



A revised climatology of SE Australia at the LGM

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This paper summarises some of the results of a recently completed project aimed at defining climate conditions at the LGM in south eastern Australia. We conclude that overall cooling on the SE mainland was 8-10°C but that cooling along the eastern coastal strip and in Tasmania was somewhat less (4-7°C). The persistence of a humid climate along the east coast and in the adjacent highlands allowed rivers to flow more strongly than during the Holocene. We suggest that onshore flow on the northern limbs of east coast high pressure cells, supplemented by moisture from east coast lows maintained this humid fringe. The processes were enhanced by increased sea-land temperature contrasts especially in winter and by reduced evapotranspiration under lower temperatures and altered vegetation cover. We can explain most of the paleoenvironmental observations in SE Australia at the LGM by invoking an enhanced high pressure cell over the modern SE mainland while westerly flow continued to dominate in Tasmania. At the true LGM westerly penetration of the SE mainland was reduced but east coast systems were either unaffected or enhanced.