**Supplemental File 1,** to accompany *Geosphere* paper “Paleogeographic and structural evolution of northwestern Africa and its Atlantic margins since the early Mesozoic” by Ye et al.

***Table S1:*** Compilation of thermochronological data (Apatite Fission Track analysis (AFTA) and Apatite (U-Th-Sm)/He dating (AHe)) available over Northwestern Africa. Sample’s name, location, lithology, age and mean track length issued from AFTA, AHe dates and the corresponding reference are shown for each sample, when available. The reader may access the temperature-time paths obtained by data inversion by consulting the cited studies.

TABLE S1. THERMOCHRONOLOGICAL DATA OVER NORTHWESTERN AFRICA

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample Name** | **Long** | **Lat** | **Location** | **Elevation**  **(m)** | **Lithology** | **AFT\_Age**  **(Ma)** | **Error**  **(Ma)** | **MTL(µm)** | **Error**  **(µm)** | **MTL\_Std** | **AHe\_Mean**  **(Ma)** | **AHe\_Correc**  **(Ma)** | **Reference\*** |
| TGH3163 | 9.9W | 24.9N | Reguibat Central | 305 | granite | 139 | 9 | 11.9 | 0.2 | 1.8 | 162-137 | 191-166 | (1) (2) |
| TGH3111B | 9.4W | 24.0N | Reguibat Central | 252 | granite | 150 | 8 | 11.9 | 0.2 | 1.7 |  |  | (2) |
| TEN1185 | 10.5W | 24.1N | Reguibat Central | 236 | gabbro | 163 | 10 | 12.4 | 0.2 | 2.1 | 142-86 | 167-133 | (1) (2) |
| YT7 | 7.3W | 26.5N | Reguibat Central | 384 | monzogranite | 166 | 8 | 11.4 | 0.3 | 1.8 |  |  | (2) |
| TEN4065 | 10.0W | 24.3N | Reguibat Central | 258 | microgranite | 172 | 13 | 11.7 | 0.3 | 2.0 |  |  | (2) |
| TGH4072A | 9.7W | 24.5N | Reguibat Central | 273 | granite | 199 | 13 | 12.4 | 0.2 | 1.6 |  |  | (1) (2) |
| AL10 | 7.1W | 26.6N | Reguibat Central | 394 | granodiorite | 202 | 14 | 12.0 | 0.2 | 1.6 | 280-67 | 396-96 | (2) |
| TEN1153 | 10.5W | 24.0N | Reguibat Central | 216 | grabbro | 256 | 21 | 12.3 | 0.2 | 2.3 | 66-31 | 81-38 | (1) (2) |
| TL3 | 3.2W | 27.4N | Reguibat East | 381 | gabbro | 237 | 21 |  |  |  | 99-31 | 133-40 | (2) |
| CH2 | 3.6W | 25.6N | Reguibat East | 252 | gabbrodiorite | 264 | 21 | 12.0 | 0.2 | 1.7 |  |  | (2) |
| CH1 | 3.6W | 25.6N | Reguibat East | 252 | gabbrodiorite | 307 | 26 | 11.5 | 0.2 | 2.1 | 178-26 | 234-32 | (2) |
| CH3 | 3.6W | 25.6N | Reguibat East | 252 | gabbrodiorite | 315 | 24 | 11.5 | 0.3 | 2.3 | 175-99 | 222-138 | (2) |
| DEG6 | 3.0W | 26.1N | Reguibat East | 355 | gabbro | 355 | 25 | 11.2 | 0.4 | 2.1 |  |  | (2) |
| GH3 | 6.1W | 25.5N | Reguibat East | 360 | trondhjemite | 359 | 27 | 11.5 | 0.2 | 1.9 | 256-88 | 326-104 | (2) |
| IG3 | 6.2W | 26.2N | Reguibat East | 366 | rhyolite | 393 | 36 | 0.0 | 0.0 |  | 277-120 | 384-166 | (2) |
| GH20 | 6.0W | 25.6N | Reguibat East | 350 | gabbro |  |  |  |  |  | 61-27 | 87-41 | (2) |
