

LACUSTRINE SEDIMENTARY RECORDS OF RORAIMA (BRAZIL): GENESIS AND EVOLUTION SINCE THE PLEISTOCENE-HOLOCENE TRANSITION.

1,3LAMEGO SIMÕES FILHO, F.F., 2,3TURCQ, B.J., 2,3SIFEDDINE, A. and 4VOLKMER-RIBEIRO, C. 1Instituto de Radioproteção e Dosimetria (IRD/CNEN), Rio de Janeiro, Brazil; 2Institut de Recherche pour le Développement, Bondy, France; 3Departamento de Geoquímica, Universidade Federal Fluminense (UFF), Niterói, Brazil; 4Museu de Ciências Naturais, Fundação Zoobotânica (FZB), Porto Alegre, RS.

The sedimentary records provided by lakes located in the wide forest-savanna boundary region of the Rio Branco fields in the Roraima State (Northern Amazon, Brazil) spread from late Pleistocene to the Holocene. We have analyzed these samples and calculated fluxes for minerals, humic acid, total organic carbon (TOC), nitrogen (C:N ratio) and charcoals. We took also several bulk sediment samples along the cores for radiocarbon dating. During the Pleistocene-Holocene transition (11,5 - 10 cal Ky. B.P.), it was noted increased fluxes of quartz and kaolinite, C:N ratio and low contents of TOC and silica amorphous. These suggest change to more humid conditions from the increasing of precipitation, associated with lower dry periods that favored the establishment of *Radiospongilla amazonensis*, a sponge specie restricted to peats. After that (10 - 9,4 cal Ky. B.P.), we have identified dated layer inversions caused by mixing as well as peaks of well preserved charcoal and quartz fluxes probably associated with fire and erosion enhancement. The lake returned to moister conditions between 9,4 and 8 cal Ky B.P. This phase shows peaks of amorphous silica associated with benthic diatoms (e.g. *Eunotia* sp.) and decreasing fluxes of TOC and clastic minerals. From 8 to 4,5 cal Ky. B.P., seem to have occurred multiple drier events, that possibly caused fire events (charcoal single peaks) and increased the erosion rates, corresponding to the early to middle holocenic transition. There are several small lakes and swamps formed after this dry phase and all them reached steady-state conditions around 1,5 cal Ky. B.P.