



UNOSAT – Transforming the Humanitarian Response through Satellite Imagery & Geospatial Technology



22 February 2019

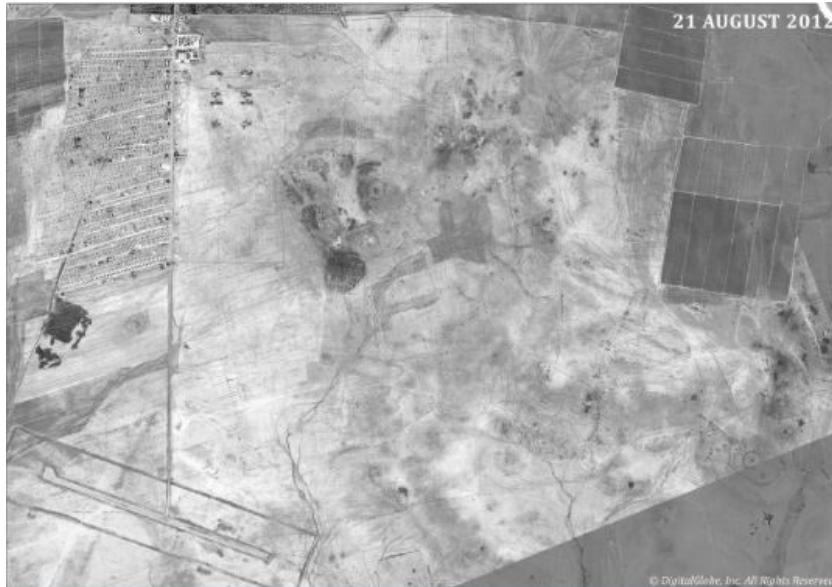


- Operational Satellite Applications Program of the United Nations Institute for Training and Research (UNITAR).
- Created in 2001, with more than 3,000 analytical products.
- Serves the UN, governments and others.
- Provides satellite imagery analysis and capacity development.
- Based at the European Organization for Nuclear Research (CERN).



THE SATELLITE IMAGE DERIVED PRODUCTS

Why Satellite Imagery?



