

OASIS

Orbital AI Supercomputer Infrastructure



*Earth observation into insights –
in minutes, not hours*

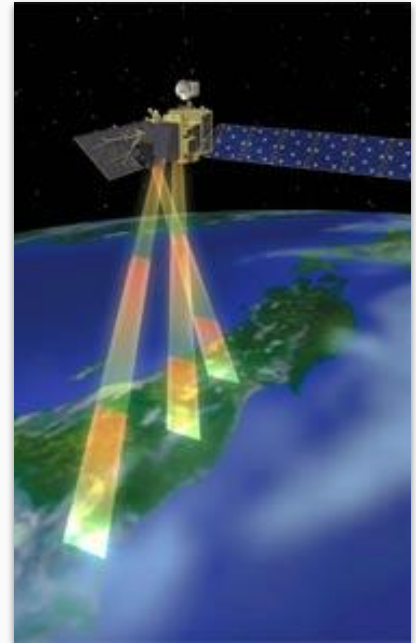
Daniil Galakhov | Chiang Mai, 2025

The Problem

Earth observation is slow.

- Current satellites downlink raw data to Earth
- Ground processing introduces 3-12 hours delay
- Delays harm time-critical sectors: disaster response, shipping, defense, energy

🧠 *Insight: The bottleneck isn't in space or on ground - it's **transmission itself!***



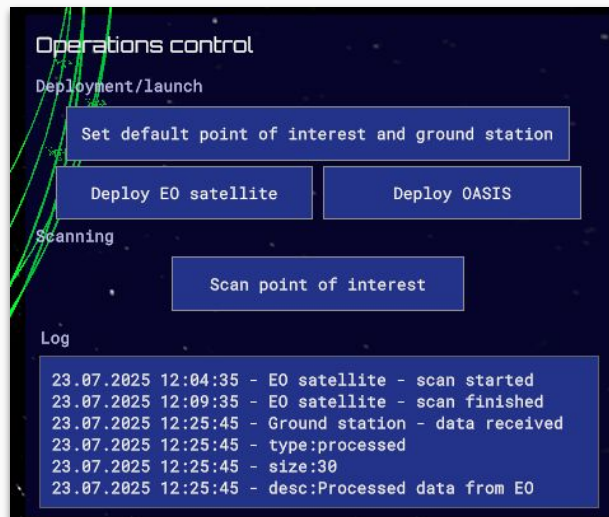
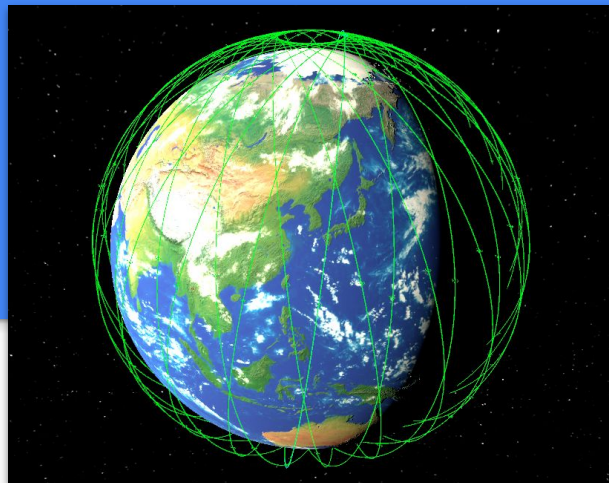
The Solution – OASIS

Process the data before it leaves space.

- Distributed constellation of “ReCor” satellites
- Equipped with onboard AI, RF and laser links
- Turns raw data into insights in orbit
- Delivers processed results in <20 minutes



