IRAP RMS 7.0 - The New Release From Roxar Delivers Enhanced Ease Of Use And Accuracy To 3D Modelling

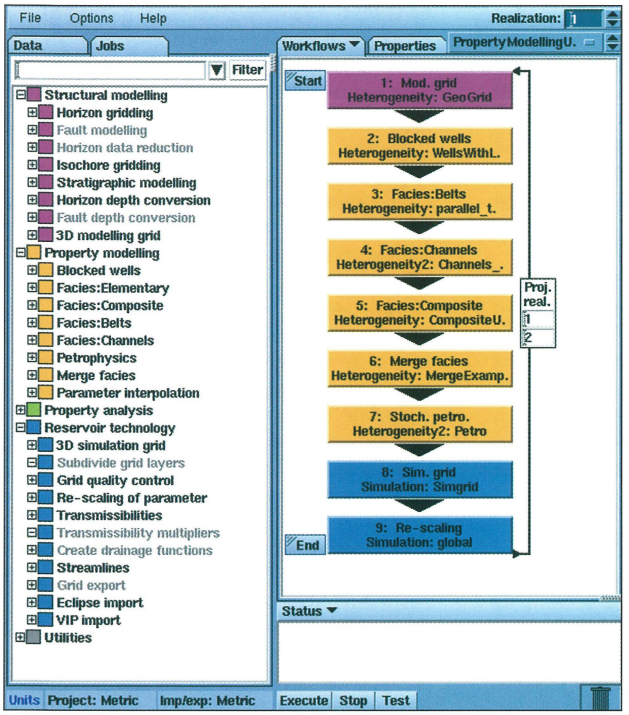

Fig. 1. User interface and workflow.

3D modelling technology: a 'must have' tool for field development

IRAP RMS 7.0 gives earth scientists and engineers a complete set of powerful 3D modelling tools. The package combines accurate structural modelling, advanced facies and petrophysical modelling with state of the art up-scaling and advanced well planning. Working across PC and UNIX platforms, the new IRAP RMS 7.0 interface is quick and intuitive, yet also allows advanced users full control of all aspects of the process.

Save time and money - manage your risk

Accurate volumetrics and flow prediction are the main reasons 3D modelling is fast becoming a 'must have' tool for both exploration and development companies. To accomplish these goals it is vital that the structure and resulting 3D models are geologically and numerically acceptable. Roxar has spent considerable time and effort ensuring the 3D grids resulting from IRAP RMS 7.0 fault models meet the highest standards demanded for reservoir simulation.

IRAP RMS 7.0 builds accurate models of listric, antithetic, reverse and normal faults. The new fault-modelling interface allows users to either automatically create fault models or have full control of every step in the process. The new interactive 3D graphic editing feature is quick, easy and intuitive, thus offering huge time saving over other approaches.

The property modelling tools incorporated in IRAP RMS 7.0 can create detailed models of any depositional environment from marine and fluvial to the more unusual reservoirs such as weathered granite and fractured basalt. Trends, wells, 3D seismic and analogue inputs are used to create and control the model, ensuring realistic flow characteristics and accurate volumetrics.

Advanced well design on your desktop or on site

Earth scientists, reservoir and drilling engineers can work as a team to interactively design well paths within the same environment, bringing substantial time and cost savings. IRAP RMS 7.0 now offers a full mechanical and geometrical evaluation based on a drilling program that includes all drilling considerations for single or multiple well targets. Used in conjunction with the RMS workflow management, well paths can be quickly re-designed while drilling as new information is received. This allows for rapid yet effective decisions at a critical time.

Workflow management that has proven such a valuable tool has been enhanced in IRAP RMS 7.0. It combines the separate steps in model building and links them into a continuous sequence of jobs. This makes updating and reproducibility easy and fast. With workflow management, advanced users can tackle experimental design and parameter optimisation to gain a better understanding of risk.

Some of the other improvements in IRAP RMS 7.0 include 3D stereo capability, 3D seismic volume rendering, and enhanced links with the major interpreting and engineering software packages. In summary, Roxar's IRAP RMS delivers an easy to use, powerful solution that allows both simple and complex reservoirs to be modelled with confidence saving time and money at every step.

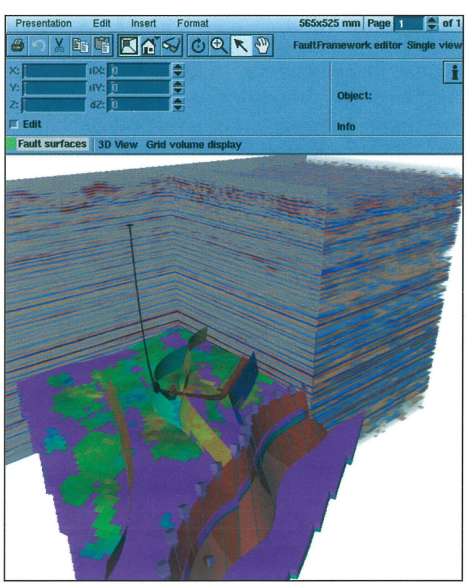

Fig. 2. 3D porosity model with faults and seismic.

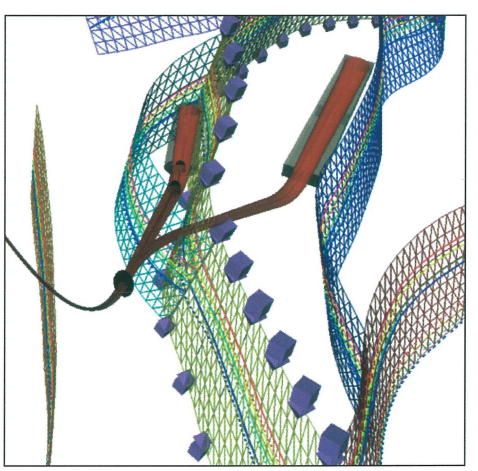

Fig. 3. Fault model with well trajectories and uncertainty ellipsoids.