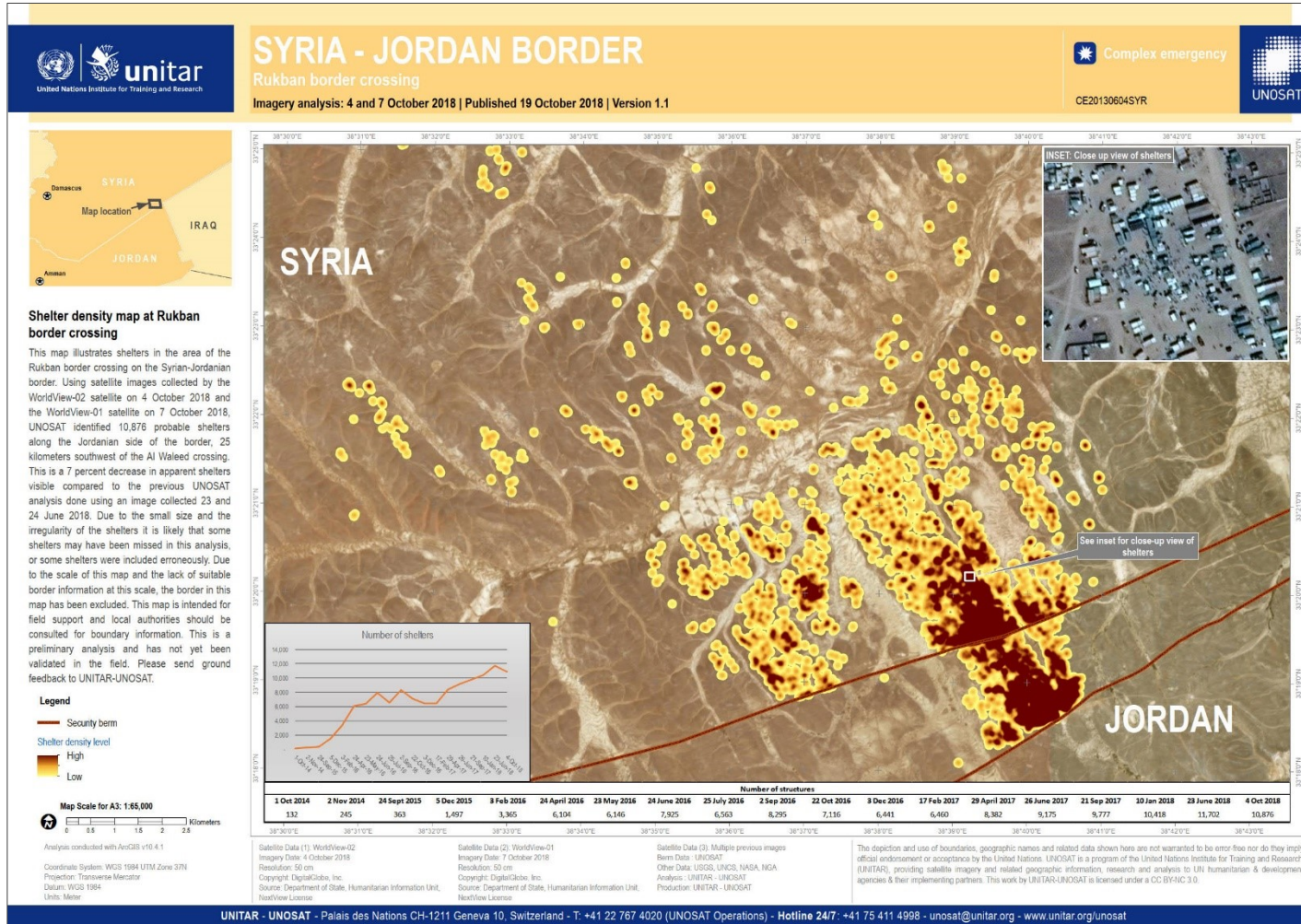
Benefits

- Objective
- Quantifiable
- Accessible
- Safe

Limitations

- Weather / Time of Day
- Revisit Time
- Costly
- Need for Field Validation

➤ Assessment and Monitoring of Refugees and Internally Displaced Persons



Satellite Data (1): WorldView-02
Imagery Date: 4 October 2018
Resolution: 50 cm
Copyright: DigitalGlobe, Inc.
Source: Department of State, Humanitarian Information Unit.
WorldView License

Satellite Data (2): WorldView-01
Imagery Date: 7 October 2018
Resolution: 50 cm
Copyright: DigitalGlobe, Inc.
Source: Department of State, Humanitarian Information Unit.
WorldView License

Satellite Data (3): Multiple previous images
Berm Data: UNOSAT
Other Data: USGS, UNCS, NASA, INGA
Analysis: UNITAR - UNOSAT
Production: UNITAR - UNOSAT

The depiction and use of boundaries, geographic names and related data shown here are not warranted to be error-free nor do they imply official endorsement or acceptance by the United Nations. UNOSAT is a program of the United Nations Institute for Training and Research (UNITAR), providing satellite imagery and related geographic information, research and analysis to UN humanitarian & development agencies & their implementing partners. This work by UNITAR-UNOSAT is licensed under a CC BY-NC 3.0.

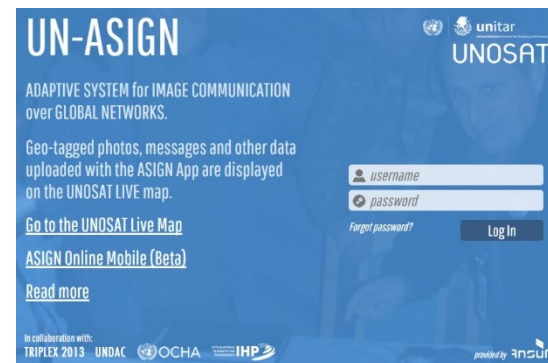
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➤ Monitoring of Informal Settlements of Syrian Refugees in Lebanon



UN-ASIGN (<https://assign.cern.ch/>)

- Open source application for smartphones.
- Work in areas with low bandwidth.
- Supports emergency response with geo-referenced photos and text.
- Integrated into UNOSAT live web maps.
- Successfully used since 2014 during operations in Vanuatu, Haiti, Gaza, Nepal, etc.



