PROJECT REFERENCE

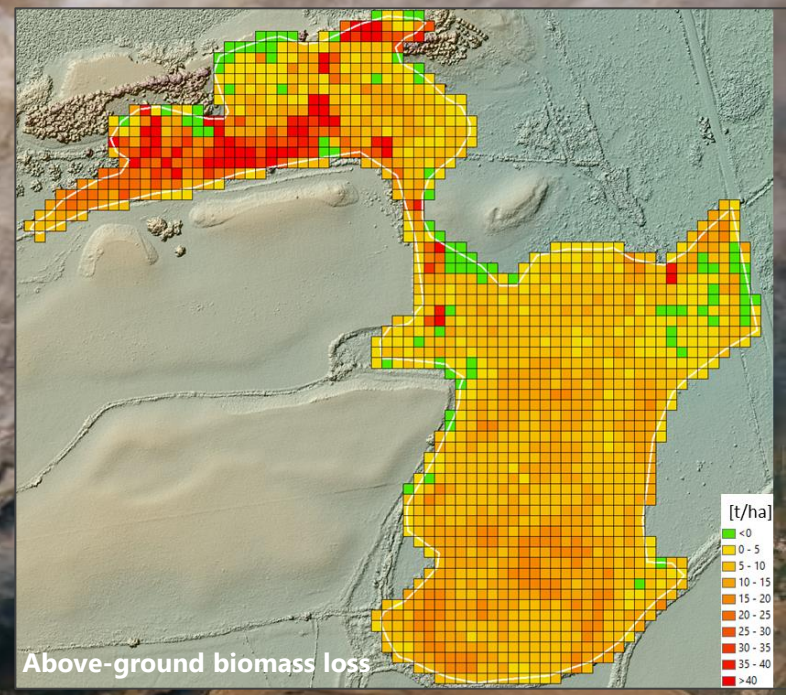
Copernicus Emergency Management Service

Forest fire impact assessment, Spain

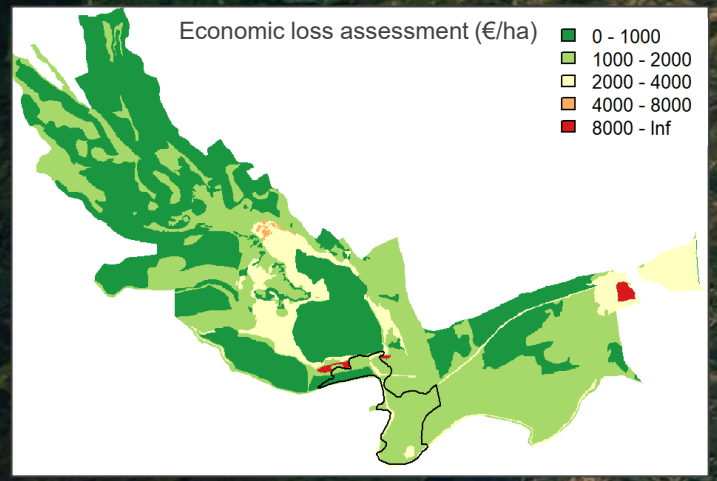
Date: 2023

Customer: European Commission / Joint Research Centre

- Fire extent delineation and grading
- Fire impact assessment on human life, infrastructure, land cover & habitats
- Estimation of above-ground biomass loss
- Soil erosion risk assessment
- Direct & indirect economic loss assessment
- Support to police investigations



Above-ground biomass loss



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Emergency Management

EMSN148: Forest fire impact assessment of the Natura 2000 site Balsa del Pulguer, Spain

