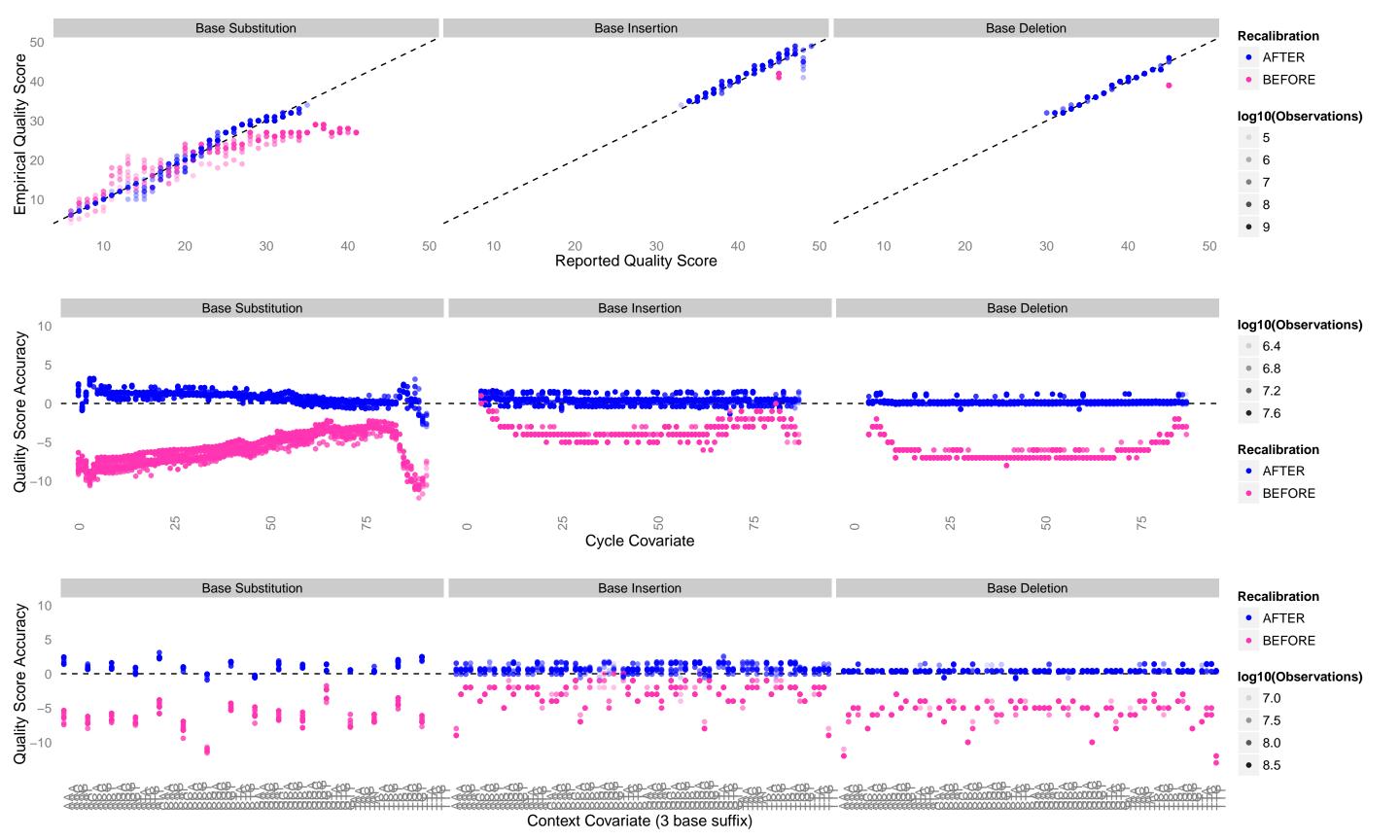
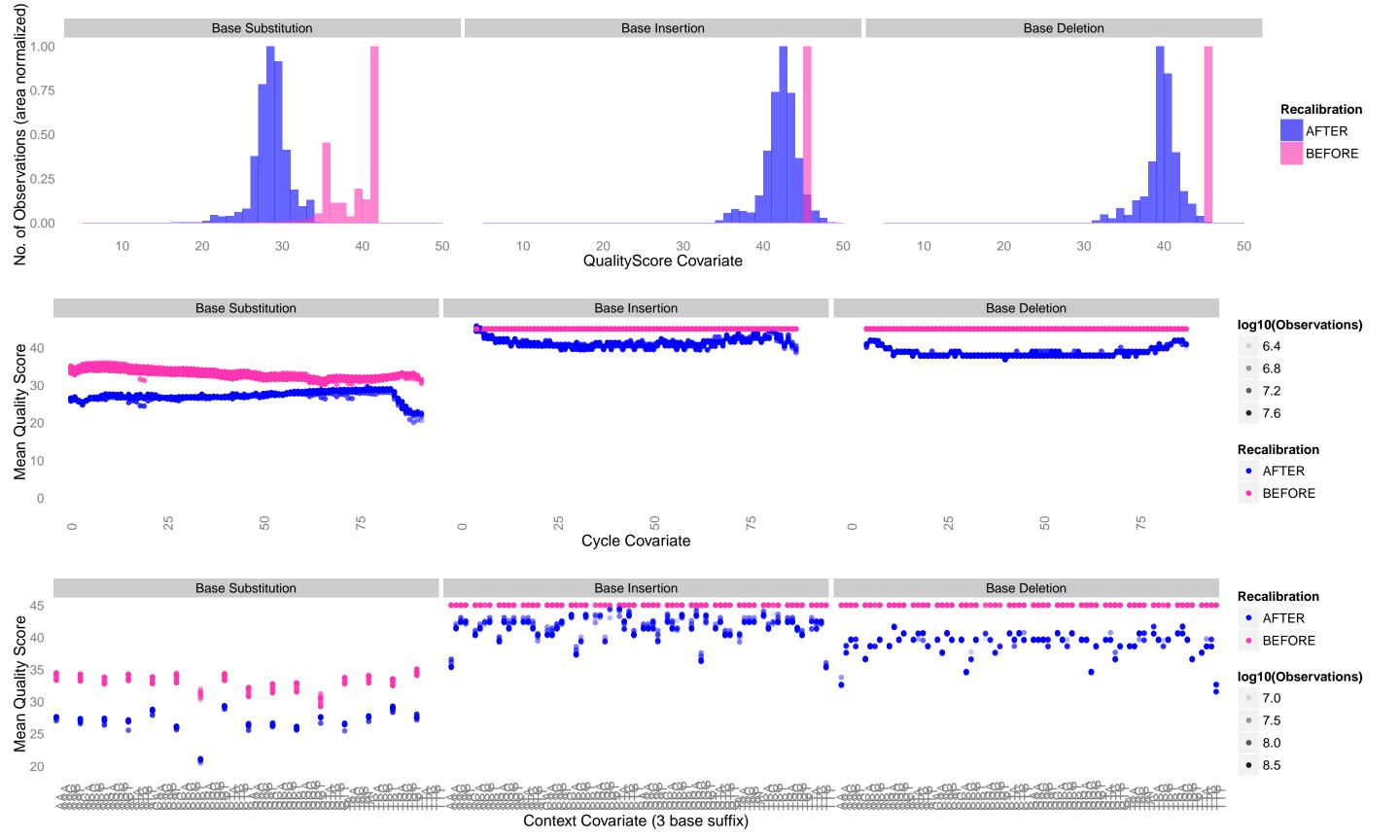
## **GATK BaseRecalibration report**

Argument	Value
binary_tag_name	None
covariate	ReadGroup, QualityScore, Context, Cycle
default_platform	None
deletions_default_quality	45
force_platform	None
indels_context_size	3
insertions_default_quality	45
low_quality_tail	2
maximum_cycle_value	500
mismatches_context_size	2
mismatches_default_quality	_1
no_standard_covs	false
quantizing_levels	16
run_without_dbsnp	false
solid_nocall_strategy	THROW_EXCEPTION
solid_recal_mode	SET_Q_ZERO





## Overall error rates by event type

7LYMFP1:388:7	7LYMFP1:388:7	7LYMFP1:388:1	7LYMFP1:388:1	7LYMFP1:388:1	7LYMFP1:388:2	7LYMFP1:388:2	7LYMFP1:388:2	7LYMFP1:388:3	7LYMFP1:388:3	7LYMFP1:388:3	7LYMFP1:388:4	7LYMFP1:388:4	7LYMFP1:388:4	7LYMFP1:388:5	7LYMFP1:388:5	7LYMFP1:388:5	7LYMFP1:388:6	7LYMFP1:388:6	7LYMFP1:388:6	7LYMF
1	D	M	1	D	M	1	D	M	I	D	M	1	D	M	I	D	M	I	D	
42.0	39.0	26.0	42.0	39.0	27.0	42.0	39.0	27.0	42.0	39.0	27.0	42.0	39.0	27.0	42.0	39.0	27.0	41.0	39.0	
45.0	45.0	33.2	45.0	45.0	33.3	45.0	45.0	33.4	45.0	45.0	33.3	45.0	45.0	33.2	45.0	45.0	32.3	45.0	45.0	
5.39e+09	5.39e+09	2.67e+09	2.67e+09	2.67e+09	4.37e+09	4.37e+09	4.37e+09	4.43e+09	4.43e+09	4.43e+09	4.59e+09	4.59e+09	4.59e+09	4.94e+09	4.94e+09	4.94e+09	5.79e+09	5.79e+09	5.79e+09	(
3.71e+05	6.95e+05	6 560+06	1 70e+05	3.25e+05	8 940+06	2 90e+05	5.48e+05	9.460+06	2 980+05	5.63e+05	9.366+06	3.06e+05	5.78e+05	9.78e+06	3.36e+05	6 27e+05	1 190+07	4 17e+05	7.48e+05	

## Error rates by event type and initial quality score

7LYMEP 1:388.7 7LYMEP 1:388.7	2	ii M	23 24	8763881 12073552	43839.74 49762.37
7LYMFP1:388:7 7LYMFP1:388:7 7LYMFP1:388:7	27 28 29	M	24 27 25	12073552 11454195 9721904 18823301	
7LYMFP1:388:7 7LYMFP1:388:7 7LYMFP1:388:7	21 22 23	M M	26 27 27	33286388 33464622 68120445	81861.80 84001.32 128094.22
7LYMFP1:388:7 7LYMFP1:388:7 7LYMFP1:388:7	34 25 26	M	27 27 29	133596995 1116176923 282266156	288907.35 1992238.78 336681.47
7LYMFP1:388:7 7LYMFP1:388:7 7LYMFP1:388:7	30 30 40	ii ii	27 28 28	96890392 441552893 333218664	189601.89 745180.57 580624.53
