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Geospatial World Forum 2024

Infrastructure Summit

Transforming the Built Environment with
Data-Driven Approaches

Elly Perets, CEO



About ASTERRA



**Downstream
pioneers in PolSAR
15 Patents**



**Customer base:
65 Countries**



**Multidisciplinary
team**



**Largest commercial
user of L-band
satellites**



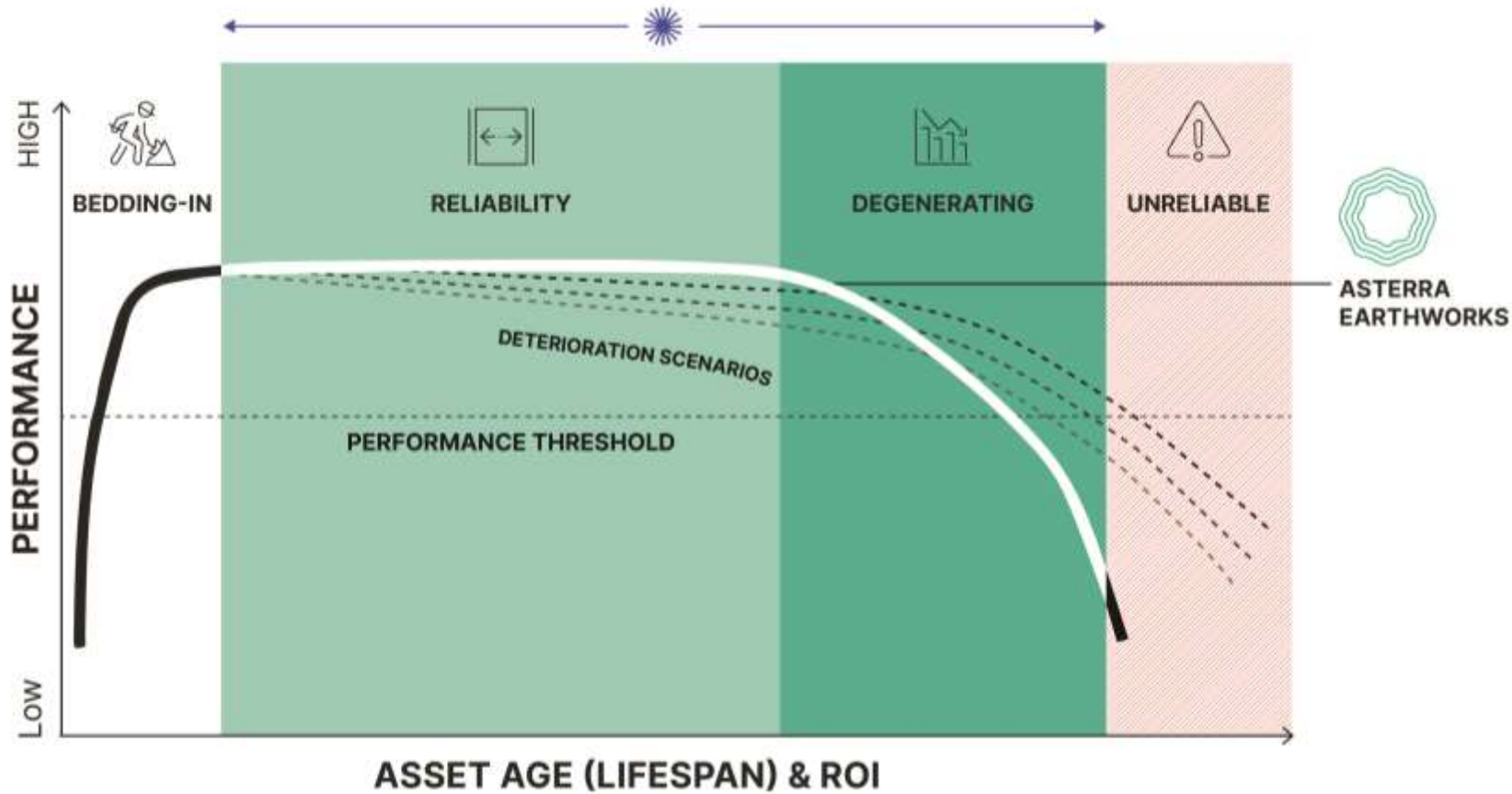
**Worldwide presence
4 offices
(USA, Israel, UK, Japan)**



**Founded:
2016**



Aging Infrastructure and Climate Change



Soil Moisture Analysis Data Layer

- Extend infrastructure lifespan
- Large-scale regions
- Identify subsurface moisture risks
- Asset condition monitoring
- High resolution data
- Optimize resource allocation



Gulf Coast Case Study: EarthWorks Dams & Levees

Challenge: Heightened risk to climate change

Results:

Identification of high moisture (potential seepage)

- ✓ Informed decision-making
- ✓ Optimized resource management
- ✓ Risk reduction
- ✓ Sustainable practices

