

leapfrog | GEO

Discover trends in data with Leapfrog Geo

Rapidly integrate, communicate, and interpret geological data with industry-leading 3D modelling

Spend time on geology, not data

Leapfrog geological modelling is made by geologists, for geologists.

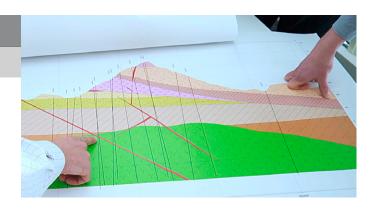
Intuitive workflows, rapid data processing, and visualisation tools bring teams together – and enable the discussions that drive decisions.

Save your time for interpretation

Build and refine geological models with user-friendly tools. Input large data sets and rapidly generate models directly from the data, bypassing time-consuming wireframing. Quickly see your geological data visualised in 3D and gain visual insights to guide your interpretations.

As you add new data to a model, the rules and parameters you already set are automatically applied. Make a change to one model and any dependant models are instantly updated – ensuring models are always up to date.

Analysing data is quick and intuitive with Leapfrog Geo's features, such as exploratory data analysis, distance function, structural modelling, vein modelling, and indicator interpolation tools.





Minimise risk and uncertainty

Test new ideas and refine your model, quickly. Duplicate models and apply streamlined workflows so you can iterate interpretations the moment new insights become available.

Rapidly copy, modify, test, and share alternative interpretations. Keep track of how decisions were made for auditing with a record of all input data and parameters used to construct a surface.

Get teams and non-technical stakeholders on the same page by sharing 3D models or 2D slices with annotations. Create movies of your model to illustrate ideas clearly, and export high quality images for reports and presentations.



Incorporate all your data

Bring in data directly from industry-leading partner solutions, such as acQuire, Maptek, ioGAS Link, IMDEXHUB-IQ, ALS Coreviewer, Coreshed, and Imago.

Import and work with many different types of data, like GIS, maps and images, drillhole, points, geophysical, structural, meshes, polylines, and geochemical data.

Build your best model, quickly

Spend your time testing ideas and making the best decisions with streamlined workflows and tools designed for geologists.

Leapfrog geological modelling provides:



An intuitive interface

Leapfrog Geo offers tools crafted for the geologist and logical workflows that save time and frustration, as well as shorten training times.

Users can learn the fundamentals in just a few days and quickly become proficient, allowing faster modelling and making more time for scientific analysis.



Visualisation

Being able to rapidly visualise in 3D brings clarity and understanding to even complex data.

Interactive 2D and 3D visualisation tools aid in analysing your data and spotting correlations and patterns. View a model from any angle, discover trends, and detect errors.

- Analyse data using statistical tools such as scatter plots, Q-Q plots, box plots, and histograms
- Highlight high grades in the scene to reveal continuity
- Visualise structural data in 2D or 3D
- Build a scene using multiple models to visualise relationships
- Cut slices and change object transparency to see inside the model
- Select, view, and rearrange drillholes



Domain modelling

Build complex geological models rapidly from drillhole data, structural data, points, polylines, and meshes in the project.

- Add rules or user choices to groupings or sub-settings of data
- Define a surface chronology to determine the cutting relationships
- Model surfaces, volumes, veins, and stratigraphic sequences
- Model complex vein systems that fold, curve, and bifurcate from one another
- Apply structural data to influence and guide the overall geometry of surfaces
- Define faults and the relationships between them within the fault system.



Numeric modelling

Easily build isosurfaces from drillholes and point data. See visual trends in the data and continuity in surfaces. Advance understanding with rapid first pass visualisation of patterns in numeric data.

- Quickly construct and visualise isosurfaces of numeric data for rapid insight
- · Incorporate complex anisotropies
- Create indicator models to guide further work
- · Build multi-domained interpolants
- Export interpolant volumes, isosurfaces, and composites
- Create geologically realistic grade domains through incorporating structural data.

Add on resource estimation extension Leapfrog Edge to carry out robust resource estimates.



Sharing

Communicate your insights with anyone in the organisation by displaying cross sections, renders, scenes, and movies in 2D and 3D.

Help team members and stakeholders with different levels of technical knowledge understand your model, and have conversations that lead to decisions.

- Set up and save 3D scenes that illustrate important aspects of the model
- Annotate scenes to add further information
- · Render images for use in reports
- Export a series of scenes as a scene file that can be displayed/shared in Leapfrog Viewer
- · Use scenes to create and export a movie
- Publish Leapfrog Geo projects to Seequent Central for version control and build models in collaboration
- Share models with anyone using the free Leapfrog Viewer app

Block modelling

Easily build block models in 3D and keep them up-to-date.

- Import block models in Isatis and UBC formats
- Assign properties to blocks from geological and numeric models
- Create sub-blocked models and define triggering surfaces
- Export models in common industry formats

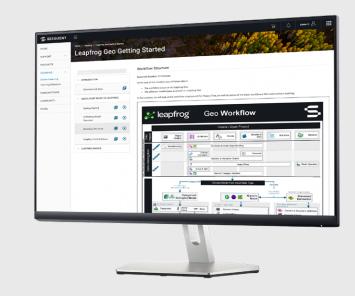
When coupled with optional extension Leapfrog Edge it provides a complete resource estimation solution.



Accessibility

Your Seequent ID allows you to sign in and receive updates to your Leapfrog Geo software from anywhere with internet connection. Going off the grid? Sign in online and your software will run on your computer without connection for up to 30 days.

On your MySeequent account, discover in-depth training courses, events, as well as helpful tips and tricks – and our User Help Centre.Import historic sections and maps. Tailor outputs for reports, CAD, or geotechnical analysis.







A better understanding of the earth creates a better world for all

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