

Millennium Atlas Project



Case Study: Generating a GIS Version of Atlas Data

Challenge

The Millennium Atlas is an authoritative review of the petroleum geology of the North Sea Oil Basin, with input from academia and over thirty companies. The challenge was to create a GIS version of the original paper and PDF report for integration with clients' other databases.

Solution

Exprodat worked with Exploration Geosciences to identify key data in the report. This data was extracted from the original drafted data and high resolution digital versions of the document and an integrated spatial database was generated as a separate standalone product

Results

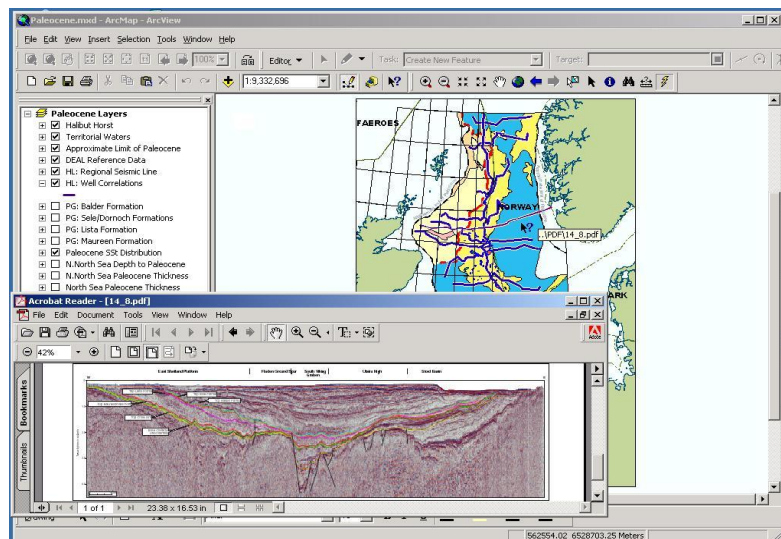
The Atlas GIS version allows companies to integrate the wealth of information in the original report with their own data sets. It has been widely licensed and is now a key component in many companies' exploration data sets working in the UKCS.



Converting a paper report to a digital spatial database

The Millennium Atlas is a product of the endeavours of oil company personnel, consultants and academia with over thirty companies providing technical support. The project is supported by the Geological Survey of Denmark and Greenland, the Norwegian Petroleum Society and the Geological Society, as well as the Department of Trade and Industry in the UK and the Norwegian Petroleum Directorate in Norway.

After several enquiries about creating a GIS version of the report, the Millennium Atlas Company contracted Exprodat to develop a GIS product.



This project used the original drafted figures (as opposed to the reduced resolution PDF images) to create a comprehensive set of GIS objects, including 324 vector/shape files from 58 Atlas figures, 363 georeferenced images from 89 Atlas figures and the capturing of location and linking of 234 other figures, all with supporting metadata. Standard shape files were created that can be imported by participants into any GIS system.

Exprodat's services

Exprodat were responsible for data conversion of the original data sets in to fully attributed spatial data sets. Other maps were georeferenced to extend data coverage. Extensive metadata from the report was also extracted and added as part of the GIS data set, allowing full cross-reference between the two products. Other key information (e.g. cross sections, field maps) were hyperlinked to spatial locations, allowing more detailed drill-down in to underlying data.