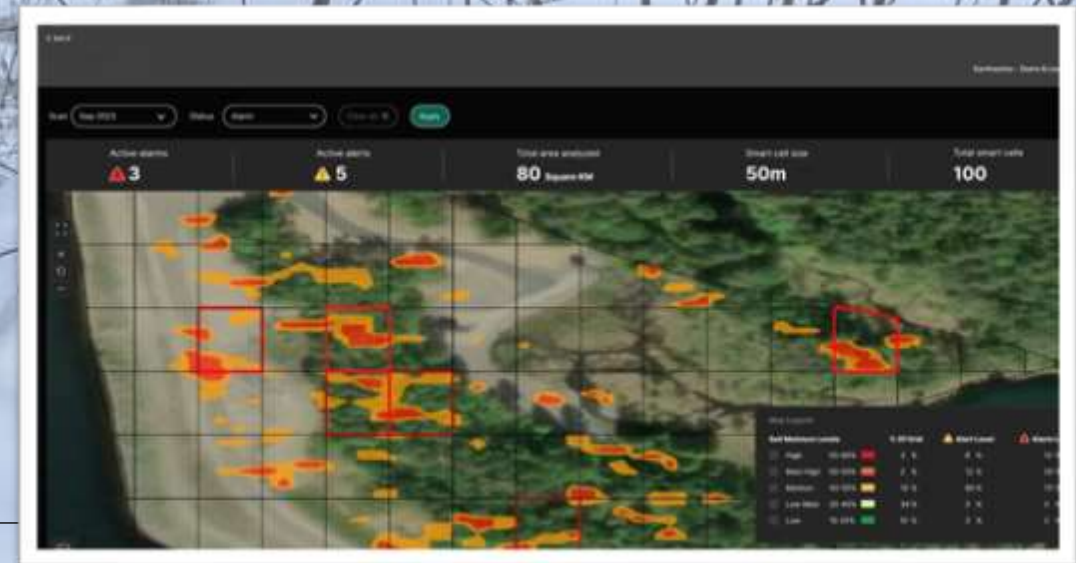


Lövön Dam Case Study: EarthWorks Dams & Levees

Challenge: Aging infrastructure and climate change

Results: Enhanced monitoring and data analysis.

- ✓ Enhanced dam safety
- ✓ Proactive risk management
- ✓ Long-term sustainability



Remote Sensing vs. Ground Sensors

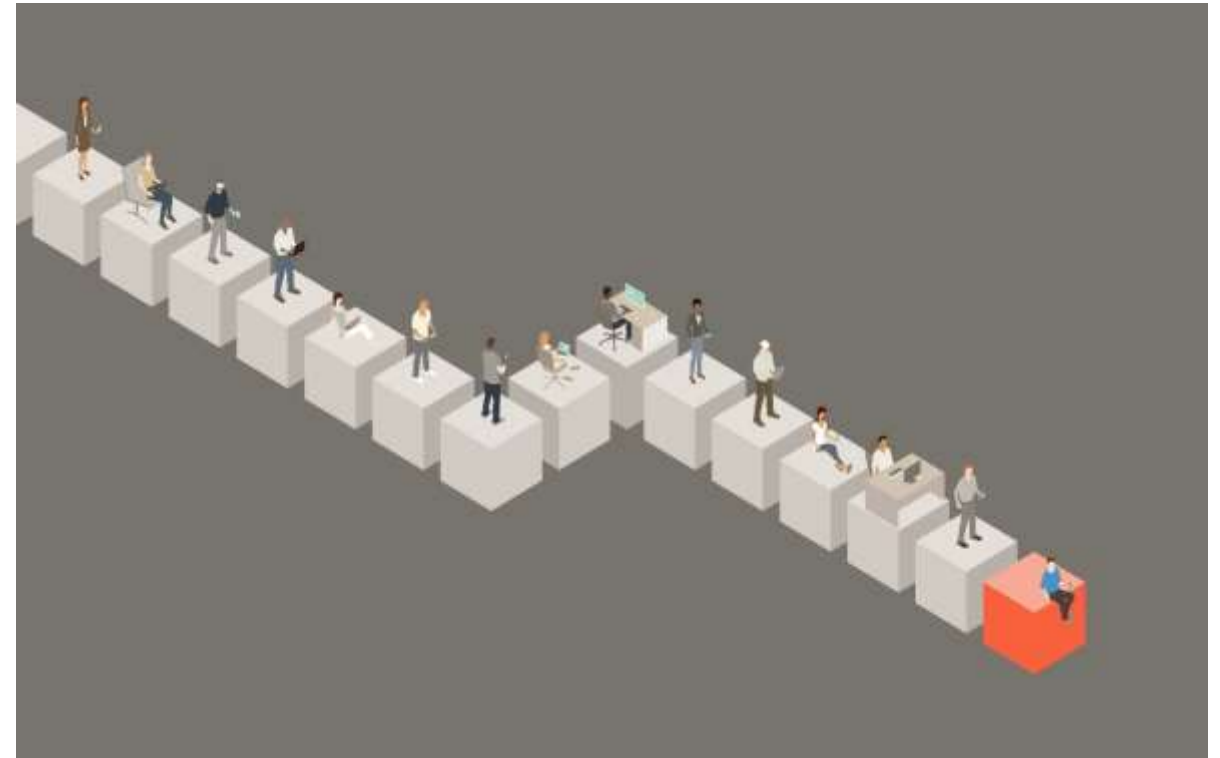
- Sensors on-site vs. satellite sensors that deliver insights at large scale
- Advanced monitoring
- Early warning systems
- Precision asset management
- Data-driven decision-making



