

INVITED CENTENNIAL ARTICLE

Secular change in metamorphism and the onset of global plate tectonics

MICHAEL BROWN^{1,*} AND TIM JOHNSON²

¹Laboratory for Crustal Petrology, Department of Geology, University of Maryland,
College Park, MD 20742, U.S.A.

²Department of Applied Geology, The Institute for Geoscience Research (TIGeR), Curtin
University, Perth WA 6845, Australia

* Email: mbrown@umd.edu

SUPPLEMENTARY DATA TABLE

Table 1. High dT/dP metamorphism

Age (Ga)	Peak T	Peak P/P-T/peak T	T (°C)	P (GPa)	T / P (°C/GPa)	References
3.714	Amphibolite unit, Isua supracrustal belt, southwest Greenland	P-T	600	0.7	857.142857	Arai et al. (2015); Blöcher-Toft and Frei (2001)
3.669	Islands south of Nuuk, southwest Greenland	P-T	860	0.8	1075	Authors P-T estimate (unpubl.); Horie et al. (2010)
3.312	Metasedimentary enclave, Mount Edgar dome, East Pilbara	Peak T	700	0.7	1000	François et al. (2014)
3.07	Kubuta granulites, Ancient Gneiss Complex, Swaziland	Peak T	853	0.71	1201.404851	Taylor et al. (2012); Suhr et al. (2015)
2.923	La France Formation, Murchison Greenstone Belt, South Africa	Peak P	655	0.81	808.649753	Block et al. (2013)
2.819	BIF, Voronezh Crystalline Massif, Volgo-Uralia	Peak T	900	1	900	Savko et al. (2010); Fonarev et al. (2006)
2.800	Tasiusarsuaq terrane, southern West Greenland	P-T	865	0.81	1067.901235	Dziggel et al. (2012)
2.751	Tire Brodré terrane, southern West Greenland	P-T	640	0.6	1066.666667	Dziggel et al. (2014)
2.73	Mkhondo Valley metamorphic suite, Ancient Gneiss Complex, Swaziland	Peak T	838	0.5	1676	Taylor et al. (2010)
2.715	Granulite xenolith, Grace Kimberlite pipe, South Africa	Peak T	1,000	1.05	952.380952	Dawson et al. (1997); Schmitz and Bowring (2003); Baldwin et al. (2007)
2.742	Skjoldungen, SE Greenland	P-T	760	0.80	950	Tusch et al. (2015); Berger et al. (2014)
2.720	Southern Marginal Zone, Limpopo Belt, southern Africa	P-T	853	1.10	775.454545	Nicola et al. (2015)
2.718	Paradise Basin, Wind River Range, Wyoming, USA	Peak T	780	0.95	821.0526316	Nicola et al. (2006); Donohue and Essene (2005)
2.700	Scourie–Drumbeg, NW Scotland	P-T	950	1.05	904.7619048	Hoyle and White (2011); Johnson et al. (2013); Crowley et al. (2015)
2.700	Minto block, Superior Province, Canada (average 7 samples)	P-T	840	0.67	1253.731343	Pattison et al. (2003)
2.700	English River Domain, Superior Province, Canada (average 7 samples)	P-T	810	0.65	1246.153246	Pattison et al. (2003)
2.697	Northern Teton Range, Wyoming, USA	P-T	950	1.20	791.6666667	Frost et al. (2007, 2009)
2.680	Varpaajarvi, central Finland	P-T	850	0.90	944.4444444	Höltä and Paavola (2000); Mäntäri and Höltä (2002); Nehring et al. (2009)
2.680	Natawhan Lake, Pikitwonei granulite domain, NW Superior Province, Canada	P-T	900	0.90	1000	Kooijman et al. (2012); Heaman et al. (2011); Mezger et al. (1990)
2.676	Beartooth Mountains, Montana–Wyoming, USA	P-T	780	0.65	1200	Guevara et al. (2015); Dragovic et al. (2015)
2.675	Ashuanipi Complex, Superior Province, Canada (average 10 samples)	P-T	880	0.78	1128.25128	Pattison et al., 2003
2.667	Sample 251, Jean Lake, central Quetico metasedimentary belt, Superior Province, Canada	P-T	628	0.64	981.25	Valli et al. (2004)
2.660	Quetico Metasedimentary Belt, Superior Province, Canada (average 6 samples)	P-T	880	0.80	1100	Pattison et al., 2003
2.645	Quadrasing, Grace terrain, Yilgarn craton	P-T	760	0.60	1266.6666667	Wilde (1994); Nemchin et al. (1994); Lindsley (1983)
2.644	Bulai pluton, Central Zone, Limpopo Belt, southern Africa	P-T	845	0.85	994.1176471	Million et al., 2008
2.636	Nevoria, Southern Cross greenstone belt, Yilgarn craton	P-T	590	0.35	1685.7142866	Müller et al. (2004)
2.636	Griffins Find, southwestern Southern Cross Province, Yilgarn craton	P-T	740	0.60	1233.333333	Barnicoat et al. (1991)
2.622	Uweinat–Kamil basement inlier, east Sahara ghost craton, SW Egypt	P-T	1050	1.00	1050	Karmaker and Schenk (2015a)
2.620	Kapuskasing structural zone, Superior Province, Canada (average 4 samples)	P-T	777	1.00	777	Bowman et al., 2011; Pattison et al., 2003
2.564	Hutti–Maski greenstone belt, eastern Dharwar craton, India	P-T	620	0.60	1033.333333	Hazarika et al. (2015)
2.546	South Kolar greenstone belt, eastern Dharwar craton, India	P-T	600	0.46	1304.347826	Hazarika et al. (2015)
2.546	Tonagh Island, Napier Complex, E Antarctica	P-T	1000	0.90	1111.111111	Shimizu et al. (2013); Carson et al. (2002)
2.545	Forefinger Point/Fyfe Hills/Zircon Point, Napier Complex, E Antarctica	P-T	1000	1.00	1000	Kelly & Harley (2005); Harley et al. (1990); Sandford and Powell (1988)
2.530	Karnataka, Dharwar Craton, India (average 7 samples)	P-T	840	0.93	903.2258065	Pattison et al. (2003); Mojzsis et al. (2003); Friend and Nutman (1992)
2.522	Nilgiri Hills, India (average 51 samples)	P-T	800	0.99	808.0808898	Peucat et al. (2013); Pattison et al. (2003)
2.500	Charnockite, Madras block, southern India	P-T	860	0.85	1011.764706	Pattison et al. (2003); Santos et al. (2003)
2.500	Mt Riser–Larsen, Napier Complex, E Antarctica	P-T	1050	0.80	1312.5	Hokada et al. (2008, 2004; 2003)
2.500	Vestfold Hills, E Antarctica	P-T	850	0.81	1049.382716	Clark et al. (2012); Zubatov & Harley (2007)
2.500	Kasai Craton, Zaire (average 6 samples)	P-T	810	0.72	1125	Pattison et al., 2003
2.500	Andriamena Mafic Unit, north-central Madagascar	P-T	1000	1.05	952.3809524	Goncalves et al. (2004); Paquette et al. (2004)
2.498	Taipingzhai, Eastern Hebei, north China craton	P-T	880	1.00	880	Kwan et al. (2016); Yang et al. (2008)
2.479	Northern Liaoning complex, eastern block, north China craton	P-T	800	0.81	987.65432	Wu et al. (2013); Wan et al. (2005)
2.480	Badcall Bay, Assyt terrane, Lewisian Complex, Scotland	P-T	1000	1.40	714.2857143	Lowe et al. (2004); Cartwright and Barnicoat (1989)
2.460	Mulgathing complex, Christie domain, N Gawler craton, South Australia	P-T	850	0.70	1214.285714	Halpin and Reid (2016); McFarlane, 2006; Tomkins and Mavrogenes, 2002
2.455	Shoal Point, S Gawler craton, South Australia	P-T	800	0.65	1230.769231	Duch et al., 2010
2.450	Terre Adélie, E Antarctica	P-T	800	0.90	888.8888889	Duchausset et al. (2008); Ménot et al. (2005)
2.350	Southern Boothia Peninsula, northern Rae craton, Canada	P-T	718	0.56	1282.142857	Berman et al. (2013a)
2.350	McCam Lake, southern Rae craton, Canada	P-T	850	0.67	1268.656716	Berman et al. (2013a)
