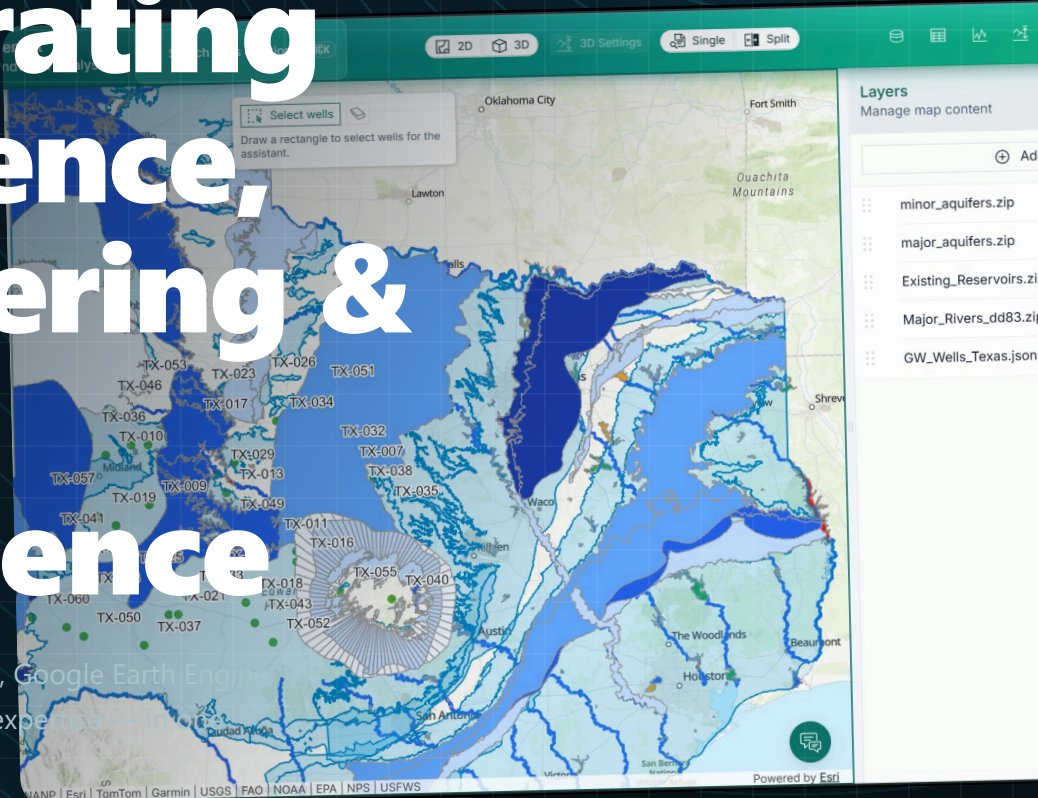


AI-POWERED DIGITAL GEOSCIENCE PLATFORM

Accelerating Geoscience, Engineering & Spatial Intelligence

AI, enterprise GIS, remote sensing, Google Earth Engine, spatial analytics, and geoscience expertise in one platform.



Plato GIS

Hydro GeoScientist

GeoTech Scientist

Data Hub

Fleet Management

WE COMBINE

Six capabilities. One geoscience platform.

We bring together the disciplines that usually sit in separate teams and tools — so organizations make faster, more informed, and more consistent decisions.

01

Artificial Intelligence

Governed agents and assistants running reviewable, tool-based workflows.

02

Enterprise GIS

A browser-based GIS foundation for maps, layers, and analysis.

03

Remote Sensing

Satellite and historical imagery with change detection in context.

04

Google Earth Engine

Planetary-scale analysis for terrain, land cover, water, environment.

05

Spatial Analytics

Contours, profiles, statistics, correlation, subsurface modelling.

06

Geoscience Expertise

Groundwater, geotechnical, and earth-science workflows by practitioners.

5

Modules on one governed foundation

79+

Registered tools AI agents can call

100%

Browser-based — no desktop install

THE GEOSCIENCE INFORMATION CHALLENGE

Spatial and subsurface knowledge is scattered.

GIS, groundwater, geotechnical, operational, and field data live in separate tools — making analysis slow, collaboration hard, and decisions difficult to defend.

Disconnected tools

GIS, monitoring, subsurface, and operations systems that don't talk to each other.

Fragmented data

Records spread across spreadsheets, PDFs, and files with no shared identity.

Limited spatial context

Evidence is hard to see together on one map or in a shared 3D picture.

Manual reporting

Maps, logs, and reports re-assembled by hand for every deliverable.

