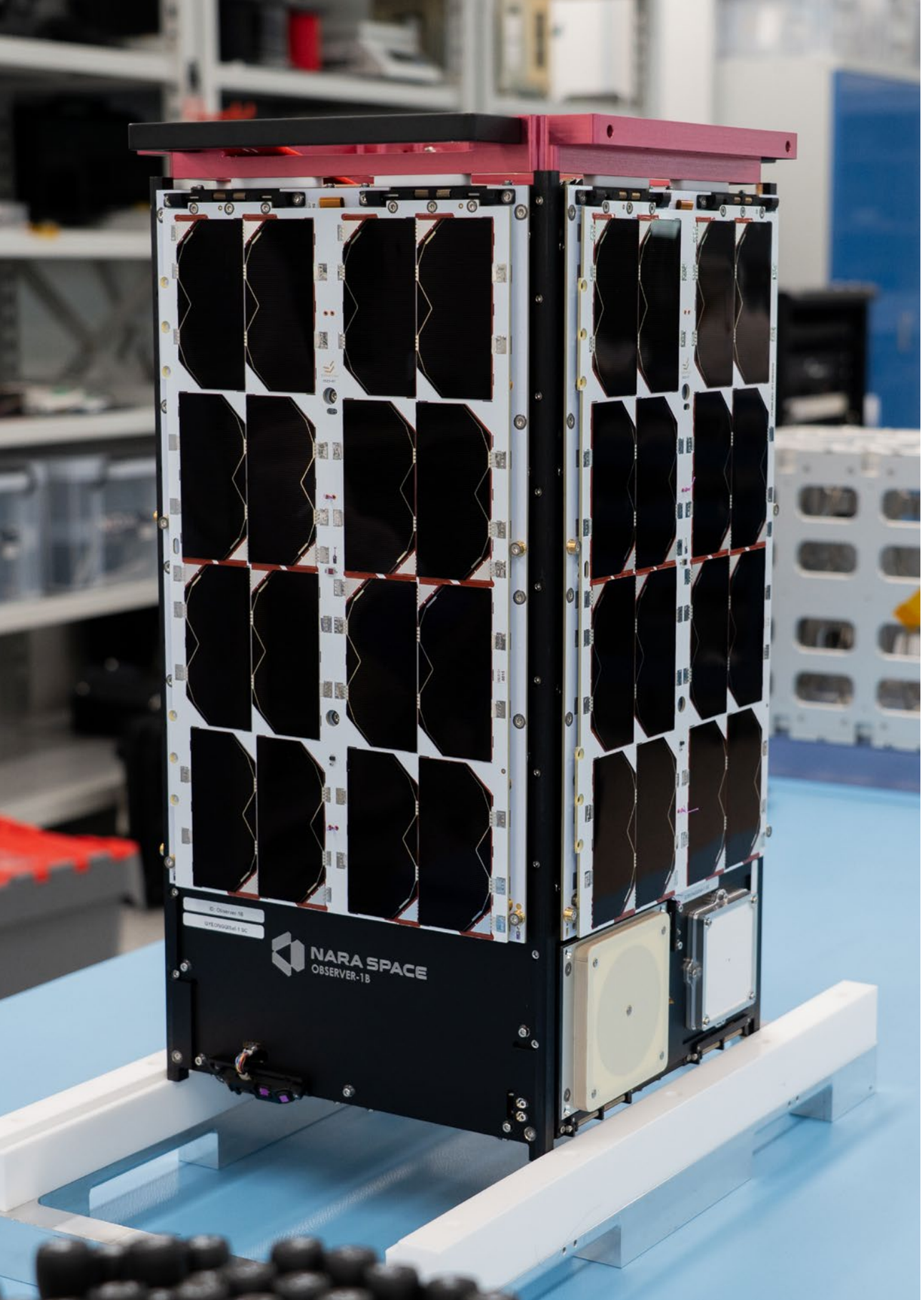
A satellite infrastructure and Earth observations solutions company

NARA SPACE



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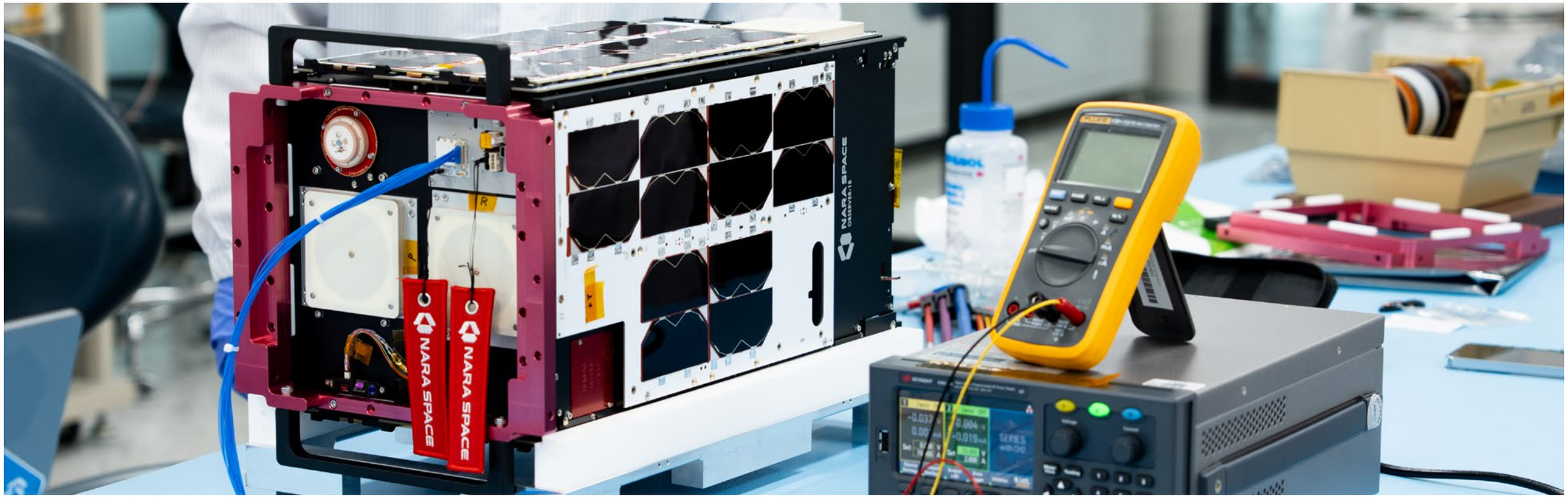
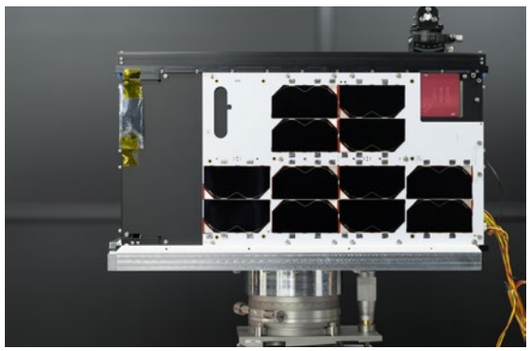
Our Mission



NARA SPACE

We uncover new insights through satellite technology and advanced Earth observation data analytics.



01. EXPAND OUR UNIVERSE

At Nara Space, we aim to push the boundaries of space exploration by designing and building advanced satellites. Our mission is to create innovative solutions that expand our universe and unlock new opportunities for a better future.

02. SHAPING TOMORROW

Nara Space is committed to building a better future for humanity. By collecting and analyzing critical satellite data, we strive to address pressing global issues such as climate change, food security and natural resource use, helping shape a more sustainable future.

03. ADVANCED TECHNOLOGY

Nara Space collaborates with partners across both space and non-space industries to integrate innovative solutions and technologies. From manufacturing to operations, we are committed to pushing the boundaries of what's possible at every step of the journey.

04. EMPOWERING ALL CITIZENS

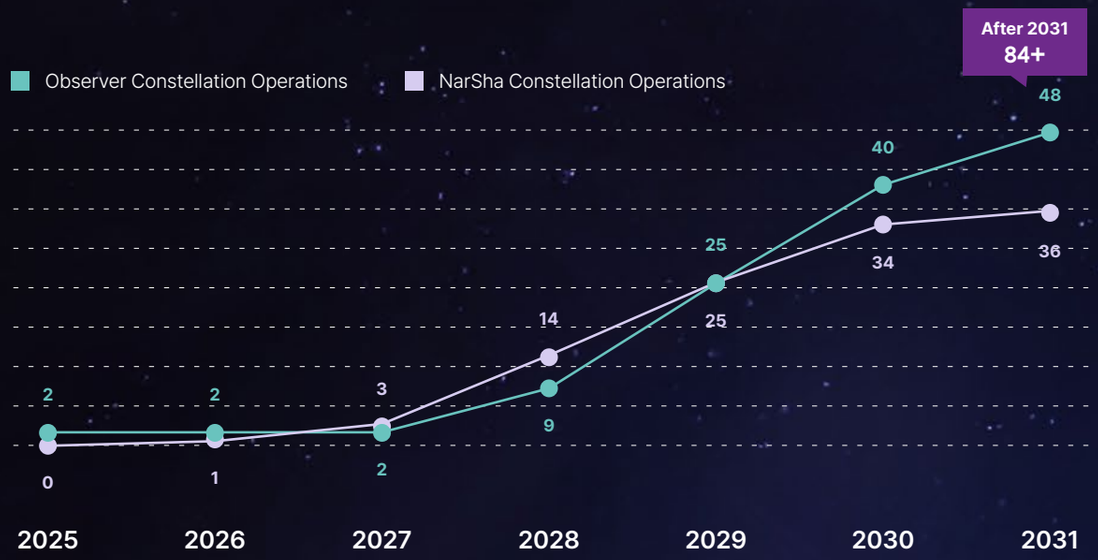
Nara Space is dedicated to making Earth observation data accessible for everyone. By simplifying the way individuals interact with space assets and data, we want to provide valuable insights that enhance daily decision-making and empower communities in new ways.

