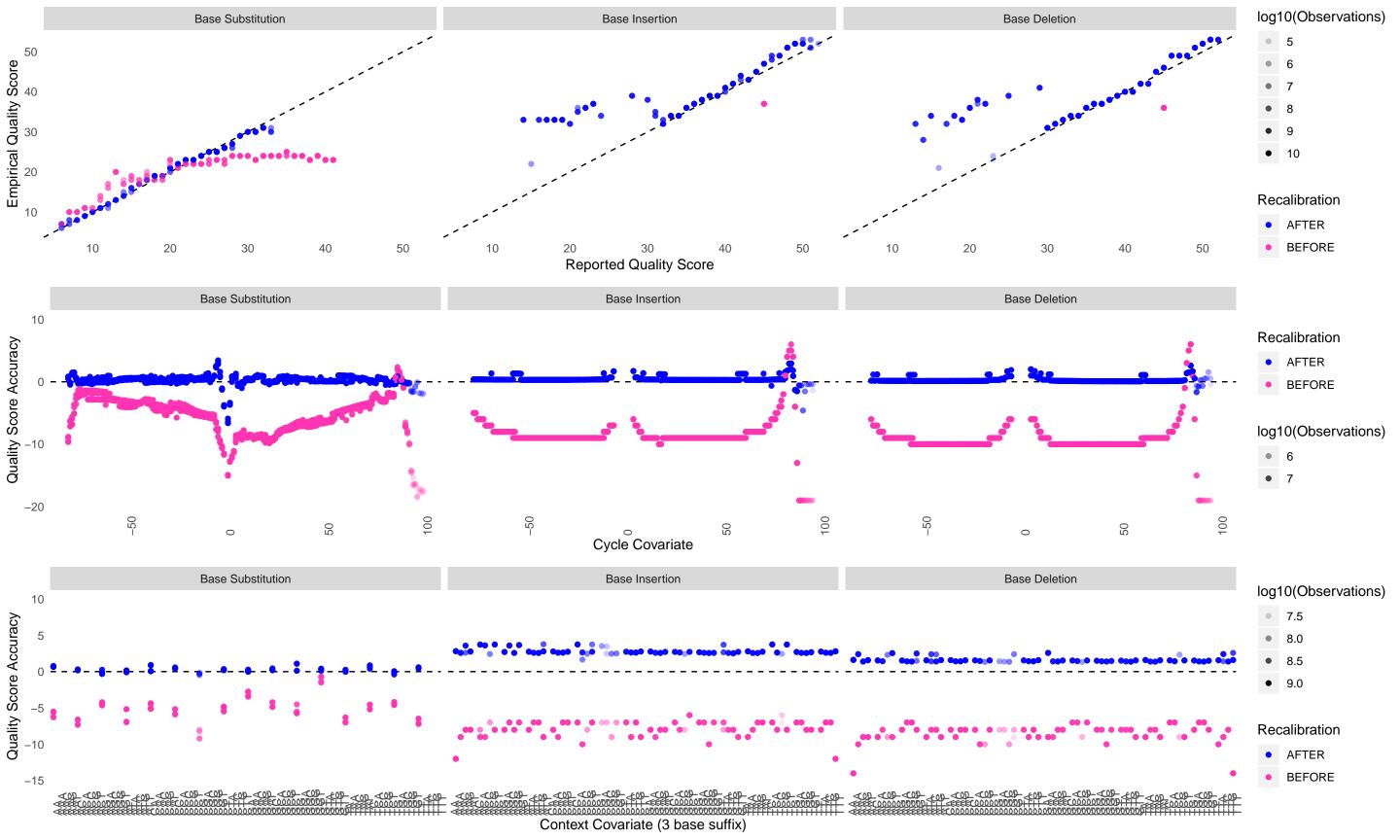
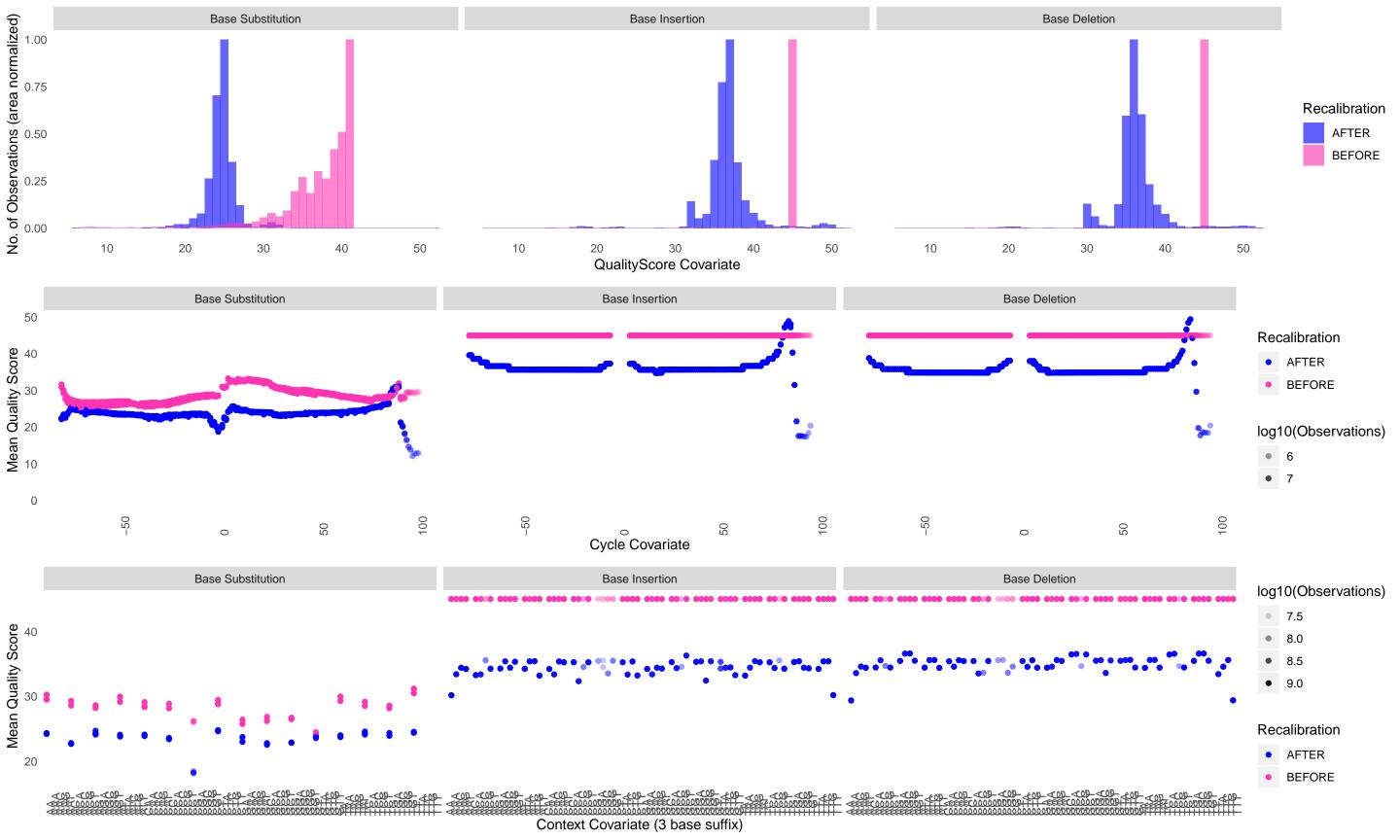
GATK BaseRecalibration report

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



Error rates by event type and initial quality score

ReadGroup @FCC1LLLACXX.5.Tibetan-macaque=NO.3	QualityScore 6 7	Eventype M M M M M M M M M M M M M M M M M M M	EmpiricalQuality 7	Observations 3098090 16076755	Errors 590183.97 1604073.73
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3		M M	10 10	16076755 24055823	2394531.24
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	8 9 10 11 12 13 14 15 16 17 18	M M	111 111 117 177 188 188 199 199 199 22 22 22 22 22 22 22 22 22 22 22 22 2	24055823 17237999 13404444 5742751	1403637.95 1167196.41
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	11 12	M M	14 17	5742751 3396711	255046.82
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	13 14	M M	20 18	3396711 11672456 4975474 12303984	69638.48 124295.60 88004.89 171246.51
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	16	M M	19 18	12303984 11919080 13178237	209227.41
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	17	M	19 19		162079.07 374072.37
@FCC1LLLACXX.5.Tibetan-macaque=NO.3 @FCC1LLLACXX.5.Tibetan-macaque=NO.3	20	M	23	18897376 13476612	103767.99 102000.17
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	19 20 21 22 23 24 25 26 26 27 28	M M	22	30031439 19884630 18897376 13476812 27879058 34775833 50277828 55287926 88581036	255709.75 103767.99 10200.17 162359.88 208842.96
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	24 25	M M	22 23	50277828 55287926	208842.96 305772.62 300330.83 434498.94
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	26 27	M M	23 23	88581036 81188752 70432169	434498.94 434213.70 306618.74
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	28 29	M M	23 24 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	70432169 106385340	
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	30 31	M M	24 23	106385340 179482862 254691964 194907657 290724375	766630.79 1219716.63
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	29 30 31 32 33 34 35 36	M	24 24	194907657 290724375	\$94265.76 768630.79 1219716.63 774313.42 1234344.10 2593067.71 289937.97 2188291.62
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	35 36	M	25 24	606364519 816603821 575672374	2898937.97 2188201.62
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	37 38	M M	24	934538289 823931246	
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	39 40	M M	24 23	1288750810 1572086323	3778911.57 5351859.20 7160237.29
