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Sommario/riassunto

Our understanding of the subsurface system of the earth is becoming increasingly more sophisticated both at the level of the behaviour of its components (solid, liquid and gas) as well as their variations in space and time. The implementation of coupled models is essential for the understanding of an increasing number of natural phenomena and in predicting human impact on these. The growing interest in the relation between fluid flow and deformation in subsurface rock systems that characterise the upper crust has led to increasingly specialized knowledge in many branches of earth scienc