



# UNOSAT's Contribution to the Asia Pacific Plan of Action on Space Applications for Sustainable Development 2018-2030

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# UNITARs Operation Satellite Application Programme



**UNITAR**  
**Operational**  
**Satellite**  
**Programme**  
**(UNOSAT)**

An operational programme of United Nations Institute for Training and Research (UNITAR)

Serving UN, international organizations, and national governments

Fully dedicated to **satellite imagery analysis** and **applications of geospatial information technologies**

Presence in Geneva, Bangkok, New York, Nairobi, Suva, Port Vila, Honiara

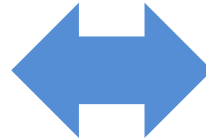


# UNOSAT Activities



## **Analysis, Research and Innovation**

Satellite imagery derived  
geospatial products



## **Training and Capacity Development**

Hands-on, national and regional  
level technical backstopping

UNOSAT Rapid Mapping Service



DRR and Resilience



Climate Change



Knowledge Sharing

RESAP Member States

Since Last ICC in 2019

Number of Activations : 21

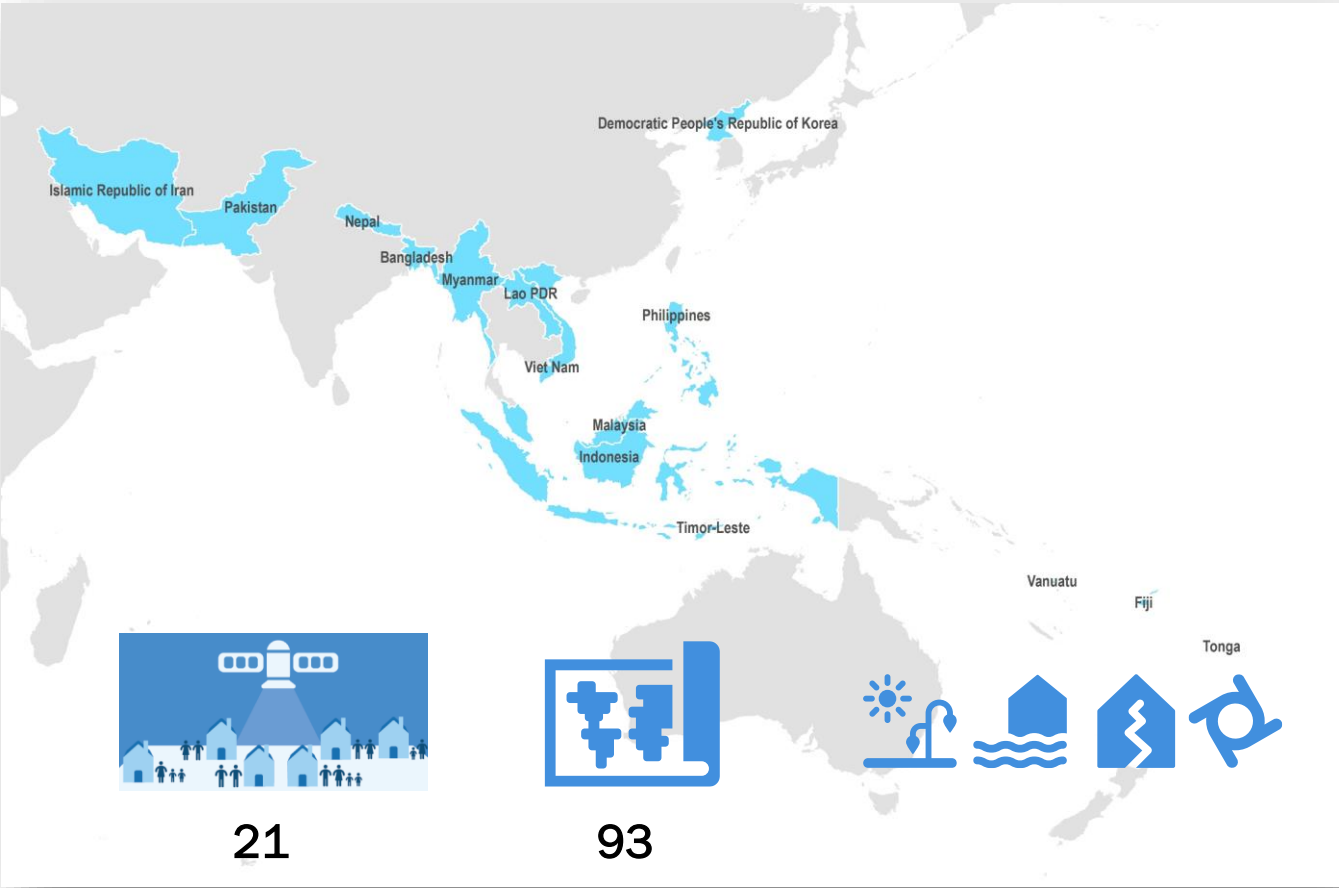
Number of Products : 93

Disaster types :

Flood, Earthquake, Tropical Cyclone, Drought

Countries Covered : 15

Lao People's Democratic Republic, Viet Nam, Indonesia, Philippines, Malaysia, Timor-Leste, Vanuatu, Fiji, Tonga, Islamic Republic of Iran, Pakistan, Nepal, Bangladesh, Myanmar, Democratic People's Republic of Korea



During Monsoon Season 2020 (on-going)		
Countries	Disaster	Number of products
Nepal	Flood	8
Bangladesh	Flood	16
Myanmar	Flood	5
Grand Total		29

