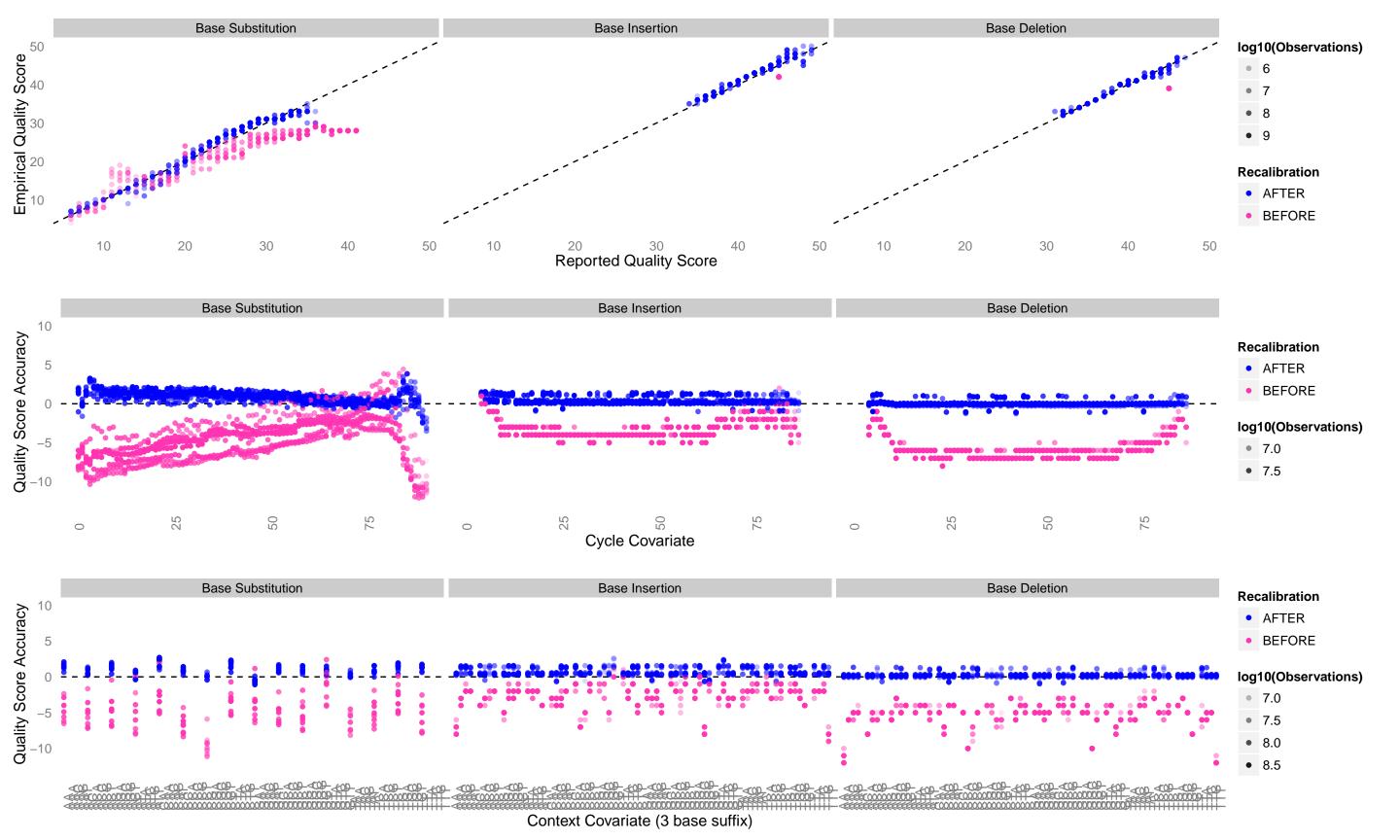
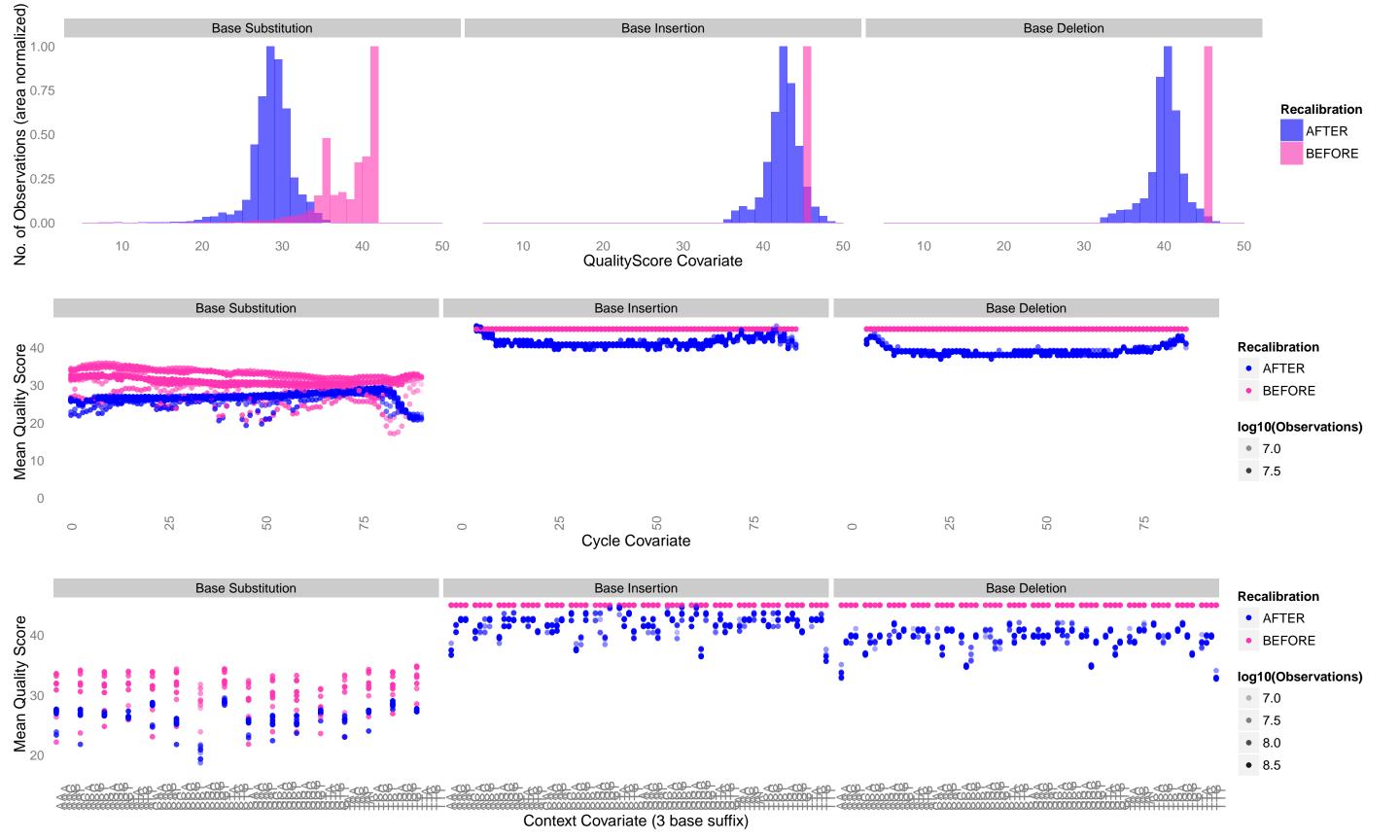
## **GATK BaseRecalibration report**

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	<b>—1</b>
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

:1	D7LYMFP1:183:3	D7LYMFP1:183:3	D7LYMFP1:183:3	D7LYMFP1:183:4	D7LYMFP1:183:4	D7LYMFP1:183:4	D7LYMFP1:183:2	D7LYMFP1:183:2	D7LYMFP1:183:2	D7LYMFP1:183:8	D7LYMFP1:183:8	D7LYMFP1:183:8	D7LYMFP1:183:5	D7LYMFP1:183:5	D7LYMFP1:183:5	D7LYMFP1:183:7	D7LYMFP1:183
D	M	1	D	M	I	D	M	I	D	M	1	D	M	1	D	M	
.0	27.0	42.0	39.0	26.0	42.0	39.0	27.0	42.0	39.0	26.0	42.0	39.0	27.0	42.0	39.0	22.0	42
.0	32.8	45.0	45.0	31.2	45.0	45.0	33.2	45.0	45.0	28.2	45.0	45.0	31.0	45.0	45.0	24.5	45
19	3.13e+09	3.13e+09	3.13e+09	6.28e+09	6.28e+09	6.28e+09	4.06e+09	4.06e+09	4.06e+09	1.59e+09	1.59e+09	1.59e+09	6.19e+09	6.19e+09	6.19e+09	2.84e+09	2.84e+(
15	6.010+06	1 080+05	3 770+05	1.470+07	3 030+05	7 300+05	8 420+06	2.580+05	4 820+05	4 480+06	1.020+05	1 820+05	1 360+07	4 100+05	7 760+05	1 680+07	1 030+(

## Error rates by event type and initial quality score

D7019FP1:180:1	2	ii.	21	2626104	22410.45
D7CHMP1:180:1 D7CHMP1:180:1 D7CHMP1:180:1 D7CHMP1:180:1 D7CHMP1:180:1 D7CHMP1:180:1 D7CHMP1:180:1 D7CHMP1:180:1	27 28 29	M M	22 22 25	2626104 3863626 3872368 3273338 8007070	25681.76 10941.47 26173.51
D701MFP1180:1 D701MFP1180:1 D701MFP1-80:1	30 31 32	M M	26 26 36	17914477	30567.46 44188.85 54751.38
D701MFP1:182:1 D701MFP1:182:1 D701MFP1:183:1	33 34	M M	27 27 27	22684152 52078746 122796359 418234738	93494.82 267124.97 725453.63
D7CYMFP1:183:1 D7CYMFP1:183:1 D7CYMFP1:183:1	36 37	M M	29 29 29	104196916 112349170 77517363 212709684	121159.04 147956.97 130983.43
D701MFP1:183:1 D701MFP1:183:1 D701MFP1:183:1	39 40 41	M M	28 28 28		353624.81 430549.80 1607099.52
D701MFP1:180:1 D701MFP1:180:1 D701MFP1:180:3	45 45	D M	42 39 4	2400922392 2400922392 2400922392 237181	147265.00 281941.78 87500.03
D701MFP1:1803 D701MFP1:1803 D701MFP1:1803	7 8	ii ii	7 7 7		262074.63 274416.60 109753.88
