Supplementary Material

**Supplementary Table 1.** Details of DST-tagged cod analyzed for sub-annual δ18O signatures. Dates are given in dd/mm/yyyy format, Sex: M = male, F = female and behavior type: C = coastal, F = frontal, NA = data not available, tagging and recapture area: W = west, SW = southwest, SE = southeast, NE = northeast, N = north off Iceland, \* = recapture area is offshore.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DST ID | Release date | Recapture date | Days at liberty | Days DST | Age at tagging [yr] | Age at recapture [yr] | Length at tagging [cm] | Length at recapture [cm] | Sex | Behavior type | Tagging area | Recapture area |
| 2C0526 | 15/04/2003 | 07/04/2004 | 358 | 358 | 10 | 11 | 98 | 104 | M | C | SE | SE |
| 1C0593 | 23/04/2003 | 06/03/2005 | 683 | 683 | 8 | 10 | 78 | 87 | F | F | NE | NE |
| 1C0595 | 23/04/2003 | 11/04/2005 | 719 | 719 | 7 | 9 | 73 | 90 | F | F | NE | NE |
| 1C1366 | 20/04/2004 | 08/04/2005 | 353 | 352 | 7 | 8 | 93 | 100 | F | F | SE | SW |
| 1C0605 | 24/04/2003 | 05/03/2005 | 681 | 681 | 7 | 9 | 78 | 90 | M | F | NE | N |
| 1C1270 | 19/04/2004 | 06/04/2005 | 352 | 352 | 6 | 7 | 91 | 98 | F | C | SE | SE |
| 3M1052 | 23/04/2002 | 27/10/2003 | 552 | 424 | 10 | 11 | 78 | 81 | F | F | NE | E\* |
| 2M1056 | 23/04/2002 | 30/03/2005 | 1072 | 423 | 8 | 11 | 93 | 109 | F | NA | NE | NE |
| 2M1060 | 23/04/2002 | 31/03/2004 | 708 | 424 | 7 | 9 | 83 | 96 | F | C | NE | NE |
| 2M1061 | 23/04/2002 | 08/03/2004 | 685 | 424 | 8 | 10 | 83 | 92 | F | C | NE | NE |
| 2M1074 | 24/04/2004 | 20/01/2004 | 636 | 423 | 5 | 7 | 73 | 81 | M | C | NE | NE |
| 1M1085 | 24/04/2004 | 06/03/2004 | 682 | 422 | 7 | 9 | 71 | 86 | F | C | NE | NE |
| 1M1087 | 24/04/2004 | 08/11/2003 | 563 | 422 | 7 | 8 | 65 | 76 | M | C | NE | N |
| 1C1315 | 14/04/2004 | 31/03/2005 | 351 | 350 | 7 | 8 | 86 | 88 | M | C | W | W |
| 1C1279 | 19/04/2004 | 03/04/2005 | 349 | 348 | 8 | 9 | 92 | 103 | M | C | SE | SE |
| 1C0431 | 12/04/2003 | 05/09/2004 | 512 | 512 | 6 | 7 | 96 | 98 | NA | C | SE | SE |
| 1C0444 | 12/04/2003 | 11/03/2005 | 699 | 699 | 5 | 7 | 93 | 106 | M | C | SE | SE |
| 1C0476 | 13/04/2003 | 12/06/2004 | 426 | 426 | 6 | 7 | 80 | 93 | M | C | SE | SE |
| 1C0493 | 14/04/2003 | 05/05/2004 | 387 | 387 | 9 | 10 | 94 | 94 | M | F | SE | SE |
| 2C0514 | 15/04/2003 | 02/09/2004 | 506 | 506 | 9 | 10 | 101 | 106 | F | C | SE | SE |
| 1C0418 | 12/04/2003 | 22/03/2004 | 345 | 345 | 9 | 10 | 90 | 92 | M | F | SE | SE |
| 1C1236 | 18/04/2004 | 29/03/2005 | 345 | 345 | 5 | 6 | 81 | 90 | F | C | SE | NE |
| 1C0426 | 12/04/2004 | 19/03/2004 | 342 | 342 | 7 | 8 | 92 | 93 | F | C | SE | SE |
| 1C1352 | 16/04/2004 | 18/03/2005 | 336 | 336 | 6 | 7 | 90 | 98 | NA | C | SW | SW |
| 1C1258 | 18/04/2004 | 16/05/2005 | 393 | 393 | 4 | 5 | 72 | 74 | M | C | SE | SE |
| 1C1272 | 19/04/2004 | 15/03/2005 | 330 | 330 | 6 | 7 | 95 | 99 | F | C | SE | SE |
| 1C0616 | 24/04/2003 | 15/03/2004 | 326 | 326 | 6 | 7 | 69 | 75 | F | F | NE | NE |
| 1C1396 | 22/04/2004 | 09/03/2005 | 321 | 321 | 6 | 7 | 102 | 110 | M | C | SE | SW |
| 1C1418 | 23/04/2004 | 08/03/2005 | 319 | 319 | 8 | 9 | 77 | 82 | M | F | SE | SE |
| 1C1284 | 19/04/2004 | 24/02/2005 | 311 | 309 | 12 | 13 | 94 | 100 | M | C | SE | SE |
| 1C1292 | 20/04/2004 | 25/02/2005 | 311 | 311 | 6 | 7 | 87 | 87 | M | C | SE | SE/E |
| 1C1214 | 16/04/2004 | 18/02/2005 | 308 | 308 | 4 | 5 | 78 | 94 | F | C | SW | SW/W |
| 1C1268 | 19/04/2004 | 21/02/2005 | 308 | 308 | 6 | 7 | 87 | 93 | M | C | SE | E |
| 1C1206 | 16/04/2004 | 13/02/2005 | 303 | 300 | 7 | 8 | 84 | 92 | M | C | SW | SE |
| 1C1373 | 21/04/2004 | 15/02/2005 | 300 | 299 | 6 | 7 | 82 | 98 | M | C | SE | E |
| 1C1409 | 22/04/2004 | 09/05/2005 | 382 | 382 | 9 | 10 | 91 | 91 | M | F | SE | E\* |
| 1C1424 | 23/04/2004 | 04/05/2005 | 376 | 376 | 10 | 11 | 94 | 97 | M | F | SE | SE |
| 1C0621 | 24/04/2003 | 08/09/2004 | 503 | 503 | 9 | 10 | 73 | 80 | F | F | NE | NE\* |

**Supplementary Table 2.** Analytical data: SIMS-measured δ18Ootolith values (not offset-corrected) with sample position (x-y stage coordinates in µm relative to the center of the holder/mount) and information if the data point was included in the data analysis based on the overlay of images with growth measurements and SIMS measurement spots (see 2.4.1).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | |  | | Sample position [µm] | | Included in data analysis |
| Otolith | ID | δ18O [‰] | ± ‰ | | x | | y |
| 2M1060 | 2M1060\_traverse-2\_@24 | -0.07 | 0.16 | | 1399 | | -3629 | yes |
| 2M1060 | 2M1060\_traverse-1\_@24 | 0.1 | 0.17 | | 1439 | | -3609 | yes |
| 2M1060 | 2M1060\_traverse-2\_@23 | 0.23 | 0.16 | | 1406 | | -3590 | yes |
| 2M1060 | 2M1060\_traverse-1\_@23 | 0.11 | 0.17 | | 1445 | | -3570 | yes |
| 2M1060 | 2M1060\_traverse-2\_@22 | 0.29 | 0.19 | | 1412 | | -3551 | yes |
| 2M1060 | 2M1060\_traverse-1\_@22 | 0.53 | 0.16 | | 1452 | | -3531 | yes |
| 2M1060 | 2M1060\_traverse-2\_@21 | 0.83 | 0.19 | | 1419 | | -3512 | yes |
| 2M1060 | 2M1060\_traverse-1\_@21 | 0.65 | 0.16 | | 1458 | | -3492 | yes |
| 2M1060 | 2M1060\_traverse-2\_@20 | 0.72 | 0.16 | | 1425 | | -3473 | yes |
| 2M1060 | 2M1060\_traverse-1\_@20 | 0.81 | 0.18 | | 1465 | | -3453 | yes |
| 2M1060 | 2M1060\_traverse-2\_@19 | 1.09 | 0.17 | | 1432 | | -3434 | yes |
| 2M1060 | 2M1060\_traverse-1\_@19 | 1.02 | 0.16 | | 1472 | | -3414 | yes |
| 2M1060 | 2M1060\_traverse-2\_@18 | 1.1 | 0.17 | | 1439 | | -3395 | yes |
| 2M1060 | 2M1060\_traverse-1\_@18 | 0.87 | 0.16 | | 1478 | | -3375 | yes |
| 2M1060 | 2M1060\_traverse-2\_@17 | 0.8 | 0.17 | | 1445 | | -3356 | yes |
| 2M1060 | 2M1060\_traverse-1\_@17 | 1.2 | 0.16 | | 1485 | | -3336 | yes |
| 2M1060 | 2M1060\_traverse-2\_@16 | 1 | 0.16 | | 1452 | | -3317 | yes |
| 2M1060 | 2M1060\_traverse-1\_@16 | 0.94 | 0.16 | | 1492 | | -3297 | yes |
| 2M1060 | 2M1060\_traverse-2\_@15 | 0.67 | 0.17 | | 1458 | | -3278 | yes |
| 2M1060 | 2M1060\_traverse-1\_@15 | 0.31 | 0.2 | | 1498 | | -3258 | yes |
| 2M1060 | 2M1060\_traverse-2\_@14 | 0.56 | 0.19 | | 1465 | | -3239 | yes |
| 2M1060 | 2M1060\_traverse-1\_@14 | 0.41 | 0.18 | | 1505 | | -3219 | yes |
| 2M1060 | 2M1060\_traverse-2\_@13 | 0.46 | 0.18 | | 1472 | | -3200 | yes |
| 2M1060 | 2M1060\_traverse-1\_@13 | 0.29 | 0.16 | | 1511 | | -3180 | yes |
| 2M1060 | 2M1060\_traverse-2\_@12 | 0.09 | 0.17 | | 1478 | | -3161 | yes |
| 2M1060 | 2M1060\_traverse-1\_@12 | 0.31 | 0.18 | | 1518 | | -3141 | yes |
| 2M1060 | 2M1060\_traverse-2\_@11 | 0.09 | 0.17 | | 1485 | | -3122 | yes |
| 2M1060 | 2M1060\_traverse-1\_@11 | -0.11 | 0.18 | | 1525 | | -3102 | yes |
| 2M1060 | 2M1060\_traverse-2\_@10 | 0.27 | 0.16 | | 1492 | | -3083 | yes |
| 2M1060 | 2M1060\_traverse-1\_@10 | 0.1 | 0.17 | | 1531 | | -3063 | no |
| 2M1060 | 2M1060\_traverse-2\_@09 | 0.69 | 0.17 | | 1498 | | -3044 | no |
| 2M1060 | 2M1060\_traverse-1\_@09 | 0.36 | 0.18 | | 1538 | | -3024 | no |
| 2M1060 | 2M1060\_traverse-2\_@08 | 0.6 | 0.16 | | 1505 | | -3005 | no |
| 2M1060 | 2M1060\_traverse-1\_@08 | 0.58 | 0.19 | | 1545 | | -2985 | no |
| 2M1060 | 2M1060\_traverse-2\_@07 | 0.58 | 0.17 | | 1511 | | -2966 | no |
| 2M1060 | 2M1060\_traverse-1\_@07 | 0.69 | 0.17 | | 1551 | | -2946 | no |
| 2M1060 | 2M1060\_traverse-2\_@06 | 0.58 | 0.17 | | 1518 | | -2927 | no |
| 2M1060 | 2M1060\_traverse-1\_@06 | 0.51 | 0.19 | | 1558 | | -2907 | no |
| 2M1060 | 2M1060\_traverse-2\_@05 | 0.7 | 0.17 | | 1525 | | -2888 | no |
| 2M1060 | 2M1060\_traverse-1\_@05 | 0.03 | 0.16 | | 1565 | | -2868 | no |
| 2M1060 | 2M1060\_traverse-2\_@04 | 0.72 | 0.19 | | 1531 | | -2849 | no |
| 2M1060 | 2M1060\_traverse-1\_@04 | 0.35 | 0.17 | | 1571 | | -2829 | no |
| 2M1060 | 2M1060\_traverse-2\_@03 | 0.4 | 0.17 | | 1538 | | -2810 | no |
| 2M1060 | 2M1060\_traverse-1\_@03 | 0.33 | 0.17 | | 1578 | | -2790 | no |
| 2M1060 | 2M1060\_traverse-2\_@02 | -0.1 | 0.17 | | 1545 | | -2771 | no |
| 2M1060 | 2M1060\_traverse-1\_@02 | -0.23 | 0.17 | | 1585 | | -2751 | no |
| 2M1060 | 2M1060\_traverse-2\_@1 | -0.1 | 0.18 | | 1552 | | -2732 | no |
| 2M1060 | 2M1060\_traverse-1\_@1 | -0.5 | 0.19 | | 1592 | | -2712 | no |
| 1C0605 | 1C0605\_traverse-2\_@14 | 1.03 | 0.19 | | -1113 | | -2728 | yes |
