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**Precambrian Lower Crustal Mafic and Ultramafic Rocks of the
Cana Brava Complex, Brazil: Mineral Composition and Evolution**

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The Cana Brava mafic ultramafic Complex, Goiás State, Brazil, is an early Precambrian differentiated massif formed by intrusion of deep seated crystallization presumably of basaltic material. Rock types cover a continuous sequence ranging from harzburgites to pyroxenites and to ferrogabbros and ferrowarps as indicated by changes in mineral associations and mineral compositions. The ultramafic suites were affected by several recrystallization events. A first reequilibration event took place at 900°C and 6-7 Kb, probably at the base of an ancient continental crust. A successive recrystallization occurred probably at approximately 1150 m.y. ago and converted some of the rock into a high-grade amphibolite assemblage. Partial lower temperature recrystallizations caused the formation of low grade amphibolites as well as serpentinites, rodingites, talc schists and related lithologies. P-T estimates of the Cana Brava samples and other early Precambrian Brazilian rocks suggest high geothermal gradients.

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