Orbit to Onsite : The Proactive Solution for Critical Infrastructure Safety and Resilience

Leveraging Fused Satellite Intelligence, Edge AI, and Predictive Analytics for Mining, Energy, and Civil Infrastructure

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Executive Summary

The safety and operational uptime of critical infrastructure are non-negotiable. Modern infrastructure faces mounting challenges from natural hazards like rockfalls, earthflows, landslides, and flooding. These events threaten safety, disrupt operations, and drive-up maintenance costs. Traditional monitoring methods are often reactive, identifying problems only after they emerge and leaving organizations vulnerable to catastrophic failures.

Coactive Science delivers the Orbit to Onsite solution, a commercially proven system that redefines risk management. It moves organizations from a reactive posture to a state of proactive, predictive intelligence. Our system revolutionizes how industries monitor and react to real-world events by seamlessly integrating multi-sensor satellite intelligence, including radar and hyperspectral data, with a network of cutting-edge, AI-powered onsite cameras. This integrated approach has been shown to reduce false alerts by over 75% and extend failure prediction windows from days to months. The core benefits of the Orbit to Onsite solution include:

- Enhanced Safety: By providing early warnings of potential failures, the system allows for timely evacuations and preventative actions, achieving zero-harm objectives.
- Operational Continuity: Predictive insights help operators manage and mitigate risks across assets like roads, railways, and construction sites, reducing lost productive days by up to 40%.
- Dramatic Cost Savings: Our intelligent sensor placement strategy, driven by active learning, reduces sensor and deployment costs by up to 10X, while proactive maintenance can cut emergency repair costs by 50%.
- Superior Risk Financing: The objective data generated by our system strengthens an operator's position when negotiating traditional insurance premiums and unlocks access to complementary parametric insurance products for rapid disaster recovery.

Highlighting its capabilities, a recent deployment at a mining infrastructure project in Western Colorado successfully predicted a rockfall event with over two months of advance warning. This allowed for proactive mitigation and, crucially, revealed a separate, more hazardous area of instability that required immediate action. This white paper details the technology, its proven benefits, and a blueprint for the future of infrastructure resilience.

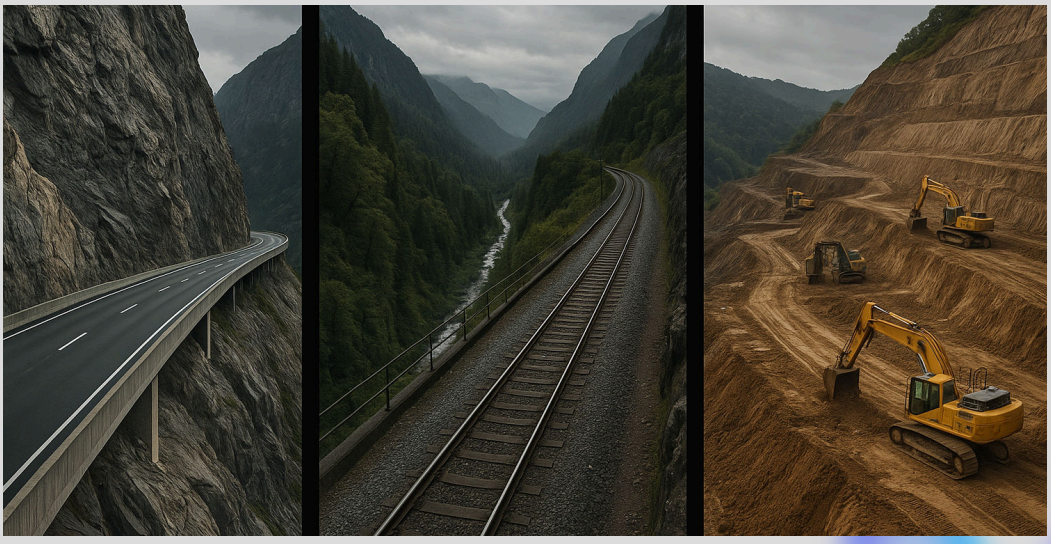
Table of content

1. The Modern Infrastructure Challenge: A World in Motion

Operators of critical infrastructure in mining, energy, and civil engineering are stewards of massive, complex, and high-value assets. The safe and continuous operation of these assets, be it a tailings dam, a hydroelectric power plant, a mountain highway, a railway corridor, or a large construction site, is fundamental to economic stability and public safety.
Yet, this infrastructure faces a convergence of escalating risks. Modern infrastructure faces mounting challenges from natural hazards like rockfalls, earthflows, and landslides. These events threaten safety, disrupt operations, and drive up maintenance costs.

- Operational Stresses: In mining, extraction alters ground stress, leading to instability. In civil construction, excavation and ground loading create new risk profiles.
- Climate Volatility: Changing weather patterns are leading to more intense and frequent environmental triggers. Accelerated freeze-thaw cycles, extreme rainfall events, and rapid snowmelt can saturate soil and rock, weakening slopes and foundations.
- Geological Hazards: Many essential corridors for roads and railways, as well as construction sites, are located in challenging terrain that is naturally susceptible to instability.