2.151	Tidjennouine area, Central Hoggar, Algeria	P-T	860	0.80	1075	Bendaoud et al. (2008)
2.072	Bakhuis granulite belt, western Suriname	P-T	950	0.85	1117.647059	Klayer et al. (2015); de Roever et al. (2003)
2.086	Itabuna–Salvador–Curaçao Block, São Francisco craton, Brazil	P-T	925	0.75	1233.333333	Peucat et al. (2011); Leite et al. (2009)
2.045	Jequiá Block, São Francisco craton, Brazil	P-T	875	0.72	1215.277778	Barbosas et al. (2006, 2004)
2.040	Mahalapye Complex, Central Zone, Limpopo Belt, southern Africa	Peak T	800	0.50	1600	Million et al., 2010
2.025	Beet Bridge Complex, Musina, Central Zone, Limpopo Belt, southern Africa	Peak T	820	0.80	1025	Zeh et al., 2010; Van Reenen et al., 2008; Zeh et al., 2004
2.002	In Roccan, In Uzzal Terrain, NW Hoggar, Algeria	Peak T	960	0.93	1032.258065	Peucat et al. (1996); Ouzezane and Boumaza (1996); Ouzezane et al. (2003)
2.002	Ihouaouene, In Ouzzal Terrain, NW Hoggar, Algeria	Peak T	1000	1.00	1000	Peucat et al. (1996); Att-Djafer et al. (2009)
2.002	Khanfous, In Uzzal Terrain, NW Hoggar, Algeria	Peak T	950	0.90	1055.555556	Peucat et al. (1996); Adjerid et al. (2013)
2.000	Amessmesssa, In Uzzal Terrain, NW Hoggar, Algeria	P-T	875	0.80	1093.75	Ouzezane et al. (1996)
1.990	Glenburgh gold deposit, Glenburgh Terrane, southern Gascoyne Province, Western Australia	P-T	875	0.72	1215.277778	Roché et al. (2016)
1.960	Katumba Block, Ubendian Belt, Tanzania	P-T	770	0.71	1084.507042	Kazimoto et al. (2015, 2014)
1.950	Daqingshan–Wulashan, Khondalite Belt, North China Craton	P-T	865	1.05	823.8095238	Cai et al. (2015a, 2015b, 2014)
1.950	Qitan1 borehole, Ordos Basin, North China Craton	Peak P	770	0.88	875	Gou et al. (2016)
1.930	Zhaojiaoya, Khondalite Belt, North China craton	Peak T	985	0.85	1158.823529	Li and Wei (2016)
1.930	Dajing, Khondalite Belt, North China craton	P-T	980	1.00	980	Gou et al. (2015); Jiao and Guo (2011); Santos et al. (2009)
1.881	Hongsigou, Khondalite Belt, North China craton	P-T	1000	0.75	1333.333333	Yang et al. (2014a)
1.826	Lujiaoying, TNCO, North China Craton	P-T	920	0.47	1975.446609	Yang et al. (2014b)
1.896	Chipman domain, Snowbird tectonic zone, Canada	P-T	850	1.00	850	Mahan et al. (2008); Flowers et al. (2006)
1.940	Talston Magmatic Zone, Canada (average 15 samples)	P-T	930	0.67	1388.059701	Pattison et al., 2003
1.925	Uweinat–Kamil basement inlier, east Sahara ghost craton, SW Egypt	Peak P	975	0.88	1114.285714	Karmaker and Schenk (2015a)
1.910	Lapland granulite belt, Finland	P-T	850	0.80	1062.5	Tuisku et al. (2006); Tuisku and Huhma (2007)
1.910	Umbo granulite belt, Russian Federation	P-T	900	1.05	857.142857	Daly et al. (2001); Aranovich et al. (2010)
1.861	Bell Peninsula, Southampton Island, Nunavut	P-T	770	0.74	1040.540541	Berman et al. (2013b)
1.848	Duke of York Bay, Southampton Island, Nunavut	P-T	780	0.71	1098.591549	Berman et al. (2013b)
1.854	Weihai, northern Sulu belt, China	P-T	950	1.20	791.6666667	Xiang et al. (2014)
1.852	MP metapelitic, Nanshu, Jiaobei massif, Jiao-Liao-Ji belt, North China Craton	P-T	885	0.97	912.371134	Zhao et al. (2015); Tam et al. (2012c)
1.850	Sherdarwaza Formation, Kabul Block, Afghanistan	P-T	860	0.70	1228.571429	Faryad et al. (2015); Collett et al. (2015)
1.850	Ketilidian Belt, Greenland (average 9 samples)	P-T	940	0.58	1620.689655	Pattison et al., 2003
1.850	Tasiuyuk gneiss, Makhavinek Lake, northern Labrador, Canada	P-T	900	0.80	1125	Mitchell et al. (2014); McFarlane et al. (2005)
1.824	Turku, southern Finland	P-T	800	0.60	1333.333333	Johannes et al. (2003); Väistinen et al. (2002)
1.800	Zone 4, Mount Stafford, central Australia	P-T	800	0.40	2000	Rubatto et al. (2006); White et al. (2003)
1.814	Frasier Lakes, Wollaston domain, northern Saskatchewan, Canada	Peak P	780	0.80	975	McKechnie et al. (2012); Annesley et al. (2005)
1.790	Eastern granulite facies zone, Thompson Nickel Belt, Manitoba, Canada	P-T	800	0.70	1142.857143	Couëslan et al. (2013); Couëslan & Pattison (2012)
1.780	Tobacco Root Mountains, Montana, USA	Peak T	850	0.85	894.736842	Cheney et al., 2004a, b
1.750	HPG block, Black Hills, South Dakota, USA	Peak P	680	0.63	1079.365079	Nalebek and Chen (2014); Dahl et al. (2005)
1.730	Strangways metamorphic complex, central Australia	P-T	850	0.85	1000	Diener et al. (2008); Möller et al. (2003)
1.731	Magnetite gneisses, Warramboo, southeastern Gawler craton, Australia	Peak T	850	0.60	1416.6666667	Morrissey et al. (2016); Lane et al. (2015)
1.720	Shoal Point, S Gawler craton, South Australia	P-T	820	0.85	964.705824	Duch et al. (2010)
1.685	Ooldea, western Gawler craton, Australia	Peak T	915	0.70	1307.142857	Cuttis et al. (2013)
1.597	Mabel Creek ridge, northern Gawler craton, Australia	P-T	860	0.90	955.5555556	Cuttis et al. (2011)
1.586	Coober Pedy ridge, northern Gawler craton, Australia	P-T	920	0.65	1415.384615	Cuttis et al. (2011)
1.640	Mount Liebig area, Warumpi province, central Australia	P-T	800	0.95	842.1052632	Scrimgeour et al. (2005)
1.580	Southeast Anmatjira Range, central Australia	P-T	900	0.70	1285.714286	Anderson et al. (2013)
1.576	Eastern Raynolds Range, central Australia	P-T	850	0.70	1214.285714	Morrissey et al. (2014)
1.646	Wilson lake terrane, Labrador, Canada	P-T	950	0.93	1021.505376	Korhonen et al. (2012)
1.625	Ongole domain, Eastern Ghats belt, India	P-T	1000	0.67	1492.557313	Sarkar and Schenk (2014); Sarkar et al. (2014)
1.600	Bhandardara–Balaghat domain, central Indian tectonic zone	P-T	930	0.80	1162.5	Bhowmik et al. (2014); Bhandari et al. (2011)
1.596	Garo–Goalpara Hills, Shillong–Meghalaya Plateau, NE India	P-T	860	0.80	1075	Chatterjee et al. (2007)
1.500	Epebume unit, Epupa complex, NW Namibia	P-T	1000	0.95	1052.631579	Brantl et al. (2007); Seth et al. (2003)
1.200	Kakamas terrane, central Namibian metamorphic complex, South Africa	P-T	900	0.50	1800	Bial et al. (2015)
1.200	Aggenys terrane, western Namibian metamorphic complex, South Africa	P-T	650	0.50	1300	Diener (2014); Bialie et al. (2007)
1.050	Aus terrane, southwestern Namibian metamorphic complex, southern Namibia	P-T	825	0.55	1500	Diener et al. (2013)
1.030	Namaqua/Land terrane, southwestern Namibian metamorphic complex, Namibia	P-T	890	0.55	1618.181818	Robb et al. (1999); Holland et al. (1996)
1.451	Romeleåsen horst, southwest Sweden	P-T	750	0.50	1500	Ulmlius et al. (2015)
1.400	Picuris orogen, New Mexico, USA	Peak T	600	0.45	1332.333333	Aronoff et al. (2016); Barnhart et al. (2012)