| 1C0605 | 1C0605\_traverse-1\_@15 | 0.84 | 0.16 | | -1093 | | -2768 | yes |
| 1C0605 | 1C0605\_traverse-2\_@13 | 0.94 | 0.16 | | -1078 | | -2712 | yes |
| 1C0605 | 1C0605\_traverse-1\_@14 | 0.88 | 0.18 | | -1058 | | -2752 | yes |
| 1C0605 | 1C0605\_traverse-2\_@12 | 0.69 | 0.18 | | -1043 | | -2696 | yes |
| 1C0605 | 1C0605\_traverse-1\_@13 | 1.34 | 0.18 | | -1023 | | -2736 | yes |
| 1C0605 | 1C0605\_traverse-2\_@11 | 0.82 | 0.21 | | -1008 | | -2679 | yes |
| 1C0605 | 1C0605\_traverse-1\_@12 | 1.05 | 0.2 | | -988 | | -2719 | yes |
| 1C0605 | 1C0605\_traverse-2\_@10 | 0.67 | 0.16 | | -972 | | -2662 | yes |
| 1C0605 | 1C0605\_traverse-1\_@11 | 0.97 | 0.18 | | -952 | | -2702 | yes |
| 1C0605 | 1C0605\_traverse-2\_@09 | 0.36 | 0.16 | | -936 | | -2645 | yes |
| 1C0605 | 1C0605\_traverse-1\_@10 | 1.19 | 0.17 | | -916 | | -2685 | yes |
| 1C0605 | 1C0605\_traverse-2\_@08 | 0.88 | 0.16 | | -900 | | -2628 | yes |
| 1C0605 | 1C0605\_traverse-1\_@09 | 0.72 | 0.16 | | -880 | | -2668 | yes |
| 1C0605 | 1C0605\_traverse-2\_@07 | 0.43 | 0.17 | | -864 | | -2611 | yes |
| 1C0605 | 1C0605\_traverse-1\_@08 | 0.34 | 0.16 | | -844 | | -2651 | yes |
| 1C0605 | 1C0605\_traverse-2\_@06 | 0.7 | 0.16 | | -828 | | -2594 | yes |
| 1C0605 | 1C0605\_traverse-1\_@07 | 0.73 | 0.16 | | -808 | | -2634 | yes |
| 1C0605 | 1C0605\_traverse-2\_@05 | 1.01 | 0.17 | | -792 | | -2577 | yes |
| 1C0605 | 1C0605\_traverse-1\_@06 | 0.76 | 0.16 | | -774 | | -2614 | yes |
| 1C0605 | 1C0605\_traverse-2\_@04 | 0.58 | 0.17 | | -756 | | -2560 | yes |
| 1C0605 | 1C0605\_traverse-1\_@05 | 0.91 | 0.18 | | -725 | | -2622 | yes |
| 1C0605 | 1C0605\_traverse-2\_@03 | 1.23 | 0.16 | | -720 | | -2543 | yes |
| 1C0605 | 1C0605\_traverse-1\_@04 | 1.21 | 0.18 | | -688 | | -2600 | yes |
| 1C0605 | 1C0605\_traverse-2\_@02 | 1.04 | 0.17 | | -684 | | -2526 | yes |
| 1C0605 | 1C0605\_traverse-1\_@03 | 0.5 | 0.18 | | -655 | | -2578 | yes |
| 1C0605 | 1C0605\_traverse-2\_@1 | 0.38 | 0.18 | | -648 | | -2509 | yes |
| 1C0605 | 1C0605\_traverse-1\_@02 | 0.29 | 0.16 | | -628 | | -2549 | yes |
| 1C0605 | 1C0605\_traverse-1\_@1 | -0.6 | 0.16 | | -592 | | -2532 | no |
| 3M1052 | 3M1052\_traverse-2\_@8 | 1.31 | 0.19 | | 2257 | | 468 | yes |
| 3M1052 | 3M1052\_traverse-1\_@8 | 0.24 | 0.18 | | 2256 | | 427 | yes |
| 3M1052 | 3M1052\_traverse-2\_@7 | 0.18 | 0.16 | | 2232 | | 434 | yes |
| 3M1052 | 3M1052\_traverse-1\_@7 | 0.8 | 0.16 | | 2234 | | 394 | yes |
| 3M1052 | 3M1052\_traverse-2\_@6 | 1.3 | 0.18 | | 2209 | | 402 | yes |
| 3M1052 | 3M1052\_traverse-1\_@6 | 0.71 | 0.16 | | 2212 | | 360 | yes |
| 3M1052 | 3M1052\_traverse-2\_@5 | 0.91 | 0.19 | | 2185 | | 369 | yes |
| 3M1052 | 3M1052\_traverse-1\_@5 | 0.67 | 0.17 | | 2190 | | 326 | yes |
| 3M1052 | 3M1052\_traverse-2\_@4 | 0.95 | 0.17 | | 2161 | | 336 | yes |
| 3M1052 | 3M1052\_traverse-1\_@4 | 1.05 | 0.17 | | 2168 | | 293 | yes |
| 3M1052 | 3M1052\_traverse-2\_@3 | 1.17 | 0.16 | | 2138 | | 304 | yes |
| 3M1052 | 3M1052\_traverse-1\_@3 | 0.8 | 0.17 | | 2167 | | 237 | yes |
| 3M1052 | 3M1052\_traverse-2\_@2 | 1.03 | 0.17 | | 2115 | | 272 | yes |
| 3M1052 | 3M1052\_traverse-1\_@2 | 1.13 | 0.19 | | 2132 | | 221 | no |
| 3M1052 | 3M1052\_traverse-2\_@1 | 1.29 | 0.18 | | 2092 | | 240 | no |
| 3M1052 | 3M1052\_traverse-1\_@1 | 1.52 | 0.16 | | 2102 | | 193 | no |
| 2M1061 | 2M1061\_traverse-1\_@15 | 1.46 | 0.16 | | 4095 | | -960 | yes |
| 2M1061 | 2M1061\_traverse-2\_@14 | 1.02 | 0.17 | | 4115 | | -937 | yes |
| 2M1061 | 2M1061\_traverse-1\_@14 | 0.95 | 0.16 | | 4075 | | -927 | yes |
| 2M1061 | 2M1061\_traverse-2\_@13 | 1.11 | 0.18 | | 4095 | | -904 | yes |
| 2M1061 | 2M1061\_traverse-1\_@13 | 1.67 | 0.16 | | 4017 | | -905 | yes |
| 2M1061 | 2M1061\_traverse-2\_@12 | 1.33 | 0.17 | | 4075 | | -871 | yes |
| 2M1061 | 2M1061\_traverse-1\_@12 | 1.64 | 0.16 | | 4035 | | -861 | yes |
| 2M1061 | 2M1061\_traverse-2\_@11 | 0.65 | 0.17 | | 4054 | | -838 | yes |
| 2M1061 | 2M1061\_traverse-1\_@11 | 1.45 | 0.18 | | 4014 | | -828 | yes |
| 2M1061 | 2M1061\_traverse-2\_@10 | 1.13 | 0.18 | | 4034 | | -805 | yes |
| 2M1061 | 2M1061\_traverse-1\_@10 | 1.16 | 0.2 | | 3994 | | -795 | yes |
| 2M1061 | 2M1061\_traverse-2\_@09 | 1.31 | 0.16 | | 4014 | | -771 | yes |
| 2M1061 | 2M1061\_traverse-1\_@09 | 1.26 | 0.16 | | 3974 | | -761 | yes |
| 2M1061 | 2M1061\_traverse-2\_@08 | 1.26 | 0.19 | | 4012 | | -733 | yes |
| 2M1061 | 2M1061\_traverse-1\_@08 | 0.91 | 0.19 | | 3954 | | -727 | yes |
| 2M1061 | 2M1061\_traverse-2\_@07 | 1.49 | 0.17 | | 3974 | | -703 | yes |
| 2M1061 | 2M1061\_traverse-1\_@07 | 1.56 | 0.16 | | 3934 | | -693 | yes |
| 2M1061 | 2M1061\_traverse-2\_@06 | 1.03 | 0.17 | | 3954 | | -669 | yes |
| 2M1061 | 2M1061\_traverse-1\_@06 | 1.38 | 0.17 | | 3914 | | -659 | no |
| 2M1061 | 2M1061\_traverse-2\_@05 | 1.08 | 0.17 | | 3949 | | -634 | no |
| 2M1061 | 2M1061\_traverse-1\_@05 | 1.47 | 0.17 | | 3858 | | -625 | no |
| 2M1061 | 2M1061\_traverse-2\_@04 | 1.56 | 0.16 | | 3932 | | -591 | no |
| 2M1061 | 2M1061\_traverse-1\_@04 | 1.48 | 0.16 | | 3874 | | -591 | no |
| 2M1061 | 2M1061\_traverse-2\_@03 | 1.17 | 0.17 | | 3915 | | -562 | no |
| 2M1061 | 2M1061\_traverse-1\_@03 | 0.75 | 0.16 | | 3853 | | -561 | no |
| 2M1061 | 2M1061\_traverse-2\_@02 | 1.05 | 0.16 | | 3905 | | -530 | no |
| 2M1061 | 2M1061\_traverse-1\_@02 | 0.77 | 0.18 | | 3834 | | -519 | no |
| 2M1061 | 2M1061\_traverse-2\_@1 | 1.01 | 0.16 | | 3854 | | -499 | no |
| 2M1061 | 2M1061\_traverse-1\_@1 | 0.07 | 0.17 | | 3814 | | -489 | no |
| 1C0593 | 1C0593\_traverse-2\_@15 | 1.32 | 0.16 | | -208 | | 2696 | yes |
| 1C0593 | 1C0593\_traverse-2\_@14 | 0.39 | 0.17 | | -191 | | 2660 | yes |
| 1C0593 | 1C0593\_traverse-1\_@15 | 0.59 | 0.16 | | -168 | | 2676 | yes |
| 1C0593 | 1C0593\_traverse-2\_@13 | 0.43 | 0.16 | | -174 | | 2623 | yes |
| 1C0593 | 1C0593\_traverse-1\_@14 | 0.58 | 0.17 | | -151 | | 2638 | yes |
| 1C0593 | 1C0593\_traverse-2\_@12 | 0.64 | 0.17 | | -157 | | 2586 | yes |
| 1C0593 | 1C0593\_traverse-1\_@13 | 0.94 | 0.18 | | -134 | | 2602 | yes |
| 1C0593 | 1C0593\_traverse-2\_@11 | 0.84 | 0.18 | | -140 | | 2550 | yes |
| 1C0593 | 1C0593\_traverse-1\_@12 | 0.76 | 0.16 | | -117 | | 2566 | yes |
| 1C0593 | 1C0593\_traverse-2\_@10 | 1.45 | 0.18 | | -123 | | 2514 | yes |
| 1C0593 | 1C0593\_traverse-1\_@11 | 1.3 | 0.18 | | -100 | | 2529 | yes |
| 1C0593 | 1C0593\_traverse-2\_@09 | 1.25 | 0.17 | | -106 | | 2477 | yes |
| 1C0593 | 1C0593\_traverse-1\_@10 | 1.4 | 0.16 | | -83 | | 2493 | yes |
| 1C0593 | 1C0593\_traverse-2\_@08 | 1.49 | 0.18 | | -89 | | 2440 | yes |
| 1C0593 | 1C0593\_traverse-1\_@09 | 1.25 | 0.16 | | -66 | | 2456 | yes |
| 1C0593 | 1C0593\_traverse-2\_@07 | 1.62 | 0.16 | | -71 | | 2404 | yes |
| 1C0593 | 1C0593\_traverse-1\_@08 | 1.6 | 0.17 | | -48 | | 2420 | yes |
| 1C0593 | 1C0593\_traverse-2\_@06 | 1.65 | 0.17 | | -53 | | 2367 | yes |
| 1C0593 | 1C0593\_traverse-1\_@07 | 1.56 | 0.2 | | -30 | | 2384 | yes |
| 1C0593 | 1C0593\_traverse-2\_@05 | 1.77 | 0.16 | | -35 | | 2331 | yes |
| 1C0593 | 1C0593\_traverse-1\_@06 | 1.81 | 0.18 | | -12 | | 2347 | yes |
| 1C0593 | 1C0593\_traverse-2\_@04 | 1.41 | 0.17 | | -17 | | 2294 | yes |
| 1C0593 | 1C0593\_traverse-1\_@05 | 1.52 | 0.18 | | 5 | | 2311 | yes |
| 1C0593 | 1C0593\_traverse-2\_@03 | 1.33 | 0.17 | | 0 | | 2258 | yes |
| 1C0593 | 1C0593\_traverse-1\_@04 | 1.13 | 0.16 | | 23 | | 2274 | yes |
| 1C0593 | 1C0593\_traverse-2\_@02 | 1.59 | 0.18 | | 18 | | 2222 | yes |
| 1C0593 | 1C0593\_traverse-1\_@03 | 1.82 | 0.17 | | 40 | | 2238 | yes |
| 1C0593 | 1C0593\_traverse-2\_@1 | 1.8 | 0.19 | | 36 | | 2186 | yes |
| 1C0593 | 1C0593\_traverse-1\_@02 | 1.57 | 0.18 | | 58 | | 2202 | yes |
| 1C0593 | 1C0593\_traverse-1\_@1 | 1.54 | 0.19 | | 76 | | 2166 | yes |
| 1C0595 | 1C0595\_traverse-2\_@17 | 0.89 | 0.18 | | -3705 | | 257 | yes |
| 1C0595 | 1C0595\_traverse-1\_@17 | 1.16 | 0.16 | | -3665 | | 237 | yes |
| 1C0595 | 1C0595\_traverse-2\_@16 | 1.33 | 0.16 | | -3698 | | 217 | yes |
| 1C0595 | 1C0595\_traverse-1\_@16 | 1.01 | 0.19 | | -3658 | | 197 | yes |
| 1C0595 | 1C0595\_traverse-2\_@15 | 0.97 | 0.17 | | -3691 | | 177 | yes |
| 1C0595 | 1C0595\_traverse-1\_@15 | 0.67 | 0.19 | | -3651 | | 157 | yes |
| 1C0595 | 1C0595\_traverse-2\_@14 | 0.72 | 0.18 | | -3684 | | 137 | yes |