Milestones

Year	Month	
2015	3	Company Launched
2017	2	Won Global Runner-Up at the University Startup World Cup
	7	Awarded Minister's Prize from the Ministry of Science and ICT
	8	Certified as a Government-Accredited Venture Company
	12	Selected for Hyundai Motor's Gift Car Season 8 Campaign
2018	3	Selected for KARI's SME Commercialization Support Program
	6	Selected for MSS Startup Growth Program – Integrated Navigation Onboard Computer
	6	Selected for Daedeok Innopolis Technology Discovery Program – Positioning Module for Mobility Platforms
2019	8	Selected for Marine & Port Startup Incubation Program
	8	Selected for Busan National Innovation Cluster Customized Support Program
2020	3	Supplied the Video Camera System (VCS) for AP Satellite's Performance Verification Satellite (PVSAT)
	8	Raised KRW 3.5B in Pre-Series A Funding
2021	1	Awarded Contract for Busan Regional Data Collection Systemization and Core Component Development Project
	5	Awarded Contract for NASA-CLPS: Magnetometer Development for Lunar Lander Mission
	11	Awarded Contract for KARI-Led Small Satellite-Based Disaster Demand Analysis and Scenario Development Project
2022	3	Raised KRW 10B in Series A Funding
	4	Selected for Space Challenge program – Satellite Design and GNC Development for Active Space Debris Removal
	5	Selected for National Space Innovation Program – Development and Commercialization of a Video Imaging Small Satellite Capable of Real-Time Environmental Change Detection and Wind Mapping
	12	Awarded Contract for Korean GPS (KPS) Orbit Determination Algorithm Verification and Test System Development Project

Year	Month	
2023	1	Awarded Contract for Uzbekistan Water Pollution Management System and Environmental Monitoring Center Construction Project Led by the Ministry of Environment
	7	Awarded the Small Satellite Development Project for the Agency for Defense Development (ADD)
	11	Successfully Launched and Operated In-House Satellite Observer-1A and Received Earth Observation Imagery
2024	3	Obtained ISO 9001 certification
	5	Raised KRW 20B in Series B Funding
	6	Selected among the IPEF (Indo-Pacific Economic Framework) Top 100 Promising Climate Tech Startups -- The only space company shortlisted in the cohort
	7	Signed MoU with Samsung Electronics and Awarded Payload Development Project for Memory Semiconductor Reliability Evaluation in Space Environment
	7	Awarded Contract to Develop a CubeSat (EEETester) for KARI's Space Qualification Support Project for Domestic Component Parts
	7	Awarded Contract for the Development, Operation, and Data Acquisition of KARI's K-RadCube CubeSat for Space Radiation Environment Measurement
	11	Awarded Contract for Hanwha Systems' K-GHGSAT Small Satellite System Integration and Payload/Bus Development for Greenhouse Gas Observation
	12	Awarded Contract for Ground Station Software Development for KT SAT

Building a Constellation to Expand Our Universe



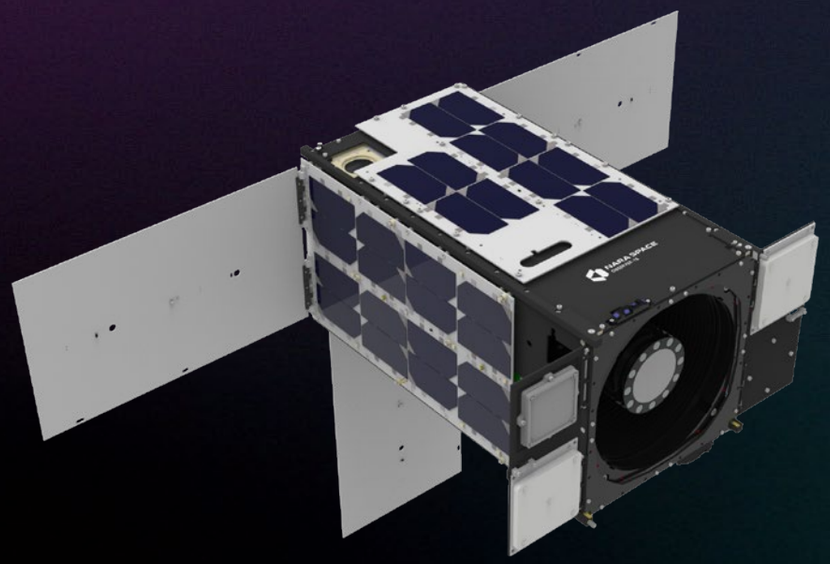
From small satellite design and manufacturing to mission operations and cutting-edge AI data analytics, Nara Space strives to reimagine the way individuals, governments and organizations stay connected to our planet's heartbeat.

Nara Space plans to establish a real-time Earth observation infrastructure to offer new insights into the numerous environmental and security issues confronting our world.

Observer

Launched November 2023

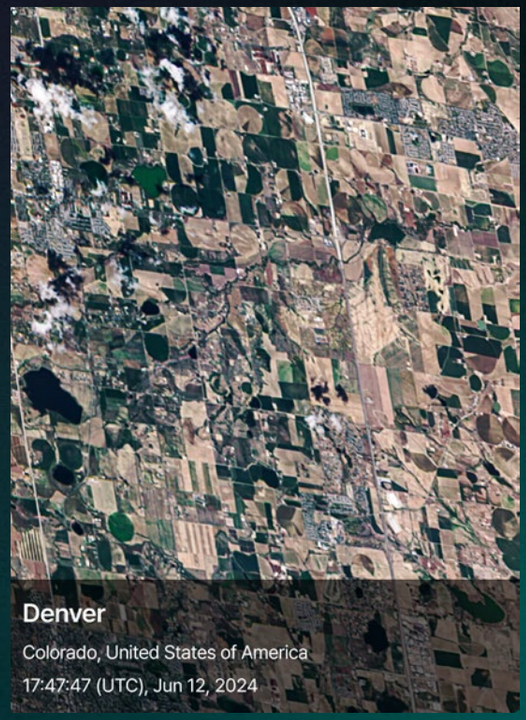
Nara Space's first standard nanosatellite for Earth observation constellations with 7 optical bands and 1.5 m GSD (< 1 m after Super Resolution)

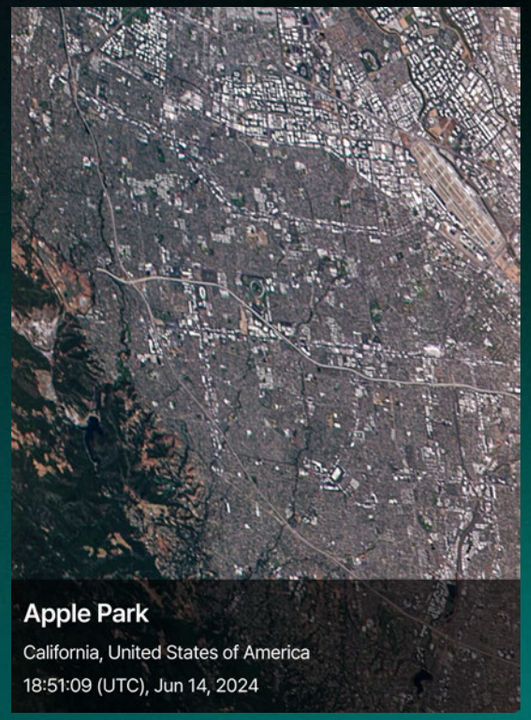


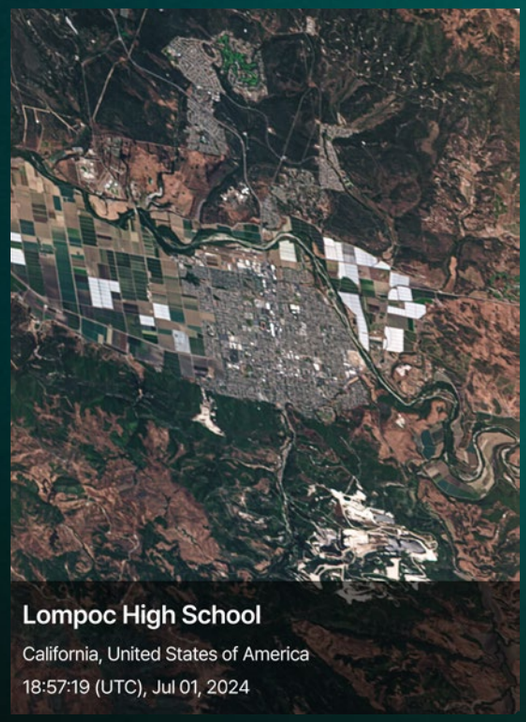
Satellite Overview

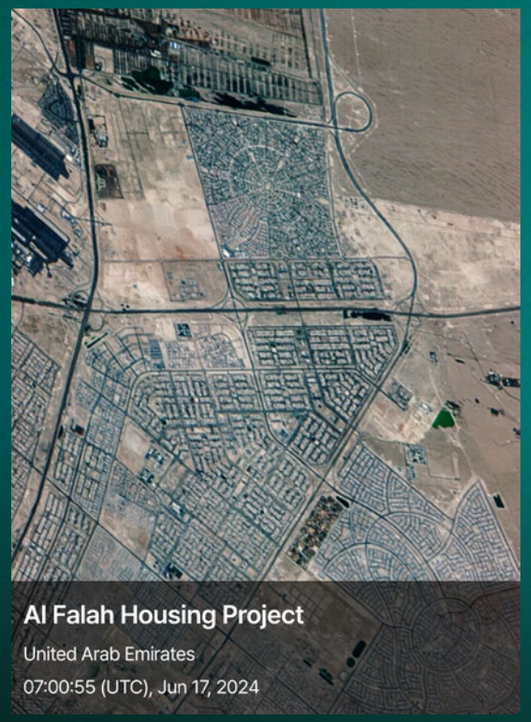
Ground sample distance	1.5 m
Bus mass	13 kg
Battery capacity	172 Wh
Payload mass	≤ 12 kg
Payload power	53 W
Telecommand / Telemetry data rate	33 Kbps / 83 Kbps (S-band)
Payload downlink data rate	50 Mbps (X-band)
Space heritage	Observer-1A (Q4 2023)
Upcoming missions	GyeonggiSat-1A (Q4 2025), Observer constellation

Observer Satellite Imagery





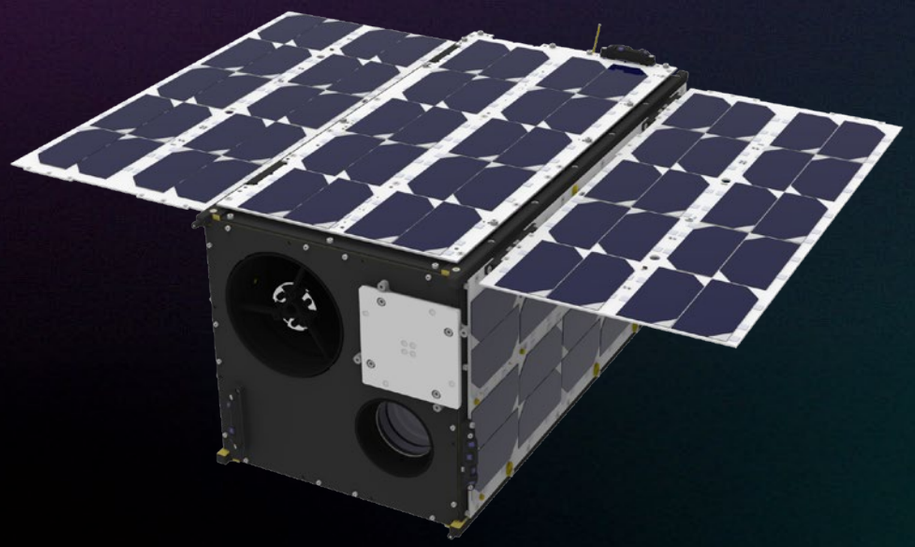




NarSha

Launch Planned in the Second Half of 2026

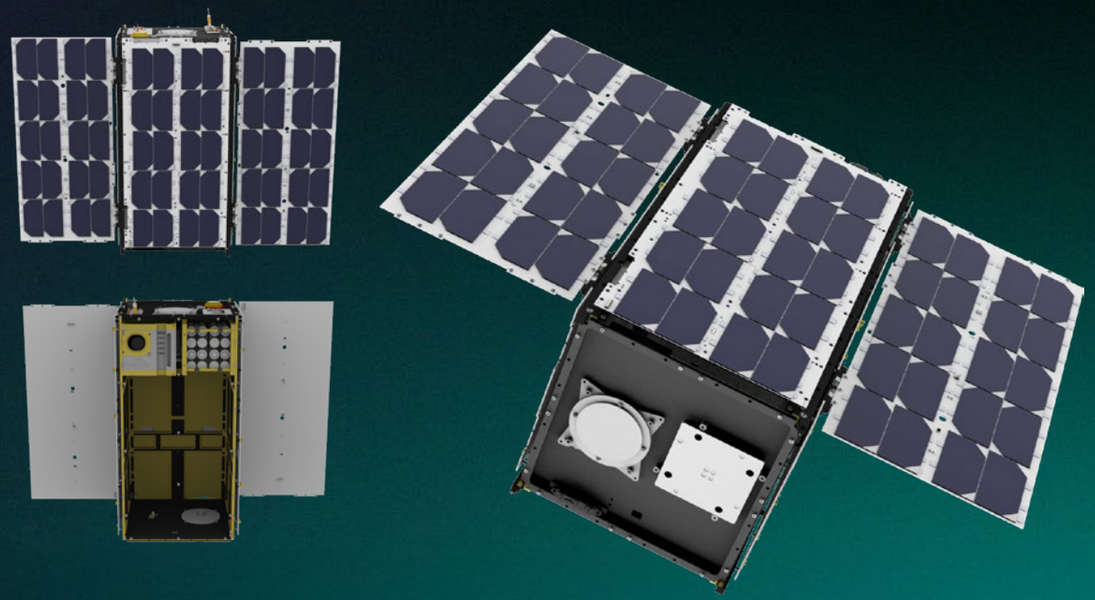
The first Korean methane monitoring microsatellite constellation



