Bhaaratha Craton¹

Is the entire Indian Peninsula is a single Craton?

Dharwar Craton and the Southern Granulite Terrain have always been a topic of interest. The opinion prevailing earlier was that the Southern Peninsula has undergone progressive metamorphism from north to south as exemplified by the green schist facies, amphibolite facies (intracratonic Proterozoic sediments and Dharwars) and finally the granulite facies south of the Fermor Line. Currently, the nature of contact between the granulite terrain and the Dharwars is being debated. Rocks equivalent of Sargurs and Dharwars are found in Tamil Nadu and also below the Deccan Basalts, indicating that the Dharwars extend both to the north and south. Likewise, views vary on the movement of Nilgiris. Nilgiris, Anaimalai and the adjacent mountain ranges to the east are all due to down throw of the Kaveri Crater region followed by easterly tilt of the Western Ghats at the time of separation of India and Madagascar. Dharwars have been subdivided into Western, Eastern and Central. However, there are no unambiguous evidences to justify such divisions. Various cratonic blocks of the Indian peninsula are separated by rift valleys and faults, thus indicating the possibility of all the blocks being one unit earlier. The earliest supercontinent Ur had triangular Indian Peninsula as the nucleus bordered by Kaapval and Pilbara. Similar shape of India continues in all the subsequent Supercontinent reconstructions. Peninsula as a whole shows a northerly tilt except in places which have evidences of intraplate deformation.

¹Subrahmanya, K. R. (2022), Bhaaratha Craton – The Monolithic Precambrian Terrain of the Indian Peninsula. Jour. Geol. Soc. India (2022) 98:41-46 https://doi.org/10.1007/s12594-022-1925-1