

grabens, as well as the upthrown side to the west, were high areas and served as a source of sediments for the grabens. On the western side of the grabens, next to the fault, alluvial fans were deposited, whereas to the east shales and possibly sands were deposited. The cycle culminated by shale being deposited all over in the filled grabens. The cycle repeated itself with uplift, erosion, faulting, etc. There are at least three such cycles seismically recognized, the first being the major, the second--smaller, and the third--still smaller. Applying Falvey's terminology [11], the first unconformity at the top of Lower Cretaceous should be called Rift - onset unconformity, and the next major unconformity which we call Mid-Upper Cretaceous, should be called Breakup unconformity.

Rift-onset unconformity was probably basin-wide spread, whereas Breakup unconformity was more localized. The shales, which terminate every cycle, could provide seals for the fans and other reservoirs in the grabens.

The Durroon Sub-Basin as it is mapped by seismic is shown in figure 3.

In addition to seismic interpretation, the recent Boobyalla core study [5,12] has confirmed the existence of Late Cretaceous alluvial fans on the downthrown side of rotational faults in the Boobyalla Plains area of northern Tasmania, which is the southern extension of the Bass Basin.