

Integrated in the Humanitarian Programme Cycle, UNOSAT Geospatial Catalogue offers a predictable mechanism and provides a full range of products to supply the humanitarian community with timely and reliable information, based on satellite imagery analysis, needed during humanitarian operations.

## SATELLITE IMAGERY DERIVED PRODUCTS



### PHASE 0 POTENTIAL SCENARIO

- Rapid risk assessment
- Alert & early warning
- Simulated hazard scenario
- Elements at risk mapping



### PHASE 1 EXPOSURE & IMPACT

- Hazard extent mapping
- Population
- Populated places
- Landuse/landcover
- IDPs and camp mapping
- Humanitarian access
- Rapid damage estimation



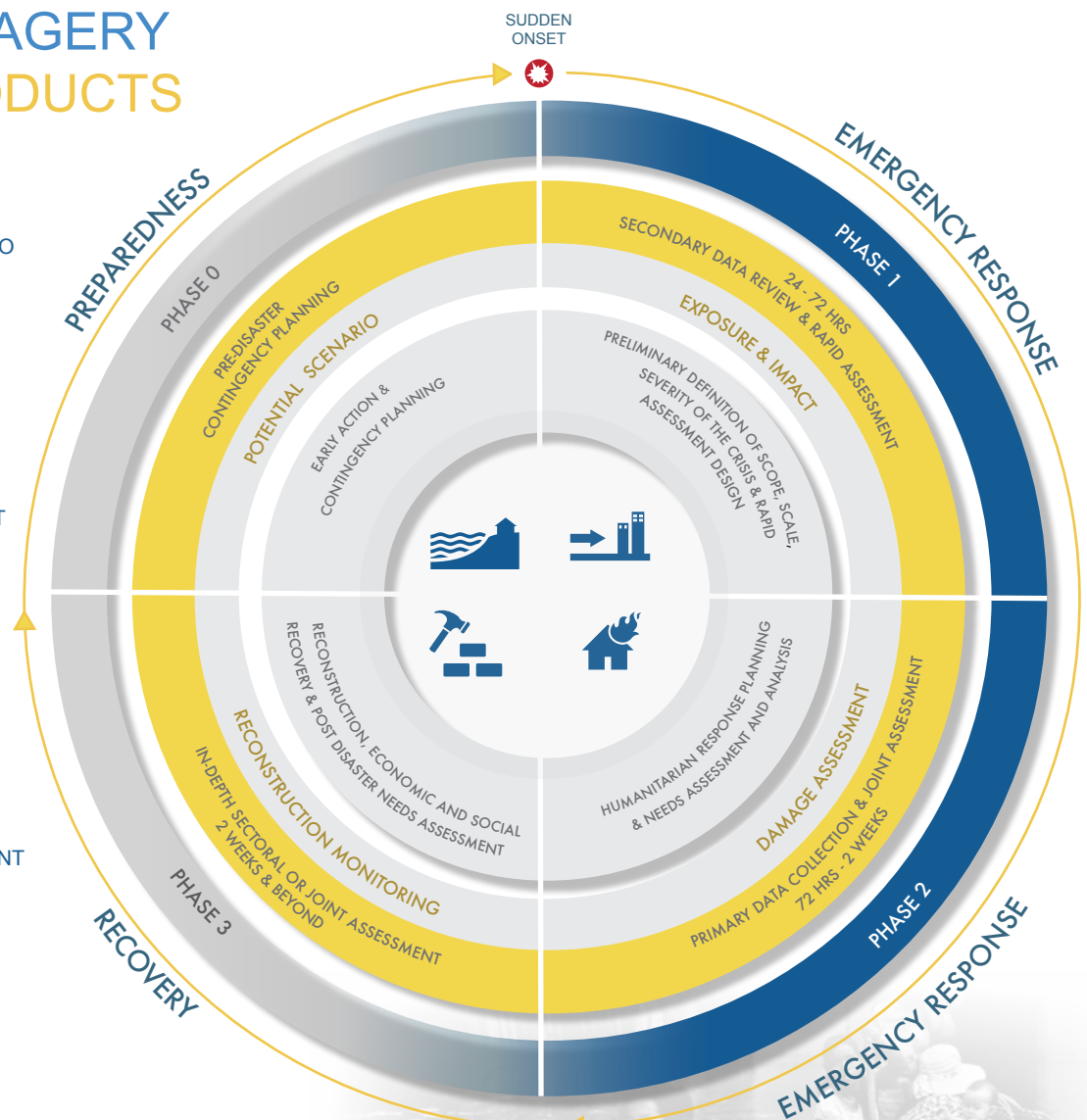
### PHASE 2 DAMAGE ASSESSMENT

- Structural damage to buildings and critical facilities
- Damage intensity
- Transportation network
- Secondary induced effects



### PHASE 3 RECONSTRUCTION MONITORING

- Cluster specific / Sectoral assessment
- Reconstruction monitoring



## HOW TO ACTIVATE RAPID MAPPING SERVICE

1

### SEND A REQUEST

What type of disaster?  
What is the geographic area?

