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SEDIMENTARY AND U-PB DETRITAL ZIRCONS PROVENANCE OF THE PALEOPROTEROZOIC PIRACICABA AND SABARÁ GROUPS, QUADRILÁTERO FERRÍFERO, SOUTHERN SÃO FRANCISCO CRATON, BRAZIL

Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Cercadinho Formation and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}/^{238}\text{U}$ ^c (%) | $^{207}\text{Pb}/^{235}\text{U}$ ^b (%) | $\pm 2s$ (%) | $^{206}\text{Pb}/^{238}\text{U}$ (%) | $\pm 2s$ (%) | ρ ^d | $^{207}\text{Pb}/^{206}\text{Pb}$ (Ma) | $\pm 2s$ (Ma) | $^{206}\text{Pb}/^{238}\text{U}$ (Ma) | $\pm 2s$ (Ma) | $^{207}\text{Pb}/^{235}\text{U}$ (Ma) | $\pm 2s$ (Ma) | conc. ^e (%) | |
|----------|--|--|-----------------|---|-----------------|---------------------|---|------------------|--|------------------|--|------------------|---------------------------|-------|
| C-001 | 1,00 | 0,21 | 10,757 | 1,880 | 0,383 | 1,246 | 0,663 | 2854 | 23 | 2092 | 22 | 2502 | 18 | 73,3 |
| C-002 | 0,00 | 1,93 | 18,459 | 1,634 | 0,497 | 1,252 | 0,766 | 3304 | 16 | 2599 | 27 | 3014 | 16 | 78,7 |
| C-003 | 2,15 | 3,07 | 0,768 | 15,725 | 0,028 | 15,545 | 0,989 | 2836 | 39 | 176 | 27 | 579 | 72 | 6,2 |
| C-004 | 0,18 | 1,09 | 8,840 | 1,563 | 0,325 | 1,179 | 0,754 | 2802 | 17 | 1816 | 19 | 2322 | 14 | 64,8 |
| C-005 | 0,00 | 2,10 | 2,859 | 1,593 | 0,133 | 1,173 | 0,737 | 2412 | 18 | 805 | 9 | 1371 | 12 | 33,4 |
| C-006 | 0,00 | 0,62 | 15,957 | 1,544 | 0,562 | 1,168 | 0,756 | 2874 | 16 | 2874 | 27 | 2874 | 15 | 100,0 |
| C-007 | 0,00 | 3,49 | 22,135 | 2,226 | 0,640 | 1,758 | 0,790 | 3189 | 22 | 3191 | 44 | 3190 | 22 | 100,0 |
| C-008 | 0,00 | 0,75 | 15,336 | 1,577 | 0,572 | 1,196 | 0,758 | 2781 | 17 | 2916 | 28 | 2836 | 15 | 104,9 |
| C-009 | 0,00 | 0,88 | 18,818 | 2,169 | 0,607 | 1,810 | 0,834 | 3017 | 19 | 3056 | 44 | 3033 | 21 | 101,3 |
| C-010 | 0,02 | 0,47 | 4,397 | 1,595 | 0,189 | 1,177 | 0,738 | 2548 | 18 | 1114 | 12 | 1712 | 13 | 43,7 |
| C-011 | 0,00 | 0,32 | 2,970 | 1,548 | 0,164 | 1,174 | 0,758 | 2120 | 18 | 977 | 11 | 1400 | 12 | 46,1 |
| C-012 | 0,61 | 0,43 | 1,492 | 2,404 | 0,089 | 1,909 | 0,794 | 1984 | 26 | 548 | 10 | 927 | 15 | 27,6 |
| C-013 | 0,61 | 1,39 | 2,617 | 2,051 | 0,124 | 1,579 | 0,770 | 2384 | 22 | 752 | 11 | 1305 | 15 | 31,5 |
| C-014 | 0,77 | 1,69 | 2,522 | 2,359 | 0,106 | 1,921 | 0,815 | 2578 | 23 | 651 | 12 | 1278 | 17 | 25,3 |
| C-015 | 1,00 | 1,75 | 14,413 | 1,913 | 0,508 | 1,286 | 0,672 | 2872 | 23 | 2649 | 28 | 2777 | 18 | 92,2 |
| C-016 | 0,30 | 0,95 | 1,210 | 1,851 | 0,072 | 1,446 | 0,781 | 1993 | 21 | 446 | 6 | 805 | 10 | 22,4 |
| C-017 | 0,00 | 0,52 | 5,662 | 1,735 | 0,218 | 1,369 | 0,789 | 2730 | 18 | 1269 | 16 | 1926 | 15 | 46,5 |
| C-018 | 0,00 | 0,83 | 20,858 | 1,625 | 0,586 | 1,257 | 0,774 | 3237 | 16 | 2972 | 30 | 3132 | 16 | 91,8 |
| C-019 | 0,22 | 1,35 | 5,012 | 1,629 | 0,181 | 1,241 | 0,762 | 2834 | 17 | 1072 | 12 | 1821 | 14 | 37,8 |
| C-020 | 0,00 | 0,49 | 6,194 | 1,549 | 0,226 | 1,152 | 0,744 | 2819 | 17 | 1312 | 14 | 2004 | 14 | 46,5 |
| C-021 | 0,00 | 0,96 | 23,620 | 1,627 | 0,656 | 1,262 | 0,776 | 3253 | 16 | 3252 | 32 | 3253 | 16 | 100,0 |
| C-022 | 0,09 | 1,19 | 9,852 | 1,638 | 0,357 | 1,234 | 0,753 | 2828 | 18 | 1967 | 21 | 2421 | 15 | 69,6 |
| C-023 | 0,00 | 0,61 | 15,961 | 1,884 | 0,561 | 1,526 | 0,810 | 2878 | 18 | 2870 | 35 | 2874 | 18 | 99,7 |
| C-024 | 0,06 | 2,03 | 6,904 | 1,596 | 0,295 | 1,182 | 0,741 | 2558 | 18 | 1664 | 17 | 2099 | 14 | 65,1 |
| C-025 | 1,00 | 0,35 | 9,352 | 1,883 | 0,290 | 1,331 | 0,707 | 3079 | 21 | 1641 | 19 | 2373 | 17 | 53,3 |
| C-026 | 0,00 | 0,31 | 18,989 | 1,725 | 0,561 | 1,354 | 0,785 | 3156 | 17 | 2871 | 31 | 3041 | 17 | 91,0 |
| C-027 | 0,02 | 1,13 | 7,396 | 1,607 | 0,299 | 1,236 | 0,769 | 2646 | 17 | 1688 | 18 | 2160 | 14 | 63,8 |
| C-028 | 0,15 | 0,71 | 7,284 | 1,606 | 0,209 | 1,224 | 0,762 | 3202 | 16 | 1223 | 14 | 2147 | 14 | 38,2 |
| C-029 | 0,22 | 0,75 | 3,091 | 1,696 | 0,099 | 1,287 | 0,759 | 3024 | 18 | 610 | 7 | 1430 | 13 | 20,2 |
| C-030 | 0,08 | 2,31 | 12,768 | 1,618 | 0,455 | 1,223 | 0,756 | 2855 | 17 | 2417 | 25 | 2663 | 15 | 84,7 |
| C-031 | 0,25 | 1,50 | 4,833 | 1,600 | 0,196 | 1,203 | 0,752 | 2645 | 18 | 1152 | 13 | 1791 | 14 | 43,6 |
| C-032 | 0,09 | 0,94 | 9,435 | 1,670 | 0,337 | 1,301 | 0,779 | 2852 | 17 | 1871 | 21 | 2381 | 15 | 65,6 |
| C-033 | 1,60 | 0,69 | 2,944 | 3,500 | 0,130 | 2,726 | 0,779 | 2503 | 37 | 787 | 20 | 1393 | 27 | 31,4 |
| C-034 | 0,54 | 0,35 | 2,935 | 1,897 | 0,154 | 1,392 | 0,734 | 2200 | 22 | 926 | 12 | 1391 | 14 | 42,1 |
| C-035 | 0,89 | 2,64 | 0,851 | 3,894 | 0,056 | 3,385 | 0,869 | 1801 | 35 | 352 | 12 | 625 | 18 | 19,5 |
| C-036 | 0,46 | 1,11 | 3,304 | 1,766 | 0,147 | 1,328 | 0,752 | 2492 | 20 | 882 | 11 | 1482 | 14 | 35,4 |
| C-037 | 0,00 | 1,23 | 11,096 | 1,604 | 0,410 | 1,231 | 0,767 | 2797 | 17 | 2213 | 23 | 2531 | 15 | 79,1 |
| C-038 | 0,00 | 0,77 | 14,498 | 1,610 | 0,540 | 1,245 | 0,773 | 2783 | 17 | 2783 | 28 | 2783 | 15 | 100,0 |
| C-039 | 0,00 | 0,75 | 15,051 | 1,865 | 0,549 | 1,505 | 0,807 | 2818 | 18 | 2820 | 34 | 2818 | 18 | 100,1 |
| C-040 | 0,00 | 0,83 | 10,777 | 1,554 | 0,392 | 1,179 | 0,758 | 2821 | 17 | 2132 | 21 | 2504 | 15 | 75,6 |
| C-041 | 0,00 | 1,39 | 23,167 | 1,750 | 0,651 | 1,397 | 0,798 | 3234 | 17 | 3233 | 36 | 3234 | 17 | 100,0 |
| C-042 | 0,00 | 1,25 | 2,254 | 1,755 | 0,090 | 1,382 | 0,787 | 2673 | 18 | 554 | 7 | 1198 | 12 | 20,7 |
| C-043 | 0,04 | 1,69 | 8,378 | 1,649 | 0,320 | 1,263 | 0,766 | 2742 | 17 | 1789 | 20 | 2273 | 15 | 65,3 |

