

Imaging of sedimentation and salt tectonics in an active convergent margin: eastern Mediterranean

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The Antalya Basin lies in the Eastern Mediterranean Sea, between the Turkish coast and the western edge of Cyprus. It is a fore-arc basin in an area of intense tectonic activity involving microplate convergence. Uplift associated with this convergence results in erosion of pre-existing rock in southern Turkey and deposition on the unstable continental shelf and slope. Sedimentation is disturbed by continuing regional tectonism that drives evaporite diapirism, and often results in collapse of sediments into the intervening deep water basin.

Acquisition of high resolution, 48 channel seismic reflection data by researchers at Memorial University of New-

foundland has provided excellent images of the tectonic and sedimentary processes at work in this area of the eastern Mediterranean. Despite the high resolution of the data, the origin of some high relief structures remains questionable. More extensive and improved data processing is enhancing the imaging of these structures and our ability to map them along strike. The work of my Honors thesis will, therefore, involve processing additional seismic lines and improving migrations of previously processed lines, culminating in an enhanced interpretation of the regional geology of the Antalya Basin.