

## PROVENANCE OF THE ANDRELANDIA AND LIBERDADE NAPPE METASSEDIMENTS IN THE REGION OF AIURUOCA, SOUTH MINAS GERAIS

Gabriella Labate Frugis – Instituto de Geociências/USP, Mario da Costa Campos Neto – Instituto de Geociências/USP.

The study of sedimentary provenance in detrital zircons using geochemical and geochronological analyses tends to indicate one or more possible sources for the sediments. These analyses were made in metasedimentary rocks of the Andrelandia and Liberdade Nappe in the southern portion of the state of Minas Gerais. The geochemical and isotopic signatures of the metapelitic rocks (Liberdade) indicated strong crustal contribution with predominance of chemical weathering related to cratonic areas, while the metapsamitic rock (Andrelandia) indicated a more significant mantle contribution with physical weathering more present, being correlated to orogenic stable areas.  $^{206}\text{Pb}/^{238}\text{U}$  and  $^{207}\text{Pb}/^{206}\text{Pb}$  ages for detrital zircons indicate significant contributions of the Mesoproterozoic to mid-Paleoproterozoic for the quartzite rocks (samples SNA-116 and SNA-180 A), whereas the rocks from finer sediments indicate significant contribution of sources with Cryogenian and Tonian ages, besides the large presence of zircon ages of late Mesoproterozoic to early Paleoproterozoic. From the geochemical signature of active margin, found in all samples, it is likely that the source area of these rocks are found in the Paranapanema Block.