| 1C0595 | 1C0595\_traverse-1\_@14 | 0.74 | 0.19 | | -3644 | | 117 | yes |
| 1C0595 | 1C0595\_traverse-2\_@13 | 0.46 | 0.17 | | -3677 | | 97 | yes |
| 1C0595 | 1C0595\_traverse-1\_@13 | 0.71 | 0.16 | | -3637 | | 77 | yes |
| 1C0595 | 1C0595\_traverse-2\_@12 | 0.82 | 0.19 | | -3670 | | 57 | yes |
| 1C0595 | 1C0595\_traverse-1\_@12 | 0.77 | 0.18 | | -3601 | | 61 | yes |
| 1C0595 | 1C0595\_traverse-2\_@11 | 1.59 | 0.17 | | -3663 | | 17 | yes |
| 1C0595 | 1C0595\_traverse-1\_@11 | 1.49 | 0.16 | | -3623 | | -3 | yes |
| 1C0595 | 1C0595\_traverse-2\_@10 | 1.65 | 0.19 | | -3656 | | -23 | yes |
| 1C0595 | 1C0595\_traverse-1\_@10 | 1.01 | 0.17 | | -3616 | | -43 | yes |
| 1C0595 | 1C0595\_traverse-2\_@09 | 1.56 | 0.17 | | -3649 | | -63 | yes |
| 1C0595 | 1C0595\_traverse-1\_@09 | 0.79 | 0.18 | | -3609 | | -83 | yes |
| 1C0595 | 1C0595\_traverse-2\_@08 | 1.06 | 0.18 | | -3642 | | -103 | yes |
| 1C0595 | 1C0595\_traverse-1\_@08 | 0.92 | 0.18 | | -3602 | | -123 | yes |
| 1C0595 | 1C0595\_traverse-2\_@07 | 1.06 | 0.19 | | -3635 | | -143 | yes |
| 1C0595 | 1C0595\_traverse-1\_@07 | 1.11 | 0.18 | | -3595 | | -163 | yes |
| 1C0595 | 1C0595\_traverse-2\_@06 | 0.97 | 0.17 | | -3628 | | -183 | yes |
| 1C0595 | 1C0595\_traverse-1\_@06 | 0.92 | 0.17 | | -3588 | | -203 | yes |
| 1C0595 | 1C0595\_traverse-2\_@05 | 1 | 0.16 | | -3621 | | -223 | yes |
| 1C0595 | 1C0595\_traverse-1\_@05 | 0.65 | 0.17 | | -3581 | | -243 | yes |
| 1C0595 | 1C0595\_traverse-2\_@04 | 1.14 | 0.17 | | -3614 | | -263 | yes |
| 1C0595 | 1C0595\_traverse-1\_@04 | 0.66 | 0.17 | | -3574 | | -283 | yes |
| 1C0595 | 1C0595\_traverse-2\_@03 | 0.64 | 0.17 | | -3607 | | -303 | yes |
| 1C0595 | 1C0595\_traverse-1\_@03 | 0.78 | 0.16 | | -3567 | | -323 | yes |
| 1C0595 | 1C0595\_traverse-2\_@02 | 1.09 | 0.17 | | -3600 | | -342 | yes |
| 1C0595 | 1C0595\_traverse-1\_@02 | 1.6 | 0.2 | | -3560 | | -362 | yes |
| 1C0595 | 1C0595\_traverse-2\_@1 | 1.87 | 0.17 | | -3593 | | -381 | yes |
| 1C0595 | 1C0595\_traverse-1\_@1 | 1.31 | 0.16 | | -3553 | | -401 | yes |
| 2M1056 | 2M1056\_traverse-2\_@33 | 0.87 | 0.16 | | -3350 | | -2079 | yes |
| 2M1056 | 2M1056\_traverse-1\_@33 | 1.32 | 0.17 | | -3408 | | -2054 | yes |
| 2M1056 | 2M1056\_traverse-2\_@32 | 1.42 | 0.17 | | -3334 | | -2034 | yes |
| 2M1056 | 2M1056\_traverse-1\_@32 | 1.74 | 0.18 | | -3412 | | -2014 | yes |
| 2M1056 | 2M1056\_traverse-2\_@31 | 1.88 | 0.18 | | -3366 | | -1994 | yes |
| 2M1056 | 2M1056\_traverse-1\_@31 | 1.85 | 0.16 | | -3416 | | -1974 | yes |
| 2M1056 | 2M1056\_traverse-2\_@30 | 1.34 | 0.16 | | -3370 | | -1954 | yes |
| 2M1056 | 2M1056\_traverse-1\_@30 | 1.52 | 0.17 | | -3420 | | -1934 | yes |
| 2M1056 | 2M1056\_traverse-2\_@29 | 1.4 | 0.16 | | -3374 | | -1914 | yes |
| 2M1056 | 2M1056\_traverse-1\_@29 | 1.28 | 0.15 | | -3424 | | -1894 | yes |
| 2M1056 | 2M1056\_traverse-2\_@28 | 1.38 | 0.15 | | -3378 | | -1874 | yes |
| 2M1056 | 2M1056\_traverse-1\_@28 | 1.7 | 0.16 | | -3428 | | -1854 | yes |
| 2M1056 | 2M1056\_traverse-2\_@27 | 1.54 | 0.15 | | -3382 | | -1834 | yes |
| 2M1056 | 2M1056\_traverse-1\_@27 | 1.32 | 0.16 | | -3432 | | -1814 | yes |
| 2M1056 | 2M1056\_traverse-2\_@26 | 1.3 | 0.19 | | -3386 | | -1794 | yes |
| 2M1056 | 2M1056\_traverse-1\_@26 | 1.25 | 0.16 | | -3436 | | -1774 | yes |
| 2M1056 | 2M1056\_traverse-2\_@25 | 1.13 | 0.17 | | -3390 | | -1754 | yes |
| 2M1056 | 2M1056\_traverse-1\_@25 | 1.28 | 0.17 | | -3440 | | -1734 | yes |
| 2M1056 | 2M1056\_traverse-2\_@24 | 1.5 | 0.18 | | -3383 | | -1723 | no |
| 2M1056 | 2M1056\_traverse-1\_@24 | 1.16 | 0.17 | | -3444 | | -1690 | no |
| 2M1056 | 2M1056\_traverse-2\_@23 | 1.4 | 0.16 | | -3371 | | -1678 | no |
| 2M1056 | 2M1056\_traverse-1\_@23 | 1.54 | 0.16 | | -3448 | | -1654 | no |
| 2M1056 | 2M1056\_traverse-2\_@22 | 1.62 | 0.18 | | -3402 | | -1634 | no |
| 2M1056 | 2M1056\_traverse-1\_@22 | 1.1 | 0.16 | | -3439 | | -1603 | no |
| 2M1056 | 2M1056\_traverse-2\_@21 | 1.67 | 0.15 | | -3397 | | -1587 | no |
| 2M1056 | 2M1056\_traverse-1\_@21 | 1.46 | 0.18 | | -3455 | | -1574 | no |
| 2M1056 | 2M1056\_traverse-2\_@20 | 1.6 | 0.16 | | -3408 | | -1554 | no |
| 2M1056 | 2M1056\_traverse-1\_@20 | 1.72 | 0.18 | | -3458 | | -1534 | no |
| 2M1056 | 2M1056\_traverse-2\_@19 | 1.82 | 0.17 | | -3411 | | -1514 | no |
| 2M1056 | 2M1056\_traverse-1\_@19 | 0.97 | 0.19 | | -3461 | | -1494 | no |
| 2M1056 | 2M1056\_traverse-2\_@18 | 1.37 | 0.16 | | -3414 | | -1474 | no |
| 2M1056 | 2M1056\_traverse-1\_@18 | 1.3 | 0.16 | | -3476 | | -1455 | no |
| 2M1056 | 2M1056\_traverse-2\_@17 | 1.03 | 0.16 | | -3417 | | -1434 | no |
| 2M1056 | 2M1056\_traverse-1\_@17 | 1.5 | 0.17 | | -3467 | | -1414 | no |
| 2M1056 | 2M1056\_traverse-2\_@16 | 1.55 | 0.15 | | -3394 | | -1390 | no |
| 2M1056 | 2M1056\_traverse-1\_@16 | 1.72 | 0.16 | | -3470 | | -1374 | no |
| 2M1056 | 2M1056\_traverse-2\_@15 | 1.88 | 0.17 | | -3423 | | -1354 | no |
| 2M1056 | 2M1056\_traverse-1\_@15 | 1.45 | 0.17 | | -3491 | | -1338 | no |
| 2M1056 | 2M1056\_traverse-2\_@14 | 1.73 | 0.2 | | -3426 | | -1314 | no |
| 2M1056 | 2M1056\_traverse-1\_@14 | 1.18 | 0.18 | | -3476 | | -1294 | no |
| 2M1056 | 2M1056\_traverse-2\_@13 | 1.34 | 0.16 | | -3429 | | -1274 | no |
| 2M1056 | 2M1056\_traverse-1\_@13 | 1.19 | 0.17 | | -3479 | | -1254 | no |
| 2M1056 | 2M1056\_traverse-2\_@12 | 1.33 | 0.16 | | -3432 | | -1234 | no |
| 2M1056 | 2M1056\_traverse-1\_@12 | 0.44 | 0.18 | | -3482 | | -1214 | no |
| 2M1056 | 2M1056\_traverse-2\_@11 | 1.03 | 0.17 | | -3435 | | -1194 | no |
| 2M1056 | 2M1056\_traverse-1\_@11 | 1.03 | 0.15 | | -3485 | | -1174 | no |
| 2M1056 | 2M1056\_traverse-2\_@10 | 1.51 | 0.17 | | -3438 | | -1154 | no |
| 2M1056 | 2M1056\_traverse-1\_@10 | 1.4 | 0.16 | | -3488 | | -1134 | no |
| 2M1056 | 2M1056\_traverse-2\_@09 | 1.2 | 0.16 | | -3441 | | -1114 | no |
| 2M1056 | 2M1056\_traverse-1\_@09 | 0.91 | 0.2 | | -3491 | | -1094 | no |
| 2M1056 | 2M1056\_traverse-2\_@08 | 1.37 | 0.16 | | -3444 | | -1074 | no |
| 2M1056 | 2M1056\_traverse-1\_@08 | 1.28 | 0.15 | | -3494 | | -1054 | no |
| 2M1056 | 2M1056\_traverse-2\_@07 | 1.01 | 0.2 | | -3447 | | -1034 | no |
| 2M1056 | 2M1056\_traverse-1\_@07 | 0.85 | 0.18 | | -3497 | | -1014 | no |
| 2M1056 | 2M1056\_traverse-2\_@06 | 1.56 | 0.15 | | -3450 | | -994 | no |
| 2M1056 | 2M1056\_traverse-1\_@06 | 1.4 | 0.18 | | -3500 | | -974 | no |
| 2M1056 | 2M1056\_traverse-2\_@05 | 1.16 | 0.16 | | -3453 | | -954 | no |
| 2M1056 | 2M1056\_traverse-1\_@05 | 1.29 | 0.17 | | -3503 | | -934 | no |
| 2M1056 | 2M1056\_traverse-2\_@04 | 1.3 | 0.18 | | -3456 | | -914 | no |
| 2M1056 | 2M1056\_traverse-1\_@04 | 0.83 | 0.15 | | -3506 | | -894 | no |
| 2M1056 | 2M1056\_traverse-2\_@03 | 0.48 | 0.17 | | -3459 | | -874 | no |
| 2M1056 | 2M1056\_traverse-1\_@03 | 0.83 | 0.17 | | -3509 | | -854 | no |
| 2M1056 | 2M1056\_traverse-2\_@02 | 0.8 | 0.17 | | -3462 | | -834 | no |
| 2M1056 | 2M1056\_traverse-1\_@02 | 1.94 | 0.17 | | -3512 | | -814 | no |
| 2M1056 | 2M1056\_traverse-2\_@1 | 1.42 | 0.18 | | -3465 | | -794 | no |
| 2M1056 | 2M1056\_traverse-1\_@1 | 1.57 | 0.17 | | -3515 | | -774 | no |
| 2M1074 | 2M1074\_traverse-2\_@24 | 0.84 | 0.17 | | 19 | | -2146 | yes |
| 2M1074 | 2M1074\_traverse-1\_@23 | 0.95 | 0.18 | | 39 | | -2096 | yes |
| 2M1074 | 2M1074\_traverse-2\_@23 | 0.64 | 0.18 | | -15 | | -2124 | yes |
| 2M1074 | 2M1074\_traverse-1\_@22 | -0.38 | 0.17 | | 5 | | -2074 | yes |
| 2M1074 | 2M1074\_traverse-2\_@22 | -0.38 | 0.17 | | -49 | | -2102 | yes |
| 2M1074 | 2M1074\_traverse-1\_@21 | -0.64 | 0.17 | | -29 | | -2052 | yes |
| 2M1074 | 2M1074\_traverse-2\_@21 | -0.83 | 0.16 | | -82 | | -2080 | yes |
| 2M1074 | 2M1074\_traverse-1\_@20 | -1.01 | 0.18 | | -62 | | -2030 | yes |
| 2M1074 | 2M1074\_traverse-2\_@20 | -0.88 | 0.17 | | -115 | | -2058 | yes |
| 2M1074 | 2M1074\_traverse-1\_@19 | -0.75 | 0.18 | | -95 | | -2008 | yes |
| 2M1074 | 2M1074\_traverse-2\_@19 | -0.55 | 0.17 | | -148 | | -2036 | yes |
| 2M1074 | 2M1074\_traverse-1\_@18 | 0.5 | 0.18 | | -128 | | -1986 | yes |
| 2M1074 | 2M1074\_traverse-2\_@18 | 0.52 | 0.18 | | -181 | | -2014 | yes |
| 2M1074 | 2M1074\_traverse-1\_@17 | 0.82 | 0.17 | | -161 | | -1964 | yes |
| 2M1074 | 2M1074\_traverse-2\_@17 | 1.2 | 0.17 | | -214 | | -1992 | yes |