1.322 Contact aureole, Makhavinek Lake pluton, northern Labrador, Canada	P-T	950	0.45	2111.111111 Mitchell et al. (2014); McFarlane et al. (2005, 2003)
1.302 Coramup Gneiss, central Biranup zone, Albany-Fraser orogen, Australia	P-T	850	1.00	850 Bodorkod and Clark (2004); Nelson et al. (1995)
1.290 Frassey Range Metamorphics, Frazer zone, Albany-Fraser orogen, Australia	P-T	850	0.90	944.444444 Clark et al. (2014)
1.210 Mutherbukin zone, Capricorn orogen, Western Australia	P-T	650	0.70	928.571429 Korhonen et al. (2015)
1.200 Western Musgrave Province, Western Australia	P-T	1000	0.75	1333.333333 Walsh et al. (2015); Smithies et al. (2011)
1.190 Eastern Musgrave Province, South Australia	P-T	900	0.63	1428.571429 Tucker et al. (2015b)
1.132 Chevings Range, Warumpi Province, central Australia	P-T	570	0.35	1628.571429 Morrissey et al. (2011)
1.130 Haasts Bluff domain, Warumpi Province, central Australia	P-T	810	0.55	1472.727273 Wong et al. (2015)
1.156 Adirondack Highlands, Grenville Province, North America (average 11 samples)	P-T	820	0.92	891.3043478 Peck et al. (2010); Pattison et al. (2003)
1.040 Mollendo-Camana Block, Arequipa-Antofalla Basement, central Andean Margin	P-T	950	1.15	826.0869363 Casquel et al. (2010); Martingole and Martelat (2003)
1.015 Garzon Massif, Colombia	P-T	965	0.70	1378.571429 Altenberger et al. (2012); Cordani et al. (2005)
1.040 Northern domain, Sausar mobile belt, central Indian tectonic zone	P-T	850	1.00	850 Bhowmik et al. (2012); Bhowmik and Spiering (2004); Brown and Phadke (1988)
1.030 Bamble terrane, Sveconorwegian belt, south Norway	P-T	940	1.05	895.2380952 Kihle et al. (2010); Bingen et al. (2008)
1.030 Chipata Terrane, southern Irundile Belt, Zambia	Peak T	1000	0.65	1538.461538 Karmaker and Schenk (2016)
1.022 Wakole Terrane, Ubendian Belt, Tanzania	P-T	747	0.91	820.8791209 Bonfa et al. (2014)
1.008 Rogaland, Norway	P-T	975	0.75	1300 Dröppel et al. (2013)
1.000 Anantagiri, Eastern Ghats Province	Peak T	1020	0.70	1457.142857 Korhonen et al. (2014, 2013a)
1.000 Sunakarametta, Eastern Ghats Province, India	Peak T	955	0.78	1224.338974 Korhonen et al. (2013a, b)
1.000 Paderu, Eastern Ghats Province, India	P-T	950	0.83	1144.578313 Korhonen et al. (2013b, 2011)
1.000 Sostrene Island, Larsenmann Hills, Prydz Bay, E Antarctica	P-T	900	1.00	900 Wang et al. (2008); Hensen et al. (1995); Hensen and Zhou (1995)
0.950 Vestfold Hills, Prydz Bay, East Antarctica	P-T	830	0.90	922.222222 Liu et al. (2014)
0.965 Stillwell Hills, East Antarctica	P-T	920	0.87	1057.471264 Halpin et al. (2013, 2007a)
0.926 Oygarden group, Kemp Land, East Antarctica	P-T	950	0.85	1117.647059 Halpin et al. (2013, 2007a); Kelley et al. (2004)
0.941 Cape Bruce, MacRobertson Land, East Antarctica	Peak T	830	0.60	1383.333333 Halpin (2013, 2007b)
0.961 Forbes Glacier, MacRobertson Land, East Antarctica	Peak T	910	0.60	1516.666667 Halpin (2013, 2007b)
0.930 Northern Prince Charles Mountains, East Antarctica	P-T	865	0.65	1330.769231 Morrissey et al. (2015)
0.945 Mawson Escarpement, Southern Prince Charles Mountains, East Antarctica	P-T	800	0.68	1176.470588 Phillips et al. (2009); Corvino et al. (2008)
0.788 NE margin Tarim craton, Tibet	P-T	810	1.00	810 He et al. (2012)
0.788 Polish, Moria Group, Moine Supergroup, NW Scotland	P-T	650	0.80	812.5 Cutts et al. (2009); Vance et al. (1998)
0.725 Glen Urquhart, Glenfinnan Group, Moine Supergroup, Scotland	P-T	700	0.90	777.777778 Cutts et al. (2010)
0.750 Barro Alto complex, Northern Brasilia Belt, Brazil	P-T	980	0.80	1225 Giustini et al. (2011); Moraes et al. (2006); Moraes and Fuck (2000)
0.702 Eidei, Kalak Nappé Complex, northern Norway	P-T	768	0.93	825.8064516 Gasser et al. (2015)
0.640 Anápolis-Itaú complex, Southern Brasilia Belt, Brazil	P-T	1000	0.90	1111.111111 Baldwin & Brown (2008); Baldwin et al. (2005)
0.621 Guaxupé Nappe, southern Brasilia Belt, Brazil	P-T	860	1.10	781.818181 Motta Garcia and Campos Neto (2003); Salazar Mora et al. (2014)
0.644 Schirmacher Hills, East Antarctica	P-T	800	0.80	1000 Baba et al. (2010, 2008)
0.627 Brattningpene, southwestern terrane, Sør Rondane Mountains, East Antarctica	P-T	860	0.85	1011.764706 Baba et al. (2013); Adachi et al. (2013)
0.555 Rundvågshetta, Lutzen-Holm Bay, East Antarctica	P-T	1000	1.00	1000 Tsunogae et al. (2016); Yoshimura et al. (2008)
0.529 Gjelsvikfjella, Central Maud belt, East Antarctica	P-T	747	0.83	905.4545455 Bisnath et al. (2006, 2005)
0.602 Sabaloka, eastern margin of the east Sahara ghorat craton, north Sudan	Peak T	950	0.55	1727.272727 Karmaker and Schenk (2015b)
0.586 Mather Peninsula, Rauer Islands, Prydz Bay, E Antarctica	P-T	1010	1.10	918.1818182 Harley et al. (2013); Harley (2008)
0.545 McKaskle Hills, East Amery Ice Shelf, East Antarctica	P-T	865	0.70	1235.714286 Morrissey et al. (2016)
0.524 Mawson Escarpement, Southern Prince Charles Mountains, East Antarctica	P-T	630	0.60	1050 Phillips et al. (2009); Corvino et al. (2008)
0.515 Taylor/Brocklehurst/Meredith, Northern Prince Charles Mountains, East Antarctica	P-T	810	0.63	1285.714286 Morrissey et al. (2016)
0.580 Southern Victoria Land, Ross orogen, Antarctica	P-T	675	0.55	1227.272727 Hagen-Peter et al. (2016)
0.577 Rio de Janeiro city outcrops, Costeiro domain, Oriental terrane, Ribeira Belt, Brazil	P-T	800	0.70	1142.857143 Kühl et al. (2004); Heilbron and machado (2003)
0.570 Central Highland Complex, Sri Lanka	P-T	950	0.90	1055.555556 Dharmaapriya et al. (2015a,b, 2014); Sajeew et al. (2010)
0.540 Bemarivo Belt, northern Madagascar	P-T	950	0.90	1055.555556 Johns et al. (2009, 2006)
0.540 Anosy domain, southeastern Madagascar	Peak P	900	0.63	1440 Horton et al. (2016); Boger et al. (2012)
0.550 Southern Granulite Terrain, India	P-T	850	1.25	800 Clark et al. (2015); Brandt et al. (2011)
0.560 Kanjampara, central Trivandrum block (Kerala Khondalite Belt), India	P-T	875	0.80	1093.73 Blereau et al. (2016)
0.552 Kakkad, central Trivandrum block (Kerala Khondalite Belt), India	P-T	950	0.70	1357.142857 Taylor et al. (2015)
0.544 Achankovil zone, southern India	P-T	930	0.70	1328.571429 Johnson et al. (2015)
0.560 Nagercoil block, southern India	Peak T	930	0.76	1223.684211 Clark et al. (2009)
0.525 Pangad, Palghat Cauvery shear system, Southern Indian	P-T	860	0.85	1011.764706 Pattison et al. (2003)
0.510 Madras Granulites, India (average 8 samples)	Peak P	750	0.80	937.3 Jung et al. (2014)
0.525 Kaoko Belt, Namibia	P-T	750	0.50	1500 Longridge et al. (2014); Ward et al. (2008); Jung and Mezger (2003)
0.520 Central Damara Belt, Namibia	P-T	760	0.90	844.4444444 Schmitt et al. (2004)
0.525 Búzios succession, Cabo Frio tectonic domain, Brazil	P-T	825	0.66	1250 Tibaldi et al. (2011); Ducea et al. (2010)
0.477 Migmatite, Sierra de Valle Fértil, Patagonian magmatic arc, Argentina	P-T	880	1.05	838.0952381 Tucker et al. (2015a); Maidment et al. (2013)
0.462 Harts Range meta-igneous complex, central Australia	P-T	800	0.70	1142.857143 Aleinikoff et al. (2006); Srogi et al. (1993)
0.430 Wilmington complex, Delaware, USA	P-T	800	0.85	941.1764706 Bader et al. (2014); Wu et al. (2014); Wang et al. (2011)
0.426 Qinling Group, Tongbai Orogen, China	P-T	1000	1.00	1000 Axler and Ague (2015a, b); Ague et al. (2013)
0.360 Northeastern Connecticut, USA	P-T	850	0.80	1062.5 Moescher et al. (2004)
0.358 Winding Stair Gap, Southern Appalachians, USA	P-T	750	0.66	1136.363636 Broussolle et al. (2015)
0.356 Chandman, south-west Mongolian Altai, Mongolia	P-T	740	0.70	1057.142857 Yakymchuk et al. (2015); Korhonen et al. (2012)
0.346 Fosdick migmatite-granite complex, Marie Byrd Land, Antarctica	P-T	675	0.70	964.2857143 Faure et al. (2010); Jones (1994)
0.338 Le Conquet Schist, Leon Domain, French Massif Armorican	P-T	800	0.80	1000 Augier et al. (2015); Johnson and Brown (2004); Brown and Dallmeyer (1996)
0.325 Golfe du Morbihan, Brittany, France	P-T	725	0.80	906.25 Fréville et al. (2016); Roger et al. (2015)
0.308 Eastern Montagne Noire, Massif Central, France	P-T	910	1.10	827.272727 Ewing et al. (2013); Redler et al., 2012
0.316 Irevia zone, Italy	P-T	850	1.05	809.5238095 Hermann and Rubatto (2003)
0.280 Val Malenco, north Italy	P-T	920	0.90	1022.222222 Guevara and Cadillac (2016); Galli et al. (2011, 2012); Liati and Gebauer (2003)
0.272 Gruf complex, central Alps	P-T	555	0.42	1321.428571 Hyppolito et al. (2015)
0.300 Pichilemu, central Chile	P-T	660	0.63	1047.619048 Wang et al. (2014)
0.299 Altai, Chinese Altai, Central Asian orogenic belt, China	P-T	950	0.80	1187.5 Tong et al. (2014)
0.278 Kalasu, Chinese Altai, Central Asian orogenic belt, China	P-T	970	0.90	1077.777778 Li et al. (2014)
0.277 Fuyun, Chinese Altai, Central Asian orogenic belt, China	P-T	690	0.90	766.6666667 Weller et al. (2015a)
0.202 Basong Ts complex, North Lhasa terrane, China	P-T	600	0.70	857.1428571 Cruz-Uribes et al. (2015)
0.150 Raft River Mountains, Sviewur hinterland, USA	P-T	600	0.65	923.0769231 Kelly et al. (2015)
0.132 Albion Mountains, Sevier hinterland, USA	P-T	870	0.75	1160. Yakymchuk et al. (2015); Korhonen et al. (2010)
0.115 Fosdick migmatite-granite complex, Marie Byrd Land, Antarctica	P-T	785	0.55	1500 Skrzypek et al. (2016); Ikeda (2014); Brown (1998)
0.100 Yanai, Ryole Belt, Japan	peak P	700	0.75	933.3333333 Lebrebre et al. (2015); Whitney and Hamilton (2004)
0.084 Kırşehir-Hırkaç massifs, Central Anatolia, Turkey	P-T	785	0.95	826.3157895 Stevens et al. (2015)
0.064 Priest River core complex, northern Idaho, USA	P-T	650	0.75	866.6666667 Ding et al. (2016)
0.047 Yardoi dome, southeastern Tibet	P-T	830	1.00	830 Smit et al. (2015); Schmidt et al. (2011)
0.037 Shakhdara dome, southern Pamir Mountains	peak T	785	0.90	872.272222 Regis et al. (2014)
0.036 Jomolhari massif, western Bhutan	P-T	805	0.85	947.0588235 Palin et al. (2013)
0.034 Day Nui Con Voi metamorphic core complex, northern Vietnam	P-T	1020	1.15	886.9565217 Hayob et al. (1993, 1989); Rudnick and Cameron (1991)
0.030 Lower crustal xenoliths, central Mexico	P-T	875	0.85	1035.502959 Scherer et al. (1997); Hamblock et al. (2007); Bohlen et al. (1983)
0.025 Granulite xenoliths Kilbourne Hole/Potrillo volcanic field, New Mexico, USA	P-T	692	0.83	833.7349398 Palin et al. (2012)
0.028 Hunza Valley, Karakoram metamorphic complex, Pakistan	P-T	720	0.70	1028.571429 Wang et al. (2013, 2015)
0.027 Higher Himalayan Crystallines, Sikkim, India	P-T	800	1.00	800 Anzckiewicz et al. (2014); Sorcar et al. (2014)
0.021 Oaro Chu Valley, western Bhutan	peak T	710	0.65	1092.307692 Regis et al. (2016)
0.019 Hitaka metamorphic belt, Japan	peak T	900	0.75	1200 Kemp et al. (2007)
0.016 Seram, eastern Indonesia	P-T	925	0.90	1027.777778 Pownall (2015); Pownall et al. (2014)

