



Small Canadian data mining company adds GeoBase to its resources

Data Forest Mining Inc. has adopted GeoBase as its source of current, no-cost, and accurate geographic data for Canada.

Data Forest Mining Inc. is using leading-edge statistical methods of data mining and visualization to identify high potential oil and gas exploration sites. To locate potential sites, the company's data miners visually analyze production, engineering, geological, and geographic data plotted in up to six dimensions. Once a potential site is located, other data-mining algorithms are used to refine the results.

Data Forest Mining Inc. uses much the same methodology that the banking and retail industries use to mine their customer-purchase databases in search of new products or markets. What this company adds is strong geographic, geological, and engineering components that assist in effectively identifying new oil and gas sites. And it is effective: these data mining techniques produce a 63 to 94 percent chance of finding new wells that could potentially produce \$30 million in profit. Traditional methods find wells with this profitability only 15 percent of the time.

Powering up new business

Always in search of new markets, Data Forest Mining has extended its methodology to investigate electric power grid losses. These transmission losses typically range from 35 to 46 percent. The company's data mining techniques have identified previously unknown relationships between line loss, power line location, geography, and microclimates. These findings will aid in positioning new power lines and locating major power-consuming facilities such as Internet data farms that house power-hungry web servers and databases.

The GeoBase advantage

As a small Canadian company striving to establish itself, Data Forest Mining recognizes the importance of keeping its costs down. Data Forest has helped meet this challenge by adopting POV-Ray freeware for its visualization tool and GeoBase as its source of accurate, up-to-date geographic information for Canada. In particular, the company has found the 30-metre grid digital elevation model from GeoBase highly valuable.

GeoBase is providing large and small companies, government agencies, academics, and individual Canadians with a no-cost, highly accurate, and current source of geographic data. Letting users concentrate on their specialties and on their businesses, GeoBase takes care of the base geographic data and enables organizations such as Data Forest Mining to develop new applications, compete more effectively, and offer cost efficient solutions to their clients.

GeoBase is a current, accurate, and maintained set of base geospatial data that describes Canada. Operating under the banner of the Canadian Council on Geomatics (CCOG), federal, provincial, and territorial governments are working together to make GeoBase possible by offering source data for the creation of the GeoBase themes.

The federal GeoConnections program has been a major catalyst for the creation of GeoBase and the building of the Canadian Geospatial Data Infrastructure (CGDI). For more information on GeoConnections and the CGDI, please visit the GeoConnections web site at www.geoconnections.org.