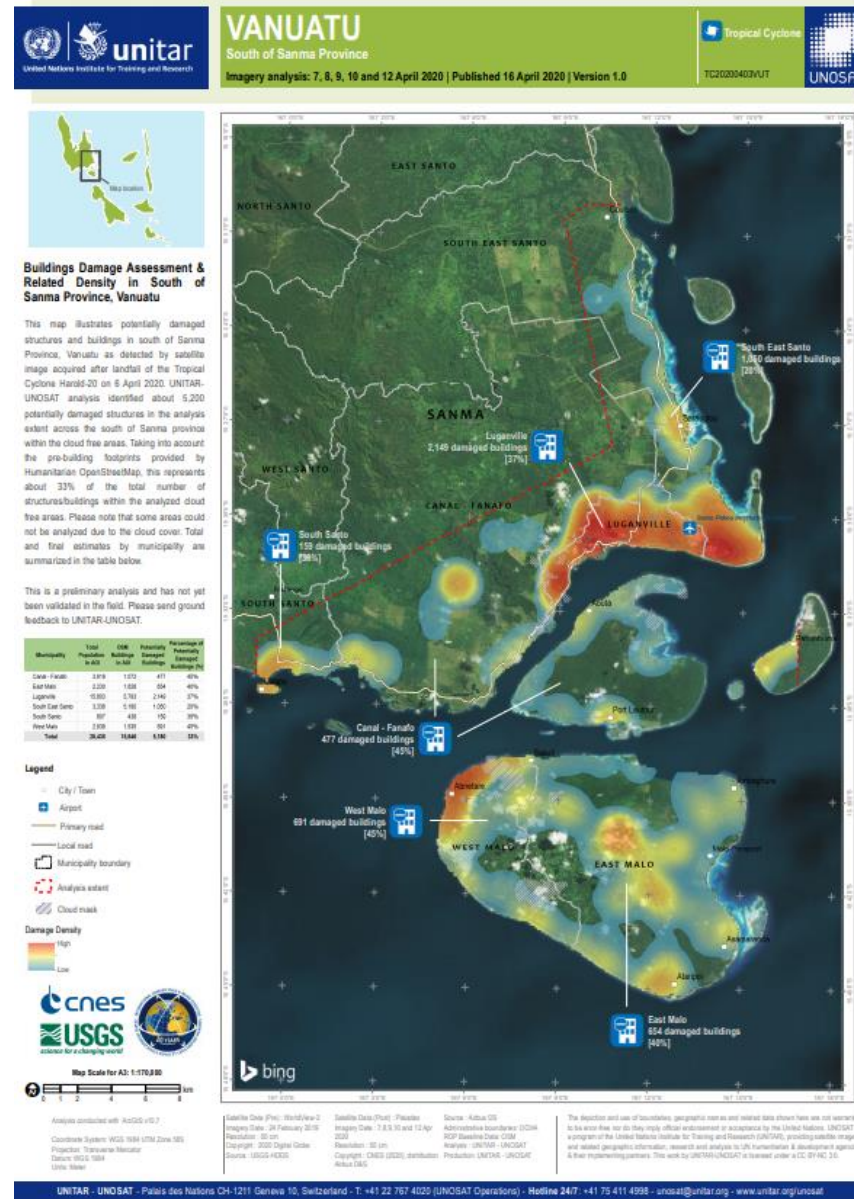


# UNOSAT Rapid Mapping Service

TC HAROLD  
in Vanuatu

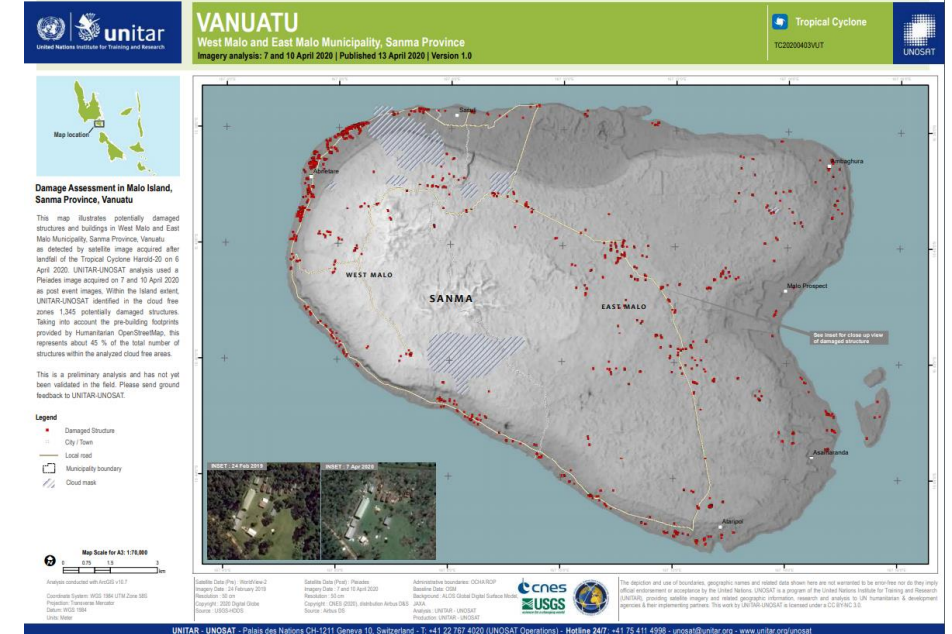
Apr. 2020

Source:  
<https://unitar.org/maps/countries/109>



Buildings damage assessment & related density in south of Sanma province, Vanuatu

Damage assessment in Malo island, Sanma province, Vanuatu



PRELIMINARY SATELLITE-DERIVED DAMAGE ASSESSMENT REPORT IN SANMA AND MALAMPA PROVINCE, VANUATU - 8 APRIL 2020

AO1 1 LUGANVILLE MUNICIPALITY, SANMA PROVINCE, VANUATU : DAMAGED STRUCTURES



Preliminary satellite-derived damage assessment, Sanma and Malampa provinces, Vanuatu

Capacity Development on space and geospatial applications for disaster and climate change resilience



