

## **Two distinctive Proterozoic sedimentary covers in the Northern Amazonian Craton, Roraima State, Brazil**

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Recent works have studied the Roraima Supergroup depositional environment and its basin evolution. To the south of the continuous basin, there are several poorly known table mountain rock sequences (Tepequém, Urutanin, Uafaranda, Aracá, Neblina and Surucucus) that have been mapped as Roraima Supergroup outliers. Evidence from U-Pb dating show the existence of two distinct Proterozoic sedimentary sequences, one older than 1.78Ga and the other younger than 1.55Ga. The relative age of the sediments is determined by their relationship with three groups of magmatic rocks; acid pyroclastic rocks (Tafelberg type), interbedded in some sequences, dolerite dikes and sills (Avanavero type) and rapakivi granite intrusions (Surucucus type). The baddeleyite U-Pb SHRIMP dating of the Cipó Dolerite intrusion ( $1,778 \pm 12\text{Ma}$ ) has established the Roraima Supergroup minimum age (Orosirian). A zircon population collected in the Surucucus Table Mountain basal conglomerate has a Calimian U-Pb SHRIMP age of  $1,551 \pm 5\text{Ma}$ . This is the sedimentary sequence maximum age, which is at least 230Ma younger than the Roraima Supergroup. This suggests a need to review the correlation of isolated table mountains to the Roraima Basin. The Urutanin and Uafaranda black shales may represent the Surucucus environment. The Tepequém sediments show correlation to the Roraima Basin. Rio Negro Province clastic zircon U-Pb dating has shown that the supposed Archaean Tunuí Group is younger than 1.90Ga and it may be interpreted as folded and metamorphosed Roraima-like sequence.