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Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Cercadinho Formation and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | Th^b U | ^{207}Pb ^{235}U | $\pm 2s$ (%) | ^{206}Pb ^{238}U | $\pm 2s$ (%) | ρ^d | ^{207}Pb ^{206}Pb | $\pm 2s$ (Ma) | ^{206}Pb ^{238}U | $\pm 2s$ (Ma) | ^{207}Pb ^{235}U | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|----------------------------|--------------------|---------------------------------------|-----------------|---------------------------------------|-----------------|----------|--|------------------|---------------------------------------|------------------|---------------------------------------|------------------|---------------------------|
| C-044 | 0,00 | 0,74 | 15,297 | 1,855 | 0,532 | 1,481 | 0,798 | 2894 | 18 | 2751 | 33 | 2834 | 18 | 95,1 |
| C-045 | 0,16 | 1,32 | 10,208 | 1,660 | 0,312 | 1,294 | 0,780 | 3104 | 17 | 1748 | 20 | 2454 | 15 | 56,3 |
| C-046 | 0,00 | 0,46 | 10,516 | 1,649 | 0,383 | 1,264 | 0,766 | 2820 | 17 | 2090 | 23 | 2481 | 15 | 74,1 |
| C-047 | 0,00 | 0,76 | 9,444 | 1,800 | 0,341 | 1,424 | 0,791 | 2832 | 18 | 1893 | 23 | 2382 | 17 | 66,9 |
| C-048 | 0,00 | 0,84 | 23,004 | 1,705 | 0,649 | 1,327 | 0,778 | 3228 | 17 | 3226 | 34 | 3227 | 17 | 99,9 |
| C-049 | 0,25 | 1,69 | 1,803 | 1,850 | 0,078 | 1,474 | 0,797 | 2530 | 19 | 485 | 7 | 1046 | 12 | 19,2 |
| C-050 | 0,17 | 0,45 | 8,308 | 1,706 | 0,242 | 1,297 | 0,760 | 3178 | 18 | 1397 | 16 | 2265 | 16 | 44,0 |
| C-051 | 0,05 | 1,52 | 9,702 | 1,667 | 0,326 | 1,246 | 0,747 | 2951 | 18 | 1818 | 20 | 2407 | 15 | 61,6 |
| C-052 | 0,42 | 3,23 | 2,927 | 1,755 | 0,134 | 1,327 | 0,756 | 2433 | 19 | 813 | 10 | 1389 | 13 | 33,4 |
| C-053 | 0,42 | 3,04 | 2,742 | 1,782 | 0,124 | 1,359 | 0,763 | 2457 | 19 | 755 | 10 | 1340 | 13 | 30,7 |
| C-054 | 0,29 | 2,41 | 4,217 | 1,630 | 0,186 | 1,222 | 0,749 | 2502 | 18 | 1100 | 12 | 1677 | 13 | 44,0 |
| C-055 | 0,00 | 3,73 | 15,321 | 2,018 | 0,530 | 1,648 | 0,817 | 2902 | 19 | 2743 | 37 | 2835 | 19 | 94,5 |
| C-056 | 0,08 | 0,99 | 7,250 | 1,569 | 0,291 | 1,190 | 0,759 | 2660 | 17 | 1646 | 17 | 2143 | 14 | 61,9 |
| C-057 | 0,00 | 1,04 | 13,086 | 1,646 | 0,453 | 1,276 | 0,775 | 2902 | 17 | 2409 | 26 | 2686 | 16 | 83,0 |
| C-058 | 0,00 | 0,76 | 16,683 | 1,701 | 0,572 | 1,338 | 0,787 | 2916 | 17 | 2917 | 31 | 2917 | 16 | 100,0 |
| C-059 | 0,00 | 1,05 | 18,886 | 1,572 | 0,602 | 1,197 | 0,761 | 3035 | 16 | 3037 | 29 | 3036 | 15 | 100,0 |
| C-060 | 0,06 | 1,02 | 11,343 | 1,566 | 0,414 | 1,190 | 0,760 | 2817 | 17 | 2231 | 22 | 2552 | 15 | 79,2 |
| C-061 | 0,00 | 1,09 | 10,453 | 1,675 | 0,379 | 1,309 | 0,782 | 2827 | 17 | 2071 | 23 | 2476 | 16 | 73,3 |
| C-062 | 0,13 | 1,26 | 7,607 | 1,623 | 0,280 | 1,205 | 0,743 | 2804 | 18 | 1589 | 17 | 2186 | 15 | 56,7 |
| C-063 | 0,00 | 1,01 | 7,780 | 1,567 | 0,308 | 1,189 | 0,759 | 2683 | 17 | 1730 | 18 | 2206 | 14 | 64,5 |
| C-064 | 0,00 | 0,59 | 2,862 | 1,782 | 0,109 | 1,397 | 0,784 | 2749 | 18 | 666 | 9 | 1372 | 13 | 24,2 |
| C-065 | 0,10 | 0,48 | 6,079 | 1,564 | 0,257 | 1,184 | 0,757 | 2571 | 17 | 1476 | 16 | 1987 | 14 | 57,4 |
| C-066 | 0,00 | 1,34 | 21,011 | 1,655 | 0,588 | 1,287 | 0,777 | 3243 | 16 | 2979 | 31 | 3139 | 16 | 91,9 |
| C-067 | 0,00 | 1,10 | 22,488 | 1,574 | 0,621 | 1,201 | 0,763 | 3263 | 16 | 3114 | 30 | 3205 | 15 | 95,4 |
| C-068 | 0,00 | 0,63 | 14,803 | 1,746 | 0,544 | 1,356 | 0,777 | 2804 | 18 | 2801 | 31 | 2803 | 17 | 99,9 |
| C-069 | 0,28 | 0,63 | 15,134 | 1,794 | 0,559 | 1,381 | 0,770 | 2796 | 19 | 2862 | 32 | 2824 | 17 | 102,4 |
| C-070 | 0,14 | 1,72 | 6,776 | 1,578 | 0,279 | 1,168 | 0,740 | 2620 | 18 | 1584 | 16 | 2083 | 14 | 60,5 |
| C-071 | 0,00 | 0,83 | 7,627 | 1,602 | 0,305 | 1,225 | 0,765 | 2663 | 17 | 1718 | 18 | 2188 | 14 | 64,5 |
| C-072 | 0,17 | 0,98 | 8,471 | 1,635 | 0,317 | 1,261 | 0,771 | 2776 | 17 | 1774 | 20 | 2283 | 15 | 63,9 |
| C-073 | 0,00 | 0,84 | 14,218 | 1,689 | 0,475 | 1,327 | 0,785 | 2960 | 17 | 2505 | 28 | 2764 | 16 | 84,6 |
| C-074 | 0,00 | 0,31 | 21,486 | 1,716 | 0,650 | 1,353 | 0,788 | 3117 | 17 | 3230 | 34 | 3161 | 17 | 103,6 |
| C-075 | 0,00 | 0,10 | 14,126 | 1,781 | 0,471 | 1,375 | 0,772 | 2962 | 18 | 2489 | 28 | 2758 | 17 | 84,0 |
| C-076 | 0,00 | 2,13 | 13,797 | 1,797 | 0,484 | 1,379 | 0,767 | 2879 | 19 | 2546 | 29 | 2736 | 17 | 88,5 |
| C-077 | 1,00 | 1,38 | 7,288 | 2,085 | 0,275 | 1,467 | 0,704 | 2762 | 24 | 1565 | 20 | 2147 | 19 | 56,7 |
| C-078 | 0,02 | 1,75 | 4,391 | 1,771 | 0,175 | 1,387 | 0,783 | 2676 | 18 | 1037 | 13 | 1711 | 15 | 38,8 |
| C-079 | 0,00 | 1,20 | 10,550 | 1,610 | 0,374 | 1,240 | 0,770 | 2862 | 17 | 2049 | 22 | 2484 | 15 | 71,6 |
| C-080 | 0,00 | 0,93 | 10,612 | 1,603 | 0,383 | 1,207 | 0,753 | 2835 | 17 | 2089 | 22 | 2490 | 15 | 73,7 |
| C-081 | 0,00 | 1,41 | 5,457 | 1,574 | 0,187 | 1,199 | 0,762 | 2920 | 16 | 1104 | 12 | 1894 | 14 | 37,8 |
| C-082 | 0,19 | 1,78 | 3,078 | 1,673 | 0,124 | 1,260 | 0,753 | 2650 | 18 | 755 | 9 | 1427 | 13 | 28,5 |
| C-083 | 0,00 | 1,41 | 11,785 | 1,766 | 0,421 | 1,320 | 0,747 | 2850 | 19 | 2266 | 25 | 2587 | 17 | 79,5 |
| C-084 | 0,00 | 0,98 | 12,281 | 1,610 | 0,434 | 1,234 | 0,766 | 2867 | 17 | 2326 | 24 | 2626 | 15 | 81,1 |
| C-085 | 0,40 | 2,56 | 4,967 | 1,793 | 0,185 | 1,313 | 0,732 | 2780 | 20 | 1096 | 13 | 1814 | 15 | 39,4 |
| C-086 | 0,00 | 1,06 | 14,924 | 1,924 | 0,539 | 1,496 | 0,778 | 2834 | 20 | 2778 | 34 | 2810 | 18 | 98,0 |

