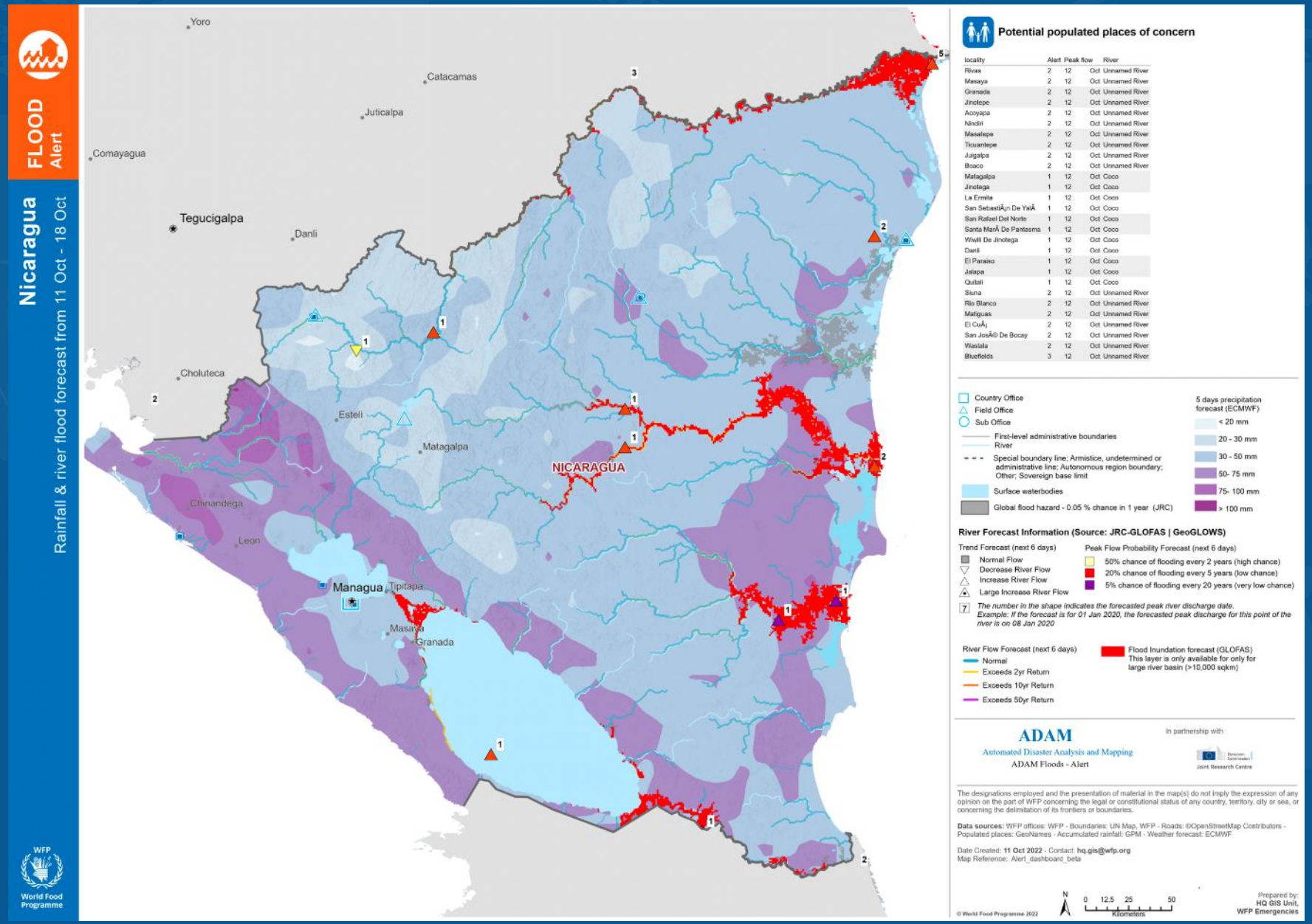
First 72 hours

ADAM Flood
Monitoring

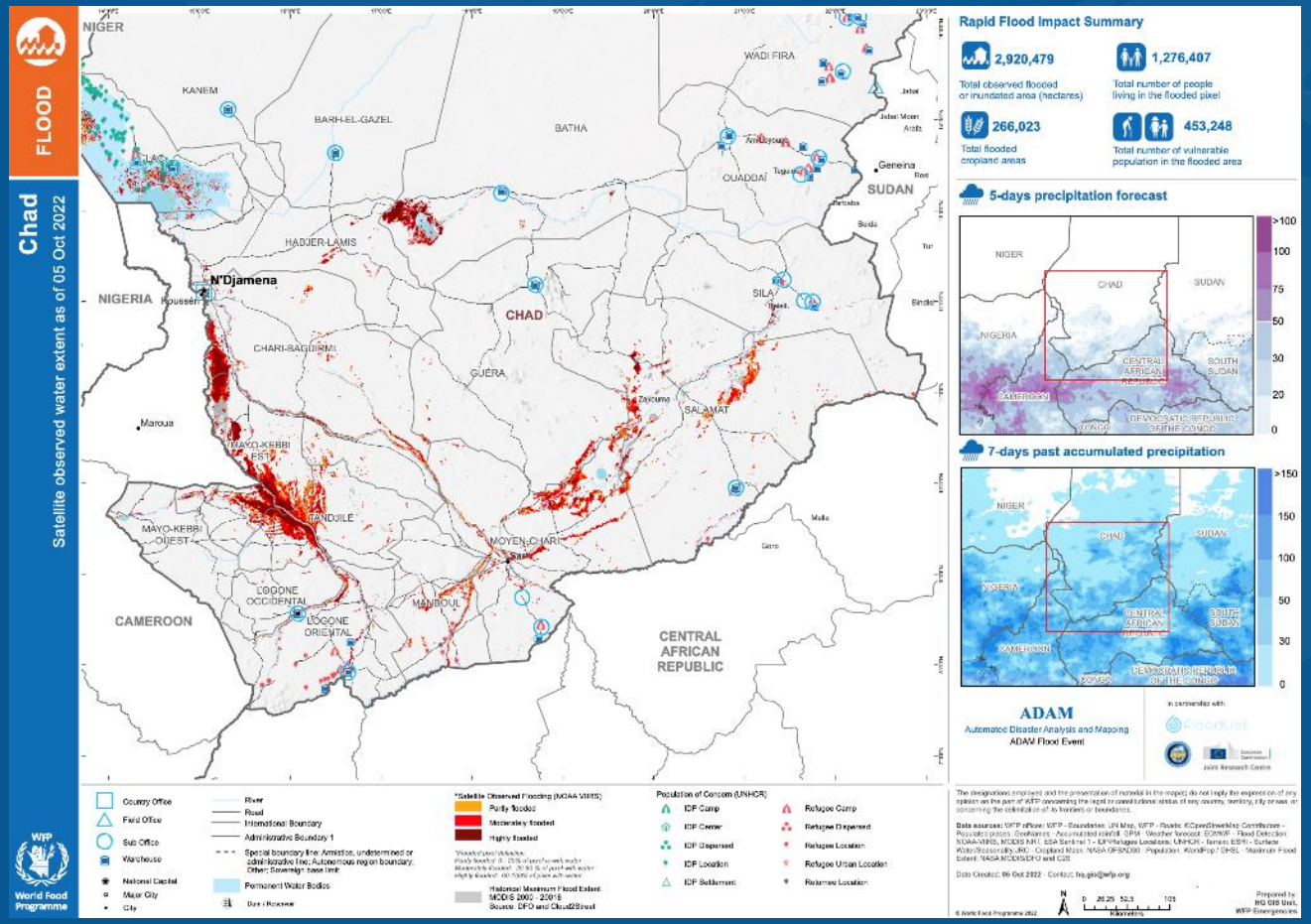
Long Floods
1-3 months or more

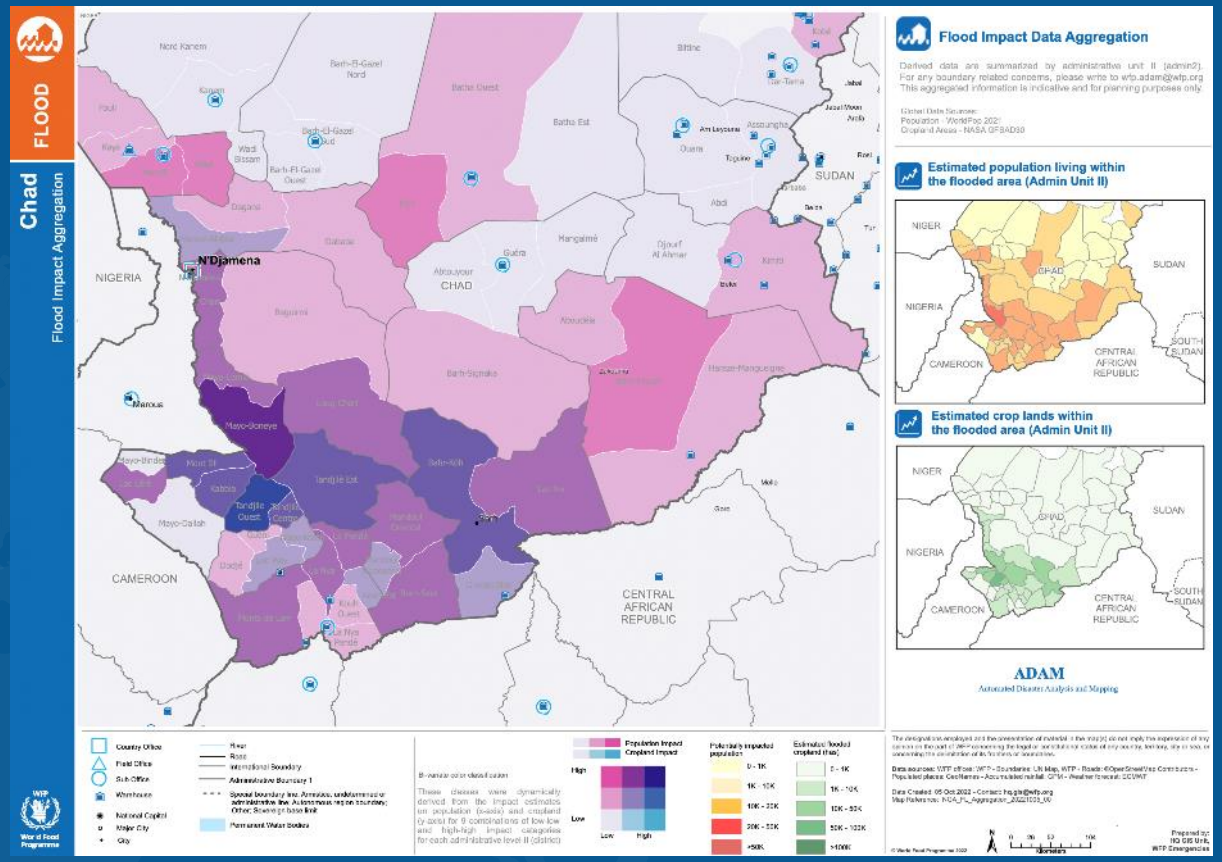
WFP
World Food Programme

ADAM Floods - Forecast



ADAM
Floods - Event



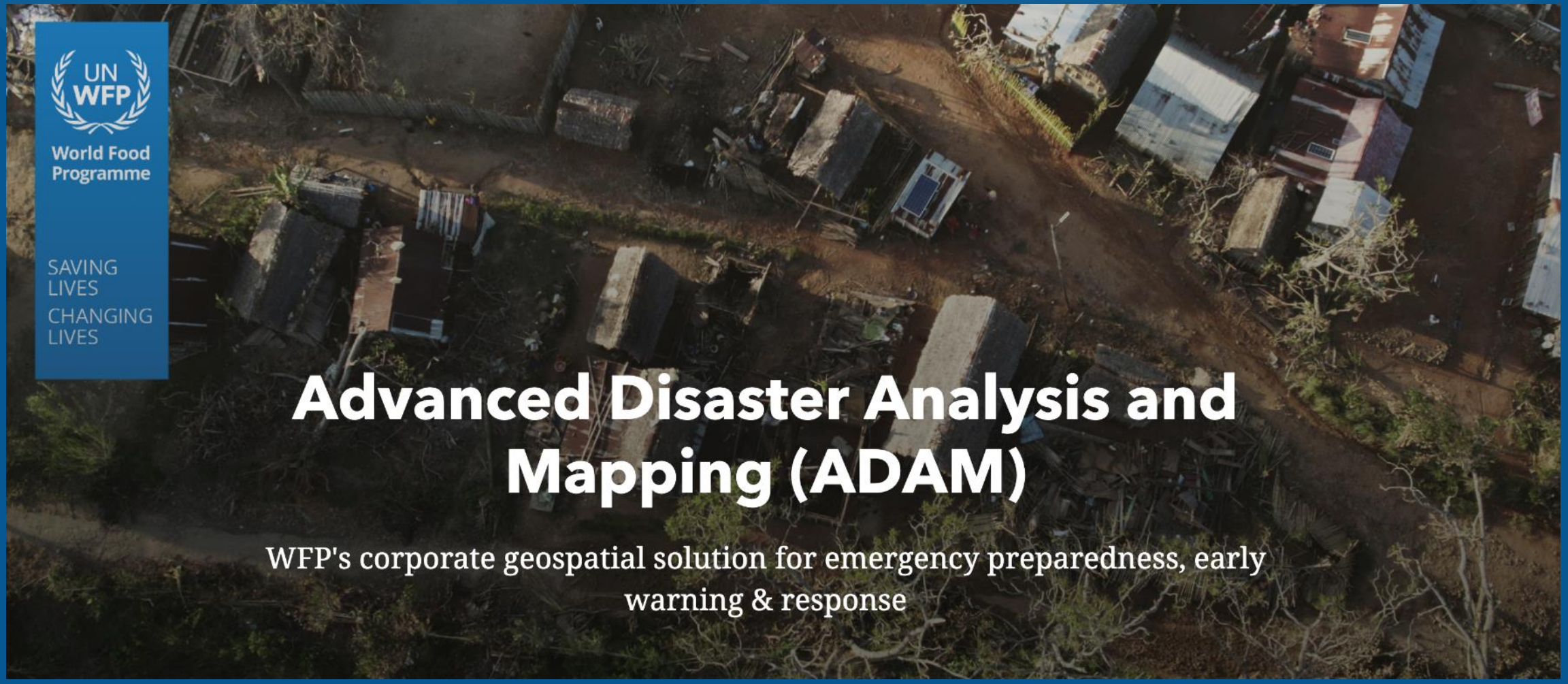


A.D.A.M Floods - Rapid Impact Analysis

