

## **880-1000 Ma Magmatic Event(s) in the Wannu Complex of Sri Lanka and Speculations on their Relevance for Rodinia and Gondwana Supercontinent Formation**

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Large volumes of ~880-1000 Ma calc-alkaline granitoid rocks in the Wannu and Vijayan crustal provinces of Sri Lanka make it likely that these domains were produced in active margin settings, probably Grenville-age island arcs. We report new single zircon evaporation ages and Nd isotopic systematics for tonalitic to granodioritic gneisses of the Kadugannawa Complex of central Sri Lanka which record a period of magmatic activity between 1006 Ma and 881 Ma and show this complex to be part of the Wannu domain. Both provinces were probably generated in arc-related settings at the outer margin of Rodinia, but this cannot be ultimately proven on the basis of the currently available data. In spite of a strong Pan-African tectono-thermal overprint at ~600-550 Ma that we relate to involvement of Sri Lanka in the amalgamation of the Gondwana Supercontinent, rare ~1000-990 Ma structures are preserved in the gneisses of the Kadugannawa Complex that may constitute remnants of the accretion history of Rodinia. We further suggest that the basement rocks of Sri Lanka do not correlate with crustal domains in southern India or in East Africa, since these were not part of Rodinia.