



3D, Digital Twins & AI

powering the future of geospatial

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90%

of all data was created during the last 2 years



80%

of all decisions in public space are based on “geolocation”

Digital Twins

connecting disciplines
through geolocation

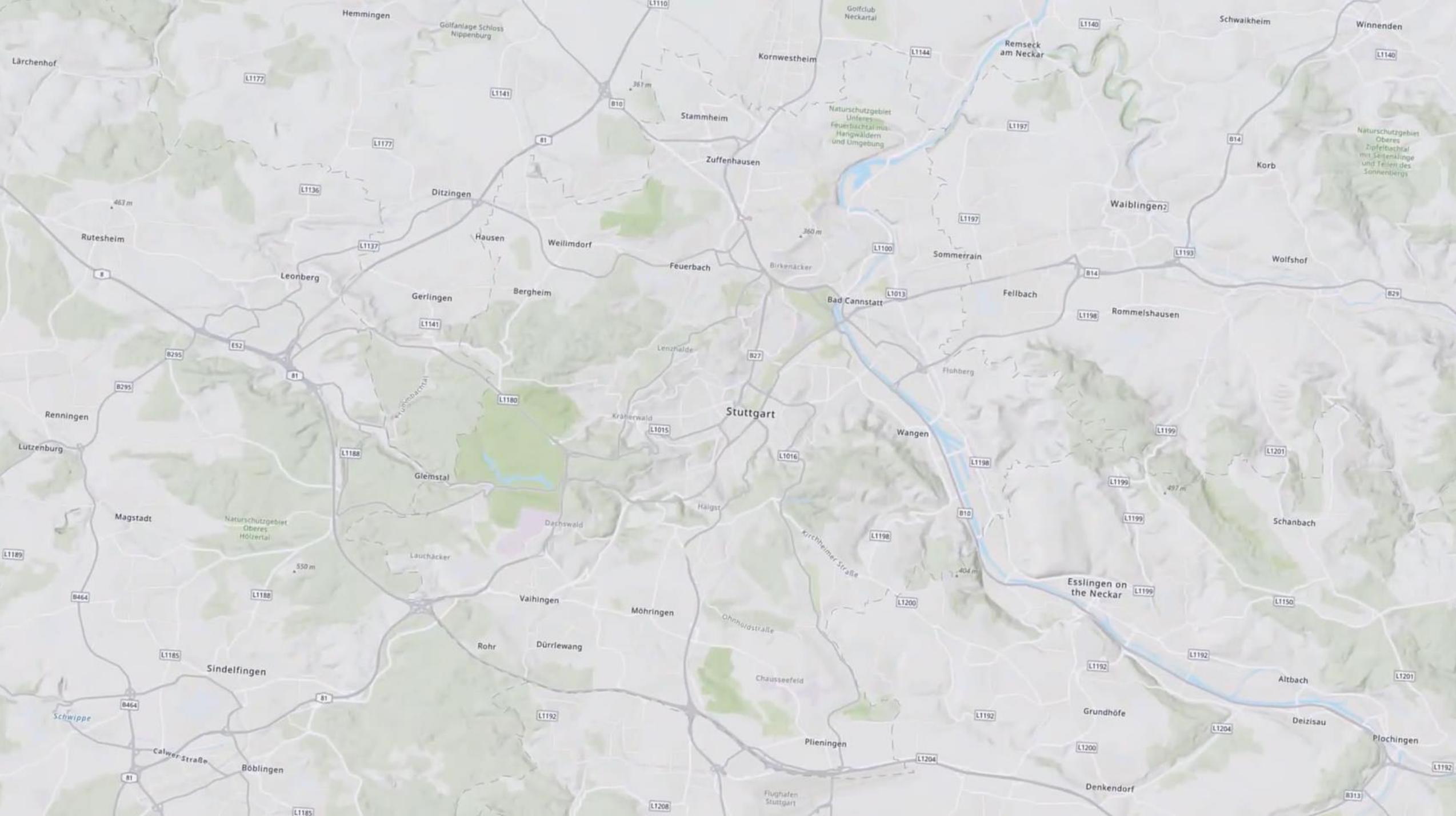
... creating shared understanding



Ingredients of spatial Digital Twins

1. Enterprise IT
& connected platforms
2. Real time data & IoT
3. Reality Mapping
4. AI & simulation





Infrastructure Assets are inherently geographic

...operating across interconnected, complex environments

BIM



Humanity &
Society

Built
Environment



Natural
Environment

EIA

Environmental
Stewardship

Social Equity

Economic
Resilience

GIS

connecting platforms for holistic understanding - towards a regenerative approach

GIS & AI



GeoAI

*Advancing the Science
of GIS Using AI*



AI Assistants

*Improving Access, Efficiency and
Productivity*



AI Agents

*Enabling agentic (intelligent)
workflows*

trusted

secure

scalable

open



Agent to Agent

A2A
MCP



AI Framework

*Foundational Enterprise AI Technology
Sovereign*

extensible





Gaussian Splats – Cambridge
Drone imagery, Data courtesy: Esri



Gaussian Splats – Utrecht
Aerial imagery 2.5cm GSD, Data courtesy: Kavel 10



Measure Distance

Planar Feet

Result



Distance

Segment (ft)	Path (ft)	Sum (ft)
3.98	3.98	3.98

Path Net Bearing: 111°

Path Net Distance: 0.00 ft

Path Net Elevation Change: 0.00 m



3.98 ft
3.98' = 47.8"



Courtesy of XGRIDS

Digital Sovereignty

- Connected platforms
- Open Standards
- Developer APIs
- Custom deployment
- Local AI models
- Local support teams



Digital Twins

connecting disciplines
through geolocation

... jumpstarting Digital Transformation