| 2M1074 | 2M1074\_traverse-1\_@16 | 1.21 | 0.17 | | -194 | | -1942 | yes |
| 2M1074 | 2M1074\_traverse-2\_@16 | 1.27 | 0.17 | | -247 | | -1970 | yes |
| 2M1074 | 2M1074\_traverse-1\_@15 | 0.94 | 0.19 | | -227 | | -1920 | yes |
| 2M1074 | 2M1074\_traverse-2\_@15 | 0.77 | 0.18 | | -280 | | -1948 | yes |
| 2M1074 | 2M1074\_traverse-1\_@14 | 0.53 | 0.16 | | -260 | | -1898 | yes |
| 2M1074 | 2M1074\_traverse-2\_@14 | 0.47 | 0.16 | | -313 | | -1926 | yes |
| 2M1074 | 2M1074\_traverse-1\_@13 | 1.7 | 0.17 | | -293 | | -1876 | yes |
| 2M1074 | 2M1074\_traverse-2\_@13 | 1.09 | 0.16 | | -346 | | -1904 | yes |
| 2M1074 | 2M1074\_traverse-1\_@12 | 1.15 | 0.19 | | -326 | | -1854 | yes |
| 2M1074 | 2M1074\_traverse-2\_@12 | 0.63 | 0.16 | | -379 | | -1882 | yes |
| 2M1074 | 2M1074\_traverse-1\_@11 | 1.39 | 0.16 | | -359 | | -1832 | yes |
| 2M1074 | 2M1074\_traverse-2\_@11 | 1.25 | 0.17 | | -412 | | -1860 | yes |
| 2M1074 | 2M1074\_traverse-1\_@10 | 0.79 | 0.15 | | -392 | | -1810 | yes |
| 2M1074 | 2M1074\_traverse-2\_@10 | 0.81 | 0.2 | | -445 | | -1838 | yes |
| 2M1074 | 2M1074\_traverse-1\_@09 | 0.46 | 0.16 | | -425 | | -1788 | yes |
| 2M1074 | 2M1074\_traverse-2\_@09 | 0.56 | 0.15 | | -478 | | -1816 | yes |
| 2M1074 | 2M1074\_traverse-1\_@08 | 0.72 | 0.16 | | -458 | | -1766 | yes |
| 2M1074 | 2M1074\_traverse-2\_@08 | 0.64 | 0.17 | | -511 | | -1794 | no |
| 2M1074 | 2M1074\_traverse-1\_@07 | 1.61 | 0.15 | | -491 | | -1744 | no |
| 2M1074 | 2M1074\_traverse-2\_@07 | 0.91 | 0.16 | | -544 | | -1772 | no |
| 2M1074 | 2M1074\_traverse-1\_@06 | 1.04 | 0.17 | | -533 | | -1731 | no |
| 2M1074 | 2M1074\_traverse-2\_@06 | 1.01 | 0.19 | | -585 | | -1756 | no |
| 2M1074 | 2M1074\_traverse-1\_@05 | 0.69 | 0.16 | | -566 | | -1710 | no |
| 2M1074 | 2M1074\_traverse-2\_@05 | 0.91 | 0.16 | | -618 | | -1736 | no |
| 2M1074 | 2M1074\_traverse-1\_@04 | 0.76 | 0.17 | | -596 | | -1685 | no |
| 2M1074 | 2M1074\_traverse-2\_@04 | 0.85 | 0.19 | | -652 | | -1711 | no |
| 2M1074 | 2M1074\_traverse-1\_@03 | 0.53 | 0.18 | | -623 | | -1656 | no |
| 2M1074 | 2M1074\_traverse-2\_@03 | 1.11 | 0.18 | | -676 | | -1683 | no |
| 2M1074 | 2M1074\_traverse-1\_@02 | 0.38 | 0.17 | | -656 | | -1633 | no |
| 2M1074 | 2M1074\_traverse-2\_@02 | -0.15 | 0.18 | | -709 | | -1660 | no |
| 2M1074 | 2M1074\_traverse-1\_@01 | -0.03 | 0.18 | | -689 | | -1610 | no |
| 2M1074 | 2M1074\_traverse-2\_@1 | 0.34 | 0.15 | | -742 | | -1637 | no |
| 2M1074 | 2M1074\_traverse-1\_@ | 0.76 | 0.18 | | -722 | | -1587 | no |
| 1M1085 | 1M1085\_traverse-1\_@1 | 0.51 | 0.17 | | 815 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@1 | 0.66 | 0.18 | | 795 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@02 | 0.85 | 0.15 | | 775 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@02 | 0.81 | 0.17 | | 755 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@03 | 1.42 | 0.15 | | 735 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@03 | 1.12 | 0.16 | | 715 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@04 | 1.26 | 0.16 | | 695 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@04 | 1.16 | 0.15 | | 675 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@05 | 0.88 | 0.18 | | 655 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@05 | 1.14 | 0.16 | | 635 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@06 | 1.4 | 0.17 | | 615 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@06 | 0.96 | 0.16 | | 595 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@07 | 1.25 | 0.17 | | 575 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@07 | 0.77 | 0.18 | | 555 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@08 | 0.81 | 0.17 | | 535 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@08 | 0.4 | 0.16 | | 515 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@09 | 0.48 | 0.15 | | 495 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@09 | 0.18 | 0.15 | | 475 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@10 | 0.35 | 0.17 | | 455 | | 404 | yes |
| 1M1085 | 1M1085\_traverse-2\_@10 | 0.8 | 0.18 | | 430 | | 469 | yes |
| 1M1085 | 1M1085\_traverse-1\_@11 | 1.01 | 0.17 | | 413 | | 375 | yes |
| 1M1085 | 1M1085\_traverse-2\_@11 | 0.76 | 0.16 | | 395 | | 454 | yes |
| 1M1085 | 1M1085\_traverse-1\_@12 | 0.73 | 0.18 | | 373 | | 375 | yes |
| 1M1085 | 1M1085\_traverse-2\_@12 | 0.75 | 0.16 | | 355 | | 454 | no |
| 1M1085 | 1M1085\_traverse-1\_@13 | 0.69 | 0.16 | | 333 | | 375 | no |
| 1M1085 | 1M1085\_traverse-2\_@13 | 0.73 | 0.17 | | 315 | | 454 | no |
| 1M1085 | 1M1085\_traverse-1\_@14 | 0.62 | 0.18 | | 293 | | 375 | no |
| 1M1085 | 1M1085\_traverse-2\_@14 | 0.45 | 0.15 | | 275 | | 454 | no |
| 1M1085 | 1M1085\_traverse-1\_@15 | 0.44 | 0.16 | | 253 | | 375 | no |
| 1M1085 | 1M1085\_traverse-2\_@15 | 0.59 | 0.16 | | 235 | | 454 | no |
| 1M1085 | 1M1085\_traverse-1\_@16 | 0.32 | 0.16 | | 213 | | 375 | no |
| 1M1085 | 1M1085\_traverse-2\_@16 | 0.17 | 0.15 | | 195 | | 454 | no |
| 1M1085 | 1M1085\_traverse-1\_@17 | 0.43 | 0.19 | | 173 | | 375 | no |
| 1M1085 | 1M1085\_traverse-2\_@17 | -0.14 | 0.19 | | 155 | | 454 | no |
| 1M1085 | 1M1085\_traverse-1\_@18 | 0.83 | 0.18 | | 168 | | 494 | no |
| 1M1085 | 1M1085\_traverse-2\_@18 | 0.93 | 0.15 | | 156 | | 516 | no |
| 1M1085 | 1M1085\_traverse-1\_@19 | 1.29 | 0.19 | | 128 | | 494 | no |
| 1M1087 | 1M1087\_traverse-1\_@1 | 0.47 | 0.16 | | 654 | | 1957 | no |
| 1M1087 | 1M1087\_traverse-2\_@1 | 0.37 | 0.15 | | 666 | | 1907 | no |
| 1M1087 | 1M1087\_traverse-1\_@02 | 0.81 | 0.17 | | 616 | | 1944 | no |
| 1M1087 | 1M1087\_traverse-2\_@02 | 0.79 | 0.17 | | 628 | | 1894 | no |
| 1M1087 | 1M1087\_traverse-1\_@03 | 0.92 | 0.16 | | 579 | | 1931 | no |
| 1M1087 | 1M1087\_traverse-2\_@03 | 1.04 | 0.18 | | 591 | | 1881 | no |
| 1M1087 | 1M1087\_traverse-1\_@04 | 0.28 | 0.16 | | 542 | | 1919 | no |
| 1M1087 | 1M1087\_traverse-2\_@04 | 0.44 | 0.16 | | 554 | | 1869 | no |
| 1M1087 | 1M1087\_traverse-1\_@05 | -0.22 | 0.17 | | 505 | | 1907 | no |
| 1M1087 | 1M1087\_traverse-2\_@05 | 0.2 | 0.18 | | 517 | | 1857 | no |
| 1M1087 | 1M1087\_traverse-1\_@06 | -0.4 | 0.17 | | 468 | | 1895 | yes |
| 1M1087 | 1M1087\_traverse-2\_@06 | -0.68 | 0.15 | | 480 | | 1845 | yes |
| 1M1087 | 1M1087\_traverse-1\_@07 | -0.52 | 0.15 | | 431 | | 1882 | yes |
| 1M1087 | 1M1087\_traverse-2\_@07 | -0.68 | 0.16 | | 443 | | 1832 | yes |
| 1M1087 | 1M1087\_traverse-1\_@08 | -0.94 | 0.17 | | 394 | | 1870 | yes |
| 1M1087 | 1M1087\_traverse-2\_@08 | -0.36 | 0.19 | | 406 | | 1820 | yes |
| 1M1087 | 1M1087\_traverse-1\_@09 | -1 | 0.17 | | 346 | | 1865 | yes |
| 1M1087 | 1M1087\_traverse-2\_@09 | -0.06 | 0.15 | | 369 | | 1808 | yes |
| 1M1087 | 1M1087\_traverse-1\_@10 | 0.2 | 0.17 | | 320 | | 1846 | yes |
| 1M1087 | 1M1087\_traverse-2\_@10 | 0.46 | 0.15 | | 332 | | 1796 | yes |
| 1M1087 | 1M1087\_traverse-1\_@11 | 0.74 | 0.15 | | 283 | | 1834 | yes |
| 1M1087 | 1M1087\_traverse-2\_@11 | 0.88 | 0.17 | | 295 | | 1784 | no |
| 1M1087 | 1M1087\_traverse-1\_@12 | 0.09 | 0.15 | | 246 | | 1821 | no |
| 1M1087 | 1M1087\_traverse-2\_@12 | 0.5 | 0.19 | | 258 | | 1771 | no |
| 1M1087 | 1M1087\_traverse-1\_@13 | -0.25 | 0.18 | | 209 | | 1810 | no |
| 1M1087 | 1M1087\_traverse-2\_@13 | 0.13 | 0.17 | | 221 | | 1760 | no |
| 1M1087 | 1M1087\_traverse-1\_@14 | 0.14 | 0.15 | | 172 | | 1797 | no |
| 1C0444 | 1C0444\_traverse-2\_@30 | 0.33 | 0.16 | | -2046 | | 1882 | yes |
| 1C0444 | 1C0444\_traverse-1\_@30 | 0.47 | 0.18 | | -2006 | | 1861 | yes |
| 1C0444 | 1C0444\_traverse-2\_@29 | 0.38 | 0.16 | | -2043 | | 1840 | yes |
| 1C0444 | 1C0444\_traverse-1\_@29 | 0.31 | 0.17 | | -2003 | | 1821 | yes |
| 1C0444 | 1C0444\_traverse-2\_@28 | 0.47 | 0.15 | | -2040 | | 1800 | yes |
| 1C0444 | 1C0444\_traverse-1\_@28 | 0.69 | 0.17 | | -2000 | | 1780 | yes |
| 1C0444 | 1C0444\_traverse-2\_@27 | 0.71 | 0.15 | | -2037 | | 1759 | yes |
| 1C0444 | 1C0444\_traverse-1\_@27 | 0.46 | 0.15 | | -1997 | | 1739 | yes |
| 1C0444 | 1C0444\_traverse-2\_@26 | 0.26 | 0.16 | | -2034 | | 1718 | yes |
| 1C0444 | 1C0444\_traverse-1\_@26 | 0.38 | 0.16 | | -1994 | | 1699 | yes |
| 1C0444 | 1C0444\_traverse-2\_@25 | 0.34 | 0.16 | | -2031 | | 1678 | yes |