DRR and Resilience



Climate Change



Knowledge Sharing



Technical Training

In-Country: Thailand, LaoPDR, Indonesia, Fiji, Vanuatu, Solomon Islands  
Regional: ASEAN



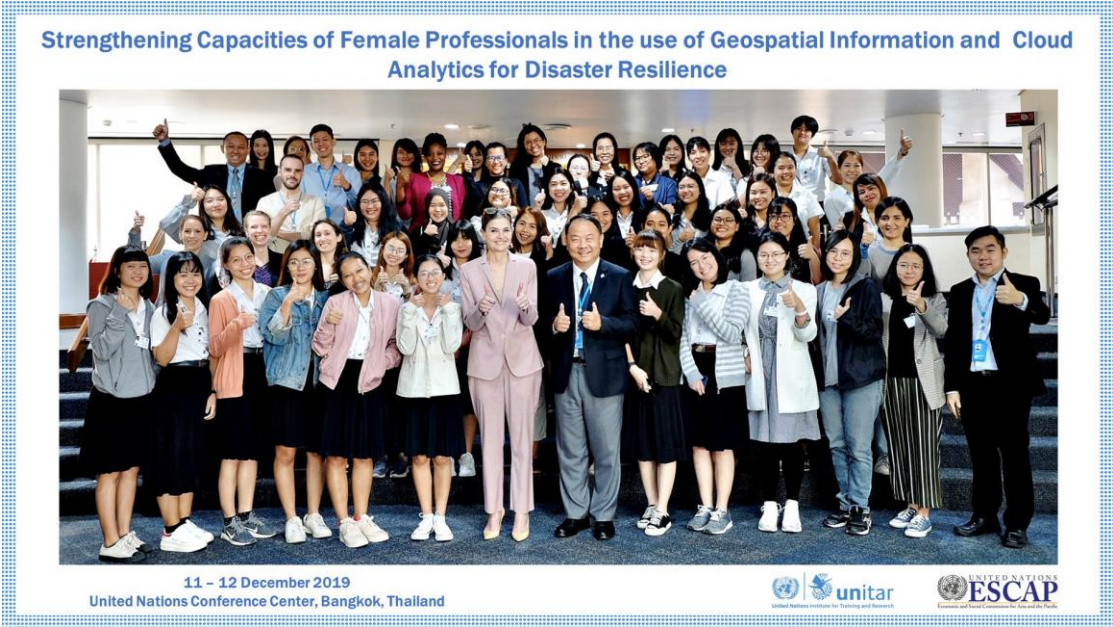
9 Technical Trainings  
221 Participants

61% 39%  
male female



12 Technical Awareness Raising Workshops  
265 participants

59% 41%  
male female



In partnership with,





IPP CommonSensing: COVID-19 Quarantine Station Management Dashboard for NDMO, Solomons Islands