Table 2. Intermediate dT/dP metamorphism

Age (Ga)	Location	Peak P/P-T/peak T	T (°C)	P (GPa)	T / P (°C/GPa)	Original References
3.68	Locality G1/24, northern terrane, Isua, southwest Greenland	P-T	870	1.25	696	Authors P-T estimate (unpubl.); Nutman et al. (2015, 2013)
3.56	Zone C/D, northeastern Isua Supracrustal Belt, southwest Greenland	P-T	620	0.8	775	Arai et al. (2015); Nutman et al. (2002)
3.28	Inyoni shear zone, Barberton Greenstone Belt	Peak P	650	1.3	500	Van Kranendonk et al. (2014); Diener et al. (2006); Moyen et al. (2006)
3.23	Tjakkast schist belt, Barberton Greenstone Belt	Peak P	590	0.85	694.1176471	Cutts et al. (2014); Diener et al. (2005, 2006); Dziggel et al. (2005)
2.92	Flinlyson Lake greenstone belt, Superior Province, Canada	Peak P	600	0.82	731.7073171	Bacchegger et al. (2014)
2.715	Faringehavn terrane, southern West Greenland	P-T	710	0.98	724.4987959	Dziggel et al. (2014)
2.700	Troch an t'Sidhean, NW Scotland	P-T	900	1.45	620.696552	Zirkler et al. (2012); Crowley et al. (2015)
2.660	Plutonic gold mine, Marymna Inlier, Western Australia	P-T	590	0.80	737.5	Wielreich and McNaughton (2002); Gazley et al. (2011, 2014)
2.600	Felsic granulite, Upper deck domain, Athabasca granulite terrane, Snowbird tectonic zone, Canada	P-T	965	1.50	643.3333332	Dumont et al. (2015)
2.560	Majorque belt, southern West Greenland	Peak P	760	1.15	660.8695652	Dyck et al. (2015)
2.550	Chimpan domain, Snowbird tectonic zone, Canada	P-T	900	1.30	692.3076923	Mahan et al. (2008); Flowers et al. (2008)
2.490	Kanjamalai, Salem Block, PCSZ, southern India	P-T	840	1.50	560	Anderson et al. (2012)
2.487	Jianning Complex, Eastern Block, North China Craton	P-T	800	1.10	727.2727273	Wei et al. (2001); Kröner et al. (1998)
2.480	Taipingzhai, Qianxi complex, Eastern Hebei, North China craton	P-T	890	1.25	712	Yang et al. (2016)
2.477	Jiaodong terrane, Eastern Block, North China craton	P-T	845	1.65	512.1212121	Liu et al. (2015)
2.461	Anorthosite, Sittampundi, Tamil Nadu, India	P-T	725	1.10	659.0909091	Chowdhury et al. (2013); Mohan et al. (2013)
2.150	Fada N'Gourma region, Burkina Faso	P-T	425	1.10	386.3636364	Ganne et al. (2012)
2.138	Bole-Bulenga domain, NW Ghana	P-T	715	1.10	650	Block et al. (2015)
2.042	Huangtuling granulite, North Dabie complex, China	P-T	950	1.35	703.7037037	Jian et al. (2012); Chen et al. (2006)
2.030	Man Rise, Ivory Coast	P-T	850	1.30	653.8461538	Pitra et al. (2010)
2.009	Kongling complex, Yangtze Block, China	P-T	910	1.40	650	Yin et al. (2013)
1.999	Ectoelite, Usagaran Belt, Tanzania	P-T	750	1.80	416.6666667	Möller et al. (1995); Collins et al. (2004)
1.960	Guifengsi, Wuai complex, TNCO, North China Craton	Peak P	670	1.15	382.6086957	Qian and Wei (2016)
1.964	Liujiagou, southern Hengshan, TNCO, North China Craton	P-T	660	1.20	550	Qian et al. (2015)
1.922	Fengshulling, southern Hengshan, TNCO, North China Craton	Peak P	800	1.30	615.3846154	Qian and Wei (2016)
1.956	Heishanshan, Khondalite Belt, North China Craton	P-T	860	1.45	593.1034483	Yin et al. (2011); Zhou et al. (2010)
1.951	Qianjianshan, Khondalite Belt, North China Craton	P-T	840	1.15	730.4374826	Yin et al. (2014, 2009)
1.946	Manjinggou, Hua'an, Khondalite Belt, North China Craton	Peak P	820	1.45	565.5172414	Wu et al. (2016); Zhao et al. (2010)
1.911	Uzkyaka-Salma, Belomorian province, Russian Federation	P-T	750	1.75	428.5714286	Li et al. (2017a, 2017b)
1.896	Kuru-Vara quarry, Belomorian province, Russian Federation	P-T	770	1.85	416.2162162	Liu et al. (2017)
1.902	Stolbikh Island, Gridino complex, Belomorian province, Russian Federation	P-T	730	1.90	384.2105263	Yu et al. (2017)
1.904	Ectoelite, Athabasca granulite terrane, Snowbird tectonic zone, Canada	P-T	800	1.60	500	Baldwin et al. (2007, 2004)
1.899	South Harris, Lewisian Complex, Scotland	Peak-P	895	1.25	716	Babu et al. (2012); Hollis et al. (2006)
1.870	Ectoelite, Ubendian Belt, Tanzania	P-T	700	1.50	466.6666667	Boniface et al. (2012a)
1.870	Magmatic granulite, Laiyang, Jiaobei massif, Jiao-Liao-Ji belt, North China Craton	P-T	825	1.40	589.2857143	Liu et al. (2013); Tam et al. (2012a)
1.860	HP metapelite, Taipingzhuang, Jiaobei massif, Jiao-Liao-Ji belt, North China Craton	P-T	870	1.55	561.2903220	Liu et al. (2014); Tam et al. (2012b)
1.850	Hengshan, TNCO, North China Craton	P-T	800	1.20	666.6666667	Kroner et al. (2006); O'Brien et al. (2005)
1.839	Zanhuan, TNCO, North China Craton	P-T	780	1.15	678.2608696	Xiao et al. (2014)
1.822	Alxa area, northern North China craton	P-T	934	2.37	394.092827	Wan et al. (2015)
1.822	Eastern Hebei, North China craton	P-T	800	1.20	666.6666667	Duan et al. (2015)
1.790	Rudall complex, central W Australia	P-T	750	1.10	681.8181818	Bagas (2004); Smithies and Bagas (1997)
1.750	Ectoelite, western unit, Glenelg-Attadale inlier, northwest Scotland	P-T	650	1.40	464.2857143	Storey et al. (2010); Storey (2008)
1.547	Natki, north Singhbhum mobile belt, India	P-T	680	1.10	618.1818181	Rekha et al. (2011); Mahata et al. (2008)
1.090	Western Central Gneiss Belt, Grenville Province, Ontario, Canada	Peak P	725	1.60	453.125	Marsh and Culshaw (2014)
1.061	Location 244, Canyon Domain, Manicouagan Imbricate zone, Grenville Province, Quebec, Canada	Peak P	880	1.50	586.6666667	Lasalle and Indares (2014); Lasalle et al. (2014)
1.050	Eastern Lelukkuau terrane, Manicouagan Imbricate zone, Grenville Province, Quebec, Canada	P-T	850	1.60	531.25	Yang and Indares (2005); Indares et al. (1998)
1.046	Southern Baie du Nord segment, Manicouagan Imbricate zone, Grenville Province, Quebec, Canada	Peak P	865	1.50	576.6666667	Indares et al. (2008); Cox et al. (1998)
1.042	Lac Espanon suite, Manicouagan Imbricate zone, Grenville Province, Quebec, Canada	P-T	855	1.70	502.9411765	Cox and Indares (1999); Cox et al. (1998)
1.046	Lunden dike, Idefjorden terrane, Sveconorwegian orogen, southwest Sweden	P-T	740	1.50	493.3333333	Sönderlund et al. (2008)
0.988	Basal shear zone, eclogite-bearing nappe, Eastern segment, Sveconorwegian orogen, southwest Sweden	P-T	870	1.75	497.1428571	Tuul et al. (2016); Möller et al. (2015)
0.974	Ectoelite-bearing nappe, eastern segment, Sveconorwegian orogen, southwest Sweden	P-T	765	1.60	478.125	Hegardt et al. (2005)
1.010	Ectoelite/websterite, eastern unit, Glenelg-Attadale inlier, northwest Scotland	P-T	750	2.00	375	Storey et al. (2005); Rawson et al. (2001); Sanders et al. (1984)
0.970	Chotanagur gneiss complexes, eastern Indian tectonic zone	P-T	800	1.10	727.2727273	Chatterjee et al. (2010, 2008)
0.825	Korla, northern Tarim Craton, China	P-T	685	1.20	570.6666667	Ge et al. (2016)
0.820	Welyati Formation, Kabul Block, Afghanistan	P-T	640	0.90	711.1111111	Faryad et al. (2015); Collett and Faryad (2015)
0.685	Tighsi, Egere terrane, Central Hoggar, Algeria	P-T	860	1.90	452.6315789	Liégeois et al. (2003); Arab et al. (2015)
0.685	Arzou NF/Pd, Central Hoggar, Algeria	P-T	760	1.50	506.6666667	Liégeois et al. (2003); Zétoutou et al. (2004)
0.685	Tin Begane, Central Hoggar, Algeria	P-T	790	1.50	526.6666667	Liégeois et al. (2003)
0.640	Gadel Group, Tarkhait, central Mauritanides, West Africa	P-T	600	1.10	545.4545454	Caby and Kienast (2009)
0.653	Xiongjan, North Lhasa, Tibet	P-T	710	1.75	405.7142857	Zhang et al. (2012)
0.650	Trie Pontas-Varginha Nappe, southern Brasilia Belt, Brazil	P-T	900	1.50	609	Renn et al. (2012)
0.618	Carvalhos Klippe, southern Brasilia Belt, Brazil	P-T	850	1.20	708.3333333	Campos Neto et al. (2010)
0.650	Furui complex, Mahenge Mountains, southern Tanzania (average 16 samples)	P-T	900	1.26	714.2857143	Pattison et al. (2003); Coonen et al., 1982
0.650	Meta-anorthosite, Uluguru Mountains, Tanzania	P-T	900	1.25	720	Tenczer et al. (2011, 2006)
0.589	Turvo-Cajati Formation, Curitiba terrane, Ribeira Belt, Brazil	P-T	790	1.13	699.1150442	Paleros et al. (2011)
0.621	Ectoelite, southern Dahomeyide Belt, Ghana	Peak P	600	1.60	375	Attoh (1998); Hirdes and Davis (2002)
0.613	Carine granulite region, NW Borborema Province, NE Brazil	P-T	750	1.02	735.2941176	Amaral et al. (2012)
0.605	NE Ox Inlier, NW Ireland	P-T	875	1.45	603.4482759	Sanderson et al. (1987)
0.612	Vohibory block, southern Madagascar	P-T	850	1.10	572.7272727	Jons and Schenk (2008)
0.604	Central African fold belt, north-central Cameroon	P-T	875	1.20	729.1666667	Bouyou et al. (2009, 2013)
0.593	Ectoelite, Ubendian Belt, Tanzania	P-T	740	1.80	411.1111111	Boniface et al. (2012b)
0.570	Brattskarvet, Eastern H.U. Sverdrupfjella, East Antarctica	P-T	930	1.45	641.3793103	Pauly et al. (2016)
0.570	Shear zones, Bates region, Musgrave Block, Australia	P-T	750	1.20	625	Raimonde et al. (2010)
0.560	Western Mann Ranges, Musgrave Block, Australia	P-T	735	1.20	612.5	Srimingour and Close (1999); Gregory et al. (2009)
0.550	Davenport shear zone, Musgrave Ranges, Musgrave Block, Australia	P-T	650	1.20	541.6666667	Camacho et al. (1997); Ellis and Maboko (1992)
0.545	Grove Mountains, East Antarctica	P-T	805	1.30	619.2307692	Liu et al. (2009)
0.545	Kusise River, Damara Belt, Namibia	P-T	610	1.07	570.0934579	Cross et al. (2015); Meneghini et al. (2014)
0.530	Whiteschists, Solwezi dome, internal zone Lufilian Arc, Zambia	P-T	750	1.30	576.9230769	Eglinton et al. (2014, 2015); John et al. (2004)
0.525	Ultramafic rocks, Shackleton Range, East Antarctica	P-T	825	2.30	358.6956522	Romer et al. (2009)
0.495	South Alyn Tagh, NW China	P-T	950	2.14	443.925336	Zhang et al. (2014, 2005)
0.474	Lunna Ness, Mainland, Shetland	Peak P	775	1.00	775	Cuts et al. (2011)
0.467	Naver Nappe, Moine Supergroup, north Sutherland, Scotland	P-T	675	1.15	586.9565217	Friend et al. (2000); Kinny et al. (1999)
0.465	Ectoelite, Chinese Beishan, southern Altaiids	P-T	760	1.60	475	Qu et al. (2011); Liu et al. (2011)
0.460	Ectoelite, Bakersville, Eastern Blue Ridge, Southern Appalachians	P-T	700	1.60	437.5	Miller et al. (2010); Page et al. (2003)
0.456	Northwest Connecticut, USA	P-T	710	1.45	489.6551724	Chu et al. (2016)
0.435	Dulan, North Qaidam, western China	P-T	870	1.70	511.7647059	Yu et al. (2014, 2011)
0.440	Lowe unit, Kuaping Group, Tongbai Orogen	P-T	590	1.03	572.815534	Liu et al. (2011)
0.435	Dulan, North Qaidam, western China	P-T	850	1.70	500	Yu et al. (2014, 2011)
0.440	Eidet, Kalak Nappe Complex, northern Norway	P-T	630	1.13	557.5221239	Gasser et al. (2015)
0.432	Metabasic rock, Roan, Vestranden, northern Western Gneiss region, Norway	P-T	870	1.45	600	Dallmeyer et al. (1992); Johansson and Möller (1986)
0.430	Holsnøy, Bergen Arc, Norway	P-T	750	1.80	416.6666667	Gladny et al. (2008)
0.431	Dunhuang, Tarin Craton	P-T	780	1.50	520	He et al. (2014)
0.428	East Kunlun, western China	P-T	620	1.60	387.5	Meier et al. (2013)
0.425	Xiangtaohu, central Qiantang, Tibet	P-T	845	1.30	650	Zhang et al. (2014)
0.425	Jatetal complex, Liverpool Land, East Greenland	P-T	850	1.10	772.7272727	Johnston et al. (2015)
0.403	Ectoelite, Punta di Iulchi, Sardinia	P-T	690	1.90	363.1578947	Cruciani et al. (2012); Cortesogno et al. (2004)
0.401	Góry Sowie Mountains, southwest Poland	P-T	900	1.50	600	O'Brien et al. (1997); Kryza et al. (1996)
0.400	Payer Land, NE Greenland	P-T	825	1.60	515.625	Elvevold et al. (2003); Gilotti and Elvevold (2002)
0.392	Granulite, Hongseong, South Korea	P-T	890	1.70	523.5294118	Oh et al. (2014)
0.391	Granulite, Yushigou, southeastern Tianshan, China	P-T	980	1.40	700	Zhang et al. (2016); Zhou et al. (2004)
0.360	Les Essarts complex, Armanian Massif, France	P-T	700	1.60	437.5	Godard (2009); Bosse et al. (2000)
0.342	Eastern Eger complex, Czech Republic	P-T	850	1.60	531.25	Konopásek et al. (2014)
0.342	Granulitebearing, Saxony, Germany	P-T	1010	2.20	459.0909091	Hagen et al. (2008); Rötzler et al. (2008); Romer and Rötzler (2001); Rötzler and Romer (2001)
0.341	Granulitebearing, Saxony, Germany	P-T	1010	2.25	448.8888889	Rötzler et al. (2004)
0.341	Erzgebirge, Saxony, Germany	P-T	830	2.10	395.2380952	Kroner and Willner (1998); Willner et al. (1997)
0.340	Central Vosges, NE France	P-T	925	1.30	711.5384615	Skrzypek et al. (2012)