Fragile traceability

When a result is questioned, the path back to source is unclear.

AI without guardrails

Point tools that can't be reviewed, audited, or trusted in production.

ONE PLATFORM, FIVE MODULES

Domain modules on a shared foundation.

Each module is a focused application in its own right — sharing one governed data foundation, one map, and one AI layer.

ENTERPRISE GIS**Plato GIS**

AI-powered enterprise Web GIS for mapping, analysis, imagery, and operational spatial workflows.

GROUNDWATER & HYDROGEOLOGY**Hydro GeoScientist**

Groundwater monitoring, wells, IoT loggers, logs, correlation, and recharge intelligence.

GEOTECHNICAL**GeoTech Scientist**

Ground investigation — boreholes, CPT, laboratory, cross sections, 3D models, interpretation.

DATA FOUNDATION**Data Hub**

The governed data backbone — records, imports, editing, and audit behind every module.

FIELD OPERATIONS**Fleet Management**

Vehicles, drivers, live map, maintenance, dispatch, and fuel for field operations.

POWERED BY**AI • Remote Sensing
GEE • Analytics**

Cross-cutting capability layers running across every module.

FROM ONE DATA FOUNDATION TO DECISIONS

Captured once. Worked by every module.



GOVERNED AI RUNS ACROSS EVERY STAGE — REVIEWABLE · TOOL-BASED · HUMAN-IN-THE-LOOP

Every output stays traceable to the record, borehole, well, or asset it came from.

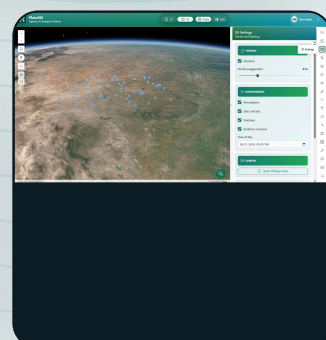
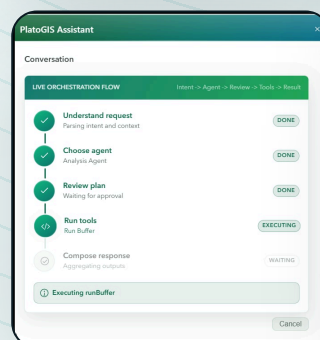
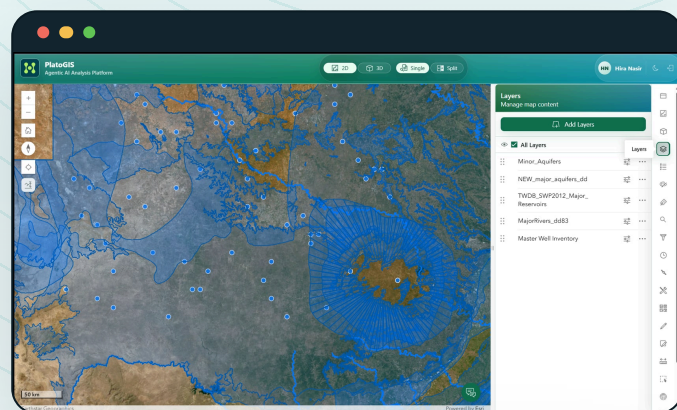
ENTERPRISE GIS MODULE

Plato GIS

AI-powered enterprise Web GIS for modern spatial operations

Operate web maps, portal layers, imagery, and analysis in one browser workspace — with AI agents connected to a registry of governed geospatial tools.

- Enterprise Web GIS and map operations
- AI agents and a registered tool library
- Remote sensing, 3D, and split-view
- Data onboarding, styling, and map production



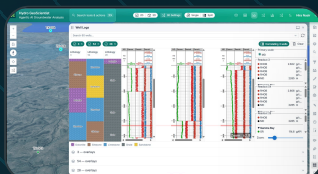
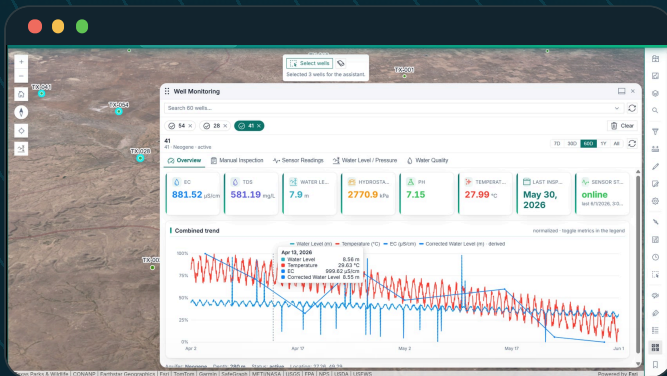
GROUNDWATER MODULE

Hydro GeoScientist

AI-enabled groundwater, wells, and hydrogeology intelligence

Monitor wells, integrate IoT loggers, analyze logs and recharge, and correlate the subsurface — with groundwater evidence on the map.