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCC1LLLACXX.5.Tibetan-macaque-NO.3	38 39 40 41 45 6 6 7 7 7 9 9 9 11 11 12 13 14 14 15 16 16 16 16		23 37	934538289 823931246 1288750810 1572086323 3010852504 11282566547 323557 17373834 2558319 17218108	7160237.29 14665695.11 2412821.58 2836793.80 615690.78
@FCC1LLLACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	45 6	D M	36 7	11282566547 3273857	2836793.80 615690.78
@FCD1R52ACXX.5. libetan-macaque-NO.3 @FCD1R52ACXX.5. Tibetan-macaque-NO.3	8	M	10 10	17373834 25593191	1706526.13 2450200.54 1370557.06
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	10	M M	11	13530808 5891802 3556291	1370557.06 1095135.34 232974.56 75443.33 136368.63 92513.76 188440.19 188113.41
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	12	M	17	3556291 12199829	75443.33 136368.63
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	14 15	M M	17 19	12199629 5174692 12476104 12210601	92513.76 168440.19
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	16 17	M M	18 20	13604129	
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	18 19	M M	19 19	32185920 20510474	365791.12 250698.75
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	20 21 22 23 24 25 26 27	M M	100 1101 1111 1111 1111 1111 1111 1111	20510474 20212259 14345994 29897346 38271695 52054727 58507650 98858598 84727084	20089.7 114119.15 106337.16 173857.35 213196.63 302919.97 300905.02 457926.57 429413.01
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	22 23	M M	22 22 23	29897346 36271695 52054727	173857.35 213196.63 202010.07
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	24 25	M	22 23 22	52054727 58507650	302919.97 300905.02 467039.67
@FCD1R52ACXX.5.Tibetan=macaque=NO.3 @FCD1R52ACXX.5.Tibetan=macaque=NO.3	27 28	O A M M M M M M M M M M M M M M M M M M	23 24	84727084 75475513	429413.01 322813.55
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	28 29 30 31 32 33 34 35 36	M M	24 24 24	84727084 75475513 116662454 189427804 274163817 211404494 311404684 664818045	429413.01 322813.55 482806.51 789266.72 1283650.61 820864.44 1296178.34 2788122.57
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	31 32	M M	23 24	274163817 211404494	1283650.61 820864.44
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	33 34	M M	24 24	311404684 664818045 850888526	1296178.34 2788122.57 2985080.83
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	35 36	M M	25 24	850888526 600880673 969069975	2985080.83 2271874.88 3660589.98 4008865.45
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	38	M	24 23		4008865.45 5551073.16
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	40 41	M	23	1690367045	7627772.92 15095743.20