Satellite Overview

Direction threshold	100 kg/h
Bus mass	15 kg
Battery capacity	172 Wh
Payload mass	≤ 10 kg
Payload power	60 W
Telecommand / Telemetry data rate	33 Kbps / 83 Kbps (S-band) and 2 Mbps (S-band)
Payload downlink data rate	100 Mbps (X-band)
Upcoming missions	GyeonggiSat-2A&2B (Q4 2026), NarSha constellation

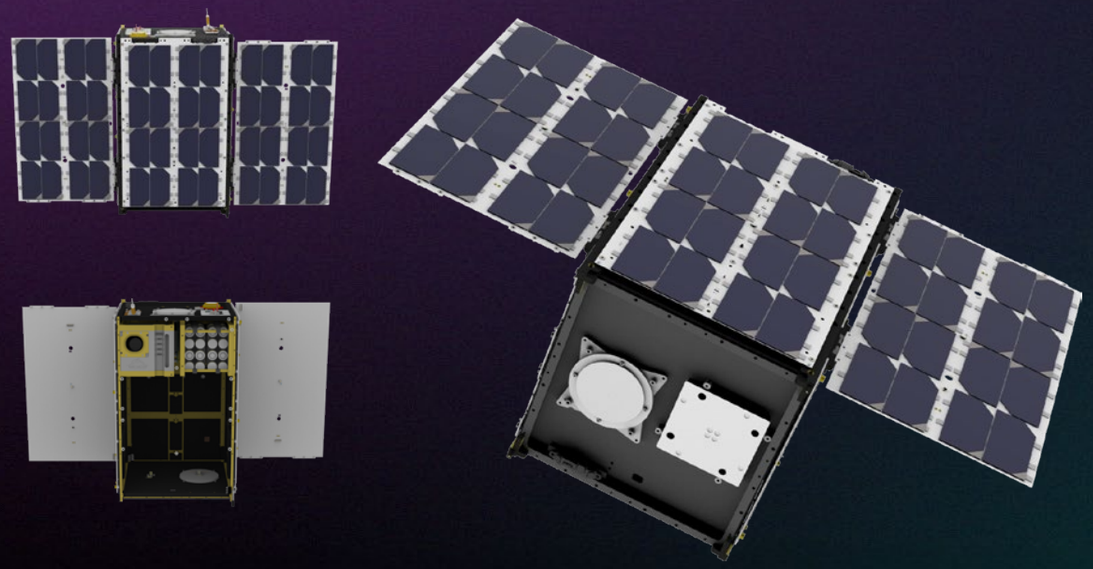
16U Platform



Satellite Overview

Ground sample distance	1.5 m
Bus mass	13 kg
Battery capacity	172 Wh
Payload mass	≤ 20 kg
Payload size	12U
Payload power	up to 100 W
Payload power channels	3.3 / 5 / 8 / 12 / 28 V (@2 A)
Payload interfaces	CAN / SpW / RS-422 / I2C
Telecommand / Telemetry data rate	33 Kbps / 83 Kbps (S-band) or 2 Mbps (S-band)
Payload downlink data rate	50 Mbps (X-band)
Space heritage	Recognition in NASA's State-of-the-Art Small Spacecraft Technology Catalogue (2023, 2024) Nara Space's First Satellite : Observer-1A (Q4 2023)
Upcoming missions	Undisclosed client mission (Q1 2027, Q2 2027)

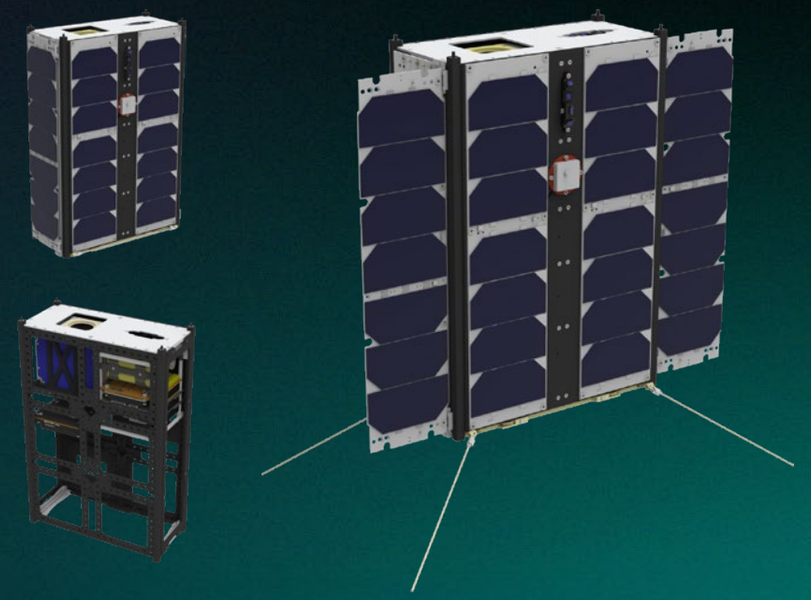
12U Platform



Satellite Overview

Ground sample distance	3 m
Bus mass	10 kg
Battery capacity	172 Wh
Payload mass	≤ 13 kg
Payload size	8U
Payload power	up to 100 W
Payload power channels	3.3 / 5 / 8 / 12 / 28 V (@2 A)
Payload interfaces	CAN / SpW / RS-422 / I2C
Telecommand / Telemetry data rate	33 Kbps / 83 Kbps (S-band) or 2 Mbps (S-band)
Payload downlink data rate	50 Mbps (X-band)
Space heritage	Recognition in NASA's State-of-the-Art Small Spacecraft Technology Catalogue (2023, 2024)
Upcoming missions	BUSANSAT-1B (Q1 2026) K-RadCube (Q1 2026) EEETester (Q4 2025, Q2 2026, Q2 2027)

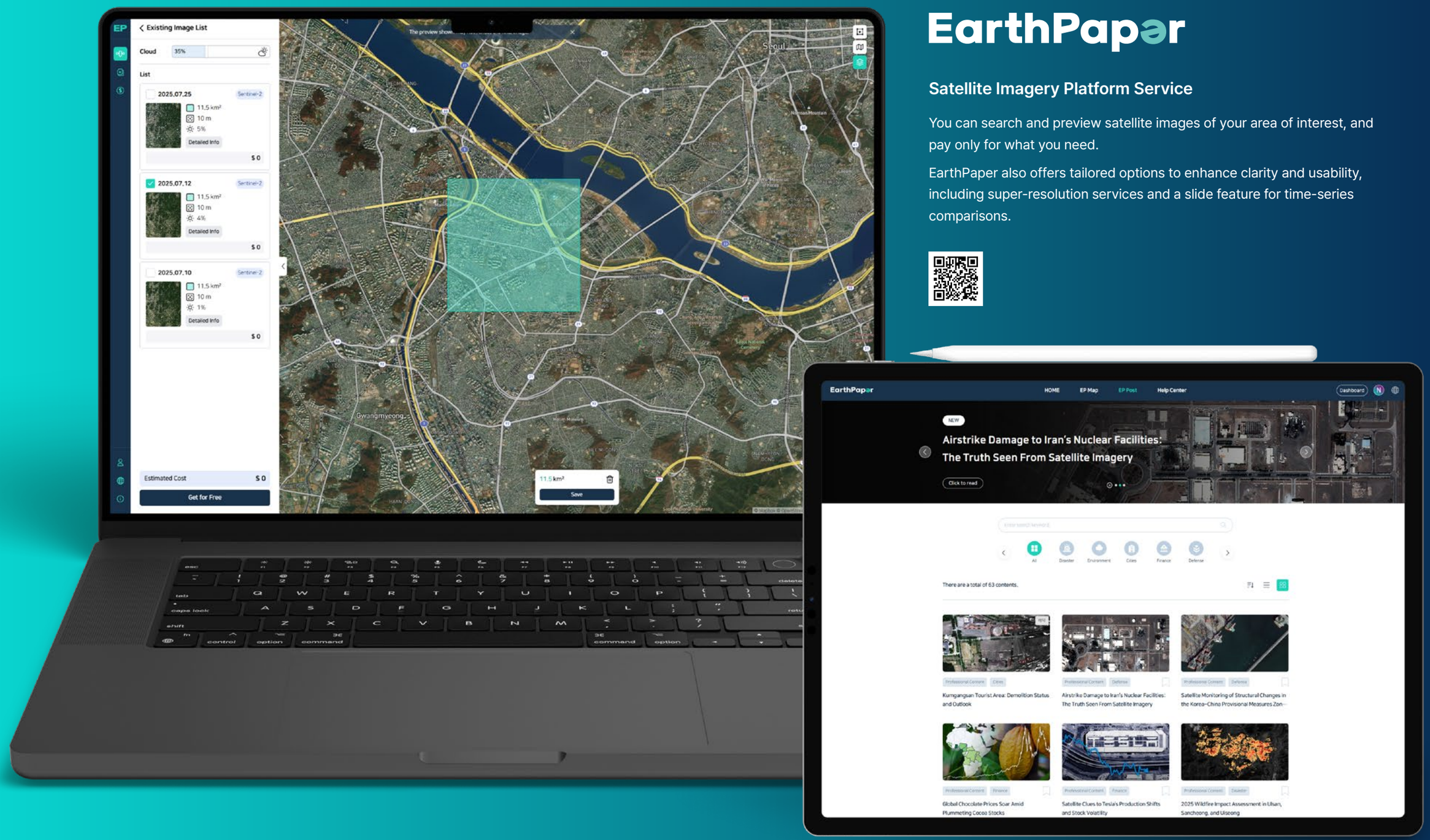
6U Platform



Satellite Overview

Ground sample distance	5 m
Bus mass	6 kg
Battery capacity	86 Wh
Payload mass	≤ 6 kg
Payload size	3U
Payload power	up to 50 W
Payload power channels	3.3 / 5 / 8 / 12 / 28 V (@2 A)
Payload interfaces	CAN / SpW / RS-422
Telecommand / Telemetry data rate	33 Kbps / 83 Kbps (S-band) or 2 Mbps (S-band)
Payload downlink data rate	50 Mbps (X-band)
Space heritage	Undisclosed client mission (Q3 2027)

