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| Supplementary Table 1. Compilation of late Paleoproterozoic (ca. 1.76 Ga) igneous ages in east Gondwana | | | | | | | |
| Region | area | Lithology | igneous age (Ma) | metamorphic age (Ma) | note | Method | Reference |
| NW India | Aravalli | A-type granites | 1730–1700 |  | extensional setting | LA–MC–ICP–MS | Kaur et al. (2017b) |
| NW India | Aravalli | A-type granites | 1800–1710 |  |  | EPMA | Biju-Sekhar et al. (2002, 2003) |
| NW India | Aravalli | trondhjemitic variety | 1725 ±13 |  | Ajitgarh pluton | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | pink alkali granite | 1719 ± 13 |  | Ajitgarh pluton | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | gray alkali granite | 1741 ± 15 |  | Ajitgarh pluton | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli |  | 1745 ± 11 |  | Barodiya pluton | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | porphyritic gray granite | 1727 ±11 |  | Bairath | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | foliated non–porphyritic type | 1711 ± 10 |  | Bairath | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | porphyritic pink variety | 1741 ± 10 |  | Bairath | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | pink granite | 1802 ± 39 |  | Harsora Granite | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | pink granite | 1770 ± 10 |  | Harsora Granite | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | granite | 1728 ± 16 |  | Dadikar Granite | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | granite | 1726 ± 11 |  | Dadikar Granite | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | granite | 1685 ± 14 |  | Dadikar Granite | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | mesocratic gneiss containing well developed feldspar augens | 1753 ± 30 |  | Aravalli Fold Belt (AFB), Anjana Granite | EPMA | Biju-Sekhar et al. (2003) |
| NW India | Aravalli | NDFB intrusive granites | 1780–1710 |  | northern Aravalli orogen | SHRIMP | Kaur et al. (2006) |
| NW India | Aravalli | A-type granites | 1780–1726 |  | northern Aravalli orogen | SHRIMP | Biju-Sekhar et al. (2003), Gupta et al. (1998), Kaur et al. (2017a) |
| NW India | Aravalli | Harsora A2-granite | 1720–1700 |  | northern Aravalli orogen | SHRIMP | Kaur et al. (2017a) |
| NW India | Aravalli | Dadikar A2-granite | 1720–1700 |  | northern Aravalli orogen | SHRIMP | Kaur et al. (2017a) |
| NW India | Aravalli | Ajitgarh pluton, gray | 1741 ±15 |  | northern Aravalli orogen | SHRIMP | Biju Sekhar et al. (2002) |
| NE India | Bangladesh | granitic pegmatite | 1722 ± 10 |  | I-type suites formed within subduction-related magmatism | SHRIMP | Hossain et al. (2018) |
| NE India | Bangladesh | diorite | 1730 ± 11 |  |  | SHRIMP | Hossain et al. (2007) |
| NE India | Bangladesh | tonalite | 1722 ± 6 |  |  | SHRIMP | Ameen et al. (2007) |
| India | Central India Tectonic Zone (CITZ) | Harnakachar Granitoids | 1710 |  | Mahakoshal Belt | SHRIMP | Bora et al. (2013) |
| India | CITZ | Katoli Granitoids | 1730 |  | Mahakoshal Belt | SHRIMP | Bora et al. (2013) |
| India | CITZ | Jhirgadandi Granitoids | 1750 |  | Mahakoshal Belt | SHRIMP | Bora et al. (2013) |
| India | CITZ | Raspahari Granitoids | 1750 |  | Mahakoshal Belt | SHRIMP | Bora et al. (2013) |
| India | CITZ | Tumiya Granitoids | 1780 |  | Mahakoshal Belt | SHRIMP | Bora et al. (2013) |
| India | CITZ | Nerueadamar Granitoids | 1880 |  | Mahakoshal Belt | SHRIMP | Bora et al. (2013) |
| India | Eastern Ghats | Western Charnockite | 1700–1600 |  |  | SHRIMP | Kovach et al. (2001) |
| India | Eastern Ghats | Western Charnockite | 2800 |  |  | SHRIMP | Kovach et al. (2001) |
| India | Eastern Ghats | pegmatite | 1672 ± 4 |  |  | SHRIMP | Mezger and Cosca (1999a) |
| India | Eastern Ghats | allanite and monazites | 1632–1350 |  |  | SHRIMP | Mezger and Cosca (1999a) |
| India | Eastern Ghats | monazite | 1450–1390 |  |  | EPMA | Kovach et al. (2001) |
| India | Eastern Ghats | granulite | 1500 |  | Koraput Alkaline Complex | LA–MC–ICP–MS | Nanda et al. (2018) |
| India | Eastern Ghats | basic and felsic plutonic | 1700 |  | Ongole Domain | U–Th–Pb Monazite | Simmat and Raith (2008) |
| India | Eastern Ghats | anorthosite | 1690 |  | Kondapalle、arctype | SHRIMP | Dharma Rao et al. (2012) |
| India | Eastern Ghats | charnockite | 1720 |  | Kondapalle、arctype | SHRIMP | Kovach et al. (2001) |
| India | Eastern Ghats | granulite | 1600–1400 |  | oldest tectonothermal event | 40Ar–39Ar | Mezger and Cosca (1999b) |
