Supplemental Table S4

XRF counting data (cps) for core LK12-22 at 10-mm-resolution

| depth in the core (mm) | K | Ca | Ti | Mn | Fe |
| --- | --- | --- | --- | --- | --- |
| 10 | 2870 | 141464 | 7778 | 5104 | 250171 |
| 20 | 2812 | 132237 | 7215 | 4724 | 247193 |
| 30 | 2806 | 132178 | 7276 | 4102 | 237888 |
| 40 | 2517 | 131792 | 6873 | 3938 | 231693 |
| 50 | 2315 | 123830 | 6145 | 2963 | 210719 |
| 60 | 2144 | 126683 | 6185 | 2820 | 212682 |
| 70 | 2277 | 131247 | 6372 | 2702 | 209142 |
| 80 | 1926 | 113994 | 5351 | 2325 | 183402 |
| 90 | 2321 | 123055 | 6142 | 2763 | 205380 |
| 100 | 2410 | 128795 | 6507 | 2811 | 217746 |
| 110 | 2205 | 121884 | 6357 | 2385 | 214667 |
| 120 | 2789 | 123925 | 8613 | 2781 | 256557 |
| 130 | 2557 | 146886 | 7053 | 2512 | 226596 |
| 140 | 2497 | 135628 | 7393 | 2601 | 226469 |
| 150 | 2537 | 136567 | 7754 | 3003 | 238372 |
| 160 | 2571 | 142280 | 7592 | 3035 | 236154 |
| 170 | 2647 | 132830 | 7585 | 4062 | 239473 |
| 180 | 2702 | 143992 | 7556 | 4149 | 233285 |
| 190 | 2728 | 143100 | 7782 | 2669 | 233685 |
| 200 | 2900 | 125893 | 8458 | 2812 | 261556 |
| 210 | 3529 | 98620 | 10532 | 3446 | 332962 |
| 220 | 3548 | 93665 | 11324 | 4904 | 344856 |
| 230 | 2813 | 149853 | 8531 | 2287 | 268969 |
| 240 | 2867 | 149747 | 8316 | 3832 | 268439 |
| 250 | 2766 | 146014 | 7556 | 3527 | 250349 |
| 260 | 2791 | 151055 | 7777 | 2983 | 267293 |
| 270 | 2650 | 170910 | 7777 | 2820 | 257680 |
| 280 | 2683 | 176500 | 7618 | 2441 | 239733 |
| 290 | 2783 | 167338 | 7858 | 2593 | 248125 |
| 300 | 3367 | 143130 | 9528 | 4305 | 270864 |
| 310 | 3335 | 146139 | 9665 | 2622 | 264234 |
| 320 | 3423 | 159728 | 9473 | 2143 | 263423 |
| 330 | 3601 | 160203 | 9642 | 2226 | 255906 |
| 340 | 3699 | 156812 | 10338 | 3651 | 262432 |
| 350 | 2962 | 174488 | 8396 | 2697 | 286914 |
| 360 | 3037 | 163591 | 8500 | 3007 | 278062 |
| 370 | 2892 | 174990 | 8079 | 1930 | 280313 |
| 380 | 2773 | 177877 | 8020 | 1885 | 285034 |
| 390 | 2742 | 186144 | 7787 | 1453 | 284318 |
| 400 | 3012 | 177668 | 7816 | 2586 | 254774 |
| 410 | 3066 | 184748 | 8372 | 1562 | 248892 |
| 420 | 3088 | 193529 | 7775 | 1795 | 246040 |
| 430 | 3094 | 192951 | 7639 | 2575 | 245094 |
| 440 | 2977 | 191062 | 7947 | 2231 | 251220 |
| 450 | 3273 | 177507 | 8229 | 2726 | 254682 |
| 460 | 3326 | 181839 | 8053 | 3168 | 267429 |
| 470 | 3128 | 181982 | 8084 | 2062 | 266484 |
| 480 | 2925 | 181148 | 7710 | 1918 | 259485 |
| 490 | 3157 | 189708 | 7599 | 2273 | 264209 |
| 500 | 3104 | 192254 | 7672 | 2480 | 259159 |
| 510 | 2896 | 185190 | 7166 | 2985 | 236744 |
| 520 | 3120 | 197522 | 7248 | 3015 | 250190 |
| 530 | 3053 | 191985 | 7410 | 2874 | 259682 |
| 540 | 3123 | 196272 | 7341 | 2074 | 260017 |
| 550 | 4083 | 135087 | 10470 | 3904 | 328339 |
| 560 | 4206 | 116086 | 11454 | 4312 | 354921 |
| 570 | 4064 | 161099 | 9308 | 2410 | 295882 |
| 580 | 4704 | 104829 | 12038 | 2762 | 340117 |
| 590 | 3537 | 182890 | 8324 | 2192 | 263869 |
| 600 | 3458 | 194811 | 8310 | 2894 | 307546 |
| 610 | 3029 | 213726 | 7430 | 2003 | 295833 |
| 620 | 2794 | 204328 | 7471 | 2538 | 310019 |
| 630 | 2731 | 188703 | 7240 | 2364 | 319996 |
|  |  |  |  |  |  |
| 655 | 2541 | 183073 | 7516 | 2158 | 411776 |
| 665 | 2677 | 185106 | 8110 | 2209 | 395831 |
| 675 | 2524 | 174343 | 7611 | 2706 | 399776 |
| 685 | 2611 | 185218 | 7574 | 2344 | 368048 |
| 695 | 2637 | 185095 | 7888 | 2324 | 381242 |