Satellite Data Search and Purchase Platform



EarthPapər

Satellite Imagery Platform Service

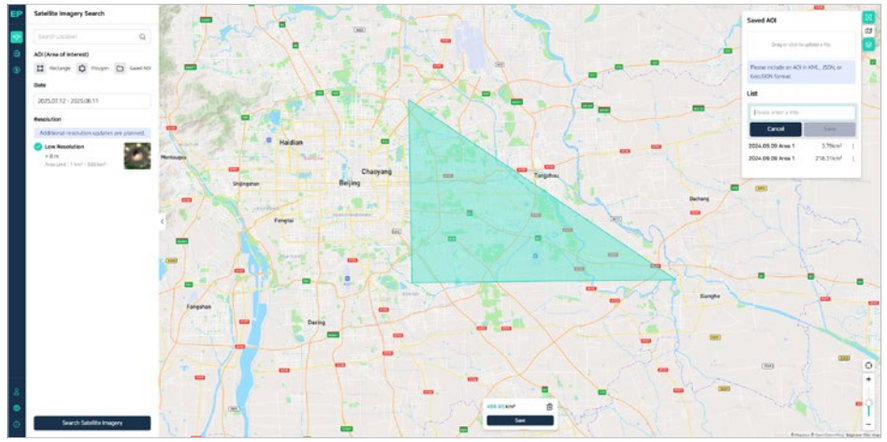
You can search and preview satellite images of your area of interest, and pay only for what you need.

EarthPaper also offers tailored options to enhance clarity and usability, including super-resolution services and a slide feature for time-series comparisons.

01. EP Map

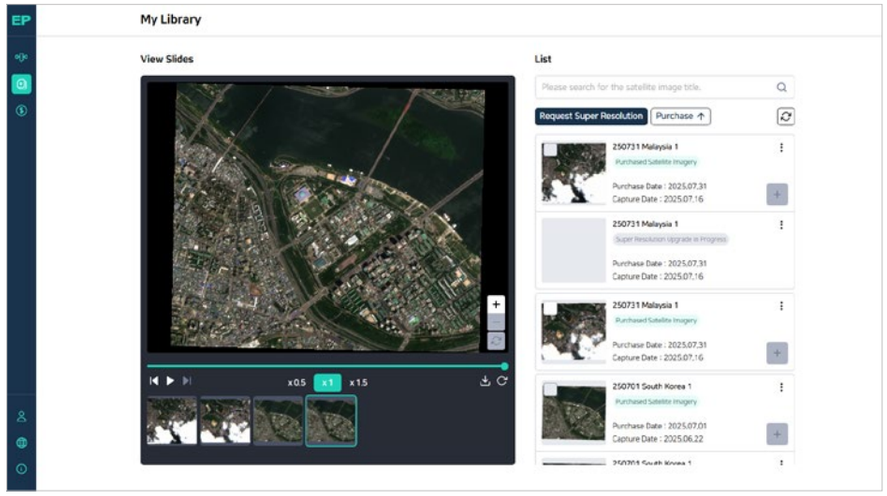
Earth Data: Instantly Accessible | Insights for a Changing World

You can directly select your area of interest in 1×1 km units, and with just a few clicks, anyone can easily and quickly purchase satellite imagery through our intuitive, user-friendly platform.



Sharper Images, Deeper Insights

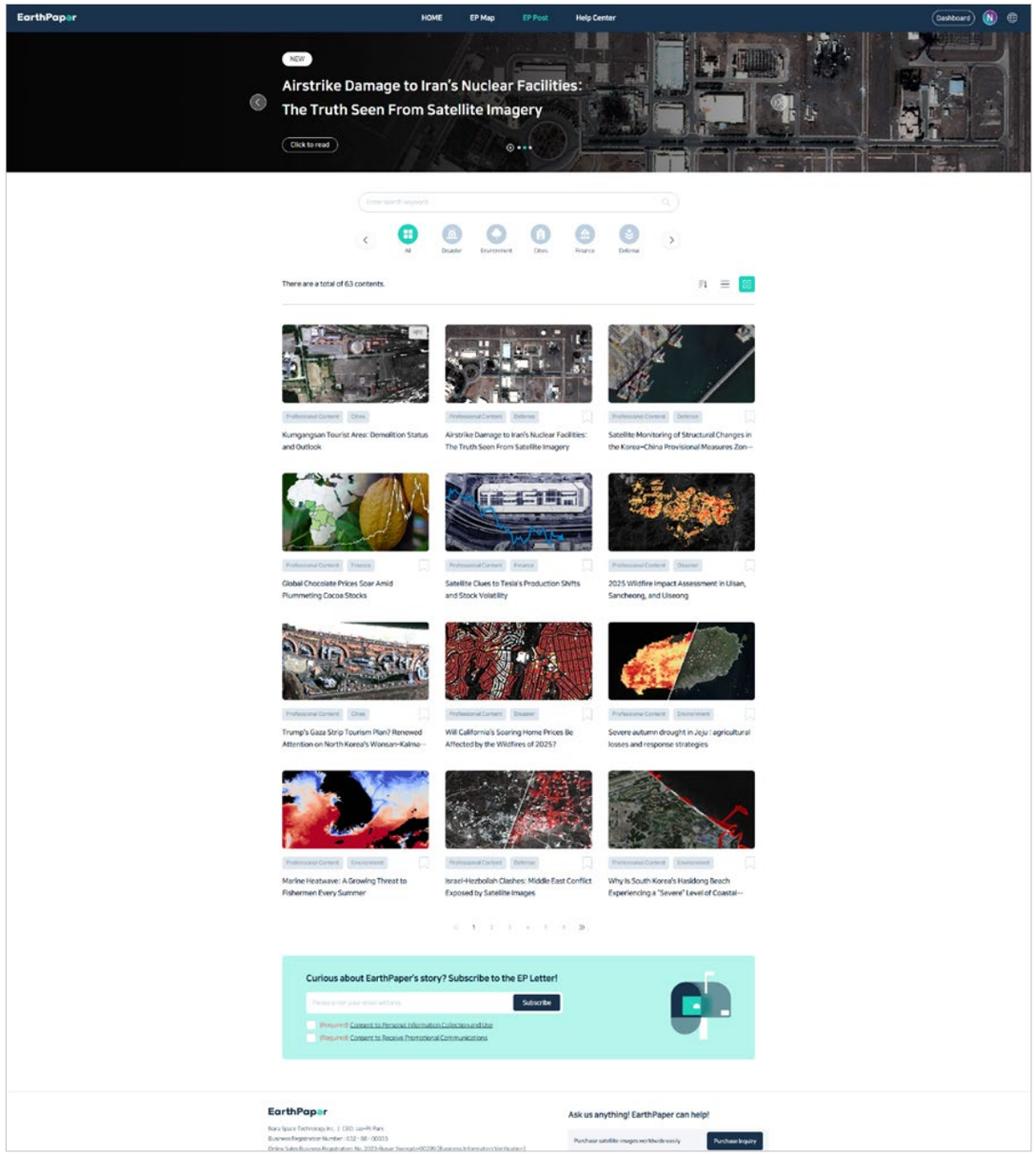
With the Super Resolution feature, users can access imagery up to three times sharper. The platform also supports time-series analysis through a slider tool, pre- and post-super-resolution comparison, and detailed zoom-in analysis to track subtle changes across regions with precision.



02. EP Post

Discover the world through the lens of satellite data

Explore how space and satellite-based data permeates our everyday lives, shaping industries, improving decision-making, and solving real-world challenges.