PROJECT REFERENCE

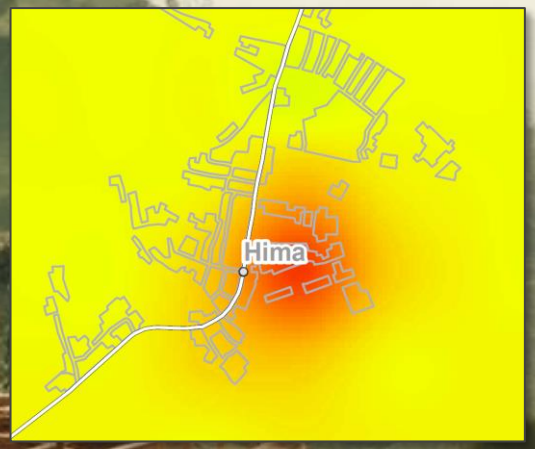
Copernicus Emergency Management Service

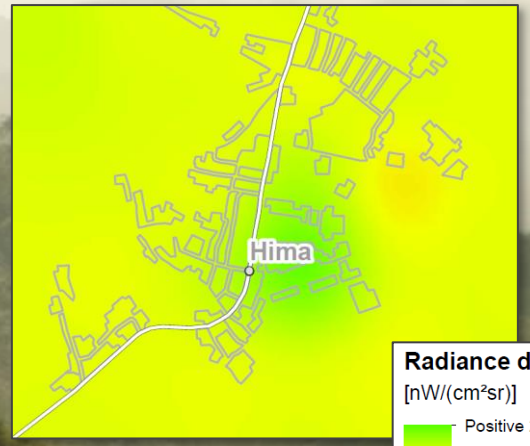
Renewable energy in Uganda and Mozambique

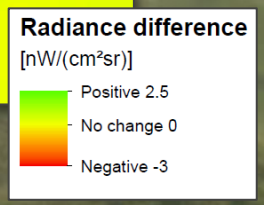
Date: 2023

Customer: European Commission / Joint Research Centre

- Electrification analysis and change for a small hydro power project in Uganda and a solar power station in Mozambique
- Human footprint mapping using night-lights
- Change in urbanisation and rural development
- Dam break modelling
- Support in better analysing the impact related to job creation, poverty reduction and disaster resilience







EMSN155: Evaluating the impact of renewable energy projects in Uganda and Mozambique