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| spot no. | $^{206}\text{Pb}/^{238}\text{U}$ ^c (%) | $^{207}\text{Pb}/^{235}\text{U}$ ^b U | $^{207}\text{Pb}/^{235}\text{U}$ (%) | $\pm 2s$ (%) | $^{206}\text{Pb}/^{238}\text{U}$ (%) | $\pm 2s$ (%) | rho ^d | $^{207}\text{Pb}/^{206}\text{Pb}$ (Ma) | $\pm 2s$ (Ma) | $^{206}\text{Pb}/^{238}\text{U}$ (Ma) | $\pm 2s$ (Ma) | $^{207}\text{Pb}/^{235}\text{U}$ (Ma) | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|--|--|---|-----------------|---|-----------------|------------------|---|------------------|--|------------------|--|------------------|---------------------------|
| C-087 | 0,02 | 7,19 | 9,735 | 1,646 | 0,372 | 1,238 | 0,752 | 2742 | 18 | 2037 | 22 | 2410 | 15 | 74,3 |
| C-088 | 0,00 | 3,20 | 8,530 | 1,674 | 0,314 | 1,298 | 0,775 | 2800 | 17 | 1762 | 20 | 2289 | 15 | 62,9 |
| C-089 | 0,10 | 0,57 | 6,356 | 1,605 | 0,272 | 1,186 | 0,739 | 2552 | 18 | 1551 | 16 | 2026 | 14 | 60,8 |
| C-090 | 1,00 | 0,82 | 5,608 | 2,160 | 0,253 | 1,418 | 0,656 | 2463 | 28 | 1455 | 18 | 1917 | 19 | 59,1 |
| C-091 | 1,36 | 2,32 | 0,932 | 6,576 | 0,045 | 6,217 | 0,945 | 2351 | 37 | 283 | 17 | 669 | 33 | 12,1 |
| C-092 | 0,47 | 2,83 | 2,206 | 1,927 | 0,104 | 1,503 | 0,780 | 2381 | 21 | 640 | 9 | 1183 | 14 | 26,9 |
| C-093 | 0,50 | 2,29 | 2,686 | 2,000 | 0,103 | 1,608 | 0,804 | 2729 | 20 | 634 | 10 | 1325 | 15 | 23,2 |
| C-094 | 1,00 | 1,02 | 24,660 | 2,017 | 0,668 | 1,515 | 0,751 | 3293 | 21 | 3297 | 39 | 3295 | 20 | 100,1 |
| C-095 | 0,19 | 1,30 | 12,430 | 1,651 | 0,442 | 1,257 | 0,761 | 2859 | 17 | 2359 | 25 | 2637 | 16 | 82,5 |
| C-096 | 0,06 | 0,77 | 7,606 | 1,593 | 0,354 | 1,215 | 0,763 | 2410 | 17 | 1955 | 21 | 2186 | 14 | 81,1 |
| C-097 | 0,00 | 1,69 | 3,901 | 1,630 | 0,196 | 1,216 | 0,746 | 2282 | 19 | 1153 | 13 | 1614 | 13 | 50,5 |
| C-098 | 0,57 | 1,46 | 2,703 | 2,133 | 0,115 | 1,704 | 0,799 | 2561 | 21 | 702 | 11 | 1329 | 16 | 27,4 |
| C-099 | 0,00 | 1,80 | 9,093 | 1,980 | 0,282 | 1,534 | 0,775 | 3081 | 20 | 1599 | 22 | 2347 | 18 | 51,9 |
| C-100 | 0,00 | 0,41 | 12,287 | 1,721 | 0,438 | 1,347 | 0,783 | 2854 | 17 | 2341 | 27 | 2627 | 16 | 82,0 |
| C-101 | 0,00 | 0,85 | 6,144 | 1,797 | 0,230 | 1,351 | 0,752 | 2778 | 19 | 1332 | 16 | 1997 | 16 | 48,0 |
| C-102 | 0,00 | 1,16 | 3,913 | 1,722 | 0,150 | 1,348 | 0,783 | 2737 | 18 | 900 | 11 | 1616 | 14 | 32,9 |
| C-103 | 0,14 | 0,45 | 26,018 | 1,835 | 0,681 | 1,390 | 0,757 | 3347 | 19 | 3347 | 36 | 3347 | 18 | 100,0 |
| C-104 | 0,00 | 0,81 | 7,012 | 1,732 | 0,286 | 1,362 | 0,786 | 2631 | 18 | 1623 | 20 | 2113 | 16 | 61,7 |
| C-105 | 0,15 | 0,87 | 3,762 | 1,702 | 0,159 | 1,296 | 0,761 | 2572 | 18 | 952 | 11 | 1585 | 14 | 37,0 |
| C-106 | 0,76 | 2,26 | 2,228 | 2,583 | 0,092 | 2,111 | 0,817 | 2607 | 25 | 569 | 12 | 1190 | 18 | 21,8 |
| C-107 | 0,00 | 0,47 | 10,179 | 1,778 | 0,379 | 1,325 | 0,745 | 2783 | 19 | 2072 | 24 | 2451 | 17 | 74,4 |
| C-108 | 0,00 | 1,00 | 11,463 | 1,820 | 0,488 | 1,434 | 0,788 | 2561 | 19 | 2563 | 30 | 2562 | 17 | 100,1 |
| C-109 | 0,27 | 0,93 | 7,215 | 1,894 | 0,319 | 1,390 | 0,734 | 2498 | 22 | 1785 | 22 | 2138 | 17 | 71,5 |
| C-110 | 0,00 | 0,35 | 5,547 | 1,653 | 0,245 | 1,260 | 0,762 | 2503 | 18 | 1410 | 16 | 1908 | 14 | 56,3 |
| C-111 | 0,00 | 1,99 | 13,047 | 1,800 | 0,462 | 1,406 | 0,781 | 2864 | 18 | 2450 | 29 | 2683 | 17 | 85,6 |
| C-112 | 0,00 | 1,17 | 11,540 | 1,621 | 0,331 | 1,250 | 0,771 | 3201 | 16 | 1845 | 20 | 2568 | 15 | 57,6 |
| C-113 | 0,08 | 0,86 | 9,289 | 1,753 | 0,374 | 1,321 | 0,753 | 2653 | 19 | 2049 | 23 | 2367 | 16 | 77,2 |
| C-114 | 0,28 | 0,67 | 5,113 | 1,662 | 0,224 | 1,250 | 0,752 | 2515 | 18 | 1301 | 15 | 1838 | 14 | 51,7 |
| C-115 | 0,00 | 2,25 | 12,560 | 1,792 | 0,456 | 1,425 | 0,795 | 2824 | 18 | 2422 | 29 | 2647 | 17 | 85,8 |
| C-116 | 0,46 | 1,29 | 3,586 | 1,799 | 0,155 | 1,355 | 0,753 | 2539 | 20 | 928 | 12 | 1546 | 14 | 36,5 |
| C-117 | 0,83 | 2,23 | 1,894 | 2,755 | 0,083 | 2,342 | 0,850 | 2516 | 24 | 513 | 12 | 1079 | 18 | 20,4 |
| C-118 | 0,84 | 1,22 | 1,138 | 3,720 | 0,053 | 3,403 | 0,915 | 2422 | 25 | 331 | 11 | 772 | 20 | 13,6 |
| C-119 | 0,00 | 0,66 | 5,009 | 1,600 | 0,217 | 1,217 | 0,761 | 2533 | 17 | 1265 | 14 | 1821 | 14 | 50,0 |
| C-120 | 1,00 | 1,36 | 21,223 | 2,160 | 0,625 | 1,602 | 0,742 | 3160 | 23 | 3132 | 40 | 3149 | 21 | 99,1 |
| C-121 | 0,24 | 1,45 | 12,422 | 1,796 | 0,379 | 1,363 | 0,759 | 3105 | 19 | 2071 | 24 | 2637 | 17 | 66,7 |
| C-122 | 0,00 | 0,95 | 7,803 | 1,749 | 0,275 | 1,315 | 0,752 | 2871 | 19 | 1568 | 18 | 2209 | 16 | 54,6 |
| C-123 | 0,08 | 1,28 | 10,298 | 1,855 | 0,368 | 1,418 | 0,764 | 2849 | 19 | 2021 | 25 | 2462 | 17 | 71,0 |
| C-124 | 0,34 | 1,21 | 1,963 | 1,836 | 0,091 | 1,443 | 0,786 | 2418 | 19 | 561 | 8 | 1103 | 12 | 23,2 |
| C-125 | 0,33 | 1,58 | 2,542 | 1,890 | 0,090 | 1,472 | 0,779 | 2874 | 19 | 553 | 8 | 1284 | 14 | 19,2 |
| C-126 | 0,00 | 0,49 | 17,896 | 1,769 | 0,551 | 1,368 | 0,774 | 3090 | 18 | 2830 | 31 | 2984 | 17 | 91,6 |
| C-127 | 0,00 | 1,73 | 11,624 | 1,840 | 0,343 | 1,464 | 0,796 | 3158 | 18 | 1901 | 24 | 2575 | 17 | 60,2 |
| C-128 | 0,00 | 1,46 | 9,575 | 1,666 | 0,291 | 1,283 | 0,771 | 3109 | 17 | 1649 | 19 | 2395 | 15 | 53,0 |
| C-129 | 0,02 | 1,66 | 7,295 | 1,850 | 0,251 | 1,457 | 0,788 | 2911 | 18 | 1445 | 19 | 2148 | 17 | 49,6 |

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Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Cercadinho Formation and from standard zircons in the Gandarela syncline

| spot no. | ²⁰⁶ Pbc ^c (%) | Th ^b U | ²⁰⁷ Pb ²³⁵ U | ±2s (%) | ²⁰⁶ Pb ²³⁸ U | ±2s (%) | rho ^d | ²⁰⁷ Pb ²⁰⁶ Pb | ±2s (Ma) | ²⁰⁶ Pb ²³⁸ U | ±2s (Ma) | ²⁰⁷ Pb ²³⁵ U | ±2s (Ma) | conc. ^e (%) |
|----------|--|----------------------|---------------------------------------|------------|---------------------------------------|------------|------------------|--|-------------|---------------------------------------|-------------|---------------------------------------|-------------|---------------------------|
| C-130 | 0,06 | 0,70 | 5,692 | 1,669 | 0,244 | 1,264 | 0,757 | 2550 | 18 | 1407 | 16 | 1930 | 15 | 55,2 |
| C-131 | 0,00 | 0,91 | 9,912 | 1,687 | 0,384 | 1,246 | 0,739 | 2719 | 19 | 2094 | 22 | 2427 | 16 | 77,0 |
| C-132 | 0,37 | 1,25 | 2,714 | 1,908 | 0,099 | 1,477 | 0,774 | 2819 | 20 | 608 | 9 | 1332 | 14 | 21,6 |
| C-133 | 0,19 | 0,72 | 14,405 | 1,711 | 0,408 | 1,277 | 0,746 | 3221 | 18 | 2208 | 24 | 2777 | 16 | 68,5 |
| C-134 | 0,10 | 2,10 | 13,350 | 1,752 | 0,480 | 1,376 | 0,785 | 2841 | 18 | 2526 | 29 | 2705 | 17 | 88,9 |
| C-135 | 0,00 | 1,11 | 4,946 | 1,660 | 0,222 | 1,253 | 0,755 | 2474 | 18 | 1291 | 15 | 1810 | 14 | 52,2 |
| C-136 | 0,15 | 0,90 | 6,633 | 1,807 | 0,290 | 1,328 | 0,735 | 2517 | 21 | 1641 | 19 | 2064 | 16 | 65,2 |
| C-137 | 0,29 | 1,92 | 2,633 | 1,741 | 0,124 | 1,326 | 0,761 | 2386 | 19 | 756 | 9 | 1310 | 13 | 31,7 |
| C-138 | 0,03 | 0,72 | 6,332 | 1,648 | 0,291 | 1,231 | 0,746 | 2433 | 19 | 1646 | 18 | 2023 | 15 | 67,7 |