| 1C0444 | 1C0444\_traverse-1\_@25 | 0.25 | 0.16 | | -1991 | | 1658 | yes |
| 1C0444 | 1C0444\_traverse-2\_@24 | 0.26 | 0.16 | | -2028 | | 1637 | yes |
| 1C0444 | 1C0444\_traverse-1\_@24 | 0 | 0.16 | | -1988 | | 1617 | yes |
| 1C0444 | 1C0444\_traverse-2\_@23 | 0.46 | 0.16 | | -2025 | | 1596 | yes |
| 1C0444 | 1C0444\_traverse-1\_@23 | 0.27 | 0.16 | | -1985 | | 1577 | yes |
| 1C0444 | 1C0444\_traverse-2\_@22 | 0.56 | 0.17 | | -2022 | | 1556 | yes |
| 1C0444 | 1C0444\_traverse-1\_@22 | 0.16 | 0.18 | | -1982 | | 1536 | yes |
| 1C0444 | 1C0444\_traverse-2\_@21 | 0.41 | 0.17 | | -2019 | | 1515 | yes |
| 1C0444 | 1C0444\_traverse-1\_@21 | 0.37 | 0.16 | | -1979 | | 1495 | yes |
| 1C0444 | 1C0444\_traverse-2\_@20 | 0.13 | 0.16 | | -2016 | | 1474 | yes |
| 1C0444 | 1C0444\_traverse-1\_@20 | 0.42 | 0.16 | | -1976 | | 1455 | yes |
| 1C0444 | 1C0444\_traverse-2\_@19 | 0.45 | 0.18 | | -2013 | | 1434 | yes |
| 1C0444 | 1C0444\_traverse-1\_@19 | 0.37 | 0.17 | | -1973 | | 1414 | yes |
| 1C0444 | 1C0444\_traverse-2\_@18 | 0.54 | 0.16 | | -2010 | | 1393 | yes |
| 1C0444 | 1C0444\_traverse-1\_@18 | 0.37 | 0.18 | | -1970 | | 1373 | yes |
| 1C0444 | 1C0444\_traverse-2\_@17 | 0.81 | 0.18 | | -2007 | | 1352 | yes |
| 1C0444 | 1C0444\_traverse-1\_@17 | 0.71 | 0.15 | | -1967 | | 1333 | yes |
| 1C0444 | 1C0444\_traverse-2\_@16 | 0.43 | 0.19 | | -2004 | | 1312 | yes |
| 1C0444 | 1C0444\_traverse-1\_@16 | 0.26 | 0.16 | | -1964 | | 1292 | yes |
| 1C0444 | 1C0444\_traverse-2\_@15 | 0.3 | 0.16 | | -2001 | | 1271 | yes |
| 1C0444 | 1C0444\_traverse-1\_@15 | 0.32 | 0.18 | | -1961 | | 1251 | yes |
| 1C0444 | 1C0444\_traverse-2\_@14 | 0.33 | 0.16 | | -1998 | | 1230 | yes |
| 1C0444 | 1C0444\_traverse-1\_@14 | -0.13 | 0.16 | | -1958 | | 1211 | yes |
| 1C0444 | 1C0444\_traverse-2\_@13 | 0.3 | 0.16 | | -1995 | | 1190 | yes |
| 1C0444 | 1C0444\_traverse-1\_@13 | -0.13 | 0.17 | | -1955 | | 1170 | yes |
| 1C0444 | 1C0444\_traverse-2\_@12 | 0.37 | 0.17 | | -1992 | | 1149 | yes |
| 1C0444 | 1C0444\_traverse-1\_@12 | -0.21 | 0.17 | | -1952 | | 1129 | yes |
| 1C0444 | 1C0444\_traverse-2\_@11 | 0.23 | 0.15 | | -1989 | | 1108 | yes |
| 1C0444 | 1C0444\_traverse-1\_@11 | -0.21 | 0.18 | | -1949 | | 1089 | yes |
| 1C0444 | 1C0444\_traverse-2\_@10 | 0.37 | 0.16 | | -1986 | | 1068 | yes |
| 1C0444 | 1C0444\_traverse-1\_@10 | 0.24 | 0.16 | | -1946 | | 1048 | yes |
| 1C0444 | 1C0444\_traverse-2\_@09 | 0.45 | 0.15 | | -1983 | | 1027 | yes |
| 1C0444 | 1C0444\_traverse-1\_@09 | 0.13 | 0.17 | | -1943 | | 1007 | yes |
| 1C0444 | 1C0444\_traverse-2\_@08 | 0.62 | 0.16 | | -1980 | | 986 | yes |
| 1C0444 | 1C0444\_traverse-1\_@08 | 0.35 | 0.16 | | -1940 | | 967 | yes |
| 1C0444 | 1C0444\_traverse-2\_@07 | 0.49 | 0.18 | | -1977 | | 946 | yes |
| 1C0444 | 1C0444\_traverse-1\_@07 | -0.06 | 0.16 | | -1937 | | 926 | yes |
| 1C0444 | 1C0444\_traverse-2\_@06 | 0.08 | 0.15 | | -1974 | | 905 | yes |
| 1C0444 | 1C0444\_traverse-1\_@06 | 0.1 | 0.15 | | -1934 | | 885 | yes |
| 1C0444 | 1C0444\_traverse-2\_@05 | 0.44 | 0.19 | | -1971 | | 864 | yes |
| 1C0444 | 1C0444\_traverse-1\_@05 | -0.01 | 0.16 | | -1931 | | 844 | yes |
| 1C0444 | 1C0444\_traverse-2\_@04 | 0.32 | 0.18 | | -1968 | | 824 | yes |
| 1C0444 | 1C0444\_traverse-1\_@04 | -0.49 | 0.15 | | -1928 | | 804 | yes |
| 1C0444 | 1C0444\_traverse-2\_@03 | -0.14 | 0.18 | | -1965 | | 783 | yes |
| 1C0444 | 1C0444\_traverse-1\_@03 | -0.16 | 0.15 | | -1925 | | 763 | yes |
| 1C0444 | 1C0444\_traverse-2\_@02 | -0.34 | 0.18 | | -1961 | | 743 | yes |
| 1C0444 | 1C0444\_traverse-1\_@02 | -0.45 | 0.17 | | -1921 | | 723 | yes |
| 1C0444 | 1C0444\_traverse-2\_@1 | 0.02 | 0.17 | | -1957 | | 703 | yes |
| 1C0444 | 1C0444\_traverse-1\_@1 | 0.02 | 0.18 | | -1917 | | 683 | yes |
| 1C0476 | 1C0476\_traverse-2\_@14 | -0.15 | 0.16 | | -3403 | | -537 | yes |
| 1C0476 | 1C0476\_traverse-2\_@13 | -0.36 | 0.16 | | -3375 | | -566 | yes |
| 1C0476 | 1C0476\_traverse-1\_@14 | 0.19 | 0.15 | | -3408 | | -607 | yes |
| 1C0476 | 1C0476\_traverse-2\_@12 | -0.15 | 0.17 | | -3347 | | -595 | yes |
| 1C0476 | 1C0476\_traverse-1\_@13 | 0.07 | 0.16 | | -3380 | | -636 | yes |
| 1C0476 | 1C0476\_traverse-2\_@11 | -0.35 | 0.16 | | -3319 | | -624 | yes |
| 1C0476 | 1C0476\_traverse-1\_@12 | -0.2 | 0.16 | | -3352 | | -665 | yes |
| 1C0476 | 1C0476\_traverse-2\_@10 | -0.34 | 0.15 | | -3291 | | -653 | yes |
| 1C0476 | 1C0476\_traverse-1\_@11 | 0.02 | 0.17 | | -3324 | | -694 | yes |
| 1C0476 | 1C0476\_traverse-2\_@09 | -0.59 | 0.17 | | -3263 | | -682 | yes |
| 1C0476 | 1C0476\_traverse-1\_@10 | 0.07 | 0.16 | | -3296 | | -723 | yes |
| 1C0476 | 1C0476\_traverse-2\_@08 | -0.33 | 0.18 | | -3235 | | -711 | yes |
| 1C0476 | 1C0476\_traverse-1\_@09 | -0.13 | 0.15 | | -3268 | | -752 | yes |
| 1C0476 | 1C0476\_traverse-2\_@07 | -0.2 | 0.17 | | -3206 | | -740 | yes |
| 1C0476 | 1C0476\_traverse-1\_@08 | -0.09 | 0.17 | | -3240 | | -781 | yes |
| 1C0476 | 1C0476\_traverse-2\_@06 | -0.01 | 0.16 | | -3177 | | -769 | yes |
| 1C0476 | 1C0476\_traverse-1\_@07 | -0.31 | 0.16 | | -3211 | | -810 | yes |
| 1C0476 | 1C0476\_traverse-2\_@05 | -0.15 | 0.21 | | -3148 | | -798 | yes |
| 1C0476 | 1C0476\_traverse-1\_@06 | -0.24 | 0.18 | | -3182 | | -839 | yes |
| 1C0476 | 1C0476\_traverse-2\_@04 | -0.02 | 0.15 | | -3119 | | -826 | yes |
| 1C0476 | 1C0476\_traverse-1\_@05 | 0.11 | 0.16 | | -3153 | | -868 | yes |
| 1C0476 | 1C0476\_traverse-2\_@03 | -0.15 | 0.17 | | -3090 | | -854 | yes |
| 1C0476 | 1C0476\_traverse-1\_@04 | 0.12 | 0.17 | | -3124 | | -896 | yes |
| 1C0476 | 1C0476\_traverse-2\_@02 | -0.67 | 0.17 | | -3061 | | -882 | yes |
| 1C0476 | 1C0476\_traverse-1\_@03 | 0.31 | 0.17 | | -3095 | | -924 | yes |
| 1C0476 | 1C0476\_traverse-2\_@1 | -0.65 | 0.15 | | -3032 | | -910 | yes |
| 1C0476 | 1C0476\_traverse-1\_@02 | -0.46 | 0.15 | | -3066 | | -952 | yes |
| 1C0476 | 1C0476\_traverse-1\_@1 | -0.14 | 0.18 | | -3037 | | -980 | yes |
| 1C1258 | 1C1258\_traverse-1\_@20 | -0.19 | 0.16 | | -2266 | | 634 | yes |
| 1C1258 | 1C1258\_traverse-2\_@19 | 0.01 | 0.16 | | -2261 | | 594 | yes |
| 1C1258 | 1C1258\_traverse-1\_@19 | 0.22 | 0.17 | | -2232 | | 613 | yes |
| 1C1258 | 1C1258\_traverse-2\_@18 | 0.42 | 0.17 | | -2227 | | 573 | yes |
| 1C1258 | 1C1258\_traverse-1\_@18 | 0.36 | 0.16 | | -2198 | | 591 | yes |
| 1C1258 | 1C1258\_traverse-2\_@17 | 0.32 | 0.18 | | -2193 | | 551 | yes |
| 1C1258 | 1C1258\_traverse-1\_@17 | 0.5 | 0.16 | | -2164 | | 569 | yes |
| 1C1258 | 1C1258\_traverse-2\_@16 | 0.37 | 0.15 | | -2159 | | 529 | yes |
| 1C1258 | 1C1258\_traverse-1\_@16 | 0.2 | 0.15 | | -2130 | | 548 | yes |
| 1C1258 | 1C1258\_traverse-2\_@15 | 0.93 | 0.18 | | -2125 | | 508 | yes |
| 1C1258 | 1C1258\_traverse-1\_@15 | 0.1 | 0.19 | | -2096 | | 527 | yes |
| 1C1258 | 1C1258\_traverse-2\_@14 | 0.61 | 0.16 | | -2091 | | 487 | yes |
| 1C1258 | 1C1258\_traverse-1\_@14 | -0.07 | 0.18 | | -2062 | | 505 | yes |
| 1C1258 | 1C1258\_traverse-2\_@13 | 0.44 | 0.17 | | -2057 | | 465 | yes |
| 1C1258 | 1C1258\_traverse-1\_@13 | 0.45 | 0.16 | | -2028 | | 484 | yes |
| 1C1258 | 1C1258\_traverse-2\_@12 | 0.63 | 0.17 | | -2023 | | 444 | yes |
| 1C1258 | 1C1258\_traverse-1\_@12 | 0.53 | 0.15 | | -1993 | | 462 | yes |
| 1C1258 | 1C1258\_traverse-2\_@11 | 0.41 | 0.15 | | -1988 | | 422 | yes |
| 1C1258 | 1C1258\_traverse-1\_@11 | 0.28 | 0.15 | | -1958 | | 441 | yes |
| 1C1258 | 1C1258\_traverse-2\_@10 | 0.51 | 0.16 | | -1953 | | 401 | yes |
| 1C1258 | 1C1258\_traverse-1\_@10 | 0.14 | 0.17 | | -1923 | | 419 | yes |
| 1C1258 | 1C1258\_traverse-2\_@09 | 0.08 | 0.15 | | -1918 | | 379 | yes |
| 1C1258 | 1C1258\_traverse-1\_@09 | 0.08 | 0.18 | | -1888 | | 398 | yes |
| 1C1258 | 1C1258\_traverse-2\_@08 | 0.55 | 0.16 | | -1883 | | 358 | yes |
| 1C1258 | 1C1258\_traverse-1\_@08 | 0.07 | 0.16 | | -1853 | | 376 | yes |
| 1C1258 | 1C1258\_traverse-2\_@07 | 0.11 | 0.16 | | -1848 | | 336 | yes |
| 1C1258 | 1C1258\_traverse-1\_@07 | -0.08 | 0.17 | | -1818 | | 355 | yes |
| 1C1258 | 1C1258\_traverse-2\_@06 | 0.2 | 0.16 | | -1813 | | 315 | yes |
| 1C1258 | 1C1258\_traverse-1\_@06 | -0.13 | 0.18 | | -1783 | | 333 | yes |
| 1C1258 | 1C1258\_traverse-2\_@05 | 0.22 | 0.16 | | -1778 | | 293 | yes |
| 1C1258 | 1C1258\_traverse-1\_@05 | 0.52 | 0.15 | | -1748 | | 312 | yes |