0.340 Argentera Massif, Italy	P-T	735	1.38	532.6086957	Rubatto et al. (2010); Ferrando et al. (2008)
0.335 Central Schwarzwald granulite complex, Germany	P-T	950	1.55	612.9032258	Kober et al. (2004); Marschall et al. (2003)
0.330 Ultен zone, Eastern Alps	P-T	700	1.50	466.6666667	Tumiaty et al. (2003); Hauenberger et al. (1996); Godard et al. (1996)
0.315 Eclogite, Montagne Noire, French Massif Central	P-T	725	1.40	517.8571429	Whitney et al. (2015)
0.253 Granulite, Imjingang Belt, South Korea	P-T	900	2.00	450	Sajeev et al. (2010)
0.231 Eclogite, Gyeonggi Massif, South Korea	P-T	840	2.00	420	Kwon et al. (2009); Kim et al. (2006)
0.191 Mafic granulite lens in gneiss of Amdo metamorphic complex, Tibet	P-T	890	1.51	589.4039735	Zhang et al. (2014, 2010)
0.179 Amdo metamorphic complex, Tibet	P-T	650	0.90	722.2222222	Gwynn et al. (2013, 2006)
0.127 Brekssea orthogneiss, Fjordland, New Zealand	P-T	850	1.80	472.2222222	Stowell et al. (2010); De Paoli et al. (2009)
0.113 Doubtful Sound, Fjordland, New Zealand	P-T	920	1.40	657.1428571	Stowell et al. (2014)
0.096 Jjal Complex, Pakistan	P-T	875	1.20	729.1666667	Padrón-Navarta et al. (2008); Anzckiewicz and Vance (2000)
0.053 Mabja dome, southern Tibet	P-T	650	0.88	738.6363636	Smit et al. (2014); Lee et al. (2004)
0.050 Kangmar dome, southern Tibet	P-T	624	0.86	725.5N13953	Smit et al. (2014); Lee et al. (2000)
0.032 Ky paragneiss, Kali Gandaki valley, central Nepal	P-T	720	1.10	654.5454545	Iaccarino et al. (2015)
0.030 Higher Himalayan crystalline squence, Yadong, Tibet	P-T	835	1.20	695.8333333	Zhang et al. (2015)
0.024 Paixang, Nancé Barwa, eastern Himalaya, China	P-T	850	1.50	566.6666667	Guilmette et al. (2011); Xu et al. (2010)
0.021 Eclogite, Arun Valley, eastern Nepal	P-T	670	1.50	446.6666667	Corrie et al. (2010)
0.020 Eclogite and granulite xenoliths, Dukeldik magmatic field, central Pamir Mountains	P-T	1060	2.70	392.5925926	Gordon et al. (2012); Hacker et al. (2005)
0.019 Ky metatexite, Lower GHC, Nyiam, central Himalaya, China	P-T	650	0.95	684.2105263	Wang et al. (2013, 2015)
0.014 Eclogite, Dinggye, central Himalaya, China	P-T	750	2.10	357.1428571	Wang et al. (2016)
0.010 West of Namche Barwa, eastern Himalayan syntaxis	Peak P	820	1.50	546.6666667	Tian et al. (2016); Booth et al. (2009)