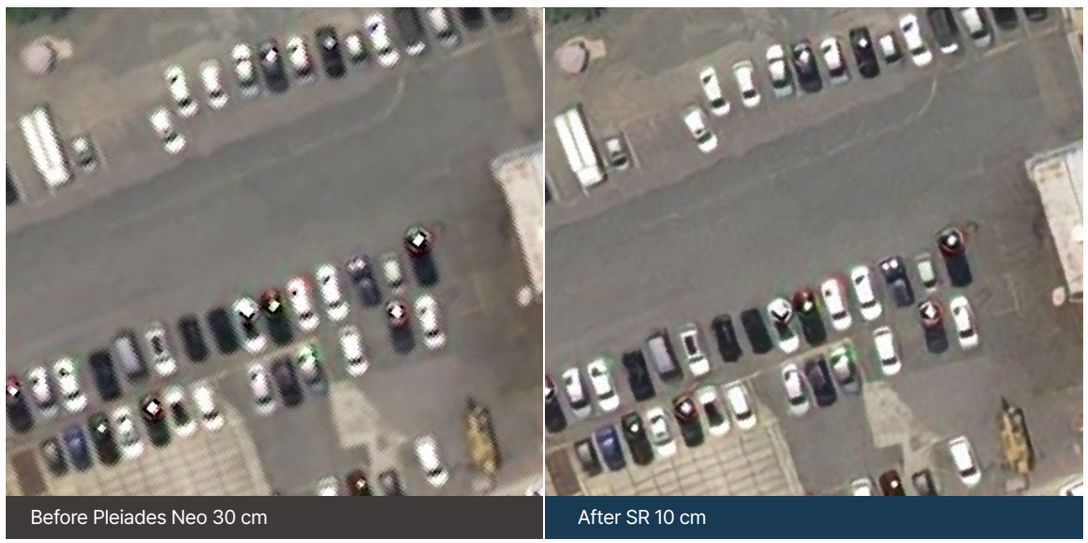


03. Super Resolution

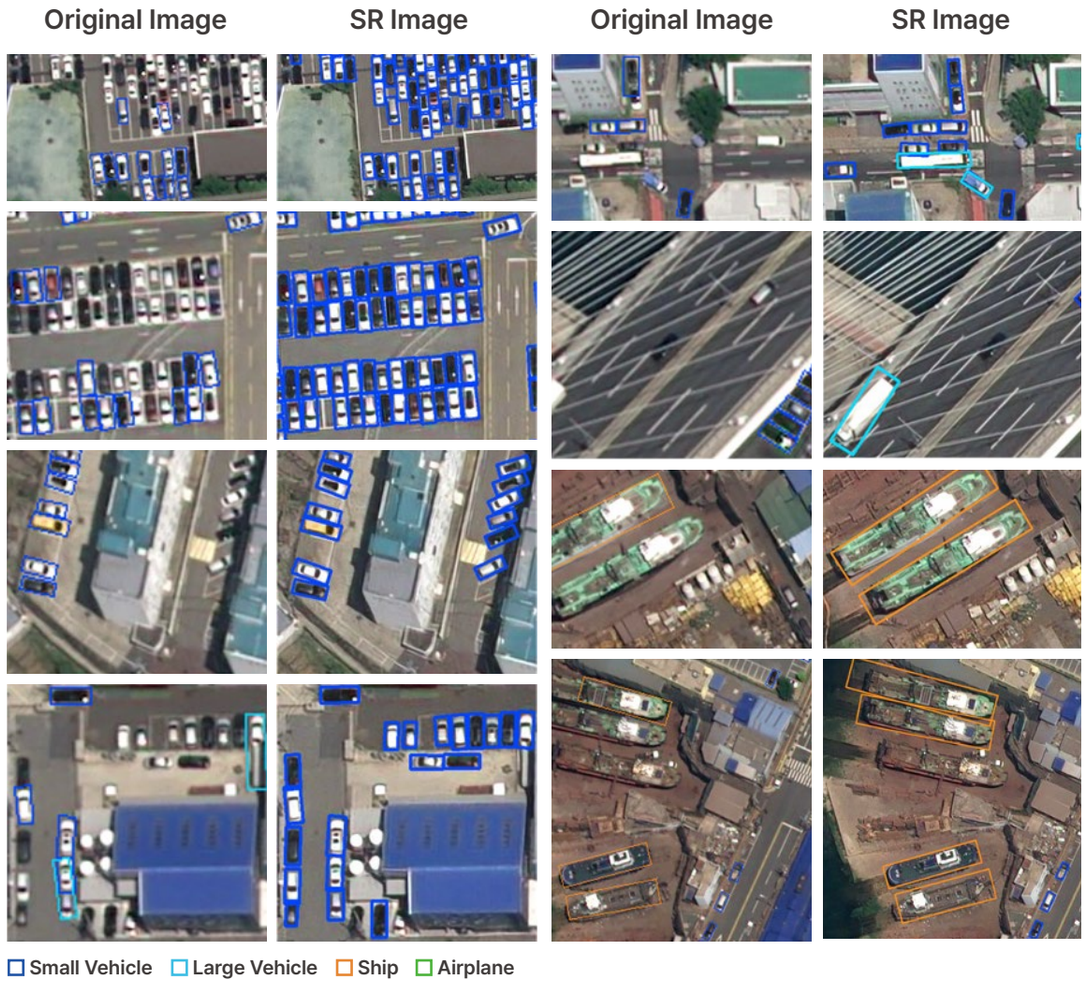
Enhance Your Satellite Imagery

Our proprietary AI-driven super resolution technology provides up to three times higher clarity in satellite imagery. This improves object identification and increases detection accuracy by 20–30%, enabling users to make better-informed decisions and extract greater insights from their data.

Before Pleiades Neo 30 cm | After SR 10 cm



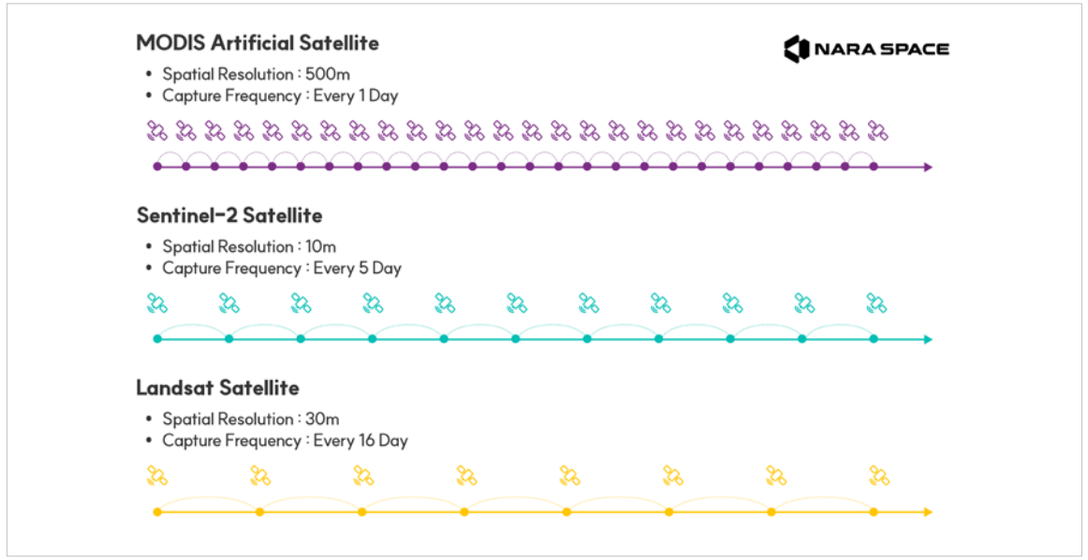
Before Pleiades Neo 30 cm | After SR 10 cm

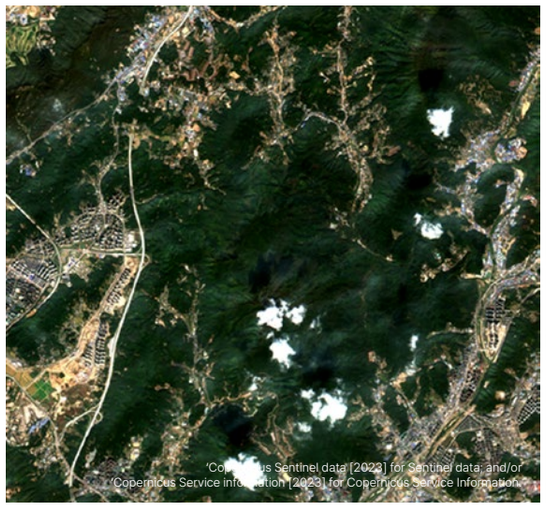


04. Gap-Filling

Gap-Filling for Seamless Satellite Imagery

By combining the strengths of both geostationary and polar-orbiting satellites, our advanced image fusion algorithms can fill data gaps on days without satellite coverage. This capability enables improved change detection across multiple sectors, including environmental monitoring, agriculture, disaster response, security, and land management.

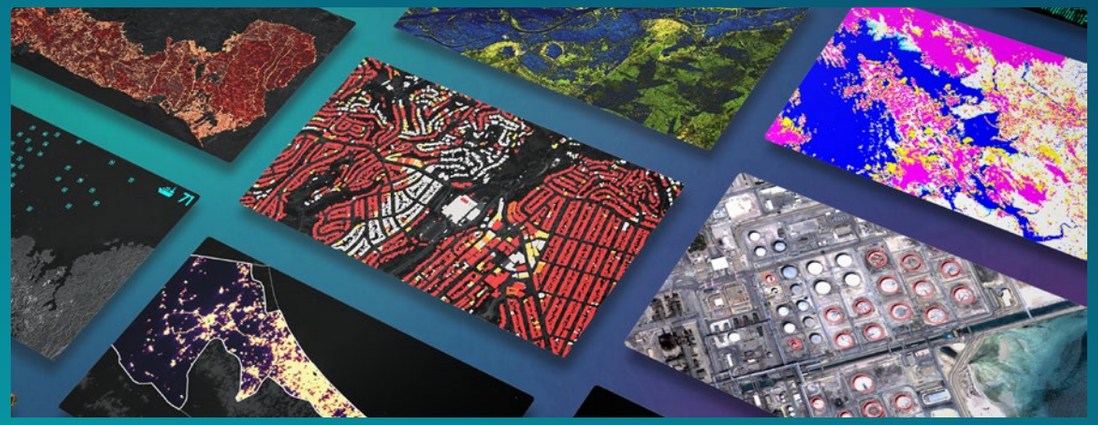




EP Analysis Package

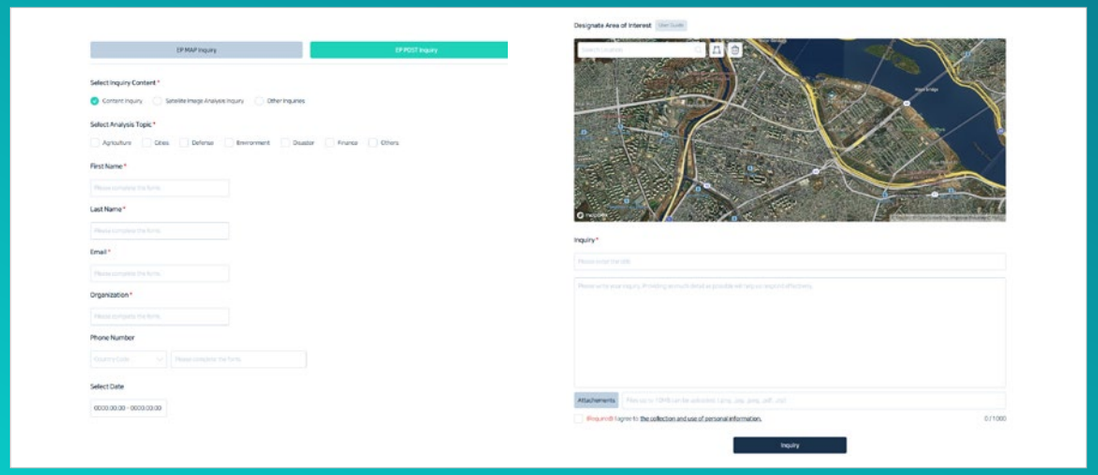
Actionable Satellite Intelligence for Industries

EarthPaper's Analysis Packages provide tailored satellite-based insights for six key sectors:
Natural Disaster Management, Urban/Infrastructure Management, Environment, Defense and Security, Agriculture, Finance and Insurance.



Request a Custom Analysis

Users can easily specify the region, date, and analysis topic, and our expert analysts will identify the most suitable satellite data, including high resolution optical imagery and Synthetic Aperture Radar (SAR). The result is a customized, actionable report that can be directly applied to real world workflows, including strategic planning, policy implementation, risk management, and more.



