

#### THE INTELLIGENCE TO ACT

**Geospatial World Forum 2023 Elly Perets, CEO** 



#### **OUR MISSION**

ASTERRA will become humanity's eyes, guiding it through Earth's changes by applying advanced analytic capabilities to synthetic aperture radar.

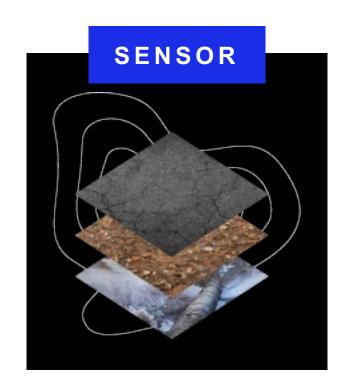




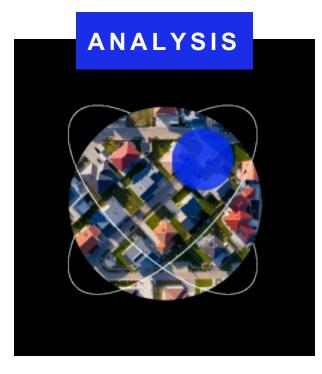
# Making SAR Data Analytics Usable and Accessible for a More Sustainable World



Satellite-based for wide-area view



Earth Observation
Synthetic Aperture Radar
above & below surface



Geophysics & Al algorithmic analysis for actionable intelligence



### A Proven Technology



Downstream pioneers in PolSAR 11 Patents



Customer base: 64 Countries 650 Projects



Multidisciplinary team



Largest commercial user of L-band satellites



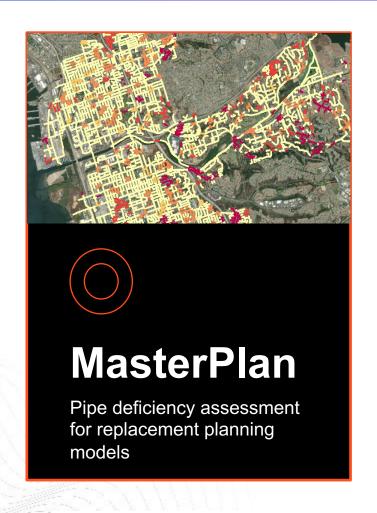
Worldwide presence
4 offices
(USA, Israel, UK, Japan)

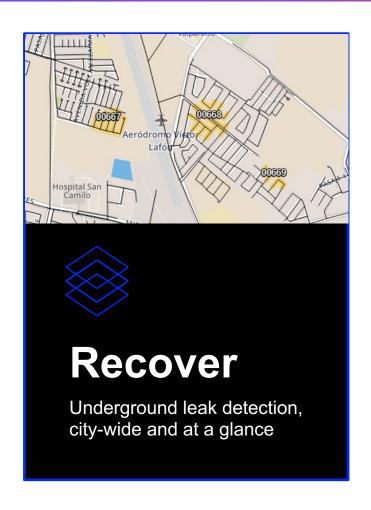


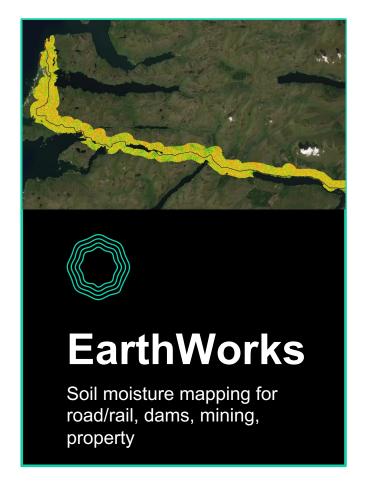
Founded: 2016

#### Solutions for a Sustainable Future

Real-time insights with ASTERRA's risk assessment and monitoring platform.