PROJECT REFERENCE

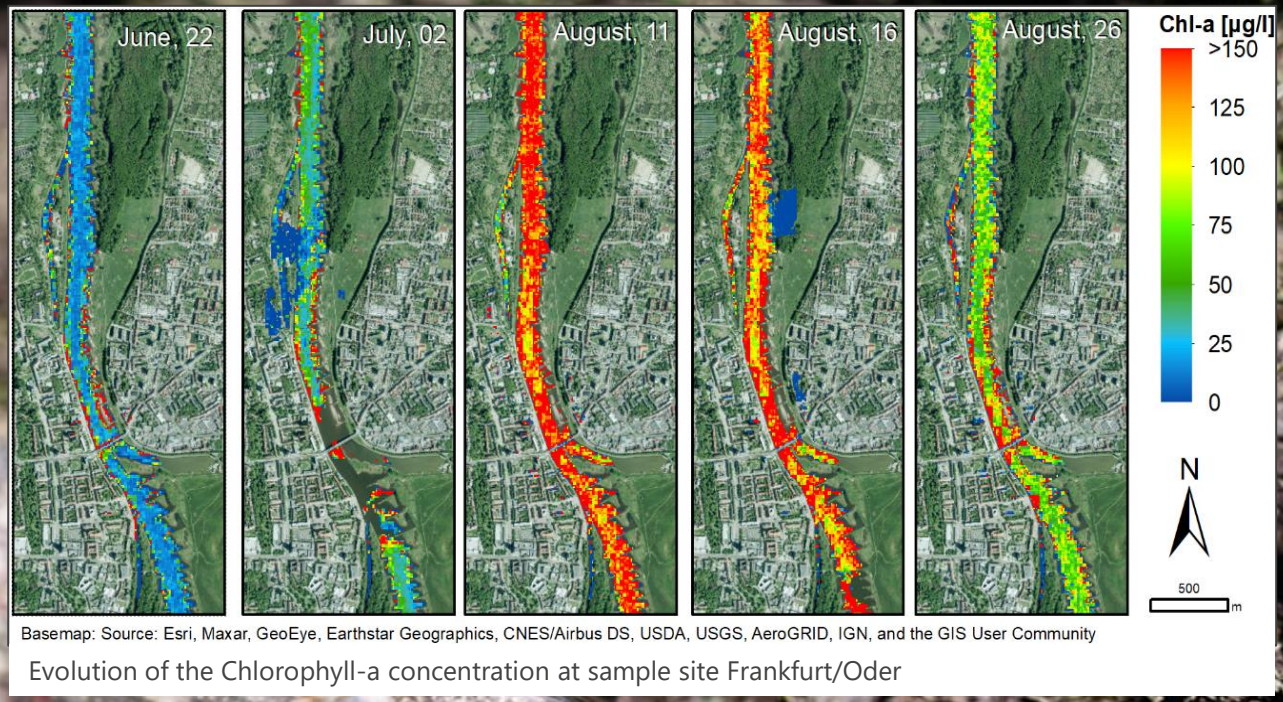
Copernicus Emergency Management Service

Water quality assessment of the river Odra (Poland)

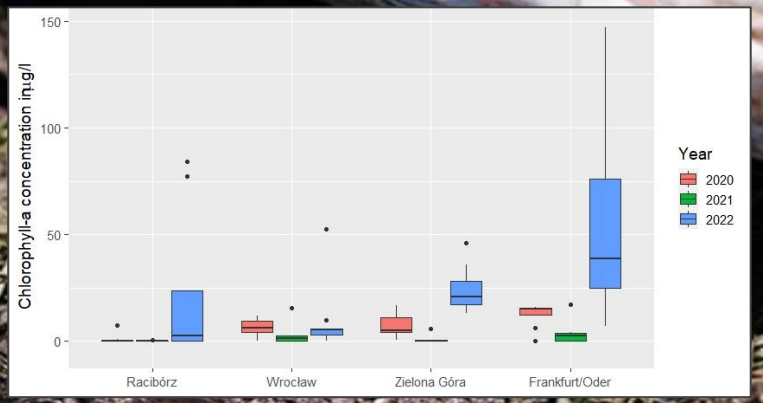
Date: 2022

Customer: European Commission / Joint Research Centre

- Water quality assessment
- Chlorophyll concentration analysis
- Time series analysis of the summer month of 2022, 2021, 2020 based on Sentinel 2
- Support to the post-disaster investigation to identify the source of the river contamination
- Retrospective analysis of previous years



Evolution of the Chlorophyll-a concentration at sample site Frankfurt/Oder



EMSN136: Water quality assessment of river Odra

PROJECT REFERENCE

Copernicus Emergency Management Service

Preparedness and resilience in support to food security, Afghanistan / Tajikistan

Date: 2022

Customer: European Commission / Joint Research Centre

- Delineation of agricultural land and single (sub)plots
- Differentiation of crop types wheat, potato and other
- Comparison of the agricultural seasons 2021 and 2022
- Estimation of the land productivity
- Support to develop a water safety and irrigation project for villages to safeguard agricultural production and food security

EMSN120: Preparedness studies for resilience in the Ishkashim area at the border of Afghanistan and Tajikistan

PROJECT REFERENCE

Copernicus Emergency Management Service

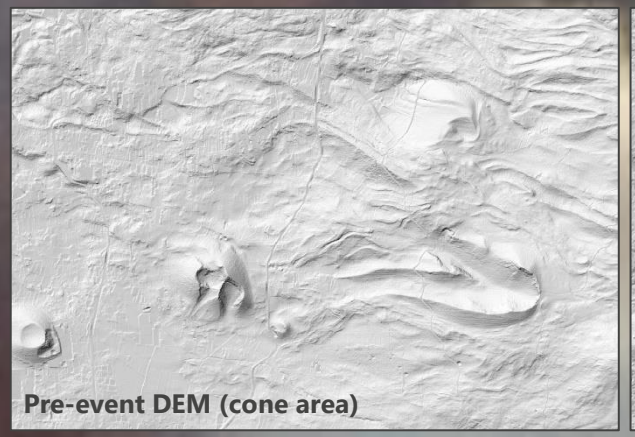
Digital elevation models and ground deformation, La Palma/ Spain

