

Lithostratigraphic evolution of the mafic and ultramafic sequences of the Brazilian Amazon Region

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The oldest mafic rocks of Brazilian Amazon Region, Archeoproterozoic in age, consist of pyroclastics, comprising the granulite belts of: the Rio Jari (Mutum Pyroclastics); the Carajás (Pium Complex); the State of Roraima (Kanuku Group); and the interfluvial Ji-Paraná/Mamoré (Jamari, Jaru, and Santa Luzia complexes). During this time, granite-greenstone terranes containing an expressive amount of basalt and subordinate komatiite in the State of Pará (Andorinhas Supergroup) and in the State of Amapá (Vila Nova Group) were also developed. In the same context were formed the mafic-ultramafic intrusive bodies of the Serra Azul (State of Pará) and Bacuri (State of Amapá) complexes. The development of the greenstone belt sequences were also associated to overthrust belts, resulting in transcurrent basins associated with basaltic lava, such as found in the Grão Pará, Aquiri, Cinzento and Tapirapé groups, in the Carajás region. These are related to mafic and/or ultramafic intrusions (Luanga Complex), basic sills (Águas Claras Gabbro), poorly-defined bodies such as the Santa Inês Gabbro and mafic dike swarms. In the Proterozoic, during the final stages of the consolidation of the Amazon Craton, a widespread intrusive event consisting of mafic and/or ultramafic composition occurred, represented by the following suites: the Cateté (Carajás region); the Tapuruquara (states of Roraima and Amazonas); the Repartimento (State of Roraima); the Cachoeira Seca, the Ingarana, and the Crepori Diabase (Tapajós region); the Suretama Diabase (Trombetas-Nhamundá rivers); the Avanavero Diabase, the Quarenta Ilhas Diabase and the Cujubim Diabase (State of Amazonas); and the Cocal Suite and the Nova Floresta Formation (State of Rondônia). The Mesozoic mafic intrusives occur as dykes, diabase sills and basalt flows: the Cururu Diabase (Pará), the Cassiporé Diabase (Amapá), the Uaraná Diabase (Amazonas), the Apoteri Suite (Roraima) and the Anari Formation (Rondônia).