



UNVEIL THE CHANGING WORLD
BOOST YOUR DECISION-MAKING

SAR Intelligence for Urban Evolution: Realizing Resilient and Sustainable Smart Cities

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Mission

Create a new infrastructure that enables the next generation to understand our Earth and achieve a resilient future.

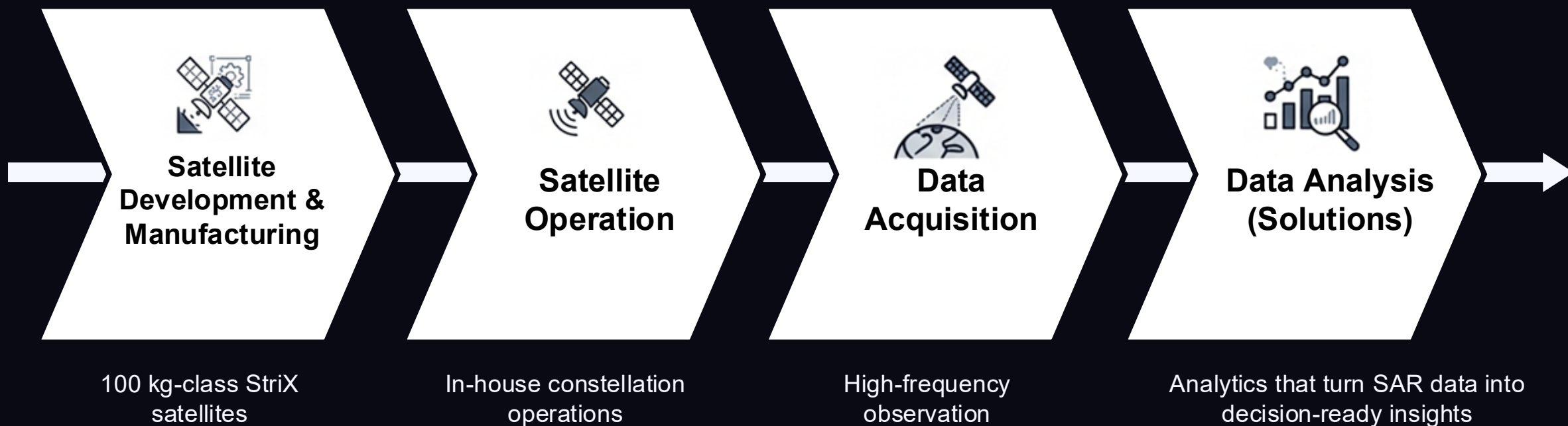
Disasters, conflicts and climate change threaten us globally. Understanding these risks requires homogeneous, stable, planet-scale data.



Our answer: a **SAR satellite constellation** that consistently monitors the Earth, **analytics** for its vast data, and a **network of partners**.

