

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



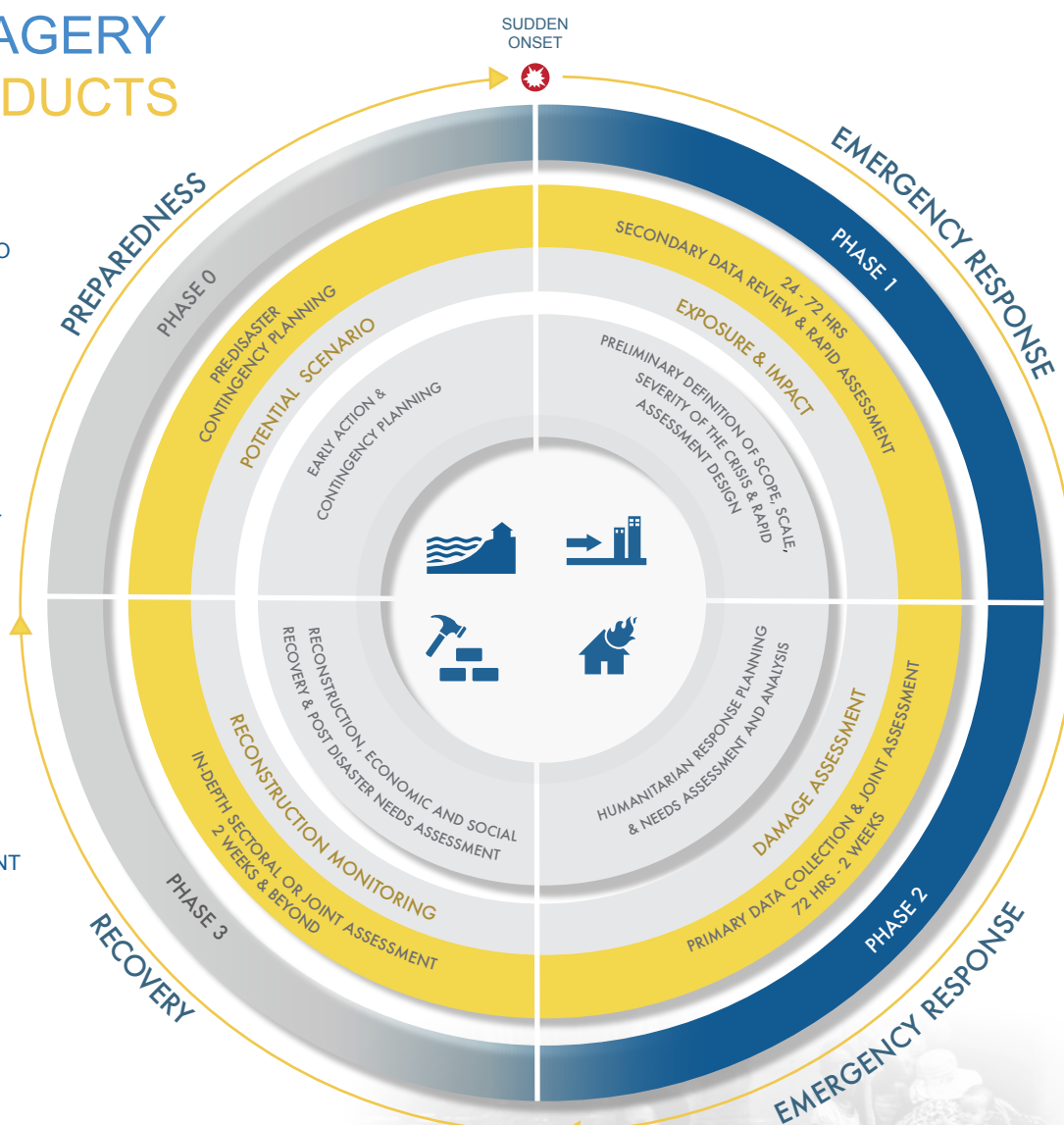
PHASE 2 DAMAGE ASSESSMENT

- 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
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 is a partner of the International Charter Space and Major Disasters.



EARTHQUAKE



FLOOD



LANDSLIDE



TROPICAL CYCLONE



VOLCANO

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.