| AOS2 | 14.3W | 22.5N | Reguibat West | 400 | nephelinic syenite | 107 | 8 | 11.8 | 0.2 | 1.8 | 65-21 | 81-27 | (2) (3) |
| TAS29 | 15.6W | 21.0N | Reguibat West | 110 | gneiss | 115 | 6 | 12.2 | 0.3 | 1.8 | 138-62 | 185-94 | (2) (3) |
| AG169 | 13.4W | 20.7N | Reguibat West | 137 | charnockite | 118 | 10 |  |  |  |  |  | (2) |
| TAS233 | 15.6W | 21.0N | Reguibat West | 110 | volcanite | 126 | 7 | 12.5 | 0.2 | 1.8 | 77-35 | 111-43 | (2) (3) |
| TCH7 | 15.1W | 21.9N | Reguibat West | 194 | granite | 127 | 8 | 9.4 | 0.3 | 2.0 | 55-23 | 67-29 | (2) (3) |
| AOS3 | 14.3W | 22.5N | Reguibat West | 400 | nephelinic syenite | 128 | 6 | 11.9 | 0.2 | 1.6 | 74-38 | 95-47 | (2) (3) |
| AOS5 | 14.3W | 22.5N | Reguibat West | 400 | nephelinic syenite | 128 | 8 | 11.8 | 0.2 | 1.8 | 39-12 | 52-14 | (2) (3) |
| AG167 | 13.4W | 20.7N | Reguibat West | 125 | charnockite | 137 | 12 |  |  |  |  |  | (2) |
| SC12 | 14.5W | 22.6N | Reguibat West | 292 | granite | 141 | 8 | 12.2 | 0.2 | 1.8 | 64-55 | 82-63 | (2) (3) |
| SC9 | 14.3W | 22.6N | Reguibat West | 318 | granite | 143 | 13 | 11.2 | 0.4 | 1.9 | 71-42 | 93-52 | (2) (3) |
| SC5 | 14.5W | 22.7N | Reguibat West | 284 | granite | 156 | 15 | 10.7 | 0.3 | 1.7 | 77-28 | 101-35 | (2) (3) |
| SC11 | 14.4W | 22.6N | Reguibat West | 293 | granite | 160 | 11 | 12.1 | 0.3 | 1.8 | 71-35 | 92-24 | (2) (3) |
| SC15 | 14.5W | 22.7N | Reguibat West | 282 | granite | 175 | 16 |  |  |  | 67-21 | 80-27 | (2) (3) |
| SC-31 | 7.8E | 18.5N | Air |  | pegmatitic granite | 34 | 3 | 12.5 | 0.7 |  |  |  | (4) |
| SC-56 | 7.8E | 18.5N | Air |  | leucoratic granite | 36 | 2 | 12.8 | 1.2 |  |  |  | (4) |
| SC-71 | 8.4E | 18.0N | Air |  | orthoclase-phenocryst granite | 44 | 3 | 12.6 | 0.2 |  |  |  | (4) |
| BF 3 | 2.0W | 12.7N | Burkina Faso | 400 | granite | 175 | 10 | 12.8 | 0.2 | 1.6 |  |  | (5) |
| BF 1 | 1.3W | 12.6N | Burkina Faso | 340 | granite | 179 | 10 | 12.8 | 0.2 | 1.5 |  |  | (5) |
| BF 7 | 3.2W | 10.7N | Burkina Faso | 320 | granite | 179 | 9 | 13.1 | 0.2 | 1.5 |  |  | (5) |
| BF 4 | 0.3W | 12.3N | Burkina Faso | 380 | quartz syenite | 196 | 19 | 12.4 | 0.2 | 1.9 |  |  | (5) |
| BF 5 | 1.9W | 12.0N | Burkina Faso | 400 | granodiorite | 211 | 8 | 12.4 | 0.2 | 1.6 |  |  | (5) |
| BF 2 | 1.9W | 11.4N | Burkina Faso | 380 | granite | 218 | 7 | 12.2 | 0.2 | 1.8 |  |  | (5) |
| IT05 | 5.7E | 22.8N | Hoggar | 1523 | granite | 75 | 8 |  |  |  | 55 |  | (6) |
| BLN12-2 | 9.6E | 17.6N | Hoggar | 671 | rhyolite | 91 | 10 |  |  |  | 64 |  | (6) |
| IT22 | 5.7E | 22.8N | Hoggar | 1537 | granite | 96 | 11 |  |  |  | 71 |  | (6) |
| ALG3 | 4.5E | 22.5N | Hoggar | 707 | granodiorite | 99 | 6 |  |  |  | 43 |  | (6) |
| TOD17 | 7.3E | 25.0N | Hoggar | 1341 | granite | 111 | 10 |  |  |  | 41 |  | (6) |
| ARO113 | 8.5E | 23.7N | Hoggar | 1037 | granite | 114 | 10 |  |  |  | 17 |  | (6) |