@FCD1R52ACXX.5.Tibetan-macaque-NO.3 @FCD1R52ACXX.5.Tibetan-macaque-NO.3	38 39 40 41 45 45 6 7		23 244 24 25 24 22 23 22 23 24 23 27 37 10 11 11	883575269 1346596777 1690367045 3123616969 11895025838 11895025838 2187293 13977221	4008865.45 5551973.16 7627772.92 15095743.20 2538699.28 2973678.04 572842.70 1346308.20
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	6 7	O M M M M M M M M M M M M M M M M M M M	7 10	2817293 13977221	572842.70 1346308.20
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	8 9 10 11 12 13 14 15 16	M M	10 11	14399501	2012900.73
@FCD1RKBACXX.3.Tibetan-macague=NO.3 @FCD1RKBACXX.3.Tibetan-macague=NO.3	11	M	13	11686244 5089370	113/6/1.15 1095801.02 243837.89 74137.90 110920.52 90579.75 170129.41 221424.94 173617.47
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	13	M	13 16 20 17 18 17	5089370 3176116 10502637 4536507 11239871	110920.52 90579.75
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	15 16	M M	18 17	11239871 10942826 12475205	170129.41 221424.94
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	17 18	M M	18	27089098	
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	18 19 21 21 22 22 22 22 22 22 22 22 22 22 22	M M	18 23	17447938 17784766 12378673	261922.29 93476.74
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	21 22	M M	21 1 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	12378673 25326107	96428.13 146909.99 195450.01 293682.50 288198.08
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	23 24 25	M M	22 22 22	25326107 32317498 46069708 50436879	293682.50 288198.08
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	26 27	M	23	81741099	407530.29 430300.51 291016.68
@FCD1RK8ACXX3.Tibetan-macaque-NO.3 @FCD1RK8ACXX3.Tibetan-macaque-NO.3	28 29	M M	24 24	75213247 65258725 99329493	291016.68 432540.35
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	30 31	M M	24 23	99329493 167176188 242320884	432540.35 725894.73 1183659.60
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	32 33	M M	24 24	242320884 184118985 280582068 590008188 860729264 577649483	746692.56 1207148.22 2547446.94 3064203.39 2206876.80
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	34 35	M M	24 24	590008188 860729264	2547446.94 3064203.39
@FCD1RKBACXX.3.Tibetan-macague=NO.3 @FCD1RKBACXX.3.Tibetan-macague=NO.3	36 37	M	24 24	943268966 803060821	3607144.37 3713518.20
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.3.Tibetan-macaque-NO.3	39 40	M	24		
@FCD1RK8ACXX3.Tibetan-macaque-NO.3 @FCD1RK8ACXX3.Tibetan-macaque-NO.3	41 45		23 37	1304901516 1569719369 3200615349 11395806566 11395806566 2769531 13729624 20229441	5472396.69 7208236.80 15708483.48 2444504.84 2868439.98 552585.90 1309135.98 2015329.49