| India | Eastern Ghats | Migmatite |  | 1762 ± 9 | Domain 1A | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | gneiss | 1614 ± 4 |  | Domain 1A | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | pegmatoidal enderbite | 1616 ± 2 – 1606 ± 10 |  | Domain 1A | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | aluminous granulite | 1880 |  | Domain 2 | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | aluminous granulite | 1759 ± 16 |  | Domain 2；inherited magmatic | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | aluminous granulite | 1701 ± 14 |  | Domain 2；inherited magmatic | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | aluminous granulite | 1780–1465 |  | Domain 2；inherited magmatic | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | Opx–felsic gneiss | 1716 |  | Domain 2；inherited magmatic | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | granite pegmatite | 1811–1456 |  | Domain 2；inherited magmatic | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | granitoid | 1760–1460 |  | Domain 2；inherited magmatic | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | granitic | 1720–1704 |  | Ongole Domain | SHRIMP | Chetty (2017) |
| India | Eastern Ghats | Kondapalli Magmatic Arc | 1850 |  | Ongole Domain, suprasubduction zone | SHRIMP | Vijaya Kumar et al. (2011) |
| India | Eastern Ghats | consists dominantly of gabbroic and anorthositic rocks, with subordinate ultramafic rocks | 1850–1700 |  | Ongole Domain, Kondapalli Layered complex, subduction–related arc magmatism | SHRIMP | Kumar and Leelanandam (2008), Leelanandam and Kumar (2007), Vijaya Kumar et al. (2011) |
| India | Eastern Ghats | Kandra Complex | 1600 |  | Ongole Domain | SHRIMP | Vijaya Kumar et al. (2011) |
| India | Eastern Ghats | major tectonometamorphic event |  | 1670–1550 | Ongole Domain | SHRIMP | Dobmeier and Raith (2003) |
| India | Eastern Ghats | plagiogranite | 1330 |  | Ongole Domain, continental arc environment, Kanigiri Mélange | LA–ICP–MS | Dharma Rao et al. (2011) |
| India | Eastern Ghats | granulite facies |  | 1600–1650 | Ongole Domain | SHRIMP | Bose et al. (2011) |
| India | Eastern Ghats | basic and felsic plutonic | 1700 |  | Ongole Domain | Monazite U–Pb–Th | Simmat and Raith (2008) |
| Rudall | Talbot | granites | 1790 |  | pre– and post–tectonic | SHRIMP | Smithies and Bagas (1997) |
| Rudall | Talbot | granites | 1765 |  | pre– and post–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | granodiorite gneiss | 1972 ± 4 |  | pre–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | monzogranite gneiss | 1802 ± 14 |  | pos–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | monzogranite gneiss | 1801 ± 5 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | monzogranite gneiss | 1795 ± 17 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | monzogranite gneiss | 1792 ± 9 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | quartzite | 1790 ± 10 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | granodiorite gneiss | 1790 ± 17 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | syenogranite gneiss | 1787 ± 12 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | Aplite dyke | 1778 ± 16 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | granodiorite gneiss | 1778 ± 17 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | monzogranite gneiss | 1775 ± 10 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Talbot | K-feldspar augen orthogneiss | 1765 ± 15 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Connaughton | K-feldspar augen orthogneiss | 1777 ± 7 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Connaughton | K-feldspar augen orthogneiss | 1769 ± 7 |  | syn–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Tabletop | granodiorite | 1476 ± 10 |  | pre– and post–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Tabletop | foliated granite | 1310 ± 4 |  | post–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Tabletop | pegmatite | 1291 ± 10 |  | post–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Tabletop | monzogranite | 1286 ± 6 |  | post–tectonic | SHRIMP | Nelson (1998) |
| Rudall | Tabletop | garnet–bearing microgneiss | 1222 ± 63 |  | post–tectonic | SHRIMP | Bagas (2004) |
| Gawler | Kimban | Donington and Colbert granitoid Suites | 1850 |  | plate–margin batholiths | SHRIMP | Hoek and Schaefer (1998) |
| Gawler | Kimban | Colbert Suite | 1760 |  | Pre– to syn–orogenic |  | Parker (1993) |