| 1C1258 | 1C1258\_traverse-2\_@04 | 0.81 | 0.15 | | -1743 | | 272 | yes |
| 1C1258 | 1C1258\_traverse-1\_@04 | 0.55 | 0.16 | | -1713 | | 290 | yes |
| 1C1258 | 1C1258\_traverse-2\_@03 | 0.57 | 0.15 | | -1708 | | 250 | yes |
| 1C1258 | 1C1258\_traverse-1\_@03 | 0.2 | 0.17 | | -1678 | | 269 | yes |
| 1C1258 | 1C1258\_traverse-2\_@02 | 0.74 | 0.17 | | -1673 | | 229 | yes |
| 1C1258 | 1C1258\_traverse-1\_@02 | 0.61 | 0.16 | | -1643 | | 248 | yes |
| 1C1258 | 1C1258\_traverse-2\_@1 | 0.57 | 0.17 | | -1638 | | 208 | yes |
| 1C1258 | 1C1258\_traverse-1\_@1 | 0.07 | 0.17 | | -1608 | | 227 | yes |
| 2C0514 | 2C0514\_traverse-2\_@1 | 0.44 | 0.16 | | -2539 | | 3755 | yes |
| 2C0514 | 2C0514\_traverse-1\_@1 | 0.06 | 0.16 | | -2549 | | 3715 | yes |
| 2C0514 | 2C0514\_traverse-2\_@02 | 0.69 | 0.17 | | -2575 | | 3736 | yes |
| 2C0514 | 2C0514\_traverse-1\_@02 | 0.38 | 0.17 | | -2585 | | 3696 | yes |
| 2C0514 | 2C0514\_traverse-2\_@03 | 0.35 | 0.15 | | -2611 | | 3717 | yes |
| 2C0514 | 2C0514\_traverse-1\_@03 | 0.05 | 0.15 | | -2621 | | 3678 | yes |
| 2C0514 | 2C0514\_traverse-2\_@04 | 0.28 | 0.16 | | -2647 | | 3699 | yes |
| 2C0514 | 2C0514\_traverse-1\_@04 | 0.23 | 0.17 | | -2657 | | 3660 | yes |
| 2C0514 | 2C0514\_traverse-2\_@05 | 0.12 | 0.15 | | -2682 | | 3681 | yes |
| 2C0514 | 2C0514\_traverse-1\_@05 | -0.02 | 0.16 | | -2692 | | 3641 | yes |
| 2C0514 | 2C0514\_traverse-2\_@06 | 0.12 | 0.17 | | -2717 | | 3662 | yes |
| 2C0514 | 2C0514\_traverse-1\_@06 | 0.13 | 0.16 | | -2727 | | 3623 | yes |
| 2C0514 | 2C0514\_traverse-2\_@07 | 0.5 | 0.15 | | -2752 | | 3644 | yes |
| 2C0514 | 2C0514\_traverse-1\_@07 | 0.08 | 0.18 | | -2762 | | 3604 | yes |
| 2C0514 | 2C0514\_traverse-2\_@08 | 0.2 | 0.17 | | -2787 | | 3626 | yes |
| 2C0514 | 2C0514\_traverse-1\_@08 | 0.07 | 0.19 | | -2797 | | 3586 | yes |
| 2C0514 | 2C0514\_traverse-2\_@09 | 0.36 | 0.16 | | -2822 | | 3607 | yes |
| 2C0514 | 2C0514\_traverse-1\_@09 | 0.34 | 0.16 | | -2832 | | 3568 | yes |
| 2C0514 | 2C0514\_traverse-2\_@10 | 0.48 | 0.17 | | -2857 | | 3589 | yes |
| 2C0514 | 2C0514\_traverse-1\_@10 | 0.59 | 0.18 | | -2867 | | 3549 | yes |
| 2C0514 | 2C0514\_traverse-2\_@11 | 0.76 | 0.18 | | -2892 | | 3571 | yes |
| 2C0514 | 2C0514\_traverse-1\_@11 | 0.08 | 0.17 | | -2902 | | 3531 | yes |
| 2C0514 | 2C0514\_traverse-2\_@12 | 0.39 | 0.17 | | -2927 | | 3553 | yes |
| 2C0514 | 2C0514\_traverse-1\_@12 | 0.69 | 0.16 | | -2937 | | 3513 | yes |
| 2C0514 | 2C0514\_traverse-2\_@13 | 0.22 | 0.18 | | -2978 | | 3564 | yes |
| 2C0514 | 2C0514\_traverse-1\_@13 | 0.31 | 0.16 | | -2972 | | 3495 | yes |
| 2C0514 | 2C0514\_traverse-2\_@14 | -1.39 | 0.16 | | -2997 | | 3517 | no |
| 2C0514 | 2C0514\_traverse-2\_@15 | 0.15 | 0.18 | | -3008 | | 3538 | yes |
| 2C0514 | 2C0514\_traverse-2\_@16 | 0.04 | 0.17 | | -3036 | | 3551 | yes |
| 2C0514 | 2C0514\_traverse-1\_@14 | 0.05 | 0.16 | | -3007 | | 3476 | yes |
| 1C0493 | 1C0493\_traverse-1\_@1 | 1.86 | 0.2 | | 458 | | -1575 | yes |
| 1C0493 | 1C0493\_traverse-1\_@2 | 0.89 | 0.16 | | 419 | | -1562 | yes |
| 1C0493 | 1C0493\_traverse-1\_@3 | 0.93 | 0.17 | | 380 | | -1549 | yes |
| 1C0493 | 1C0493\_traverse-1\_@4 | 0.35 | 0.17 | | 342 | | -1536 | yes |
| 1C0493 | 1C0493\_traverse-1\_@5 | 0.04 | 0.2 | | 304 | | -1523 | yes |
| 1C0493 | 1C0493\_traverse-1\_@6 | 0.8 | 0.18 | | 265 | | -1510 | yes |
| 1C0493 | 1C0493\_traverse-1\_@7 | 1.66 | 0.15 | | 232 | | -1489 | yes |
| 1C0493 | 1C0493\_traverse-1\_@8 | 1.49 | 0.16 | | 189 | | -1484 | yes |
| 1C0493 | 1C0493\_traverse-1\_@9 | 0.93 | 0.16 | | 152 | | -1470 | yes |
| 1C0493 | 1C0493\_traverse-2\_@1 | 1.56 | 0.15 | | 462 | | -1624 | yes |
| 1C0493 | 1C0493\_traverse-2\_@2 | 1.69 | 0.15 | | 436 | | -1604 | yes |
| 1C0493 | 1C0493\_traverse-2\_@3 | 0.95 | 0.16 | | 399 | | -1593 | yes |
| 1C0493 | 1C0493\_traverse-2\_@4 | 0.84 | 0.15 | | 364 | | -1582 | yes |
| 1C0493 | 1C0493\_traverse-2\_@5 | 0.3 | 0.18 | | 327 | | -1570 | yes |
| 1C0493 | 1C0493\_traverse-2\_@6 | -0.04 | 0.18 | | 292 | | -1558 | yes |
| 1C0493 | 1C0493\_traverse-2\_@7 | 1.32 | 0.19 | | 255 | | -1546 | yes |
| 1C0493 | 1C0493\_traverse-2\_@8 | 1.25 | 0.17 | | 217 | | -1551 | yes |
| 1C0493 | 1C0493\_traverse-2\_@9 | 1.51 | 0.15 | | 183 | | -1522 | yes |
| 1C0493 | 1C0493\_traverse-2\_@10 | 1.23 | 0.16 | | 147 | | -1510 | yes |
| 1C0431 | 1C0431\_traverse-2\_@26 | 0.59 | 0.19 | | 445 | | -4155 | yes |
| 1C0431 | 1C0431\_traverse-1\_@26 | 0.44 | 0.21 | | 445 | | -4115 | yes |
| 1C0431 | 1C0431\_traverse-2\_@25 | 0.49 | 0.17 | | 412 | | -4132 | yes |
| 1C0431 | 1C0431\_traverse-1\_@25 | 0.66 | 0.17 | | 412 | | -4092 | yes |
| 1C0431 | 1C0431\_traverse-2\_@24 | 0.33 | 0.15 | | 379 | | -4109 | yes |
| 1C0431 | 1C0431\_traverse-1\_@24 | 0.49 | 0.2 | | 379 | | -4069 | yes |
| 1C0431 | 1C0431\_traverse-2\_@23 | 0.46 | 0.19 | | 346 | | -4086 | yes |
| 1C0431 | 1C0431\_traverse-1\_@23 | 0.48 | 0.16 | | 346 | | -4046 | yes |
| 1C0431 | 1C0431\_traverse-2\_@22 | 0.31 | 0.16 | | 313 | | -4063 | yes |
| 1C0431 | 1C0431\_traverse-1\_@22 | 0.21 | 0.17 | | 313 | | -4023 | yes |
| 1C0431 | 1C0431\_traverse-2\_@21 | 1.21 | 0.17 | | 280 | | -4040 | yes |
| 1C0431 | 1C0431\_traverse-1\_@21 | 0.74 | 0.19 | | 280 | | -4000 | yes |
| 1C0431 | 1C0431\_traverse-2\_@20 | 0.35 | 0.16 | | 247 | | -4017 | yes |
| 1C0431 | 1C0431\_traverse-1\_@20 | 0.67 | 0.16 | | 247 | | -3977 | yes |
| 1C0431 | 1C0431\_traverse-2\_@19 | 0.55 | 0.18 | | 214 | | -3994 | yes |
| 1C0431 | 1C0431\_traverse-1\_@19 | 0.6 | 0.17 | | 214 | | -3954 | yes |
| 1C0431 | 1C0431\_traverse-2\_@18 | 0.2 | 0.17 | | 181 | | -3971 | yes |
| 1C0431 | 1C0431\_traverse-1\_@18 | 0.37 | 0.17 | | 181 | | -3931 | yes |
| 1C0431 | 1C0431\_traverse-2\_@17 | 0.31 | 0.18 | | 148 | | -3948 | yes |
| 1C0431 | 1C0431\_traverse-1\_@17 | 0.38 | 0.16 | | 148 | | -3908 | yes |
| 1C0431 | 1C0431\_traverse-2\_@16 | 0.23 | 0.16 | | 115 | | -3925 | yes |
| 1C0431 | 1C0431\_traverse-1\_@16 | 0.12 | 0.15 | | 115 | | -3885 | yes |
| 1C0431 | 1C0431\_traverse-2\_@15 | 0.2 | 0.16 | | 82 | | -3902 | yes |
| 1C0431 | 1C0431\_traverse-1\_@15 | 0.21 | 0.18 | | 82 | | -3862 | yes |
| 1C0431 | 1C0431\_traverse-2\_@14 | 0.4 | 0.17 | | 49 | | -3879 | yes |
| 1C0431 | 1C0431\_traverse-1\_@14 | 0.26 | 0.17 | | 49 | | -3839 | yes |
| 1C0431 | 1C0431\_traverse-2\_@13 | 0.39 | 0.18 | | 16 | | -3856 | yes |
| 1C0431 | 1C0431\_traverse-1\_@13 | 0.01 | 0.22 | | 16 | | -3816 | yes |
| 1C0431 | 1C0431\_traverse-2\_@12 | 0.01 | 0.19 | | -17 | | -3833 | yes |
| 1C0431 | 1C0431\_traverse-1\_@12 | -0.03 | 0.16 | | -17 | | -3793 | yes |
| 1C0431 | 1C0431\_traverse-2\_@11 | 0.06 | 0.16 | | -50 | | -3809 | yes |
| 1C0431 | 1C0431\_traverse-1\_@11 | -0.09 | 0.17 | | -50 | | -3769 | yes |
| 1C0431 | 1C0431\_traverse-2\_@10 | -0.31 | 0.16 | | -83 | | -3785 | yes |
| 1C0431 | 1C0431\_traverse-1\_@10 | -0.28 | 0.18 | | -83 | | -3745 | yes |
| 1C0431 | 1C0431\_traverse-2\_@09 | -0.09 | 0.16 | | -116 | | -3761 | yes |
| 1C0431 | 1C0431\_traverse-1\_@09 | -0.12 | 0.16 | | -116 | | -3721 | yes |
| 1C0431 | 1C0431\_traverse-2\_@08 | 0.22 | 0.17 | | -148 | | -3737 | yes |
| 1C0431 | 1C0431\_traverse-1\_@08 | 0.09 | 0.15 | | -148 | | -3697 | yes |
| 1C0431 | 1C0431\_traverse-2\_@07 | 0.71 | 0.15 | | -180 | | -3713 | yes |
| 1C0431 | 1C0431\_traverse-1\_@07 | 0.74 | 0.17 | | -180 | | -3673 | yes |
| 1C0431 | 1C0431\_traverse-2\_@06 | 1.19 | 0.18 | | -212 | | -3689 | yes |
| 1C0431 | 1C0431\_traverse-1\_@06 | 0.49 | 0.17 | | -212 | | -3649 | yes |
| 1C0431 | 1C0431\_traverse-2\_@05 | 0.18 | 0.18 | | -244 | | -3665 | yes |
| 1C0431 | 1C0431\_traverse-1\_@05 | 0.08 | 0.19 | | -244 | | -3625 | yes |
| 1C0431 | 1C0431\_traverse-2\_@04 | 0.78 | 0.16 | | -276 | | -3641 | yes |
| 1C0431 | 1C0431\_traverse-1\_@04 | 0.49 | 0.16 | | -276 | | -3601 | yes |
| 1C0431 | 1C0431\_traverse-2\_@03 | 0.58 | 0.17 | | -308 | | -3617 | yes |
| 1C0431 | 1C0431\_traverse-1\_@03 | 0.3 | 0.18 | | -308 | | -3577 | yes |
| 1C0431 | 1C0431\_traverse-2\_@02 | 0.21 | 0.15 | | -340 | | -3593 | yes |
| 1C0431 | 1C0431\_traverse-1\_@02 | 0.36 | 0.17 | | -340 | | -3553 | yes |
| 1C0431 | 1C0431\_traverse-2\_@1 | 0.48 | 0.16 | | -372 | | -3569 | yes |
| 1C0431 | 1C0431\_traverse-1\_@1 | 0.28 | 0.17 | | -372 | | -3529 | yes |
