



Synspective

SOLUTIONS

**FLOOD
DAMAGE
ASSESSMENT**

Our Solution

Flood damage (inundation area, inundation depth, damaged road, damaged building) assessment service for disaster response. In a disaster, it is necessary to promptly respond to the damage situation in a wide area based on accurate 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 regardless of the situation.

Furthermore, utilizing the most advanced analysis methods such as AI technology, the range of impact on facilities such as roads and buildings can be identified.



Applicable for



FINANCE



INSURANCE



GOVERNMENT



INFRASTRUCTURE

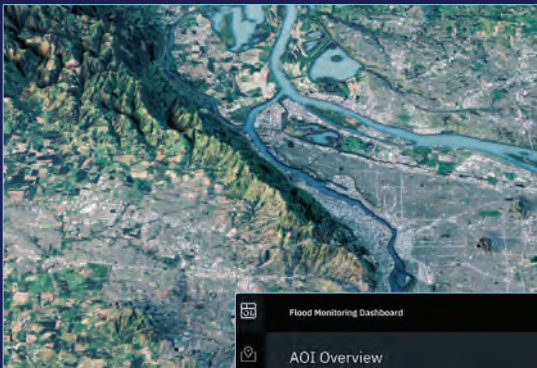
Benefits And Outputs

- More effective provision of homogeneous flood damage information over a wide area
- Reduce the time to grasp the situation of the flood damage
- Rapid decision making
- Easy to use management dashboard
- Intuitive user interface



This solution would support

- Flood risk assessment of non-life insurance companies
- Estimation of flood damage to owned/managed assets at financial institutions
- Acquisition of primary information in ministries and local



Application Examples

There has been so much abnormal weather such as torrential rain or heat waves around the world like never seen before. How much time and human resources are spent when we try to assess the level of damages? Are we collecting the necessary information for adequate first responses?

Use case 1: Rapid needs assessment in disasters

Upon large scale natural disasters such as torrential rain or floods, the solution provides prompt damage assessment data to the affected country, international organizations, emergency, rescue and relief organizations. Satellite imagery estimating inundation levels can help prioritizing the rescue, support or staff allocation to the area.

The system will capture the latest data after the disaster struck, automatically analysing data within hours then update the damage data on the platform online.

Users can also download/export data for sharing purposes across the stakeholders.



Use case 2: Insurance industry's immediate post disaster response

Upon floods, nonlife insurance companies can retrieve the affected property data for their clients promptly. By accessing the inundation data through satellite imagery at the fastest possible time frame, one can improve their staff allocation planning and efficiency of the supporting structure, speeding up the process whilst minimizing the lead time it takes from the disaster to the point of insurance coverage payment.

News reports and information from the ground help identify the affected areas, to plan the staff allocation to deploy; however, it could still take days to fathom the overall picture as entering such areas are often not easy immediately following the event.

Satellites can monitor the vast area at once, to understand the conditions quantitatively.