Traditional monitoring methods, which often rely on scheduled visual inspections or sparse, point-based sensors, struggle to keep pace with this dynamic risk landscape. They are labor-intensive, provide incomplete coverage, and are inherently reactive. They may catch a problem that has already started but often lack the predictive power to provide sufficient warning to prevent a disaster. A new, proactive approach is a modern necessity.



2. Introducing the Orbit to Onsite Solution

The Orbit to Onsite solution by Coactive Science is an end-to-end, commercially available monitoring and alert system engineered to provide a comprehensive and predictive understanding of infrastructure stability. It moves beyond isolated data points to create a holistic, dynamic view of your assets, integrating wide-area satellite intelligence with a continuously learning network of ground-based sensors.

Orbit: The Wide-Area View

The foundation of the solution is a multi-sensor satellite intelligence strategy. We fuse data from different types of advanced satellites to get a complete picture. This includes Synthetic Aperture Radar (SAR) for detecting millimeter-scale ground movement and hyperspectral imaging for analyzing material composition and environmental conditions. This fusion allows us to cost-effectively monitor entire operational zones and not just see that something is moving but begin to understand why.

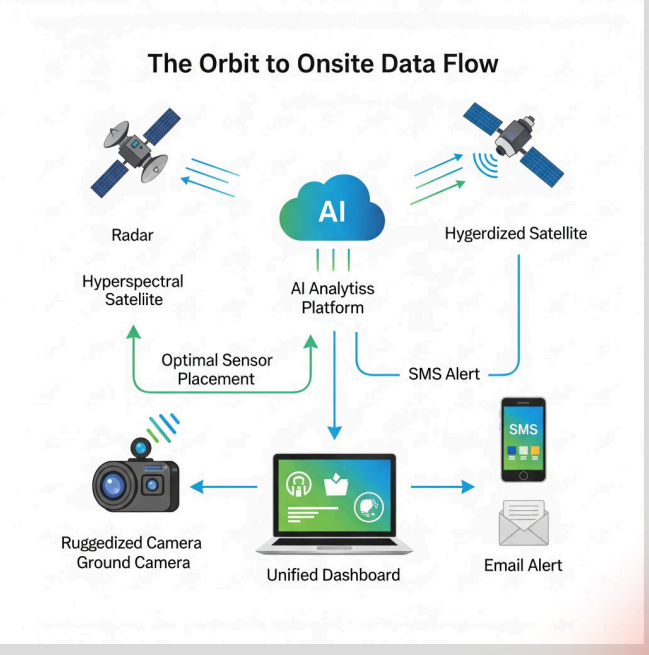
Onsite: The Real-Time Ground Truth

Once our satellite analysis identifies areas of concern, the "Onsite" component provides targeted, continuous monitoring. This includes a network of intelligent, ruggedized edge cameras and other geotechnical sensors. Our core AI technology learns in real-time, zeroing in on critical changes and triggering expert-level actions exactly where they matter.

Integration: From Data to Actionable Insight

The power of the Orbit to Onsite solution lies in its intelligent integration.

- Multi-sensor satellite (Orbit) data is analyzed by our AI to guide the cost-effective deployment of ground-based (Onsite) assets.
- Onsite cameras provide real-time visual verification and a continuous stream of data, filling the gaps between satellite passes.
- All data streams are fed into a unified analytics platform and dashboard, with automated alerts sent via SMS and email when predefined thresholds are breached, ensuring decision-makers receive clear, actionable warnings.

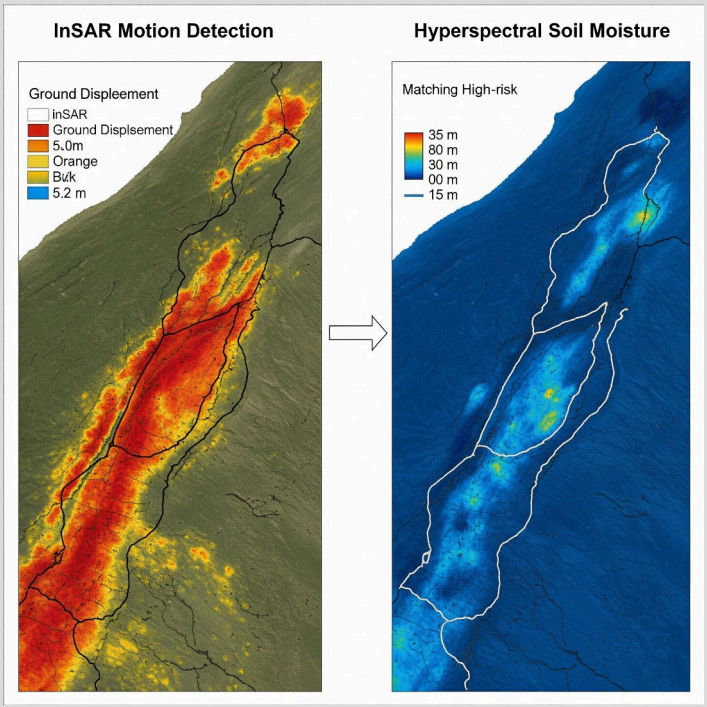


3. The Technology: A Deeper Dive

3.1 Orbit: Fusing Advanced Satellite Intelligence

Our approach goes far beyond a single data source. By fusing inputs from complementary satellite technologies, we build a multi-layered understanding of site stability.