The Current State of Play: Data Silo Challenges in EO

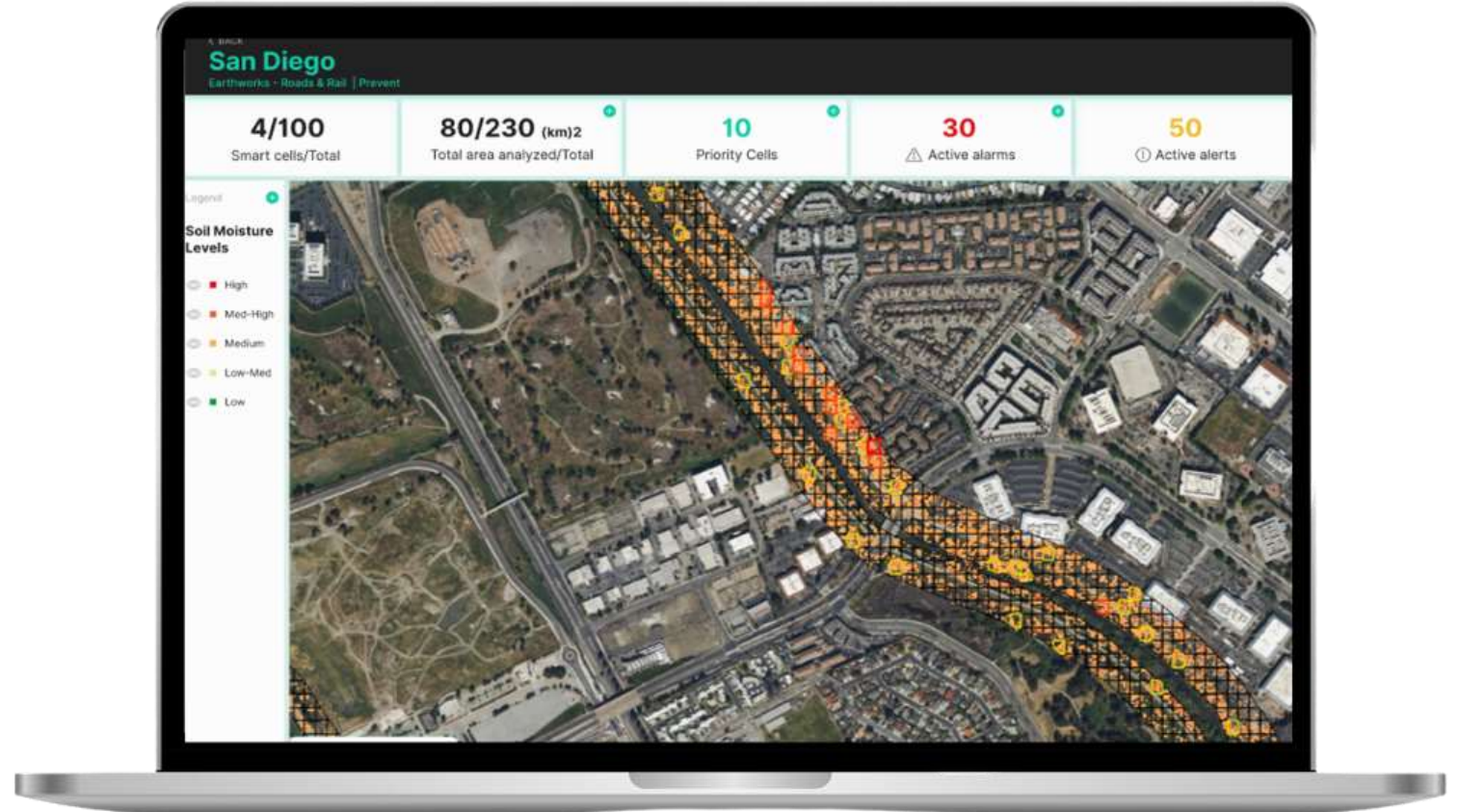
Challenges

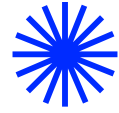
- Limited data accessibility
- Inefficient collaboration
- Lack of data integration
- Risk of data loss or mismanagement
- Fragmented workflows
- Compliance and regulatory risks



Introducing: API Integration for Earth Observation

- Open Garden Approach
- Common Data Environment
- Integrated Data Layers





Thank You!