7LYMFP1:388:7 7LYMFP1:388:7 7LYMFP1:388:7	41 45 45	ii D	27 42 29	333218664 2428691173 5389897234 5389897234	4483171.11 371438.25 694759.63
7LYMFP1388:1 7LYMFP1388:1 7LYMFP1388:1 7LYMFP1388:1	7	ii ii	5 6 7	\$300027234 1707151 921223 627223 627223 627223 6274	280871.00 218085.02 199085.70
7LYMFP1:388:1 7LYMFP1:388:1 7LYMFP1:388:1	10 11 12	M M M	7 10 13	653439 534689 551756	120324 98 51434 63 25941.56
7LYMFP:388:1 7LYMFP:388:1 7LYMFP:388:1 7LYMFP:388:1	13 94 15	M M	12 12 14	733008 238273 1192875 1744464	42702.41 14331.40 48252.71 62331.71
7LYMFP1:388:1 7LYMFP1:388:1 7LYMFP1:388:1	17 18 19	M M	15 14 15	1383892 1490840 903730	48891.61 65854.33 28408.04
7LYMFP1:388:1 7LYMFP1:388:1 7LYMFP1:388:1	20 21 22	M	19 16 19	1617045 589235 1055970	22289.13 13909.04 13486.54
7LYMFP1:388:1 7LYMFP1:388:1 7LYMFP1:388:1	24 25 26	M M	18 19 20	2084617 2876289 2579210	34707.31 36709.37 34182.58
7LYMFP1:380:1 7LYMFP1:380:1 7LYMFP1:380:1 7LYMFP1:380:1	27 28 29	N N	19 24 23 34	3555378 2795230 5767750 8890117	40133.47 12139.96 31587.65 36767.18
7LYMFP1:388:1 7LYMFP1:388:1 7LYMFP1:388:1	21 22 23	M M	24 25 26	1221 1285	42976.27 41552.65 60672.76
7LYMFP1:380:1 7LYMFP1:380:1 7LYMFP1:380:1	25	M M	25 27 29	24192479 49376738 540052257 127731218	149801.64 1117881.94 163122.26
7LYMFP 1:388:1 7LYMFP 1:388:1 7LYMFP 1:388:1	36 39 40	ii ii	26 27 27	134853583 32666408 243368408 139667007 1303257541 2668080103	75142.48 470566.71 256526.79
7LYMFP:388:1 7LYMFP:388:1 7LYMFP:388:1 7LYMFP:388:1	41 45 45	M	27 42 39 5	1303257541 2668080103 2668080103 2773240	2496484.08 169951.43 324886.42 869271.44
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	7 8 9	M M M	8 8 10	20060000103 2006000103 272240 272240 2723612 4411127 621246 975665 811607 871013 1253866 324665 1555776 1150216	251716.84 213485.69 63334.94
7LYMFP13882 7LYMFP13882 7LYMFP13882	10 11 12	M.	12 14 15	975685 811607 871013	58079.61 34588.83 26798.48
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	14 15 16	M M	13 18 17	291666 1555720 1127645	17779.53 25589.77 25025.23