Mean
1 sd

787.1496 1.4285827 573.9567133
109.476 0.3539476 116.3095822

Table 3. Low dT/dP metamorphism

Age (Ga)	Location	Peak P/P-T/peak T	T (°C)	P (GPa)	T / P (°C/GPa)	Original References
1.85	North side of Norden Stromfjord, Nagssugtoqidian orogen, West Greenland	P-T	980	6.95	141.0071942	Glassley et al. (2014); Willigers et al. (2001)
1.83	Eclogite, Kovik tectonic window, Trans-Hudson orogen, Canada	P-T	735	2.5	294	Weller and St-Onge (2017)
1.135	Jordan Ranch, Llano uplift, Texas	P-T	790	2.40	329.1666667	Carlson et al. (2007)
0.750	Aksu blueschist terrane, western China	P-T	350	1.15	304.3478261	Yong et al. (2013); Zhang et al. (1999)
0.685	Tighsi, Egere terrane, Central Hoggar, Algeria	P-T	694	1.96	354.0816327	Doukkari et al. (2014); Liégeois et al. (2003)
0.685	Adrar Izzilaténe, Egere terrane, Central Hoggar, Algeria	P-T	670	2	335	Doukkari et al. (2015); Liégeois et al. (2003)
0.655	Central Zambia	P-T	755	2.83	266.7844523	John et al. (2003, 2004)
0.650	Três Pontas-Varginha Nappe, southern Brasília Belt, Brazil	P-T	900	3.00	300	Reno et al. (2012); Parkinson et al. (2001)
0.620	Eclogite, Richardson Complex, Biscayarhalvoya, Spitsbergen	P-T	720	2.00	360	Elvevold et al. (2013); Dallmeyer et al. (1990b); Peucat et al. (1989)
0.623	Tidéradjouanet, Tassendjanet terrane, Western Hoggar, Algeria	Peak P	660	2.10	314.2857143	Berger et al. (2014)
0.611	Eclogite, Gourma Nappe complex, northern Mali	Peak P	720	3.20	225	Caby (1994); Ganade de Araujo et al. (2014)
0.608	Eclogite, Lato Hills, south Togo	Peak P	710	2.90	244.8275862	Agbossoumonde et al. (2001); Ganade de Araujo et al. (2014)
0.615	Fonquilha eclogite zone, NW Borborema Province, NE Brazil	Peak P	770	2.80	275	Santos et al. (2009); Ganade de Araujo et al. (2014); Santos et al. (2015)
0.610	Central Zambia	P-T	755	2.83	266.7844523	John et al. (2003, 2004)
0.553	Blueschist, Anglesey, UK	P-T	415	0.80	518.75	Horsfall (2009)
0.537	Kumdy-Kol, Kokchetav Massif, northern Kazakhstan	P-T	1035	7.00	147.8571429	Katayama and Maruyama (2009); Katayama et al. (2001)
0.528	Barchi-Kol, Kokchetav Massif, northern Kazakhstan	P-T	1000	4.90	204.0816327	Stepanov et al. (2016); Hermann et al. (2001)
0.511	Collingwood River, Franklin Metamorphic Complex, Tasmania	P-T	630	1.80	350	Palmeri et al. (2009); Black et al. (1997)
0.500	South-west Altyn Tagh, China	P-T	830	2.90	286.2068966	Liu et al. (2012)
0.500	Lantern Range, Northern Victoria Land, Antarctica	P-T	800	3.20	250	Palmeri et al. (2007); Di Vincenzo et al. (1997)
0.491	Eclogite, Attunga, southern New England Orogen, Australia	P-T	650	2.24	290.1785714	Manton et al. (2017); Phillips et al. (2015)
0.490	Port Macquarie, New South Wales, Australia	P-T	590	2.70	218.5185185	Tamblyn et al. (in revision)
0.494	Eclogite, North Qinling, China	P-T	700	2.75	254.5454545	Cheng et al. (2012)
0.490	Di eclogite, North Qinling, China	P-T	689	3.50	196.8571429	Wang et al. (2014)
0.470	Carpholite blueschists, Matalafjella, Spitsbergen	P-T	400	1.55	258.0645161	Agati et al. (2005); Dallmeyer et al. (1990a)
0.470	Blueschist, Nordenkjöld Land, Spitsbergen	P-T	480	1.60	300	Kosminski et al. (2014); Dallmeyer et al. (1990a)
0.474	Aktuyz, Northern Tianshan, Kyrgyzstan	P-T	600	2.30	260.8695652	Rojas-Agramonte et al. (2013); Orozbaev et al. (2010)
0.470	Makbal, Northern Tianshan, Kyrgyzstan	P-T	555	3.05	181.9672131	Orozbaev et al. (2015); Rojas-Agramonte et al. (2013)
0.466	North Qilian, China	P-T	540	2.20	245.4545454	Cheng et al. (2016); Wei et al. (2009); Wei and Song (2008)
0.471	Jaeren nappe, SW Norway	P-T	620	2.55	243.1372549	Smit et al. (2010, 2008)
0.452	Tromso Nappe, Norway	P-T	770	3.50	220	Janák et al. (2013); Corfu et al. (2003)
0.460	Stor Jougdan, Seve Nappe Complex, Sweden	P-T	815	3.50	232.8571429	Klonowska et al. (2016)
0.446	Tjelkeni eclogite, Seve nappe complex, Sweden	P-T	660	2.50	264	Majek et al. (2014); Root & Corfu et al. (2012)
0.442	Ky-Grit gneiss, Areskutan, Seve nappe complex, Sweden	P-T	650	2.80	232.1428571	Klonowska et al. (2014); Ladenberger et al. (2014)
0.445	Dulan, North Qaidam, NW China	P-T	892	3.68	242.3913043	Han et al. (2015); Song et al. (2014)
0.435	Xiteshan, North Qaidam, NW China	P-T	770	2.95	261.0169492	Song et al. (2014); Zhang et al. (2011)
0.433	Yuka, North Qaidam, NW China	P-T	652	3.01	216.6112957	Song et al. (2014); Zhang et al. (2009)
0.412	Limousin, Massif Central, France	P-T	660	3.00	220	Berger et al. (2010)
0.408	Monts du Lyonnais, Massif Central, France	P-T	750	2.80	267.8571429	Lardeau et al. (2001); Paquette et al. (1995)
0.410	Northern UHP domain, Western Gneiss Region, Norway	P-T	815	3.25	250.7692308	Butler et al. (2013); Krogh et al. (2011)
0.410	Southern and Central UHP domains, Western Gneiss Region, Norway	P-T	800	3.50	228.5714286	DesOrmeau et al. (2015); Hacker (2006)
0.399	Lofoten, Norway	P-T	665	2.65	250.9433962	Froitzheim et al. (2016)
0.399	Liverpool Land, East Greenland	P-T	800	2.50	320	Corfu and Hartz (2011); Hartz et al. (2005)
0.389	Maksutov Complex, southern Urals	P-T	650	3.20	203.125	Bostick et al. (2003); Leech and Willingshofer (2004)
0.387	Stary Gieraltów, Snieżnik Mountains, southwest Poland	P-T	875	2.70	324.0740741	Ferrero et al. (2005); Anczkiewicz et al. (2007); Bröcker and Klemm (1996)
0.380	Miedzygórze, Snieżnik Mountains, southwest Poland	P-T	715	2.10	340.4671905	Štípková et al. (2012); Bröcker et al. (2010)
0.384	Eclogite, Mühlberg Massif, Germany	P-T	725	3.00	241.6666667	Liebscher et al. (2007); Stosch and Lugmair (1990)
0.380	Mariánské Lázně complex, Bohemian Massif, Czech Republic	P-T	640	2.75	232.7272727	Faryad (2012); Timmermann et al. (2004)
0.380	Běstvina granulite, Kutná Hora complex, Bohemian Massif, Czech Republic	Peak P	700	3.70	189.1891892	Jedlicka et al. (2015); Perraki and Faryad, (2014); Nahodilová et al. (2014)
0.366	Ile de Groix, Armorican Massif, France	Peak P	450	1.90	236.8421053	Bosse et al. (2005); Ballèvre et al. (2003)
0.363	Lws blueschist, Malpica-Tui Complex, NW Spain	P-T	560	2.20	254.5454545	López-Carmena et al. (2014)