Built entirely on existing tech

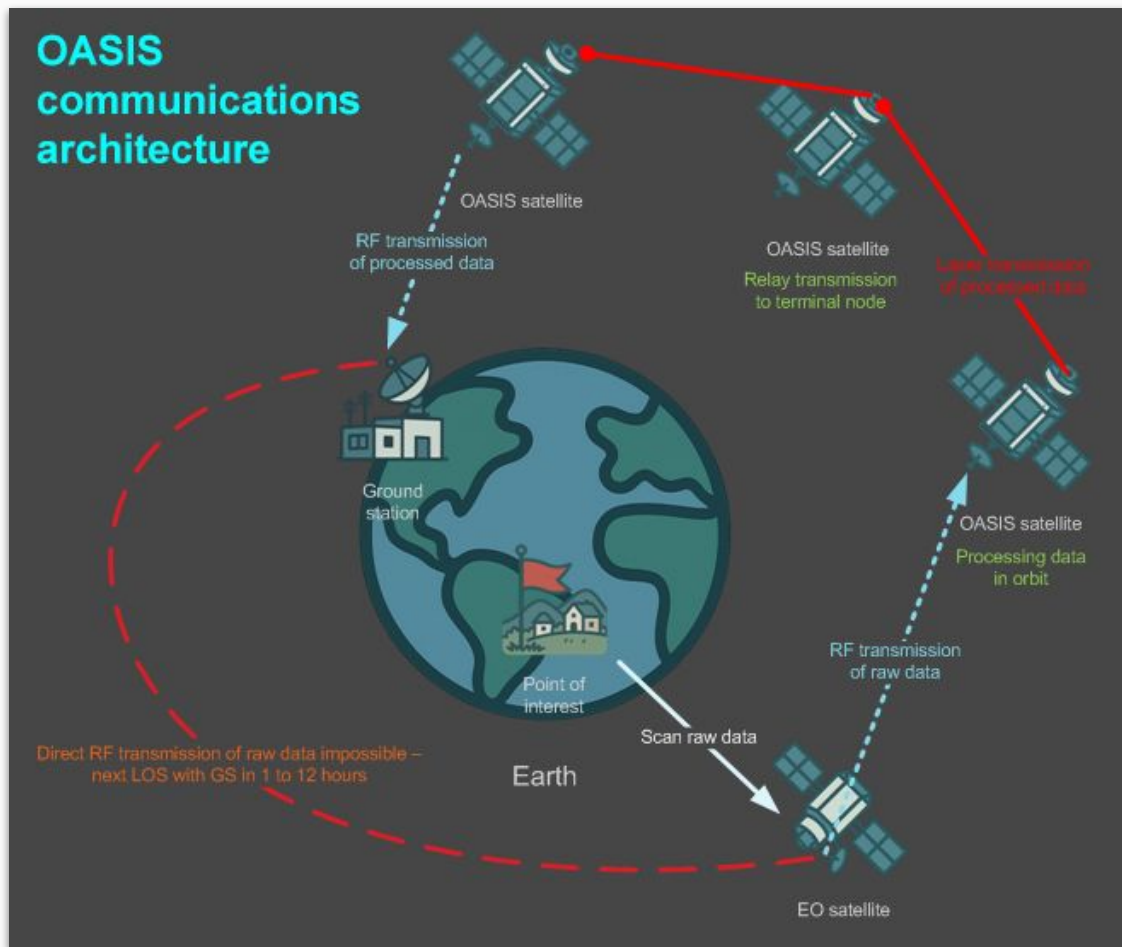


How It Works

Satellite (ReCor Node) Functions:

- 🛰️ Receives raw EO/sensor data via RF
- 🧠 Runs AI inference onboard
- 🔗 Distributes results via laser mesh
- 🌐 Sends to clients or ground via RF

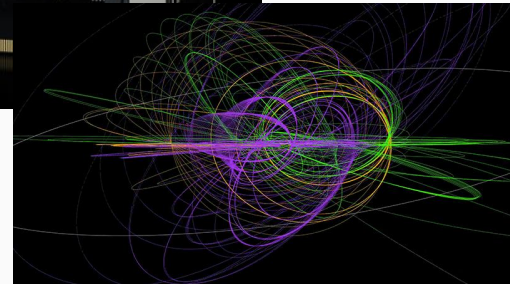
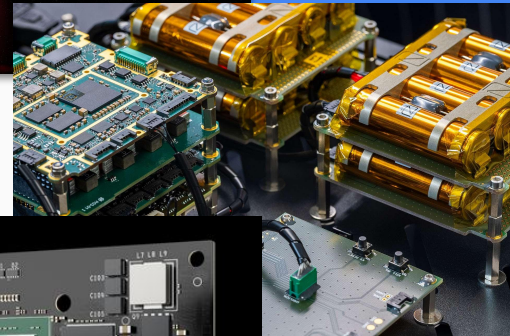
Scalable, flexible, no science fiction.



Technical Architecture

- **Laser Links:** Multi-Gbps mesh between nodes
- **RF Modules:** Dual-band (client & ground)
- **AI Chips:** Hailo, Sophon, NVIDIA Jetson
- **Custom software:** flight-proven astrodynamic algorithms + scheduler for cloud computing

