Deglacial and postglacial climate history in east-central Isla Grande de Chiloé, southern Chile (43°S)

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Palynologic and stratigraphic data from Laguna Tahui (42°50?S, 73°30?W) indicate cool-temperate and humid conditions there between 14,000 and 10,000 14C yr B.P., followed by warmer and drier-than-present conditions between 10,000 and 7000 14C yr B.P., and subsequent cooling and rise in precipitation over the last 5800 14C yr. The thermophilous Valdivian trees Eucryphia cordifolia and Caldcluvia paniculata reached their maximum abundance during the early Holocene warm-dry phase (10,000-7000 14C yr B.P.), followed by a rise in lake levels and reexpansion of North Patagonian conifers starting at 7000 and 5800 14C yr B.P., respectively. Variations in the stratigraphic and geographic distribution of temperate rainforests in southern Chile suggest multimillennial trends in temperature and westerly activity, which are spatially and temporally coherent with paleoclimate records from neighboring regions. Climate variability at millennial and submillennial time scales may account for the establi