*estimated number of people living in the flooded areas with at least 100 people potentially affected per district. Vulnerable population within flooded area are estimates from WorldPop data.

Country Code	Region (Admin level 1)	District (Admin level 2)	Flooded Area (hectares)	Flooded Cropland (hectares)	Potentially Impacted Population*		
					Total in District	Children (0-9 y.o.)	Elderly (>60 y.o.)
TCD	Barh-El-Gazel	Barh-El-Gazel Nord	6,323	0	140	6	46
		Barh-El-Gazel Sud	2,767	0	380	15	124
	Batha	Batha Est	6,235	39	896	44	320
		Batha Ouest	12,941	35	1,040	51	371
		Fitri	177,739	46	29,357	1,452	10,472
	Chari-Baguirmi	Baguirmi	57,105	155	10,155	419	3,515
		Chari	130,438	3,019	53,112	1,686	12,953
		Loug-Chari	114,666	4,041	24,457	998	8,475
	Guéra	Barh-Signaka	91,163	186	6,351	314	2,265
	Hadjer-Lamis	Dababa	37,479	202	7,295	302	2,534
		Dagana	7,193	370	3,193	132	1,109
		Haraze-Al-Biar	27,583	1,477	19,099	784	6,647
	Kanem	Nord Kanem	9,912	0	205	8	67
	Lac	Fouli	71,211	4	4,524	183	1,478
		Kaya	23,530	3	4,432	180	1,448
		Mamdi	153,021	182	37,920	1,538	12,391
		Wayi	30,792	105	21,415	870	7,050

ADAM about page | gis.wfp.org/adam



ADAM Features

ADAM about page – gis.wfp.org/adam

ADAM Alerts – ADAM report sent via email if subscribed (Floods, Earthquakes, Tropical Storm)

