

Press Kit

COMPANY OVERVIEW

constellr is Europe's leading provider of high-resolution thermal earth observation. Its mission: to deliver precise, reliable, and continuous temperature intelligence from space to support critical infrastructure, environmental systems, urban management, and strategic monitoring.

Headquartered in Freiburg, Germany, constellr operates a sovereign-grade constellation of thermal satellites, designed to provide day and night monitoring at high resolution with absolute radiometric accuracy. Through its Constellation-as-a-Service (CaaS) model, constellr offers governments and institutions secure, on-demand access to thermal insights that support resilience and data-driven action.

INVESTORS

LAKE
STAR

AMATHAON
CAPITAL

vsquared
ventures

eit

Food

iqt IN-Q-TEL™

European
Innovation
Council



Co-funded by
the European Union

next

Co-funded by the
European Union



FTTF

Natural
Ventures

OHB

SPACEBEL

SERAPHIM

KEY FACTS

80+ total employees

2025 first 2 satellites launched

€50+ million capital raised



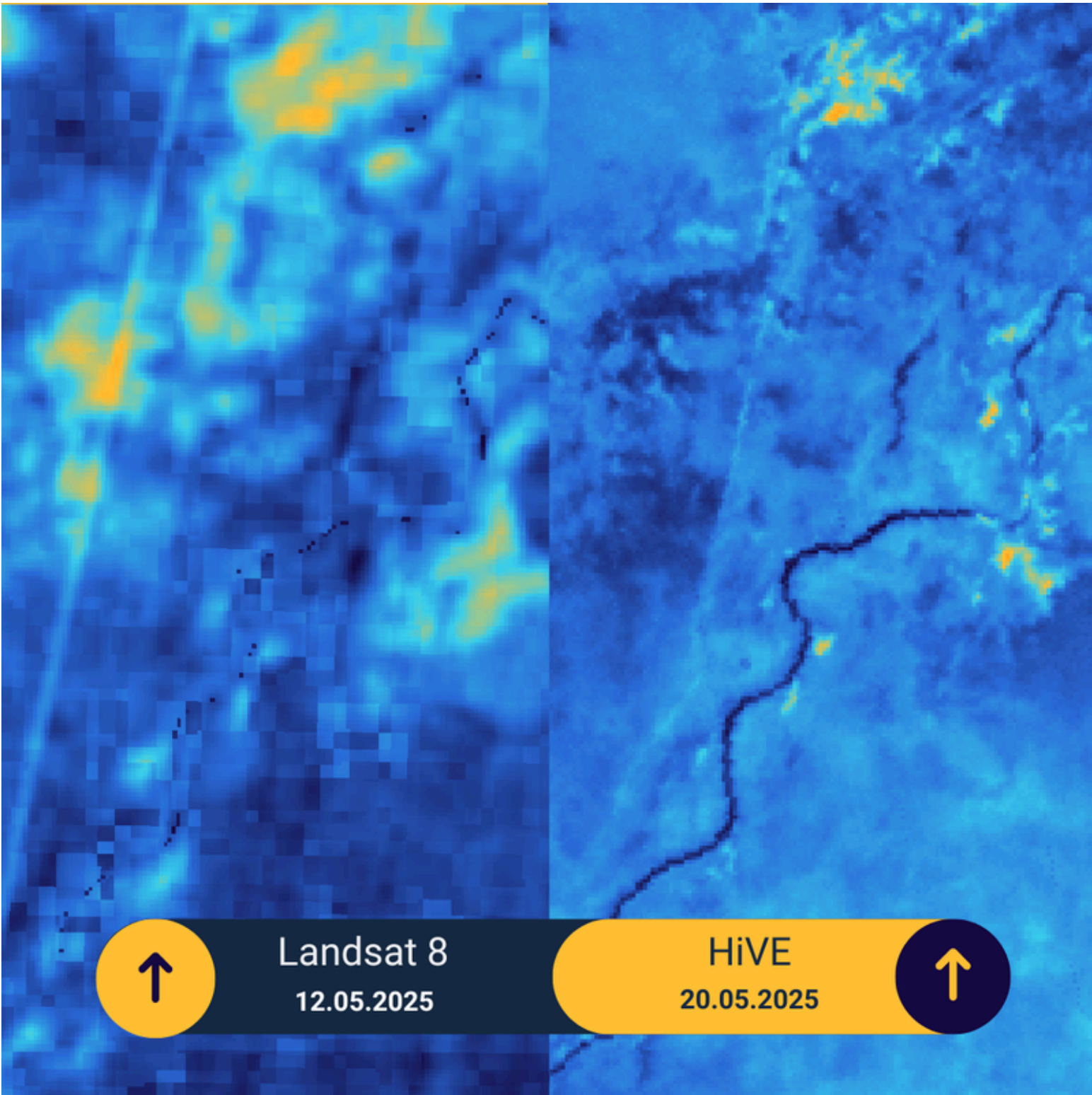
HQ in Germany

WHY THERMAL?

By leveraging our proprietary high-resolution thermal imagery, you can explore your areas of interest like never before, unlocking insights and analytics that were previously out of reach. constellr's data unlocks capabilities and information that weren't available before:

- Anomaly Detection: Identify changes in activity, overheating, material fatigue, leakage and energy loss
- Trend Analysis: Track long-term temperature changes reliably for smarter decision-making.
- Granular Detail: Zoom in to street- and neighbourhood-scale for pinpoint accuracy.
- Data Integration: Fuse thermal and optical layers for a complete perspective.

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KEY FACTS

2 Satellites launched
SkyBee-1 (January 2025)
SkyBee-2 (June 2025)

1.5-3 days frequency
up to twice daily in key regions

30 m spatial resolution
resampled to 10 m; absolute LST with high thermal sensitivity

 **Observation**
day and night thermal infrared

TECH SPECS

Constellation Name: HiVE (High precision Versatile Ecosphere)
Orbit Type: Sun-synchronous polar orbit
Orbit Altitude: ~510 km
Orbit Period: ~95 minutes (1.5 hrs per orbit)
Revisit Time:
1 satellite: 3 days
2 satellites: 1.5 days, up to twice daily in key regions

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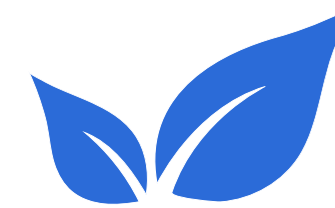
Defense & Strategic Applications

- Monitor thermal activity around critical infrastructure
- Support sovereign intelligence needs with persistent temperature insight
- Strengthen national risk preparedness with independent data access



Infrastructure & Urban Resilience

- Track thermal stress on roads, railways, and energy systems
- Assess heat island effects and optimize cooling strategies
- Support infrastructure maintenance with predictive data



Environmental Monitoring

- Enable early warning for drought-prone or climate-vulnerable zones
- Monitor thermal shifts in water, soil, and vegetation over time
- Provide consistent input to environmental models and policy planning

Customers highlights

We work with commercial and governmental customers worldwide.