- Well monitoring and IoT logger integration
- Water level, EC, TDS, and pressure time series
- Well construction, logs, and correlation
- Recharge suitability and AI-assisted review



GEOTECHNICAL MODULE

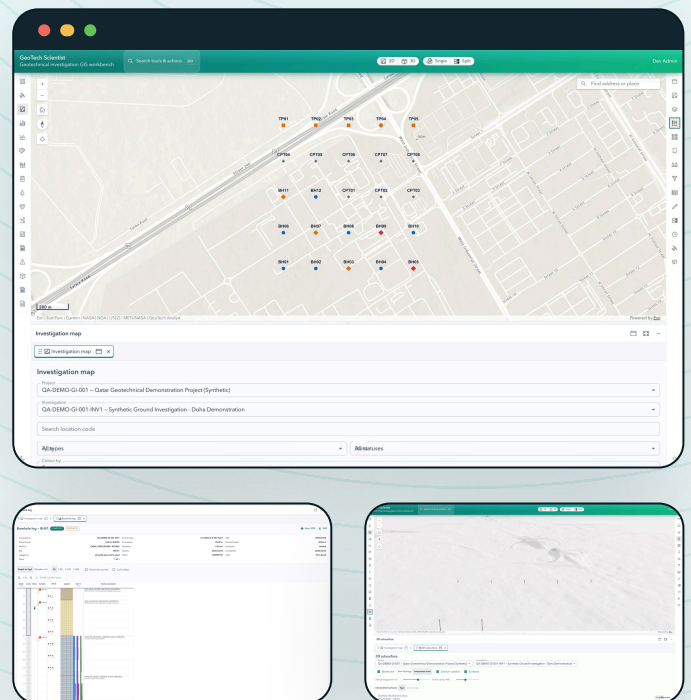
GeoTech Scientist

Integrated geotechnical investigation and subsurface intelligence

Bring boreholes, in-situ and laboratory tests, logs, cross sections, 3D ground models, and governed interpretation into one platform — traceable to source.

- Investigation mapping and borehole/CPT logging
- Laboratory data and soil/rock characterization
- Cross sections and 3D ground models
- Governed design parameters and AGS4/DIGGS

A dedicated GeoTech Scientist brochure is available.



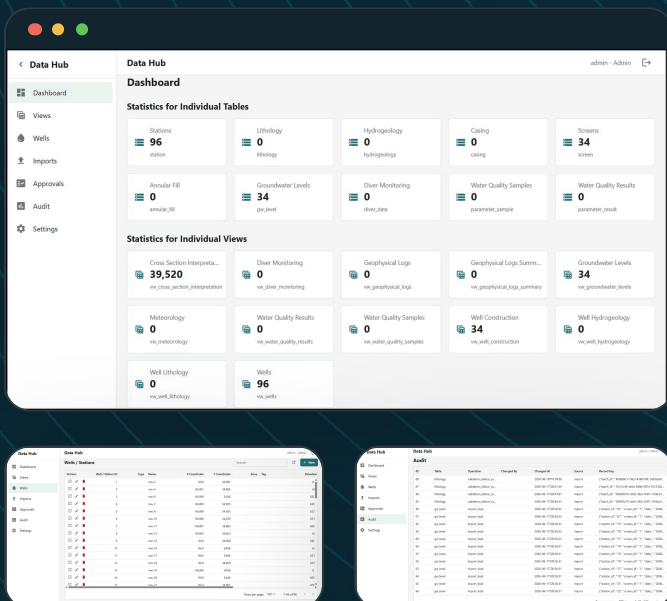
DATA & INTEGRATION MODULE

Data Hub

The governed data backbone for the platform

Import, edit, govern, and audit the operational records every module depends on — keeping the data behind decisions organized, accountable, and traceable.