D701MFP1:1803 D701MFP1:1803 D701MFP1:1803	10 11 12	M	11 13	122893 557362 828670 469475 489348 848579 299377 122821 861566	138143.70 41277.49 27129.66
D701MFP1:180:3 D701MFP1:180:3 D701MFP1:180:3	13 14 15	M M	12 11 14	848579 295077 1225921	53401.17 24213.90 50341.45
D701MFP1:180:3 D701MFP1:180:3 D701MFP1:180:3	16 17 18	M M	13 14 15	1225027 861520 9411191 2150263 1138725 2572470 878120 9502179 2004112 2004112 2004726 5484150 771050	45617.47 59245.20 71566.61
D701MFP1:180:3 D701MFP1:180:3 D701MFP1:180:3	19 20 21	M M	17 21 18	1138725 2572476 878139	24454.24 20748.61 13471.90
D701MFP1:180:3 D701MFP1:180:3	22 23 24	M	20 21 21	2906112 3907359	23372.32 29520.87
D701MFP1:1803 D701MFP1:1803	26 27	M M	21 23 22	5404175 6888596 7713259	401.05.52 36418.23 44148.43
D701MFP1:180:3 D701MFP1:180:3 D701MFP1:180:3	29 30	M M	25 26 36	7713259 542365 1568162 221097 31970435 40007227	49080.69 57891.25 81487.96
D701MFP11803 D701MFP11803 D701MFP11803	32 33 34	M M	26 27 26	40007227 77186492 193498549	100436.74 143130.70 449174.00
D701MFP1:1803 D701MFP1:1803 D701MFP1:1803	25 26 27	ii ii	28 29 29	7718582 193498549 451461243 133221019 148894382	746678.74 156770.88 202014.69
D701MFP1:1803 D701MFP1:1803 D701MFP1:1803	38 39 40	M	27 28 28	148894282 100436455 295056076 347302706	181031.12 509909.25 570753.21
D701MFP1:180:3 D701MFP1:180:3 D701MFP1:180:3	41 45 45	M I	28 42 39	1229140040 3133467942 3133467942	2152511.38 197901.81 377010.00
D7CYMFP1:183:4 D7CYMFP1:183:4 D7CYMFP1:183:4	6 7 8	M M	8	839226 4178257 4810060	224298.71 640394.82 750761.35
D701MFP1:183:4 D701MFP1:183:4	10	ii ii	12	3071336 1369344	463981.84 86193.70
D7010FP11804 D7010FP11804 D7010FP11804	12 13 14	ii ii	17 14	2892853 1060440	40953100 60845.16 41685.97
D7CMFP1:1804 D7CMFP1:1804	16 17	i i	13	3082372 4175813	139236.19 132770.28
D701MFP1:1824 D701MFP1:1824 D701MFP1:1824	19 20 21	M M	17 22 20	3249676 7059510 3316647	62915.92 46606.13 30051.24
D701MFP1:1834 D701MFP1:1834 D701MFP1:1834	22 23 24	M	23 22 22	6569480 8941999 10999109	34072.41 59700.30 76231.62