➤ 2018 Dam Collapse Flash Floods in Lao People's Democratic Republic

GDACS - LIVE Map Flash Floods, LAO PDR, FL20180723LAO, GDACS ID: 1000210

Find address or place

Mal

Hinsombat

Taphat

#TRAINING
Roadside camp, Tok Tok
Authorities are clearing the space for temporary shelters! About 5 hectare

[Large version](#)

[Zoom to](#)

1km

106.510 14.708 Degrees

DigitalGlobe | Lao Population and Housing Census 2005 Lao Statistics Bureau, Ministry of Planning and Invest... esri



GDACS LIVE Map Earthquake, Nepal (EQ-2015-000048-NPL)

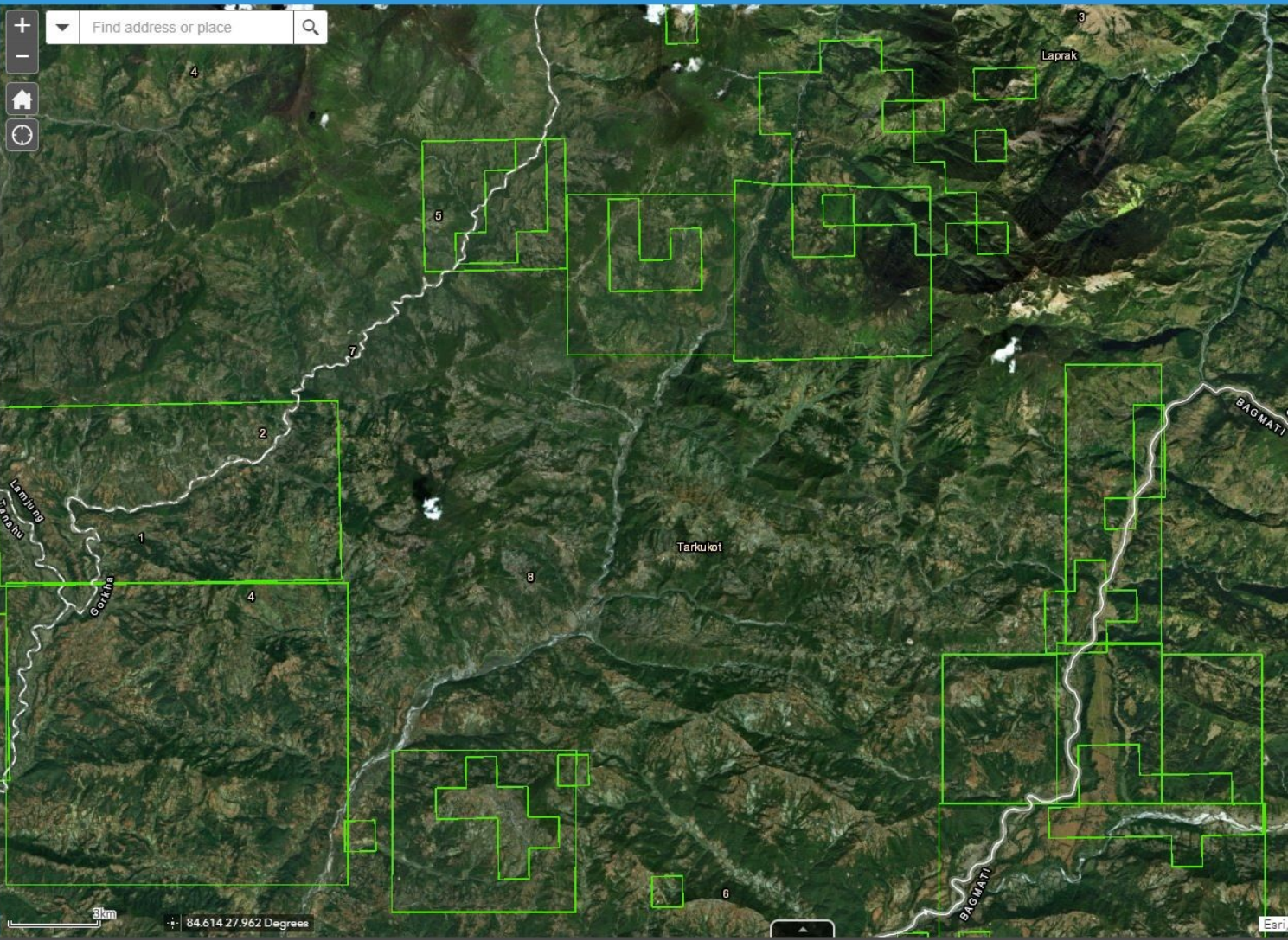


Find address or place

Legend

GDACS Satellite Mapping Coordination System (SMCS) Area Status

- AOI for Event Glide Number: EQ-2015-000048-NPL
- Completed
 - In Progress
 - Planned





UNOSAT

DATA | LOCATIONS | ORGANISATIONS | QUICKLINKS

ADD DATA

HOME / DATASETS

You might also like: [UN Operational Satellite Applications Programme \(UNOSAT\) \(UNOSAT\) organisation page](#)

Data [729]

UNOSAT

Show filter:

Show 25 | 50 | 100

ORDER BY: Relevance

Refine your search: [Clear all](#)

FEATURED:

- CODs [1]
- Sub-national [679]
- Geodata [259]
- Datasets on request [0]
- Datasets with Quick Charts [0]
- Datasets with Showcase [495]
- Datasets with HXL tags [0]

LOCATIONS:

- Afghanistan [18]
- Algeria [8]
- Angola [2]
- Anguilla [3]
- Antigua And Barbuda [3]

[More](#)

FORMATS:

- CSV [1]
- KMZ [170]
- PDF [1]
- SHP [1]
- XLSX [5]

[More](#)

UNOSAT Population Exposure Report - 3 October 2016 Tropical Cyclone Matthew-16

UN Operational Satellite Applications Programme (UNOSAT)

100+ Downloads

Updated October 6, 2016 | Dataset date: Oct 5, 2016

This dataset updates: Never

This report illustrates the population exposure to the tropical cyclone Matthew-16 in Haiti, Cuba and Jamaica.

XLSX |

Geodata of UNOSAT Damage Assessment Activities in Viti Levu Island, Fiji

UN Operational Satellite Applications Programme (UNOSAT)

Updated March 22, 2016 | Dataset date: Mar 10, 2016

This dataset updates: Never

Tropical Cyclone Winston-UNOSAT Damage Assessment Activities in Viti Levu Island.

ZIPPED SHAPEFILE |

Cuba - Population Exposure Wind Speed from Hurricane Matthew (UNOSAT, 2016-10...

UN Operational Satellite Applications Programme (UNOSAT)

Updated October 7, 2016 | Dataset date: Oct 6, 2016

This dataset updates: Never

Population Exposure Wind Speed Zones, Cuba

ZIPPED SHAPEFILE |

Jamaica - Population Exposure Wind Speed from Hurricane Matthew (UNOSAT - 2...

UN Operational Satellite Applications Programme (UNOSAT)

Updated October 7, 2016 | Dataset date: Oct 6, 2016

This dataset updates: Never

Population Exposure Wind Speed Zones Matthew-16

ZIPPED SHAPEFILE |

R&D: Artificial Intelligence and Satellite



Documents | Images | Jimmy | Logout

Document: GeOnG - Zaatari | Manage

Workflow > Run Detection

Models

Selected: BaseNet #0 (base net)

- BaseNet #0
- Adaptation 1
- Adaptation 2
- Adaptation 3
- Adaptation 5b8e7799
- Adaptation 5ba93b89
- Adaptation 5baa9818
- BaseNet #2

Detect | Adapt | Manage | Refresh list

Layers

- Evaluation Annotations
- Task Tiles
- Extent #1
- zaatari.tif
- OpenStreetMap

+ New | Evaluate | Manage

DigitalGlobe

GLOBAL PULSE

UNOSAT

Keyboard Commands:

- 2 - Place box detection annotation (in top visible annotation layer) Shift-2 - Remove it
- Space - zoom in to boundaries of task currently under pointer
- Shift-Space - zoom out to boundaries of top visible task layer

Detecting complete, 3623 found | Cleaned up 847

Leaflet | OpenStreetMap



Baidoa



Bidibidi



Doro



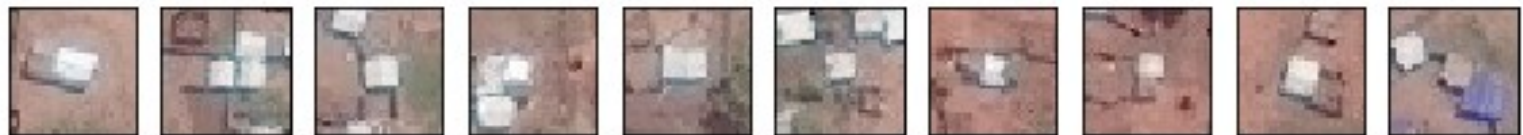
Muna



Ngala



Yida



- UNITAR-UNOSAT Website:
<https://www.unitar.org/unosat/maps>
- International Charter on Space and Major Disasters:
<https://www.disasterscharter.org>
- Humanitarian Data Exchange (HDX):
<https://data.humdata.org/>
- ReliefWeb:
<http://reliefweb.int/>
- Global Disaster Alert and Coordination System (GDACS):
<http://www.gdacs.org/>
- GDACS Satellite Mapping and Coordination System (SMCS):
<https://gdacs-smcs.unosat.org/>

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<http://unitar.org/unosat>



unitar

United Nations Institute for Training and Research

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