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	17 18 19	M	19 16 17	1599289 2322979 1326801	19761.09 59099.39 26934.45
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	21 22 22 23	M M	20 22 22 22	1599289 222273 1326801 165546 1192046 2113056 348558 4232248 5460110 7421788 725045	11824.74 15153.62 20059.41
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	24 25 26	M	22 23 22	4239248 5460110 7421788	24501.36 30784.43 40366.11
7LYMFP13882 7LYMFP13882 7LYMFP13882 7LYMFP13882	27 28 29	ii ii	25 26 25 27	7250405 6081213 11794924 18075070 21672092	16993.01 29115.20 2918.55
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	21 22 23	M M M	26 26 27	25097512	57939.32 57829.42 90125.68
7LYMFP13882 7LYMFP13882 7LYMFP13882 7LYMFP13882	36 35 36	M M	26 27 29	91842915 920241844 222066320 224502120	221369.34 1709586.02 263605.66 317793.76
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	38 39 40	M	27 28 28	375935343 239876516	127947.71 658849.20 416847.25
7LYMFP1:388:2 7LYMFP1:388:2 7LYMFP1:388:2	41	M I	27 42 29	2051333988 4370450382 4370450382	3773424.75 290348.67 548115.71
7LYMFP1:388:3 7LYMFP1:388:3 7LYMFP1:388:3	7 8 9	M M	9 8 7	205 (1212)88 4170 (523)82 4170 (523)82 25300 ( 1342)74 1463323 719753 1112164 74395 817240	187741.02 253409.21 130590.97
7LYMFP1:380:3 7LYMFP1:380:3 7LYMFP1:380:3	10 11 12	M	14 16	1112164 743955 837340	158531.30 30202.58 21522.83
7LYMFP1:388:3 7LYMFP1:388:3 7LYMFP1:388:3	14 15 16	M M	13 14 13	7-43925 8073-40 1173564 389353 1603226 1123519 1594011 2390755	19387.86 62336.03 52198.66
7LYMFP1:380:3 7LYMFP1:380:3 7LYMFP1:380:3	17 18 19	M	15 14 16	1594011 2390755 1336407	45453.69 98047.19 30558.33
7LYMFP1:388:3 7LYMFP1:388:3 7LYMFP1:388:3	21 22 22 23	ii ii	20 22 22 22	200755 1336477 3114216 191329 2335200 3646545 423823 503111 7563246 7457523 6005000	12364.88 13529.56 23792.79
7LYMFP1:380:3 7LYMFP1:380:3 7LYMFP1:380:3	26 25 26	M	22 21 23	4328893 5638131 7563246	30661.16 42352.18 39673.17
7LYMFP1388:3 7LYMFP1388:3 7LYMFP1388:3 7LYMFP1388:3	27 28 29 30	N N	26 25 26	745/322 6092699 12028424 18371462 22012722 25400987	16237.00 40903.65 50317.51