D701MFP11804 D701MFP11804 D701MFP11804	25 26 27	M M	21 24 22	13745460 20579007 18099051	104963.71 80208.68 118157.96
D707MFP1:1804 D707MFP1:1804 D707MFP1:1804	28 29 30	M	26 25 26	1224-60000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	41402.85 96634.46 121872.10
D701MFP1:1804 D701MFP1:1804 D701MFP1:1804	31 32 33	M M	26 26 27	4470000773	142593.72 157167.03 226367.01
D701MFP1:1804 D701MFP1:1804 D701MFP1:1804	34 35 36	M	26 27 29	230530319 1178010166 320802263 336813696	524466.56 2207068.37 389350.48
D701MFP1:1804 D701MFP1:1804 D701MFP1:1804 D701MFP1:1804	2/ 28 29	M M	29 28 28	237485387 597055456 709047***	457815.21 419914.17 1011252.90
D7DMFP1:1834 D7DMFP1:1834 D7DMFP1:1834	41 45 45	-	28 28 42 33	2209979932 6280918262 6280918262	3888795.18 383223.86 730245.45
		M M		227485387 507055468 2000705468 2000970502 2000970502 2000970502 2000970502 2000970502 2000970502 2000970502 200097050 200097050 200097050 200097050 200097050 200097050 200097050 200097050	227 ME 127 ME 12
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	10	M M		750050 1151101 557366	115117.07 184164.57 17288.18
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	12 13 14	M	15 16 14	593639 1099049 372814	18087.55 27330.68 16559.01
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	15 16 17	H	15 14 19	1475661 1122682 1549076	45452.99 47423.14 64647.24
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	18 19 20	M	15 16 22	2267520 1102019 2336522	79061.88 29370.66 16494.37
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	21 22 23	M	20 22 21	2067520 102019 2336522 1112416 2182979 3073501 4885746 6691079 6643627 5724667	96559.01 46452.99 47422.14 64647.24 79061.88 20373.66 16494.25 20377.74 20607.55 20504.45 16409.95 4509.91 16409.95
D701MFP1:183.2 D701MFP1:183.2 D701MFP1:183.2	24 25 26	M	21 21 23	3673501 4885746 6691079	29607.55 39556.45 36160.95
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	27 28 29	M	22 25 24	664343.7 5724997 10268978	45049.31 16466.82 39305.15