| 1C1409 | 1C1409\_traverse-1\_@9 | 1.56 | 0.17 | | -3943 | | -2002 | yes |
| 1C1409 | 1C1409\_traverse-2\_@8 | 0.87 | 0.15 | | -3983 | | -2002 | yes |
| 1C1409 | 1C1409\_traverse-1\_@8 | 0.34 | 0.15 | | -3962 | | -1967 | yes |
| 1C1409 | 1C1409\_traverse-2\_@7 | 0.73 | 0.15 | | -4002 | | -1967 | yes |
| 1C1409 | 1C1409\_traverse-1\_@7 | 0.8 | 0.17 | | -3981 | | -1932 | yes |
| 1C1409 | 1C1409\_traverse-2\_@6 | 0.67 | 0.16 | | -4021 | | -1932 | yes |
| 1C1409 | 1C1409\_traverse-1\_@6 | 0.69 | 0.17 | | -4000 | | -1897 | yes |
| 1C1409 | 1C1409\_traverse-2\_@5 | 1.17 | 0.17 | | -4040 | | -1897 | yes |
| 1C1409 | 1C1409\_traverse-1\_@5 | 1.39 | 0.17 | | -4019 | | -1862 | yes |
| 1C1409 | 1C1409\_traverse-2\_@4 | 1.58 | 0.16 | | -4059 | | -1862 | yes |
| 1C1409 | 1C1409\_traverse-1\_@4 | 1.18 | 0.16 | | -4038 | | -1827 | yes |
| 1C1409 | 1C1409\_traverse-2\_@3 | 1.72 | 0.16 | | -4078 | | -1827 | yes |
| 1C1409 | 1C1409\_traverse-1\_@3 | 1.28 | 0.16 | | -4057 | | -1792 | yes |
| 1C1409 | 1C1409\_traverse-2\_@2 | 1.82 | 0.17 | | -4097 | | -1792 | yes |
| 1C1409 | 1C1409\_traverse-1\_@2 | 1.34 | 0.19 | | -4076 | | -1757 | yes |
| 1C1409 | 1C1409\_traverse-2\_@1 | 0.48 | 0.19 | | -4116 | | -1757 | yes |
| 1C1409 | 1C1409\_traverse-1\_@1 | 0.39 | 0.2 | | -4095 | | -1722 | yes |
| 1C0621 | 1C0621\_traverse-2\_@9 | 0.31 | 0.17 | | -1877 | | 479 | yes |
| 1C0621 | 1C0621\_traverse-1\_@9 | 0.94 | 0.15 | | -1824 | | 575 | yes |
| 1C0621 | 1C0621\_traverse-2\_@8 | 1.34 | 0.17 | | -1819 | | 525 | yes |
| 1C0621 | 1C0621\_traverse-1\_@8 | 1.32 | 0.17 | | -1785 | | 558 | yes |
| 1C0621 | 1C0621\_traverse-2\_@7 | 1.26 | 0.18 | | -1780 | | 510 | yes |
| 1C0621 | 1C0621\_traverse-1\_@7 | 1.35 | 0.17 | | -1746 | | 543 | yes |
| 1C0621 | 1C0621\_traverse-2\_@6 | 1.93 | 0.18 | | -1741 | | 493 | yes |
| 1C0621 | 1C0621\_traverse-1\_@6 | 1.28 | 0.18 | | -1707 | | 526 | yes |
| 1C0621 | 1C0621\_traverse-2\_@5 | 1.26 | 0.15 | | -1702 | | 478 | yes |
| 1C0621 | 1C0621\_traverse-1\_@5 | 1.5 | 0.16 | | -1668 | | 511 | yes |
| 1C0621 | 1C0621\_traverse-2\_@4 | 1.9 | 0.17 | | -1663 | | 461 | yes |
| 1C0621 | 1C0621\_traverse-1\_@4 | 1.68 | 0.15 | | -1628 | | 495 | yes |
| 1C0621 | 1C0621\_traverse-2\_@3 | 1.83 | 0.16 | | -1623 | | 446 | yes |
| 1C0621 | 1C0621\_traverse-1\_@3 | 1.32 | 0.16 | | -1588 | | 479 | yes |
| 1C0621 | 1C0621\_traverse-2\_@2 | 1.22 | 0.17 | | -1583 | | 429 | yes |
| 1C0621 | 1C0621\_traverse-1\_@2 | 2 | 0.16 | | -1548 | | 464 | yes |
| 1C0621 | 1C0621\_traverse-2\_@1 | 1.81 | 0.15 | | -1548 | | 418 | yes |
| 1C0621 | 1C0621\_traverse-1\_@1 | 1.31 | 0.15 | | -1508 | | 449 | yes |
| 1C1424 | 1C1424\_traverse-2\_@6 | 1.19 | 0.16 | | 2588 | | 1087 | no |
| 1C1424 | 1C1424\_traverse-1\_@6 | 0.99 | 0.17 | | 2608 | | 1037 | no |
| 1C1424 | 1C1424\_traverse-2\_@5 | 0.5 | 0.16 | | 2628 | | 1084 | no |
| 1C1424 | 1C1424\_traverse-1\_@5 | 1.36 | 0.17 | | 2646 | | 1032 | yes |
| 1C1424 | 1C1424\_traverse-2\_@4 | 1.44 | 0.17 | | 2666 | | 1079 | yes |
| 1C1424 | 1C1424\_traverse-1\_@4 | 0.8 | 0.19 | | 2686 | | 1029 | yes |
| 1C1424 | 1C1424\_traverse-2\_@3 | 1.09 | 0.16 | | 2706 | | 1076 | yes |
| 1C1424 | 1C1424\_traverse-1\_@3 | 0.44 | 0.17 | | 2726 | | 1026 | yes |
| 1C1424 | 1C1424\_traverse-2\_@2 | 1.42 | 0.18 | | 2746 | | 1073 | yes |
| 1C1424 | 1C1424\_traverse-1\_@2 | 1.35 | 0.16 | | 2766 | | 1023 | yes |
| 1C1424 | 1C1424\_traverse-2\_@1 | 1.11 | 0.19 | | 2786 | | 1070 | yes |
| 1C1424 | 1C1424\_traverse-1\_@1 | 0.87 | 0.2 | | 2806 | | 1020 | yes |
| 1C1366 | 1C1366\_@1 | 0.15 | 0.16 | | 5668 | | -1784 | yes |
| 1C1366 | 1C1366\_@2 | 1.42 | 0.15 | | 5676 | | -1825 | yes |
| 1C1366 | 1C1366\_@3 | 0.83 | 0.17 | | 5684 | | -1866 | yes |
| 1C1366 | 1C1366\_@4 | 0.69 | 0.2 | | 5692 | | -1907 | yes |
| 1C1366 | 1C1366\_@5 | -0.2 | 0.17 | | 5700 | | -1948 | yes |
| 1C1366 | 1C1366\_@6 | 0.54 | 0.16 | | 5710 | | -1988 | yes |
| 1C1270 | 1C1270\_@1 | 0.2 | 0.19 | | 4697 | | -3618 | no |
| 1C1270 | 1C1270\_@2 | 0.09 | 0.17 | | 4719 | | -3582 | no |
| 1C1270 | 1C1270\_@3 | 0.09 | 0.17 | | 4742 | | -3546 | no |
| 1C1270 | 1C1270\_@4 | -0.15 | 0.18 | | 4764 | | -3510 | no |
| 1C1270 | 1C1270\_@5 | -0.42 | 0.15 | | 4787 | | -3474 | yes |
| 1C1270 | 1C1270\_@6 | -1.16 | 0.68 | | 4809 | | -3438 | yes |
| 1C1270 | 1C1270\_@7 | -0.88 | 0.17 | | 4831 | | -3402 | yes |
| 1C1270 | 1C1270\_@8 | -1.05 | 0.17 | | 4855 | | -3366 | yes |
| 2C0526 | 2C0526\_@10 | 1.03 | 0.17 | | 1024 | | -2074 | yes |
| 2C0526 | 2C0526\_@9 | 0.96 | 0.17 | | 1048 | | -2043 | yes |
| 2C0526 | 2C0526\_@8 | 1.03 | 0.17 | | 1074 | | -2012 | yes |
| 2C0526 | 2C0526\_@7 | 0.88 | 0.16 | | 1099 | | -1981 | yes |
| 2C0526 | 2C0526\_@6 | 1.02 | 0.16 | | 1124 | | -1950 | yes |
| 2C0526 | 2C0526\_@5 | 0.99 | 0.17 | | 1150 | | -1919 | yes |
| 2C0526 | 2C0526\_@4 | 0.59 | 0.17 | | 1175 | | -1888 | yes |
| 2C0526 | 2C0526\_@3 | 0.88 | 0.15 | | 1200 | | -1857 | yes |
| 2C0526 | 2C0526\_@2 | 1.29 | 0.16 | | 1226 | | -1826 | yes |
| 2C0526 | 2C0526\_@1 | 0.58 | 0.18 | | 1252 | | -1795 | yes |
| 1C1315 | 1C1315\_@10 | 0.51 | 0.15 | | 4054 | | -2084 | yes |
| 1C1315 | 1C1315\_@09 | -0.12 | 0.15 | | 4027 | | -2126 | yes |
| 1C1315 | 1C1315\_@08 | 0.07 | 0.16 | | 4000 | | -2168 | yes |
| 1C1315 | 1C1315\_@07 | 0.13 | 0.16 | | 3973 | | -2209 | yes |
| 1C1315 | 1C1315\_@06 | -0.01 | 0.17 | | 3946 | | -2250 | yes |
| 1C1315 | 1C1315\_@05 | 1.35 | 0.17 | | 3919 | | -2291 | yes |
| 1C1315 | 1C1315\_@04 | 1.75 | 0.19 | | 3892 | | -2332 | yes |
| 1C1315 | 1C1315\_@03 | 1.69 | 0.15 | | 3865 | | -2373 | yes |
| 1C1315 | 1C1315\_@02 | 1.53 | 0.15 | | 3838 | | -2414 | yes |
| 1C1315 | 1C1315\_@1 | 0.85 | 0.16 | | 3811 | | -2455 | yes |
| 1C1279 | 1C1279\_@12 | 1.49 | 0.17 | | 1532 | | -135 | yes |
| 1C1279 | 1C1279\_@11 | 1.43 | 0.17 | | 1519 | | -184 | yes |
| 1C1279 | 1C1279\_@10 | 1.17 | 0.15 | | 1505 | | -232 | yes |
| 1C1279 | 1C1279\_@09 | 1.13 | 0.16 | | 1492 | | -280 | yes |
| 1C1279 | 1C1279\_@08 | 0.95 | 0.17 | | 1478 | | -328 | yes |
| 1C1279 | 1C1279\_@07 | 1.07 | 0.15 | | 1464 | | -376 | yes |
| 1C1279 | 1C1279\_@06 | 1.11 | 0.15 | | 1451 | | -424 | yes |
| 1C1279 | 1C1279\_@05 | 0.95 | 0.16 | | 1437 | | -472 | yes |
| 1C1279 | 1C1279\_@04 | 0.28 | 0.16 | | 1424 | | -520 | yes |
| 1C1279 | 1C1279\_@03 | 0.62 | 0.16 | | 1410 | | -568 | yes |
| 1C1279 | 1C1279\_@02 | 1.08 | 0.15 | | 1397 | | -616 | yes |
| 1C1279 | 1C1279\_@1 | 1.65 | 0.18 | | 1384 | | -664 | yes |
| 1C0418 | 1C0418\_@8 | 0.84 | 0.17 | | -1156 | | 224 | yes |
| 1C0418 | 1C0418\_@7 | 1.37 | 0.17 | | -1142 | | 176 | yes |
| 1C0418 | 1C0418\_@6 | 1.28 | 0.16 | | -1128 | | 128 | yes |
| 1C0418 | 1C0418\_@5 | 1.23 | 0.15 | | -1114 | | 80 | yes |
| 1C0418 | 1C0418\_@4 | 1.66 | 0.18 | | -1100 | | 32 | yes |
| 1C0418 | 1C0418\_@3 | 1.76 | 0.16 | | -1086 | | -15 | yes |
| 1C0418 | 1C0418\_@2 | 2.79 | 0.18 | | -1072 | | -62 | no |
| 1C0418 | 1C0418\_@1 | 1.08 | 0.17 | | -1058 | | -109 | yes |
| 1C1236 | 1C1236\_@8 | 1.31 | 0.2 | | -3188 | | -103 | yes |
| 1C1236 | 1C1236\_@7 | 1.2 | 0.16 | | -3144 | | -124 | yes |
| 1C1236 | 1C1236\_@6 | 0.71 | 0.17 | | -3100 | | -145 | yes |
| 1C1236 | 1C1236\_@5 | 0.05 | 0.15 | | -3056 | | -166 | yes |
| 1C1236 | 1C1236\_@4 | 0.28 | 0.18 | | -3012 | | -187 | yes |
| 1C1236 | 1C1236\_@3 | 0.84 | 0.16 | | -2968 | | -208 | yes |
| 1C1236 | 1C1236\_@2 | 1.23 | 0.16 | | -2924 | | -228 | yes |
| 1C1236 | 1C1236\_@1 | 1.51 | 0.15 | | -2879 | | -248 | yes |
| 1C0426 | 1C0426\_@6 | 2.49 | 0.18 | | -463 | | -2120 | yes |
| 1C0426 | 1C0426\_@5 | 2.68 | 0.15 | | -456 | | -2072 | yes |
| 1C0426 | 1C0426\_@4 | 2.79 | 0.15 | | -449 | | -2024 | yes |
| 1C0426 | 1C0426\_@3 | 2.35 | 0.17 | | -442 | | -1976 | yes |
| 1C0426 | 1C0426\_@2 | 2.4 | 0.17 | | -434 | | -1928 | yes |
| 1C0426 | 1C0426\_@1 | 2.46 | 0.16 | | -426 | | -1880 | yes |
| 1C1352 | 1C1352\_@12 | 0.99 | 0.16 | | -4944 | | -2290 | yes |
| 1C1352 | 1C1352\_@11 | 1.21 | 0.15 | | -4950 | | -2241 | yes |
| 1C1352 | 1C1352\_@10 | 1.21 | 0.15 | | -4956 | | -2192 | yes |
| 1C1352 | 1C1352\_@09 | 1.06 | 0.15 | | -4962 | | -2143 | yes |
| 1C1352 | 1C1352\_@08 | 1.55 | 0.16 | | -4952 | | -2089 | yes |