Precision Motion Detection with InSAR: Interferometric Synthetic Aperture Radar is a cornerstone of our solution. It uses radar signals to create maps of ground displacement with millimeter-level precision. This allows us to quantify extremely slow-moving deformation over large areas, detecting the subtle, precursory movements of a potential landslide or subsidence event long before they are visible. This tells us *where* and *how fast* the ground is moving.



Material and Environmental Analysis with Hyperspectral Imaging: To understand why the ground is moving, we integrate hyperspectral data, including through our partnership with Pixxel. Hyperspectral sensors capture light in hundreds of narrow bands, creating a unique "spectral signature" for every material. This allows our AI to:

- Map Soil Moisture: Identify areas of ground saturation that weaken slopes and act as a primary trigger for failures.
- Analyze Mineralogy: Detect subtle changes in soil and rock composition, like the presence of clay minerals, which can indicate weathering and reduced stability.
- Monitor Vegetation Health: Stressed or dying vegetation is often a key indicator of underlying issues like groundwater seepage or gas leaks, providing another layer of precursory evidence.

By fusing InSAR's motion detection with hyperspectral's compositional analysis, we can distinguish a stable slope from one that is saturated and at risk of failure.

3. The Technology: A Deeper Dive

3.2 The Onsite Advantage: Edge AI, Real-Time Alerts, & AI Reporting

While satellite intelligence provides an unparalleled wide-area view, high-risk locations require the immediate, high-frequency monitoring that our "Onsite" technology provides. This is headlined by our intelligent edge cameras.

Edge Computing with Onboard GPUs: Coactive Science deploys ruggedized, autonomous camera systems connected in a local mesh network to powerful GPUs. This allows complex computer vision and AI models to run directly at the edge, on the site itself. The camera can perform sub-millimeter change detection, classify objects, and quantify rates of movement autonomously. This is essential for remote sites where network connectivity is limited, expensive, or unreliable.

Real-Time Alerts Straight to Operators: When the edge AI detects an anomalous event, the system is configured for immediate action. It instantly transmits a compact alert package via satellite or cellular networks. This triggers:

- Automated SMS and Email Alerts: Customized messages are sent directly to the mobile phones and inboxes of field personnel, safety managers, and operational supervisors.
- Dashboard Updates: The central dashboard is updated with the alert details, including imagery and data, for deeper analysis.

Generative AI for Incident Reporting: All data, including images, sensor readings, and alerts, is meticulously logged. To make this data accessible, our system leverages Generative AI. This model automatically synthesizes raw event data into clear, human-readable incident reports. A manager can receive a concise summary explaining what happened, the timeline, the data that triggered the alert, and the response taken. This bridges the gap between complex technical data and effective executive-level decision making.

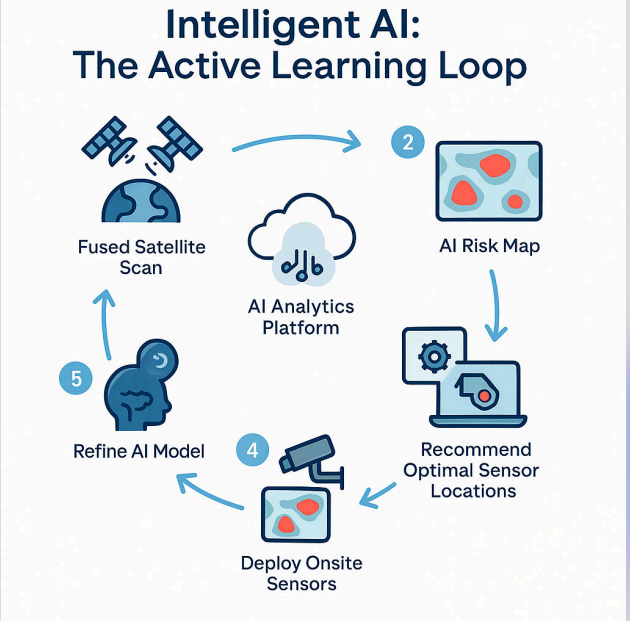
4. The Coactive Science Advantage: Intelligent & Evolving AI

Choosing a monitoring partner is as critical as choosing the technology itself. Coactive Science provides more than just data; we deliver a complete, end-to-end solution built on a foundation of continuously learning AI and strategic expertise. Our platform transforms raw satellite, video, and sensor data into proactive intelligence that delivers quantifiable value.