| ALG1 | 4.4E | 22.7N | Hoggar | 705 | granodiorite | 166 | 10 |  |  |  |  |  | (6) |
| ALG2 | 4.4E | 22.6N | Hoggar | 699 | granodiorite | 166 | 9 | 10.4 | 0.2 |  | 41 |  | (6) |
| TOD27 | 7.3E | 25.1N | Hoggar | 1372 | granodiorite | 179 | 20 | 0.0 | 0.0 |  | 22 |  | (6) |
| TOD30 | 7.3E | 25.0N | Hoggar | 1416 | granite | 285 | 29 |  |  |  | 14 |  | (6) |
| ALG4 | 4.6E | 22.5N | Hoggar | 722 | granodiorite |  |  |  |  |  | 42 |  | (6) |
| FRZ1 | 3.5E | 25.7N | Hoggar | 625 | Cambro-Ordovician sandstone | |  |  |  |  | 78 |  | (6) |
| BLN400 | 8.6E | 19.6N | Hoggar | 802 | mylonitic metatonalite | |  |  |  |  | 37 |  | (6) |
| TZA14 | 4.5E | 23.9N | Hoggar | 827 | granite | |  |  |  |  | 49 |  | (6) |
| TZA28 | 4.4E | 24.0N | Hoggar | 754 | granite |  |  |  |  |  | 49 |  | (6) |
| TZA182 | 4.0E | 25.1N | Hoggar | 834 | granodiorite | |  |  |  |  | 71 |  | (6) |
| TZA204 | 4.7E | 24.7N | Hoggar | 912 | granite |  |  |  |  |  | 43 |  | (6) |
| ARO108 | 8.5E | 23.7N | Hoggar | 1037 | granite |  |  |  |  |  | 41 |  | (6) |
| EN06-5 | 2.5W | 3.6N | IC-GN marginal ridge | -3465 | sandstone | 68 |  |  |  |  |  |  | (7) |
| EN04-9 | 2.3W | 3.7N | IC-GN marginal ridge | -2405 | sandstone | 69 |  |  |  |  |  |  | (7) |
| EN09-9 | 2.7W | 3.5N | IC-GN marginal ridge | -2675 | sandstone | 78 |  |  |  |  |  |  | (7) |
| EN01-3 | 1.9W | 3.9N | IC-GN marginal ridge | -3479 | sandstone | 83 |  |  |  |  |  |  | (7) |
| EN09-4 | 2.7W | 3.5N | IC-GN marginal ridge | -3524 | sandstone | 90 |  |  |  |  |  |  | (7) |
| EN09-2 | 2.7W | 3.5N | IC-GN marginal ridge | -3905 | sandstone | 92 |  |  |  |  |  |  | (7) |
| 961 | 3.1W | 3.5N | IC-GN marginal ridge | -365 | siltstone | 92 |  |  |  |  |  |  | (7) |
| 960 | 2.7W | 3.6N | IC-GN marginal ridge |  | sandstone, claystone, limestone | |  |  |  |  |  |  | (7) (8) |
| 959 | 2.7W | 3.6N | IC-GN marginal ridge |  | sandstone |  |  |  |  |  |  |  | (8) |
| **\*Reference**: (1) Leprêtre et al., 2014; (2) Leprêtre, 2015; (3) Leprêtre et al., 2015; (4) Cavellec, 2006; (5) Gunnell, 2003; (6) Rougier, 2012; (7) Bouillin et al., 1997; (8) Clift et al., 1998 | | | | | | | | | | | | | |

***Table S2****:* Compilation of Meso-Cenozoic magmatic occurences in Northwestern Africa. Paleogeographic maps: Fig 5- Early Jurassic (235-190 Ma), Fig 6- Vanlanginian (140-133Ma), Fig 7- Middle Aptian (120-115 Ma), Fig 8- Late Albian (107-100 Ma), Fig 9- Late Cenomanian (97-93 Ma), Fig 10- Santonian (86-84 Ma), Fig 11- Maastrichtian (72-66 Ma), Fig 12- Late Paleocene (61-56 Ma), Fig 13- Oligocene (34-23 Ma).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| TABLE S2. REFERENCES OF MAGMATISM DATING | | | | | | |
| **Country** | **Location** | **Emplacement mode** | **Age (Ma)** | **Dating Method** | **Reference+** | **Fig** |
| Nigeria | Benue Trough | Intrusion in Kerri-Kerri formation | 41 | Radiometrical dating | [1] | 13 |