| Gawler | Kimban | Middle Camp granite | 1740 |  | Pre– to syn–orogenic |  | Parker (1993) |
| Gawler | Kimban | Middle camp Granite | 1740–1730 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Moonabie | McGregor Volcanic, A bimodal suite，acid, ash–flow tuffs and basaltic lava | 1740 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Nuyts | granite gneiss | 1762 ± 11 |  |  | SHRIMP | Cooper and Belousova (2004) |
| Gawler | Moonabie | Moody Suite | 1740–1730 |  |  | SHRIMP | Fanning et al. (2007) |
| Gawler | Moonabie | rhyolite | 1715 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Moonabie | granitic gneiss | 1697 ± 65 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Moonabie | porphyritic rhyolite | 1791 ± 4 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Mt Woods | quartzofeldspathic gneiss | 1742 ± 27 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Moonabie | porphyritic rhyolite | 1737 ± 5 |  |  | SHRIMP | Fanning et al. (1988) |
| Gawler | Moonta | gabbro | 1765 |  |  | SHRIMP | Johnson (1993) |
| Broken Hill |  | dacite dike |  | 1580 ± 5 |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Mundi intrusion |  | 1591 ± 5 |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Purnamoota road leucogneiss |  | 1597 ± 3 |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Hores Gneiss, metavolcaniclastic | 1685 ± 3 |  |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Alma Gneiss | 1704 ± 3 |  |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Rasp Ridge Gneiss | 1683 ± 3 |  |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Oakdale Granite Gneiss | 1695 ± 4 |  |  |  | Stevens (2006) |
| Broken Hill |  | Stephens Creek Granite Gneiss | 1689 ± 5 |  |  |  | Stevens (2006) |
| Broken Hill |  | Wondervale Well Granite Gneiss | 1685 ± 5 |  |  |  | Stevens (2006) |
| Broken Hill |  | Purnamoota Leucogneiss | 1597 ± 5 |  |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Cusin Creek Granite | 1596 ± 3 |  |  | SHRIMP | Gibson et al. (2005) |
| Broken Hill |  | Mundi Granite | 1591 ± 5 |  |  | SHRIMP | Gibson et al. (2005) |
| Mount Isa |  | granites | 1820 |  | I-type infracrustal sources | SHRIMP | Wyborn (1988) |
| Mount Isa |  | mafic extrusive | 1780–1760 |  |  | SHRIMP | Claoué Long (2007) |
| Mount Isa |  | Packsaddle Granite | 1725 |  |  | SHRIMP | Claoué Long (2007) |
| Mount Isa |  | Hobblechain Rhyolite | 1725 |  |  | SHRIMP | Claoué Long (2007) |
| Mount Isa |  | Tanumbirini Rhyolite | 1713 ± 7 |  |  | SHRIMP | Claoué Long (2007) |
| Mount Isa |  | felsic volcanic debris | 1708 ± 5 |  |  | SHRIMP | Jackson et al. (2000) |
| Mount Isa |  | Yeldham Granite | 1796 ± 3 |  |  | Xenotime TIMS | Wyborn (1988) |
| Mount Isa |  | alkali-feldspar granite | 1711 ± 3 |  |  | SHRIMP | Neumann et al. (2006) |
| Mount Isa |  | Top Rocky Rhyolite | 1725 ± 3 |  |  | SHRIMP | Page et al. (2000) |
| Mount Isa |  | foliated porphyritic granites and gneisses | 1758 ± 8 |  |  | SHRIMP | Pearson (1992) |
| Mount Isa |  | Burstall Granite and comagmatic Lunch Creek Gabbro | 1740–1735 |  |  | SHRIMP | Page (1983a) |
| Mount Isa |  | rhyolites | 1720 ± 7 |  |  | SHRIMP | Page (1983b) |
| Mount Isa |  | Gin Creek Granite | 1741 ± 7 |  |  | SHRIMP | Page and Sun (1998) |
| Mount Isa |  | Jessie Granite | 1746±8 |  | εNd(t) = –1.7 | SHRIMP | Page and Sun (1998) |
| Mount Isa |  | Double Crossing Metamorphics intrusive | 1740 ± 6 |  |  | SHRIMP | Page and Sun (1998) |
| Mount Isa | Magna Lynn | metamorphosed basalt | 1777 |  | SiO2<49% | SHRIMP | Wilson (1987) |
| Mount Isa | Argylla | andesite, dacite, rhyolite | 1777 |  | The high K2O (>5%) and total iron contents (5–7% in dacites and 2–5% in rhyolites) | SHRIMP | Wilson (1987) |
| Mount Isa |  | Eastern Creek Volcanics | 1700 |  | Both are marie (<50% SiO2) with tholeiitic affinities. | SHRIMP | Wilson (1987) |
| Mount Isa | Argylla | andesite, dacite, rhyolite | 1760 |  |  | SHRIMP | Claoué Long (2007) |
| Mount Isa | Leichhardt Metamorphics | granites | 1720 |  | S-type magmas derived by  partial melting of sedimentary crustal material | SHRIMP | Bierlein et al. (2011) |
| Mount Isa | Leichhardt Metamorphics | granites | 1775 |  | partial melting of a shale source at shallow depths so that garnet is not in the residue | SHRIMP | Bierlein et al. (2011) |
| Mount Isa | Leichhardt Metamorphics | granites | 1790 |  |  | SHRIMP | Wilson (1987) |
| Georgetown | Forsayth | amphibolite | 1675 ± 3 |  |  | SHRIMP | Black et al. (1998) |