🔧 *No new science. Just tight engineering.*



Killer Applications

 **Disaster Response** — maps floods, fires, quakes in minutes

 **Maritime Optimization** — dynamic ship routing using EO & weather

 **Energy Grid Support** — forecast solar/wind with high precision

 **Defense & ISR** — delivers low-latency intelligence globally

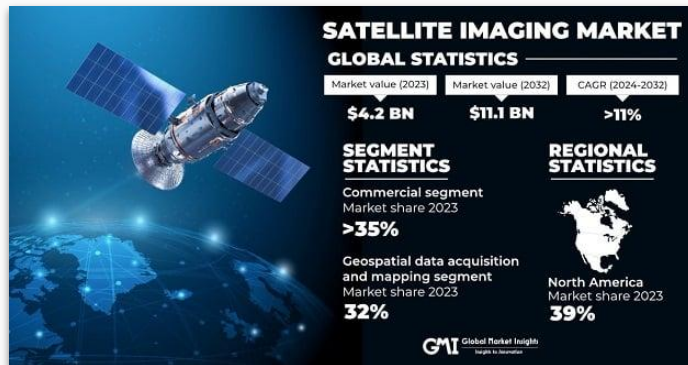
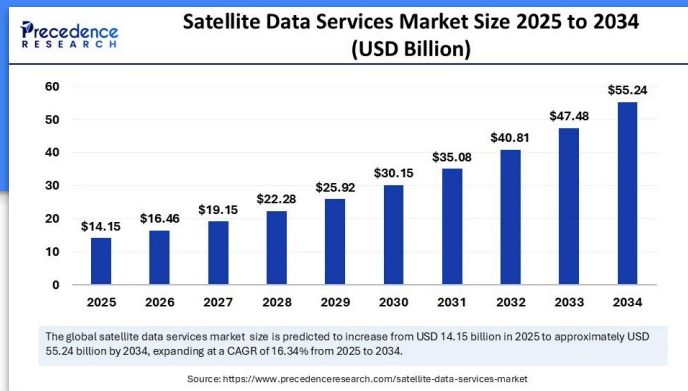
 **Environmental Monitoring** — pollution, climate, treaty enforcement



Market Opportunity

- Space data market: **\$20B+ by early 2030s**
- Demand shift: from raw data → **processed intelligence**
- OASIS enables:
 - Faster decisions
 - Lower costs
 - Competitive edge

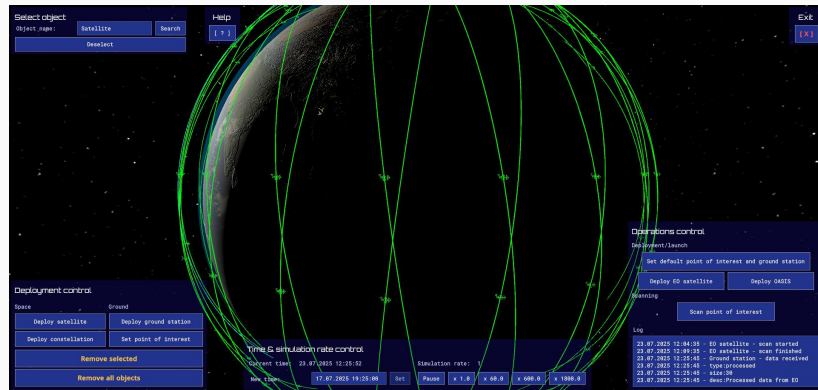
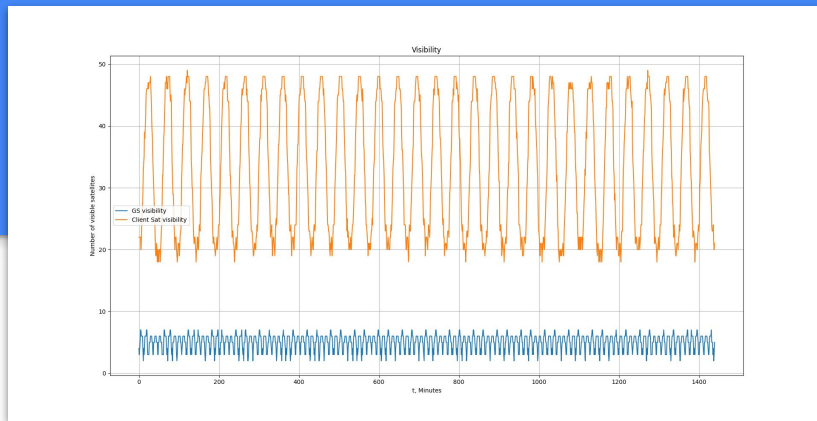
 Modular. Vendor-agnostic. Infrastructure-grade.



Validation

- ✓ 2 custom orbital simulations (Unity + C# / Python)
- ✓ Main ReCor functionality modeled
- ✓ 15-minute latency proven in-sim vs. 8 hours baseline
- ✓ Hardware stack (RF, optical, AI vendors) identified

 We know - **it works.**



Deployment Roadmap



Phase 1: Simulation & Partnering (6–9 mo)

Phase 2: Investment & Payload Integration (12–18 mo)

Phase 3: First Ring Launch: 8–16 nodes (18–24 mo)

Phase 4: Global Constellation (36+ mo)



Est. cost: \$470M, break-even in 3–4 years from Phase 4

Why We're Different

 Minimal R&D needed

 Works with *any* EO satellite

 Real AI processing in orbit

 Built by real mission engineers, not PowerPoint dreamers

 Validated in simulation – ready to scale

Ask

We're seeking:

- Business angels to support and guide us on early stage
- Investors for Phase 1–2 rollout
- Strategic partners in space industry, EO, and defense
- Anchor clients in maritime, energy, security, or EO

 Let's build the edge of space-based AI infrastructure.



ANGEL INVESTOR



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