0.360	Low-T eclogite, La Varenne, Champcoœux complex, Armorican massif, France	P-T	550	1.60	343.7	Bosse et al. (2000); Ballèvre and Marchand (1991)
0.358	North-east Greenland, Greenland Caledonides	P-T	970	3.60	269.4444444	McClelland et al. (2010); Gilotti and Rava (2002)
0.343	Eclogite, Blumenau, Erzgebirge, Saxony, Germany	Peak P	800	3.30	242.4242428	Schmidäck and Müller (2000); von Quadt and Gebauer (1998); Schmidäck et al. (1995)
0.342	Kyanite eclogite, T-7 borehole, Ceske stredohori Mts, Bohemian Massif, Czech Republic	P-T	970	3.80	255.2631579	Kotková and Janák (1991); Gebauer (1991)
0.342	Straž nad Ohří, Eger complex, Czech Republic	P-T	1100	4.80	166666667	Haříř and Kotková (2016); Kotková et al. (1995)
0.320	UHP eclogite, southwestern Tianshan, China	P-T	505	3.20	157.8125	Du et al. (2014b); Su et al. (2010)
0.320	Coe metapelite, southwestern Tianshan, China	P-T	565	2.90	194.8275862	Yang et al. (2013)
0.320	Lws eclogite, southwestern Tianshan, China	P-T	498	2.43	204.9382716	Du et al. (2014a); Su et al. (2010)
0.318	HP eclogite, southwestern Tianshan, China	P-T	565	2.35	240.4255319	Meyer et al. (2016); Li et al. (2011)
0.319	Athabashy, Tianshan, Kyrgyzstan	P-T	600	2.40	250	Hegner et al. (2010); Tagiri et al. (1995)
0.315	Eclogite, Shanderman, northern Iran	P-T	605	1.80	336.1111111	Omraní et al. (2013); Zanchetta et al. (2009)
0.274	Sumo eclogite, Lhasa block, Tibet	P-T	670	2.70	248.1481481	Weller et al. (2016)
0.265	Eclogite, Jilang, Lhasa block, Tibet	P-T	770	3.60	213.8888889	Cheng et al. (2012)
0.261	Eclogite, Songdo, Lhasa block, Tibet	P-T	730	2.70	270.3703704	Zhang and Tang (2009); Yang et al. (2007)
0.257	Qianjin eclogite, Huwan Shear Zone, Hong'An, China	P-T	575	2.40	239.5833333	Cheng and Cao (2015)
0.252	Xiongjian eclogite, Huwan Shear Zone, Hong'An, China	P-T	610	2.30	265.2173913	Cheng et al. (2016)
0.242	Blueschist, Lancang tectonic belt, Southwest China	P-T	390	1.00	390	Fan et al. (2015)
0.242	Lawsonite blueschist, northwestern Qiangtang, Tibet	P-T	375	1.05	357.1428571	Tang and Zhang (2014)
0.235	Gangma Co, central Qiangtang, Tibet	P-T	435	2.25	193.3333333	Zhai et al. (2011); Pullen et al. (2008)
0.233	Rongma, central Qiangtang, Tibet	P-T	520	1.40	371.4285714	Pullen et al. (2008); Kapp et al. (2003)
0.230	Baigung eclogite, Lhasa block, Tibet	P-T	490	2.60	188.4615385	Cheng et al. (2015)
0.236	Huangzhen-Zhujachong, South Dabie zone, China	P-T	670	3.30	203.030303	Li et al. (2004)
0.233	Shuanghe (eclogite/marble), medium-T UHP eclogite zone, Dabie Shan, China	P-T	726	4.10	177.0731707	Wei et al. (2013); Liu et al. (2006)
0.227	Xinxian, low-T UHP eclogite unit, western Dabieshan, China	P-T	610	2.90	210.3448276	Wei and Clarke (2011); Wei et al. (2010); Wu et al. (2008)
0.222	Luotian, North Dabie zone, China	P-T	970	4.25	228.2352941	Liu et al. (2015, 2011a, 2007)
0.236	Weihai, Sulu belt, China	P-T	660	3.00	220	Zong et al. (2010); Banerjee et al. (2000)
0.236	Taohang, Sulu belt, China	P-T	700	3.40	205.8823529	Li et al. (2014); Nakamura and Hirajima (2010)
0.233	Yangkou, Sulu belt, China	P-T	733	3.50	209.4285714	Wang et al. (2014); Zeng et al. (2011)
0.233	Marble, Sanqinjie, Sulu belt, China	P-T	600	3.55	169.0140445	Zhu et al. (2009); Liu et al. (2007)
0.227	Eclogite, Donghai, Sulu belt, China	P-T	660	3.30	200	Mattinson et al. (2004); Liu et al. (2004)
0.230	Song Ma suture zone, northern Vietnam	P-T	700	2.60	269.2307692	Zhang et al. (2013)
0.218	Pinchi Lake, British Columbia, Canada	P-T	536	2.55	210.1960784	Wei and Clarke (2011); Ghent et al. (2009)
0.190	Eclogite, Basu, Qiangtang, central Tibet	P-T	990	4.00	247.5	Zhang et al. (2008)
0.158	Kim complex, Rhodope zone, Greece	P-T	800	4.00	200	Liati et al. (2016); Kremn et al. (2010); Schmidt et al. (2010); Perraki et al. (2006)
0.158	Eclogite, Ring Mountain, Tiburon Peninsular, California, USA	P-T	585	2.35	248.9361704	Tsujimori et al. (2006a); Anczkiewicz et al. (2004)
0.145	Cazadero, Northern California, USA	P-T	504	1.80	280	Wei and Clarke (2011); Anczkiewicz et al. (2004)
0.145	Jenner, Northern California, USA	P-T	435	2.20	197.7272727	Anczkiewicz et al. (2004); Rava and Terry (2004)
0.140	Northeastern Nicaragua	P-T	590	1.60	368.75	Flores et al. (2015)
0.132	Carrizal Grande, south Motagua Fault Zone, Guatemala	P-T	520	2.50	208	Endo et al. (2012); Brueckner et al. (2009)
0.124	Lws eclogite, Bantimurung complex, south Sulawesi, Indonesia	P-T	580	2.60	223.0769231	Brückner et al. (2017); Wei and Clarke (2011); Parkinson and Katayama (1999)
0.118	Luk Ulo complex, central Java, Indonesia	P-T	440	2.20	200	Bröcker et al. (2017); Kadarsuman et al. (2007)
0.108	Jagua Clara melange, Rio San Juan complex, Dominican Republic	P-T	585	2.30	254.3478261	Escuder-Viruete et al. (2013); Krebs et al. (2008)
0.091	Sivrihisar massif, central Turkey	Peak P	460	2.40	191.6666667	Çetinkaplan et al. (2008); Mulcahy et al. (2014)
0.085	Alanya massif, southeastern Turkey	P-T	530	1.70	311.7647059	Çetinkaplan et al. (2016)
0.083	Bülbül massif, southeastern Turkey	P-T	520	2.00	260	Oberhänsli et al. (2013)
0.083	Tavşanlı zone, western Turkey	P-T	500	2.40	208.3333333	Plunder et al. (2015); Sherlock et al. (1999)
0.045	Southern Menderes massif, southwestern Turkey	P-T	480	1.30	369.2307692	Pouteau et al. (2013); Rimmele et al. (2005)
0.092	Pohorje Mountains, Eastern Alps, Slovenia	P-T	820	3.70	221.6216216	Janák et al. (2015, 2009)
0.090	Koralpe (Hohi), Eastern Alps	P-T	630	1.95	323.0769231	Bruand et al. (2010); Thöni (2006)
0.089	Eclogite unit, Sanbagawa belt, Japan	P-T	560	2.00	280	Wellmer et al. (2015b); Wallis et al. (2009)
0.088	Eclogite, Sistan Suture Zone, Iran	P-T	600	2.30	260.8695652	Bröcker et al. (2013); Fotoohi Rad et al. (2005)
0.079	As Sifah, Oman	P-T	490	2.50	196	Massonne et al. (2013); Warren et al. (2005)
0.085	Druer unit, Sesia Zone, Western Alps	Peak P	550	1.95	282.0512821	Regis et al. (2014)
0.075	Fondo unit, Sesia Zone, Western Alps	Peak P	530	1.80	294.4444444	Regis et al. (2014)
0.081	Garnet Ridge, Colorado Plateau, USA	P-T	630	4.07	154.7911548	Wei and Clarke (2011); Usui et al. (2003)