| Georgetown | Forsayth | mafics | 1675 ± 3 |  |  | SHRIMP | Black et al. (1998) |
| Georgetown | Forsayth | leuco–gabbro | 1656 ± 2 |  |  | SHRIMP | Black et al. (1998) |
| Georgetown | Forsayth | granitic gneisses | 1684 ± 2 |  |  | SHRIMP | Black et al. (1998) |
| Georgetown | Forsayth | granitic gneisses | 1696 ± 2 |  |  | SHRIMP | Black et al. (2005) |
| Georgetown | Forsayth | felsic leucogneiss | 1707 ± 8 |  |  | SHRIMP | Black et al. (2005) |
| Georgetown | Forsayth | granites | 1560–1550 |  |  | SHRIMP | Black et al. (2005) |
| Georgetown | Forsayth | granites | 1550 ±6 |  | εNd(t) < 0 | SHRIMP | Black and McCulloch (1990) |
| Georgetown | Forsayth | Mistletoe Granite | 1544 ± 7 |  | εNd(t) < 0 | SHRIMP | Black and McCulloch (1990) |
| Georgetown | Forsayth | trondhjemite | 1650 ± 17 |  | εNd(t)< 0 | SHRIMP | Black and McCulloch (1990) |
| Georgetown | Forsayth | migmatitic gneiss | 1586 ± 5 |  | A, S-type | SHRIMP | Blewett and Black (1998) |
| Georgetown | Forsayth | biotite granite | 1558 ± 4 |  |  | SHRIMP | Black and McCulloch (1990) |
| Coen Region | Yambo | mafic igneous | 1586 ± 4 |  |  | SHRIMP | Blewett and Black (1998) |
| Coen Region | Yambo | granodioritic gneiss | 1585 ± 6 |  |  | SHRIMP | Blewett and Black (1998) |
| Coen Region | Yambo | granodioritic gneiss | 1576 ± 5 |  |  | SHRIMP | Blewett and Black (1998) |
| Coen Region | Yambo | mylonitic granitic gneiss | 1579 ± 4 |  |  | SHRIMP | Blewett and Black (1998) |
| southern Arunta |  | granite | 1770 ± 1750 |  | syn-tectonic and post-tectonic | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | biotite granodiorite | 1775 ± 27 |  | Jervois Granite | Whole–Rock Isochron | Black and McCulloch (1990) |
| southern Arunta | Aileron | biotite granodiorite | 1771 ± 6 |  | Jervois Granite, Barramundi–type suites | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | Barramundi granite | 1890–1830 |  |  | SHRIMP | Zhao and Cooper (1992 |
| southern Arunta | Aileron | Atnarpa Igneous | 1880–1850 |  |  | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | biotite–feldspar granitic gneiss | 1747 ± 9 |  | Jessie Gap Gneiss | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | quartzofeldspathic gneiss, amphibolite and biotite gneiss | 1771 ± 9 |  | tonalitic gneiss | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | granodiorite, granite,  diorite, granitic gneiss, amphibolite and syenite | 1762 ± 9 |  | Atneequa Granitic Complex, εNd(t) = 0.22 | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Northern Territory | K-feldspar biotite granodiorite | 1743 ± 4 |  | Atneequa Granite | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | feldspar porphyritic granite | 1714 ± 3 |  | Jinka Granite | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | foliated biotite granite | 1805 ± 4 |  |  | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | biotite granite |  | 1710 ± 5 |  | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | gneissic granite | 1779 ± 3 | 1744 ± 4 | Huckitta, Jervois | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | feldspar porphyritic granite | 1746 ± 4 |  | Jervois | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | biotite granodiorite | 1773 ± 3 |  | Jervois | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | biotite granodiorite–tonalite | 1774 ± 5 |  | Jervois | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | feldspar porphyritic granodiorite | 1789 ± 3 |  | Jervois | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | foliated biotite monzogranite | 1791 ± 3 |  | Dneiper | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | quartz norite | 1780 ± 6 |  | Dneiper | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | petroleum well granite | 1802 ± 8 |  |  | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | foliated quartzbiotite schist/mylonite | 1794 ± 3 | 1769 ± 3 |  | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | tourmaline muscovite granite | 1740 ± 30 |  | Illogwa Creek\Limbla | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | muscovite granite | 1730 ± 8 |  |  | SHRIMP | Kositcin et al. (2011) |
| southern Arunta | Aileron | High–Al type | 1771 ± 6 |  | Jervois | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | grey, biotite–rich gneissic granite | 1762 ± 14 |  | Dneiper Granite | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | Huckitta Granodiorites | 1762 ± 3 |  | Entia Dome | SHRIMP | Maidment et al. (2005) |