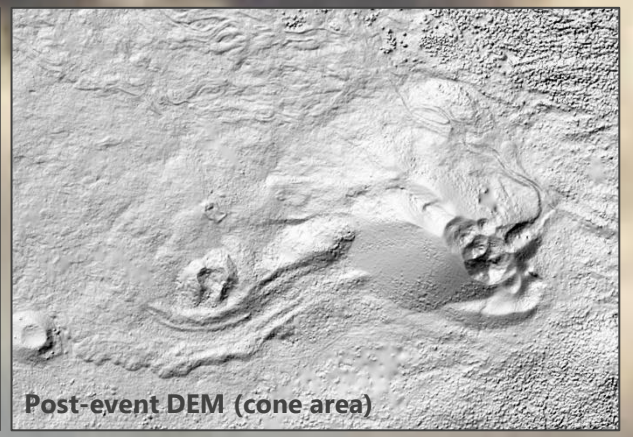
Date: 2021/2022

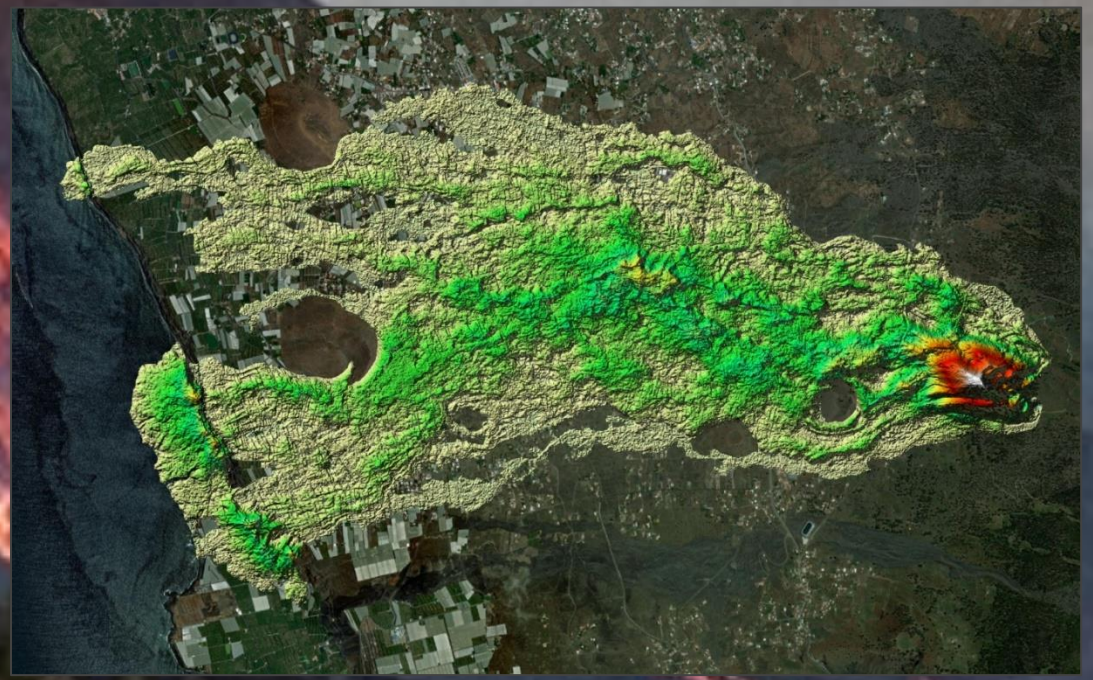
Customer: European Commission / Joint Research Centre

- Generation of Digital Elevation Models based on tri-stereo optical and TanDEM-X SAR image data
- Estimation of the elevation change
- Determination of thickness and volume of lava flow
- Support to the preparation and mitigation planning
- Input for e.g. lava flow trajectories modelling, morphologic mapping

EMSN119: Digital Elevation Models of the Cumbre Vieja Volcano in La Palma, Spain


Pre-event DEM (cone area)