Vertically Integrated Business Model

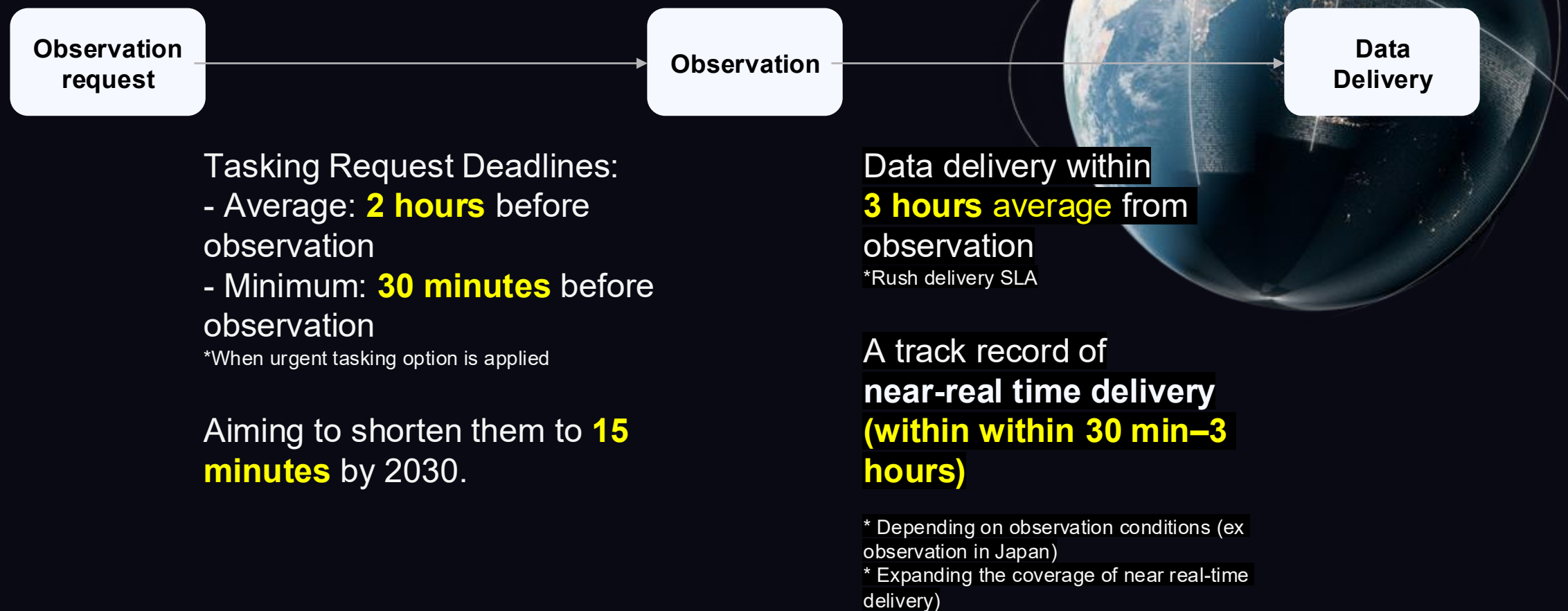
A fully integrated vertical business model — from satellite development to solution delivery.



Why it matters: Full control of the value chain enables faster response to customer needs, lower cost per scene, and end-to-end quality — the foundation for both the StriX constellation and shared-capacity programs such as Synspective OMNIA.

StriX Constellation & Rapid Access

30+ Satellites by 2028

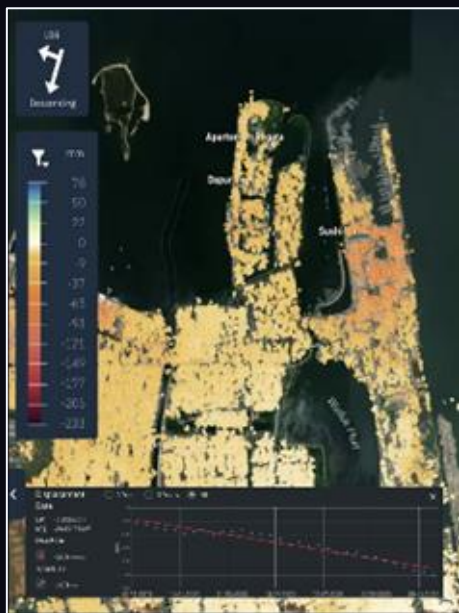


SAR Analytics Solutions for Smart City Resilience

Tokyo-born, Global Leader in SAR Satellite Earth Observation Intelligence

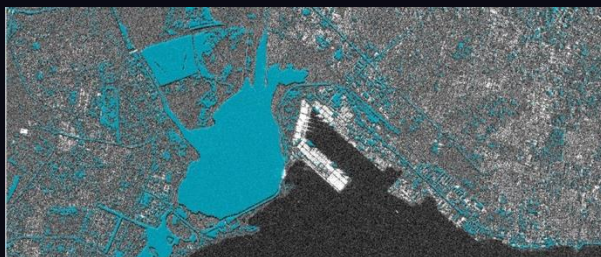
SAR-derived analytics that keep cities safe and functioning — monitoring ground and infrastructure risk, understanding disaster situations, analyzing the environment, and detecting objects, day and night, in any weather