DRR and Resilience



Climate Change



Knowledge Sharing



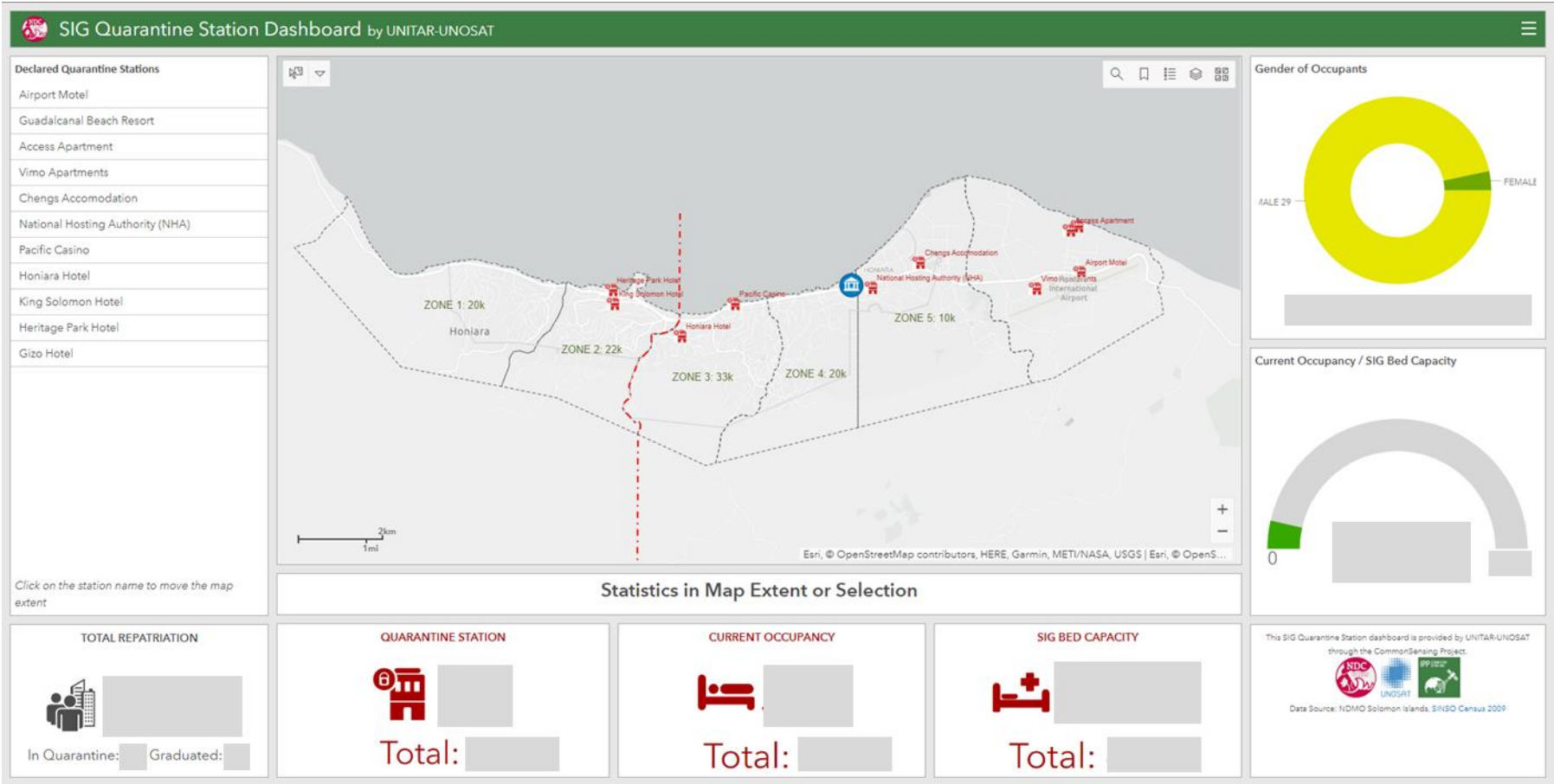
Technical Training

Solomon Islands

Currently working on COVID-19 returnees management tools together with National Disaster Management Office of Solomon Islands Government



In partnership with,



# Innovation

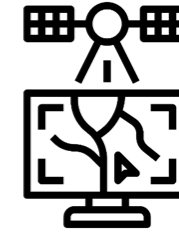
- UNOSAT AI-based Flood Rapid Mapping Service tested in Recent Bangladesh Flooding