0.077 Chuacús complex, central Guatemala	P-T	705	2.25	313.3333333 Martens et al. (2012)
0.071 Lws blueschist, Seghin, Hajiabad area, Zagros,	P-T	500	1.75	285.7142857 Angiboust et al. (2016); Agard et al. (2005)
0.069 Eastern dome, Escambray massif, central Cuba	P-T	600	1.60	375 Schneider et al. (2004)
0.061 Western dome, Escambray massif, central Cuba	P-T	470	1.50	313.3333333 Grevel et al. (2006)
0.052 Syros, Greece	P-T	545	2.00	272.5 Lister and Forster (2016); Philippon et al. (2013); Lagos et al. (2007); Tomaschek et al. (2003)
0.045 Sifnos, Greece	P-T	550	2.20	250 Dragovic et al. (2015); Ashley et al. (2014)
0.051 Tso-Morari eclogite, western Himalaya, India	P-T	645	2.75	234.5454545 St-Onge et al. (2013)
0.051 Stak eclogite, Hamosh, NE Himalaya, Pakistan	P-T	750	2.50	300 Lamari et al. (2013); Riel et al. (2008)
0.047 Eclogite, Kaghan Valley, NW Himalaya, Pakistan	P-T	710	3.30	215.1515152 Wilke et al. (2010a, b)
0.044 Zone 4, Pam Peninsula, New Caledonia	P-T	550	2.50	220 Brovarone and Agard (2013); Spandler et al. (2005)
0.049 Volti Massif, Ligurian Alps	P-T	480	2.50	192 Malatesta et al. (2012); Federico et al. (2005)
0.045 Monviso, Western Alps	P-T	550	2.70	203.7037037 Angiboust et al. (2012); Rubatto & Hermann (2003)
0.044 Laga Di Cignana, Zermatt-Saas zone, Western Alps	P-T	575	3.00	191.6666667 Frezzotti et al. (2014); Groppo et al. (2009); Rubatto et al. (1998)
0.044 Balma unit, Pennine Alps	P-T	580	1.90	305.2631579 Herwartz et al. (2008)
0.043 Gressoney valley, Monte Rosa nappe, Western Alps	P-T	560	2.55	219.6078431 Gasco et al. (2011); Lapen et al. (2007)
0.037 Trescolmen, Adula nappe, Western Alps	P-T	750	2.50	300 Herwartz et al. (2011); Dale & Holland (2003)
0.035 Brossasco-Iasca unit (Dora-Maira Massif), Western Alps	P-T	730	4.00	182.5 Castelli et al. (2007); Groppo et al. (2007); Hermann (2003); Rubatto and Hermann (2001); Gebauer et al. (1997)
0.034 Gran Paradiso Massif, Western Alps	P-T	520	2.00	260 Manzoni et al. (2015); Gabudanu Radulescu et al. (2009);
0.034 Schistes Lustrés, Corsica, France	P-T	520	2.30	226.0869565 Brovarone and Herwartz (2013); Brovarone et al. (2011); Martin et al. (2011)
0.034 Gimigliano, lower ophiolitic unit, Catena Costiera, Calabria, Italy	P-T	370	1.25	296 Rossetti et al. (2004)
0.032 Eclogite zone, Tauern Window, Eastern Alps, Austria	P-T	560	2.55	219.6078431 Nagel et al. (2013); Hoschek (2013); Smye et al. (2011, 2010)
0.021 Footwall of the Kef Lakhel thrust, Edough Massif, Algeria	Peak P	750	3.60	208.3333333 Fernandez et al. (2016); Caby et al. (2014)
0.007 Fergusson Island, eastern Papua New Guinea	P-T	700	2.70	259.2592593 Zirakparvar et al. (2011); Baldwin et al. (2008)
0.005 Yuli belt, eastern Taiwan	P-T	540	1.6	337.5 Keyser et al. (2016); Sandmann et al. (2015)

Mean
1 sd

647.34 2.6815385 255.1849955
149.16915 0.9386098 58.50874828