

SS02-O-06

## Were Siberia, Mongolia, Kazakhstan part of the Malani Supercontinent during Late Proterozoic?

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Based on the occurrence of plume related, anorogenic (A-type) magmatism (alkali granites, nepheline syenites, carbonatites associated in space and time with bimodal volcanics, and the Vendian shallow water sedimentary sequence of carbonate, phosphorite, and evaporites in the Lesser Precursor to Himalayan terrane (PHTT), Siberia, Mongolia and Kazakhstan, it is proposed that all these micro-continents were included in the configuration of the Late Proterozoic

Malani supercontinent comprising Trans-Aravalli block (TAB) of the NW Indian shield, South China, Seychelles, Madagascar, Central Iran, Nubian-Arabian shield (Fig. 1, 2) and Table-1. This assembly and subsequent breakup marked the rift to drift tectonic environment (Ilyin, 1990; Jahn, 2004; Kovalenko et al., 2004; Kochhar, 2007, 2008; Kroner et al., 2007; Li et al., 2008; Vernikovskiy et al., 2009).

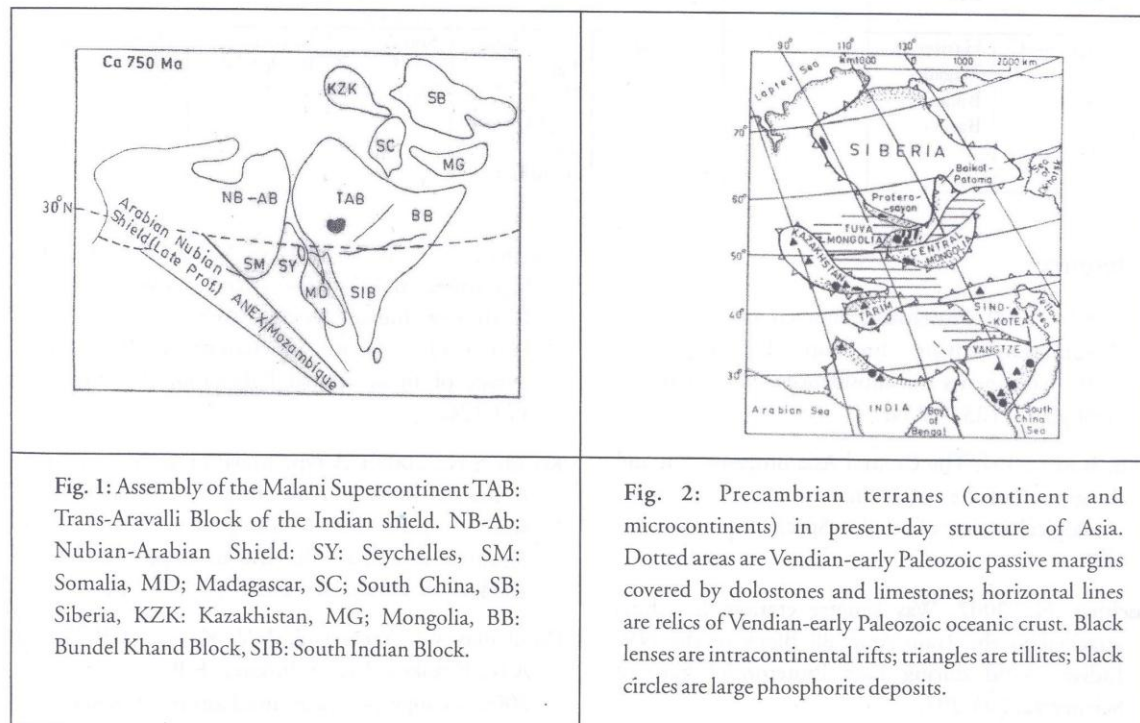


Table 1: Summary of similarities between TAB, Seychelles, Nubian Arabian Shield, S. China, Kazakhstan, Siberia and Mongolia

	TAB NW Indian Shield	Seychelles	Nubian Arabian Shield	S. China Yangtze Block	Kazakhstan	Siberia	Mongolia
Alkali Magmatism granites	Siwana Jalor Tusham CA 745 Ma	Mahe, Ste Anna Praslin 700-755 Ma	Jabal-Al Hasasin Jabal-As Sawal Dahul 700-760 Ma	Chengjian 780-745 Ma	Kopa Formation 775 Ma Red gneiss granite	SW Margin Tataraka-Ishimila suture Zone Srednetalaraka pluton 671-774 Ma Mafic Dykes (Nersa) 740 Ma	Barguzinsky Block 850-700Ma
Protolith	Archean BGC	Archean BGC	Paleo Proterozoic or older crustal Precursor	--	Anrakhai Terrane 1789±0.6 Ma 2187± 0.5 Ma $\epsilon\text{Nd} (t) - 6.4$	--	Ust, Angara complexes $\epsilon\text{Nd} (t) +8$ to $-6$ Juvenile crust
Paleople	55-70°N	30°N	--	70°N	--	--	--
Strutian glaciations	Pokhran, Salt Range Boulder Bed	--	Haqf Super Group	Lintua and Nantua deposits	Upper part of sequence underlying Karatau	Norlhein Siberna	Olokit graben
Evaporite/Carbonate Sequence	Hanseran, Nagaur-Bikaner Basin	--	Hormuz Series	Late Sinian Late Precambrian carbonates and phosphates	South Tyan Shan	Kuonanm Black Shale	Darkhat and Khubsugul Series.

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