GJ-1 (primary standard zircon)

| | | | | | | | | | | | | | | |
|------|------|------|-------|-------|-------|-------|-------|-----|----|-----|----|-----|----|-------|
| G-1 | 0,00 | 0,04 | 0,808 | 1,682 | 0,098 | 1,224 | 0,728 | 596 | 25 | 603 | 7 | 601 | 8 | 101,1 |
| G-2 | 0,00 | 0,04 | 0,809 | 1,769 | 0,098 | 1,267 | 0,716 | 602 | 27 | 602 | 7 | 602 | 8 | 100,0 |
| G-3 | 0,00 | 0,04 | 0,817 | 1,918 | 0,098 | 1,390 | 0,725 | 624 | 28 | 602 | 8 | 606 | 9 | 96,4 |
| G-4 | 0,28 | 0,04 | 0,806 | 2,051 | 0,098 | 1,376 | 0,671 | 595 | 33 | 601 | 8 | 600 | 9 | 101,0 |
| G-5 | 1,00 | 0,04 | 0,806 | 4,380 | 0,097 | 2,499 | 0,570 | 607 | 78 | 598 | 14 | 600 | 20 | 98,6 |
| G-6 | 0,00 | 0,05 | 0,806 | 1,900 | 0,098 | 1,351 | 0,711 | 598 | 29 | 601 | 8 | 600 | 9 | 100,5 |
| G-7 | 0,00 | 0,05 | 0,810 | 1,785 | 0,098 | 1,306 | 0,731 | 602 | 26 | 603 | 8 | 603 | 8 | 100,1 |
| G-8 | 0,00 | 0,05 | 0,806 | 1,701 | 0,097 | 1,259 | 0,740 | 615 | 25 | 596 | 7 | 600 | 8 | 97,0 |
| G-9 | 0,00 | 0,04 | 0,809 | 1,697 | 0,098 | 1,247 | 0,735 | 604 | 25 | 602 | 7 | 602 | 8 | 99,7 |
| G-10 | 0,09 | 0,04 | 0,807 | 1,851 | 0,098 | 1,361 | 0,735 | 599 | 27 | 602 | 8 | 601 | 8 | 100,5 |
| G-11 | 0,00 | 0,05 | 0,821 | 2,139 | 0,098 | 1,509 | 0,706 | 629 | 33 | 603 | 9 | 609 | 10 | 95,8 |
| G-12 | 1,00 | 0,04 | 0,808 | 4,314 | 0,098 | 2,434 | 0,564 | 606 | 77 | 600 | 14 | 601 | 20 | 99,1 |
| G-13 | 0,00 | 0,04 | 0,808 | 1,765 | 0,098 | 1,309 | 0,741 | 601 | 26 | 602 | 8 | 602 | 8 | 100,0 |
| G-14 | 0,54 | 0,05 | 0,807 | 2,965 | 0,098 | 1,879 | 0,634 | 588 | 50 | 605 | 11 | 601 | 14 | 102,9 |
| G-15 | 0,00 | 0,04 | 0,814 | 2,086 | 0,098 | 1,487 | 0,713 | 609 | 32 | 604 | 9 | 605 | 10 | 99,1 |
| G-16 | 0,00 | 0,04 | 0,806 | 2,173 | 0,098 | 1,536 | 0,707 | 598 | 33 | 601 | 9 | 600 | 10 | 100,4 |

BB (quality control zircon)

| | | | | | | | | | | | | | | |
|------|------|------|-------|-------|-------|-------|-------|-----|----|-----|---|-----|---|-------|
| B-1 | 0,00 | 0,45 | 0,748 | 1,627 | 0,091 | 1,205 | 0,741 | 584 | 24 | 563 | 7 | 567 | 7 | 96,4 |
| B-2 | 0,00 | 0,45 | 0,756 | 1,635 | 0,092 | 1,218 | 0,745 | 589 | 24 | 567 | 7 | 571 | 7 | 96,3 |
| B-3 | 0,00 | 0,44 | 0,749 | 1,643 | 0,091 | 1,226 | 0,746 | 583 | 24 | 564 | 7 | 567 | 7 | 96,6 |
| B-4 | 0,00 | 0,45 | 0,743 | 1,632 | 0,091 | 1,207 | 0,739 | 573 | 24 | 562 | 7 | 564 | 7 | 98,2 |
| B-5 | 0,00 | 0,44 | 0,697 | 1,644 | 0,086 | 1,227 | 0,746 | 548 | 24 | 534 | 6 | 537 | 7 | 97,5 |
| B-6 | 0,00 | 0,44 | 0,697 | 1,643 | 0,087 | 1,225 | 0,745 | 546 | 24 | 535 | 6 | 537 | 7 | 98,1 |
| B-7 | 0,00 | 0,45 | 0,756 | 1,661 | 0,092 | 1,235 | 0,744 | 584 | 24 | 569 | 7 | 572 | 7 | 97,5 |
| B-8 | 0,00 | 0,45 | 0,744 | 1,647 | 0,092 | 1,221 | 0,741 | 560 | 24 | 566 | 7 | 565 | 7 | 101,0 |
| B-9 | 0,00 | 0,46 | 0,738 | 1,641 | 0,092 | 1,222 | 0,744 | 545 | 24 | 565 | 7 | 561 | 7 | 103,8 |
| B-10 | 0,00 | 0,43 | 0,746 | 1,660 | 0,092 | 1,239 | 0,746 | 561 | 24 | 567 | 7 | 566 | 7 | 101,1 |
| B-11 | 0,00 | 0,43 | 0,722 | 1,672 | 0,090 | 1,242 | 0,743 | 532 | 25 | 557 | 7 | 552 | 7 | 104,7 |
| B-12 | 0,00 | 0,44 | 0,728 | 1,680 | 0,091 | 1,254 | 0,746 | 534 | 24 | 561 | 7 | 556 | 7 | 105,0 |
| B-13 | 0,00 | 0,45 | 0,740 | 1,680 | 0,091 | 1,255 | 0,747 | 569 | 24 | 561 | 7 | 562 | 7 | 98,5 |
| B-14 | 0,00 | 0,46 | 0,746 | 1,687 | 0,092 | 1,257 | 0,745 | 555 | 25 | 569 | 7 | 566 | 7 | 102,5 |

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Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Cercadinho Formation and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | $\frac{\text{Th}^b}{\text{U}}$ | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (%) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (%) | rho ^d | $\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ | $\pm 2s$ (Ma) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (Ma) | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|----------------------------|--------------------------------|--|-----------------|--|-----------------|------------------|---|------------------|--|------------------|--|------------------|---------------------------|
| B-15 | 0,00 | 0,46 | 0,749 | 1,698 | 0,091 | 1,270 | 0,748 | 584 | 24 | 563 | 7 | 568 | 7 | 96,4 |
| B-16 | 0,00 | 0,45 | 0,749 | 1,692 | 0,091 | 1,250 | 0,738 | 588 | 25 | 563 | 7 | 568 | 7 | 95,6 |
| B-17 | 0,00 | 0,45 | 0,737 | 1,695 | 0,090 | 1,260 | 0,743 | 569 | 25 | 558 | 7 | 561 | 7 | 98,1 |

^a Within run background-corrected mean ^{207}Pb signal in cps (counts per second).

^c U content and Th/U ratio were calculated relative to GJ-1 reference zircon.

^b Percentage of the common Pb on the ^{206}Pb . Zero = below detection limit.

^d rho = $^{206}\text{Pb}/^{238}\text{U}$ error / $^{207}\text{Pb}/^{235}\text{U}$ error

^e Degree of concordance = $^{206}\text{Pb}/^{238}\text{U}$ age / $^{207}\text{Pb}/^{206}\text{Pb}$ age x 100