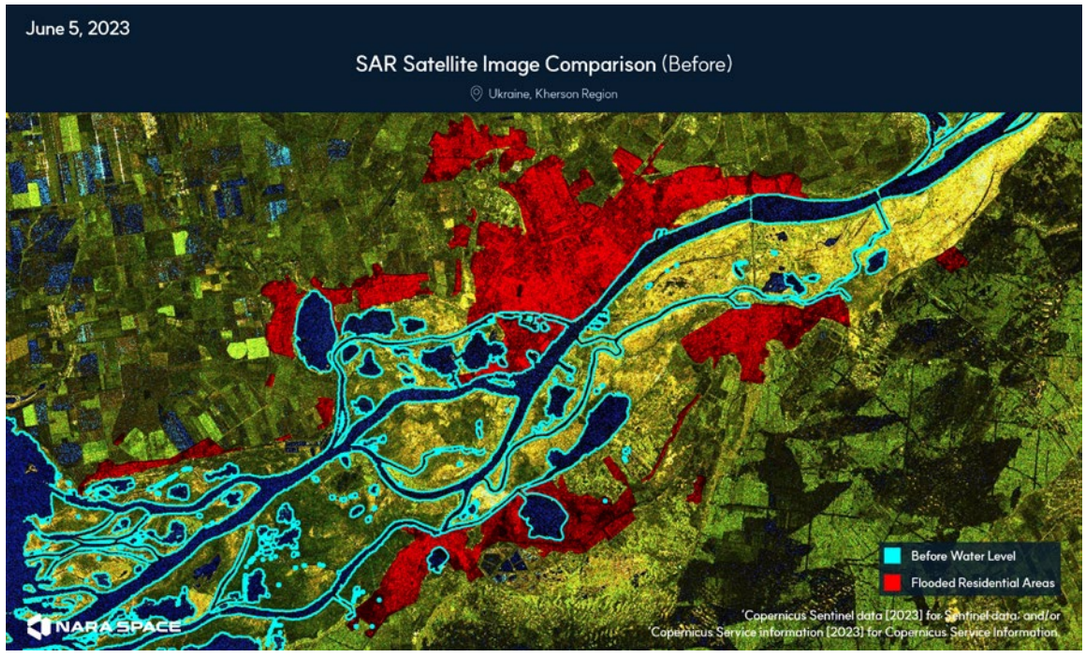
Natural Disaster Management

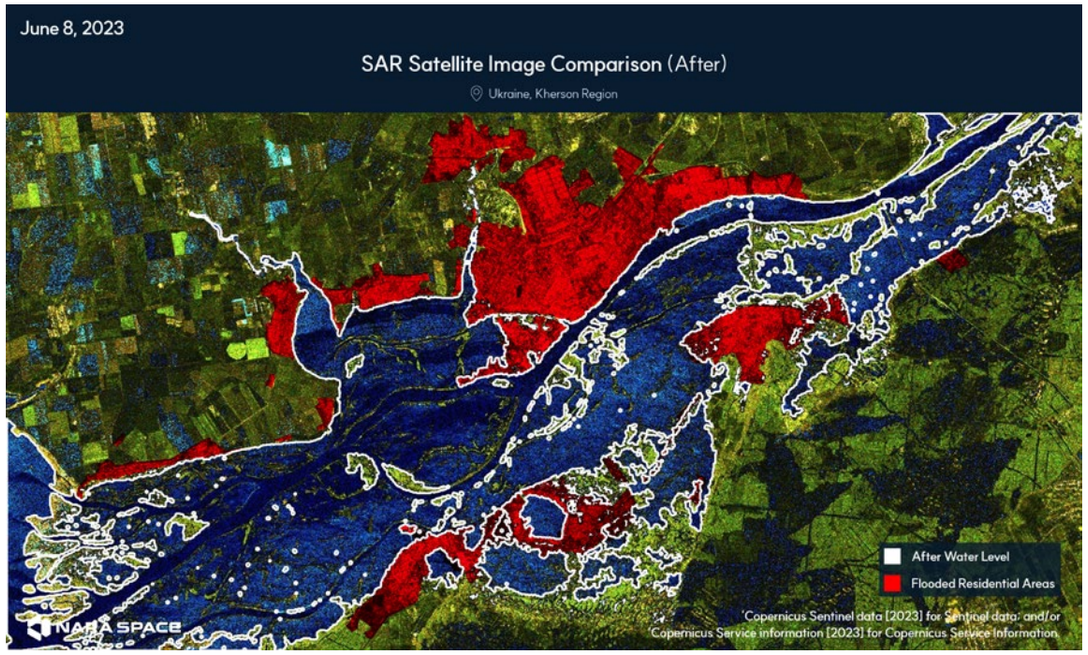
Farther and Faster: The Satellite Eye that Safeguards Critical Response Time

Using high-resolution satellite imagery and deep learning, we provide rapid and accurate assessments of natural disasters such as wildfires, floods, and landslides. Our solution identifies infrastructure damage (e.g., buildings, roads), analyzes ground subsidence risks with InSAR technology, and estimates financial losses to support effective disaster recovery planning. Over time, we generate disaster risk maps to help build proactive disaster prevention and response systems.

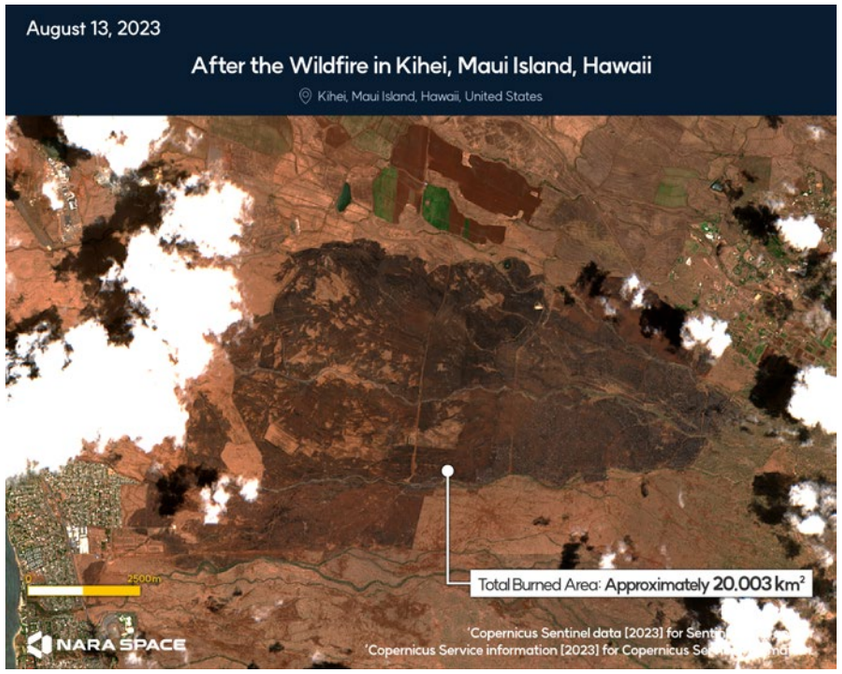
Ideal for organizations that:

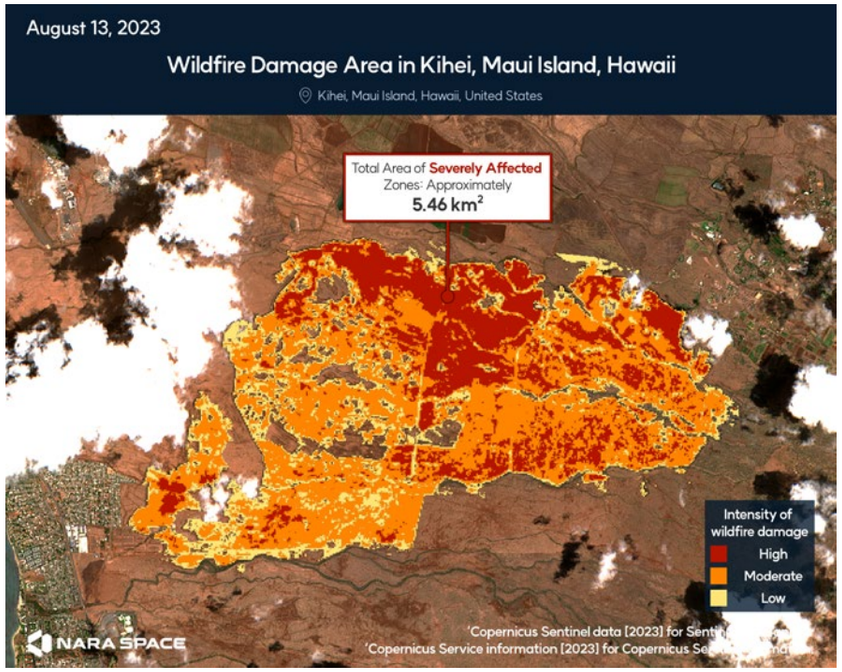
* Need satellite data to quantify disaster impact
* Handle insurance assessments or forecast potential losses
* Prioritize emergency aid based on damage severity





Insights from Satellite Imagery of the Dam Explosion Site in Ukraine





Entire Town Burned in Hawaii's Most Severe Wildfire Seen from Space

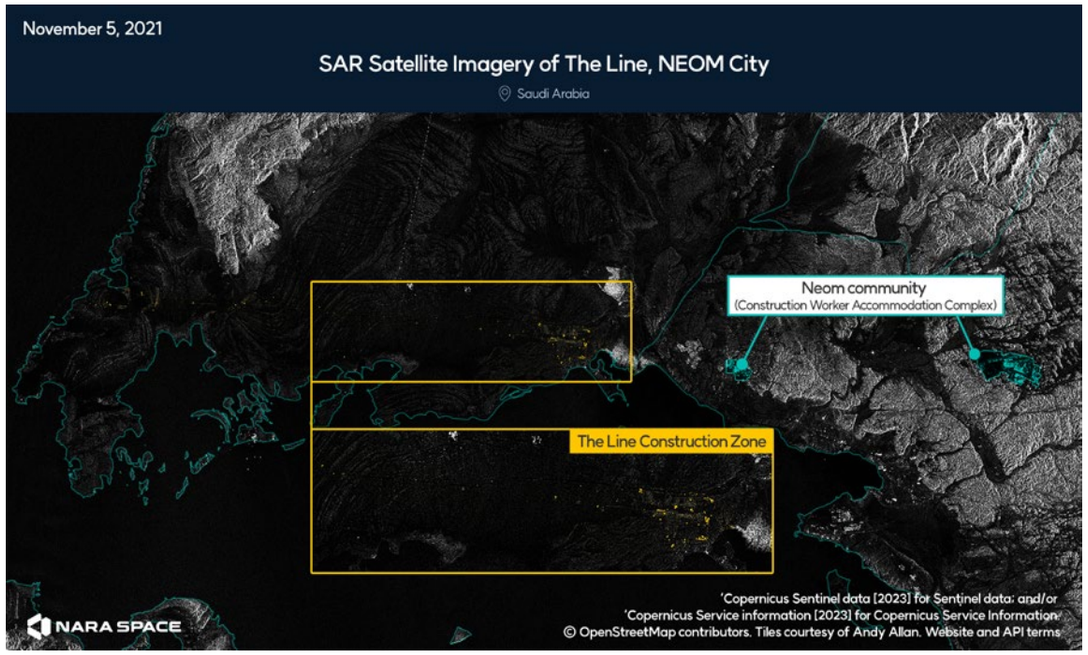
Urban / Infrastructure Management

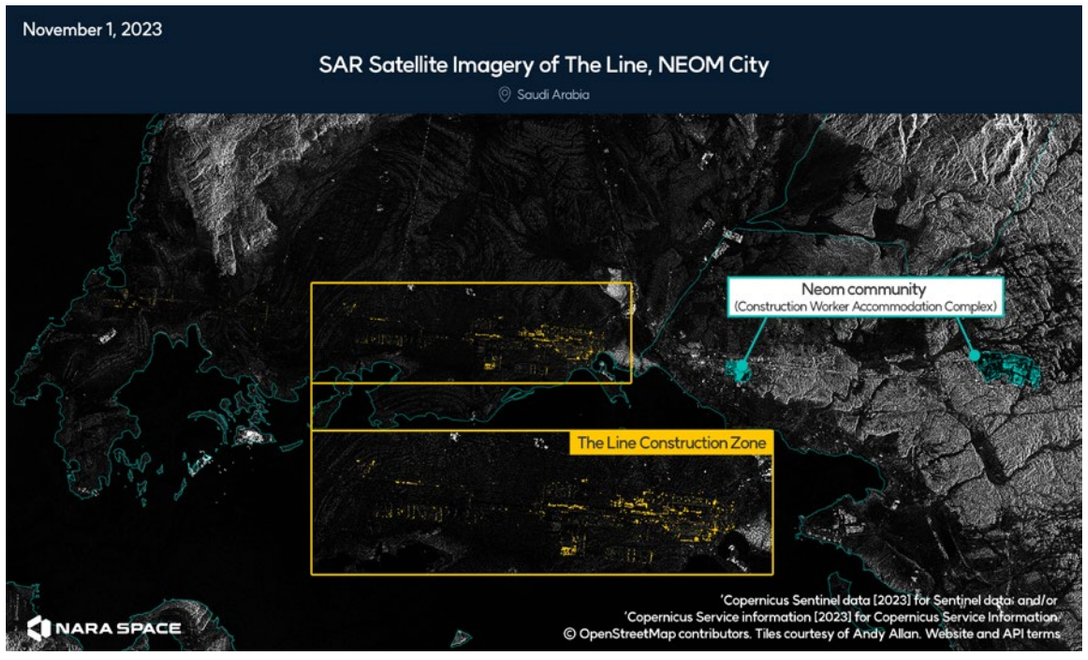
A Smarter, Sharper View of the City

Using satellite imagery and deep learning, we automatically detect key urban elements such as buildings, roads, and transportation assets, including vehicles, ships, and aircraft, to deliver up to date insights into city conditions. We also generate land cover maps that provide a clear overview of land use, making it easy to monitor and analyze urban change.