Infrastructure & Ground Risk



Land Displacement Monitoring

Disaster Situation Awareness



Flood Damage Assessment



Disaster Damage Assessment

Environmental Management



Forestry Inventory Management



Offshore Wind and Wave

Object Detection and Classification



Vessels and Aircraft

Monitoring Targets



Roads and
Railways



Tunnels



Pipelines



Dams, Bridges,
and Buildings



Residential
Development
Areas



Airports



Ports



Mining & Energy



Disaster
Management

Analytics Objectives



Time-series
Trends



Stability Assessment



Subsidence
and Uplift



Identification of
Soft Ground
Conditions



Landslide
Detection

Infrastructure & Ground Risk — Wide-Area, Full-Slope Landslide Monitoring

Full-slope ground deformation monitoring from space, in close agreement with on-site field measurements (with Okuyama Boring Co., Ltd.)



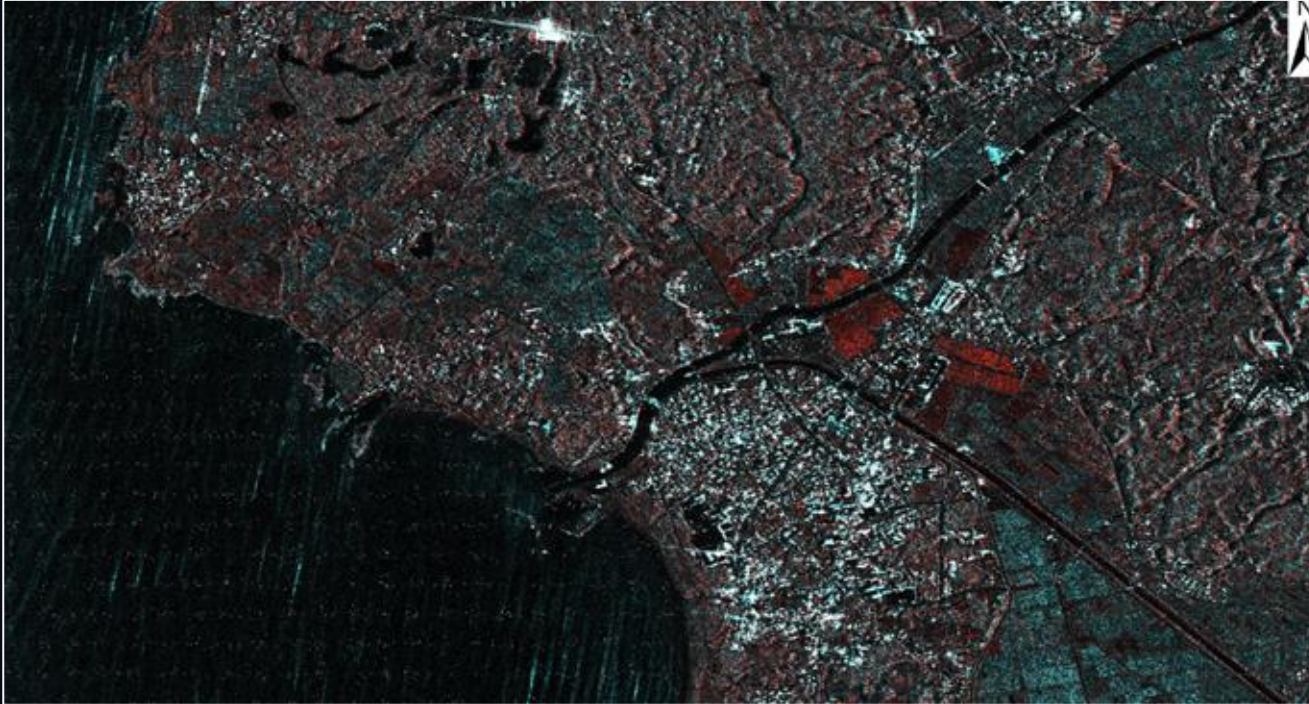
Full-slope distribution of cumulative vertical displacement from 2.5D analysis (based on 2014–2025 time-series data).