Active Learning for 10X Sensor Cost Reduction
A primary challenge in ground monitoring is knowing where to place sensors for maximum impact without incurring prohibitive costs. We solve this with *Active Learning*. Our process begins with the wide-area satellite data, which our AI uses to create an initial site-wide risk map. The active learning algorithm then intelligently analyzes this map to identify a handful of optimal locations for placing our high-fidelity onsite cameras and sensors. This targeted, intelligence-driven deployment strategy avoids unnecessary hardware, allowing our clients to achieve comprehensive monitoring with a fraction of the sensors. This approach has been shown to *reduce overall sensor* and *deployment costs by up to 10X* compared to traditional, brute-force placement strategies.

A Continually Updating Multimodal Foundation Model:
At the core of our system is a sophisticated multimodal foundation model

- Multimodal: This means the AI learns from many different types of data simultaneously: InSAR displacement, hyperspectral signatures, optical camera images, temperature data, seismic sensor readings, and more. By fusing these data streams, it develops a much richer and more accurate understanding of site conditions than any single-sensor system could achieve.
- Continually Updating: Our model is not static. It is built on an active learning framework, meaning with every new observation and every piece of feedback from our experts, the model retrains and refines itself. This continuous evolution means the system gets smarter over time, delivering ever-increasing confidence and value to our clients.



5. Delivering Quantifiable Operator Value

The intelligence of the Orbit to Onsite system translates directly into measurable improvements in safety, efficiency, and cost savings for infrastructure operators.

- **Over 75% Reduction in False Alerts**
  Our multimodal AI, which correlates ground movement with factors like soil moisture from hyperspectral data, filters out benign events. This ensures operators only respond to genuine structural threats, saving valuable time and resources.

- **90%+ Increase in Warning Time**
  By detecting millimeter-scale precursory movements, the system provides warning windows of weeks or even months. This is a vast improvement over traditional visual inspections that may only offer days or hours of notice.

- **Up to 40% Reduction in Lost Productivity**
  Sufficient early warning allows a shift from reactive emergency shutdowns to planned, proactive maintenance. This minimizes disruption to mining operations, transportation routes, or construction schedules.

- **Up to 50% Reduction in Emergency Repair Costs**
  Proactive mitigation, such as stabilizing a slope before it fails, is significantly less expensive than the post-failure costs of reconstruction, equipment loss, and environmental cleanup.

- **Enhanced Safety and Zero-Harm Goals**
  Continuous monitoring and predictive alerts are instrumental in achieving "zero-harm" objectives. The system provides ample time for the evacuation of personnel and the securing of work zones long before conditions become critical.

- **Over 80% Reduction in Manual Inspection Hours**
  The system automates the wide-area surveillance process. It allows expert geotechnical staff to focus their attention on the high-risk hotspots identified by the AI, rather than spending time on routine visual inspections of stable ground

6. Case Study: How Coactive Science Delivered a 72-Day Early Warning to Mitigate Mine-Slope Risk

The Executive Summary

Mining safety just got a revolutionary upgrade. When a major Western Colorado mining operation faced potentially catastrophic rockfall risks, they turned to Coactive Science's groundbreaking Orbit to Onsite solution. The system's intelligence cut through environmental noise, analyzing freeze-thaw cycles to confirm deep-seated structural threats. The results? A game-changing 72-day advance warning of a critical rockfall event , the discovery of an even more dangerous hidden hazard requiring immediate intervention , and a complete transformation of their risk management approach—all while protecting lives and high-value mining assets.

The Challenge

Steep slopes, active extraction zones, and operations induced ground stress created a perfect storm of safety risks across the entire operational area. Traditional monitoring methods were failing to provide adequate warning time, leaving personnel, infrastructue and equipment vulnerable to catastrophic failures.

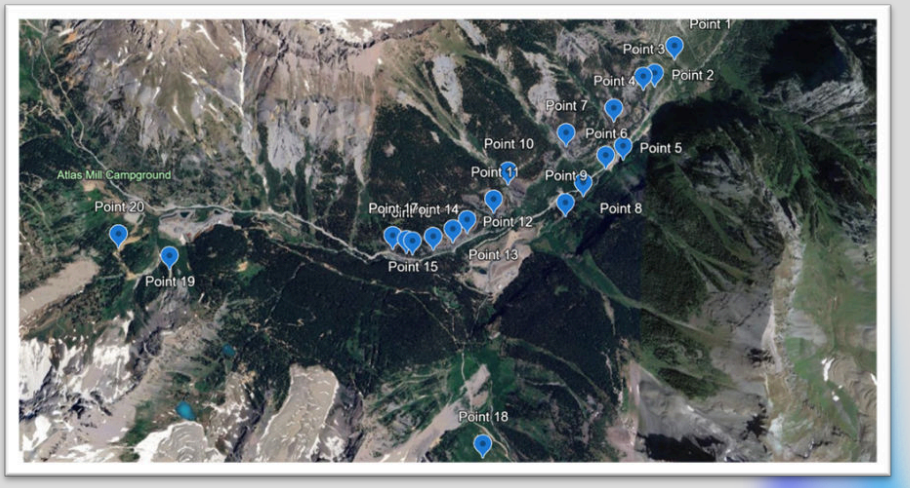
The Solution in Action

Coactive Science's revolutionary Orbit to Onsite system, combining multi-sensor satellite intelligence with AI-powered edge cameras to deliver predictive, proactive risk management.