D701MFP11832 D701MFP11832	30 31 32	ii ii	26 25 26	5724997 10289878 17234995 19295878 24159032 49153612 105138340	39305.15 49311.06 59236.16 67599.53 101753.21 277736.04
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	34 35	ii ii	26 27 30	105138340 787928123 105855406	277736.04 1428763.31 219904.47
D701MFP1:1802 D701MFP1:1802	37 38	i i	29 27	216573062 92018573	280320.44 171209.74
D701MFP1:1832 D701MFP1:1832 D701MFP1:1832	40 41 45	N .	28 28 42	Tributation (1997) 2460-7500-7500-7500-7500-7500-7500-7500-75	277738.04 141924.47 280220.44 171200.74 677916.60 267496.50 267496.50 267496.50 267496.50 31550.24 31550.31 32280.24 48759.31 32280.24 48759.31 71786.31 71786.31 71786.31 71786.32 71786.32
D701MFP1:1832 D701MFP1:1838 D701MFP1:1838	45	M M	39 6 8	4064993731 242943 1790966	481519.83 56012.81 311956.31
D701MFP1:180:8 D701MFP1:180:8 D701MFP1:180:8	8 9 10	M	8 8 12	2072578 1116625 1950969	323262.64 182739.45 130384.49
D701MFP1:1808 D701MFP1:1808 D701MFP1:1808	11 12 13	ii ii	18 19 17	2673592 1405578 2898105	39514.07 17945.26 53757.19
D7CYMFP1:183:8 D7CYMFP1:183:8 D7CYMFP1:183:8	14 15 16	M M	16 16 14	825597 2245406 1660127	20903.40 50896.08 67179.02
D701MFP1:183:8 D701MFP1:183:8 D701MFP1:183:8	17 18 19	M	16 16 16	2437230 3346740 2522810	50896.08 67179.02 55428.25 92421.23 56938.25
D701MFP1:183:8 D701MFP1:183:8 D701MFP1:183:8	20 21 22	M	22 20 21	7067173 2001810 3406702	40221.52 1855.09 30224.47 4722.51 4722.51 17244.59 62361.51 56561.51 56561.51 56561.51 6467.76 87209.97 8062.74 8062
D701MFP11808 D701MFP11808	24 25	ii ii	21 21 22	5843236 10227209	42723.31 51769.51 70249.59
D701MFP1:180:8 D701MFP1:180:8 D701MFP1:180:8	27 28 29	ii ii	22 26 36	8327876 12705401 22715504	58516.17 35616.11 54507.16
D707MFP1:180:8 D707MFP1:180:8	30 31	N.	25 26	30544492 36036799	87599.97 80952.74
D701MFP1:183:8 D701MFP1:183:8 D701MFP1:483:8	33 34	M M	27 27 27	50171228 117556396 157472804	104021.88 215877.58 332556.10
D701MFP1:183.6 D701MFP1:183.6 D701MFP1:183.6	36 37 38	M	29 28 28	77320297 100234455 99681779	100509.87 153983.85 171187.97
