Synspective

Flood Damage Assessment (FDA)

assessing inundation area, inundation depth, and damage to infrastructures on near real-time

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Hazard

Tsunami Cyclone Storm Surge Flood

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Solution Purpose

Preparedness Response Recovery

Solution Theme

Risk Assessment Infrastructure Technology Information & Communication Technology Rescue & Medical Treatment Evaluation

Technology Subject

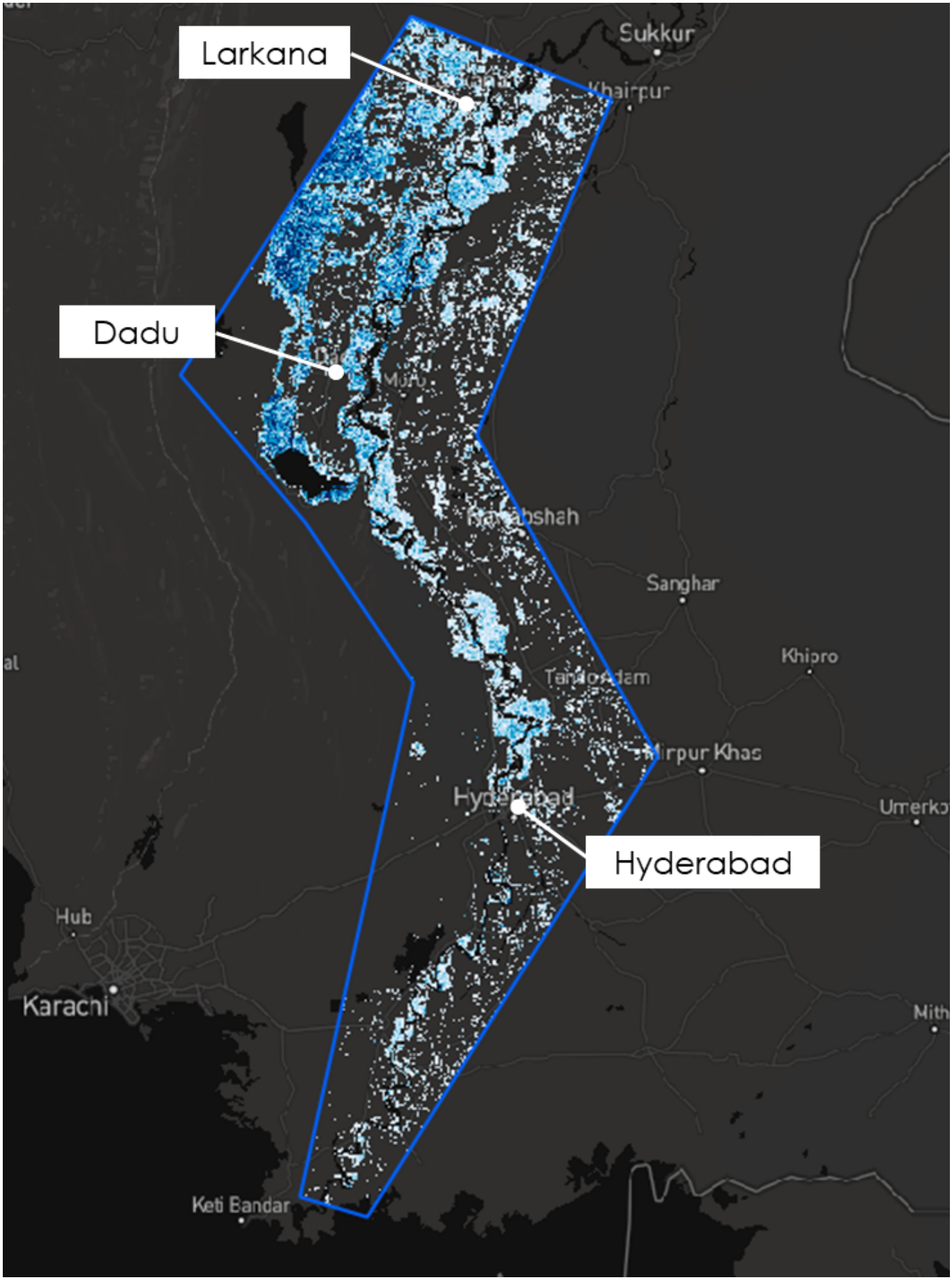
Hazard Identification Risk Monitoring River & Basin Coast Port Information Gathering Information Analysis & Judgement Emergency Rescue Operation Post Disaster Evaluation

Advantages

SAR satellites are capable of all-weather ground observations, making it possible to quickly grasp the presence or absence of flood damage over a wider area regardless of the situation. In addition, by utilizing advanced analysis methods such as AI technology, it is possible to identify the extent of impact on facilities such as roads and buildings.

Solution Illustrated

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FDA's Analysis image of the Pakistan Flood

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Background

Useful when you need the following benefits:
- Primary information for flood damage evaluation
- Reduced time required to grasp the situation of the flood damage
- Facilitates rapid decision-making

Exposition of the Solution

Flood damage evaluation service for disaster response that assesses inundation area, inundation depth, and damage to roads and buildings. In a disaster, it is necessary to promptly respond to the damage across a wide area based on accurate and precise primary information. Unlike conventional observation methods using optical satellites and airplanes/drones, SAR satellites enable all-weather ground observation and can quickly determine the presence or absence of inundation damage in a wider area. Furthermore, utilizing the most advanced analysis methods such as AI technology, FDA can identify the range of impact on facilities such as roads and buildings.

Achievements of Examples

Used by the following users:
- Flood risk assessment of non-life insurance companies
- Estimation of flood damage to owned/managed assets at financial institutions
- Acquisition of primary information by ministries and local governments

Other References

https://synspective.com/solutions/flood-damage/

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