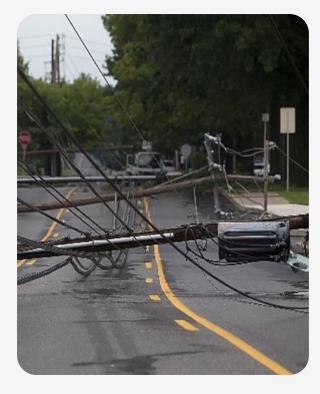


# Challenges

Extreme weather events appear to become increasingly violent and recurring in recent years. Tsunamis, hurricanes, earthquakes, landslides, forest fires and torrential rains are typical examples of natural disasters and all present challenges for emergency responders. The first few days following the event are often crucial to the continuation and success of the necessary interventions.



Conditions on the ground are typically difficult following a disaster, which complicates planning of the response. For example, there might be problems with communications and power, trees and other debris might obstruct roads and damaged power lines might represent hazards. All these factors make the work of rescue teams difficult and dangerous.



### Collection

Imagery can be collected by aircrafts, but recently drones are becoming widely used due to their low cost and ease of use. Multi-rotor or fixed-wing platforms can be flown, depending on the resolution required, the size of the area to be covered and operational constraints. In addition, the various sensors now available, such as thermal and multispectral cameras, offer new tools to meet specific needs.



# **Processing**

The use of a cutting-edge mapping software such as Correlator3D, specifically adapted to these types of situations, is essential to ensure the effectiveness of emergency responders. Once the imagery has been collected, the data is then quickly processed directly in the field to create orthomosaics, digital elevation models and 3D models. The resulting geospatial data helps emergency responders to organize their interventions in a timely manner.



# Interpretation

The data generated can be used to precisely locate and estimate affected areas. Distances, areas and volumes can be evaluated directly with Correlator3D. They can also be analyzed to perform damage assessment. Such geospatial and quantitative estimates of damage allow to plan, for example, the quick clean-up of debris and how to efficiently fix infrastructures.



### Benefits

For emergency response, each minute counts and can make a difference. The ability to rapidly get detailed information about the affected areas is key to coordinate interventions. Accurate maps also support reconstruction efforts following a disaster and can help government authorities to calculate recovery aid funds. Ultimately, it is the people affected who really benefit from such advanced geospatial technologies.

# DISCUSS YOUR SPECIFIC REQUIREMENTS WITH OUR SPECIALISTS

**SCHEDULE MEETING** 