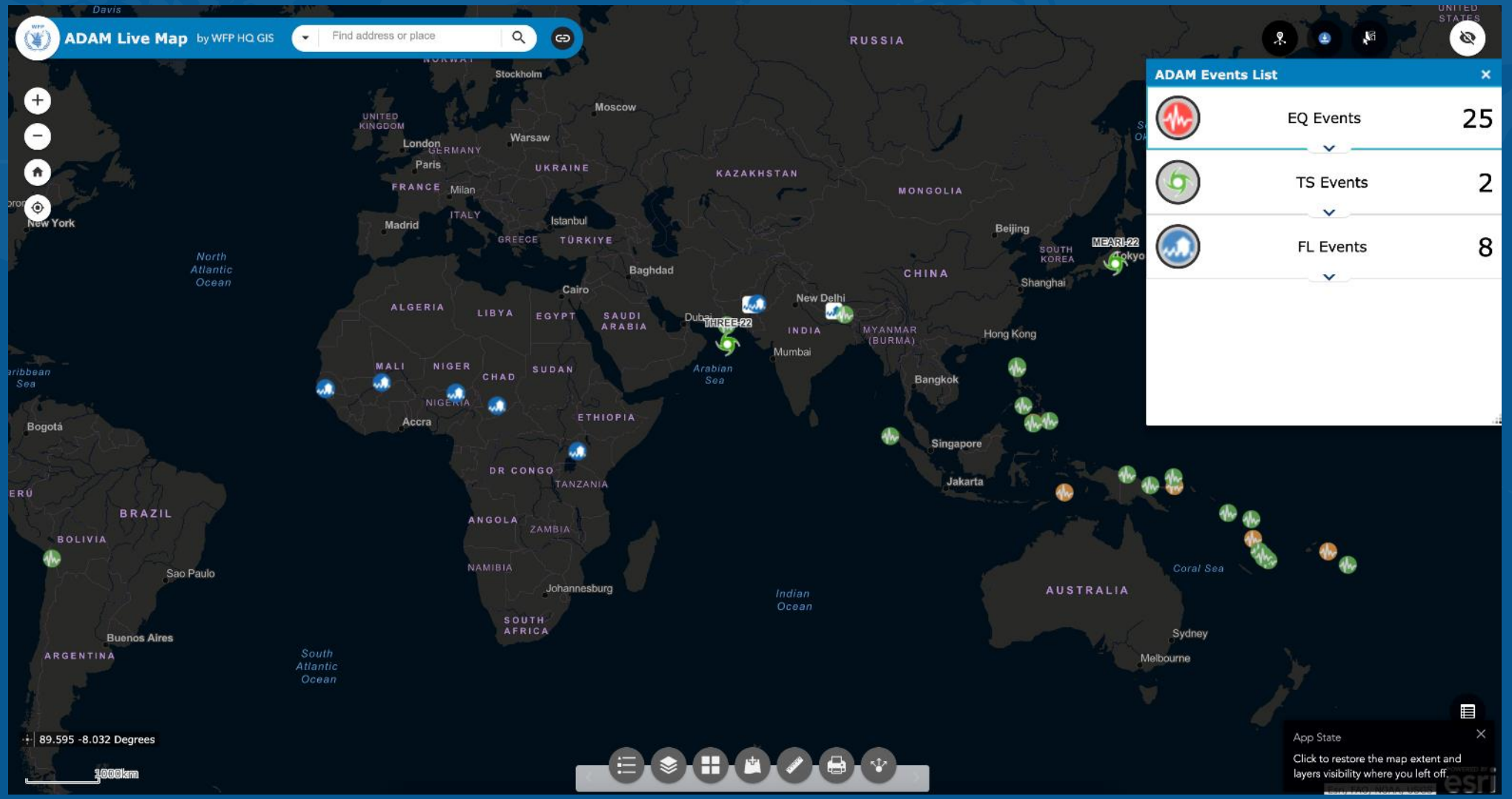
ADAM Live Map – View last 14 days of events and download GIS data

