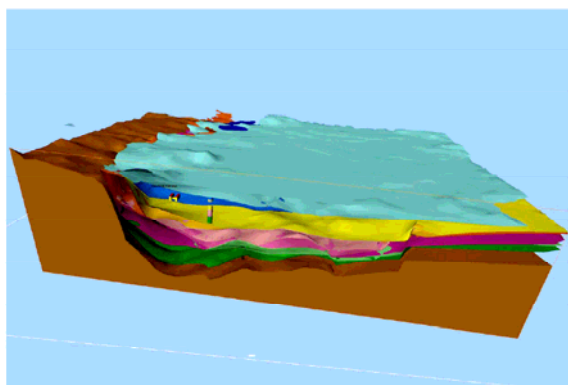


## 3D GeoModeller software: new 3D facilities for combining geological and geophysical modelling

**BRGM, the French Geological Survey and the Australian Company Intrepid Geophysics have signed an agreement for the commercialisation of an original 3D GeoModeller software. Designed primarily for geologists, this software is now fully compatible with the software developed by Intrepid Geophysics and provides combined geophysical and geological modelling. The first commercial release will be available within the next 3 months.**



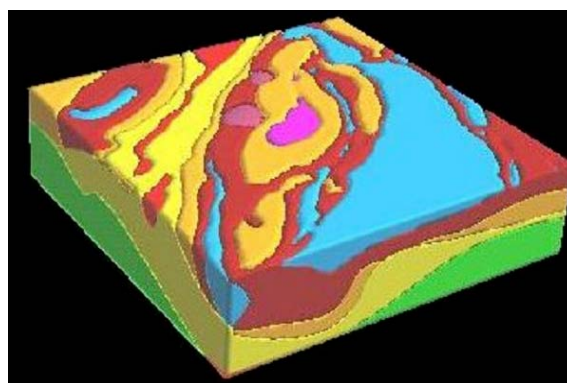
Reassessment of the geothermal potential of the Limagne d'Allier, France (<http://3dweg.brgm.fr>)

As other geological surveys, BRGM faces the challenge of large-scale integration of geoscientific data in order to build coherent 3 Dimensional geological models that are consistent with the currently known facts. The **3D GeoModeller software** results from several years of scientific and technical research, based on skills in geology and software development. At the institutional level, the key emergent technology is for geology to progress from a subjective science to a numerate, reproducible one.

The **3D GeoModeller software** has been conceived as a support 3D-mapping system based on discriminant geological information and structural data. The 3D geometrical model takes into account all information available on the vertical dimension (cross sections, drill holes, geophysical profiles, etc.), which is instantaneously recalculated to accommodate new data as they become available. At a more advanced stage, this model is tested for correctness or consistency using independent geophysical data sets through inversion. The final result provides geoscientists and other stakeholders with a shared vision of the subsurface domain that is relevant for scientific research, underground-management and

resources assessment, natural hazards mitigation and decision support systems.

A unique international geoscience cooperation has created a consortium of institutions and companies\* for achieving the first commercial release and to ensure forward-thinking sponsorship. With this commercialisation agreement, BRGM aims at the promotion of its scientific research and development activities and to extend its international references through the production of high-resolution 3D geological models. The organization also plans new research and development focused on emerging priorities that require natural risks assessment, quantification and reduction of geological uncertainty. Monitoring of underground gas storage or evaluation of the geothermal potential at the scale of Europe are planned in the near future using the **3D GeoModeller software**.



The Broken Hill model, Australia (<http://www.intrepid-geophysics.com>)

\* **Australian Government Geoscience Consortium:** New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, Western Australia, CSIRO, Geoscience Australia, **Placer Dome, Geological Survey of Namibia**