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Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Sabará Group and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | Th^b U | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (%) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (%) | rho^d | $\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ | $\pm 2s$ (Ma) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (Ma) | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|----------------------------|--------------------|--|-----------------|--|-----------------|----------------|---|------------------|--|------------------|--|------------------|---------------------------|
| S-001 | 0,00 | 0,40 | 5,591 | 2,255 | 0,343 | 1,929 | 0,855 | 1929 | 21 | 1902 | 32 | 1915 | 20 | 98,6 |
| S-002 | 0,00 | 0,68 | 5,433 | 2,255 | 0,333 | 1,941 | 0,861 | 1932 | 21 | 1852 | 31 | 1890 | 20 | 95,9 |
| S-003 | 0,00 | 1,04 | 5,951 | 2,128 | 0,354 | 1,865 | 0,876 | 1985 | 18 | 1953 | 32 | 1969 | 19 | 98,4 |
| S-004 | 0,29 | 0,68 | 6,009 | 2,249 | 0,357 | 1,906 | 0,847 | 1987 | 21 | 1968 | 32 | 1977 | 20 | 99,0 |
| S-005 | 0,00 | 0,54 | 6,182 | 2,110 | 0,361 | 1,832 | 0,868 | 2016 | 19 | 1989 | 31 | 2002 | 19 | 98,7 |
| S-006 | 0,00 | 0,76 | 6,348 | 2,060 | 0,366 | 1,786 | 0,867 | 2039 | 18 | 2011 | 31 | 2025 | 18 | 98,7 |
| S-007 | 0,03 | 0,66 | 6,422 | 2,216 | 0,369 | 1,910 | 0,862 | 2048 | 20 | 2023 | 33 | 2035 | 20 | 98,8 |
| S-008 | 0,00 | 0,80 | 6,367 | 2,363 | 0,365 | 1,868 | 0,790 | 2049 | 26 | 2007 | 32 | 2028 | 21 | 97,9 |
| S-009 | 0,00 | 1,36 | 6,443 | 2,039 | 0,369 | 1,718 | 0,843 | 2052 | 19 | 2025 | 30 | 2038 | 18 | 98,7 |
| S-010 | 0,05 | 0,72 | 6,483 | 2,377 | 0,369 | 2,030 | 0,854 | 2061 | 22 | 2027 | 35 | 2044 | 21 | 98,4 |
| S-011 | 0,00 | 0,83 | 6,556 | 2,023 | 0,372 | 1,735 | 0,857 | 2066 | 18 | 2041 | 30 | 2053 | 18 | 98,8 |
| S-012 | 0,00 | 0,54 | 6,628 | 2,264 | 0,374 | 1,870 | 0,826 | 2076 | 22 | 2050 | 33 | 2063 | 20 | 98,7 |
| S-013 | 0,00 | 0,54 | 6,363 | 2,093 | 0,359 | 1,811 | 0,865 | 2078 | 18 | 1977 | 31 | 2027 | 19 | 95,1 |
| S-014 | 1,00 | 0,60 | 6,789 | 2,660 | 0,382 | 1,888 | 0,710 | 2085 | 33 | 2084 | 34 | 2084 | 24 | 100,0 |
| S-015 | 1,00 | 1,13 | 6,797 | 2,753 | 0,381 | 1,954 | 0,710 | 2087 | 34 | 2083 | 35 | 2085 | 25 | 99,8 |
| S-016 | 0,15 | 0,97 | 6,984 | 2,098 | 0,392 | 1,768 | 0,843 | 2089 | 20 | 2131 | 32 | 2109 | 19 | 102,0 |
| S-017 | 0,16 | 1,08 | 6,729 | 2,180 | 0,377 | 1,804 | 0,828 | 2089 | 22 | 2064 | 32 | 2076 | 19 | 98,8 |
| S-018 | 0,00 | 0,71 | 6,783 | 2,063 | 0,380 | 1,746 | 0,847 | 2089 | 19 | 2077 | 31 | 2083 | 18 | 99,4 |
| S-019 | 0,00 | 0,66 | 6,851 | 2,031 | 0,381 | 1,738 | 0,856 | 2104 | 18 | 2081 | 31 | 2092 | 18 | 98,9 |
| S-020 | 0,00 | 0,49 | 7,159 | 2,030 | 0,398 | 1,709 | 0,842 | 2105 | 19 | 2159 | 31 | 2131 | 18 | 102,6 |
| S-021 | 0,00 | 0,76 | 6,930 | 2,099 | 0,383 | 1,755 | 0,836 | 2115 | 20 | 2090 | 31 | 2102 | 19 | 98,8 |
| S-022 | 0,00 | 1,08 | 6,932 | 2,110 | 0,383 | 1,803 | 0,854 | 2116 | 19 | 2089 | 32 | 2103 | 19 | 98,7 |
| S-023 | 0,00 | 0,69 | 6,949 | 2,317 | 0,383 | 1,952 | 0,843 | 2119 | 22 | 2091 | 35 | 2105 | 21 | 98,7 |
| S-024 | 0,00 | 0,73 | 7,023 | 2,118 | 0,387 | 1,795 | 0,848 | 2122 | 20 | 2107 | 32 | 2114 | 19 | 99,3 |
| S-025 | 0,00 | 1,18 | 7,159 | 2,194 | 0,393 | 1,869 | 0,852 | 2128 | 20 | 2135 | 34 | 2131 | 20 | 100,4 |
| S-026 | 0,00 | 1,09 | 7,038 | 2,110 | 0,386 | 1,784 | 0,846 | 2130 | 20 | 2102 | 32 | 2116 | 19 | 98,7 |
| S-027 | 0,00 | 0,56 | 7,462 | 2,086 | 0,408 | 1,795 | 0,860 | 2134 | 19 | 2205 | 34 | 2168 | 19 | 103,4 |
| S-028 | 0,00 | 0,58 | 7,113 | 2,209 | 0,387 | 1,803 | 0,816 | 2141 | 22 | 2110 | 33 | 2126 | 20 | 98,5 |
| S-029 | 0,00 | 0,44 | 7,230 | 2,252 | 0,392 | 1,817 | 0,807 | 2148 | 23 | 2132 | 33 | 2140 | 20 | 99,2 |
| S-030 | 0,00 | 1,13 | 7,210 | 2,060 | 0,390 | 1,744 | 0,847 | 2153 | 19 | 2122 | 32 | 2138 | 19 | 98,6 |
| S-031 | 0,00 | 0,40 | 7,324 | 2,184 | 0,395 | 1,815 | 0,831 | 2155 | 21 | 2148 | 33 | 2152 | 20 | 99,7 |
| S-032 | 0,00 | 0,74 | 7,337 | 2,128 | 0,395 | 1,827 | 0,858 | 2159 | 19 | 2147 | 33 | 2153 | 19 | 99,5 |
| S-033 | 0,00 | 0,47 | 7,479 | 2,086 | 0,402 | 1,731 | 0,830 | 2163 | 20 | 2178 | 32 | 2170 | 19 | 100,7 |
| S-034 | 0,00 | 0,66 | 7,401 | 2,066 | 0,396 | 1,760 | 0,852 | 2173 | 19 | 2148 | 32 | 2161 | 19 | 98,9 |
| S-035 | 0,16 | 0,77 | 7,465 | 2,219 | 0,397 | 1,851 | 0,834 | 2182 | 21 | 2155 | 34 | 2169 | 20 | 98,8 |
| S-036 | 0,14 | 0,59 | 7,661 | 2,360 | 0,407 | 1,972 | 0,835 | 2184 | 23 | 2201 | 37 | 2192 | 21 | 100,8 |
| S-037 | 0,17 | 0,50 | 7,719 | 2,062 | 0,404 | 1,755 | 0,851 | 2210 | 19 | 2187 | 33 | 2199 | 19 | 99,0 |
| S-038 | 0,40 | 0,95 | 7,891 | 2,262 | 0,409 | 1,800 | 0,796 | 2226 | 24 | 2211 | 34 | 2219 | 21 | 99,3 |
| S-039 | 0,00 | 0,64 | 7,943 | 2,183 | 0,411 | 1,865 | 0,855 | 2231 | 20 | 2218 | 35 | 2225 | 20 | 99,4 |
| S-040 | 0,00 | 0,30 | 8,361 | 2,156 | 0,426 | 1,809 | 0,839 | 2257 | 20 | 2286 | 35 | 2271 | 20 | 101,3 |
| S-041 | 1,00 | 0,02 | 8,170 | 2,497 | 0,414 | 1,766 | 0,707 | 2264 | 30 | 2235 | 33 | 2250 | 23 | 98,8 |
| S-042 | 0,00 | 0,45 | 8,389 | 2,357 | 0,420 | 1,895 | 0,804 | 2286 | 24 | 2260 | 36 | 2274 | 22 | 98,9 |
| S-043 | 0,11 | 0,70 | 10,416 | 2,235 | 0,464 | 1,927 | 0,862 | 2485 | 19 | 2457 | 39 | 2472 | 21 | 98,9 |

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Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Sabará Group and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | Th^b U | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (%) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (%) | rho^d | $\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ | $\pm 2s$ (Ma) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (Ma) | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|----------------------------|--------------------|--|-----------------|--|-----------------|----------------|---|------------------|--|------------------|--|------------------|---------------------------|
| S-044 | 0,80 | 0,71 | 11,084 | 2,573 | 0,477 | 2,051 | 0,797 | 2545 | 26 | 2512 | 43 | 2530 | 24 | 98,7 |
| S-045 | 0,00 | 0,73 | 11,123 | 2,025 | 0,477 | 1,744 | 0,861 | 2549 | 17 | 2515 | 36 | 2533 | 19 | 98,7 |
| S-046 | 0,00 | 0,26 | 12,072 | 2,132 | 0,495 | 1,870 | 0,877 | 2623 | 17 | 2593 | 40 | 2610 | 20 | 98,9 |
| S-047 | 0,00 | 1,06 | 12,585 | 2,208 | 0,505 | 1,915 | 0,867 | 2661 | 18 | 2633 | 42 | 2649 | 21 | 98,9 |
| S-048 | 0,01 | 1,11 | 12,702 | 2,021 | 0,506 | 1,731 | 0,856 | 2671 | 17 | 2640 | 38 | 2658 | 19 | 98,8 |
| S-049 | 0,00 | 0,81 | 12,926 | 2,129 | 0,510 | 1,793 | 0,842 | 2688 | 19 | 2656 | 39 | 2674 | 20 | 98,8 |
| S-050 | 0,00 | 0,87 | 13,261 | 2,115 | 0,516 | 1,779 | 0,841 | 2711 | 19 | 2682 | 39 | 2698 | 20 | 98,9 |
| S-051 | 0,00 | 0,06 | 14,242 | 2,055 | 0,543 | 1,756 | 0,855 | 2743 | 18 | 2797 | 40 | 2766 | 20 | 101,9 |
| S-052 | 0,00 | 0,77 | 14,192 | 2,002 | 0,539 | 1,707 | 0,852 | 2750 | 17 | 2780 | 39 | 2763 | 19 | 101,1 |
| S-053 | 0,00 | 0,35 | 13,895 | 2,030 | 0,526 | 1,756 | 0,865 | 2756 | 17 | 2725 | 39 | 2743 | 19 | 98,9 |
| S-054 | 0,03 | 0,95 | 14,079 | 2,003 | 0,527 | 1,721 | 0,860 | 2773 | 17 | 2731 | 38 | 2755 | 19 | 98,5 |
| S-055 | 0,00 | 0,69 | 14,177 | 2,096 | 0,531 | 1,744 | 0,832 | 2774 | 19 | 2745 | 39 | 2762 | 20 | 99,0 |
| S-056 | 0,00 | 0,36 | 14,220 | 2,057 | 0,531 | 1,743 | 0,847 | 2778 | 18 | 2746 | 39 | 2764 | 20 | 98,9 |
| S-057 | 0,30 | 0,62 | 14,285 | 2,127 | 0,533 | 1,812 | 0,852 | 2780 | 18 | 2754 | 41 | 2769 | 20 | 99,1 |
| S-058 | 1,00 | 0,13 | 15,085 | 2,436 | 0,558 | 1,859 | 0,763 | 2793 | 26 | 2859 | 43 | 2821 | 23 | 102,4 |
| S-059 | 0,00 | 0,54 | 14,808 | 2,044 | 0,540 | 1,762 | 0,862 | 2816 | 17 | 2785 | 40 | 2803 | 20 | 98,9 |
| S-060 | 0,00 | 0,88 | 14,870 | 2,103 | 0,542 | 1,828 | 0,869 | 2819 | 17 | 2790 | 42 | 2807 | 20 | 99,0 |
| S-061 | 0,00 | 0,41 | 15,588 | 2,084 | 0,567 | 1,739 | 0,834 | 2821 | 19 | 2896 | 41 | 2852 | 20 | 102,7 |
| S-062 | 0,02 | 0,02 | 14,662 | 2,147 | 0,533 | 1,871 | 0,871 | 2821 | 17 | 2755 | 42 | 2794 | 21 | 97,7 |
| S-063 | 0,06 | 0,96 | 15,183 | 2,087 | 0,545 | 1,761 | 0,844 | 2842 | 18 | 2806 | 40 | 2827 | 20 | 98,7 |
| S-064 | 0,04 | 0,77 | 14,693 | 2,013 | 0,525 | 1,714 | 0,851 | 2850 | 17 | 2721 | 38 | 2796 | 19 | 95,5 |
| S-065 | 0,17 | 0,96 | 15,962 | 2,116 | 0,569 | 1,829 | 0,864 | 2854 | 17 | 2903 | 43 | 2875 | 20 | 101,7 |
| S-066 | 0,24 | 0,72 | 15,481 | 2,126 | 0,550 | 1,784 | 0,839 | 2860 | 19 | 2825 | 41 | 2845 | 20 | 98,8 |
| S-067 | 0,00 | 0,26 | 16,004 | 2,077 | 0,562 | 1,782 | 0,858 | 2878 | 17 | 2876 | 41 | 2877 | 20 | 99,9 |
| S-068 | 1,00 | 0,39 | 15,787 | 2,375 | 0,554 | 1,889 | 0,795 | 2878 | 23 | 2844 | 44 | 2864 | 23 | 98,8 |
| S-069 | 0,05 | 0,15 | 16,013 | 2,136 | 0,559 | 1,767 | 0,827 | 2888 | 19 | 2863 | 41 | 2878 | 21 | 99,2 |
| S-070 | 0,00 | 0,45 | 16,039 | 2,188 | 0,558 | 1,815 | 0,829 | 2895 | 20 | 2857 | 42 | 2879 | 21 | 98,7 |
| S-071 | 0,00 | 0,59 | 16,224 | 2,121 | 0,561 | 1,765 | 0,832 | 2904 | 19 | 2871 | 41 | 2890 | 20 | 98,9 |
| S-072 | 0,00 | 0,30 | 16,259 | 2,017 | 0,562 | 1,708 | 0,847 | 2904 | 17 | 2876 | 40 | 2892 | 19 | 99,0 |
| S-073 | 0,19 | 0,29 | 16,387 | 2,133 | 0,563 | 1,802 | 0,845 | 2914 | 18 | 2879 | 42 | 2900 | 21 | 98,8 |
| S-074 | 0,00 | 0,61 | 17,360 | 2,129 | 0,577 | 1,788 | 0,840 | 2967 | 19 | 2937 | 42 | 2955 | 21 | 99,0 |
| S-075 | 0,00 | 0,98 | 16,862 | 2,249 | 0,560 | 1,828 | 0,813 | 2968 | 21 | 2867 | 42 | 2927 | 22 | 96,6 |
| S-076 | 0,08 | 0,01 | 19,071 | 2,147 | 0,599 | 1,794 | 0,836 | 3059 | 19 | 3025 | 43 | 3045 | 21 | 98,9 |
| S-077 | 0,00 | 0,70 | 21,069 | 2,084 | 0,620 | 1,781 | 0,854 | 3162 | 17 | 3110 | 44 | 3142 | 20 | 98,4 |
| S-078 | 0,00 | 0,66 | 25,205 | 2,127 | 0,665 | 1,860 | 0,874 | 3335 | 16 | 3285 | 48 | 3316 | 21 | 98,5 |
| S-079 | 0,00 | 1,20 | 6,658 | 2,028 | 0,367 | 1,745 | 0,861 | 2120 | 18 | 2014 | 30 | 2067 | 18 | 95,0 |
| S-080 | 0,14 | 0,53 | 12,033 | 2,121 | 0,479 | 1,856 | 0,875 | 2674 | 17 | 2522 | 39 | 2607 | 20 | 94,3 |
| S-081 | 0,21 | 0,81 | 7,527 | 2,121 | 0,387 | 1,741 | 0,821 | 2242 | 21 | 2108 | 31 | 2176 | 19 | 94,0 |
| S-082 | 1,00 | 0,35 | 6,093 | 2,861 | 0,348 | 1,919 | 0,671 | 2055 | 37 | 1927 | 32 | 1989 | 25 | 93,8 |
| S-083 | 0,00 | 0,92 | 6,482 | 2,182 | 0,359 | 1,862 | 0,854 | 2112 | 20 | 1976 | 32 | 2043 | 19 | 93,6 |
| S-084 | 0,00 | 0,46 | 6,559 | 2,167 | 0,356 | 1,780 | 0,822 | 2145 | 22 | 1964 | 30 | 2054 | 19 | 91,5 |
| S-085 | 0,00 | 0,42 | 5,812 | 2,182 | 0,334 | 1,752 | 0,803 | 2043 | 23 | 1860 | 28 | 1948 | 19 | 91,0 |
| S-086 | 1,00 | 0,91 | 14,365 | 2,357 | 0,502 | 1,851 | 0,785 | 2885 | 24 | 2624 | 40 | 2774 | 23 | 90,9 |