ADAM Dashboard – download historical ADAM events

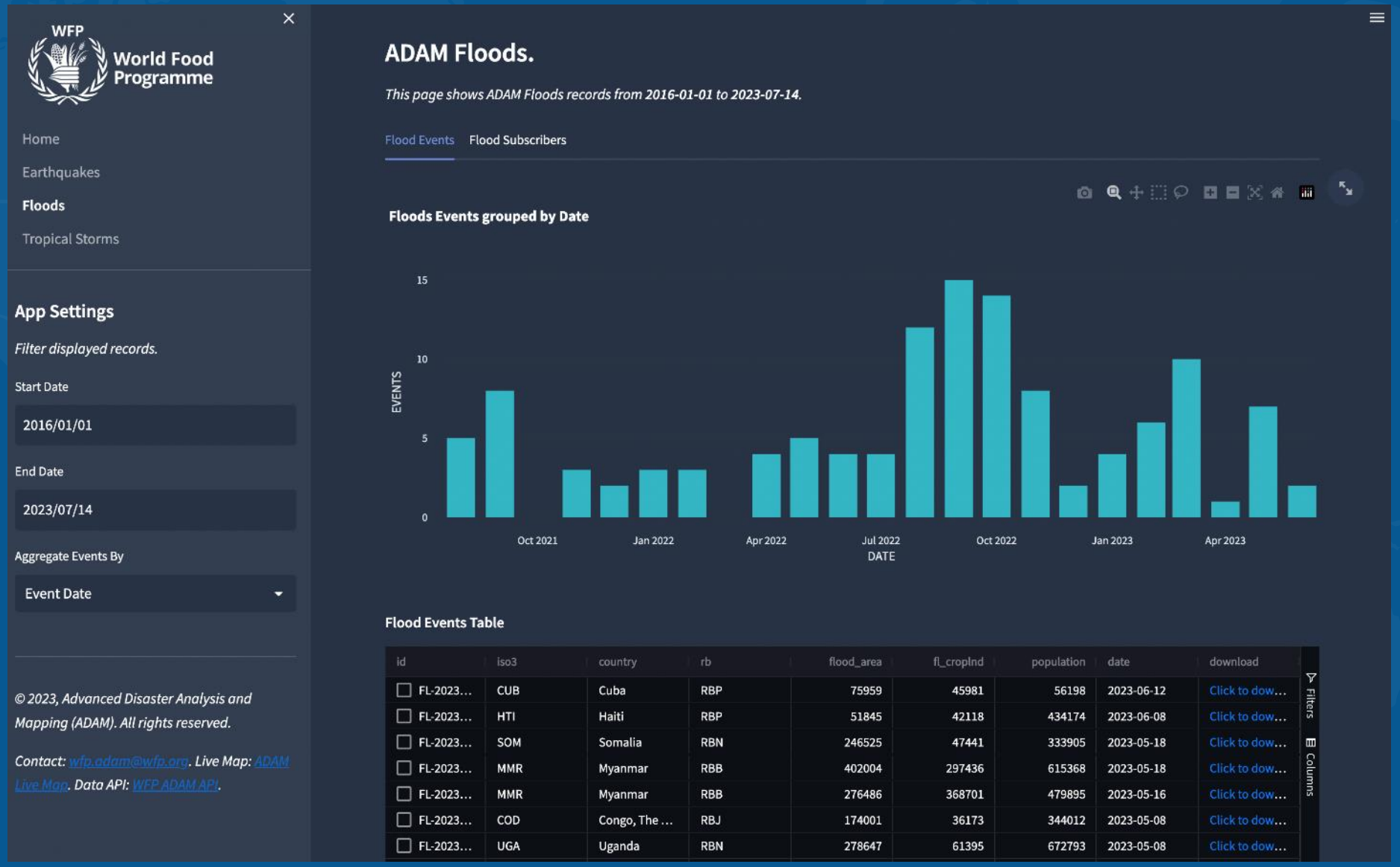
ADAM API – programatically access historical events, reports, disaster data

