附表1 禄丰地区东川群变砂岩中碎屑锆石LA-ICP-MS同位素测年结果

Table 1 LA-ICP-MS isotopic dating results of detrital zircons from metasandstone of Dongchuan Group in Lufeng area

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 测点  编号 | 同位素含量(10-6) | | | Th/U | 同位素比值 | | | | | | 年龄(Ma) | | | | | | | | | 谐和  度(％) |
| 206Pb\* | Th | U | 207Pb\*/206Pb\* 1*σ* | | 207Pb\*/235U 1*σ* | | 206Pb\*/238U 1*σ* | | 207Pb/206Pb | 1*σ* | | 207Pb/235U | 1*σ* | | 206Pb/238U | 1*σ* | |
| ZC02-01 | 211.2 | 152.7 | 281.0 | 0.54 | 0.132 22 | 0.000 80 | 7.653 87 | 0.129 31 | 0.418 27 | 0.003 52 | 2 128 | | 18 | 2 191 | | 15 | 2 253 | | 16 | 94 |
| ZC02-02 | 156.3 | 206.0 | 194.2 | 1.06 | 0.118 18 | 0.001 14 | 5.813 10 | 0.121 18 | 0.355 13 | 0.004 84 | 1 929 | | 19 | 1 948 | | 18 | 1 959 | | 23 | 98 |
| ZC02-03 | 142.8 | 128.2 | 195.5 | 0.66 | 0.121 00 | 0.001 05 | 6.529 46 | 0.129 30 | 0.389 71 | 0.004 93 | 1 971 | | 18 | 2 050 | | 17 | 2 121 | | 23 | 93 |
| ZC02-04 | 127.5 | 330.8 | 186.5 | 1.77 | 0.131 60 | 0.001 06 | 7.487 04 | 0.202 28 | 0.409 84 | 0.008 61 | 2 119 | | 22 | 2 171 | | 24 | 2 214 | | 39 | 96 |
| ZC02-05 | 35.56 | 26.94 | 43.00 | 0.63 | 0.144 95 | 0.002 26 | 8.850 78 | 0.214 13 | 0.441 62 | 0.005 27 | 2 287 | | 25 | 2 323 | | 22 | 2 358 | | 24 | 97 |
| ZC02-06 | 319.7 | 469.3 | 958.8 | 0.49 | 0.138 11 | 0.000 70 | 4.425 83 | 0.147 81 | 0.230 53 | 0.006 23 | 2 204 | | 26 | 1 717 | | 28 | 1 337 | | 33 | 165 |
| ZC02-07 | 118.0 | 116.0 | 148.1 | 0.78 | 0.123 26 | 0.001 59 | 6.440 43 | 0.152 66 | 0.377 78 | 0.004 52 | 2 004 | | 25 | 2 038 | | 21 | 2 066 | | 21 | 97 |
| ZC02-08 | 78.29 | 11.36 | 189.7 | 0.06 | 0.124 02 | 0.001 11 | 6.471 94 | 0.144 95 | 0.376 02 | 0.004 24 | 2 015 | | 24 | 2 042 | | 20 | 2 058 | | 20 | 98 |
| ZC02-09 | 27.37 | 23.90 | 28.71 | 0.83 | 0.144 12 | 0.003 28 | 8.378 94 | 0.241 33 | 0.422 57 | 0.005 37 | 2 277 | | 32 | 2 273 | | 26 | 2 272 | | 24 | 100 |
| ZC02-10 | 159.9 | 138.8 | 190.2 | 0.73 | 0.135 13 | 0.001 12 | 7.585 39 | 0.158 53 | 0.405 12 | 0.003 41 | 2 166 | | 25 | 2 183 | | 19 | 2 193 | | 16 | 99 |
| ZC02-11 | 112.7 | 319.5 | 765.0 | 0.42 | 0.093 50 | 0.004 24 | 0.994 63 | 0.042 56 | 0.077 16 | 0.001 15 | 1 498 | | 88 | 701 | | 22 | 479 | | 7 | 313 |
| ZC02-12 | 273.1 | 359.0 | 853.2 | 0.42 | 0.143 05 | 0.001 28 | 6.823 41 | 0.169 39 | 0.344 26 | 0.003 46 | 2 215 | | 15 | 2 089 | | 22 | 2 007 | | 17 | 110 |