Post-event DEM (cone area)



PROJECT REFERENCE

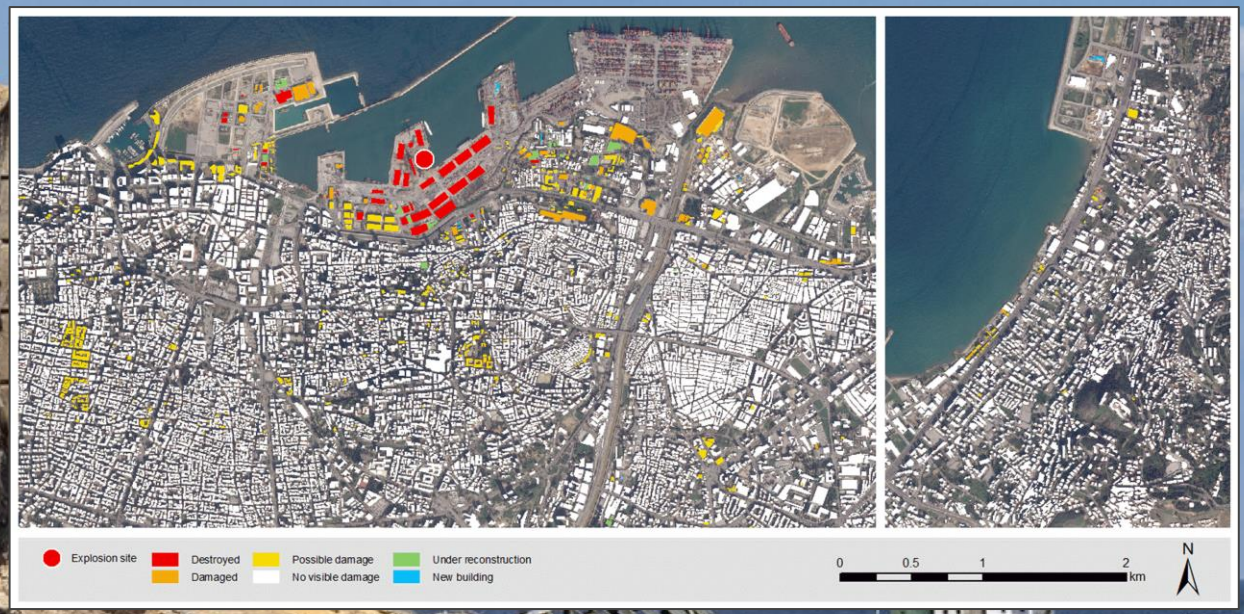
Copernicus Emergency Management Service

Damage assessment & reconstruction monitoring, Beirut

Date: 2021/2022

Customer: European Commission / Joint Research Centre

- Damage assessment of buildings
- Long-term monitoring of the reconstruction activities over 1.5 years
- Focus: buildings, industry & utilities, medical infrastructure, schools, governmental facilities and food distribution infrastructure
- Development of landfills and storage waste sites
- Assessing the medium-term recovery and reconstruction needs



EMSN087: Reconstruction monitoring in Beirut, Lebanon, following August 2020 explosion, for the Reform, Recovery and Reconstruction Framework (3RF)

