

NEWSLETTER

Q1 2026

Mimir space technologies

SNAPSHOT

- Kicked-off ALERT-IOD, a project funded by ESA PhiLab exploring edge AI for time-critical decision making from space.
- Early benchmarks of Mimir Compute Framework (MCF) show up to 750% performance improvement compared to conventional frameworks.


COMPANY PROGRESS

ALERT-IOD Development

We contribute with optimization of AI pipelines intended for execution directly on satellite hardware.

Key results so far include:

- **98%** reduction in model size and parameter count, reducing memory requirements from ~50MB to under 1MB.
- Successful INT8 quantization and benchmarking across GPU and CPU.
- Improved speed:

GPU	Original		277.6 FPS
	Optimized		3599.5 FPS
CPU	Original		n/a *
	Optimized		442.4 FPS

The work directly supports the broader objective of enabling real-time AI inference on satellite platforms, reducing the need to downlink large volumes of raw data to Earth.

* not runnable on CPU.

Technology Development

MCF is the second layer in our stack, providing tools to build and execute space-optimized compute.

Initial performance benchmarks show promising results, with up to 750% performance improvements compared to conventional frameworks.

750%
performance

INDUSTRY DEVELOPMENTS

- SpaceX filed plans for an orbital data center system of up to **1 million satellites**, underscoring growing interest in space-based compute infrastructure.
- Google's Project Suncatcher shows that **major tech players are paying attention to orbital compute**, with research into space-based AI infrastructure using solar power, optical links, and TPUs.
- Starcloud has reached a **\$1.1 billion valuation** after their series A round, highlighting growing investor interest in space-driven AI infrastructure as demand for computing power surges.

FOUNDER COMMENTARY



Anton Moberg

Starcloud, SpaceX, Amazon, and Google have filed for a combined total of over 1 million satellites for the purpose of Orbital Datacenters. The interest in space is increasing by the day, and now the giants are pursuing it en masse. Regardless if datacenters or edge computing (or a combination) win in the end, we are positioning ourselves as the foundational infrastructure to power it.



Therese Thomsson

There's a lot of talk about the space ecosystem in Sweden right now. Most of it revolves around funding, if we are NewSpace or not, commercialization, etc. These conversations are important, but often feel flat and boring.

This is an industry that once inspired millions. Where is the storytelling? The wish for legacy? Doing the impossible? Let's bring back the fire and resolve from the past!