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Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Sabará Group and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | Th^b U | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (%) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (%) | ρ^d | $\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ | $\pm 2s$ (Ma) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (Ma) | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|----------------------------|--------------------|--|-----------------|--|-----------------|----------|---|------------------|--|------------------|--|------------------|---------------------------|
| S-087 | 0,00 | 0,23 | 12,081 | 2,175 | 0,455 | 1,882 | 0,865 | 2764 | 18 | 2417 | 38 | 2611 | 21 | 87,4 |
| S-088 | 0,00 | 0,67 | 5,505 | 2,035 | 0,317 | 1,769 | 0,869 | 2044 | 18 | 1773 | 27 | 1901 | 18 | 86,7 |
| S-089 | 0,00 | 0,74 | 5,174 | 2,062 | 0,306 | 1,782 | 0,864 | 1993 | 18 | 1723 | 27 | 1848 | 18 | 86,4 |
| S-090 | 0,23 | 0,95 | 7,250 | 2,103 | 0,359 | 1,802 | 0,857 | 2303 | 19 | 1979 | 31 | 2143 | 19 | 85,9 |
| S-091 | 0,00 | 1,78 | 12,792 | 2,114 | 0,458 | 1,767 | 0,836 | 2846 | 19 | 2432 | 36 | 2664 | 20 | 85,5 |
| S-092 | 0,00 | 0,48 | 9,753 | 2,090 | 0,401 | 1,848 | 0,884 | 2617 | 16 | 2176 | 34 | 2412 | 19 | 83,1 |
| S-093 | 0,10 | 0,97 | 11,826 | 2,148 | 0,434 | 1,864 | 0,868 | 2808 | 17 | 2322 | 36 | 2591 | 20 | 82,7 |
| S-094 | 0,25 | 1,24 | 5,208 | 2,108 | 0,297 | 1,792 | 0,850 | 2059 | 20 | 1677 | 27 | 1854 | 18 | 81,4 |
| S-095 | 0,04 | 0,82 | 5,402 | 2,094 | 0,300 | 1,793 | 0,856 | 2105 | 19 | 1692 | 27 | 1885 | 18 | 80,4 |
| S-096 | 0,01 | 1,01 | 4,929 | 2,061 | 0,286 | 1,785 | 0,866 | 2030 | 18 | 1620 | 26 | 1807 | 18 | 79,8 |
| S-097 | 0,00 | 0,76 | 4,310 | 2,046 | 0,263 | 1,779 | 0,870 | 1939 | 18 | 1505 | 24 | 1695 | 17 | 77,7 |
| S-098 | 0,04 | 0,21 | 9,146 | 2,065 | 0,365 | 1,786 | 0,865 | 2669 | 17 | 2006 | 31 | 2353 | 19 | 75,2 |
| S-099 | 0,36 | 1,25 | 4,145 | 2,365 | 0,253 | 1,834 | 0,775 | 1940 | 27 | 1453 | 24 | 1663 | 20 | 74,9 |
| S-100 | 0,00 | 0,96 | 5,332 | 2,135 | 0,285 | 1,789 | 0,838 | 2173 | 20 | 1616 | 26 | 1874 | 18 | 74,4 |
| S-101 | 0,13 | 0,55 | 3,935 | 2,108 | 0,244 | 1,813 | 0,860 | 1909 | 19 | 1408 | 23 | 1621 | 17 | 73,8 |
| S-102 | 0,28 | 0,76 | 10,156 | 2,048 | 0,375 | 1,752 | 0,855 | 2798 | 17 | 2052 | 31 | 2449 | 19 | 73,3 |
| S-103 | 0,12 | 1,01 | 4,208 | 2,067 | 0,251 | 1,783 | 0,863 | 1983 | 19 | 1441 | 23 | 1676 | 17 | 72,7 |
| S-104 | 0,05 | 1,16 | 10,256 | 2,031 | 0,369 | 1,766 | 0,869 | 2838 | 16 | 2026 | 31 | 2458 | 19 | 71,4 |
| S-105 | 0,10 | 0,51 | 4,270 | 2,074 | 0,248 | 1,788 | 0,862 | 2030 | 19 | 1426 | 23 | 1688 | 17 | 70,2 |
| S-106 | 0,24 | 0,33 | 7,925 | 2,044 | 0,328 | 1,756 | 0,859 | 2608 | 17 | 1829 | 28 | 2223 | 19 | 70,1 |
| S-107 | 0,00 | 0,28 | 7,974 | 2,003 | 0,327 | 1,753 | 0,875 | 2622 | 16 | 1826 | 28 | 2228 | 18 | 69,6 |
| S-108 | 0,29 | 1,22 | 3,698 | 2,209 | 0,229 | 1,784 | 0,808 | 1914 | 23 | 1328 | 21 | 1571 | 18 | 69,4 |
| S-109 | 0,00 | 0,93 | 3,524 | 2,094 | 0,219 | 1,824 | 0,871 | 1904 | 19 | 1278 | 21 | 1533 | 17 | 67,2 |
| S-110 | 0,20 | 0,87 | 5,087 | 2,055 | 0,260 | 1,772 | 0,863 | 2247 | 18 | 1492 | 24 | 1834 | 18 | 66,4 |
| S-111 | 0,07 | 0,90 | 3,358 | 2,084 | 0,210 | 1,776 | 0,852 | 1898 | 20 | 1227 | 20 | 1495 | 16 | 64,6 |
| S-112 | 0,00 | 0,84 | 4,182 | 2,091 | 0,231 | 1,767 | 0,845 | 2116 | 20 | 1339 | 21 | 1670 | 17 | 63,3 |
| S-113 | 0,00 | 0,71 | 4,348 | 2,006 | 0,232 | 1,752 | 0,873 | 2178 | 17 | 1344 | 21 | 1703 | 17 | 61,7 |
| S-114 | 0,00 | 0,85 | 6,402 | 2,044 | 0,270 | 1,775 | 0,868 | 2574 | 17 | 1543 | 24 | 2033 | 18 | 59,9 |
| S-115 | 0,15 | 1,70 | 3,004 | 2,097 | 0,186 | 1,773 | 0,845 | 1915 | 20 | 1098 | 18 | 1409 | 16 | 57,4 |
| S-116 | 1,00 | 0,72 | 2,416 | 3,081 | 0,165 | 2,190 | 0,711 | 1740 | 40 | 982 | 20 | 1247 | 22 | 56,5 |
| S-117 | 1,00 | 0,53 | 3,119 | 2,862 | 0,187 | 2,090 | 0,730 | 1969 | 35 | 1106 | 21 | 1437 | 22 | 56,2 |
| S-118 | 0,14 | 0,20 | 2,557 | 2,053 | 0,168 | 1,774 | 0,864 | 1811 | 19 | 998 | 16 | 1289 | 15 | 55,1 |
| S-119 | 1,00 | 0,51 | 4,926 | 2,638 | 0,225 | 2,075 | 0,786 | 2442 | 28 | 1309 | 25 | 1807 | 23 | 53,6 |
| S-120 | 0,06 | 1,17 | 2,663 | 2,172 | 0,165 | 1,852 | 0,853 | 1908 | 20 | 986 | 17 | 1318 | 16 | 51,7 |
| S-121 | 0,31 | 1,91 | 2,144 | 2,192 | 0,146 | 1,830 | 0,835 | 1738 | 22 | 880 | 15 | 1163 | 15 | 50,6 |
| S-122 | 0,00 | 1,17 | 4,628 | 2,198 | 0,211 | 1,896 | 0,863 | 2446 | 19 | 1234 | 21 | 1754 | 19 | 50,4 |
| S-123 | 0,76 | 0,72 | 4,756 | 2,344 | 0,207 | 1,910 | 0,815 | 2521 | 23 | 1215 | 21 | 1777 | 20 | 48,2 |
| S-124 | 0,24 | 2,05 | 2,727 | 2,117 | 0,161 | 1,805 | 0,853 | 2001 | 20 | 961 | 16 | 1336 | 16 | 48,0 |
| S-125 | 0,34 | 0,90 | 5,330 | 2,138 | 0,211 | 1,834 | 0,858 | 2686 | 18 | 1232 | 21 | 1874 | 18 | 45,8 |
| S-126 | 0,32 | 1,20 | 2,256 | 2,166 | 0,135 | 1,837 | 0,848 | 1970 | 20 | 818 | 14 | 1199 | 15 | 41,5 |
| S-127 | 0,50 | 2,68 | 1,999 | 2,343 | 0,109 | 1,982 | 0,846 | 2136 | 22 | 668 | 13 | 1115 | 16 | 31,3 |
| S-128 | 0,66 | 0,74 | 1,323 | 2,904 | 0,072 | 2,534 | 0,873 | 2140 | 25 | 448 | 11 | 856 | 17 | 21,0 |
| S-129 | 2,18 | 3,49 | 1,200 | 9,479 | 0,049 | 9,095 | 0,960 | 2633 | 44 | 308 | 27 | 800 | 54 | 11,7 |