| ZC02-13 | 101.6 | 348.9 | 337.5 | 1.03 | 0.116 30 | 0.000 80 | 5.550 48 | 0.134 03 | 0.345 33 | 0.001 71 | 1 900 | | 36 | 1 908 | | 21 | 1 912 | | 8 | 99 |
| ZC02-14 | 95.11 | 84.46 | 59.40 | 1.42 | 0.377 52 | 0.003 77 | 43.047 35 | 0.840 44 | 0.827 80 | 0.005 85 | 3 822 | | 21 | 3 843 | | 19 | 3 888 | | 21 | 98 |
| ZC02-15 | 238.8 | 469.7 | 500.4 | 0.94 | 0.128 12 | 0.000 99 | 4.479 83 | 0.116 03 | 0.253 38 | 0.004 13 | 2 072 | | 24 | 1 727 | | 22 | 1 456 | | 21 | 142 |
| ZC02-16 | 46.38 | 20.02 | 50.03 | 0.40 | 0.187 18 | 0.002 20 | 13.603 62 | 0.362 77 | 0.526 22 | 0.006 66 | 2 718 | | 27 | 2 723 | | 25 | 2 725 | | 28 | 100 |
| ZC02-17 | 152.1 | 131.2 | 170.9 | 0.77 | 0.135 75 | 0.001 16 | 7.659 22 | 0.191 12 | 0.408 30 | 0.002 67 | 2 174 | | 34 | 2 192 | | 22 | 2 207 | | 12 | 99 |
| ZC02-18 | 70.85 | 133.9 | 106.2 | 1.26 | 0.138 17 | 0.001 42 | 7.796 62 | 0.204 21 | 0.408 68 | 0.006 15 | 2 204 | | 25 | 2 208 | | 24 | 2 209 | | 28 | 100 |
| ZC02-19 | 116.6 | 125.3 | 87.17 | 1.44 | 0.340 34 | 0.002 30 | 36.480 56 | 0.769 81 | 0.774 43 | 0.006 30 | 3 664 | | 22 | 3 680 | | 21 | 3 697 | | 23 | 99 |
| ZC02-20 | 79.73 | 58.25 | 86.52 | 0.67 | 0.145 02 | 0.001 59 | 8.703 86 | 0.216 21 | 0.434 73 | 0.003 90 | 2 288 | | 30 | 2 307 | | 23 | 2 327 | | 18 | 98 |
| ZC02-21 | 188.9 | 126.9 | 217.7 | 0.58 | 0.148 44 | 0.001 06 | 8.765 82 | 0.197 76 | 0.427 04 | 0.002 83 | 2 328 | | 30 | 2 314 | | 21 | 2 292 | | 13 | 102 |
| ZC02-22 | 97.29 | 98.03 | 144.8 | 0.68 | 0.107 52 | 0.001 33 | 4.712 09 | 0.120 67 | 0.317 41 | 0.003 00 | 1 758 | | 33 | 1 769 | | 21 | 1 777 | | 15 | 99 |
| ZC02-23 | 292.0 | 1784 | 2238 | 0.80 | 0.160 60 | 0.001 45 | 2.294 23 | 0.173 95 | 0.099 61 | 0.006 64 | 2 462 | | 57 | 1 211 | | 54 | 612 | | 39 | 402 |
| ZC02-24 | 107.6 | 86.10 | 137.7 | 0.63 | 0.126 34 | 0.001 47 | 6.689 08 | 0.205 46 | 0.382 79 | 0.004 34 | 2 048 | | 38 | 2 071 | | 27 | 2 089 | | 20 | 98 |
| ZC02-25 | 151.7 | 209.4 | 186.4 | 1.12 | 0.138 63 | 0.001 52 | 7.739 68 | 0.236 53 | 0.403 37 | 0.003 56 | 2 210 | | 41 | 2 201 | | 27 | 2 185 | | 16 | 101 |
| ZC02-26 | 128.8 | 102.7 | 208.4 | 0.49 | 0.119 89 | 0.001 09 | 5.781 25 | 0.157 76 | 0.349 10 | 0.003 66 | 1 955 | | 34 | 1 944 | | 24 | 1 930 | | 17 | 101 |
| ZC02-27 | 165.5 | 211.2 | 237.2 | 0.89 | 0.116 90 | 0.000 93 | 5.704 66 | 0.164 66 | 0.352 68 | 0.005 49 | 1 909 | | 30 | 1 932 | | 25 | 1 947 | | 26 | 98 |