| southern Arunta | Aileron | grey, biotite–rich gneissic granite Low–A1 type | 1771 ± 15 |  |  | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | Mount Swan Granite | 1713 ± 7 |  |  | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | Haverson suite | 1818 ± 8 |  |  | SHRIMP | Collins and Williams (1995) |
| southern Arunta | Aileron | High–Al type | 1747 ± 3 |  |  | SHRIMP | Foden et al. (1988) |
| southern Arunta | Aileron | Low–A1 type | 1780 ± 10 |  | Napperby Main suite, migmatitic quartzofeldspathic  gneiss | SHRIMP | Collins and Williams (1995) |
| southern Arunta | Aileron | High–heat–production (HHP) Group | 1713 ± 7 |  | Jinka suite, Barrow Creek suite, Napperby HHP suite | SHRIMP | Warren (1990) |
| southern Arunta | Aileron | High–heat–production (HHP) Group | 1726 ± 4 |  | Wuluma suite | SHRIMP | Collins and Williams (1995) |
| southern Arunta | Aileron | High–heat–production (HHP) Group | 1726 ± 4 |  | Gumtree suite | SHRIMP | Warren (1990) |
| southern Arunta | Aileron | quartz–microcline–plagioclase–biotite gneiss | 1773 ± 4 |  | Inkamulla, arc–like | SHRIMP | Collins et al. (2005) |
| southern Arunta | Aileron | well–layered migmatitic plagioclase + quartz + K-feldspar + biotite + hornblende gneiss | 1762 ± 3 |  | Huckitta Granodiorites, arc–like | SHRIMP | Collins et al. (2005) |
| southern Arunta | Aileron | biotite granite | 1765 ± 4 |  | Casey Inlier | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | Granodiorite | 1776 ± 3 |  |  | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | Albarta Metamorphics |  | 1729 ± 3 |  | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | metapsammite |  | 1852 ± 6 | Casey Inlier | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | biotite leucogranite | 1770 ± 4 |  | Casey Inlier | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | migmatite | 1768 ± 5 |  | Casey Inlier | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | migmatite | 1723 ± 3 |  |  | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | low–grade metagabbro | 1771 ± 4.4 |  | Casey Inlier | SHRIMP | Carson et al. (2009) |
| southern Arunta | Aileron | magmatic rocks | 1780-1740 |  |  |  | Fields (2012) |
| southern Arunta | Aileron | Dwarf Well Granite | 1773 ± 6 |  | εHf(t) = –8.5 to –3.6 | SHRIMP | Hollis et al. (2013), Kirkland et al. (2009) |
| southern Arunta | Aileron | granite | 1767 ± 4 |  |  | SHRIMP | Worden et al. (2006) |
| southern Arunta | Aileron | granitic rocks | 1810–1800 |  |  | SHRIMP | Scrimgeour (2003) |
| southern Arunta | Aileron | pelitic migmatite | 1753 ± 7 |  |  | SHRIMP | Bodorkos et al. (2013) |
| southern Arunta | Aileron | felsic gneiss | 1771 ± 10 |  |  | SHRIMP | Wade et al. (2008) |
| southern Arunta | Aileron | granites and gabbro | 1780–1760 |  |  | SHRIMP | Claoué Long (2007) |
| southern Arunta | Aileron | granitic and mafic–includes apparent arc–related and A-type magmatism | 1760–1740 |  |  | SHRIMP | Scrimgeour (2003) |
| southern Arunta | Aileron | metasyenogranite | 1691 ± 5 |  |  | SHRIMP | Kirkland et al. (2009) |
| southern Arunta | Aileron | migmatitic orthogneiss | 1779 ± 5 |  | Jervois | SHRIMP | Kositcin et al. (2015) |
| southern Arunta | Aileron | psammitic gneiss | 1763 ± 6 |  |  | SHRIMP | Bodorkos et al. (2013) |
| southern Arunta | Aileron | Alice Springs Granite | 1752 ± 11 |  | Calcalkaline–Trondhjentitic (CAT) Group | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Aileron | Alice Springs Granite | 1860 ± 20 |  | CAT Group, inheritance age | SHRIMP | Zhao and Bennett (1995) |
| southern Arunta | Warumpi | granite | 1643 ± 4 |  |  | SHRIMP | Hollis et al. (2013) |
| southern Arunta | Warumpi | Rungutjirba Gneiss | 1615 |  | εNd(t) = +1.3 to +1.4 | SHRIMP | Hollis et al. (2013) |
| southern Arunta | Warumpi | Burt Bluff Gneiss | 1603 |  | εNd(t) = +0.9 to +2.5 | SHRIMP | Hollis et al. (2013) |
| southern Arunta | Warumpi | Ininti Granite | 1691 |  |  | SHRIMP | Hollis et al. (2013) |
| southern Arunta | Warumpi | Ininti Granite | 1688 ± 5 |  |  | SHRIMP | Worden et al. (2006) |
| southern Arunta | Warumpi | dacite | 1677 |  |  | SHRIMP | Hollis et al. (2013) |
| southern Arunta | Irindina | migmatitic orthogneiss | 1795 ± 5 |  | Queenie Flat Granite Complex | SHRIMP | Bodorkos et al. (2013) |
| southern Arunta | Irindina | porphyritic orthogneiss | 1795 ± 5 |  | Queenie Flat Granite Complex | SHRIMP | Bodorkos et al. (2013) |
| southern Arunta | Irindina | tonalitic orthogneiss | 1802 ± 7 |  | Phoenix Orthogneiss | SHRIMP | Bodorkos et al. (2013) |