| Algeria | Touareg Shield | Serouenout lava flows | 18.1 ± 0.4; 6.3 | K-Ar | [2] [3] | 13 |
| Algeria | Touareg Shield | Tahalgha lava flows | 3.4 ± 0.1 - 2.43 ± 0.06 | K-Ar | [2] [3] | 13 |
| Algeria | Touareg Shield | Taharaq lava flows | 34.5 ± 3.5 - 32.8 ± 2.6 | Ar-Ar | [4] | 13 |
| Algeria | Touareg Shield | Taharaq lava flows, dykes | 44 ± 0.8; 33.6 ± 0.7 - 24.4 ± 0.5 | K-Ar | [4] | 13 |
| Sierra Leone | CAMP | Freetown Complex | 232.1 ± 9 - 196.3 ± 3 | Ar-Ar | [5] [6] | 5 |
| Guinea | Offshore | Krausse Seamount | 53.3 - 55.4 | N.D.\* | [7] | 12 |
| Guinea | Offshore | Nadir Seamount | 58.6 ± 0.3 | Ar-Ar | [7] | 12 |
| Algeria | CAMP | Reggane-Tindouf-Hank Sills & Fersiga  Dykes & Bechar Lava flows | 197.9 ± 2.0 - 195.0 ± 1.6 | Ar-Ar | [8] | 5 |
| Liberia | CAMP | Paynesvill Sill | 185.0 ± 4.4 - 187.0 ± 3.4 | Ar-Ar | [9] | 5 |
| Liberia | CAMP | Liberia Dyke and Sills | 192 ± 6 - 173 ± 4 | K-Ar | [9] | 5 |
| Guinea | CAMP | Kakoulima Laccolithic Complex & Fouta Djalon Dykes and Sills | 200.4 ± 2.4 - 188.7 ±  1.9 | Ar-Ar | [10] | 5 |
| Nigeria | Younger Granites | Pankshin ring complexe | 151 | Rb-Sr | [11] [12] | 5 |
| Nigeria | Younger Granites | Jos ring complexe | 161 | Rb-Sr | [11] [12] | 5 |
| Nigeria | Younger Granites | Shere Hills ring complexe | 161 | Rb-Sr | [11] [12] | 5 |
| Nigeria | Younger Granites | Amo ring complexe | 162 | Rb-Sr | [11] [12] | 5 |
| Nigeria | Younger Granites | Zaranda ring complexe | 186 | Rb-Sr | [11] [12] | 5 |
| Nigeria | CAMP | Oban-Obudu Dyke Swarm | 219.9 ± 4.7 - 204.0 ± 9.9 | K-Ar | [13] | 5 |
| Nigeria | N.P.\* | Oban-Obudu Dyke Swarm | 140.5 ±  0.7 | Ar-Ar | [14] | 6 |
| Nigeria | Cameroun Line | Mandara lava flows | 36 - 30 | K-Ar | [15] | 13 |
| Nigeria | Cameroun Line | Biu Plateau lava flows | 5 - 0.8 | K-Ar | [15] | 13 |
| Cameroun | Cameroun Line | Manengouba lava flows | 3 - 0 | K-Ar, Rb-Sr | [15] [16] | 13 |
| Cameroun | Cameroun Line | Sao Tomé lava flows | 13 - 0 | K-Ar, Rb-Sr | [15] [16] [17] | 13 |
| Cameroun | Cameroun Line | Bambouto lava flows | 23 - 14 | K-Ar | [15] [18] | 13 |
| Cameroun | Cameroun Line | Oku lava flows | 31 - 22 | K-Ar | [15] [19] | 13 |
| Chad | WCRAS | Dilia (Langrin-1) granites, Termit | 190 ± 7 | N.D.\* | [20] [21] | 5 |
| Chad | WCRAS | Doseo (Tega-1) sills | 97 ± 1.2 | N.D.\* | [20] [21] | 9 |
| Chad | WCRAS | Bongor (Naramay-1) sills | 52 - 56 | N.D.\* | [20] [21] | 12 |
| Chad | WCRAS | Doseo (Kikwey-1) sills | 101.1 ± 1.1 | N.D.\* | [20] [21] | 8 |
| Chad | WCRAS | Termit (Kumia-1) sills | Cenomanian | Relative dating | [20] [21] | 9 |
| Chad | WCRAS | Sedigi dykes, Termit | Santonian | Relative dating | [20] [21] | 10 |
| Chad | WCRAS | Doseo (Keita-1) sills | Upper Aptian | Relative dating | [20] [21] | 7 |
