



Crowddroning in action

The Future of Flood Mapping 2023

Unleashing the Power of People and Crowddroning by Globhe to Navigate Complex Geographies, Capture High-Quality Images, and Collect Life-Saving Data.



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Understand Flooding

As humans, we face new frontiers every day. Nowhere more apparent than in disaster recovery, planning, and prevention. This is not an easy task.

Recent flooding events have made it increasingly clear that Humanitarian Agencies and Government Bodies require an alternative to traditional satellite data and other techniques used for monitoring disaster-stricken areas. The current information gathered is blurry, limited in scope, slow to access, and generates a large carbon footprint - all of which stand against providing timely relief assistance when most needed. To save lives amidst rapidly increasing natural disasters, authorities must adopt more efficient ways of quickly mapping flood-damaged regions with reliable accuracy.

2 billion people a year are affected by natural hazards worldwide



The World Bank's recent report paints a grim picture - flooding is now the world's deadliest natural hazard, affecting an unprecedented 2 billion people worldwide. Climatic changes and unpredictable urbanisation combined with poor land use and planning had only exacerbated this issue, resulting in tragic outcomes such as those seen in Pakistan back in 2022 when 1700 lives were claimed, and over \$39 US Billion lost due to floods.

The devastating impact of floods has necessitated a swift response that can provide accurate insights quickly to avert further damage and save lives.

Globhe is a global marketplace that helps customers connect to a vast network of crowddroners across the world in seconds. This is cost-effective, reliable drone data sourced from local champions for first-hand accounts in real-time.

So read on. And together, we look forward to exploring the conversations and collaborations that will serve flood mapping now and into the future.

Navigating complex geographies

01

At this time of profound environmental change, people must come together and work within communities to uncover new ways to respond to natural disasters quickly and decisively.

Crowddroning offers an invaluable resource— the sophisticated mapping capabilities of specialist-operated drones give more precise insights into areas that helicopters cannot reach, and satellites cannot accurately survey.

From monitoring directional water flow during a flood emergency to capturing footage of hard-to-reach airspaces between trees in dense foliage, drones can offer crucial information at remarkable speeds.

Globe works with a vast network of drone operators in local communities to deliver a raft of benefits; insights into culture, geography, and terrain contextualize research efforts while creating job opportunities. Local knowledge also means that disaster can be anticipated and prevented by operating drones and checking areas in the lead-up to a big storm. This allows for better preparation and prevention.





Crowddroning in Action

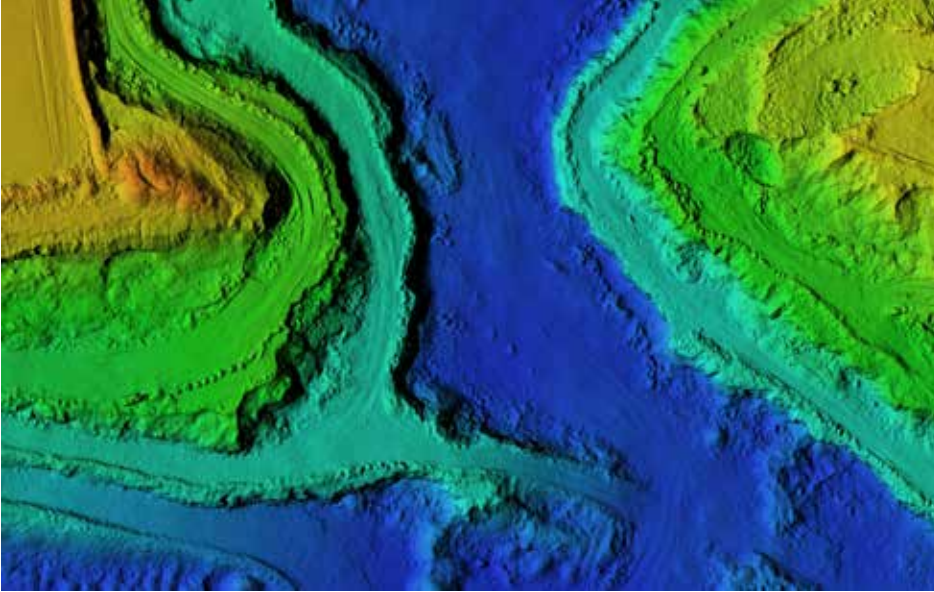
The Sharpest View Capturing **High-Quality** Images

For Globhe's partners, one of the main challenges in mapping potential or existing flood areas is not only access, but the quality of data available. Accessing high-quality data more quickly is an essential part of the Globhe offering.

02



Flood modelling



Hydraulic models simulate potential flood events and help in identifying areas of risk. Digital Elevation models represents the terrain & significantly influences the flood data results.