# References

Ameen, S.M.M., Wilde, S.A., Kabir, M.Z., Akon, E., Chowdhury, K.R., Khan, M.S.H., 2007. Paleoproterozoic granitoids in the basement of Bangladesh: A piece of the Indian shield or an exotic fragment of the Gondwana jigsaw? Gondwana Research 12, 380–387.

Bagas, L., 2004. Proterozoic evolution and tectonic setting of the northwest Paterson Orogen, Western Australia. Precambrian Research 128, 475–496.

Bierlein, F.P., Maas, R., Woodhead, J., 2011. Pre–1.8 Ga tectono-magmatic evolution of the Kalkadoon–Leichhardt Belt: implications for the crustal architecture and metallogeny of the Mount Isa Inlier, northwest Queensland, Australia. Australian Journal of Earth Sciences 58, 887–915.

Biju-Sekhar, S., Yokoyama, K., Pandit, M.K., Okudaira, T., Yoshida, M., Santosh, M., 2003. Late Paleoproterozoic magmatism in Delhi Fold Belt, NW India and its implication: evidence from EPMA chemical ages of zircons. Journal of Asian Earth Sciences 22, 189–207.

Biju Sekhar, S., Pandit, M.K., Yokoyama, K., Santosh, M., 2002. Electron microprobe dating of the Ajitgarh and Barodiya granitoids, NW India: implications on the evolution of Delhi Fold Belt. Journal of Geosciences, Osaka City University 45, 13–27.

Black, L., Withnall, I.W., Gregory, P., Oversby, B.S., Bain, J.H.C., 2005. U– Pb zircon ages from leucogneiss in the Etheridge Group and their significance for the early history of the Georgetown region, north Queensland. Australian Journal of Earth Sciences 52, 385–401.

Black, L.P., Gregory, P., Withnall, I.W., Bain, J.H.C., 1998. U–Pb zircon age for the Etheridge Group, Georgetown region, north Queensland: Implications for relationship with the Broken Hill and Mt Isa sequences Australian Journal of Earth Sciences 45, 925–935.

Black, L.P., McCulloch, M.T., 1990. Isotopic evidence for the dependence of recurrent felsic magmatism on new crust formation: An example from the Georgetown region of Northeastern Australia. Geochimica et Cosmochimica Acta 54, 183–196.

Blewett, R.S., Black, L.P., 1998. Structural and temporal framework of the Coen Region, north Queensland: Implications for major tectonothermal events in east and north Australia. Australian Journal of Earth Sciences 45, 597–609.

Bodorkos, S., Beyer, E.E., Edgoose, C.J., Whelan, J.A., Webb, G., Vandenberg, L.C., Hallett, L., 2013. Summary of results. Joint NTGS–GA geochronology project: central and eastern Arunta Region, January 2008-June 2011. Northern Territory Geological Survey, Record 3.

Bora, S., Kumar, S., Yi, K., Kim, N., Lee, T.H., 2013. Geochemistry and U–Pb SHRIMP zircon chronology of granitoids and microgranular enclaves from Jhirgadandi Pluton of Mahakoshal Belt, Central India Tectonic Zone, India. Journal of Asian Earth Sciences 70–71, 99–114.

Bose, S., Dunkley, D.J., Dasgupta, S., Das, K., Arima, M., 2011. India–Antarctica–Australia–Laurentia connection in the Paleoproterozoic–Mesoproterozoic revisited: Evidence from new zircon U–Pb and monazite chemical age data from the Eastern Ghats Belt, India. Geological Society of America Bulletin 123, 2031–2049.

Carson, C.J., Claoué Long, J., Stern, R.A., Close, D.F., Scrimgeour, I., Glass, L.M., 2009. Summary of results. Joint NTGS–GA geochronology project: Arunta and Pine Creek regions July 2006–May 2007. Northern Territory Geological Survey, Record 1.

Chetty, T.R.K., 2017. Chapter 3–The Eastern Ghats Mobile Belt, in: Chetty, T.R.K. (Ed.), Proterozoic Orogens of India. Elsevier, 119–210.

Claoué Long, J., 2007. Time–space evolution of the southern North Australia Craton. Geochronological synthesis and Time-Space plots for Proterozoic Australia, 1–211.

Collins, W.J., Flood, R.H., Vernon, R.H., Shaw, S.E., 2005. The Wuluma granite, Arunta Block, central Australia: an example of in situ, near–isochemical granite formation in a granulite–facies terrane. Lithos 23, 63–83.

Collins, W.J., Williams, I.S., 1995. SHRIMP ionprobe dating of short–lived Proterozoic tectonic cycles in the northern Arunta Inlier, central Australia. Precambrian Research 71, 69–89.

Cooper, S.A., Belousova, E.A., 2004. Granite gneiss basement on Flinders Island, South Australia. Australian Journal of Earth Sciences 51, 611-619.

Dharma Rao, C.V., Santosh, M., Chmielowski, R.M., 2012. Sapphirine granulites from Panasapattu, Eastern Ghats belt, India: Ultrahigh–temperature metamorphism in a Proterozoic convergent plate margin. Geoscience Frontiers 3, 9–31.

Dharma Rao, C.V., Santosh, M., Wu, Y.-B., 2011. Mesoproterozoic ophiolitic mélange from the SE periphery of the Indian plate: U–Pb zircon ages and tectonic implications. Gondwana Research 19, 384–401.

Dobmeier, C.J., Raith, M.M., 2003. Crustal architecture and evolution of the Eastern Ghats Belt and adjacent regions of India. Geological Society, London, Special Publications 206, 145–168.

Fanning, C.M., Flint, R.B., Parker, A.J., Ludwig, K.R., Blissett, A.H., 1988. Refined Proterozoic evolution of the Gawler Craton, South Australia, through U–Pb zircon geochronology. Precambrian Research 40–41, 363–386.