| Niger | WCRAS | Gosso Lorom lava flows, Termit | 10 ≤ 1 | N.D.\* | [20] [21] | 13 |
| Niger | WCRAS | Termit (Iaguil-1) sills | 8.6 ± 0.5 | N.D.\* | [20] [21] | 13 |
| Nigeria | Nigeria Shield | Jos Plateau lava flows | 2.1 ± 0.1 - 0.9 ± 0.2 | K-Ar | [22] | 13 |
| Nigeria | Benue Trough | South Gombe plugs | 22.8 - 11.2 | K-Ar | [22] | 13 |
| Nigeria | Cameroun Line | Biu Plateau lava flows | 5.0 ± 0.2 - 0.8 | K-Ar | [22] | 13 |
| Nigeria | Benue Trough | South Gombe plugs | 7.4 - 2.5 | K-Ar | [22] | 13 |
| Cameroun | Cameroun Line | Mt Cameroon lava flows | 3 - 0 | Rb-Sr | [16] | 13 |
| Cameroun | Cameroun Line | Bioko lava flows | 1 - 0 | Rb-Sr | [16] | 13 |
| Cameroun | Cameroun Line | Principe lava flows | 31 - 0 | Rb-Sr | [16] [17] | 13 |
| Cameroun | Cameroun Line | CL plutons | 73 ± 6 - 39 ± 2 | K-Ar, Ar-Ar, Rb-Sr | [23] | 11 |
| Cameroun | Cameroun Line | CL plutons | 73 ± 6 - 39 ± 2 | K-Ar, Ar-Ar, Rb-Sr | [23] | 12 |
| Cameroun | Cameroun Line | CL plutons | 73 ± 6 - 39 ± 2 | K-Ar, Ar-Ar, Rb-Sr | [23] | 13 |
| Liberia | CAMP | Liberia Dyke Swarm | 196 ± 4 - 177 ± 4 | K-Ar | [24] [25] | 5 |
| Cameroun | Cameroun Line | Pagalu lava flows | 5 - 0 | Rb-Sr | [17] | 13 |
| Chad | Tibesti Shield | Tibesti lava flows | 9.7 - 0.3 | N.D.\* | [26] | 13 |
| Mali | Touareg Shield | Tin Zaouatene lava flows | 0 | N.D.\* | [26] | 13 |
| Niger | Touareg Shield | Tin Taralle and Todra lava | 28 - 20; 15 - 8; 4 - 0.7 | N.D.\* | [26] | 13 |
| Mali | Touareg Shield | Tidjerazraze ring complexe | 161 ± 5 | Rb-Sr | [27] | 5 |
| Mali | Touareg Shield | Anezrouf ring complex | 184 ± 14 | Rb-Sr | [27] | 5 |
| Mali | Touareg Shield | Tirkine ring complexe | 215 ± 11 | Rb-Sr | [27] | 5 |
| Nigeria | Benue Trough | Gowol lava flows | 123.1 ± 1.6 | Ar-Ar | [28] | 7 |
| Nigeria | Benue Trough | Bima Hill lava flows | 106.6 ± 19 | Ar-Ar | [28] | 8 |
| Nigeria | Benue Trough | Dumne lava flows | 130.7 ± 2.7 | Ar-Ar | [28] | 6 |
| Nigeria | Benue Trough | Burashikai lava flows | 146.7 ± 1.6 - 137.8 ± 1.9 | Ar-Ar | [28] | 6 |
| Nigeria | Benue Trough | Gboko dykes | 93.5 ± 1.7; 92.3 ± 1.1 | Ar-Ar | [28] | 9 |
| Nigeria | Benue Trough | Wanakum Hills lava flows, sills, dykes and pyroclastic deposits | 95.3 ± 1 - 71.4 ± 1.3 | Ar-Ar | [28] | 9 |
| Nigeria | Benue Trough | Katyo subvolcanic intrusions | 97.1 ± 1.2; 68.4 ± 1.1 | Ar-Ar | [28] | 9 |
| Nigeria | Benue Trough | Okigwi subvolcanic intrusions | 87.7 ± 1 - 81.1 ± 1.1 | Ar-Ar | [28] | 10 |
| Nigeria | Benue Trough | Wanakum Hills lava flows, sills, dykes and pyroclastic deposits | 95.3 ± 1 - 71.4 ± 1.3 | Ar-Ar | [28] | 10 |
| Nigeria | Benue Trough | Wanakum Hills lava flows, sills, dykes and pyroclastic deposits | 95.3 ± 1 - 71.4 ± 1.3 | Ar-Ar | [28] | 11 |
| Nigeria | Benue Trough | Katyo subvolcanic intrusions | 97.1 ± 1.2; 68.4 ± 1.1 | Ar-Ar | [28] | 11 |