A subsidence trend of roughly 100 mm over about ten years around the landslide blocks on both banks (indicated by arrows).

Created from Geospatial Information Authority of Japan (GSI) Fundamental Geospatial Data and National Research Institute for Earth Science and Disaster Resilience (NIED) Landslide Topography GIS Data. © JAXA [2014–2025], © Synspective Inc.

Disaster Damage Assessment (DDA)

Downtown Shika, 2024 Noto Peninsula Earthquake, StriX SAR Satellite Data Analysis



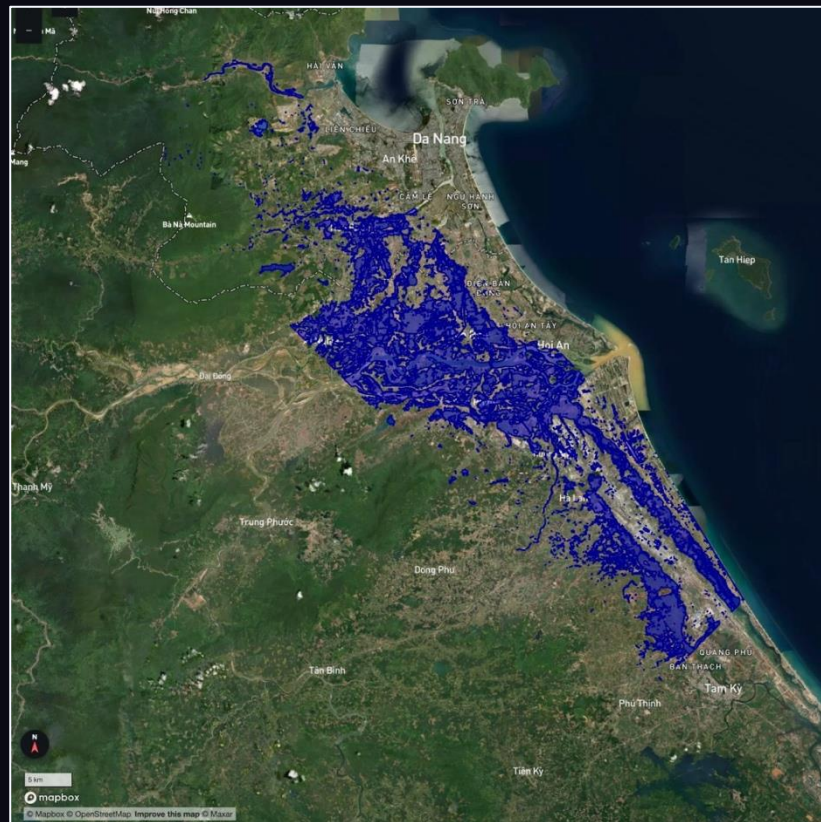
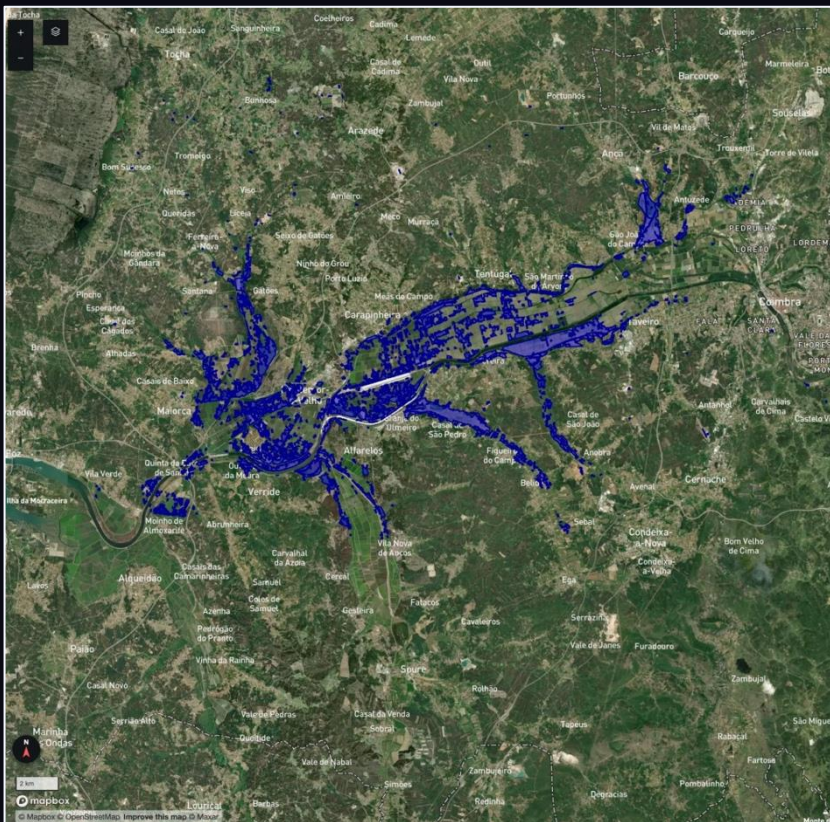
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Features

