CARTO

The Sovereign AI Imperative

Why Location Intelligence in Financial Services Can't Afford a Black Box

GWF 2026 - Session 3 - Financial and Risk Intelligence
Location Analytics for Payments, Insurance, and Investments

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FSI is facing two distinct pressures

Location data powers the most valuable FSI use cases and sits at the intersection of the industry's two hardest problems: Regulators want more oversight. Boards want more AI. The gap is where risk lives.

Data Sovereignty

Customer addresses, transaction locations, property portfolios, and claims footprints are regulated. **They cannot leave the institution's controlled environment** - not for an LLM or cloud mapping platform.

DORA
Operational resilience, third-party risk
GDPR + data residency
Cross-border transfer constraints
EU Data Act + sectoral rules
Sovereign cloud mandates

Black-box AI

Spatial reasoning chains operations - joins, aggregations, enrichment. Generic AI agents produce answers **you can't reconstruct, reproduce, or defend to a regulator**. "The model found a hotspot" is not an answer.

Spatial hallucination
Plausible hotspots, invented relationships
No reproducible audit trail
Cannot re-run the spatial analysis later
Opaque model provenance
Unknown training data, unvetted weights

High risk AI obligations are coming

In 2026, high-risk AI obligations under the EU AI Act become enforceable - including credit scoring and insurance pricing, which routinely use geospatial features.

fines

multi-million fines

EU AI Act fines
Geospatial features used in credit scoring and insurance pricing - flood zones, address-level risk, proximity variables - inherit the full high-risk regime.

zero

acceptable hallucinations

Maps you can't reproduce
Regulators haven't set a hallucination threshold, because hallucination isn't acceptable for critical decisions. "The AI drew this" is not defensible.

2026

EU AI Act enforcement

High-risk deadline
High-risk AI obligations are enforceable. Traceability, human oversight, conformity assessments are required for AI using geospatial data.

From black-box AI to sovereign, agentic geo

Three architectural principles that let FSI institutions use AI for geospatial analysis.

01

Data that never moves

Analytics should run inside your own infrastructure. No data egress. No vendor-hosted copies. Residency, DORA, and sector rules are satisfied.

CARTO deploys on top of your existing infrastructure.

02

Every step inspectable

An agentic workflow is a chain of defined, auditable tools orchestrated by AI. Each step should produce code your team can read, version, and replay.

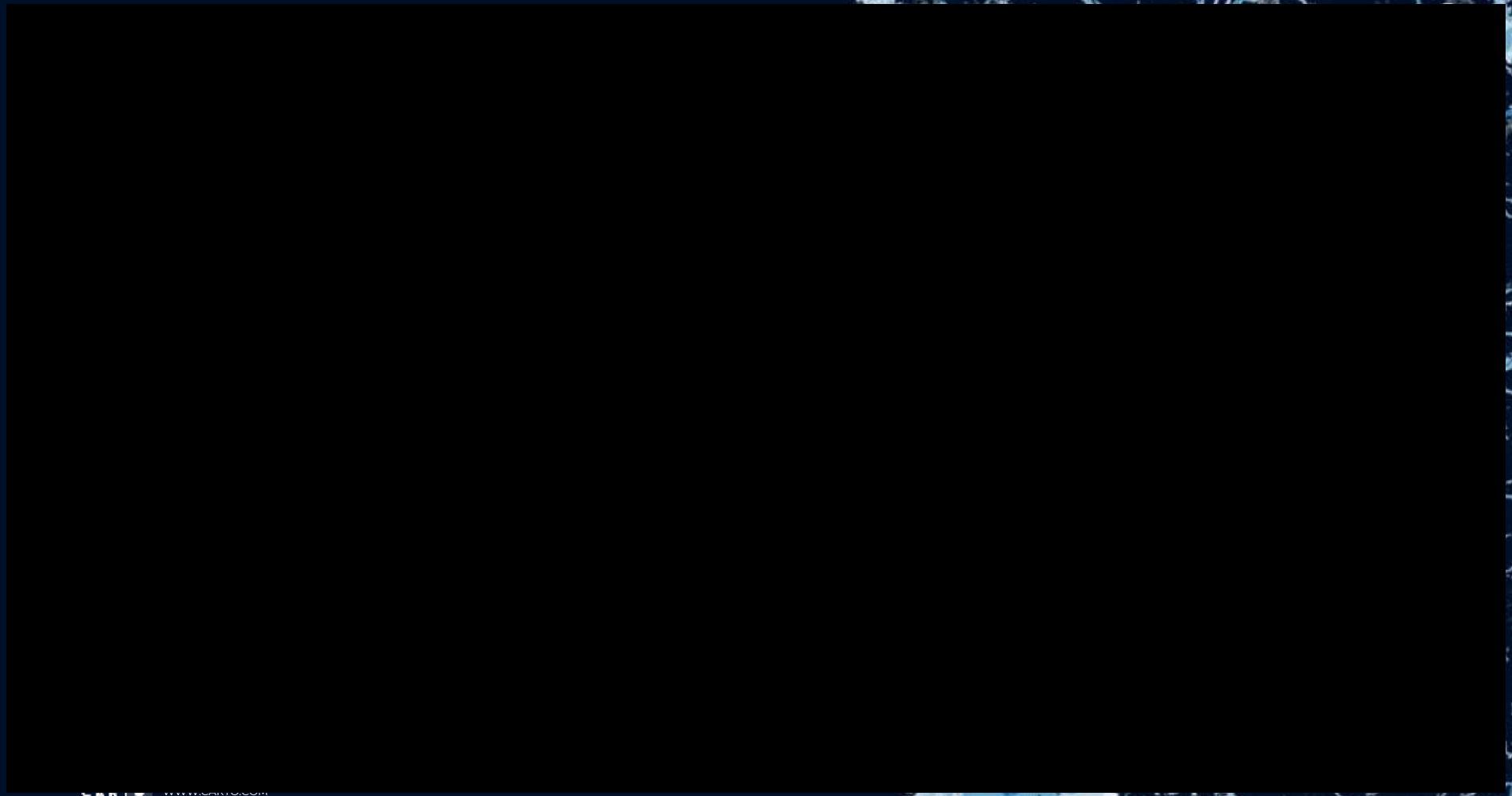
Every CARTO agent action is a reproducible query.

03

Your own, vetted AI

Connect the LLM your risk and compliance teams have approved - including private, on-prem, or region-locked deployments - and swap it as governance matures.

Bring your own vetted LLM to CARTO.



Geospatial AI in FSI is not a capability challenge

It just needs the right architecture

Keep your data sovereign

Keep your reasoning auditable

Keep your own model

Thanks! Stop by booth #46 to learn more

(We have some free tickets to the Spatial Data Science Conference in London on 14th May, while they last!)