### **Impact**



Ensure availability and sustainable management of water and



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Take urgent action to combat climate change and its impacts

# Mining Safety



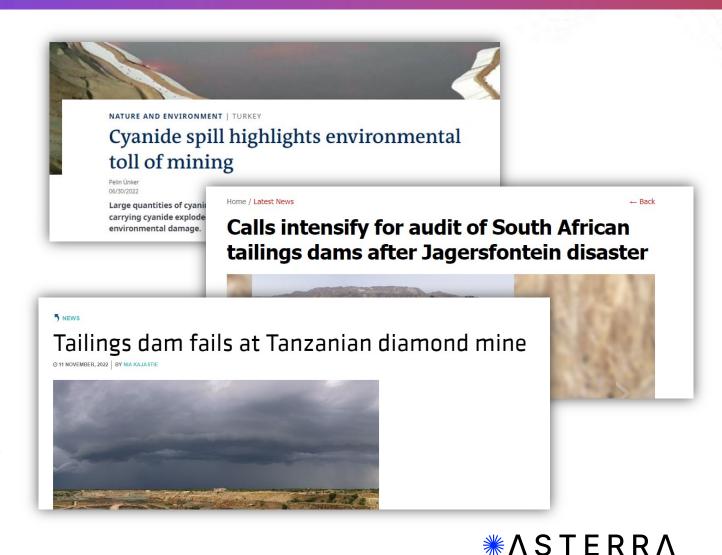
#### Risk Factors and Safety Issues

- Unseen Dangers
- Climate Change →
   Structural Weakening
- Open-Pit Hazards
- Subjective Assessment

"...average cost of \$543 million per failure categorized as "very serious""

Source:

The RISK, PUBLIC LIABILITY, & ECONOMICS of TAILINGS STORAGE FACILITY FAILURES Lindsay Newland Bowker1 & David M. Chambers2 July 21, 2015



## **Current Monitoring Methods**

#### **Reactive Response**

Problem can only be addressed once it's **visually** identified.

- Sensors (Motion, Saturation)
- Seismic Monitoring
- INSAR
- Drones



2014 2023





# Mineral Exploration



## **Current Model Challenges**

Resourceintensive process that demands significant investments of time and money from planning → breaking ground.



#### **ASTERRA's Solution**

Quickly and accurately pinpointing optimal drilling points even before the permit process, saving valuable time and millions of dollars in costs.

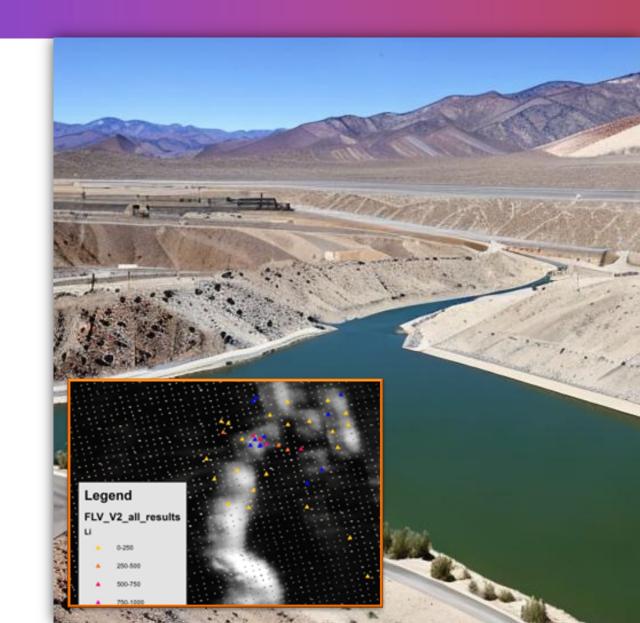
30 sq. km to 0.2 sq. km to never-before-seen lithium quantities in under two months.



# **Key Takeaways: Safety and Exploration**

#### **ASTERRA's Innovative Approach**

- Accuracy Needle in a haystack
- Savings Fraction of the cost
- **Efficiency** Matter of weeks
- Risk Mitigation Unproductive land
- ROI Increase success outcome
- Sustainability Environmental impact





# Thank You!