The Results

The deployment yielded immediate and critical insights:

1. 72-day advance warning of rockfall event
2. Prevention of catastrophic failure at a Point 9 (showing 231.9 mm/year movement—80% higher than pre-failure rates)
3. Complete site-wide risk assessment revealing systematic induced instability
4. Millions in potential damages avoided through proactive intervention



The Mining Industry's Safety Crisis: When Reactive Becomes Deadly

Mining operations today face an unprecedented convergence of safety challenges that traditional monitoring simply cannot address. With operational stresses from extraction altering ground stability, climate volatility creating more intense environmental triggers, and geological hazards naturally present in challenging terrain, the industry desperately needs solutions that can predict—not just react to—critical failures.

For our Western Colorado client, these challenges were intensifying daily. Their large-scale mining operation featured steep slopes, active extraction zones, and critical processing infrastructure—all subject to mining-induced ground stress and harsh environmental conditions. The operator needed more than just monitoring; they required a predictive intelligence system that could provide site-wide risk assessment and deliver reliable, advance warning of potential slope failures.

The stakes couldn't be higher: Personnel safety, equipment protection, operational continuity, and regulatory compliance all depended on having sufficient warning time to take protective action.

The Traditional Monitoring Failure
Conventional monitoring approaches had left the operation vulnerable:

- Reactive visual inspections that identified problems only after they emerged
- Sparse, point-based sensors providing incomplete site coverage
- Labor-intensive processes that couldn't scale to monitor the entire operational area
- Limited predictive capability offering days or hours of notice instead of the months needed for proper mitigation

The client knew that waiting for visible signs of trouble was no longer a viable strategy. They needed a transformational approach that could shift them from reactive emergency response to proactive risk management.

Game-Changing Technology: The Orbit to Onsite Solution
When cutting-edge satellite intelligence meets AI-powered ground truth, mining safety is revolutionized.

Coactive Science's Orbit to Onsite solution delivered exactly what the mining operation needed: a comprehensive, predictive monitoring system that could transform their entire risk management approach. This wasn't just another monitoring tool—it was a complete paradigm shift from reactive to proactive safety management.

Revolutionary Multi-data Fusion

The system's power lies in its intelligent integration of complementary technologies:

Orbit Component - Wide-Area Satellite Intelligence:

- Interferometric Synthetic Aperture Radar (InSAR) detecting millimeter-scale ground displacement across the entire site
- Hyperspectral imaging analyzing material composition and environmental conditions to understand *why* ground movement occurs
- Comprehensive coverage monitoring the entire operational zone cost-effectively

Onsite Component - Real-Time Ground Truth:

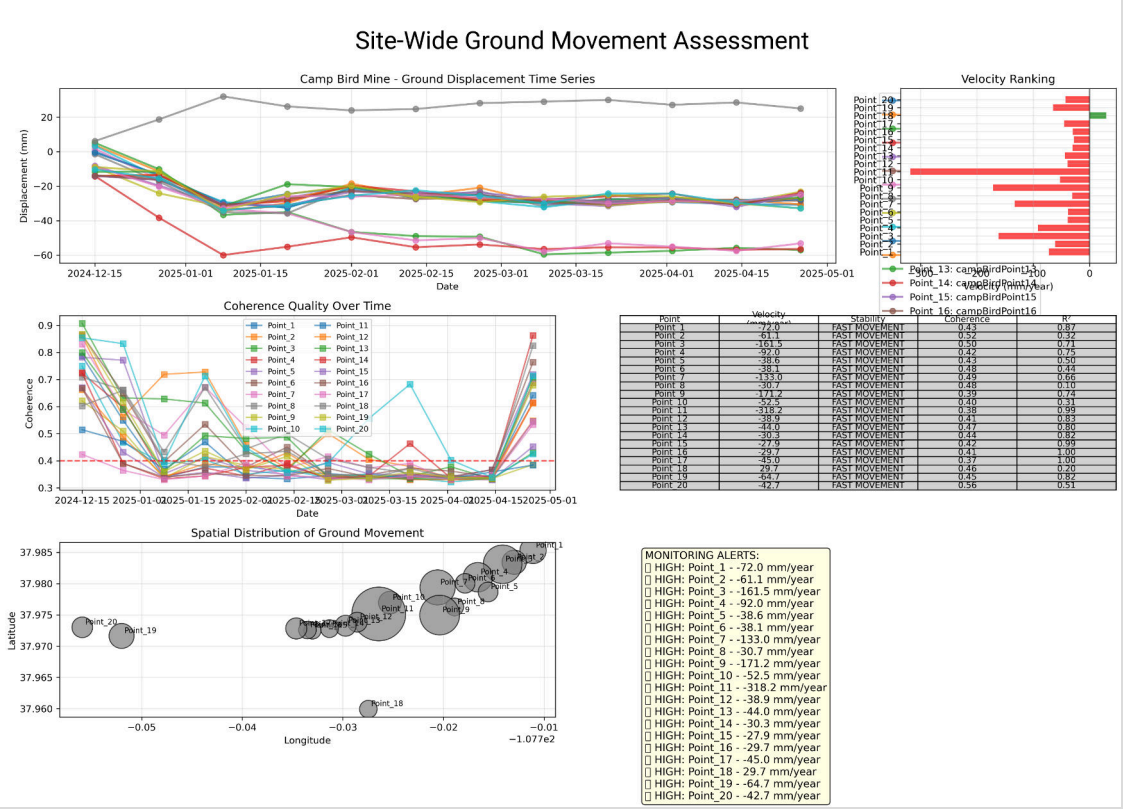
- Ruggedized edge cameras with onboard GPU processing
- Autonomous mesh networking enabling operation in remote locations
- Sub-millimeter change detection providing continuous, high-frequency monitoring
- Instant alert capability via satellite or cellular networks