| ZC02-28 | 231.2 | 105.4 | 357.7 | 0.29 | 0.138 41 | 0.000 88 | 7.750 01 | 0.193 92 | 0.404 40 | 0.002 97 | 2 207 | | 33 | 2 202 | | 23 | 2 189 | | 14 | 101 |
| ZC02-29 | 23.09 | 16.67 | 26.74 | 0.62 | 0.134 60 | 0.003 45 | 7.784 11 | 0.483 47 | 0.403 62 | 0.015 72 | 2 159 | | 57 | 2 206 | | 56 | 2 186 | | 72 | 99 |
| ZC02-30 | 347.0 | 269.3 | 628.4 | 0.43 | 0.106 62 | 0.000 61 | 4.767 54 | 0.138 00 | 0.322 57 | 0.002 45 | 1 742 | | 42 | 1 779 | | 24 | 1 802 | | 12 | 97 |
| ZC02-31 | 180.0 | 180.5 | 145.0 | 1.24 | 0.149 12 | 0.001 36 | 9.160 98 | 0.276 99 | 0.443 50 | 0.005 09 | 2 336 | | 36 | 2 354 | | 28 | 2 366 | | 23 | 99 |
| ZC02-32 | 36.51 | 38.87 | 32.03 | 1.21 | 0.129 28 | 0.003 07 | 7.391 89 | 0.246 72 | 0.417 17 | 0.006 14 | 2 088 | | 38 | 2 160 | | 30 | 2 248 | | 28 | 93 |
| ZC02-33 | 118.0 | 206.8 | 217.3 | 0.95 | 0.134 75 | 0.001 39 | 6.064 02 | 0.158 74 | 0.324 12 | 0.003 35 | 2 161 | | 31 | 1 985 | | 23 | 1 810 | | 16 | 119 |
| ZC02-34 | 340.0 | 393.9 | 425.8 | 0.93 | 0.125 64 | 0.000 72 | 6.512 77 | 0.162 40 | 0.373 72 | 0.005 11 | 2 038 | | 25 | 2 048 | | 22 | 2 047 | | 24 | 100 |
| ZC02-35 | 155.0 | 382.1 | 494.9 | 0.77 | 0.127 14 | 0.001 09 | 3.358 63 | 0.115 07 | 0.189 28 | 0.004 40 | 2 059 | | 30 | 1 495 | | 27 | 1 117 | | 24 | 184 |
| ZC02-36 | 216.8 | 261.6 | 289.6 | 0.90 | 0.128 25 | 0.000 83 | 6.745 83 | 0.167 04 | 0.379 43 | 0.004 41 | 2 074 | | 27 | 2 079 | | 22 | 2 074 | | 21 | 100 |
| ZC02-37 | 72.76 | 60.81 | 87.34 | 0.70 | 0.138 18 | 0.001 67 | 7.715 07 | 0.195 81 | 0.403 52 | 0.004 22 | 2 205 | | 30 | 2 198 | | 23 | 2 185 | | 19 | 101 |
| ZC02-38 | 163.7 | 137.3 | 212.2 | 0.65 | 0.129 23 | 0.001 07 | 6.804 37 | 0.141 14 | 0.380 46 | 0.002 30 | 2 087 | | 28 | 2 086 | | 18 | 2 078 | | 11 | 100 |
| ZC02-39 | 225.7 | 981.6 | 1681 | 0.58 | 0.118 53 | 0.000 75 | 1.898 09 | 0.106 76 | 0.114 95 | 0.005 94 | 1 934 | | 45 | 1 080 | | 37 | 701 | | 34 | 276 |
| ZC02-40 | 346.6 | 449.0 | 416.1 | 1.08 | 0.149 75 | 0.000 71 | 8.771 92 | 0.160 39 | 0.423 60 | 0.001 72 | 2 343 | | 26 | 2 315 | | 17 | 2 277 | | 8 | 103 |
| ZC02-41 | 220.7 | 358.1 | 319.6 | 1.12 | 0.149 57 | 0.001 01 | 8.980 49 | 0.191 82 | 0.434 31 | 0.003 64 | 2 341 | | 25 | 2 336 | | 20 | 2 325 | | 16 | 101 |
| ZC02-42 | 100.7 | 43.81 | 154.8 | 0.28 | 0.143 26 | 0.001 39 | 8.553 65 | 0.235 40 | 0.430 81 | 0.006 05 | 2 267 | | 28 | 2 292 | | 25 | 2 309 | | 27 | 98 |
