Reactivated tectonic structural controls on morphological development of the Central Luconia carbonates

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A broad platform of the Central Luconia Province is characterised by extensive development of the Miocene carbonates. Faultings that had taken place during the Oligocene to the Middle Miocene produced 'basins and highs' which controlled the distribution of subsequent carbonate growth. Platform-type buildups tend to concentrate on fault-bounded regional highs, whereas pinnacle-type buildups are distributed within the basinal areas.

A current study suggests that the low and high reliefs of the pinnacle buildups are strongly controlled by tectonic structures underneath the buildups which were reactivated during the carbonate deposition. These reactivated thrust faults which were active until end of Late Miocene have caused further uplifting. Larger part of the buildups has continuously developed over the uplifted areas, whereas other buildups sitting on structurally stable areas tend to die off as they cannot keep pace with a sudden rise in sea-level.

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