

Prospectivity Mapping Fact Sheet

What is Prospectivity Mapping

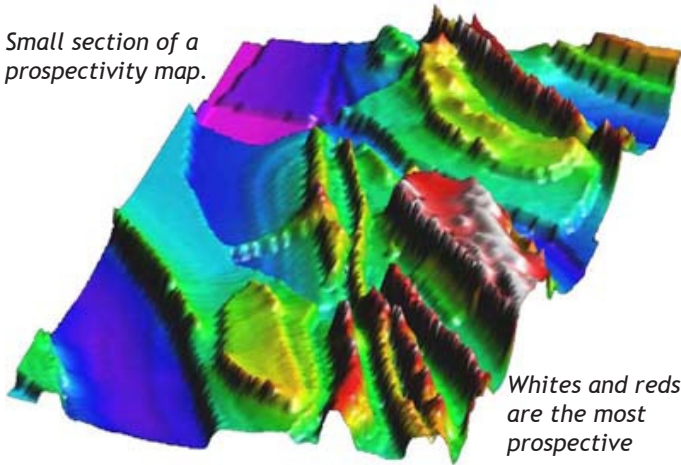
Prospectivity mapping allows you to make better use of your exploration data. Two basic types of prospectivity mapping exist: knowledge-driven and data-driven.

With a **knowledge-driven** approach, we take your concepts about deposit formation, convert these into mappable criteria and combine them into a single prospectivity map.

A **data-driven** approach identifies spatial relationships between known deposits and particular geological features. Identified relationships are mapped and combined into a prospectivity map.

Of course a **hybrid** “best of both worlds” approach that implements both knowledge-driven and data-driven components can be employed.

Small section of a prospectivity map.

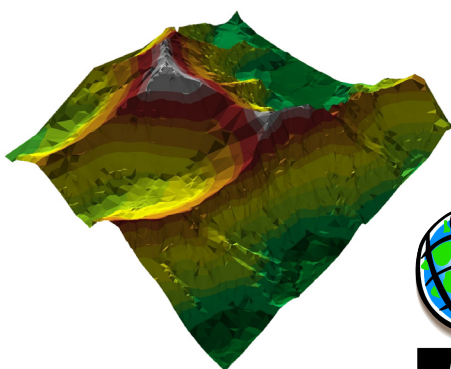


Whites and reds are the most prospective areas.

We can construct prospectivity maps using a number of different techniques including: boolean overlay, index overlay, algebraic combination, Bayesian integration (weights of evidence), adaptive (fuzzy) logic, vectorial fuzzy logic, logistical regression, artificial neural networks and self-organising maps (SOMs).

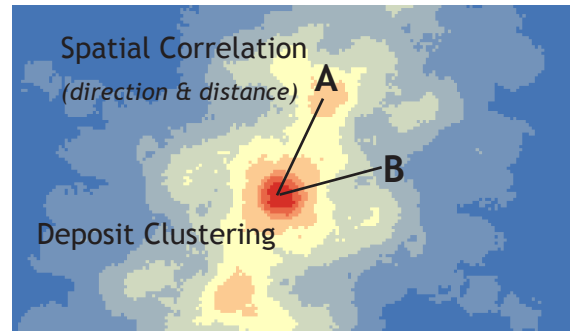
Spatial Analysis Services Philosophy

Your geologists know your ground better than anyone else. When working with you we request a constant feed-back system be established to maximise your return on investment so that you understand the processes being applied and the results being returned. We provide you ample opportunity and flexibility in the prospectivity mapping process including the ability to include “what-if” analyses.



Spatial Correlation Analysis

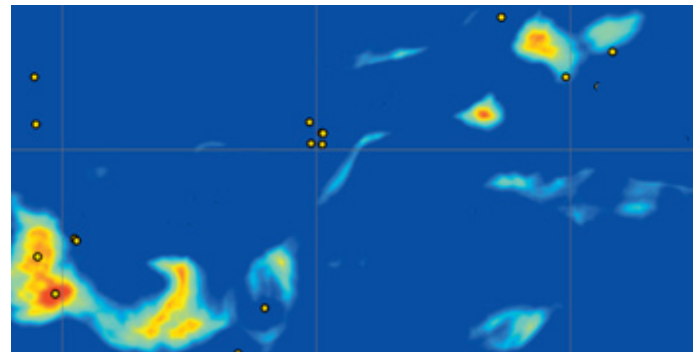
Have you noticed that there can be semi-regular spacings between deposits and even camps? A spatial correlation analysis can **qualify the existence and strengths** of such spacings and help you in area selection.



You are significantly more likely to find another deposit at a given distance NE of an existing deposit than at the same distance towards the ENE.

Deposit Fingerprinting

Do you want to highlight areas geologically similar to one that contains a particular deposit? If so then deposit fingerprinting is a solution. We take a “parametric fingerprint” of the known deposit and produce a map that shows how similar your area is to this parametric fingerprint.



Fingerprint map for the lower-left deposit. Areas in orange and red are those that are parametrically most similar to the location that hosts that deposit.

For more information contact:

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