The AI Advantage: Intelligent Learning and Cost Optimization

What sets Coactive Science apart is our Active Learning approach that delivered unprecedented cost efficiency:

- 10X cost reduction through AI-driven optimal placement strategy of cameras.
- Multimodal foundation model continuously learning from satellite data, camera feeds, environmental sensors, and expert feedback
- 75% reduction in false alerts by correlating multiple data streams
- Automated expert-level analysis eliminating the need for manual data interpretation

This intelligent approach meant the client achieved comprehensive monitoring with a fraction of the cameras typically required, while getting dramatically better results than traditional systems.



Point	Velocity	Stability	Coherence	R²
Point_1	-72.0	FAST MOVEMENT	0.43	0.87
Point_2	-61.1	FAST MOVEMENT	0.52	0.32
Point_3	-161.5	FAST MOVEMENT	0.50	0.71
Point_4	-92.0	FAST MOVEMENT	0.42	0.75
Point_5	-38.6	FAST MOVEMENT	0.43	0.50
Point_6	-38.1	FAST MOVEMENT	0.48	0.44
Point_7	-133.0	FAST MOVEMENT	0.49	0.66
Point_8	-30.7	FAST MOVEMENT	0.48	0.10
Point_9	-171.2	FAST MOVEMENT	0.39	0.74
Point_10	-52.5	FAST MOVEMENT	0.40	0.31
Point_11	-318.2	FAST MOVEMENT	0.38	0.99
Point_12	-38.9	FAST MOVEMENT	0.41	0.83
Point_13	-44.0	FAST MOVEMENT	0.47	0.80
Point_14	-30.3	FAST MOVEMENT	0.44	0.82
Point_15	-27.9	FAST MOVEMENT	0.42	0.99
Point_16	-29.7	FAST MOVEMENT	0.41	1.00
Point_17	-45.0	FAST MOVEMENT	0.37	1.00
Point_18	29.7	FAST MOVEMENT	0.46	0.20
Point_19	-64.7	FAST MOVEMENT	0.45	0.82
Point_20	-42.7	FAST MOVEMENT	0.56	0.51

The Breakthrough: 72 Days of Advance Warning

The system didn't just work—it revolutionized the client's entire approach to risk management. The Discovery Timeline:

The Orbit to Onsite solution tracked the classic phases of progressive slope failure with unprecedented precision:

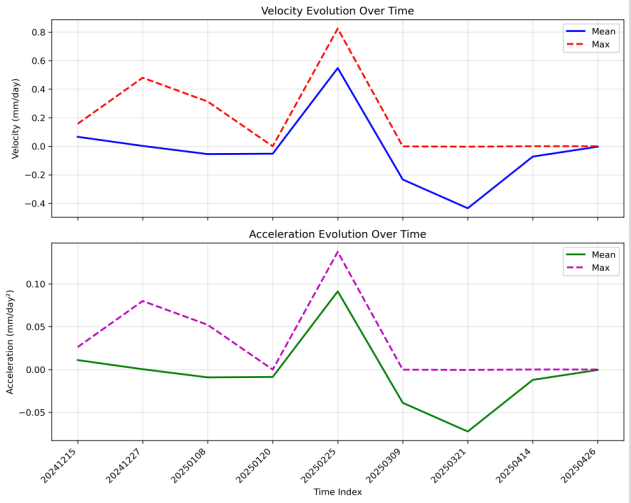
- Day 0 (December 15): Initial uplift detected—early sign of stress redistribution in the rock mass
- Day 12 (December 27): Movement pattern reversal—accelerating subsidence trend begins
- Day 49 (February 1): Sharp deterioration rate increase—system raises alert level, exceeding "critical" velocity threshold of 100 mm/year
- Day 72 (February 25): Rockfall event occurs—with the client fully prepared and protected

The Bigger Picture: Systematic Site-Wide Risk Assessment

The analysis revealed that all monitored points across the entire site were experiencing significant movement, highlighting systematic, induced regional instability that required a comprehensive new risk management strategy.