@FCD1RK8ACXX.3.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	45 6	D M	36 7	11395808566 2769531	2866439.98 552585.90
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	7 8	M M	10 10 11 10 13	13729624 20229441	1309135.98 2015329.49
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	9 10	M M	11 10	14320491 11660467 5044662	1178005.90 1136722.20 269737.04
@FCD1RKBACXX.4.Tibetan-macaque-NO.3 @FCD1RKBACXX.4.Tibetan-macaque-NO.3	10 11 12 13 14 15 16 17 18	M M	13 16	5044662 3116795	269737.04 72115.78
@FCD1RK8ACXX4.Tibetan=macaque=NO.3	14	M	16 20 17 18 17 18 18	3116795 10281975 4451139 11138451 10849069	72115.78 108716.99 88305.56 178280.85 215251.30
@FCD1RK8ACXX.4.Tibetan-macaque=NO.3 @FCD1RK8ACXX.4.Tibetan-macaque=NO.3	16	M M	17 18	10849069 12720853	215251.30 221899.65
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	19	M M	18	12720853 26927712 17247624	221899.65 387541.91 273601.01
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	20 21	M M	23 21	17556231 12218856	93381.51 98345.93 143353.14
FOCULLIACIAS, Toestern-microgen-NO3 6FCCILLIACIAS, Toestern-microgen-NO3 6FCCILLIACIA	22 23	M M	23 21 22 22 22 22 24 24 24 24 24 24 24 24 24	17247624 17556231 12218856 24966277 31948794 45582375 5000340 80877537	143353.14 197505.94
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	24 25	M M	22 22	45582375 50009340	197505.94 303861.69 289942.77 402992.35
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3	26 27	M	23 22 24		443023.56
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	28 29 30	M	24 24 24	64397695 98702393 165623215	284302.58 434191.58 722723.73
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	31 32	M M	23 24	165623215 241312015 183428581	722723.73 1179594.01 752208.93
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	33 34	M M	24 24	280701946 594975729 878448618 582494008 953905727	1206057.97 2578773.84 3116359.07 2225853.48 3652198.74
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	35 36	M M	25 24	878448618 582494008	3116359.07 2225853.48
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	37 38	M M	24 23	953905727 807225986 1318770547	3652198.74 3741689.63 5555502.99
@FLD1KR8ACXX.4. Ibetan-macaque-N0.3 @FCD1RK8ACXX.4. Tbetan-macaque-N0.3 @FCD1RK8ACXX.4. Tbetan-macaque-N0.3 @FCD1RK8ACXX.4. Tbetan-macaque-N0.3 @FCD1RK8ACXX.4. Tbetan-macaque-N0.3 @FCD1RK8ACXX.4. Tbetan-macaque-N0.3 @FCD1RK8ACXX.4. Tbetan-macaque-N0.3	20 22:22:22:23:23:24:22:25:25:25:25:25:25:25:25:25:25:25:25:	0 N M M M M M M M M M M M M M M M M M M	23 24 23 23	1594196522	7330650.50 16041583.27
@FCD1RK8ACXX.4.Tibetan-macaque-NO.3 @FCD1RK8ACXX.4.Tibetan-macaque-NO.3	45 45	"i D	23 37 36	3262262081 11528959580 11528959580	7330650.50 16041583.27 2473604.31 2901844.82