Highly-trained Crowddroners use high-megapixel drone cameras which allows them to shoot with a low GSD (Ground Sampling Distance), i.e., higher resolution at a greater distance.

Flying at a higher altitude and collecting higher-quality drone data due to the high-megapixel count means drones need less flying time...and can deliver more quickly.

Drones

- SAVES TIME
- 10-20CM RESOLUTION
- LIMITLESS DATA TYPES
- TRANSPARENT
- AUTOMATED + CUSTOMIZED
- SUSTAINABLE

Satellites

- LENGTHY
- 10M-30CM RESOLUTION
- LIMITED DATA TYPES
- VAGUE
- COMPLEX PROCESS
- CARBON FOOTPRINT

Standout benefits

- **High-Res means nothing is missed**
Drones provide high-resolution images that are more valuable than traditional satellite images or helicopter data.
- **Teams on the ground and in the air**
Crowddroning operators can be mobilised quickly to any location and capture hundreds and thousands of images in a single flight.
- **Fast Data is saving lives**
Images can be processed rapidly to reveal any urgent situations that require attention.

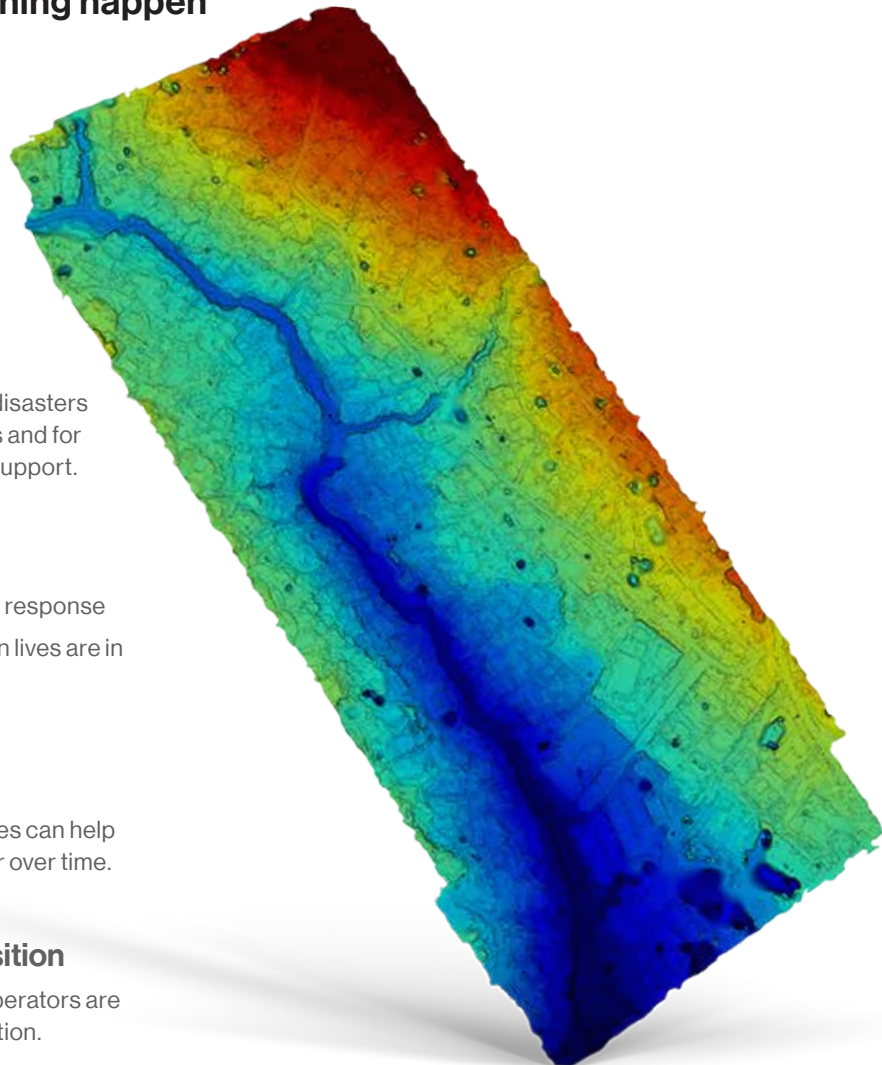
Life saving data 03

One of the outstanding achievements of drone data is saving people's lives when disasters such as flooding happen but they are most effective in prevention.

By operating drones before a big storm, for example, organisations can better prepare and act as soon as possible should anything happen during or after the storm.

What does this mean in practice?

