



POSTER PRESENTATION

Provenance and Sedimentary Routing Pathways of the Salin Sub-Basin, Myanmar

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This research looks at the understudied Oligocene Shwezetaung, Paduang, and Okhmintaung Formations in the Salin sub-basin, which is part of the Central Myanmar Basin, with the aim of determining provenance of clastic sediments and reconstructing evolving depositional environments. Data has been collected through a fieldwork campaign targeting well-exposed sediments along the western margin of the sub-basin. The outcrops studied span approximately one hundred kilometres from north to south, and a series of sedimentary logs, palaeocurrent data, 2D panel diagrams, and samples for petrographical analysis have been collected and interpreted. This work presents the results from this field season and from a preliminary provenance study.

Interpretation of the field data suggests very few changes to overall depositional environments during the Oligocene. Continental fluvial systems dominate the northern area of the basin, with intermittent terrestrial deposition in related lacustrine and vegetated over-bank environments. Palaeocurrent data suggest southward flow throughout the entire Oligocene, mainly directed from the Himalayan foothills, with some input from the Indo-Burman Ranges (IBR) to the west and the Sino-Burman Ranges (SBR) to the east. The data suggest a gradation into marginal marine (e.g. deltaic, sandy shoreface) towards the south of the basin, and eventually into shallow marine settings, with intermittent evidence of deep marine (e.g. debrites, seismites) deposition. Rapid sea level fluctuations are interpreted throughout the three formations, but an overall transgression is evident. The provenance study will assess the degree of mixing from the Himalaya, the IBR and the SBR.