| 1C1352 | 1C1352\_@07 | 1.65 | 0.15 | | -4972 | | -2045 | yes |
| 1C1352 | 1C1352\_@06 | 1.04 | 0.18 | | -4977 | | -1995 | yes |
| 1C1352 | 1C1352\_@05 | 1.06 | 0.15 | | -4982 | | -1945 | yes |
| 1C1352 | 1C1352\_@04 | 1.22 | 0.15 | | -4987 | | -1895 | yes |
| 1C1352 | 1C1352\_@03 | 1.04 | 0.15 | | -4992 | | -1845 | yes |
| 1C1352 | 1C1352\_@02 | 1.64 | 0.19 | | -4997 | | -1795 | yes |
| 1C1352 | 1C1352\_@1 | 1.55 | 0.18 | | -5002 | | -1745 | yes |
| 1C1292 | 1C1292\_@11 | 1.14 | 0.15 | | -5465 | | 1668 | yes |
| 1C1292 | 1C1292\_@10 | 1.34 | 0.17 | | -5469 | | 1615 | yes |
| 1C1292 | 1C1292\_@09 | 1.43 | 0.15 | | -5473 | | 1564 | yes |
| 1C1292 | 1C1292\_@08 | 1.45 | 0.14 | | -5477 | | 1512 | yes |
| 1C1292 | 1C1292\_@07 | 1.08 | 0.17 | | -5481 | | 1460 | yes |
| 1C1292 | 1C1292\_@06 | 1.06 | 0.17 | | -5485 | | 1409 | yes |
| 1C1292 | 1C1292\_@05 | 0.87 | 0.17 | | -5489 | | 1357 | yes |
| 1C1292 | 1C1292\_@04 | 0.38 | 0.15 | | -5493 | | 1306 | yes |
| 1C1292 | 1C1292\_@03 | 0.84 | 0.18 | | -5496 | | 1254 | yes |
| 1C1292 | 1C1292\_@02 | 1.37 | 0.17 | | -5499 | | 1203 | yes |
| 1C1292 | 1C1292\_@1 | 1.7 | 0.19 | | -5502 | | 1152 | yes |
| 1C1284 | 1C1284\_@7 | 0.57 | 0.17 | | -2322 | | -246 | yes |
| 1C1284 | 1C1284\_@6 | 0.77 | 0.15 | | -2290 | | -208 | yes |
| 1C1284 | 1C1284\_@5 | 0.56 | 0.15 | | -2258 | | -170 | yes |
| 1C1284 | 1C1284\_@4 | 0.53 | 0.15 | | -2226 | | -132 | yes |
| 1C1284 | 1C1284\_@3 | 0.8 | 0.16 | | -2194 | | -94 | yes |
| 1C1284 | 1C1284\_@2 | 0.44 | 0.14 | | -2162 | | -56 | yes |
| 1C1284 | 1C1284\_@1 | 1.07 | 0.14 | | -2130 | | -18 | yes |
| 1C1418 | 1C1418\_@6 | 0.9 | 0.17 | | -2319 | | 2136 | no |
| 1C1418 | 1C1418\_@5 | 0.82 | 0.16 | | -2354 | | 2099 | no |
| 1C1418 | 1C1418\_@4 | 1.21 | 0.15 | | -2389 | | 2062 | yes |
| 1C1418 | 1C1418\_@3 | 1.89 | 0.15 | | -2424 | | 2025 | yes |
| 1C1418 | 1C1418\_@2 | 1.09 | 0.16 | | -2458 | | 1988 | yes |
| 1C1418 | 1C1418\_@1 | 0.78 | 0.19 | | -2492 | | 1951 | yes |
| 1C1396 | 1C1396\_@9 | 0.16 | 0.14 | | -8 | | 517 | no |
| 1C1396 | 1C1396\_@8 | 0.44 | 0.17 | | -25 | | 470 | no |
| 1C1396 | 1C1396\_@7 | 0.51 | 0.13 | | -42 | | 421 | no |
| 1C1396 | 1C1396\_@6 | 0.03 | 0.15 | | -59 | | 374 | yes |
| 1C1396 | 1C1396\_@5 | 0.19 | 0.15 | | -76 | | 325 | yes |
| 1C1396 | 1C1396\_@4 | 0.11 | 0.14 | | -93 | | 278 | yes |
| 1C1396 | 1C1396\_@3 | 0.33 | 0.14 | | -110 | | 229 | yes |
| 1C1396 | 1C1396\_@2 | 0.27 | 0.13 | | -127 | | 182 | yes |
| 1C1396 | 1C1396\_@1 | 1 | 0.14 | | -144 | | 135 | yes |
| 1C0616 | 1C0616\_@1 | 1.06 | 0.16 | | -213 | | -1640 | yes |
| 1C0616 | 1C0616\_@2 | 2.05 | 0.17 | | -263 | | -1643 | yes |
| 1C0616 | 1C0616\_@3 | 1.37 | 0.13 | | -313 | | -1646 | yes |
| 1C0616 | 1C0616\_@4 | 1.37 | 0.14 | | -363 | | -1649 | yes |
| 1C0616 | 1C0616\_@5 | 1.27 | 0.13 | | -413 | | -1652 | yes |
| 1C0616 | 1C0616\_@6 | 1.37 | 0.13 | | -463 | | -1655 | yes |
| 1C0616 | 1C0616\_@7 | 1.62 | 0.17 | | -513 | | -1658 | yes |
| 1C0616 | 1C0616\_@8 | 1.69 | 0.13 | | -562 | | -1661 | yes |
| 1C0616 | 1C0616\_@9 | 2.32 | 0.15 | | -611 | | -1664 | yes |
| 1C1272 | 1C1272\_@1 | 0.18 | 0.12 | | -1205 | | -5602 | yes |
| 1C1272 | 1C1272\_@02 | 0.71 | 0.12 | | -1254 | | -5590 | yes |
| 1C1272 | 1C1272\_@03 | 1.4 | 0.13 | | -1303 | | -5578 | yes |
| 1C1272 | 1C1272\_@04 | 0.74 | 0.13 | | -1352 | | -5566 | yes |
| 1C1272 | 1C1272\_@05 | 0.47 | 0.15 | | -1401 | | -5554 | yes |
| 1C1272 | 1C1272\_@06 | 0.21 | 0.13 | | -1450 | | -5541 | yes |
| 1C1272 | 1C1272\_@07 | 0.35 | 0.14 | | -1499 | | -5528 | yes |
| 1C1272 | 1C1272\_@08 | 0.24 | 0.14 | | -1548 | | -5515 | yes |
| 1C1272 | 1C1272\_@09 | 0.1 | 0.13 | | -1597 | | -5502 | yes |
| 1C1272 | 1C1272\_@10 | 0.48 | 0.13 | | -1646 | | -5489 | yes |
| 1C1272 | 1C1272\_@11 | 0.67 | 0.15 | | -1694 | | -5476 | yes |
| 1C1206 | 1C1206\_@1 | 1.59 | 0.16 | | -3294 | | 132 | yes |
| 1C1206 | 1C1206\_@2 | 1.54 | 0.16 | | -3265 | | 173 | yes |
| 1C1206 | 1C1206\_@3 | 0.71 | 0.17 | | -3236 | | 214 | yes |
| 1C1206 | 1C1206\_@4 | 1.05 | 0.15 | | -3207 | | 255 | yes |
| 1C1206 | 1C1206\_@5 | 1.15 | 0.16 | | -3178 | | 297 | yes |
| 1C1206 | 1C1206\_@6 | 0.83 | 0.16 | | -3149 | | 338 | yes |
| 1C1206 | 1C1206\_@7 | 1.02 | 0.17 | | -3120 | | 380 | yes |
| 1C1268 | 1C1268\_@6 | 1.03 | 0.15 | | -183 | | -720 | no |
| 1C1268 | 1C1268\_@5 | 0.7 | 0.18 | | -215 | | -760 | yes |
| 1C1268 | 1C1268\_@4 | 0.73 | 0.17 | | -247 | | -800 | yes |
| 1C1268 | 1C1268\_@3 | 0.53 | 0.17 | | -279 | | -839 | yes |
| 1C1268 | 1C1268\_@2 | 1.11 | 0.16 | | -311 | | -878 | yes |
| 1C1268 | 1C1268\_@1 | 1.45 | 0.15 | | -343 | | -917 | yes |
| 1C1214 | 1C1214\_@1 | 1.73 | 0.15 | | 2228 | | -2124 | yes |
| 1C1214 | 1C1214\_@02 | 0.99 | 0.15 | | 2180 | | -2134 | yes |
| 1C1214 | 1C1214\_@03 | 1.59 | 0.15 | | 2133 | | -2144 | yes |
| 1C1214 | 1C1214\_@04 | 1.35 | 0.14 | | 2085 | | -2154 | yes |
| 1C1214 | 1C1214\_@05 | 1.11 | 0.15 | | 2038 | | -2164 | yes |
| 1C1214 | 1C1214\_@06 | 0.81 | 0.16 | | 1991 | | -2174 | yes |
| 1C1214 | 1C1214\_@07 | 0.92 | 0.17 | | 1943 | | -2184 | yes |
| 1C1214 | 1C1214\_@08 | 0.63 | 0.17 | | 1896 | | -2194 | yes |
| 1C1214 | 1C1214\_@09 | 0.39 | 0.15 | | 1849 | | -2204 | yes |
| 1C1214 | 1C1214\_@10 | 0.01 | 0.16 | | 1801 | | -2214 | yes |
| 1C1214 | 1C1214\_@11 | -0.04 | 0.17 | | 1754 | | -2224 | yes |
| 1C1214 | 1C1214\_@12 | 0.09 | 0.15 | | 1707 | | -2233 | yes |
| 1C1214 | 1C1214\_@13 | 0.18 | 0.14 | | 1659 | | -2242 | yes |
| 1C1214 | 1C1214\_@14 | 0.64 | 0.16 | | 1612 | | -2251 | yes |
| 1C1214 | 1C1214\_@15 | 1.11 | 0.14 | | 1565 | | -2260 | yes |
| 1C1214 | 1C1214\_@16 | 0.92 | 0.15 | | 1517 | | -2269 | yes |
| 1C1214 | 1C1214\_@17 | 1.26 | 0.16 | | 1471 | | -2278 | yes |
| 1C1373 | 1C1373\_@8 | 0.49 | 0.19 | | -2935 | | -2585 | no |
| 1C1373 | 1C1373\_@7 | 0.31 | 0.18 | | -2960 | | -2542 | yes |
| 1C1373 | 1C1373\_@6 | 0.26 | 0.14 | | -2985 | | -2499 | yes |
| 1C1373 | 1C1373\_@5 | 0.53 | 0.15 | | -3010 | | -2456 | yes |
| 1C1373 | 1C1373\_@4 | 0.32 | 0.14 | | -3035 | | -2413 | yes |
| 1C1373 | 1C1373\_@3 | 0.13 | 0.16 | | -3059 | | -2370 | yes |
| 1C1373 | 1C1373\_@2 | 0.49 | 0.16 | | -3083 | | -2327 | yes |
| 1C1373 | 1C1373\_@1 | 1.1 | 0.14 | | -3107 | | -2283 | yes |

**Supplementary Table 3.** Salinity variation around Iceland (W=west, SW=southwest, SE=southeast, and NE=northeast off Iceland) between 2002 and 2005. Season: 1=January-March, 2=April-June, 3=July-September, and 4=October-December.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Season | | | |  |
| Area | **Year** | **1** | **2** | **3** | **4** | **Variation** |
| W | 2002 | 35 | 35-35.1 | 35.1 | 35 | 0.1 |
| 2003 | 35 | 35 | 35-35.1 | 35 |
| 2004 | 35 | 35 | 35.1 | 35 |
| 2005 | 35.1 | 35 | 35.1 | 35.1 |
| SW | 2002 | 35.1 | 35.2 | 35.1-35.2 | 35.1 | 0.15 |
| 2003 | 35-35.2 | 35.2 | 35.2 | 35.1-35.2 |
| 2004 | 35.2 | 35.2 | >35.1 | 35-35.2 |
| 2005 | 35.1-35.2 | 35.2 | 35.3 | 35.1-35.2 |
| SE | 2002 | 34.7-35.2 | 35.1-35.2 | 34.7-35.2 | 34.5-35.2 | 0.6 |
| 2003 | 34.7-35.2 | 34.9-35.2 | 34.9-35.2 | 34.8-35.3 |
| 2004 | 34.9-35.2 | 34.8-35.2 | 35 | 34.8-35.3 |
| 2005 | 34.7-35.2 | 34.6-35.2 | 34.6-35.2 | 34.7-35.2 |
| NE | 2002 | 34.6-34.7 | 34.6-34.7 | 34.7-34.8 | 34.5 | 0.25 |
| 2003 | 34.7-34.9 | 34.8-34.9 | 34.9 | 34.7-34.8 |
| 2004 | 34.8 | 34.8-34.9 | 35 | 34.8 |
| 2005 | 34.8 | 34.6-34.7 | 34.6-34.8/9 | 34.7 |

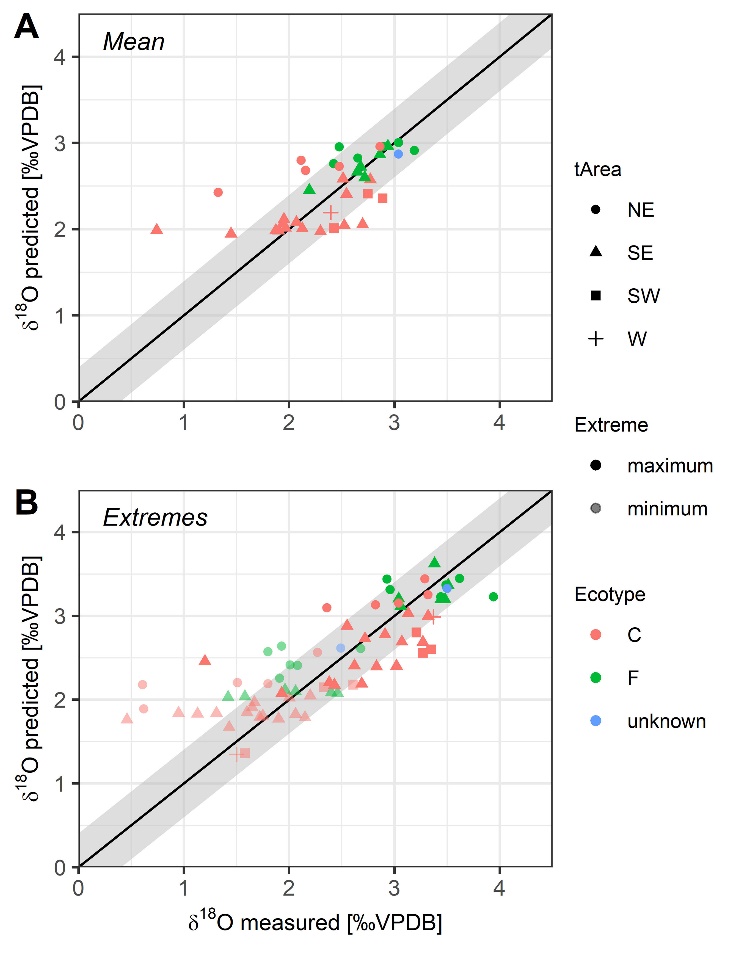
Chart

Description automatically generated

**Supplemenary Figure 1.** Mean monthly depth and standard deviation for each tagging area (W=west, SW=southwest, SE=southeast, and NE=northeast off Iceland) and ecotype recorded by DST tags.



**Supplementary Figure 2.** Measured and predicted otolith δ18O of (A) coastal and (B) frontal cod by tagging area (W=west, SW=southwest, SE=southeast, and NE=northeast off Iceland).



**Supplementary Figure 3.** Predicted vs. measured (A) mean and (B) minimum and maximum δ18Ootolith values for all DST-tagged cod by tagging area (tArea) and ecotype (C=coastal, F=frontal). Extremes show minimum (50% color transparency) and maximum (full-color intensity). The grey area around the 1:1 line represents the approximate analytical error of the SIMS measurement.