| Nigeria | Benue Trough | Makurdi intrusions | 49.1 ± 1.1 | Ar-Ar | [28] | 12 |
| Nigeria | Benue Trough | Afikpo sills | 55.2 ± 2 | Ar-Ar | [28] | 12 |
| Liberia | CAMP | Liberia Dyke Swarm | 201 ± 2 - 186 ± 4 | K-Ar | [29] | 5 |
| Algeria | Touareg Shield | Achkal ring complexe, Amadhor | 29 ± 0.6; 24 ± 0.4 | K-Ar | [30] | 13 |
| Guinea | Offshore | Los Island instrusions | 104.5 ± 1.6 | Rb-Sr | [31] | 8 |
| Mauritania | Taoudenni | Richat dome | 85 ± 5 | Fission track dating | [32] | 10 |
| Cameroun | Cameroun Line | Garoua lava flows | 39 - 34 | K-Ar | [33] | 13 |
| Nigeria | Benue Trough | Burashika-Shani lava flows | 147 ± 7 | K - Ar | [34] | 6 |
| Nigeria | Benue Trough | Gowol and Bima-Wada lava flows | 103 ± 5 | K - Ar | [34] | 8 |
| Nigeria | Younger Granites | Mada ring complexe | 150 ± 2; 145 ± 4 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Tibchi ring complexe | 171 ± 3 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Banke ring complexe | 173 ± 3; 173 ± 2 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Kudaru ring complexe | 175 ± 16; 173 ± 3 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Dutsen ring complexe | 177 ± 3; 173 ± 3 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Ningi ring complexe | 183 ± 7 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Shira ring complexe | 186 ± 5 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Fagam ring complexe | 191 ± 3 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Dutse ring complexe | 213 ± 7 | Rb-Sr | [35] | 5 |
| Nigeria | Younger Granites | Ririwai ring complexe | 170 - 166 | Rb-Sr | [12] [35] [36] | 5 |
| Cameroun | Cameroun Line | Ngaoundere lava flows | 11 - 7 | N.D.\* | [19] | 13 |
| Ghana | Offshore | Vocaniclastic deposits | 125 - 120 | N.D.\* | [37] | 7 |
| Algeria | Touareg Shield | Atakor basaltic lava flows | 19.9 ± 1.9 - 12.4 ± 2; 6.7 ± 2 - 4.2 ± 0.2; 1.95 ± 0.2 - 1.5 ± 0.1 | K-Ar | [38] [39] | 13 |
| Algeria | CAMP | Ksi-Ksou Dyke | 198.0 ± 1.8 | Ar-Ar | [40] | 5 |
| Mali | CAMP | Taoudenni  Dyke Swarm | 203.7 ± 2.7 - 200.9 ± 2.5 | Ar-Ar | [40] | 5 |
| Guinea | Kimberlite | Banakoro kimberlite pipe | 139 ± 3 | Ar-Ar | [41] | 6 |
| Guinea | Kimberlite | Droujba kimberlite pipe | 153 ± 3 | Ar-Ar | [41] | 6 |
| Sierra Leone | Kimberlite | Tongo kimberlite dyke | 140 | N.D.\* | [41] | 6 |
| Sierra Leone | Kimberlite | Koidu kimberlite pipe 1 | 143 ± 1 | Ar-Ar | [41] | 6 |
| Sierra Leone | Kimberlite | Koidu kimberlite pipe 2 | 146 ± 2 | Ar-Ar | [41] | 6 |
| Nigeria | Benue Trough | Gboko-Ikyuen rhyolites | 113 ± 3 | Rb-Sr | [42] | 7 |
| Nigeria | Younger Granites | Afu ring complexe | 141 ± 2; 144 ± 2 | Rb-Sr | [43] [44] | 5 |
| Mali | CAMP | Taoudenni Sills | 202.4 ± 1.6 - 198.9  ±  1.2 | Ar-Ar | [45] | 5 |