- Structured record management and imports
- In-place editing with field-level context
- Water-level and time-series ingestion
- Audit logs and governed application views



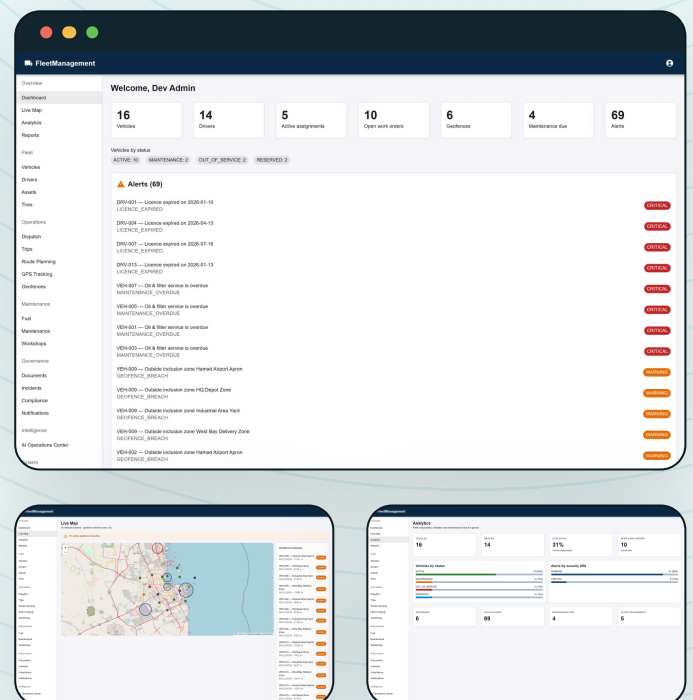
FIELD OPERATIONS MODULE

Fleet Management

Connected fleet, asset, and field operations

Manage vehicles and drivers, track them live, schedule maintenance, and dispatch work — connected to the same spatial foundation as the rest of the platform.

- Vehicle/asset register and driver records
- Live map, GPS, and geofences with breach alerts
- Maintenance, work orders, and fuel tracking
- Dispatch, trips, and fleet analytics