Fanning, C.M., Reid, A.J., Teale, G.S., 2007. A geochronological framework for the Gawler Craton, South Australia. South Australia Geological Survey Bulletin 55.

Fields, C.E., 2012. Liebig–aged (c. 1640 Ma) magmatism and metamorphism in c. 1760 Ma crust in the Warumpi and southern Aileron Province, central Australia: a case for revising the tectonic framework of Proterozoic Australia. http://hdl.handle.net/2440/92217.

Foden, J.D., Buick, I.S., Mortimer, G.E., 1988. The petrology and geochemistry of granitic gneisses from the East Arunta inlier, central Australia: implications for Proterozoic crustal development. Precambrian Research 40–41, 233–259.

Gibson, G.M., Page, R.W., Stevens, B.P.J., 2005. Geochronology of the Sequence Hosting the Broken Hill Pb–Zn–Ag Orebody, Australia. Economic Geology 100, 633–661.

Gupta, P., Guha, D.B., Chattopadhyay, B., 1998. Basement-cover relationship in the Khetri copper belt and the emplacement mechanism of the granite massifs, Rajasthan, India. Journal of the Geological Society of India 52, 417–432.

Hoek, J.D., Schaefer, B.F., 1998. Palaeoproterozoic Kimban mobile belt, Eyre Peninsula: timing and significance of felsic and mafic magmatism and deformation. Australian Journal of Earth Sciences 45, 305–313.

Hollis, J.A., Kirkland, C.L., Spaggiari, C.V., Tyler, I.M., Haines, P.W., Wingate, M.T.D., Belousova, E.A., Murphy, R.C., 2013. Zircon U–Pb–HF Isotope Evidence for Links Between the Warumpi and Aileron Provinces, West Arunta Region. Geological Survey of Western Australia.

Hossain, I., Tsunogae, T., Rajesh, H.M., Chen, B., Arakawa, Y., 2007. Palaeoproterozoic U–Pb SHRIMP zircon age from basement rocks in Bangladesh: A possible remnant of the Columbia supercontinent. Comptes Rendus Geoscience 339, 979–986.

Hossain, I., Tsunogae, T., Tsutsumi, Y., Takahashi, K., 2018. Petrology, geochemistry and LA–ICP–MS U–Pb geochronology of Paleoproterozoic basement rocks in Bangladesh: An evaluation of calc–alkaline magmatism and implication for Columbia supercontinent amalgamation. Journal of Asian Earth Sciences 157, 22–39.

Jackson, M.J., Scott, D.L., Rawlings, D.J., 2000. Stratigraphic framework for the Leichhardt and Calvert Superbasins: Review and correlations of the pre–1700 Ma successions between Mt Isa and McArthur River. Australian Journal of Earth Sciences 47, 381–403.

Johnson, J.P., 1993. The geochronology and radiogenic isotope systematics of the Olympic Dam copper–uranium–gold–silver deposit, South Australia.

Kaur, P., Chaudhri, N., Okrusch, M., Koepke, J., 2006. Palaeoproterozoic A-type felsic magmatism in the Khetri Copper Belt, Rajasthan, northwestern India: petrologic and tectonic implications. Mineralogy and Petrology 87, 81–122.

Kaur, P., Eliyas, N., Chaudhri, N., 2017a. Record of post-collisional A-type magmatism in the Alwar complex, northern Aravalli orogen, NW India. Current Science 112, 608–615.

Kaur, P., Zeh, A., Chaudhri, N., Eliyas, N., 2017b. Two distinct sources of 1.73–1.70Ga A-type granites from the northern Aravalli orogen, NW India: Constraints from in situ zircon U-Pb ages and Lu–Hf isotopes. Gondwana Research 49, 164–181.

Kirkland, C.L., Wingate, M.T.D., Tyler, I.M., Spaggiari, C.V., 2009. 184367: metagranodiorite, Dwarf Well. Geochronology Record 846, 4.

Kositcin, N., Magee, C.W., Champion, D.C., Whelan, J.A., 2011. New SHRIMP geochronology from the Arunta Region: 2009–2010. Geoscience Australia.

Kositcin, N., Reno, B.L., Whelan, J.A., 2015. Summary of results. Joint NTGS–GA geochronology project: Arunta Region, July 2014–June 2015. Northern Territory Geological Survey.

Kovach, V.P., Simmat, R., Rickers, K., Berezhnaya, N.G., Salnikova, E.B., Dobmeier, C., Raith, M.M., Yakovleva, S.Z., Kotov, A.B., 2001. The Western Charnockite Zone of the Eastern Ghats Belt, India–An Independent Crustal Province of Late Archaean (2.8 Ga) and Palaeoproterozoic (1.7–1.6 Ga) Terrains. Gondwana Research 4, 666–667.

Kumar, K.V., Leelanandam, C., 2008. Evolution of the Eastern Ghats Belt, India; a plate tectonic perspective. Bulletin-Geological Society of India 72, 720–749.

Leelanandam, C., Kumar, V., 2007. Petrogenesis and tectonic Setting of the chromitites and chromite–bearing ultramafic cumulates of the Kondapalli layered complex, Eastern Ghats Belt, India: evidences from the textural, mineralchemical and whole–rock geochemical Studies. Indian Continental Crust and Upper Mantle, IAGR Memoir 10, 89–107.

