AISTRALYS

AistralysOS | The AI automation layer for satellite operations

AistralysOS is the layer that connects, orchestrates and automates the entire ground segment. Mission control, flight dynamics and mission planning stay the systems of record, while AistralysOS becomes the system of action and the operational brain of the mission.

Built for modern mission operations. From a single satellite to a full constellation. Perfect for scaling operations without scaling operational cost.



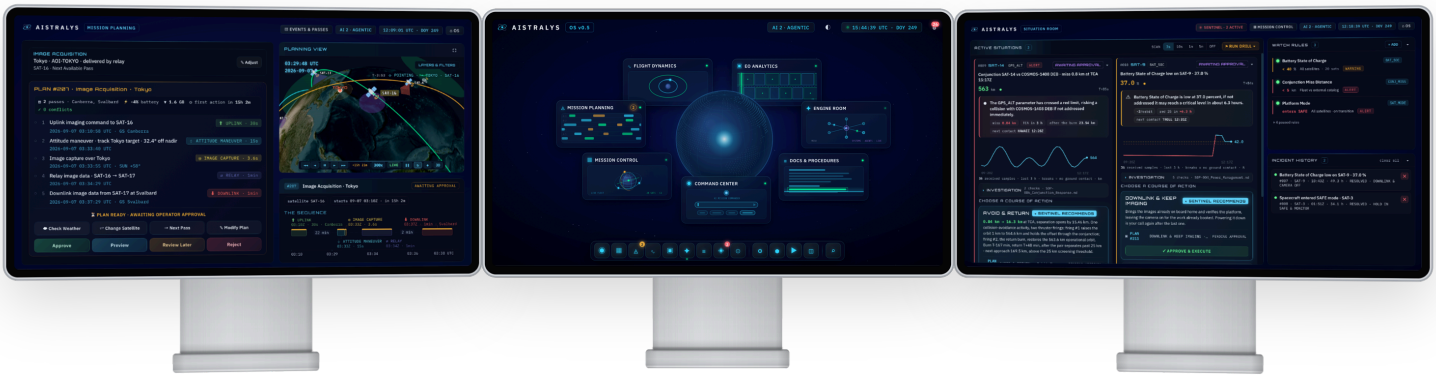
AISTRALYS COMMAND CENTER

AI COMMANDER

One common operating picture

ABOVE THE SYSTEMS YOU ALREADY RUN

AistralysOS integrates with your existing ground segment architecture and keeps a live context of the mission, synchronized from all connected systems. It brings the mission into one view: a unified and modern interface to monitor, control and automate your systems and your satellites.



MISSION PLANNING WINDOW

OPERATING SYSTEM VIEW

ANOMALY RESOLUTION WINDOW

Agents prepare. Operators decide. Agents execute under supervision

HUMAN OPERATOR IN THE LOOP, BY DESIGN

Specialized AI agents run 24/7 and assist the operators in every decision. They interpret requests in natural language, assemble execution plans for satellite activities, detect anomalies and suggest resolutions.

LEVEL 0	LEVEL 1	LEVEL 2
AI OFF	ASSIST	AGENTIC AI
DETERMINISTIC AUTOMATION	EXPLAINS & RECOMMENDS	PLANS & EXECUTES

Modular platform architecture. Cross-system automation, end to end

AUTOMATION ENGINE

Deterministic rules and a team of specialized agents.

AI Commander · Router · Docs Context · Sentinel · Analyst

+

MODERN INTERFACE

One data model, many views. Operate your systems from here.

Command Center · Operating System · Engine Room · Ground Stations
Mission Control · Mission Planning · Flight Dynamics · EO Analytics

Connected to your systems. On your own infrastructure

VENDOR-AGNOSTIC

A modular architecture that integrates with the systems you already run.

SELF-HOSTED

Runs on-premise or in your cloud. Works online and offline.

YOUR MODELS

Your choice of AI model, cloud or local on your own hardware.