1. Rapid Damage Mapping:
Buildings, Infrastructure, Land Areas
2. Infrastructure Impact Analysis
3. Landslide Detection
4. Recovery and Reconstruction Support

Disaster Situation Awareness — Flood Damage Assessment (FDA)

Rapid, weather-independent flood mapping with SAR — situational awareness when optical sensors are blind

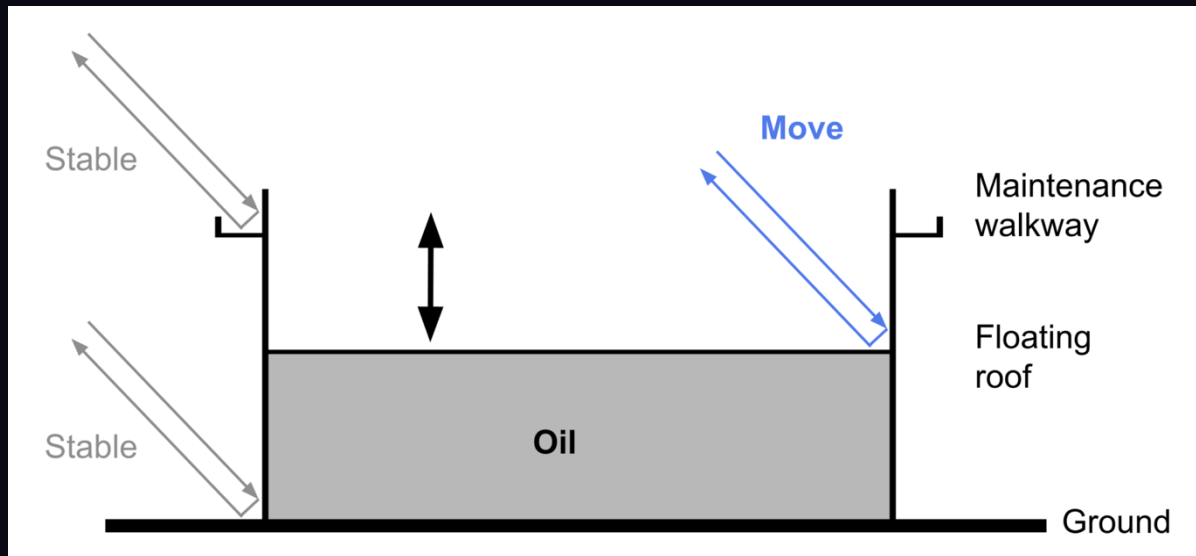


FDA automatically extracts inundated areas from SAR imagery and estimates impacts on roads and buildings — primary information that supports rapid decision-making in the first hours of a disaster.

