



## **3D Seismic Reflection Data: Has the Geological Hubble Retained Its Focus?**

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In their seminal paper in 2002, Joe Cartwright and Mads Huuse referred to 3D seismic reflection data as the 'Geological Hubble', illustrating how these data had the potential to revolutionise our understanding of the genesis and evolution of sedimentary basins. 14 years on, I will here outline just some of the key recent advances made in our understanding of basin structure and stratigraphy, focusing on: (i) the intrusion and extrusion of igneous rocks; (ii) salt tectonics, with particular emphasis on intrasalt structure and the kinematics and mechanics of diapirism; (iii) the geometry and growth of normal faults; and (iv) the structure and emplacement of mass-transport complexes (MTCs). I will stress that future advances at least partly relies on hydrocarbon exploration companies and government agencies continuing to make their data freely available via easy-to-access data portals. I will issue a clarion call to academics, stressing that 'geodynamicists', sedimentologists, structural geologists and geomorphologists, amongst others, can benefit from utilising what I believe are currently an underused data type.