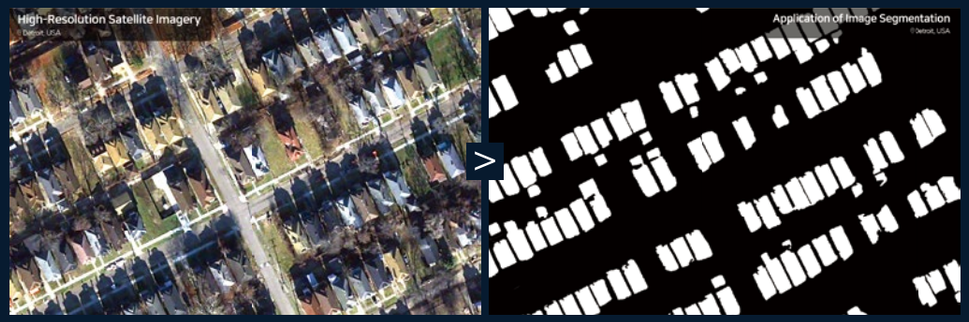
Ideal for organizations that:

* Plan urban renewal or manage housing and infrastructure
* Monitor land use changes and detect unauthorized construction
* Develop urban infrastructure and smart city strategies



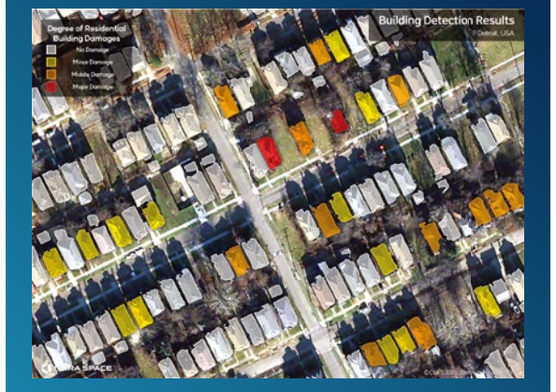


Saudi Mega Project 'Neom City'



Building detection model (Image Segmentation)

Building damage detection model (Object Detection)



Results of the building analysis algorithm

*Jointly developed with Professor Park Yoon-mi's team at Seoul National University

Environment

The Most Reliable Data for a Sustainable Future

We use satellite imagery to track environmental changes and support climate action and resource management. We monitor carbon sinks through land cover, forest, and vegetation analysis, manage water resources by observing dam levels and coastline shifts, and support renewable energy planning by detecting sea ice, drought conditions, and solar panel distribution.

Ideal for organizations that:

* Develop climate strategies or pursue carbon neutrality
* Analyze ecosystem data for environmental research
* Use data to guide ESG and carbon-focused investments

Mangrove Forests, the Solution to Global Warming, Are Being Destroyed?

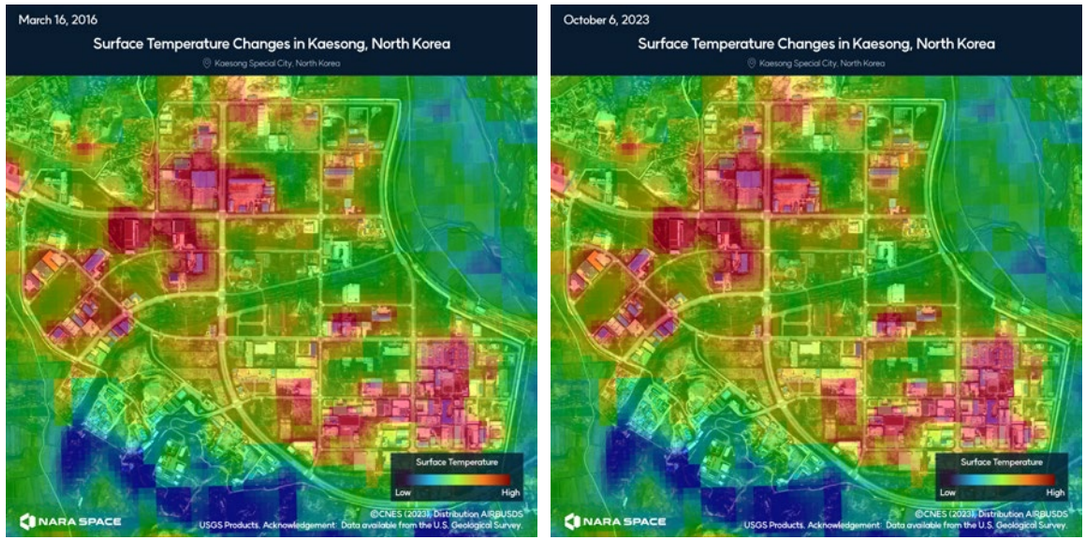
Defense & Security

Strategic Advantage Through Superior Intelligence

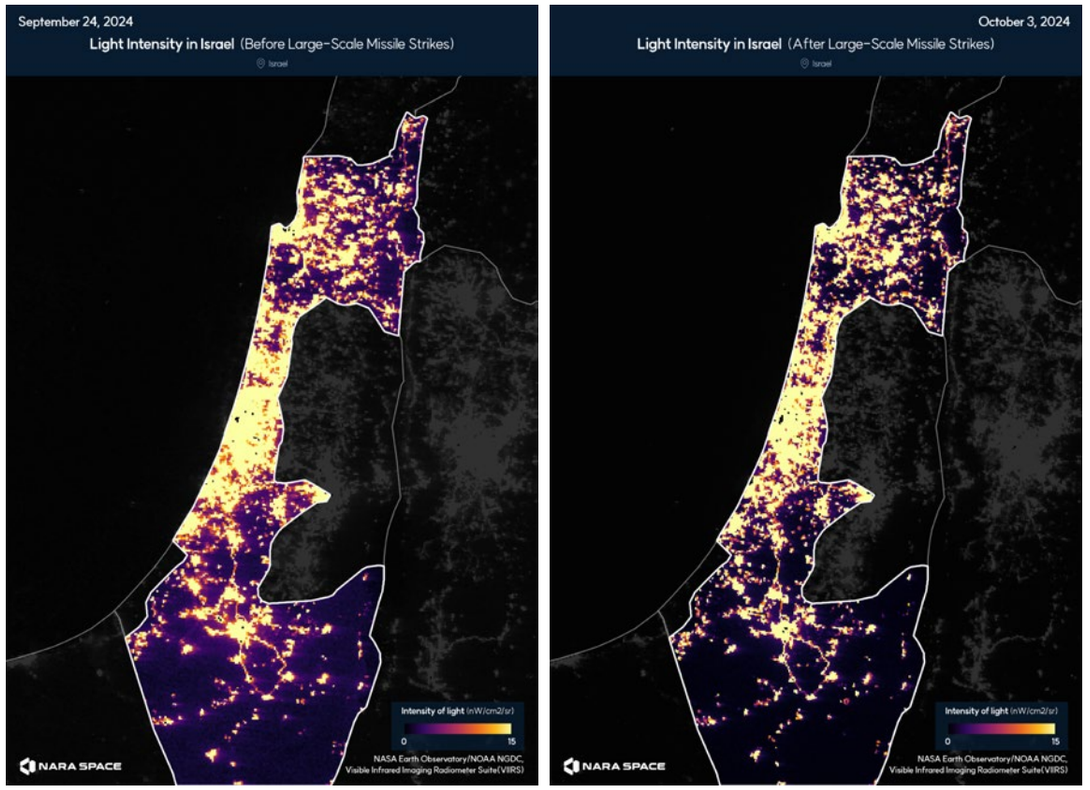
We analyze optical and SAR satellite imagery to quickly detect changes in areas of interest, regardless of weather or time. This enables rapid identification of military and infrastructure changes, precise tracking of land, sea, and air movements, and early detection of potential threats. We also provide quantitative damage assessments in conflict and disaster zones to support fast decision-making and mission planning.

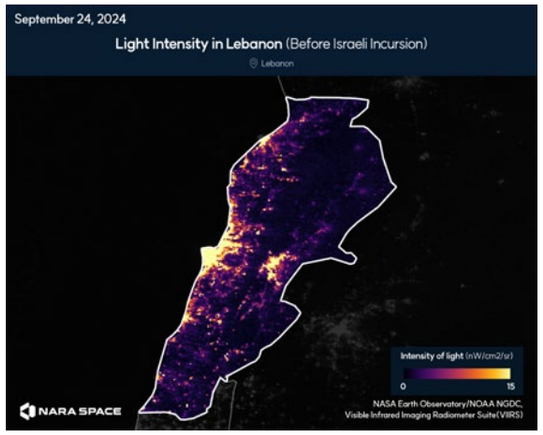
Ideal for organizations that:

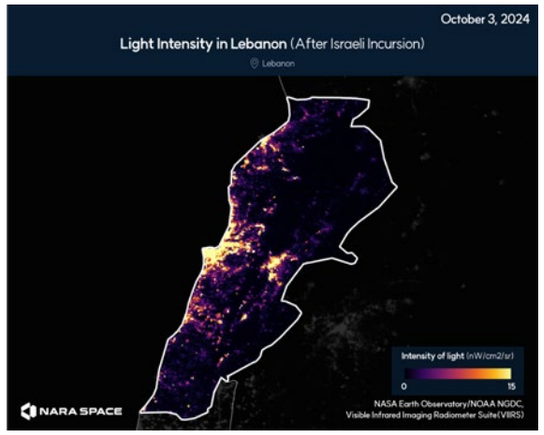
* Monitor conflict zones and potential threats
* Rely on geospatial intelligence for strategic decision-making

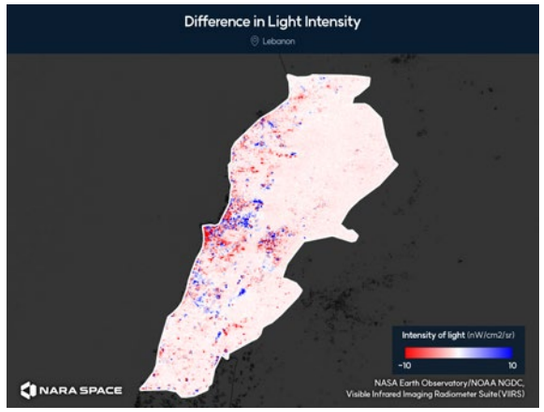


Unauthorized Operation Caught at Kaesong Industrial Complex, Along With Disappeared Buses









