

Land Change Detection Using Drone

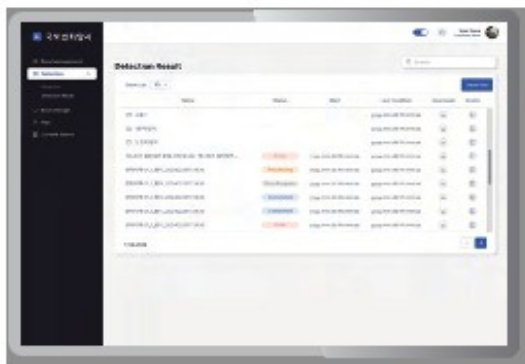
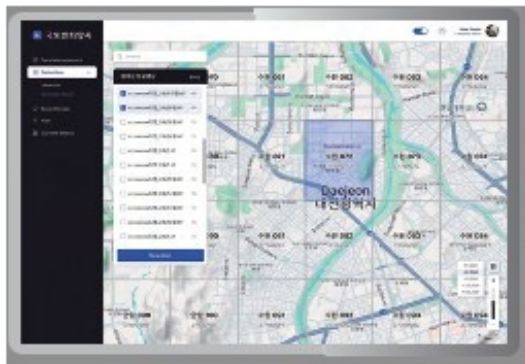
AI-Powered Spatial Intelligence from ElcomTech | South Korea

Executive Summary for Investors

Company: ElcomTech Co., Ltd.

Location: Daejeon, South Korea – the nation's premier science and technology hub, But, it has US LLC in Rockville, Maryland

Key Features



Core Solution: Drone-Based AI Land Change Detection

ElcomTech specializes in forest and land use image analysis using images captured from **satellites, aircraft, and drones** . By applying AI technology to analyze time-series drone imagery, the solution enables precise detection of land cover changes with high resolution and operational flexibility.

Key Capabilities	
Application	Description
Forest Health Monitoring	Detect pest and disease infestation (e.g., Pine Wilt Disease) in\ forests using drone imagery
Illegal Land Development	Identify unpermitted clearing, grading, or land use conversion
Building Expansion Detection	Detect unauthorized construction or structural modifications
Map Updating	Monitor changes in artificial and natural structures to support land integrity management

Why Drone-Based?	
Advantage	Investor Value
Higher Resolution	Sub-centimeter accuracy vs. satellite imagery
On-Demand Collection	No waiting for satellite revisit cycles

Advantage

Investor Value

Cost-Effective for Targeted Areas

Ideal for project-specific or high-risk zone monitoring

Integration with AI Engine

Real-time or near-real-time change detection

Technology Differentiators

1. **Multi-Source Data Fusion** – Combines drone, satellite, and aircraft imagery for comprehensive coverage
 2. **Automated Time-Series Analysis** – AI algorithms compare historical and current drone imagery to detect subtle changes
 3. **Spatial Change Visualization** – Geotagged detection results enable rapid decision-making and regulatory enforcement
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Market Opportunity (US & Canada)

- **Forest Management:** Large-scale pine forests vulnerable to pests
 - **Land Use Compliance:** Stringent zoning and environmental regulations
 - **Infrastructure Monitoring:** Bridge, pipeline, and construction site change detection
 - **Disaster Response:** Post-event damage assessment and land change analysis
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Investment Thesis Summary

ElcomTech offers a proven AI-driven land change detection solution with drone integration capability, addressing critical needs in forest health, land use compliance, and infrastructure monitoring for North American markets.