PROJECT REFERENCE

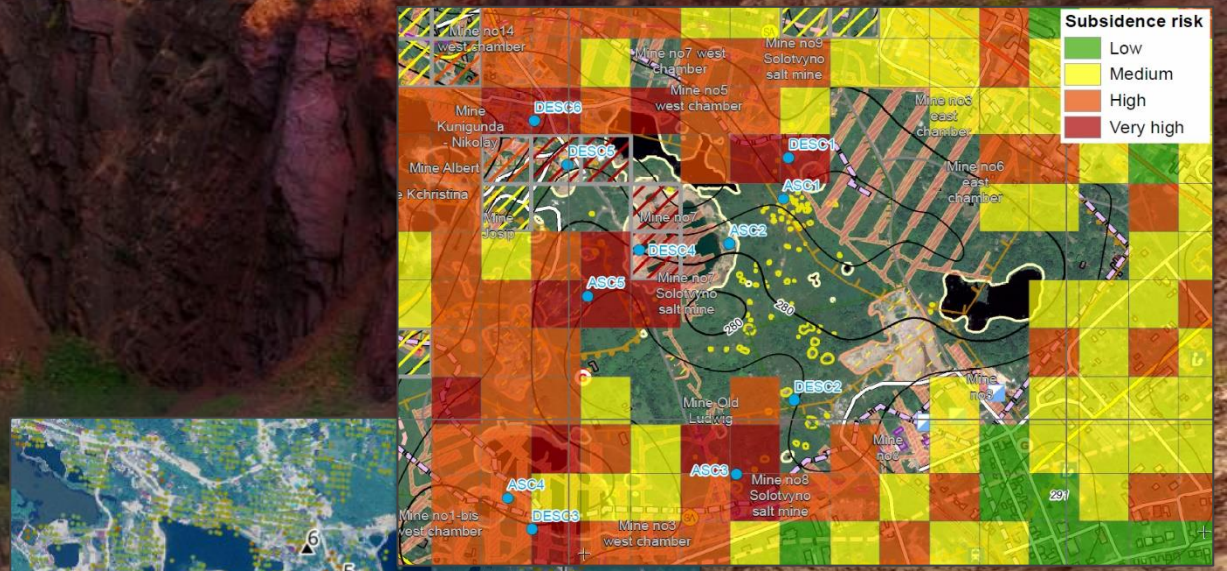
Copernicus Emergency Management Service

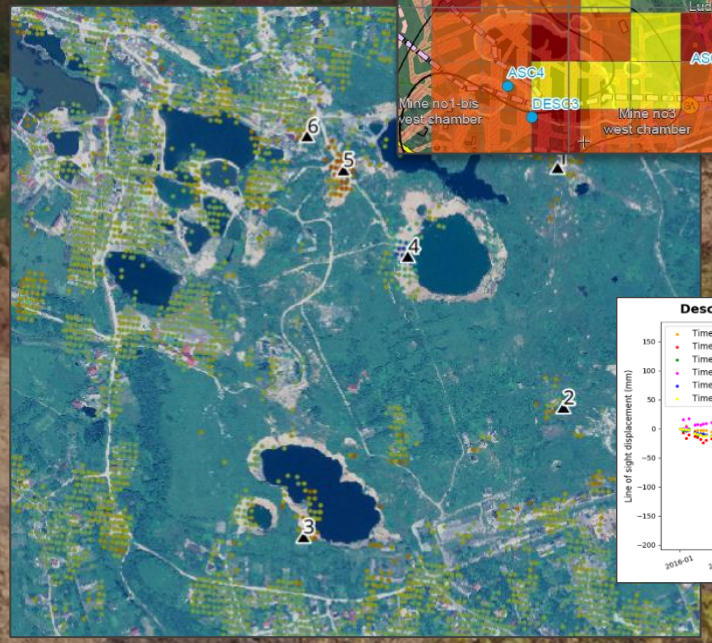
Ground deformation of anthropogenic sinkholes, Ukraine

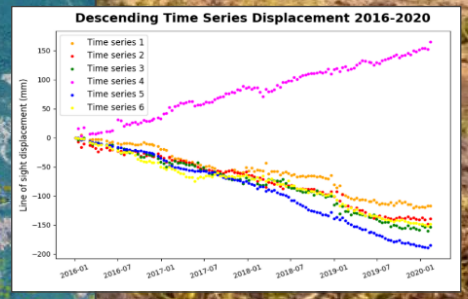
Date: 2020

Customer: European Commission / Joint Research Centre

- Analysis of surface dynamics (2016-2020)
- Delineation of subsidence areas
- Evolution of deformation
- Risk analysis related to landslides, ground movement & deformation
- Support the user with data for the modelling of e.g. (hydro)geological processes and ground failure forecast
- Awareness raising, early warning assistance







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EMSN064: Detection and mapping of ground deformations of anthropogenic sinkholes