D701MFP1:183:8 D701MFP1:183:8 D701MFP1:183:8	29 40 41	M	28 28 28	239665921 198219151 23299094651 15923480144 15923480140 2329665 5455666 2356071 23444650 15444650 1545622 1515622 11465927	408979.90 290205.29 530109.64
D701MFP1:180:8 D701MFP1:180:8 D701MFP1:180:5	45 45 6	D M	42 39 6	1592348014 1592348014 725009	102209.85 182108.81 188354.12
D701MFP1:1835 D701MFP1:1835	á			5455496 3256071	790041.97 385013.90
D701MFP1:1805 D701MFP1:1805	10 11 12	M M	10 14 17	1349703 1349703 1319562	49845.39 29366.44
D701MFP1:1835 D701MFP1:1835 D701MFP1:1835	14 15 16	M	15 16 15	3513452 1165697 3549855 3159023 3659804 6469032 3345823 6421544	2902055 29 530100 64 102200 85 182100 81 188364 12 544002 77 790041 97 385013 90 223419 22 46205 44 54703 54 34215 06 94846 02 103508 80
D701MFP1:180.5 D701MFP1:180.5 D701MFP1:180.5	17 18 19	M M	17 16 18	3669804 6469032 3345623	78576.45 146576.20 52940.96
D701MFP1:1835 D701MFP1:1835 D701MFP1:1835	20 21 22	M	24 22 24	6421544 3581107 7605247	28684.91 25185.31 32273.77
D7DWPH1805 D7DWPH1805 D7DWPH1805	23 24 25	M M	21 21 22	10955999 14070230	41555.90 55775.96 68995.11
D7DWFP1:1835 D7DWFP1:1835 D7DWFP1:1835 D7DWFP1:1835	27 28 20	ii.	20 27	6421544 3581107 7005547 8365555 10065590 4070230 22614008 17474082 21743877 20087230 53250050 6070937	28684.91 225.85.31 32273.77 41555.90 55775.96 68795.91 75116.38 79116.38 79136.35 4364.31 79364.31
D7DMP1:1835 D7DMP1:1835 D7DMP1:1835 D7DMP1:1835	28 20 21	M	26 27 27	52250050 60070837 73547704	78238.60 108161.07 123691.10 143165.69 204620.48 455485.75
DZCHMP1:1835 DZCHMP1:1835 DZCHMP1:1835 DZCHMP1:1835 DZCHMP1:1835 DZCHMP1:1835	33 34 35	M	27 27 27 27	60373837 73846701 111009801 252244469 963235502	204620.48 455485.75 1903425.23
D701MFP1:180.5 D701MFP1:180.5 D701MFP1:180.5 D701MFP1:180.5	36 37 38	M	29 29 28	963295502 360993687 364979917 280767003	1903425.23 411288.41 482635.30 479449.47
D701MFP1:180.5 D701MFP1:180.5 D701MFP1:180.5	39 40 41	M M	28 28 28	681945570 847974233 1948520063	1093692.49 1375116.81 3414254.11
DOUBLE   1885   1895	45 45 6	, d	42 39 5	6189300337 6189300337 1597670	410068.33 776431.17 501706.80