24/7 Automatic Monitoring



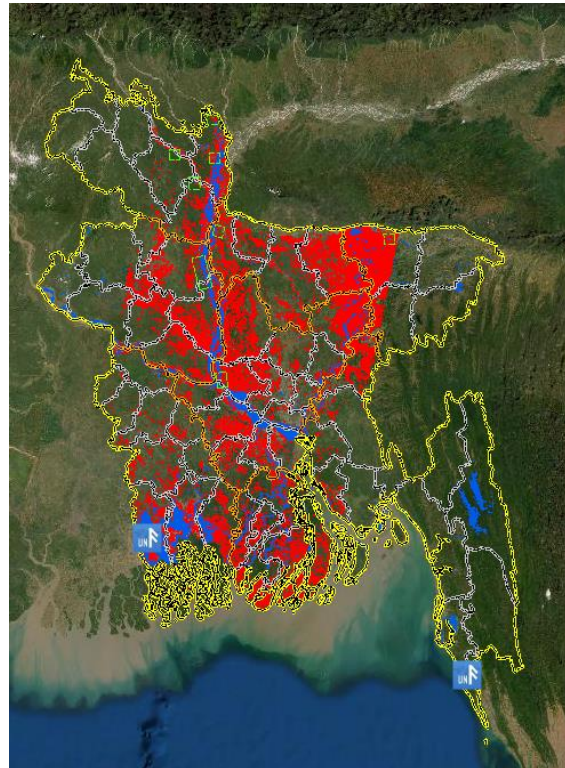
Artificial Intelligence Model



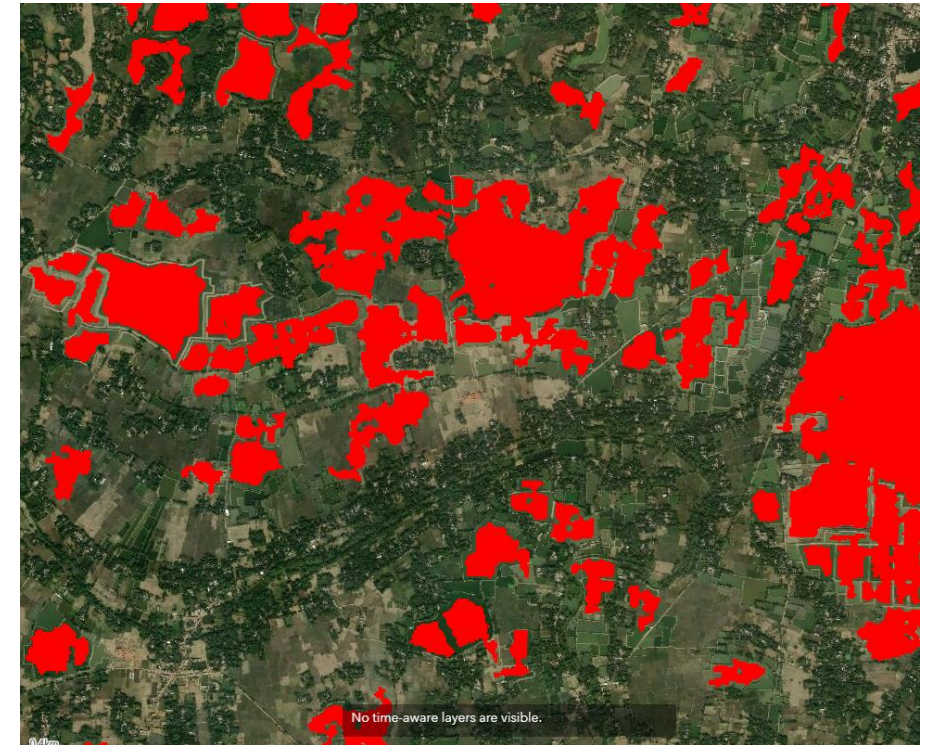
UNOSAT Flood Platform



Faster Emergency Response



Large Country Scale Analysis  
Complete within hours



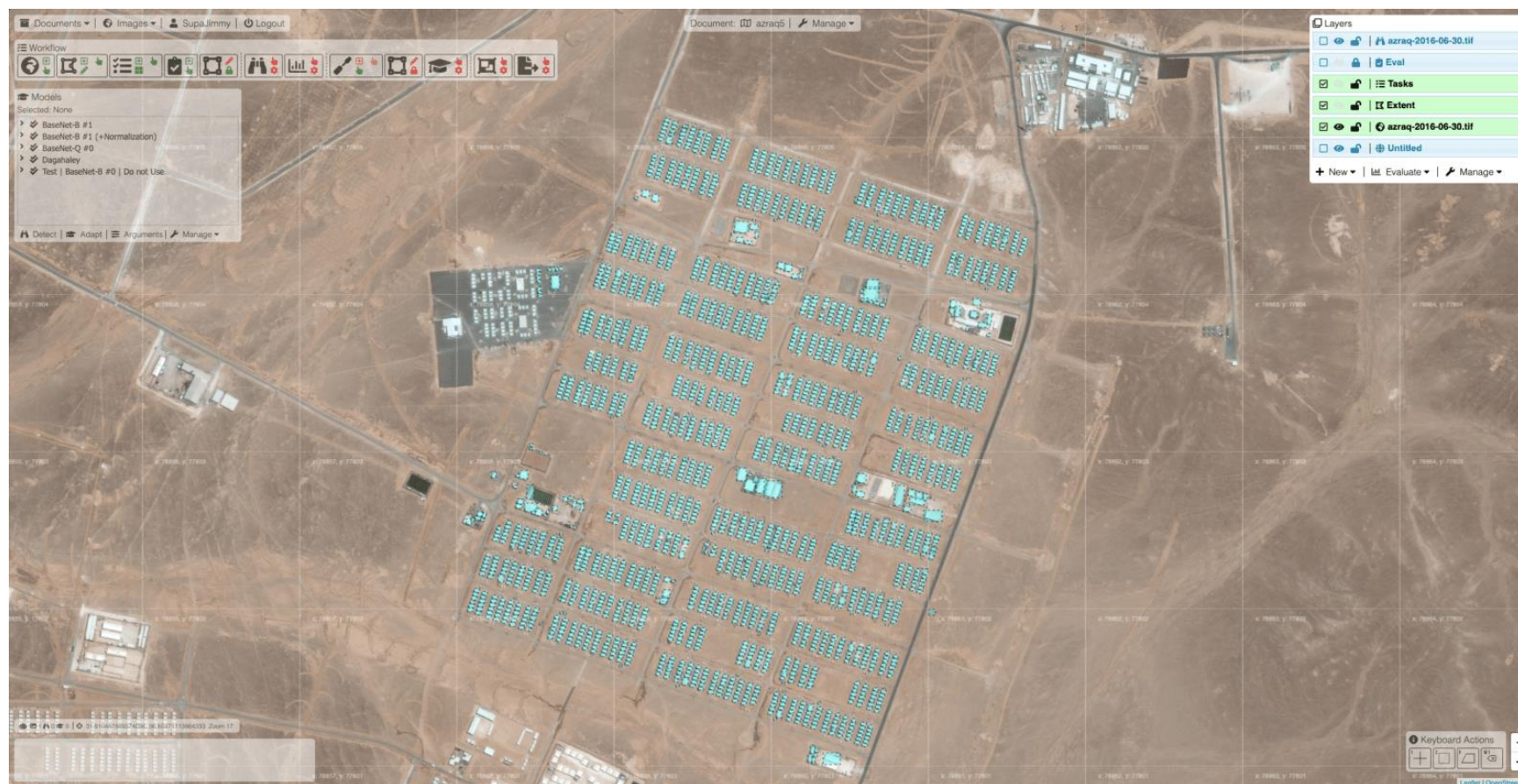
Internal Testing has revealed reasonable agreement with  
traditional supervised analysis



# Innovation

PulseSatellite is a collaborative web-based tool that combines cutting edge artificial intelligence with human expertise to extract the most relevant information from satellite imagery for use in humanitarian contexts.

## - PulseSatellite



Created by



<https://www.unglobalpulse.org/microsite/pulsesatellite/>



# unitar

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