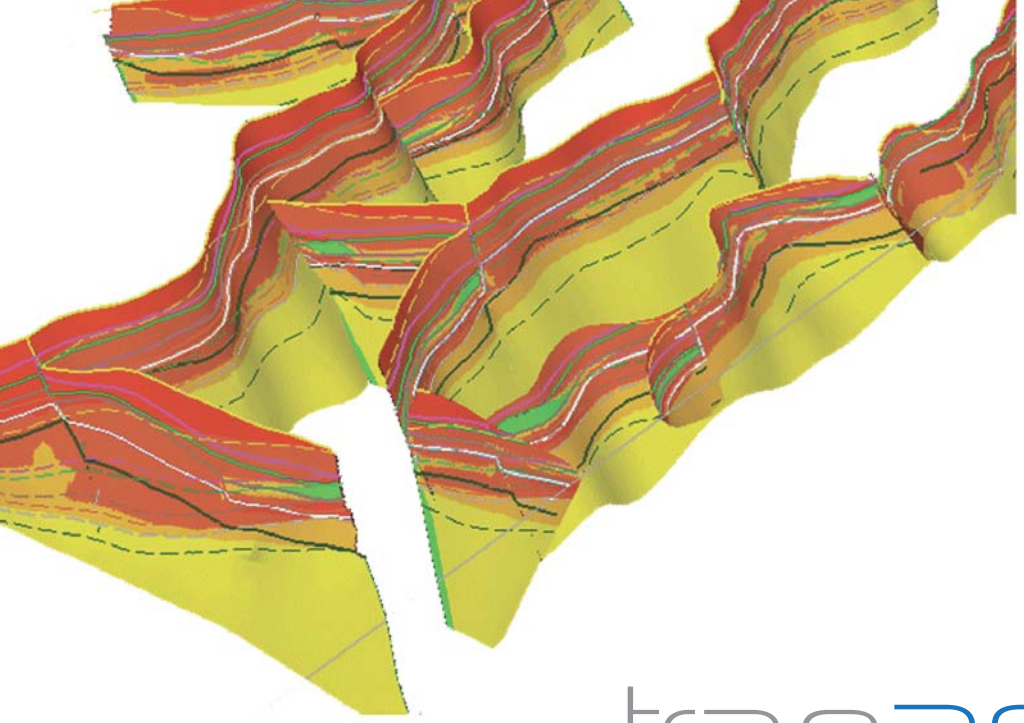
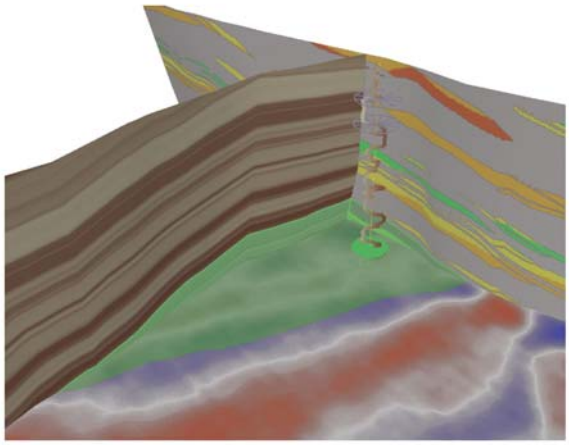
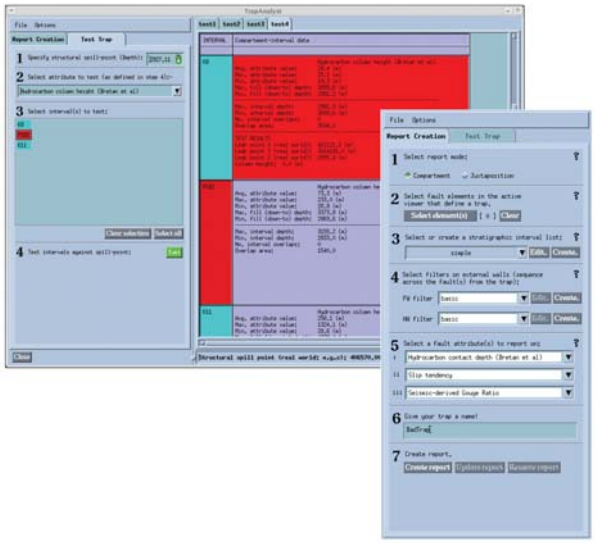


trapanalyst

FILL-SPILL ANALYSIS OF MULTIPLY FAULTED COMPARTMENTS





When traps comprise multiple reservoirs and are bounded by more than one fault, determining the critical leak points can be a challenging exercise. Typically we need to ask questions like: can the trap fill to structural spill? or what is the best case and worst case for expected column height? These can be very difficult to answer from graphical displays alone. TT6 tackles this problem with TrapAnalyst, a new component for fault seal analysis.

TrapAnalyst is a wizard based workflow tool. Simply identify the trap-bounding faults graphically, select the reservoir intervals of interest and TrapAnalyst will do the leg work. First, it provides a tabulated summary of all the juxtapositions of interest and reports on the fault seal attributes e.g. SGR, overlap area, column height. It then finds the points on each fault that correspond to the shallowest hydrocarbon contact. It selects the critical point and compares it with the spill point from structure contours. The resulting information can be used in spread sheets or it can be used directly (and automatically) by TT6 to generate trap objects i.e. the geometry of all the trap bounding surfaces including the hydrocarbon water contact.

TT6

seismic interpretation > structural modelling > fault seal