

General Theme 4

4.9

Contourites are sediments deposited or reworked under the action of bottom currents. In many cases, they act as the background sedimentary process and interact in a wide variety of sedimentary environments over a range of time scales. Their diagnostic criteria – including how they differ from turbidite deposits - have been elaborated over the past decades, but need further improvement. However, the ability to discriminate contourites from other processes has proven to be difficult in mixed systems where multiple processes interact with each other. In addition, a review of the literature demonstrates that contourite processes are active on most margins, so their relative importance needs to be elucidated. This session specifically aims to discuss the products and processes, at small and large scale, of mixed contourite systems. This may include (not exclusively) bottom current reworked turbidites, contourites interbedded within (glacigenic) debris flow deposits, pelagic deposits, submarine landslide bodies lubricated by contourite layers, interaction with (cold-water coral) reef or mounds, influence of active tectonic deformation. The main aim of this session is to discuss how the interaction of these processes ultimately influences the shaping of continental margins and to identify knowledge gaps. We welcome contributions using marine sedimentological and geophysical methods, as well as outcrop studies from “ancient” land sections. Other contourite studies are also welcomed, but mixed systems will be prioritized for oral presentations.