| ZC02-43 | 145.2 | 66.30 | 153.9 | 0.43 | 0.185 97 | 0.001 29 | 13.687 06 | 0.307 56 | 0.532 97 | 0.003 88 | 2 707 | | 27 | 2 728 | | 21 | 2 754 | | 16 | 98 |
| ZC02-44 | 116.8 | 98.22 | 125.6 | 0.78 | 0.148 22 | 0.001 84 | 8.816 98 | 0.200 49 | 0.431 15 | 0.003 75 | 2 325 | | 27 | 2 319 | | 21 | 2 311 | | 17 | 101 |
| ZC02-45 | 176.0 | 854.5 | 632.0 | 1.35 | 0.131 63 | 0.001 19 | 2.824 73 | 0.119 71 | 0.154 49 | 0.005 62 | 2 120 | | 33 | 1 362 | | 32 | 926 | | 31 | 229 |
| ZC02-46 | 128.7 | 94.45 | 230.5 | 0.41 | 0.118 01 | 0.001 28 | 5.783 67 | 0.124 75 | 0.356 17 | 0.004 83 | 1 926 | | 20 | 1 944 | | 19 | 1 964 | | 23 | 98 |
| ZC02-47 | 61.33 | 47.71 | 88.48 | 0.54 | 0.136 33 | 0.001 90 | 7.555 33 | 0.176 60 | 0.401 36 | 0.004 31 | 2 181 | | 26 | 2 180 | | 21 | 2 175 | | 20 | 100 |
| ZC02-48 | 109.1 | 113.1 | 126.1 | 0.90 | 0.127 74 | 0.003 95 | 6.556 81 | 0.190 72 | 0.372 26 | 0.003 89 | 2 067 | | 56 | 2 054 | | 26 | 2 040 | | 18 | 101 |
| ZC02-49 | 171.5 | 109.6 | 263.2 | 0.42 | 0.124 69 | 0.000 88 | 6.544 00 | 0.133 96 | 0.379 08 | 0.003 04 | 2 024 | | 25 | 2 052 | | 18 | 2 072 | | 14 | 98 |
| ZC02-50 | 201.9 | 163.5 | 240.4 | 0.68 | 0.150 09 | 0.001 24 | 9.133 07 | 0.186 35 | 0.439 90 | 0.004 73 | 2 347 | | 20 | 2 351 | | 19 | 2 350 | | 21 | 100 |
| ZC02-51 | 68.87 | 47.41 | 84.99 | 0.56 | 0.141 84 | 0.001 95 | 8.724 97 | 0.184 37 | 0.445 41 | 0.004 23 | 2 250 | | 23 | 2 310 | | 19 | 2 375 | | 19 | 95 |
| ZC02-52 | 67.31 | 55.02 | 108.3 | 0.51 | 0.114 70 | 0.001 44 | 5.646 28 | 0.118 88 | 0.355 61 | 0.003 17 | 1 875 | | 25 | 1 923 | | 18 | 1 961 | | 15 | 96 |
| ZC02-53 | 181.4 | 172.5 | 215.0 | 0.80 | 0.130 79 | 0.001 24 | 6.853 81 | 0.134 51 | 0.378 84 | 0.003 35 | 2 109 | | 22 | 2 093 | | 17 | 2 071 | | 16 | 102 |
| ZC02-54 | 188.1 | 424.3 | 532.9 | 0.80 | 0.134 28 | 0.002 19 | 4.934 99 | 0.170 84 | 0.277 89 | 0.015 36 | 2 155 | | 51 | 1 808 | | 29 | 1 581 | | 77 | 136 |
| ZC02-55 | 133.1 | 141.3 | 185.0 | 0.76 | 0.114 55 | 0.001 14 | 5.508 47 | 0.109 20 | 0.348 08 | 0.002 69 | 1 873 | | 25 | 1 902 | | 17 | 1 925 | | 13 | 97 |
| ZC02-56 | 270.5 | 171.0 | 364.4 | 0.47 | 0.152 30 | 0.000 90 | 9.397 88 | 0.192 43 | 0.446 15 | 0.005 91 | 2 372 | | 18 | 2 378 | | 19 | 2 378 | | 26 | 100 |
| ZC02-57 | 198.8 | 98.30 | 421.6 | 0.23 | 0.124 30 | 0.000 73 | 6.568 50 | 0.132 17 | 0.381 12 | 0.004 57 | 2 019 | | 19 | 2 055 | | 18 | 2 082 | | 21 | 97 |