SOVEREIGN

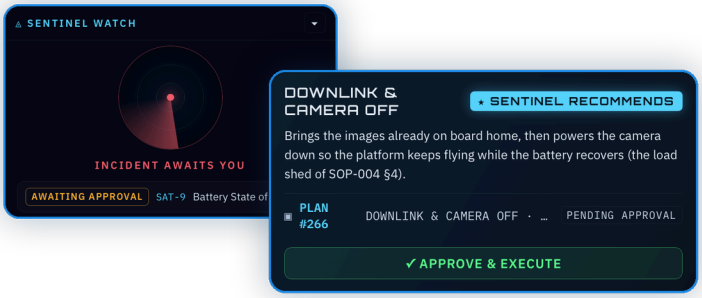
Built in Germany. European data sovereignty.

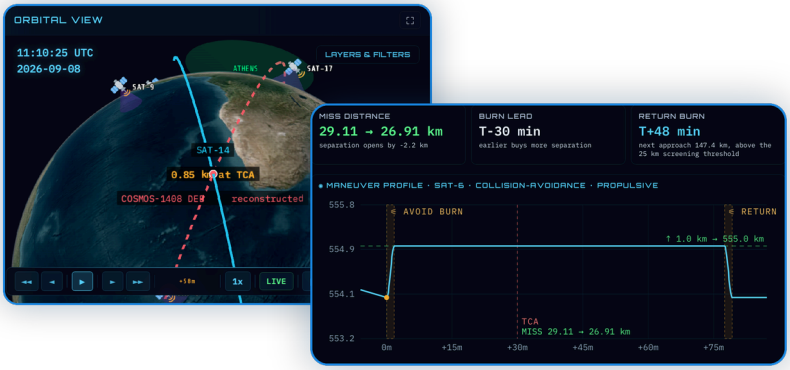
5→1	3	24/7	<5 min
five systems, one interface	levels of autonomy	fleet monitoring	from alert to a recovery plan

Anomaly Detection & Resolution

USE CASE 01

AistralysOS watches the telemetry of the entire fleet and catches deviations before a limit is crossed. It investigates against the telemetry history, past incidents and your own procedures, and prepares the recovery plan for you to approve.





Collision Avoidance & Manoeuvre Planning

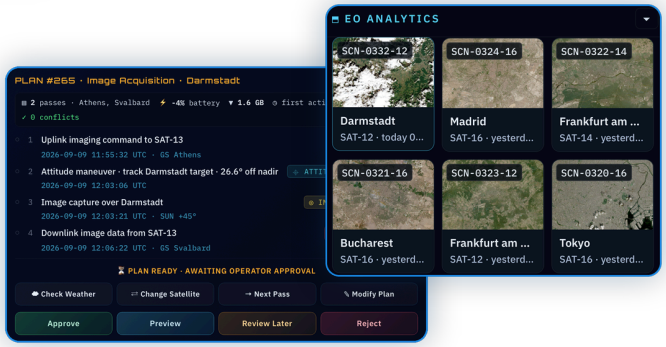
USE CASE 02

A conjunction alert arrives from your SSA feed. AistralysOS computes the avoidance manoeuvre, checks it against the orbit model and the mission constraints, and books the uplink pass. Three tools and a chain of emails become one approval.

Mission Planning & Image Acquisition

USE CASE 03

Ask for the image in plain language. AistralysOS coordinates across your Flight Dynamics and Mission Planning systems and assembles an Acquisition Plan for you to review and approve. The commands then go to Mission Control, the scene lands in EO Analytics, ready for analysis or a retake.



Built for your mission

EARTH OBSERVATION

Automated tasking and monitoring for optical, hyperspectral, infrared and SAR payloads.

EVERY ORBIT

Telecom and GEO fleets, demonstration missions, in-orbit servicing and orbital computing.

CONSTELLATIONS

Scaling operational capacity without scaling operational cost.

DEFENCE

Self-hosted, offline and ITAR-free, for sovereign operations.

From contract to delivery in three to six months

01 DISCOVERY

Your mission, your systems and your team.

02 INTEGRATION

We connect AistralysOS to your systems.

03 AUTOMATION

Your daily procedures become rules and agents.

04 LIVE OPERATIONS

In shadow mode beside your team first, then live.

LET'S AUTOMATE YOUR GROUND SEGMENT