- **Critical real-time information**
Drones are a simple and affordable way to see disasters happening in real-time. To identify priority areas and for people at risk for recovery and reconstruction support.
- **Quicker scanning**
Globhe's Crowddroning platform enables quick response that can reduce planning and coordination when lives are in danger.
- **Recurring image acquisition**
By acquiring data at regular time intervals, drones can help monitor critical areas and analyse the risk factor over time.
- **Environmentally friendly data acquisition**
All drones are battery-driven and local drone operators are commissioned which means limited travel pollution.



How it works 04

Order data 01

Specify locations, data products, and other industry-specific parameters.

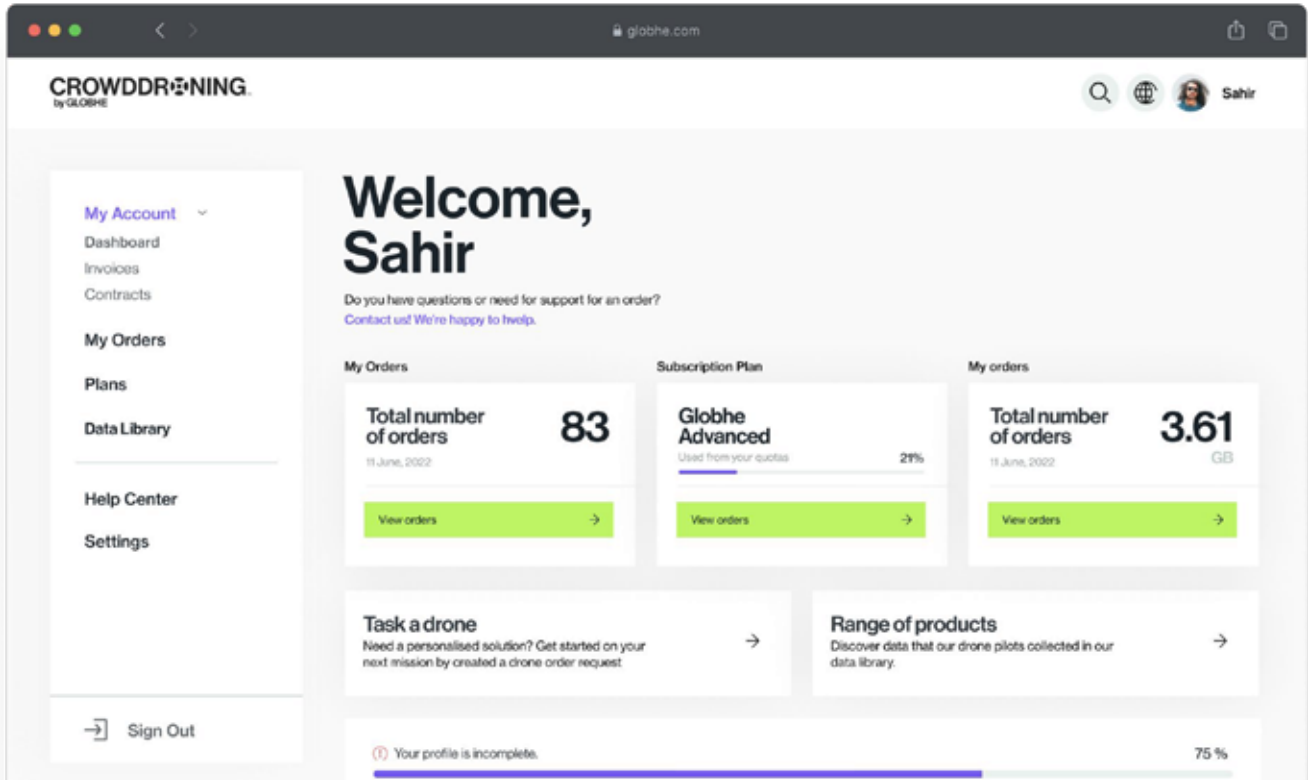
Operator match 02

We match you instantly against relevant operators collecting the data.

Data delivery 03

When the order is completed your data set will be sent directly to you or integrated with our custom API.

Made possible through GLOBHE’s automated platform and marketplace.
Solving data collection complexity with full transparency.



Thank you

Discovering the future of flood mapping is not an easy task. However, at Globhe we have taken on the challenge of uncovering a future where flood mapping is dramatically more effective and efficient. The future lies in being able to anticipate and prevent quickly rather than respond slowly with low quality, mass linked data.

Our revolutionary platform helps to prevent disastrous events by linking humanitarian organisations and government bodies with thousands of Crowddroners in 131 countries worldwide. Through gathering data quickly and sharing it accurately, our technology has not only made us pioneers of positive technological transformation but advancers of life saving solutions.

To learn more visit us at globhe.com