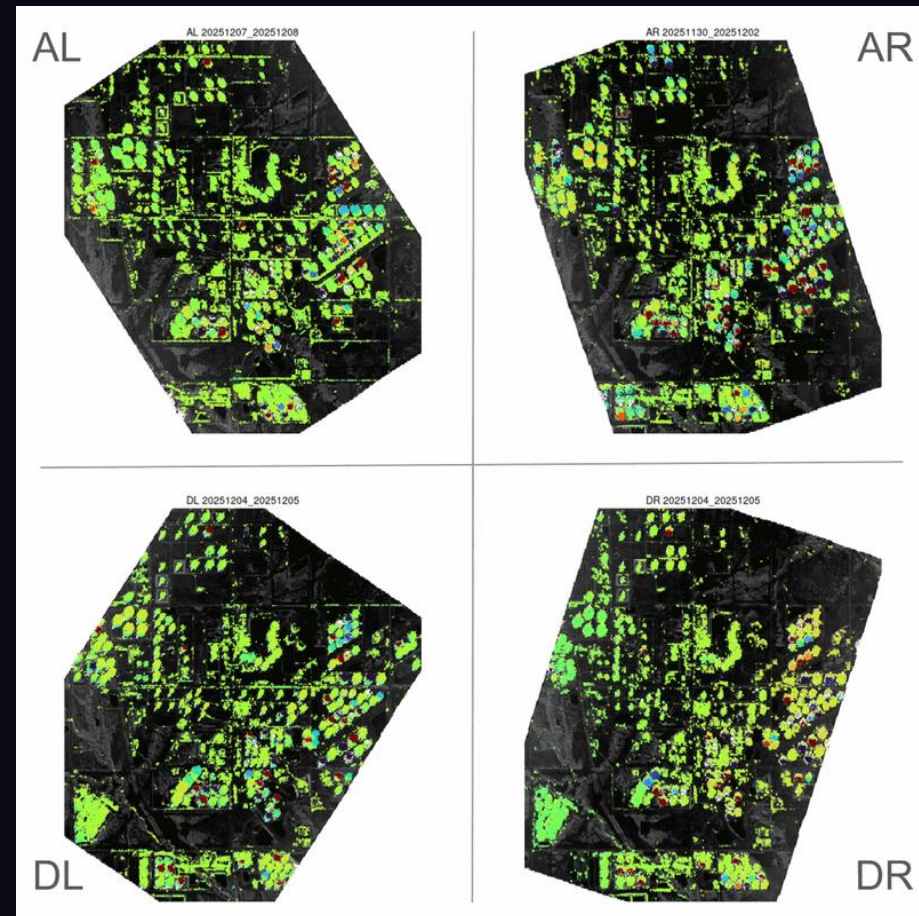
Flood extent derived from StriX SAR data using Synspective's Flood Damage Assessment (FDA).
© Mapbox © OpenStreetMap contributors © Synspective Inc.

Object Detection & Classification — StriX × Pixel Offset (PO) Method

Centimeter-accuracy monitoring of meter-scale infrastructure movement — floating-roof oil tanks at Cushing, Oklahoma



The Cushing demonstration shows what the PO method can do for floating-roof tanks, but the same approach applies to any individual constructed structure whose displacement unfolds on a similar scale. Localized lateral flow affecting buildings, port facilities, and other constructed assets is one obvious extension.





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The SAR data was captured by the StriX series of satellites developed and operated by Synspective.