| ZC02-58 | 94.11 | 13.46 | 211.4 | 0.06 | 0.123 26 | 0.001 11 | 6.556 55 | 0.129 44 | 0.384 08 | 0.003 87 | 2 004 | | 21 | 2 054 | | 17 | 2 095 | | 18 | 96 |
| ZC02-59 | 78.69 | 49.62 | 106.2 | 0.47 | 0.146 11 | 0.001 65 | 8.821 61 | 0.189 76 | 0.435 82 | 0.004 32 | 2 301 | | 23 | 2 320 | | 20 | 2 332 | | 19 | 99 |
| ZC02-60 | 175.2 | 209.8 | 246.9 | 0.85 | 0.114 68 | 0.001 13 | 5.587 15 | 0.128 72 | 0.351 75 | 0.004 07 | 1 875 | | 25 | 1 914 | | 20 | 1 943 | | 19 | 97 |
| ZC02-61 | 80.49 | 243.3 | 143.3 | 1.70 | 0.123 95 | 0.001 96 | 5.899 51 | 0.149 57 | 0.345 12 | 0.004 20 | 2 014 | | 28 | 1 961 | | 22 | 1 911 | | 20 | 105 |
| ZC02-62 | 67.13 | 50.40 | 88.70 | 0.57 | 0.135 92 | 0.002 10 | 7.730 60 | 0.180 35 | 0.412 42 | 0.004 12 | 2 176 | | 27 | 2 200 | | 21 | 2 226 | | 19 | 98 |
| ZC02-63 | 24.95 | 124.8 | 68.31 | 1.83 | 0.124 50 | 0.002 24 | 4.589 27 | 0.120 64 | 0.267 20 | 0.002 74 | 2 022 | | 32 | 1 747 | | 22 | 1 527 | | 14 | 132 |
| ZC02-64 | 323.6 | 353.3 | 127.9 | 2.76 | 0.182 35 | 0.001 20 | 13.810 46 | 0.294 51 | 0.547 46 | 0.004 64 | 2 674 | | 24 | 2 737 | | 20 | 2 815 | | 19 | 95 |
| ZC02-65 | 30.53 | 30.20 | 23.73 | 1.27 | 0.145 31 | 0.003 16 | 8.815 99 | 0.288 39 | 0.440 54 | 0.004 69 | 2 291 | | 42 | 2 319 | | 30 | 2 353 | | 21 | 97 |
| ZC02-66 | 151.4 | 86.93 | 178.2 | 0.49 | 0.134 56 | 0.001 17 | 7.683 30 | 0.187 58 | 0.412 91 | 0.004 02 | 2 158 | | 29 | 2 195 | | 22 | 2 228 | | 18 | 97 |
| ZC02-67 | 128.0 | 72.33 | 137.5 | 0.53 | 0.206 28 | 0.001 89 | 15.502 03 | 0.390 86 | 0.544 69 | 0.004 74 | 2 877 | | 30 | 2 847 | | 24 | 2 803 | | 20 | 103 |
| ZC02-68 | 61.72 | 12.47 | 135.5 | 0.09 | 0.125 33 | 0.001 29 | 6.537 64 | 0.142 26 | 0.377 81 | 0.002 23 | 2 033 | | 30 | 2 051 | | 19 | 2 066 | | 10 | 98 |
| ZC02-69 | 176.3 | 154.6 | 183.4 | 0.84 | 0.151 48 | 0.001 15 | 8.845 63 | 0.169 75 | 0.422 28 | 0.002 16 | 2 363 | | 26 | 2 322 | | 18 | 2 271 | | 10 | 104 |
| ZC02-70 | 165.4 | 295.9 | 271.5 | 1.09 | 0.122 26 | 0.001 07 | 5.289 21 | 0.112 14 | 0.312 43 | 0.002 51 | 1 989 | | 26 | 1 867 | | 18 | 1 813 | | 12 | 110 |

附表2 禄丰地区东川群变砂岩中碎屑锆石Lu-Hf同位素组成

Table 2 Lu-Hf isotopic composition of detrital zircons from metasandstone of Dongchuan Group in Lufeng area

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 测点编号 | 年龄(Ma) | 176Yb/177Hf | 176Lu/177Hf | 176Hf/177Hf | 2*σ* | 176Hf/177Hfi | *ε*Hf(*t*) | 2*σ* | *T*DM1 (Ma) | *T*DM2(Ma) | *f*Lu/Hf |