Israel-Hezbollah Clashes: Middle East Conflict Exposed by Satellite Images

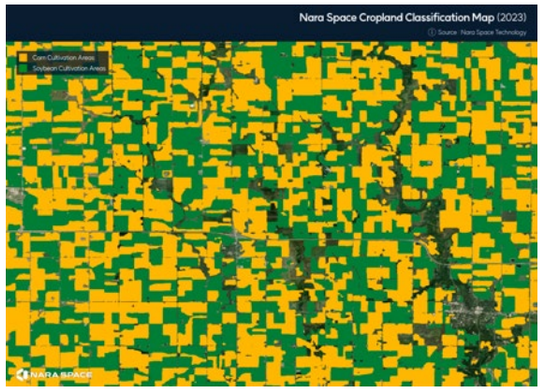
Agriculture

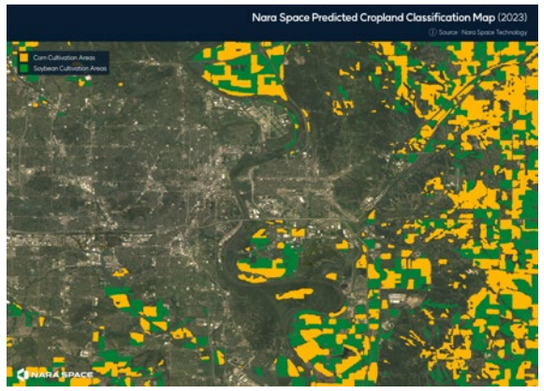
Farming with Data — The Start of Smarter Agriculture

We analyze satellite imagery to assess crop health and forecast future yields. By predicting the productivity of key crops such as corn, soybeans, and wheat, and providing detailed crop classification analysis, we help optimize cultivation plans with scientific data—enhancing efficiency and reducing uncertainty in agriculture.

Ideal for organizations that:

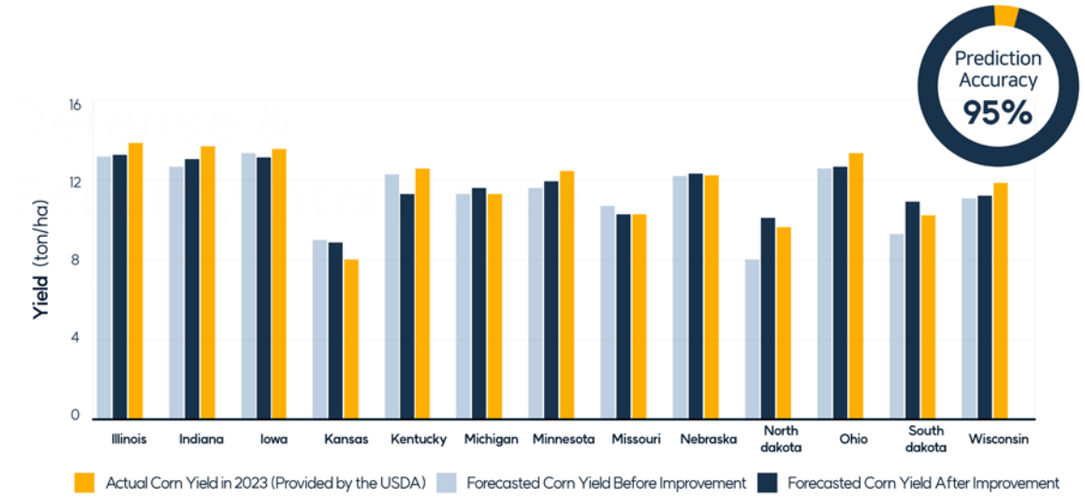
* Need to continuously monitor crop health and development
* Analyze crop prices and forecast agricultural yields
* Evaluate investment risks in agriculture and agribusiness





Performance comparison of actual corn yields with forecasted corn yields derived from the improved Nara Space corn yield forecast model (2023)

Source : USDA, Nara Space Technology



A new corn yield forecast model that has revolutionized the grain market

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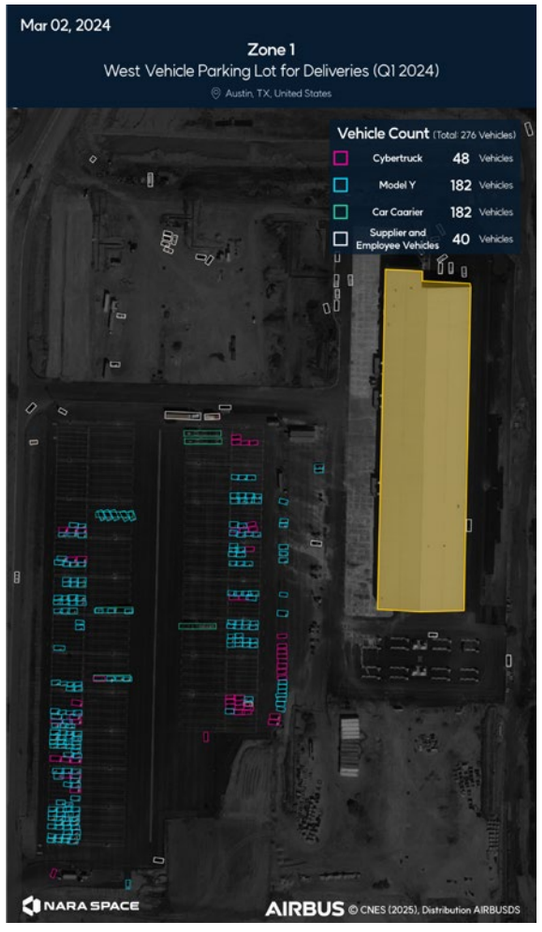
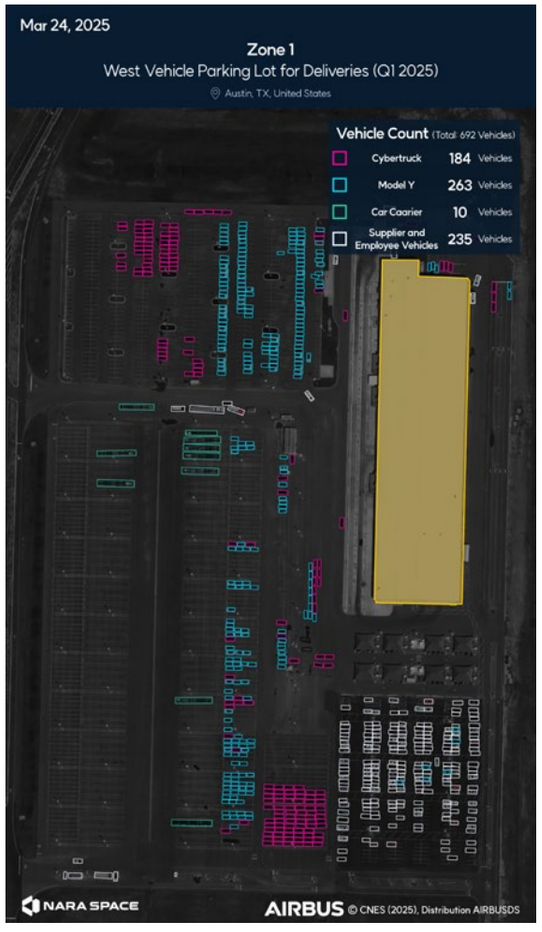
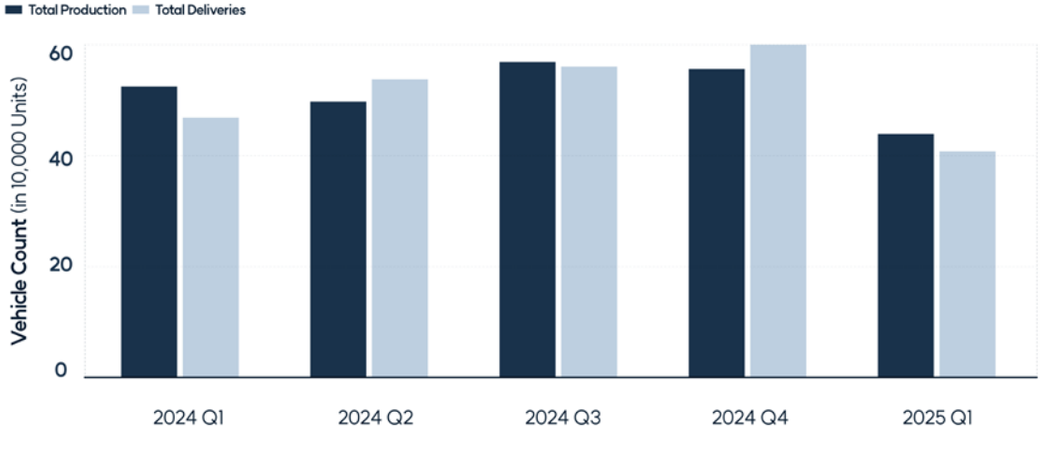




Quarterly Changes in Tesla's Total Production and Deliveries (Q1 2024 – Q1 2025)

Source : Tesla Investor Relations



Tesla Stock Price Trend (April 1, 2024 – April 21, 2025)

Source : Investing.com (Tesla Stock Price History)

	Date	Price	Key Stock Drivers
1	April 22, 2024	$142.1	Tesla's stock declined as demand for electric vehicles slowed and competition from Chinese automakers intensified.
2	June 13, 2024	$182.5	The stock rose after shareholders reapproved Elon Musk's $56 billion pay package and passed the proposal to relocate Tesla's corporate domicile to Texas.
3	July 2, 2024	$231.3	Tesla shares increased on strong Model Y sales, though the gains were limited by concerns over competition and tariffs in the Chinese market.
4	August 7, 2024	$191.8	The stock fell after the robotaxi unveiling event was postponed, which sparked concerns about delays in autonomous driving commercialization.
5	October 10, 2024	$238.8	Shares dropped due to the lack of specifics in the robotaxi announcement, prior expectations being already priced in, a broader tech sector downturn, and continued concerns over Chinese competition and tariff risks.
6	December 17, 2024	$479.9	The stock rose on expectations of increased vehicle deliveries in Q4 2024, growth in the Megapack energy storage business, and optimism over pro-business policies under a potential second Trump administration.
7	January 29, 2025	$389.1	Tesla's share price declined due to projections of slower growth in 2025, poor sales in China, and heightened concerns over tariffs.
8	February 5, 2025	$378.2	The stock remained under pressure amid discussions of imposing steep tariffs on Chinese electric vehicles and components under the new Trump administration.
9	March 10, 2025	$222.2	Tesla shares declined after the company delayed the U.S. release of the low-cost Model Y, while competing brands launched affordable models, raising market share concerns.
10	April 9, 2025	$272.2	The stock rebounded during a broader market rally as investors sought buying opportunities following an extended oversold condition.
11	April 21, 2025	$227.5	Tesla's stock fell ahead of the Q1 earnings release due to uncertainty over results, tariff and production delays, and political controversies involving Elon Musk.

Satellite Clues to Tesla's Production Shifts and Stock Volatility

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