

Deglacial and postglacial vegetation changes on the eastern slopes of the central Patagonian Andes (47°S)

Villa-Martínez, Rodrigo

Moreno, Patricio I.

Valenzuela, Marcela A.

We report pollen, spore, and charcoal records from Lago Augusta (47°05'S, 72°23'W, 440m a.s.l.), a small closed-basin lake located near the modern forest-steppe ecotone east of the Andes in Central Patagonia, Chile. The record shows local ice-free conditions through the last glacial termination in the Río Chacabuco Valley and flooding by an ice-dammed lake. Once this proglacial lake ceased to inundate areas above 450m a.s.l., the valley was colonized by herbs, shrubs and evergreen rainforest taxa between 15,600 and 16,000calyr BP, indicating an open landscape under cold/wet conditions. Millennial-scale fluctuations in the hygrophilous conifer *Fitzroya*/. *Pilgerodendron* suggest precipitation variations within a cool/wet climate between 11,800 and 13,400calyr BP, followed by the establishment of dense *Nothofagus* forests between 9800 and 11,800calyr BP and declines in hygrophilous and cold-resistant trees, herbs and shrubs. This interval coincided with peak fire activity and laminated carb