| ZC02-01 | 2 128 | 0.050 751 | 0.000 968 | 0.281 388 | 0.000 015 | 0.281 349 | -2.8 | 1.61 | 2 601 | 2 884 | -0.97 |
| ZC02-02 | 1 929 | 0.035 527 | 0.000 706 | 0.281 504 | 0.000 015 | 0.281 478 | -2.7 | 1.85 | 2 426 | 2 729 | -0.98 |
| ZC02-03 | 1 971 | 0.009 531 | 0.000 167 | 0.281 463 | 0.000 016 | 0.281 457 | -2.5 | 1.70 | 2 446 | 2 747 | -0.99 |
| ZC02-04 | 2 119 | 0.024 276 | 0.000 492 | 0.281 455 | 0.000 017 | 0.281 435 | 0.1 | 1.81 | 2 478 | 2 701 | -0.99 |
| ZC02-05 | 2 287 | 0.026 130 | 0.000 510 | 0.281 289 | 0.000 018 | 0.281 266 | -2.0 | 1.62 | 2 703 | 2 961 | -0.98 |
| ZC02-07 | 2 004 | 0.030 867 | 0.000 611 | 0.281 513 | 0.000 018 | 0.281 489 | -0.6 | 1.50 | 2 407 | 2 655 | -0.98 |
| ZC02-08 | 2 015 | 0.021 477 | 0.001 324 | 0.281 511 | 0.000 015 | 0.281 460 | -1.4 | 1.63 | 2 456 | 2 713 | -0.96 |
| ZC02-09 | 2 277 | 0.019 838 | 0.000 362 | 0.281 424 | 0.000 022 | 0.281 409 | 2.8 | 1.69 | 2 511 | 2 657 | -0.99 |
| ZC02-10 | 2 166 | 0.022 875 | 0.000 433 | 0.281 427 | 0.000 017 | 0.281 409 | 0.3 | 1.51 | 2 512 | 2 727 | -0.99 |
| ZC02-12 | 2 215 | 0.021 964 | 0.000 377 | 0.281 308 | 0.000 015 | 0.281 292 | -2.8 | 1.58 | 2 668 | 2 951 | -0.99 |
| ZC02-13 | 1 900 | 0.041 243 | 0.000 692 | 0.281 547 | 0.000 022 | 0.281 522 | -1.8 | 1.62 | 2 366 | 2 650 | -0.98 |
| ZC02-14 | 3 822 | 0.049 423 | 0.001 202 | 0.280 451 | 0.000 031 | 0.280 362 | 1.6 | 1.69 | 3 886 | 3 924 | -0.96 |
| ZC02-16 | 2 718 | 0.023 551 | 0.000 436 | 0.281 057 | 0.000 018 | 0.281 034 | -0.3 | 1.96 | 3 008 | 3 188 | -0.99 |
| ZC02-17 | 2 174 | 0.050 416 | 0.001 051 | 0.281 438 | 0.000 021 | 0.281 394 | -0.1 | 1.60 | 2 538 | 2 755 | -0.97 |
| ZC02-18 | 2 204 | 0.018 059 | 0.000 349 | 0.281 369 | 0.000 024 | 0.281 355 | -0.8 | 1.54 | 2 584 | 2 822 | -0.99 |
| ZC02-19 | 3 664 | 0.061 248 | 0.001 263 | 0.280 569 | 0.000 022 | 0.280 480 | 2.1 | 1.58 | 3 733 | 3 774 | -0.96 |
| ZC02-20 | 2 288 | 0.044 144 | 0.000 839 | 0.281 374 | 0.000 027 | 0.281 337 | 0.5 | 1.70 | 2 611 | 2 807 | -0.97 |
| ZC02-21 | 2 328 | 0.036 359 | 0.000 617 | 0.281 226 | 0.000 022 | 0.281 198 | -3.5 | 1.12 | 2 796 | 3 083 | -0.98 |
| ZC02-22 | 1 758 | 0.026 716 | 0.000 495 | 0.281 568 | 0.000 022 | 0.281 552 | -4.0 | 1.14 | 2 325 | 2 677 | -0.99 |
| ZC02-24 | 2 048 | 0.026 104 | 0.000 500 | 0.281 472 | 0.000 018 | 0.281 452 | -0.9 | 1.72 | 2 456 | 2 708 | -0.98 |