This wasn't just about preventing one rockfall—it was about fundamentally transforming how the client understood and managed risk across their entire operation.

The Outcome:
The advance warning enabled the operator to proactively manage a significant safety hazard, protecting personnel and equipment. Furthermore, the identification of the even more dangerous "Point 9" allowed for immediate mitigation of a previously unknown catastrophic threat. This case study provides a clear demonstration of the return on investment, where the cost of monitoring is minuscule compared to the potential cost of failure.



Solving Alert Fatigue: The Avalanche-Risk Module
eyond rockfalls, the site also faced significant avalanche risk. Coactive's Avalanche-Risk module fuses millimetre-scale Interferometric Synthetic Aperture Radar (InSAR) displacement data with freeze–thaw analytics. While this satellite-level analysis proved capable of detecting precursory slope deformation long before catastrophic release, it initially led to a high volume of alerts. This "alert fatigue" escalated overtime costs and diluted operator focus—a common issue in high-volume monitoring programs.

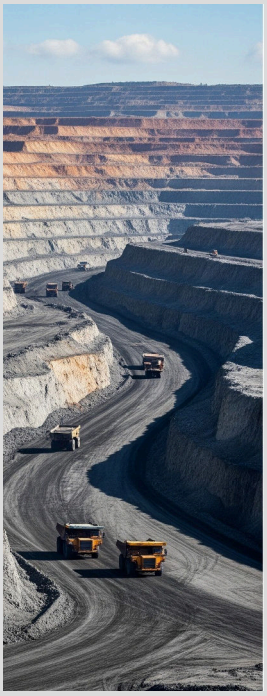
The objective was to preserve the system's early sensitivity while suppressing non-actionable alarms.

To solve this, a photogrammetric camera array was installed at the hotspot. This onsite system uses advanced optical analysis and change-detection to track centimetre-level downslope motion, issuing field alerts only when displacement exceeds a critical threshold calibrated to historical data. By corroborating orbital triggers with real-time ground imagery, the integrated system eliminated 65% of false-positive callouts and cut manual inspection labor accordingly. This validated Coactive's integrated approach, proving that augmenting satellite (InSAR) data with high-resolution optical sensors enhances both the precision and confidence of slope-instability assessments.

7. Benefits Across Critical Infrastructure Sectors

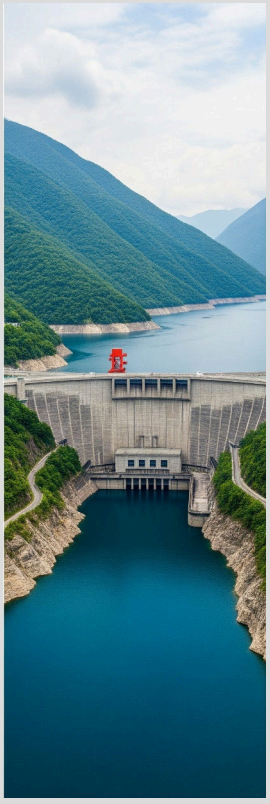
The Orbit to Onsite solution is a flexible, scalable system designed to address the critical safety challenges faced by a range of industries that operate in complex and dynamic environments

7.1 Mining



The mining industry is a primary beneficiary of this technology. Applications include:

- Tailings Dam Safety: Continuous monitoring of dam walls and surrounding areas for any signs of deformation or seepage.
- Open-Pit Slope Stability: Site-wide monitoring of pit walls to detect progressive failures and predict rockfalls, ensuring the safety of workers and machinery.
- Subsidence Monitoring: Tracking ground settlement above underground operations to protect surface infrastructure.



7.2 Energy Generation

For the energy sector, ensuring the integrity of large-scale infrastructure is essential for reliable power delivery and public safety.

- Hydroelectric Dam Safety: Monitoring the dam structure and surrounding valley slopes for any deformation that could indicate a structural risk.
- Pipeline & Transmission Corridors: Identifying landslide risks along pipeline routes and ensuring the stability of foundations for transmission towers.
- Power Plant Stability: Assessing ground stability at the sites of critical facilities where even minor ground movement can have significant consequences.

7. Benefits Across Critical Infrastructure Sectors

7.3 Civil Infrastructure (Roads, Rail, Construction)

By providing early detection of slope instability, debris movement, and environmental changes, our solution supports proactive maintenance, risk mitigation, and rapid emergency response for:

- Roads & Railways: Monitoring the stability of slopes and embankments along critical transportation corridors to prevent landslides from blocking routes.
- Construction Sites: Assessing ground stability during and after major excavation and construction projects to ensure the safety of the site and surrounding areas.
- Urban & Municipal Slopes: Protecting communities by monitoring slopes adjacent to residential areas and public facilities.