[emergencymapping@unosat.org](mailto:emergencymapping@unosat.org)  
24/7 Phone Line +41 75 411 4998

2

### GET FEEDBACK

We will assess your request and get back to you with a plan for product delivery within the next few hours

3

### PRODUCTION & FOLLOW UP

We start the analysis and notify you about product delivery

4

### DELIVERY



DATA LIVE MAPS REPORTS MAPS TRAINING

UNOSAT uses publicly available satellite imagery from commercial vendors, in-kind contributions, free and open sources and the International Charter: Space and Major Disasters.



**PREPAREDNESS**

**PRE-DISASTER • CONTINGENCY PLANNING**

**POTENTIAL SCENARIO**

Early Action & Contingency Planning

Snapshot



- Rapid flood risk assessment
- Alert & early warning
- Simulated flood extent
- Archive detected flood extents



- Landslide susceptibility
- Landslide inventory mapping
- Elements at risk mapping



- Forecast cyclone track and sustained wind speed zones
- Precipitation analysis
- Potentially affected population estimates

**EMERGENCY RESPONSE**

**24 - 72 HOURS • SECONDARY DATA REVIEW & RAPID ASSESSMENT**

**EXPOSURE & IMPACT**

Preliminary definition of Scope, Scale, Severity of the Crisis and Rapid Assessment Design

Sitrep, Situation Analysis, Flash Update



- Precipitation analysis
- Flood extent mapping
- Estimated affected population, populated places, landcover/landuse and critical facilities
- Humanitarian access (physical access to affected areas)
- Temporary gathering sites & IDPs camp mapping



- Estimated affected population, populated places, landcover/landuse and critical facilities
- Flood extent mapping
- Rapid damage assessment (built-up areas, critical facilities and buildings)
- Humanitarian access (physical access to affected areas)
- Temporary gathering sites & IDPs camp mapping



- Estimated affected population, populated places, landcover/landuse and critical facilities
- Rapid damage assessment (built-up areas, critical facilities and buildings)
- Humanitarian access (physical access to affected areas)
- Temporary gathering sites & IDPs camp mapping



- Landslide extent mapping
- Estimated affected population, populated places, landcover/landuse and critical facilities
- Rapid damage assessment (built-up areas, critical facilities and buildings)
- Humanitarian access (physical access to affected areas)
- Temporary gathering sites & IDPs camp mapping



- Lava flow extent mapping
- Estimated affected population, populated places, landcover/landuse and critical facilities
- Rapid damage assessment (built-up areas, critical facilities and buildings)
- Humanitarian access (physical access to affected areas)
- Temporary gathering sites & IDPs camp mapping

**72 HOURS - 2 WEEKS • PRIMARY DATA COLLECTION & JOINT ASSESSMENT**

**DAMAGE ASSESSMENT**

Humanitarian Response Planning and Needs Assessment and Analysis

Flash Appeal, Central Emergency Response Fund (CERF), Multi-sector Initial Rapid Assessment (MIRA) Report



- Flood event monitoring
- Cumulative flood extent
- Comprehensive building damage assessment (mudflow)
- Transportation network status & road obstacles (mudflow)



- Comprehensive building damage assessment
- Landslide volume estimation
- Landslide event monitoring
- Transportation network status & road obstacles



- Comprehensive building damage assessment
- Building damage intensity
- Damage and loss estimation
- Transportation network status & road obstacles



- Comprehensive building damage assessment
- Volcano event / lava flow monitoring
- Transportation network status & road obstacles



- Comprehensive building damage assessment
- Building damage intensity
- Transportation network status & road obstacles

NOTE: Continued products (24-72 hrs) and secondary effects induced by primary crisis events are also provided

**RECOVERY**

**2 WEEKS & BEYOND • IN-DEPTH SECTORAL OR JOINT ASSESSMENTS**

**RECONSTRUCTION MONITORING**

Reconstruction, Economic and Social Recovery, and Post-Disaster Needs Assessment

Humanitarian Needs Overview (HNO), Dashboard

- Cluster specific / Sectoral assessment (Transport, Buildings / Shelter, Transitional Shelters and IDPs, Services, Environment, Livelihoods)
- Reconstruction monitoring

NOTE: Other products may be produced on request - UNOSAT is flexible and seeks to maximize impact from our analyses.