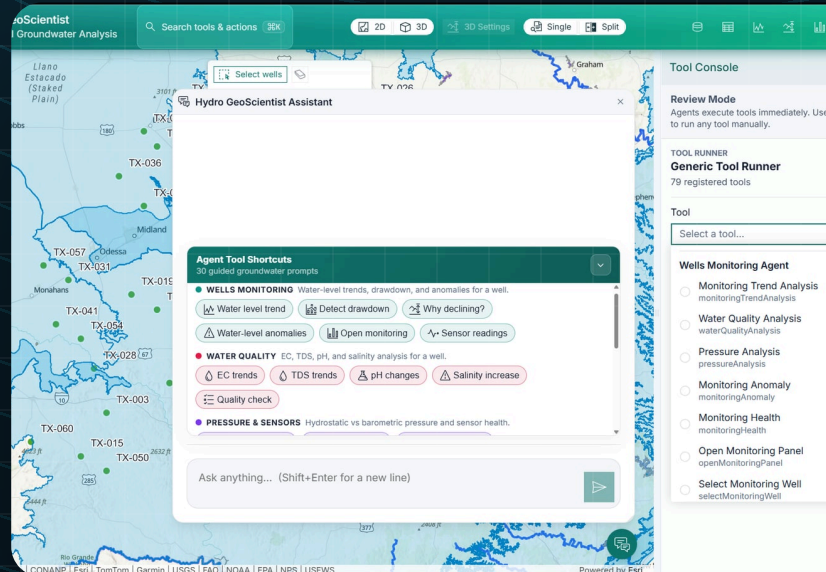


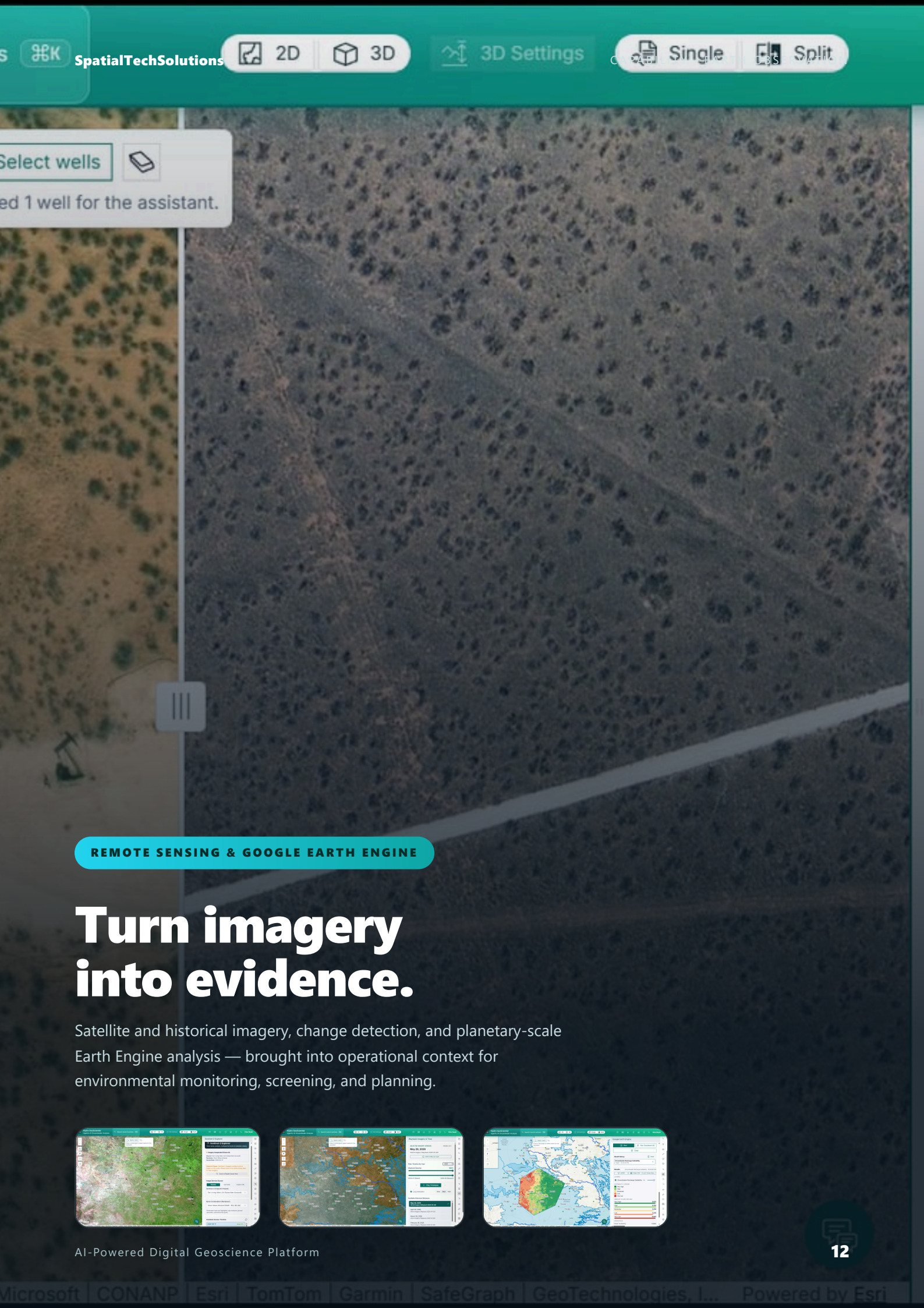
GOVERNED AI

AI that assists — and can be reviewed.

Across the platform, AI agents turn plain-language requests into reviewable, tool-based workflows. Every step is visible, and a human stays in the loop where governance matters.

- Natural-language requests routed to registered tools
- Visible, auditable agent steps
- Read-only, governed data assistants
- AI assists professionals — it does not replace review





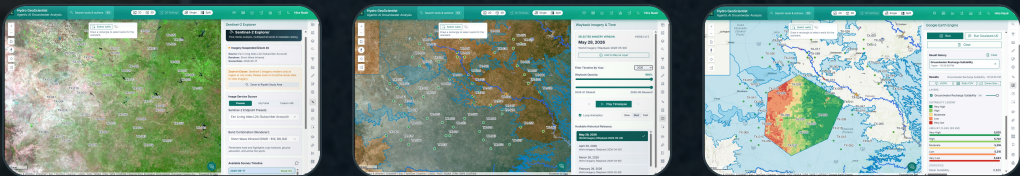
Select wells

ed 1 well for the assistant.

REMOTE SENSING & GOOGLE EARTH ENGINE

Turn imagery into evidence.

Satellite and historical imagery, change detection, and planetary-scale Earth Engine analysis — brought into operational context for environmental monitoring, screening, and planning.