| 705 | 2587 | 186764 | 8165 | 2342 | 379590 |
| 715 | 2709 | 187984 | 7682 | 1903 | 365901 |
| 725 | 2635 | 186979 | 7647 | 1899 | 389605 |
| 735 | 2620 | 187453 | 7343 | 2254 | 369851 |
| 745 | 2636 | 185975 | 7403 | 2159 | 365210 |
| 755 | 2509 | 190218 | 7320 | 1792 | 372403 |
| 765 | 2625 | 178331 | 7419 | 1517 | 403763 |
| 775 | 2514 | 180192 | 6986 | 1609 | 375186 |
| 785 | 2491 | 172267 | 7170 | 1846 | 429176 |
| 795 | 2313 | 165074 | 8110 | 1837 | 451757 |
| 805 | 2526 | 167806 | 7699 | 2014 | 480249 |
| 815 | 2497 | 186677 | 6952 | 2269 | 489715 |
| 825 | 2449 | 160310 | 7668 | 2690 | 502891 |
| 835 | 4717 | 102511 | 12049 | 7434 | 457983 |
| 845 | 4734 | 125895 | 11334 | 5987 | 382026 |
| 855 | 5046 | 94686 | 13062 | 4980 | 338503 |
| 865 | 5010 | 89898 | 13844 | 6107 | 391189 |
| 875 | 4968 | 116137 | 12709 | 6618 | 379703 |
| 885 | 4938 | 110663 | 13726 | 5505 | 349313 |
| 895 | 5067 | 149285 | 12427 | 5284 | 316681 |
| 905 | 4442 | 240804 | 8129 | 5968 | 253719 |
| 915 | 4621 | 217963 | 9110 | 5019 | 251408 |
| 925 | 4027 | 291181 | 5613 | 4730 | 189449 |
| 935 | 3315 | 329023 | 3220 | 4578 | 145925 |
| 945 | 3451 | 324790 | 3791 | 4502 | 152751 |
| 955 | 3585 | 326206 | 3584 | 3941 | 145413 |
| 965 | 3566 | 316375 | 3808 | 4092 | 156575 |
| 975 | 3656 | 268275 | 5188 | 4838 | 181456 |
| 985 | 4798 | 148456 | 11170 | 4522 | 265141 |
| 995 | 4972 | 145411 | 11678 | 4886 | 266857 |
| 1005 | 4708 | 164403 | 10475 | 4240 | 256078 |
| 1015 | 4852 | 106954 | 13391 | 3466 | 360060 |
| 1025 | 4830 | 81980 | 14885 | 4091 | 400394 |
| 1035 | 4485 | 139809 | 11526 | 2850 | 317009 |
| 1045 | 4017 | 183831 | 10661 | 1768 | 262635 |
| 1055 | 4038 | 179371 | 10660 | 1513 | 267129 |
| 1065 | 3971 | 187384 | 10009 | 1537 | 257175 |
| 1075 | 3915 | 182688 | 10808 | 1519 | 255963 |
| 1085 | 3873 | 177731 | 10557 | 1631 | 260035 |
| 1095 | 3907 | 184024 | 10743 | 1638 | 258413 |
| 1105 | 4055 | 174495 | 11021 | 1670 | 267531 |
| 1115 | 4063 | 172097 | 11172 | 1666 | 266687 |
| 1125 | 4485 | 161063 | 10890 | 1818 | 283562 |
| 1135 | 4523 | 154368 | 11585 | 1911 | 291555 |
| 1145 | 4257 | 144347 | 11484 | 2065 | 295133 |
| 1155 | 4434 | 140437 | 11372 | 2315 | 291008 |
| 1165 | 4590 | 136152 | 11449 | 2023 | 288457 |
| 1175 | 4552 | 126761 | 12452 | 2769 | 334837 |
| 1185 | 4268 | 105688 | 13853 | 4318 | 413524 |
| 1195 | 4588 | 86125 | 15098 | 5371 | 462026 |
| 1205 | 4612 | 133358 | 12590 | 3316 | 356108 |
| 1215 | 5204 | 95645 | 14386 | 5041 | 373360 |
| 1225 | 5563 | 66061 | 15950 | 6883 | 379154 |
| 1235 | 5500 | 69637 | 16090 | 5750 | 379910 |
| 1245 | 4604 | 115714 | 12748 | 7402 | 466184 |
| 1255 | 4617 | 120681 | 12630 | 2748 | 350097 |
| 1265 | 4990 | 107292 | 13483 | 2758 | 350294 |
| 1275 | 4942 | 101000 | 14419 | 3744 | 330044 |
| 1285 | 4759 | 133173 | 11830 | 5974 | 397678 |
| 1295 | 5159 | 66888 | 14912 | 11118 | 619362 |
| 1305 | 5230 | 110777 | 12382 | 6523 | 412617 |
| 1315 | 4914 | 157820 | 10508 | 2903 | 290543 |
| 1325 | 4810 | 94539 | 13118 | 7320 | 476998 |
| 1335 | 5366 | 92673 | 14672 | 4293 | 411847 |
| 1345 | 4736 | 150761 | 10889 | 3325 | 319561 |
| 1355 | 4185 | 203677 | 9205 | 2119 | 238802 |
| 1365 | 4361 | 222112 | 8469 | 1528 | 212133 |
| 1375 | 5182 | 171140 | 9974 | 1999 | 249061 |
| 1385 | 5171 | 183370 | 9888 | 2006 | 207890 |
| 1395 | 4717 | 206641 | 8109 | 2962 | 191406 |
| 1405 | 5468 | 169636 | 9975 | 3788 | 239506 |