| ZC02-25 | 2 210 | 0.041 496 | 0.000 790 | 0.281 398 | 0.000 022 | 0.281 365 | -0.3 | 1.84 | 2 574 | 2 795 | -0.98 |
| ZC02-26 | 1 955 | 0.011 158 | 0.000 220 | 0.281 543 | 0.000 019 | 0.281 535 | -0.1 | 1.28 | 2 343 | 2 587 | -0.99 |
| ZC02-27 | 1 909 | 0.079 251 | 0.001 331 | 0.281 612 | 0.000 022 | 0.281 563 | -0.1 | 1.44 | 2 316 | 2 554 | -0.96 |
| ZC02-28 | 2 207 | 0.018 805 | 0.000 385 | 0.281 248 | 0.000 022 | 0.281 232 | -5.1 | 1.56 | 2 749 | 3 088 | -0.99 |
| ZC02-29 | 2 159 | 0.032 128 | 0.000 645 | 0.280 986 | 0.000 024 | 0.280 960 | -15.9 | 1.38 | 3 119 | 3 708 | -0.98 |
| ZC02-30 | 1 742 | 0.029 231 | 0.000 558 | 0.281 266 | 0.000 018 | 0.281 247 | -15.2 | 1.44 | 2 738 | 3 352 | -0.98 |
| ZC02-31 | 2 336 | 0.051 051 | 0.000 951 | 0.281 089 | 0.000 023 | 0.281 046 | -8.7 | 1.51 | 3 005 | 3 407 | -0.97 |
| ZC02-32 | 2 088 | 0.038 698 | 0.000 721 | 0.281 369 | 0.000 024 | 0.281 340 | -4.0 | 1.48 | 2 609 | 2 927 | -0.98 |
| ZC02-34 | 2 038 | 0.084 194 | 0.001 492 | 0.281 558 | 0.000 024 | 0.281 500 | 0.6 | 1.35 | 2 401 | 2 610 | -0.96 |
| ZC02-36 | 2 074 | 0.062 953 | 0.001 144 | 0.281 555 | 0.000 021 | 0.281 510 | 1.7 | 1.51 | 2 383 | 2 566 | -0.97 |
| ZC02-37 | 2 205 | 0.041 483 | 0.000 736 | 0.281 481 | 0.000 028 | 0.281 450 | 2.6 | 1.60 | 2 459 | 2 613 | -0.98 |
| ZC02-38 | 2 087 | 0.047 111 | 0.000 871 | 0.281 657 | 0.000 025 | 0.281 622 | 6.0 | 1.48 | 2 227 | 2 312 | -0.97 |
| ZC02-40 | 2 343 | 0.030 877 | 0.000 596 | 0.281 334 | 0.000 020 | 0.281 308 | 0.7 | 1.56 | 2 647 | 2 835 | -0.98 |
| ZC02-41 | 2 341 | 0.019 736 | 0.000 339 | 0.281 271 | 0.000 023 | 0.281 256 | -1.2 | 1.49 | 2 715 | 2 950 | -0.99 |
| ZC02-42 | 2 267 | 0.034 835 | 0.000 692 | 0.281 355 | 0.000 023 | 0.281 325 | -0.4 | 1.41 | 2 626 | 2 846 | -0.98 |
| ZC02-43 | 2 707 | 0.017 257 | 0.000 329 | 0.281 080 | 0.000 024 | 0.281 063 | 0.4 | 1.49 | 2 969 | 3 133 | -0.99 |
| ZC02-44 | 2 325 | 0.027 163 | 0.000 529 | 0.281 309 | 0.000 024 | 0.281 286 | -0.5 | 1.44 | 2 677 | 2 895 | -0.98 |
| ZC02-46 | 1 926 | 0.043 706 | 0.000 752 | 0.281 485 | 0.000 028 | 0.281 457 | -3.5 | 1.46 | 2 454 | 2 776 | -0.98 |
| ZC02-47 | 2 181 | 0.078 482 | 0.001 432 | 0.281 551 | 0.000 022 | 0.281 491 | 3.5 | 1.52 | 2 407 | 2 539 | -0.96 |
| ZC02-48 | 2 067 | 0.035 462 | 0.000 663 | 0.281 524 | 0.000 020 | 0.281 497 | 1.1 | 1.48 | 2 396 | 2 598 | -0.98 |