| Mali | CAMP | Taoudenni  Dyke Swarm | 203.7 ± 2.7 - 196.6 ± 1.0 | Ar-Ar | [45] | 5 |
| Nigeria | Kimberlite | Kuafur kimberlite | c.150 | N.D.\* | [46] | 6 |
| Nigeria | Nigeria Shield | Jos Plateau lava flows | 34.7 ± 0.2; 27 ± 0.2; 8.4 ± 0.1 | K-Ar | [47] | 13 |
| Algeria | Touareg Shield | In Ezzane lava flows | 0 | N.D.\* | [26] | 13 |
| Algeria | Touareg Shield | Manzaz lava flows | 20 - 12; 7 - 4; 3 - 0.01 | N.D.\* | [26] | 13 |
| Algeria | Touareg Shield | Adrar n'Ajjer lava flows | 3.5 - 2.5 | N.D.\* | [26] | 13 |
| Algeria | Touareg Shield | Eggere lava flows | 3.5 - 2.5 | N.D.\* | [26] | 13 |
| Algeria | Touareg Shield | Serouenout lava flows | 16.8 ± 0.6 - 4.7 ± 0.3 | Ar-Ar | [48] | 13 |
| Guinea | Offshore | Drilled volcanic | Aptian-Albian | Relative dating | This study | 7 |
| Guinea | Offshore | Drilled volcanics | Aptian-Albian | Relative dating | This study | 8 |
| Liberia | Offshore | Drilled interbedded tuffs and basalts | Neocomian | Relative dating | This study | 6 |
| Liberia | Offshore | Drilled andesite | Neocomian | Relative dating | This study | 6 |
| Liberia | Offshore | Drilled interbedded tuffs and basalts | Neocomian | Relative dating | This study | 6 |
| Liberia | Offshore | Drilled tuffs | Albian | Relative dating | This study | 8 |
| Liberia | Offshore | St Paul lacoliths, volcanics | Tertiary | Relative dating | This study | 12 |
| Liberia | Offshore | St Paul lacoliths, volcanics | Tertiary | Relative dating | This study | 13 |
| **\*N.P.** = not provided.  **+Reference**: [1] Adegoke et al., 1986; [2] Aït Hamou and Dautria, 1994; [3] ; Aït Hamou, 2000; [4] Aït Hamou et al., 2000; [5] Barrie, 2006; [6] Barrie et al., 2010; [7] Bertrand et al., 1993; [8] Chabou et al., 2007; [9] Dalrymple et al., 1975; [10] Deckart et al., 1997; [11] Van Breemen et al., 1975; [12] Dickin et al., 1991; [13] Ekwueme et al., 1997; [14] Ekwueme,1994; [15] Fitton and Dunlop, 1985; [16] Halliday et al., 1990; [17] Lee et al., 1994; [18] Marzoli et al., 2000; [19] Rankenburg et al., 2005; [20] Genik, 1992; [21] Genik, 1993; [22] Grant et al., 1972; [23] Kamdem et al., 2001; [24] Lanphere and Dalrymple, 1971; [25] Lanphere and Dalrymple, 1976; [26] Liégeois et al., 2005; [27] Liégois et al., 1991; [28] Maluski et al., 1995; [29] Mauche et al., 1989; [30] Maza et al., 1995; [31] Moreau et al., 1996; [32] Netto et al., 1992; [33] Ngounouno et al., 1997; [34] Popoff et al., 1982; [35] Rahaman et al., 1984; [36] Van Breemen et al., 1975; [37] Reyre, 1984; [38] Rognon et al., 1981; [39] Rognon et al., 1983; [40] Sebai et al., 1991; [41] Skinner et al., 2004; [42] Umeji and Caen-Vachette, 1983; [43] Vail, 1989; [44] Bowden et al., 1976; [45] Verati et al., 2005; [46] Wright, 1976; [47] Zeese et al., 1994; [48] Maza et al., 1998. | | | | | | |

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