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Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Sabará Group and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | Th^b U | ^{207}Pb ^{235}U | $\pm 2s$ (%) | ^{206}Pb ^{238}U | $\pm 2s$ (%) | rho ^d | ^{207}Pb ^{206}Pb | $\pm 2s$ (Ma) | ^{206}Pb ^{238}U | $\pm 2s$ (Ma) | ^{207}Pb ^{235}U | $\pm 2s$ (Ma) | conc. ^e (%) |
|---------------------------------------|----------------------------|--------------------|---------------------------------------|-----------------|---------------------------------------|-----------------|------------------|--|------------------|---------------------------------------|------------------|---------------------------------------|------------------|---------------------------|
| GJ-1 (primary standard zircon) | | | | | | | | | | | | | | |
| G-1 | 0,22 | 0,04 | 0,810 | 2,275 | 0,098 | 1,821 | 0,800 | 592 | 30 | 605 | 11 | 602 | 10 | 102,3 |
| G-2 | 0,00 | 0,05 | 0,822 | 2,104 | 0,098 | 1,771 | 0,841 | 628 | 24 | 604 | 10 | 609 | 10 | 96,2 |
| G-3 | 0,00 | 0,05 | 0,791 | 2,113 | 0,097 | 1,773 | 0,839 | 572 | 25 | 597 | 10 | 592 | 10 | 104,3 |
| G-4 | 0,00 | 0,04 | 0,805 | 2,105 | 0,098 | 1,759 | 0,836 | 593 | 25 | 601 | 10 | 599 | 10 | 101,4 |
| G-5 | 1,00 | 0,04 | 0,802 | 4,467 | 0,097 | 2,724 | 0,610 | 595 | 77 | 599 | 16 | 598 | 20 | 100,7 |
| G-6 | 0,00 | 0,04 | 0,808 | 2,120 | 0,097 | 1,777 | 0,838 | 623 | 25 | 596 | 10 | 601 | 10 | 95,6 |
| G-7 | 0,00 | 0,04 | 0,807 | 2,132 | 0,097 | 1,785 | 0,837 | 606 | 25 | 600 | 10 | 601 | 10 | 99,0 |
| G-8 | 0,02 | 0,04 | 0,799 | 2,128 | 0,097 | 1,776 | 0,835 | 598 | 25 | 596 | 10 | 596 | 10 | 99,6 |
| G-9 | 0,12 | 0,05 | 0,817 | 2,167 | 0,098 | 1,789 | 0,826 | 616 | 26 | 603 | 10 | 606 | 10 | 97,9 |
| G-10 | 0,31 | 0,04 | 0,797 | 2,457 | 0,097 | 1,898 | 0,772 | 582 | 34 | 599 | 11 | 595 | 11 | 102,9 |
| G-11 | 0,00 | 0,05 | 0,811 | 2,122 | 0,098 | 1,769 | 0,834 | 596 | 25 | 605 | 10 | 603 | 10 | 101,4 |
| G-12 | 0,08 | 0,05 | 0,802 | 2,152 | 0,097 | 1,794 | 0,833 | 592 | 26 | 600 | 10 | 598 | 10 | 101,2 |
| G-13 | 0,34 | 0,05 | 0,815 | 2,517 | 0,097 | 1,919 | 0,762 | 630 | 35 | 599 | 11 | 605 | 12 | 95,0 |
| G-14 | 0,04 | 0,04 | 0,798 | 2,134 | 0,097 | 1,779 | 0,834 | 597 | 26 | 596 | 10 | 596 | 10 | 99,8 |
| G-15 | 0,00 | 0,04 | 0,806 | 2,146 | 0,097 | 1,794 | 0,836 | 615 | 25 | 597 | 10 | 600 | 10 | 97,0 |
| G-16 | 0,00 | 0,05 | 0,806 | 2,130 | 0,098 | 1,779 | 0,835 | 596 | 25 | 602 | 10 | 600 | 10 | 100,9 |
| G-17 | 0,10 | 0,04 | 0,799 | 2,174 | 0,097 | 1,791 | 0,824 | 600 | 27 | 595 | 10 | 596 | 10 | 99,1 |
| G-18 | 0,00 | 0,04 | 0,821 | 2,176 | 0,098 | 1,813 | 0,833 | 628 | 26 | 604 | 10 | 609 | 10 | 96,2 |
| G-19 | 0,00 | 0,05 | 0,794 | 2,160 | 0,097 | 1,801 | 0,834 | 588 | 26 | 595 | 10 | 593 | 10 | 101,2 |
| G-20 | 0,00 | 0,05 | 0,807 | 2,179 | 0,097 | 1,810 | 0,831 | 610 | 26 | 598 | 10 | 601 | 10 | 98,1 |
| G-21 | 0,00 | 0,05 | 0,834 | 2,169 | 0,100 | 1,805 | 0,832 | 628 | 26 | 613 | 11 | 616 | 10 | 97,7 |
| G-22 | 0,00 | 0,05 | 0,826 | 2,190 | 0,098 | 1,811 | 0,827 | 636 | 26 | 604 | 10 | 611 | 10 | 95,0 |
| G-23 | 0,00 | 0,04 | 0,818 | 2,189 | 0,098 | 1,815 | 0,829 | 621 | 26 | 603 | 10 | 607 | 10 | 97,1 |
| G-24 | 0,00 | 0,04 | 0,811 | 2,187 | 0,098 | 1,818 | 0,832 | 607 | 26 | 602 | 10 | 603 | 10 | 99,2 |

BB (quality control zircon)

| | | | | | | | | | | | | | | |
|------|------|------|-------|-------|-------|-------|-------|-----|----|-----|----|-----|----|-------|
| B-1 | 0,00 | 0,39 | 0,730 | 2,073 | 0,090 | 1,753 | 0,846 | 558 | 24 | 556 | 9 | 557 | 9 | 99,7 |
| B-2 | 0,00 | 0,40 | 0,730 | 2,155 | 0,090 | 1,742 | 0,808 | 570 | 28 | 553 | 9 | 556 | 9 | 96,9 |
| B-3 | 0,00 | 0,39 | 0,730 | 2,077 | 0,090 | 1,739 | 0,838 | 569 | 25 | 554 | 9 | 557 | 9 | 97,4 |
| B-4 | 1,00 | 0,39 | 0,730 | 4,567 | 0,090 | 2,821 | 0,618 | 563 | 78 | 555 | 15 | 557 | 20 | 98,6 |
| B-5 | 0,00 | 0,39 | 0,726 | 2,089 | 0,090 | 1,715 | 0,821 | 555 | 26 | 554 | 9 | 554 | 9 | 99,9 |
| B-6 | 0,39 | 0,39 | 0,728 | 2,617 | 0,090 | 1,942 | 0,742 | 558 | 38 | 555 | 10 | 555 | 11 | 99,4 |
| B-7 | 0,00 | 0,38 | 0,725 | 2,073 | 0,090 | 1,741 | 0,840 | 556 | 25 | 553 | 9 | 554 | 9 | 99,4 |
| B-8 | 0,00 | 0,38 | 0,729 | 2,074 | 0,090 | 1,754 | 0,845 | 555 | 24 | 556 | 9 | 556 | 9 | 100,3 |
| B-9 | 0,36 | 0,40 | 0,729 | 2,576 | 0,090 | 1,913 | 0,743 | 559 | 38 | 555 | 10 | 556 | 11 | 99,2 |
| B-10 | 0,00 | 0,39 | 0,727 | 2,076 | 0,090 | 1,732 | 0,834 | 548 | 25 | 556 | 9 | 555 | 9 | 101,4 |
| B-11 | 0,35 | 0,39 | 0,729 | 2,557 | 0,090 | 1,902 | 0,744 | 555 | 37 | 556 | 10 | 556 | 11 | 100,3 |
| B-12 | 0,08 | 0,39 | 0,729 | 2,240 | 0,090 | 1,747 | 0,780 | 563 | 31 | 554 | 9 | 556 | 10 | 98,4 |
| B-13 | 0,00 | 0,39 | 0,733 | 2,083 | 0,090 | 1,737 | 0,834 | 573 | 25 | 554 | 9 | 558 | 9 | 96,7 |
| B-14 | 0,21 | 0,39 | 0,730 | 2,254 | 0,090 | 1,839 | 0,816 | 562 | 28 | 556 | 10 | 557 | 10 | 98,9 |
| B-15 | 0,09 | 0,40 | 0,731 | 2,182 | 0,089 | 1,778 | 0,815 | 579 | 27 | 552 | 9 | 557 | 9 | 95,4 |

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Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

