

January 2024



xFlareTM

An ExploreTech Solution

xFlare™

Solution Overview

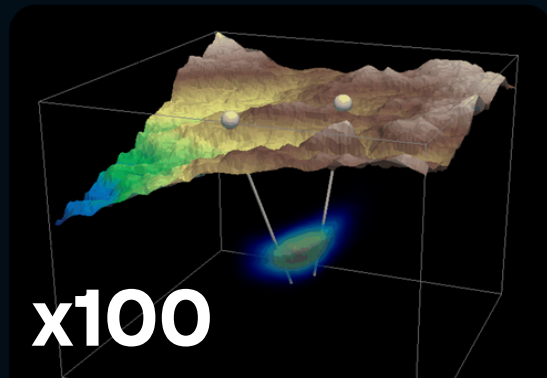
Your exploration portfolio has tens, or hundreds, of targets. Choose the right ones and optimize drilling with xFlare.

Save Time Assessing Targets

Assessing drill targets in greenfield or brownfield exploration is a big investment. You collect data, hire experts to analyze it, and then decide how to prioritize the target. What if this took only a few days instead of weeks or months? xFlare makes that a reality.

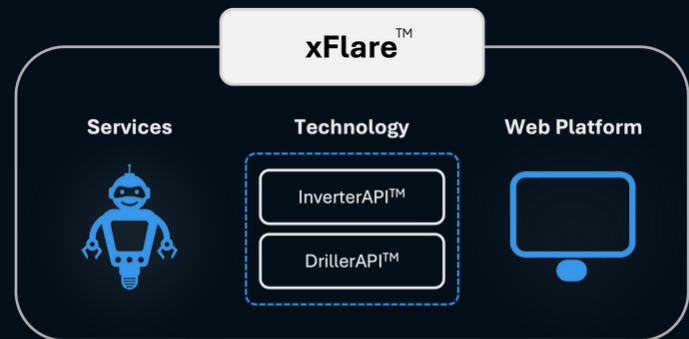
Backed by 10 Years of Research

ExploreTech's founders are PhD geoscientists who spent 10 years developing the technology behind xFlare. The technology has already been applied successfully by some of the largest mining companies in the world.



Tailored to Your Unique Needs

Get the insights you need, delivered through a 3-pronged approach:



Services help you identify relevant datasets, define geological hypotheses, and prepare a drilling plan.

Technology consists of two core products which perform the inversion and drilling optimization.

Web Platform provides a browser-based interface to visualize the models and drilling plans.

xFlare™

Exploration, faster.

Get clear, quantitative insights in days - not months.

Fast

Modeling a single drill target typically requires weeks to months of iteration. With xFlare, just input the data and deposit style and automatically get a matching geologic model and a drilling plan. Iterate on ideas in days, not months.

Automated

Planning typically requires back and forth discussions between several experts. With xFlare, the inversion, interpretation, and drillhole planning are automatic once you input the data and deposit style. This saves time you and money.

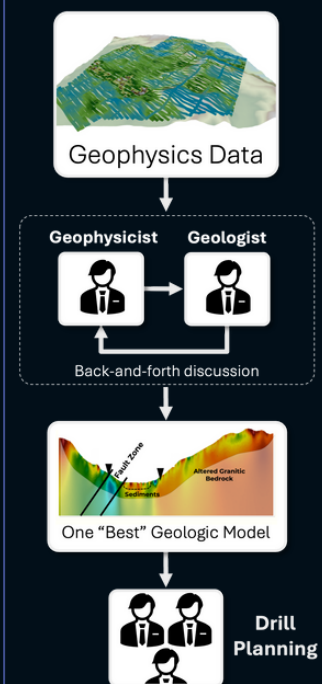
Scalable

Traditional drill target modeling is time-consuming and expensive. This means you can only assess so many targets each year. xFlare can process targets in parallel, letting you look at tens to hundreds of targets rather than just a few.

With xFlare



Before xFlare



How does xFlare Work?

xFlare utilizes two API's that control super-computers hosted in the cloud. These API's were researched and developed by ExploreTech's founders.



InverterAPI™

InverterAPI turns geophysics into geology. You provide the data and the geological concept, and InverterAPI gives you thousands of geologic models that all match the data. Having thousands of models lets you quantify drilling risk & reward.



DrillerAPI™

DrillerAPI creates a drilling plan that maximizes the chance of success. You provide drilling constraints such as permitting and depth limits. Then, DrillerAPI optimizes the placement and trajectory of the next drillhole to achieve your specific project goals.

Guigui Case Study

Reyna Silver used xFlare to locate a magnetic structure 1000-1200 meters below the surface which could be the source intrusion they're seeking.

