

Lowry D.C. and Longley I.M. 1991: **A new model for the mid-Cretaceous structural history of the northern Gippsland Basin.** *APEA Jour*, 1991, 143-153.

#### ABSTRACT

The tectonic history of the northern flank of the offshore Gippsland Basin can be divided into three phases:

- an Early Cretaceous rift phase (120-98 Ma) with deposition of the Strzelecki Group and extension in a northeast-southwest direction.
- a mid-Cretaceous phase (98-80 Ma) with deposition of the Golden Beach Group and extension in a northwest-southeast direction and
- a Late Cretaceous to Tertiary sag phase with intermittent compression or wrenching.

Previous workers have described the first and third phases. This paper argues for a distinctive second phase with extension at right angles to the first phase. The complex Cretaceous structure in the Kipper-Hammerhead area is interpreted in terms of a model in which transfer faults of the first phase became domino faults of the second phase.