ADAM Annual Report

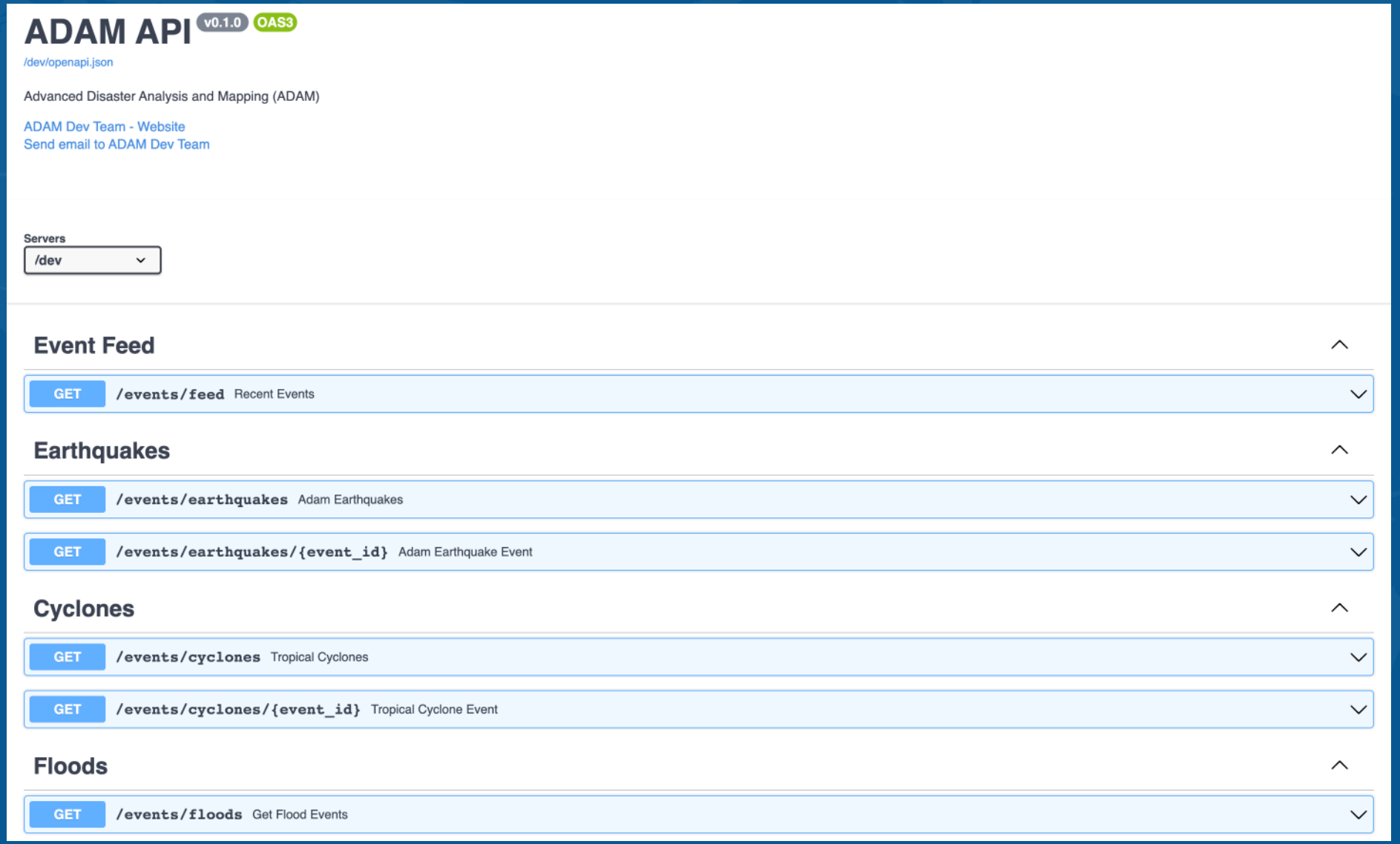
ADAM LIVE MAP | gis.wfp.org/adamlive



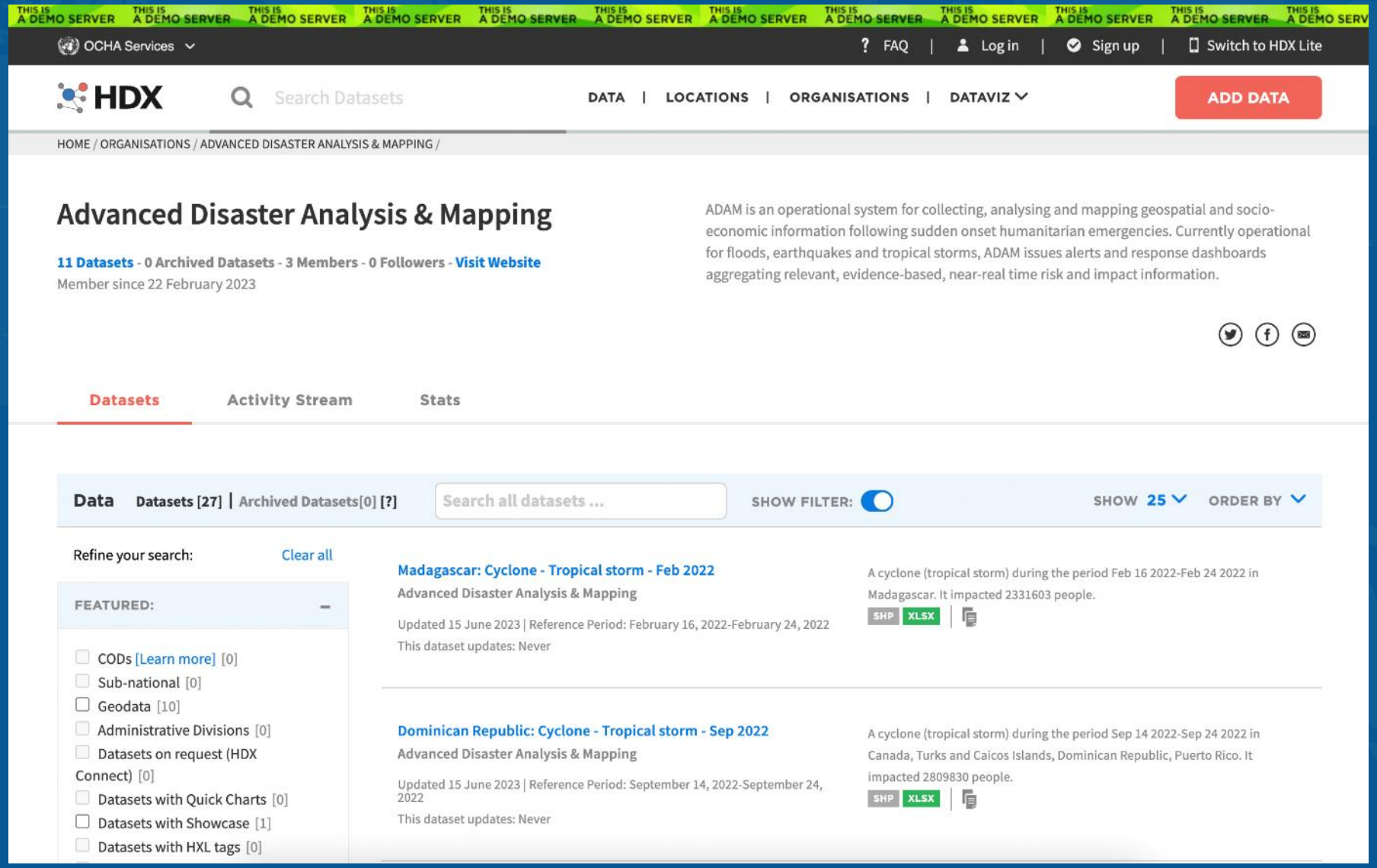
ADAM dashboard



ADAM API


ADAM API v0.1.0 OAS3
/dev/openapi.json
Advanced Disaster Analysis and Mapping (ADAM)
ADAM Dev Team - Website
Send email to ADAM Dev Team
Servers
/dev
Event Feed
GET /events/feed Recent Events
Earthquakes
GET /events/earthquakes Adam Earthquakes
GET /events/earthquakes/{event_id} Adam Earthquake Event
Cyclones
GET /events/cyclones Tropical Cyclones
GET /events/cyclones/{event_id} Tropical Cyclone Event
Floods
GET /events/floods Get Flood Events

ADAM in HDX (soon)



WFP ADAM Partners

ADAM by the numbers

- 2,300+ unique subscribers and users
- 200+ major & minor disasters analyzed since 2014
- 20+ humanitarian and aid organizations/partners

WFP World Food Programme

Thank you!