Maidment, D.W., Hand, M., Williams, I.S., 2005. Tectonic cycles in the Strangways Metamorphic Complex, Arunta Inlier, central Australia: geochronological evidence for exhumation and basin formation between two high-grade metamorphic events. Australian Journal of Earth Sciences 52, 205–215.

Mezger, K., Cosca, M.A., 1999a. The thermal history of the Eastern Ghats Belt (India) as revealed by U–Pb and 40Ar/39Ar dating of metamorphic and magmatic minerals: implications for the SWEAT correlation. Precambrian Research 94, 251–271.

Mezger, K., Cosca, M.A., 1999b. The thermotectonic history of the Eastern Ghats metamorphic Belt (India), as revealed by U–Pb and 40Ar–39Ar dating of metamorphic and magmatic minerals. Precambrian Res 94, 251–271.

Nanda, J., Gupta, S., Hacker, B., 2018. U–Pb zircon and titanite ages from granulites of the Koraput area–Evidence for Columbia, Rodinia and Gondwana from the Eastern Ghats Province, India. Precambrian Research 314, 394–413.

Nelson, D.R., 1998. Compilation of SHRIMP U–Pb zircon geochronology date, 1997. Western Australia Geological Survey, Record.

Neumann, N.L., Southgate, P.N., Gibson, G.M., McIntyre, A., 2006. New SHRIMP geochronology for the Western Fold Belt of the Mt Isa Inlier: developing a 1800–1650 Ma event framework Australian Journal of Earth Sciences 53, 1023–1039.

Page, R.W., 1983a. Chronology of magmatism, skarn formation, and uranium mineralization, Mary Kathleen, Queensland, Australia. Economic Geology 78, 838–853.

Page, R.W., 1983b. Timing of superposed volcanism in the Proterozoic Mount Isa Inlier, Australia. Precambrian Research 21, 223–245.

Page, R.W., Jackson, M.J., Krassay, A.A., 2000. Constraining sequence stratigraphy in north Australian basins: SHRIMP U–Pb zircon geochronology between Mt Isa and McArthur River Australian Journal of Earth Sciences 47, 431–459.

Page, R.W., Sun, S.S., 1998. Aspects of geochronology and crustal evolution in the Eastern Fold Belt, Mt Isa Inlier. Australian Journal of Earth Sciences 45, 343–361.

Parker, A.J., 1993. Kimban orogeny. The geology of South Australia 1, 71–82.

Pearson, P.J., 1992. Synkinematic emplacement of the Middle Proterozoic Wonga batholith into a midcrustal extensional shear zone, Mount Isa Inlier, Queensland, Australia. Detailed Studies of the Mount Isa Inlier, 289–328.

Scrimgeour, I., 2003. Developing a revised framework for the Arunta Region. Annual Geoscience Exploration Seminar, pp. 2003–2001.

Simmat, R., Raith, M.M., 2008. U–Th–Pb monazite geochronometry of the Eastern Ghats Belt, India: timing and spatial disposition of poly-metamorphism. Precambrian Research 162, 16–39.

Smithies, R.H., Bagas, L., 1997. High pressure amphibolite–granulite facies metamorphism in the Paleoproterozoic Rudall Complex, central Western Australia. Precambrian Research 83, 243–265.

Stevens, B.P.J., 2006. Advances in understanding Broken Hill geology. Broken Hill Exploration Initiative, 166.

Vijaya Kumar, K., Leelanandam, C., Ernst, W.G., 2011. Formation and fragmentation of the Palaeoproterozoic supercontinent Columbia: evidence from the Eastern Ghats Granulite Belt, southeast India. International Geology Review 53, 1297–1311.

Wade, B.P., Hand, M., Maidment, D.W., Close, D.F., Scrimgeour, I.R., 2008. Origin of metasedimentary and igneous rocks from the Entia Dome, eastern Arunta region, central Australia: a U–Pb LA–ICPMS, SHRIMP and Sm–Nd isotope study. Australian Journal of Earth Sciences 55, 703–719.

Warren, R.G., 1990. Geochemical sampling in the Arunta Block, 1980–8. Bureau of Mineral Resources, Geology & Geophysics.

Wilson, I.H., 1987. Geochemistry of Proterozoic Volcanics, Mount Isa Inlier, Australia. Geological Society Special Publication 33, 409–423.

Worden, K.E., Claoué Long, J.C., Scrimgeour, I.R., Doyle, N., 2006. Summary of Results. Joint NTGS–GA Geochronology Project: Pine Creek Orogen and Arunta Region, January–June 2004. Northern Territory Geological Survey Record 5, 1–23.

Wyborn, L.A.I., 1988. Petrology, geochemistry and origin of a major Australian 1880–1840 Ma felsic volcano–plutonic suite: a model for intracontinental felsic magma generation. Precambrian Research 40–41, 37–60.

Zhao, J.X., Bennett, V.C., 1995. SHRIMP U–Pb zircon geochronology of granites in the Arunta Inlier, central Australia: implications for Proterozoic crustal evolution. Precambrian Research 71, 17–43.