| ZC02-49 | 2 024 | 0.045 092 | 0.000 724 | 0.281 559 | 0.000 025 | 0.281 531 | 1.3 | 1.48 | 2 352 | 2 552 | -0.98 |
| ZC02-50 | 2 347 | 0.035 874 | 0.000 748 | 0.281 308 | 0.000 021 | 0.281 275 | -0.4 | 1.55 | 2 693 | 2 904 | -0.98 |
| ZC02-51 | 2 250 | 0.012 553 | 0.000 255 | 0.281 347 | 0.000 019 | 0.281 336 | -0.4 | 1.97 | 2 608 | 2 833 | -0.99 |
| ZC02-52 | 1 875 | 0.024 717 | 0.000 453 | 0.281 447 | 0.000 017 | 0.281 431 | -5.6 | 1.47 | 2 487 | 2 867 | -0.99 |
| ZC02-53 | 2 109 | 0.064 727 | 0.001 134 | 0.281 625 | 0.000 021 | 0.281 579 | 5.0 | 1.66 | 2 287 | 2 392 | -0.97 |
| ZC02-55 | 1 873 | 0.033 355 | 0.000 606 | 0.281 544 | 0.000 020 | 0.281 523 | -2.4 | 1.55 | 2 365 | 2 667 | -0.98 |
| ZC02-56 | 2 372 | 0.027 902 | 0.000 507 | 0.281 352 | 0.000 017 | 0.281 329 | 2.1 | 1.61 | 2 618 | 2 770 | -0.98 |
| ZC02-57 | 2 019 | 0.023 740 | 0.000 484 | 0.281 512 | 0.000 018 | 0.281 494 | -0.1 | 1.56 | 2 400 | 2 636 | -0.99 |
| ZC02-58 | 2 004 | 0.011 935 | 0.000 232 | 0.281 517 | 0.000 017 | 0.281 508 | 0.1 | 1.42 | 2 379 | 2 615 | -0.99 |
| ZC02-59 | 2 301 | 0.024 610 | 0.000 453 | 0.281 472 | 0.000 020 | 0.281 452 | 4.9 | 2.14 | 2 452 | 2 546 | -0.99 |
| ZC02-60 | 1 875 | 0.014 530 | 0.000 293 | 0.281 489 | 0.000 017 | 0.281 479 | -3.9 | 1.47 | 2 420 | 2 762 | -0.99 |
| ZC02-61 | 2 014 | 0.065 370 | 0.001 201 | 0.281 694 | 0.000 020 | 0.281 648 | 5.2 | 1.62 | 2 195 | 2 302 | -0.96 |
| ZC02-62 | 2 176 | 0.020 039 | 0.000 410 | 0.281 439 | 0.000 020 | 0.281 422 | 0.9 | 1.57 | 2 494 | 2 692 | -0.99 |
| ZC02-64 | 2 674 | 0.046 374 | 0.000 826 | 0.281 219 | 0.000 021 | 0.281 177 | 3.7 | 1.42 | 2 820 | 2 908 | -0.98 |
| ZC02-65 | 2 291 | 0.039 280 | 0.000 722 | 0.281 112 | 0.000 022 | 0.281 080 | -8.6 | 1.42 | 2 957 | 3 363 | -0.98 |
| ZC02-66 | 2 158 | 0.024 562 | 0.000 469 | 0.281 456 | 0.000 017 | 0.281 437 | 1.1 | 1.43 | 2 475 | 2 672 | -0.99 |
| ZC02-67 | 2 877 | 0.033 578 | 0.000 693 | 0.281 044 | 0.000 027 | 0.281 006 | 2.3 | 1.46 | 3 046 | 3 149 | -0.98 |
| ZC02-68 | 2 033 | 0.026 074 | 0.000 520 | 0.281 381 | 0.000 017 | 0.281 361 | -4.5 | 1.93 | 2 580 | 2 919 | -0.98 |
| ZC02-69 | 2 363 | 0.031 688 | 0.000 630 | 0.281 186 | 0.000 022 | 0.281 157 | -4.2 | 1.61 | 2 850 | 3 150 | -0.98 |
| ZC02-70 | 1 989 | 0.048 862 | 0.000 685 | 0.281 652 | 0.000 025 | 0.281 626 | 3.9 | 1.50 | 2 223 | 2 366 | -0.98 |