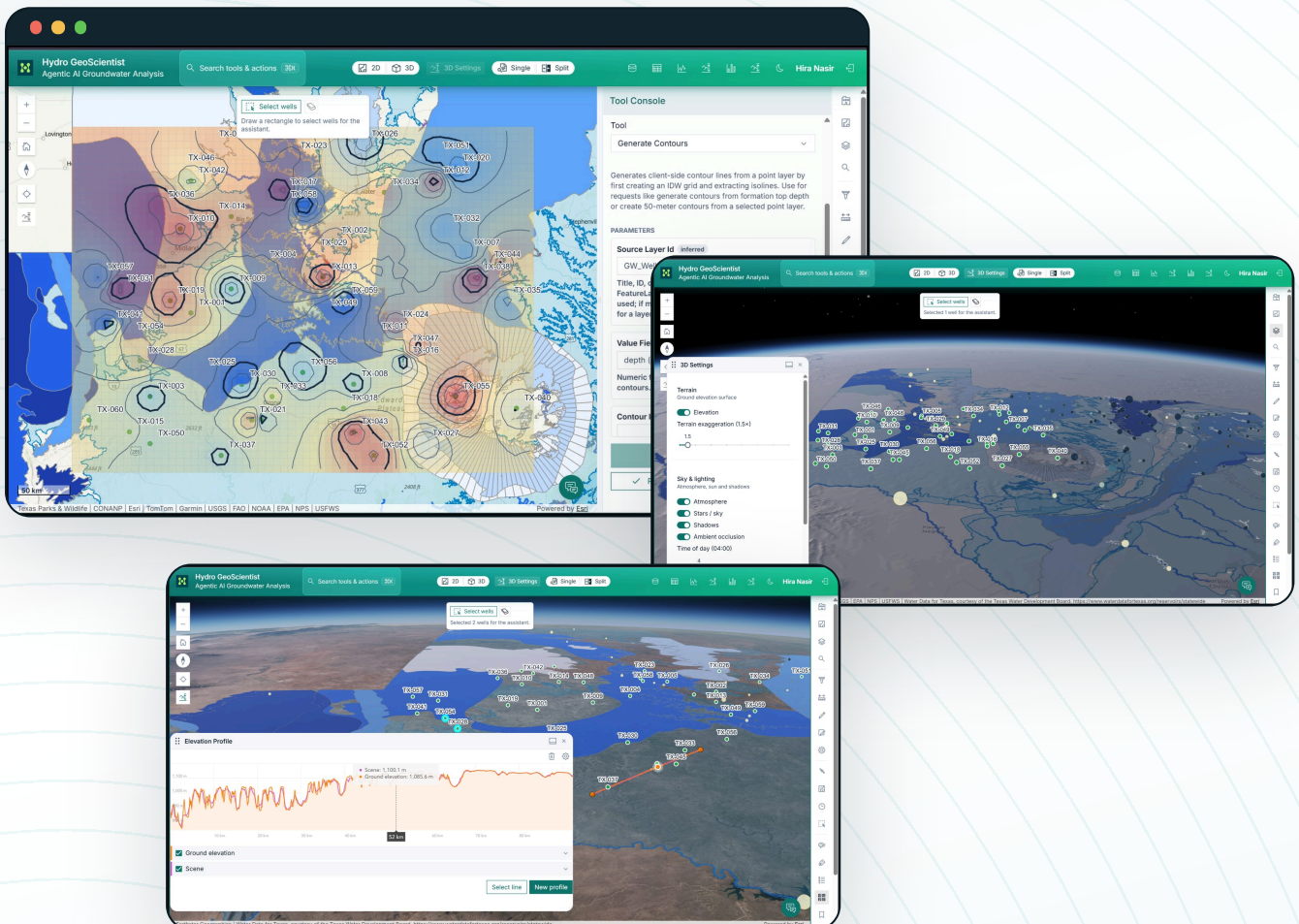


AI-Powered Digital Geoscience Platform

SPATIAL ANALYTICS & VISUALIZATION

Analysis that stays map-native.

Contours, elevation profiles, statistics, and measurements — then move from 2D maps to terrain-aware 3D and split-view comparison for clearer technical review.



SOLUTIONS BY INDUSTRY

Built around the decisions each sector makes.

HYDRO · DATA HUB · GIS

Water & Environment

Groundwater monitoring, IoT loggers, recharge, environmental change.

GEOTECH · DATA HUB

Geotechnical & Ground Engineering

Investigation, logging, correlation, and design parameters.

GIS · GEOTECH · FLEET

Infrastructure & Construction

Site context, ground conditions, and field operations.

GIS · GEOTECH · FLEET

Mining & Resources

Imagery, terrain, subsurface context, remote operations.

GIS · DATA HUB · FLEET

Government & Utilities

Governed, repeatable spatial operations and asset management.

FLEET · GIS · DATA HUB

Transportation & Fleet

Vehicles, drivers, live tracking, and dispatch on the map.