7LYMFP1:388:3 7LYMFP1:388:3 7LYMFP1:388:3	21 32 33	M	25 26 27	22012722 26400987 47909757 94028717	63848.79 65296.51 98169.71
7LYMFP1:380:3 7LYMFP1:380:3 7LYMFP1:380:3 7LYMFP1:380:3	36 25 36	ii ii	26 27 28 28	935988937	231027.05 1744658.53 276389.53 334858.10
7LYMFP1:388:3 7LYMFP1:388:3 7LYMFP1:388:3	38 39 40	M	27 27 28	229104711 66570889 387381581 246221452	140838.36 695536.16 437871.86
7LYMFP13863 7LYMFP13863 7LYMFP13863 7LYMFP13864	41 45 45	M I D	27 42 29	66574889 387381581 246221402 2062274032 4432274385 4432274385 281509 1423877 1621505 705290 1060942 733865 807325	3857030.07 298356.67 562880.54 80108.22
7LYMFP1:388:4 7LYMFP1:388:4 7LYMFP1:388:4	7 8 9	M M	9 8	1432877 1521505 705990	195728.88 223299.21 93223.03
7LYMFP1:380:4 7LYMFP1:380:4 7LYMFP1:380:4	10 11 12	M	11 16 15	1060942 732865 807355	85599.12 17186.24 24265.89
7LYMFP 1:388:4 7LYMFP 1:388:4 7LYMFP 1:388:4	96 95 96	ii ii	13 17 16	807325 1200238 420325 6029981 1177513 1657194 2423094 1388322	21359.42 36071.06 32657.03
7LYMFP1:380:4 7LYMFP1:380:4 7LYMFP1:380:4	17 18 19	M M	18 16 17	1657194 2433094 1388322	28207.59 61693.24 29466.05
7LYMFP 1:388:4 7LYMFP 1:388:4 7LYMFP 1:388:4	21 22 23	ii ii	20 22 22 22	1380322 2322262 1333158 2549766 3810494 4613710 5971021 8092018	12258.76 15544.13 24121.87
7LYMFP1:380:4 7LYMFP1:380:4 7LYMFP1:380:4	24 25 26	M.	22 22 23	4613710 5971021 8092018 7918852 6733619 12758887	29466.05 18755.58 12258.76 15544.13 24121.87 27936.24 23814.46 41375.88 27874.95 19102.68 41623.57 46033.88
7LYMFP1:388:4 7LYMFP1:388:4 7LYMFP1:388:4	28 29 30	M	25 25 26	6733619 12758887 19688337	19102.68 41623.57 46033.88
7LYMFP1:380:4 7LYMFP1:380:4 7LYMFP1:380:4	21 22 23	M	26 26 27	12758837 19688337 22279835 27801301 50478640	41023.57 46033.88 62216.40 63830.61 92294.34 205978.23 1806098.85 277870.80 30348.32 142680.86 732266.46 447541.70
7LYMFP1:388:4 7LYMFP1:388:4 7LYMFP1:388:4	25 25 27	M	27 29 29	98202307 970270412 223827317 237917520 70773583 409778416	1806098.85 277870.80 330948.32