Guigui Project in Chihuahua, Mexico

Reyna Silver's Guigui Project is located in the Santa Eulalia Mining District, which hosts one of the world's largest known Carbonate Replacement Deposits (CRD). Despite producing over 500 million ounces of silver, the porphyry source has not been found, yet. That is where xFlare comes in: optimizing drilling based on geophysics.

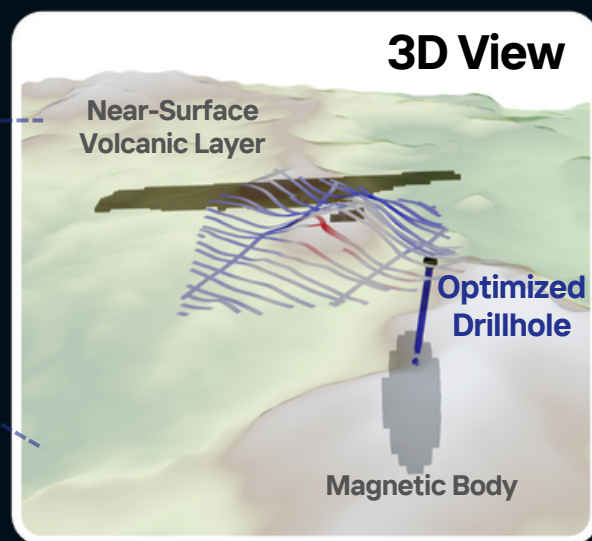
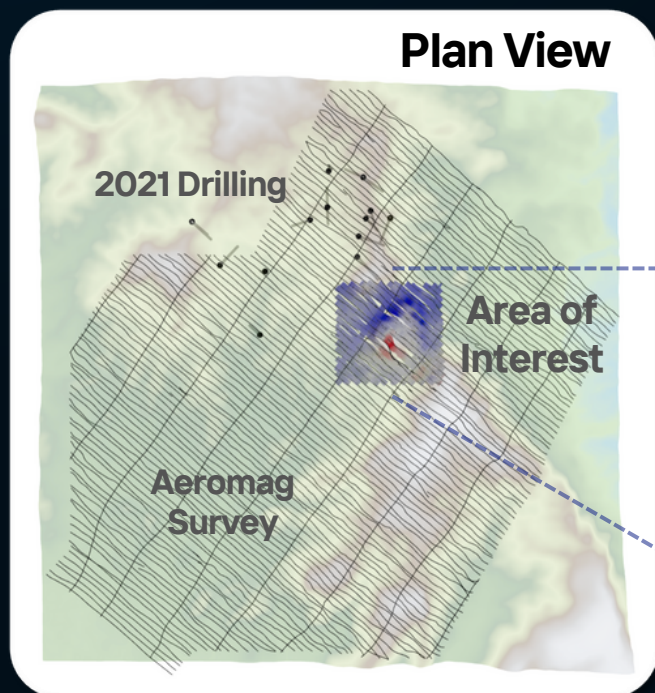
Reyna Silver partnered with ExploreTech to investigate a magnetic anomaly near the 2021 drilling area. If the anomaly is caused by metallic mineralization, then it may signal the presence of the source porphyry.

xFlare Shows the Way

ExploreTech worked with Reyna Silver to develop a simplified geologic model: a thin layer of surface volcanics plus a deeper magnetic body hosted within a limestone unit.

InverterAPI showed the magnetic body is 400-800m southeast of the hilltop and is 1000-1200m deep. DrillerAPI showed a statistically high chance of intersecting the magnetic body using a 1500m drillhole positioned in a nearby valley.

Reyna Silver plans to incorporate this prime target into their next drilling program at Guigui. In the meantime, they have also engaged ExploreTech on their two Nevada CRD assets: Medicine Springs and Gryphon Summit.



"We are so pleased with ExploreTech's work on the Guigui geophysics, that we are now working with them on our Nevada assets." - Jorge Ramiro Monroy, CEO of Reyna Silver

100x

Speed-Up

Achieve more by evaluating many targets simultaneously instead of one at a time.

xFlare: Exploration, faster.

xFlare unlocks the ability to iterate and decide at scale. With xFlare, you can rapidly assess targets throughout your entire exploration portfolio and understand where your exploration dollars will go the furthest.

Compatible Geophysics Data

xFlare works with the following data types:

- Magnetism (TMI & Gradients)
- Gravity
- Frequency Domain Electromagnetics
- Direct Current Induced Polarization (DC/IP)
- Time Domain Electromagnetics
- Natural Source Magnetotellurics

Learn More

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