7.4 Urban Infrastructure & Resilience

The Peña Magdalena cliff collapse in Soria (May 2025) highlights the escalating challenges faced across European urban regions: non-seismic rockfalls, exacerbated by climate-driven rainfall and temperature shifts, have claimed over 1,550 lives since 1872. In parallel, many EU communities struggle with "energy poverty," where insufficiently insulated buildings combined with unstable ground conditions amplify public risk and resource inefficiencies.

Coactive Science's Orbit-to-Onsite platformmerges satellite ground-motion data with local IoT sensor networks to produce real-time "infrastructure health scores." These scores enable AI-supported monitoring of slope stability and structural performance, informing rapid responses such as maintenance scheduling, adaptive energy retrofits, and community resilience planning.

By integrating layers like topography, subsurface networks, building envelopes, and energy grids, the system advances decision-making for climate-neutral, energy-efficient urban infrastructure. Its parametric thresholds (e.g., subsidence >30 mm/month) trigger proactive interventions, supporting both physical safety and energy optimization, and making it highly applicable for structural engineers, planners, and resilience-focused funds.

8. Enhancing Risk Management: Lowering Premiums & Unlocking Parametric Solutions

A robust safety and monitoring program is not just an operational necessity; it is also a powerful financial tool. The data-driven intelligence from the Orbit to Onsite solution enhances an operator's entire risk management framework, strengthening their relationship with traditional insurers and unlocking new, innovative risk-transfer mechanisms.

Strengthening Traditional Insurance:
Insurers set premiums based on their assessment of risk. For geological hazards, a lack of clear, high-quality data often leads to uncertainty and, consequently, higher premiums. The Orbit to Onsite system changes this dynamic. By implementing our solution, an operator can provide their insurance carrier with objective, continuous, and verifiable data that demonstrates a proactive approach to risk management. This evidence of quantifying, monitoring, and actively mitigating risk puts the operator in a much stronger negotiating position, potentially leading to *more favorable terms and lower premiums* on their traditional indemnity policies.

Unlocking Complementary Parametric Solutions:
In addition to enhancing traditional insurance, the Orbit to Onsite system opens the door to *parametric insurance*, a powerful complement for managing severe events. Unlike traditional policies that pay out based on assessed losses, parametric products provide a rapid, pre-agreed payout as soon as a specific data trigger is met. The historical barrier to these products for geological hazards has been the lack of a trusted data source for the trigger.

Our system *provides that trigger*. For example, a policy can be written where the trigger is: "*If ground velocity at GPS coordinate [X, Y], as measured by the Orbit to Onsite system, exceeds a 30-day rolling average of 100 mm/year, the policy pays out $Z million within 15 days.*"

This creates a comprehensive financial safety net: improved traditional insurance for broad coverage, layered with fast-payout parametric insurance for immediate liquidity and recovery after a specific critical event is detected.

9. Conclusion & Strategic Recommendations

The landscape of infrastructure risk is changing. Increased operational demands and a more volatile global climate require a fundamental shift in how we approach safety and stability monitoring. Waiting for visible signs of trouble is no longer a viable strategy. The future of responsible infrastructure management lies in proactive, predictive, and data-driven risk mitigation.

The *Orbit to Onsite* solution from Coactive Science represents this future, today. By seamlessly integrating the wide-area perspective of fused satellite intelligence with the continuous, real-time data from onsite edge AI cameras, all powered by an evolving multimodal AI, we provide a comprehensive understanding of structural behavior that was previously unattainable. Our commercially available system is field-proven to deliver months of advance warning for potential failures, distinguishing between environmental noise and true structural threats.

This capability delivers transformative benefits:

- It saves lives through timely, automated alerts and risk mitigation.
- It protects high-value assets across mining, energy, and civil infrastructure.
- It reduces costs through intelligent sensor deployment and proactive maintenance.
- It unlocks innovative financial tools like parametric insurance, building greater financial resilience.

Proactive, integrated monitoring is no longer a luxury. It is a core necessity for modern infrastructure management. The technology to see the future of our structures is here.

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About Coactive Science

Coactive Science is at the forefront of vertically integrated AI, building intelligent systems that combine satellite data, video analytics, and other sensor inputs to solve critical real-world problems. We specialize in transforming massive, unstructured datasets into clear, actionable insights for enterprise clients. Our flagship Orbit to Onsite solution provides a new level of situational awareness for infrastructure safety, empowering operators to move from a reactive to a predictive and proactive risk management strategy. By making it easy to search, analyze, and understand visual and sensor data, we help our clients enhance safety, ensure operational continuity, and build a more resilient future.

Contact us

To learn more about the Orbit to Onsite solution and how it can be applied to your projects, please contact us via:

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