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| --- | --- | --- | --- |
|  | **Stratigraphic units**  |  **Litho units & grade of metamorphism** | **Additional information** |
|  |
|  DHARWAR SUPERGROUP (2600-2800 Ma)  |  | Proterozoic mafic dykesCharnockites (2500-2600 Ma)Younger granites (2600 Ma) |  |
| CHITRADURGAGROUP | Ranibennur Subgroup  | Greywackes with BIF, polymict conglomerate, mafic-felsic volcanics.Least metamorphosed, gentle deformation | Oldest detrital zircon reported in Gadag greenstone belt: 3542 ± 9 Ma (Sarma *et al*. 2012) |
| Vanivilas Subgroup | Manganese and iron formations, stromatolitic carbonates, biogenic chert, pelites, quartzites and polymict conglomerates (basin margin). Mafic-felsic volcanics with BIF, phyllites (basin centre)Talya/Kaldurga Conglomerate = Metabasalts and siliceous phyllites of Jagar valley Greenschist facies metamorphism, strong deformation |  |
| Mulaingiri FormationSantaveri Formation |  *Disconformity* |
| BABABUDAN GROUP | BIF with phyllites and rare ultramafic-mafic sillsMetabasalts, felsic volcanics (Galipuje felsite), ultramafic schists, layered basic complexes, siliceous phyllites, cross-bedded quartzite (Kaimara, Tanigabail) | Oldest reported detrital zircon: 3634 ± 10 Ma (Bhaskar Rao *et al*. 2008) |
|  | Allampura FormationKalasapura Formation | Metabasalts, gabbros, ultramafic schists, local BIF, phyllites, cross-bedded quartzite (Lakya)Metabasalts, gabbros, ultramafic schists, phyllites, quartzites, basal quartz pebble conglomerate (Kartikere Conglomerate)Greenschist to lower amphibolite facies of metamorphism |  |
|  |  *Deformed angular unconformity* |
|  Peninsular Gneiss with trondjhemite-granodiorite plutons (⁓3200 to ⁓3400 Ma)  Migmatite and amphibolite facies metamorphism | Oldest generation: 3410 ± 3.6 Ma (Guitreau *et al.* 201*7*) |
|  *Intrusive/Tectonic contact* |
| SARGUR GROUP(3100-3300 Ma) | Ultramafic -mafic intrusive complexes (Hole Narasipur, Nuggihalli etc.)Cherts amd BIFBasaltic and komatiitic amphibolites, serpentinised komatiitesLocal marbles and calc-silicates rocksGarnet biotite schist and para-gneiss (with kyanite, sillimanite, staurolite, graphite and corundum); rare cordierite-sillimanite-hypersthene gneissFuchsite quartzite with chromite layers and barytes bedsUpper amphibolite to lower granulite facies metamorphism, intense deformation | Detrital zircons show age range of 3130-3580 Ma (Nutman *et al*. 1992)Oldest reported zircon age: 3555 ± 95 Ma (Lancaster *et al*. 2015) |
|  *Intrusive/Tectonic contact* |
|  Gorur Gneiss (3300-3400 Ma) |

Supplementary Table 1. Regional stratigraphy of the Western Dharwar craton (after Swami Nath & Ramakrishnan 1981; Viswanatha & Ramakrishnan 1981; Naqvi & Rogers 1987; Naqvi *et al*. 2009; and Guitreau *et al*. 2017)