INDUSTRY SPOTLIGHT

Water & Environment

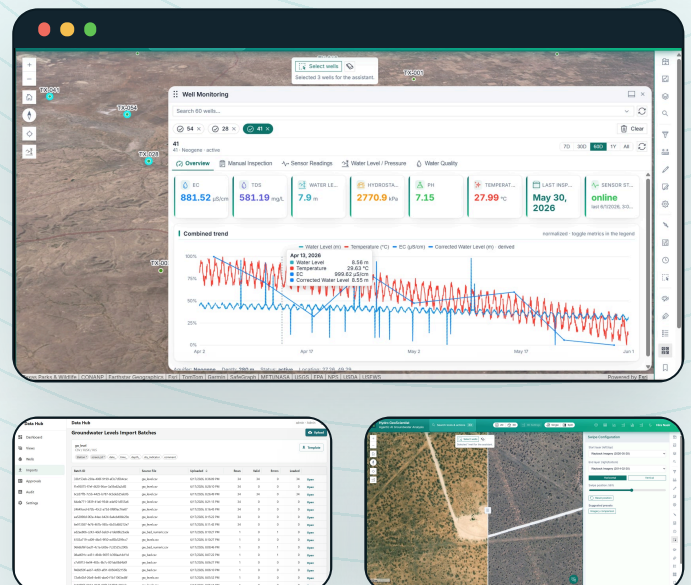
Water authorities and environmental teams monitor wells and aquifers, integrate IoT logger data, analyze recharge, and turn imagery into change evidence — governed in one place.

- Sensor-backed groundwater dashboards
- Automated water-level ingestion via Data Hub
- Recharge suitability and environmental change

Hydro GeoScientist

Data Hub

Plato GIS



INDUSTRY SPOTLIGHT

Infrastructure, Ground & Fleet

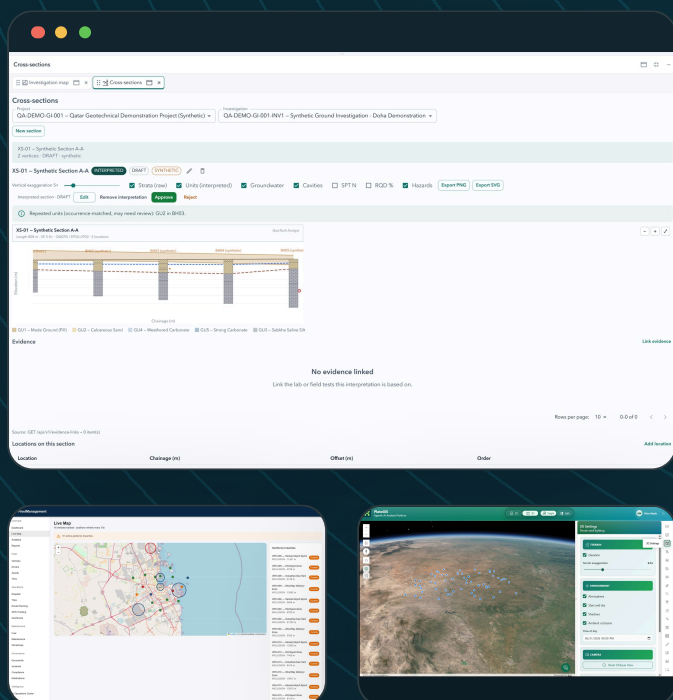
Infrastructure, construction, and resource teams combine enterprise GIS, ground investigation, and field operations — from route and terrain review to subsurface conditions and the fleet that delivers the work.

- Ground conditions and risk visible early
- Terrain, imagery, and measurement in one workspace
- Connected vehicles, drivers, and field operations

GeoTech Scientist

Plato GIS

Fleet Management

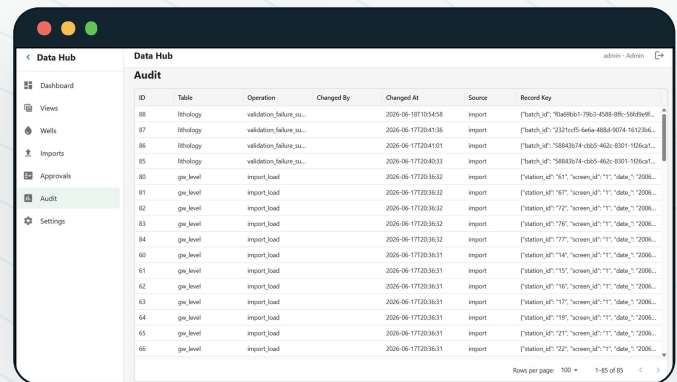


DATA FOUNDATION & GOVERNANCE

One governed foundation under everything.

