

Throughout the area the Upper Cretaceous to Tertiary section is thinner than along the margin of southern Australia (Encl. 15) and is basically undisturbed. The lower part, however, shows slight basinward dips below a minor unconformity e.g. N 427, sp 1100 (Encl. 19). Within the succession volcanic horizons, marked by bundles of diffractions, may be seen in the lower part on some lines e.g. N 427, sp 1800-2200 (Encl. 19). In addition, horizons marked by discontinuous, but well-developed reflections occur, for example on N 431 (Encl. 19). They may result from the load of more competent turbiditic horizons over deep sea clays. Signs of possible clay diapirism may be seen on N 430, sp 2600.

The Gippsland Basin forms an east-west trending block-faulted graben filled with Permian to Cenomanian continental sediments. Its cuts across the trend of the continental margin and the proximal part is filled with a deltaic sequence of Upper Cretaceous sediments. Transgressive carbonates of Tertiary age unconformably overlie the entire basin area and blanket the existing relief. At the seaward end of the basin, the sediments thin towards a submarine canyon system in front of the buried delta. In the deep sea the basement rises to a shallower level and is overlain by Neogene sediments of the Tasman Abyssal Plain.