Results of U–Pb LA–ICP–MS analyses of detrital zircon grains from Sabará Group and from standard zircons in the Gandarela syncline

| spot no. | $^{206}\text{Pb}^c$ (%) | Th^b U | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (%) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (%) | rho ^d | $\frac{^{207}\text{Pb}}{^{206}\text{Pb}}$ | $\pm 2s$ (Ma) | $\frac{^{206}\text{Pb}}{^{238}\text{U}}$ | $\pm 2s$ (Ma) | $\frac{^{207}\text{Pb}}{^{235}\text{U}}$ | $\pm 2s$ (Ma) | conc. ^e (%) |
|----------|----------------------------|--------------------|--|-----------------|--|-----------------|------------------|---|------------------|--|------------------|--|------------------|---------------------------|
| B-16 | 0,29 | 0,39 | 0,729 | 2,439 | 0,091 | 1,858 | 0,762 | 541 | 35 | 560 | 10 | 556 | 10 | 103,5 |
| B-17 | 0,00 | 0,39 | 0,731 | 2,176 | 0,090 | 1,777 | 0,816 | 563 | 27 | 556 | 9 | 557 | 9 | 98,8 |
| B-18 | 0,00 | 0,40 | 0,731 | 2,231 | 0,091 | 1,790 | 0,802 | 551 | 29 | 559 | 10 | 557 | 10 | 101,3 |
| B-19 | 1,00 | 0,39 | 0,731 | 4,566 | 0,089 | 2,840 | 0,622 | 580 | 78 | 551 | 15 | 557 | 20 | 95,1 |
| B-20 | 0,00 | 0,39 | 0,730 | 2,124 | 0,090 | 1,762 | 0,830 | 569 | 26 | 553 | 9 | 557 | 9 | 97,3 |
| B-21 | 0,00 | 0,40 | 0,731 | 2,154 | 0,090 | 1,769 | 0,821 | 553 | 27 | 558 | 9 | 557 | 9 | 100,9 |
| B-22 | 0,27 | 0,39 | 0,730 | 2,396 | 0,089 | 1,891 | 0,789 | 579 | 32 | 551 | 10 | 556 | 10 | 95,1 |
| B-23 | 1,00 | 0,39 | 0,732 | 4,577 | 0,090 | 2,838 | 0,620 | 571 | 78 | 554 | 15 | 558 | 20 | 97,0 |
| B-24 | 0,07 | 0,39 | 0,730 | 2,188 | 0,090 | 1,785 | 0,816 | 562 | 28 | 556 | 10 | 557 | 9 | 98,9 |

^a Within run background-corrected mean ^{207}Pb signal in cps (counts per second).

^c U content and Th/U ratio were calculated relative to GJ-1 reference zircon.

^b Percentage of the common Pb on the ^{206}Pb . Zero = below detection limit.

^e rho = $\frac{^{206}\text{Pb}/^{238}\text{U error}}{^{207}\text{Pb}/^{235}\text{U error}}$

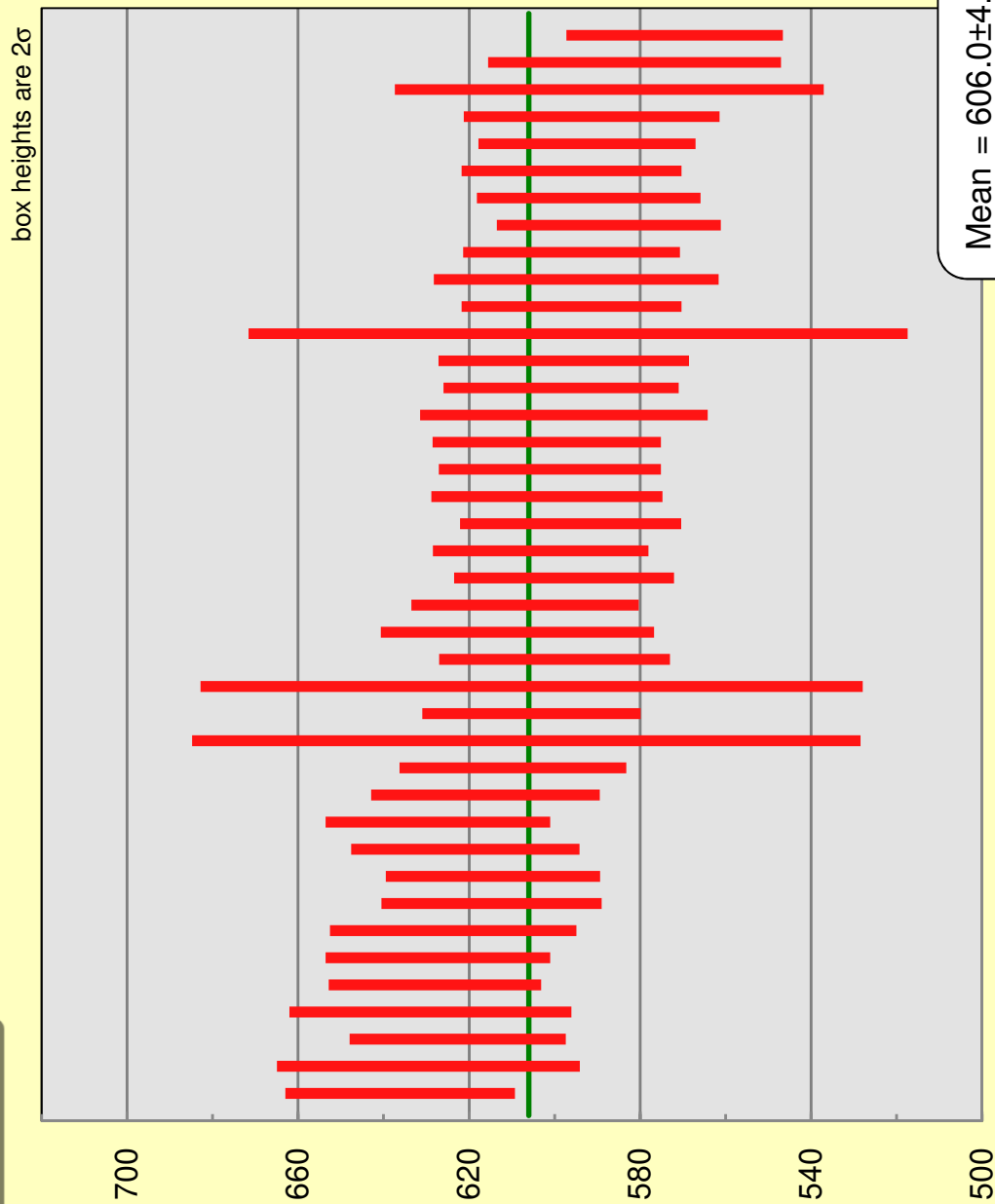
^f Degree of concordance = $\frac{^{206}\text{Pb}/^{238}\text{U age}}{^{207}\text{Pb}/^{206}\text{Pb age}} \times 100$

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FERRÍFERO, SOUTHERN SÃO FRANCISCO CRATON, BRAZIL**

Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

GJ-1 primary standard zircon



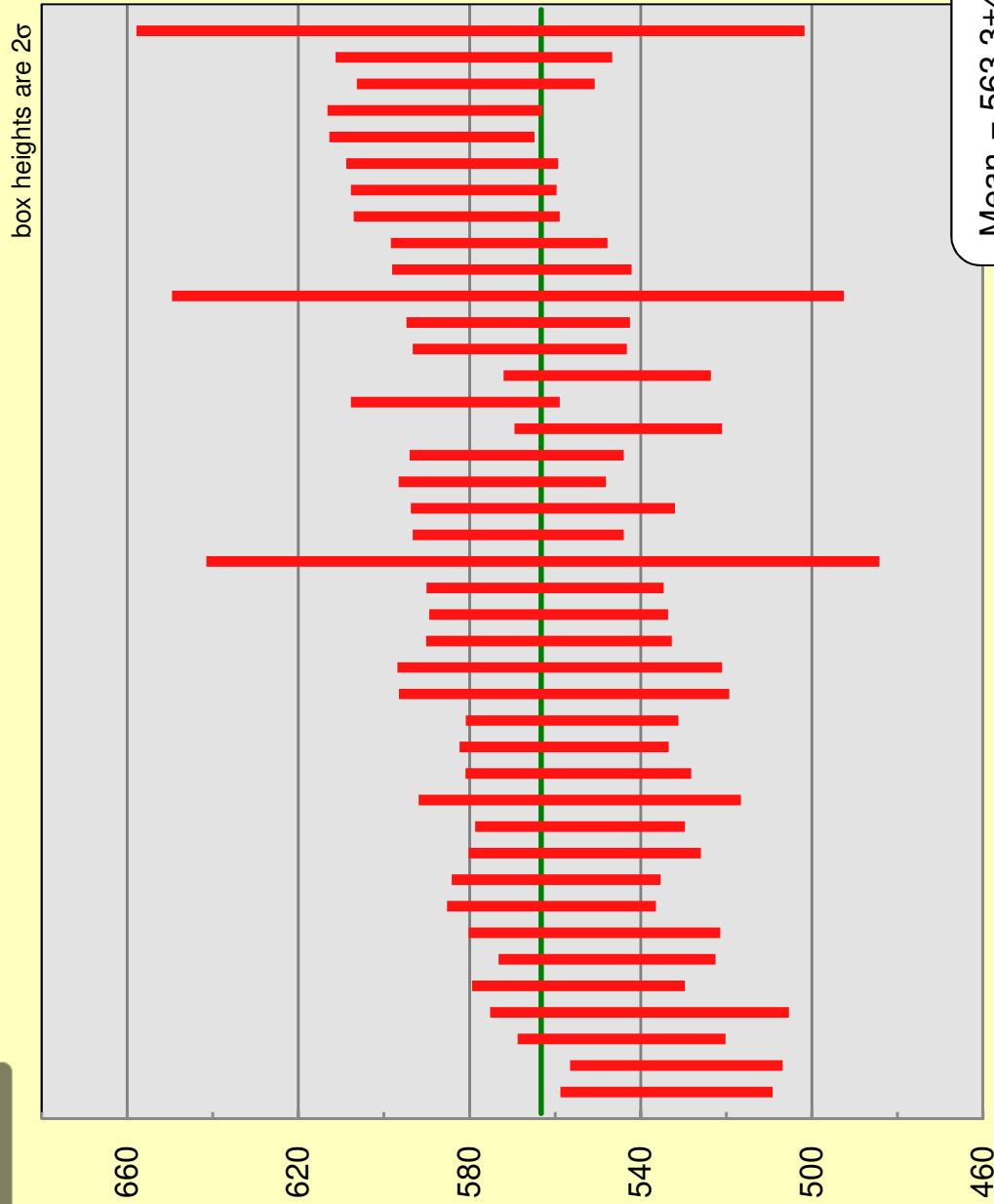
Mean = 606.0 ± 4.8 [0.79%] 95% conf.
Wtd by data-pt errs only, 0 of 40 rej.
MSWD = 1.13, probability = 0.26

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FERRÍFERO, SOUTHERN SÃO FRANCISCO CRATON, BRAZIL**

Luiz Fernandes Dutra; Maximiliano Martins; Cristiano Lana

BB quality control zircon



Mean = 563.3 ± 4.8 [0.85%] 95% conf.
Wtd by data-pt errs only, 0 of 41 rej.
MSWD = 1.3, probability = 0.12