QUICK GUIDE sinactive

PROVIDE A FASTER AND MORE EFFICIENT EMERGENCY RESPONSE

Challenges

Extreme weather events are occurring more often and have become more violent and costly. Tsunamis, hurricanes, earthquakes, landslides, forest fires and torrential rains are typical examples of natural disasters and all present different and unique challenges for emergency responders. The first few days following the event are often crucial to their contribution and effectiveness.

Conditions on the ground often make access difficult following a disaster, which complicates planning of the response. For example, there are often problems with communications and power, downed trees and damaged power lines might impede access and potentially cause harm. All these factors make the work of first responders and rescue teams difficult and dangerous.



Collection

Imagery can be collected by aircraft, but it is also very common to see drones on site first due to their low cost, ease of use, and fewer limitations to flight in post event weather. It is common to see both multi-rotor and fixed-wing platforms in operation, 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, aid in recovery and search and rescue efforts.





Processing

The use of cutting-edge photogrammetry software such as Correlator3D, specifically adapted to these types of situations, is essential to ensure the effectiveness of emergency response efforts. 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 efforts 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 for the planning of quick debris clean-up and how to efficiently fix infrastructure issues.



Benefits

For emergency response, each minute counts and can make a difference. The ability to rapidly get detailed information about affected areas is key to the coordination of response. 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