7LYMFP1:380:4 7LYMFP1:380:4 7LYMFP1:380:4 7LYMFP1:380:4	30 39 40	N N	27 27 28 27	70773583 409778416 257201734 2114031887	142680.86 732366.46 447541.70 38641723.52
7LYMFP1:388:4 7LYMFP1:388:4 7LYMFP1:388:5	45	D M	42 29 7	4587579506 4587579506 303407	305506.41 577642.75 67782.54
7LYMFP:386.5 7LYMFP:386.5 7LYMFP:386.5	7 8 9	M M	9 10 10	403778416 227201734 21146231805 4667277500 437777500 437777500 437777500 503262 1740035 832369 1243447 821814 843644	722364.6 44724.70 2894779.52 205506.41 577642.75 67782.54 186625.27 18074.15 82577.74 80026.15 12312.21 14782.31 10910.33
7LYMFP 1:388.5 7LYMFP 1:388.5 7LYMFP 1:388.5	11 12 13	ii ii	18 18 21	821823 894341 1430542	12312.31 14792.31 10910.33
7LYMFP1:380:5 7LYMFP1:380:5 7LYMFP1:380:5	14 15 16	M.	15 19 16	1433542 463441 1880632 1365561 1937156 3005278 1723104 3847321	10910.33 14599.59 24214.59 22011.84 23215.41 60702.84 29533.85 16981.82
7LYMFP1:388:5 7LYMFP1:388:5 7LYMFP1:388:5	18 19 20	M M M	17 18 24	3005278 1723104 3847321	60702.84 29530.65 16981.82
Section	27 22 23 24	M		3847321 1539548 3034740 4429362 5425068 7079150 9651696 9293493	10279.82 11854.85 20115.14 26697.37
7LYMFP1:388:5 7LYMFP1:388:5 7LYMFP1:388:5	25 26 27	M	23 24 24	7079150 9651696 9299493	34828 32 40430 58 37725 75 17429 78 45434 75 47159 39
7LYMFP13885 7LYMFP13885 7LYMFP13885 7LYMFP13885	29 20 30 31	M M M	27 25 27 28	7820407 15182034 22998901 27344293	17429.78 45434.75 47159.39 67715.56
7LYMFP1:388:5 7LYMFP1:388:5 7LYMFP1:388:5	22 23 34	M	27 27 26	27344293 32687315 57542316 112901590	47158.38 67715.56 70071.85 107750.11 258982.71
7LYMPP13885 7LYMPP13885 7LYMPP13885 7LYMPP13885	25 27 28	ii ii	27 29 29 27	1030661338 254717718 255197413 80746668	305980.69 350231.36 159122.47
7LYMFP1:388:5 7LYMFP1:388:5 7LYMFP1:388:5	29 40 41	M	28 28 27	423557316 289352649 2267047428	737883.43 505700.74 4192654.83
7LYMFP1:380:5 7LYMFP1:380:5 7LYMFP1:380:6	45		42 29 6	4941512832 4941512832 477181	335590.18 626862.52 112313.92
7LYMFP 1:388:6 7LYMFP 1:388:6 7LYMFP 1:388:6	6 9 10	ii ii	9 10 11	2799560 1354395 1395114	323968.32 137788.06 160305.90
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	11 12 13	M.	16 17 19	1305493 1375016 2201202	29235.24 25421.86 28582.75
