Late quaternary vegetation of southern Isla Grande de Chiloé, Chile

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Late-glacial-Holocene forest history of southern Isla Chiloé (latitude 43°10? S) was reconstructed on the basis of pollen analysis in three profiles (Laguna Soledad, Laguna Chaiguata, Puerto Carmen). Prior to 12,500 yr B.P. pollen records are dominated by plant taxa characteristic of open habitats (Zone I). From 12,500 yr B.P. to the present, tree species predominate in the pollen records (Zones II-V). Between 12,500 and 9500 yr B.P. ombrophyllous taxa (Nothofagus, Podocarpus nubigena. Myrtaceae, Fitzroya/Pilgerodendron, and Drimys) are frequent in all pollen diagrams, suggesting a wetter and colder climate than the present. Between 9000 and 5500 yr B.P. Valdivian forest elements, such as Nothofagus dombeyi type, Weinmannia, and Eucryphia/Caldcluvia, dominate, indicating a period of drier and warmer climate. From 5500 yr B.P. onward, the expansion of mixed North Patagonian-Subantarctic forest elements and the increased frequence of Tepualia suggest increased rainfall and temperatures o