PATHWAY WEATHERING IN GRANITOID ROCKS FROM CENTRAL REGION OF ANGOLA: GEOCHEMICAL AND MINERALOGICAL DATA

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ABSTRACT

The Central Region of Angola is characterized by the abundance of granitoid rocks, whose weathering "in situ" originated the so-called residual soils. The textural, geochemical and mineralogical properties of these soils depend not only on the chemical composition of parent rock, but mainly on the local climatic and geomorphological characteristics.

In the study area, sampling sites were selected, which extend from the region of Kwanza-Norte (Kassenda, Dondo) through Kwanza-Sul (Cangulo, Quibala and Waco Kungo) until the plateau of Huambo, where samples of fresh rock, weathered rock and its residual soil were collected along each weathering profile.

Chemical analytical data were determined using X-ray fluorescence (XRF) analysis of the major and minor elements, whereas mineralogical data were determined using X-ray diffraction (XRD), on the samples of rock and on the respective residual soil.

The results obtained and their comparative analysis between the sampling sites, as well as along each weathering profile is presented.

This paper allows contributing to the knowledge of the geochemical weathering in tropical areas, as is the case of Angola.