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	15 16 17	M M	15 16 16	42357796 280325640 280325640 28041512820 48441512820 48441512820 48441512820 48441512820 48441512820 29052640 29052640 200526400 200526400 200526400 200526400 200526400 2005264000 2005264000 2005264000000000000000000000000000000000	44620.48 45180.70 48863.28
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	18 19 20 21	M M M	17 18 23	4454951 2524342 5794380 2348400	86271.94 40517.66 26483.15
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	22 23 24	M	24 24 24 23	4619864 6618615 8142278	19101.10 19101.87 29617.87 29436.60
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	25 26 27	M	23 24 24	10606118 14676740 13742852	51318.27 56420.69 54930.20
7LYMFP13886 7LYMFP13886 7LYMFP13886 7LYMFP13886	29 20 20 21	M	27 25 27 26	11865245 22721054 23779138 29548898	26196.24 64753.54 71028.80 94883.12
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	22 23 24	M	27 27 22	47273113 79934001 154927579	100264.26 149781.64 237898.81
7LYMFP 1:388:6 7LYMFP 1:388:6 7LYMFP 1:388:6	36 37 38	M	29 29 27	302192173 301141314 114260470	364520 39 422205.01 221030 86
7LYMFP1:388:6 7LYMFP1:388:6 7LYMFP1:388:6	29 40 41	M	28 28 27	509678728 375272532 2508469554	903298.19 650840.55 4620432.14
7LYMFP13888 7LYMFP13888 7LYMFP13888	45 6 7	M M	41 39 7 10	5787329121 5787329121 509172 2749260	4:6523.77 747561.45 110354.22 278962.34
7LYMFP1:388:8 7LYMFP1:388:8 7LYMFP1:388:8	8 9 10	M	10 11 12	2925054 1429212 2092688	306635.87 115162.04 130836.72
7LYMFP1:388:8 7LYMFP1:388:8 7LYMFP1:388:8 7LYMFP1:388:8	11 12 13	M M	18 18 20 46	1291915 1488295 2327380 769584	19713.54 22687.23 22382.94 21055.08
1			ARMACADA *** DE COMO DE COMO DE COMO ARCAMACAMACAMACAMACAMACAMACAMACAMACAMACA	8 GOTTO 16 CONTROL 16	### 1997 1997 1997 1997 1997 1997 1997 1
7LYMFP1:388:8 7LYMFP1:388:8 7LYMFP1:388:8 7LYMFP1:388:8	18 19 20 21	M M M	18 18 24	4937611 2707086 6219415 2557742	85438.63 39829.99 24603.10
7LYMFP1:360:0 7LYMFP1:360:0	22 23	M	24 24	5062194 7158047	10101.54 20592.07