

Case Studies: Applications of tephrochronology in Cono Sur (southern Chile/ARG) & Kutubu, PNG



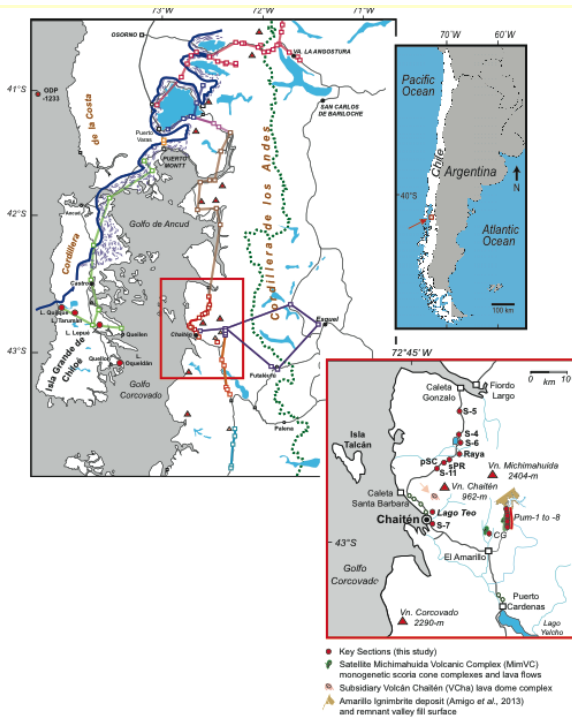


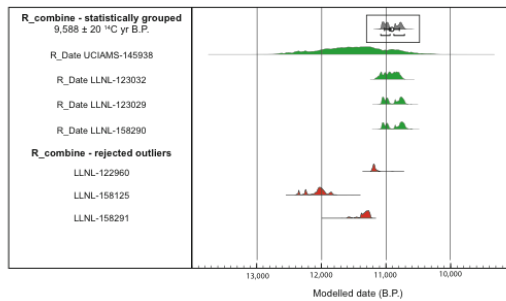
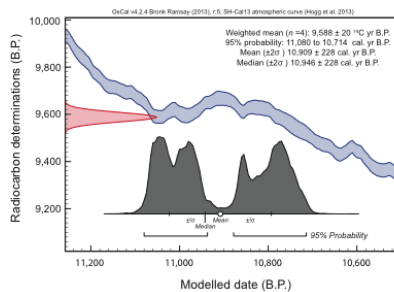
Objective 1:
• to quantify eruptive periodicities in order to evaluate volcanic risk

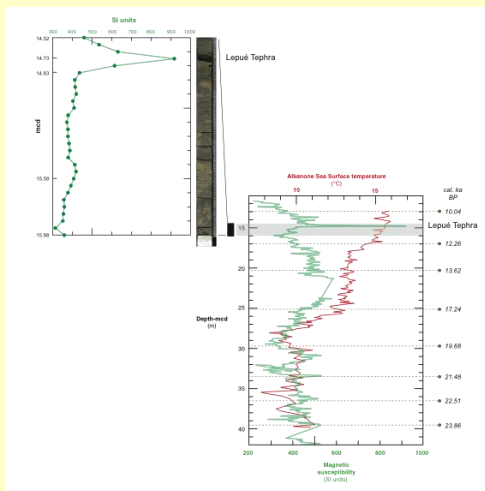
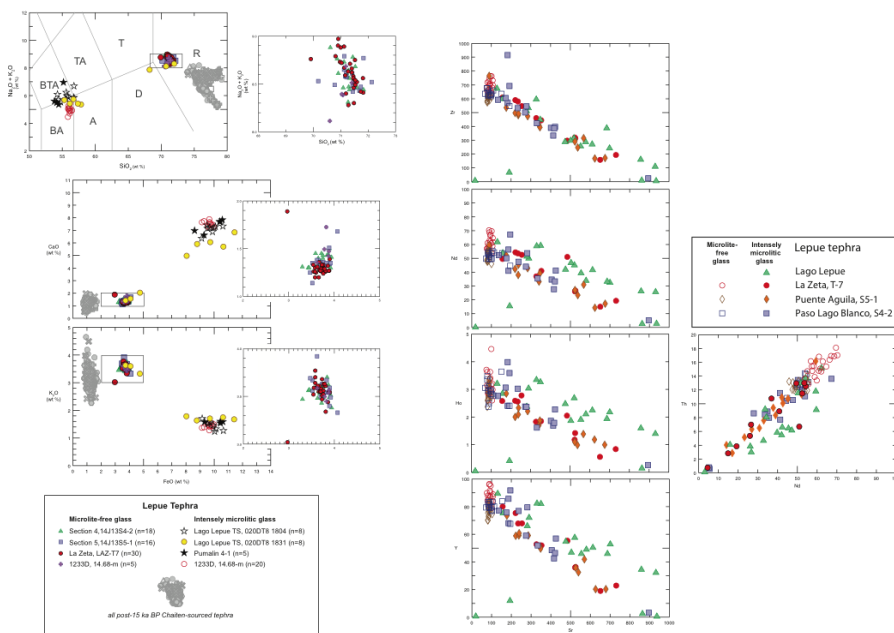