The platform runs on a governed data foundation with roles, authentication, audit logs, and same-origin API access — so AI and analytics stay grounded in trusted, accountable records.

- Structured records shared across modules
- Audit logs and change history
- Roles, authentication, and secured access
- Web-based on a FastAPI + SQL Server backend



The screenshot shows a web application interface for 'Data Hub' with a sidebar menu containing 'Dashboard', 'Views', 'Wells', 'Imports', 'Approvals', 'Audit' (selected), and 'Settings'. The main content area displays an 'Audit' table with the following columns: ID, Table, Operation, Changed By, Changed At, Source, and Record Key. The table contains 10 rows of data, all showing 'import_load' operations on the 'gw_level' table, performed by 'gw_level' at '2026-06-17T20:36:31' via 'import' source. The 'Record Key' column contains complex identifiers.

ID	Table	Operation	Changed By	Changed At	Source	Record Key
88	lithology	validation_failure...		2026-06-18T10:54:58	import	[Batch_id,"1568888-7963-4088-89c-56d8d0d...
87	lithology	validation_failure...		2026-06-17T20:41:56	import	[Batch_id,"2321c055-6e5a-488d-9074-16123d6...
86	lithology	validation_failure...		2026-06-17T20:41:01	import	[Batch_id,"58843b74-c855-463c-8301-1d3ca1...
85	lithology	validation_failure...		2026-06-17T20:40:33	import	[Batch_id,"58843b74-c855-463c-8301-1d3ca1...
80	gw_level	import_load		2026-06-17T20:36:32	import	[Station_id,"61","scanners_id","1","date","2006...
81	gw_level	import_load		2026-06-17T20:36:32	import	[Station_id,"62","scanners_id","1","date","2006...
82	gw_level	import_load		2026-06-17T20:36:32	import	[Station_id,"63","scanners_id","1","date","2006...
83	gw_level	import_load		2026-06-17T20:36:32	import	[Station_id,"64","scanners_id","1","date","2006...
84	gw_level	import_load		2026-06-17T20:36:32	import	[Station_id,"65","scanners_id","1","date","2006...
61	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"13","scanners_id","1","date","2006...
60	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"14","scanners_id","1","date","2006...
62	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"15","scanners_id","1","date","2006...
63	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"16","scanners_id","1","date","2006...
64	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"17","scanners_id","1","date","2006...
65	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"18","scanners_id","1","date","2006...
66	gw_level	import_load		2026-06-17T20:36:31	import	[Station_id,"19","scanners_id","1","date","2006...

Audit logs and governed records behind every module.

SERVICES & DELIVERY

Platform product, backed by expert services.

GIS enterprise architecture

Assess systems, data flows, integrations, and deployment patterns.

AI-enabled applications

Build web GIS applications with AI-assisted user experiences.

Geospatial data management

Structure, migrate, govern, and integrate spatial datasets.

Analytical applications

Dashboards, monitoring, suitability models, remote-sensing tools.

ArcGIS Enterprise deployment

Plan, configure, and support ArcGIS Enterprise environments.

Open-source GIS stacks

Deploy PostGIS, GeoServer, QGIS, and modern web clients.

WHY SPATIALTECHSOLUTIONS

Evidence-based differentiators.

One idea runs through the platform: keep geoscience data connected, governed, and traceable — from the field to the decision.

01

One connected platform

Five modules on a shared, governed data foundation — not disconnected tools.

02

Governed AI

Visible steps, reviewable outputs, and human-in-the-loop control.

03

Geoscience depth

Real groundwater, geotechnical, and earth-science workflows.

04

Real product evidence

Every screen is the working application — maps, logs, sections, reports.

05

Enterprise deployment

Browser-based on a governed backend, ArcGIS and open-source options.

06

Product + services

A platform backed by geospatial engineering and delivery services.

REQUEST A DEMO

See the geoscience platform on your workflow.

Talk to us about the modules that fit your sector, implementation scope, data readiness, integrations, and deployment — walked through on representative data.

By industry

Water, geotechnical, infrastructure, mining, government, or fleet.

By module

Plato GIS, Hydro GeoScientist, GeoTech Scientist, Data Hub, Fleet.

Governance

Roles, audit, and read-only AI review controls.

Deployment

Browser-based on a FastAPI + SQL Server backend.

SpatialTechSolutions

AI-Powered Digital Geoscience Platform

spatialtechsolutions.com
connect@spatialtechsolutions.com

Request a demo · </request-demo>