Objective 2:
• resolve the timing of deglaciation









Marine (ODP-1233) & Lake/Bog Records

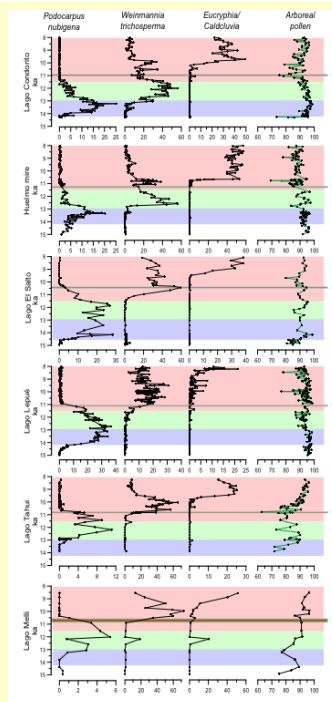
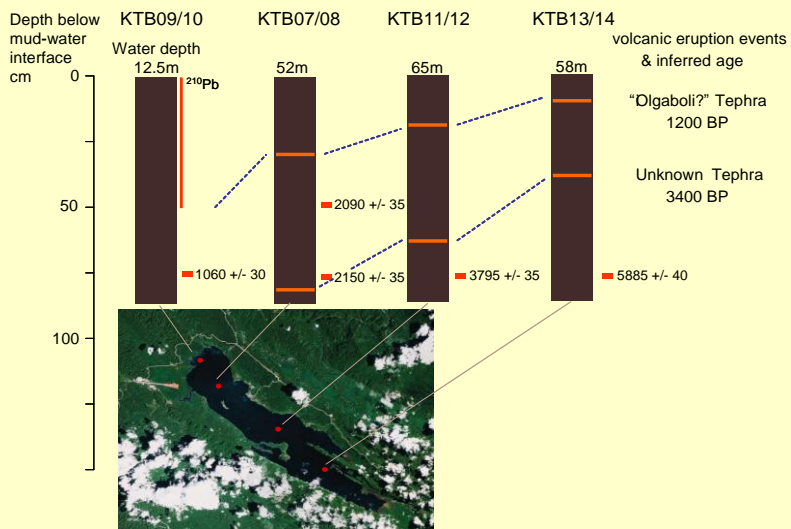
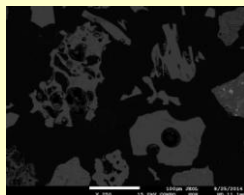
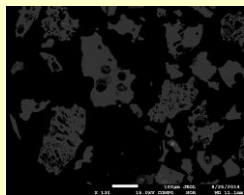
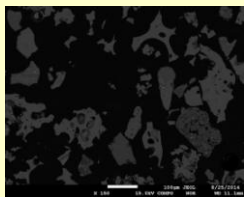




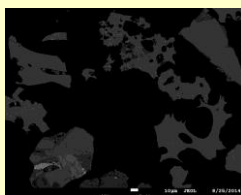
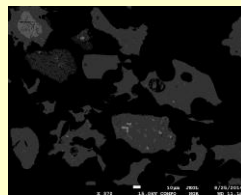
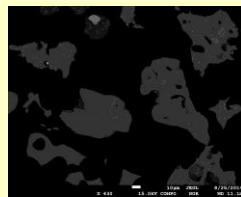
Figure 2. Location of coring sites around Lake Kutubu. Four cores were collected using a modified piston mud-water-interface corer in August 2009. The brown organic-rich detritus includes 2 recognised tephras. Sampling regime for Pb210 and results of C14 chronological analysis is shown.



Lake Kutubu, PNG – glass shards - what they look like



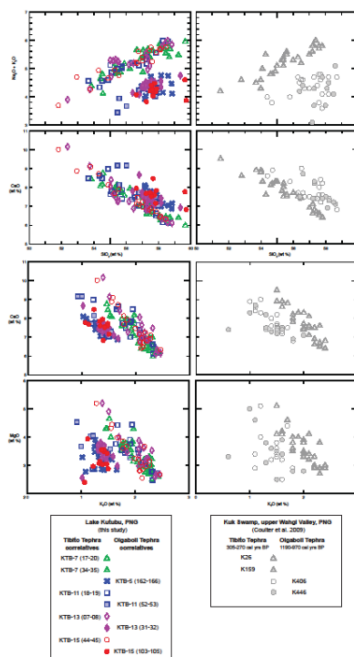
KTB-11, 18-19



KTB-11, 52-53

Lake Kutubu, PNG
Glass shard major
element
Chemistry

Enabling
identification &
correlation



Extended
tephra
distributions &
utility for future
studies