D7D1MFP1:180.7 D7D1MFP1:180.7 D7D1MFP1:180.7	7 8	M	6 7 7	9399253 13344956 5922894	2197984.36 2910927.80 1190938.07
D701MFP1:183:7 D701MFP1:183:7	11 11 12	ii ii	17 16	8096045 4531896	190062.23 117576.11
D701MFP1:180.7 D701MFP1:180.7 D701MFP1:180.7	14 15	ii ii	13 15	2594415 7824568 6342138	138415.21 236605.76 202171.82
D701MFP1:180:7 D701MFP1:180:7 D701MFP1:180:7	17 18 19	M M	15 14 15	11081421 14592992 9421586	341111.65 634910.33 323154.52
D70/MFP1:180:7 D70/MFP1:180:7 D70/MFP1:180:7	20 21 22	M M	21 17 18	22446573 8635200 15873736	182777.53 167305.42 265491.34
D701MFP1:180:7 D701MFP1:180:7 D701MFP1:180:7	23 24 25	M M	18 20 22	18099758 21555338 32636028	319369.35 215643.61 228143.34
D707MFP1:180:7 D707MFP1:180:7 D707MFP1:180:7	26 27 28	M	21 21 24	52055223 31549404 48294966	387950.61 243023.95 206937.01
D701MFP1:1007 D701MFP1:1007 D701MFP1:1007	29 30 31	M	26 26 26	60651616 96792672 96150632	169757.96 265174.90 265949.92
D7D1MFP1:1807 D7D1MFP1:1807 D7D1MFP1:1807	22 23 24	M M	26 27 28	117201626 229793703 235597703	241345.03 236502.44 378283.48
D701MFP1:183.7 D701MFP1:183.7 D701MFP1:183.7	36 37	M M	29 28	139022379 188560430 192327474	189844.30 323836.27
D701MFP1:180.7 D701MFP1:180.7 D701MFP1:180.7	39 40 41	M M	28 28 28	373284647 338935440 325954124	644759.49 496550.69 524307.68
D701MFP1:180:7 D701MFP1:180:7 D701MFP1:180:6	45 45	d M	42 39 6	2836345948 2836345948 670801	192723.55 345568.12 157949.55
D701MFP1:183:6 D701MFP1:183:6 D701MFP1:183:6	7 8 9	M	8 9	4112868 4982713 2697853	608714.68 794854.17 362734.31
D707MFP1:1806 D707MFP1:1806 D707MFP1:1806 D707MFP1:1806	10 11 12	M	10 16 17	2976116 2134839 1481737	290438.43 49986.51 28719.47
D707MFP1:183:6 D707MFP1:183:6 D707MFP1:183:6 D707MFP1:183:6	14 15	ii ii	15 15	1012945 3149706 2377744	73022.46 28918.18 71720.77
D707MFP1:183:6 D707MFP1:183:6 D707MFP1:183:6 D707MFP1:183:6	16 17 18	M	14 17 17	2707481 3690560 5920610 3817478	97494.04 75352.44 122951.91
SOUNDER 1822	AN AN AN GREEF *** - 9 : 10 2 50 2 50 2 50 2 50 2 60 2 60 2 60 2 6			601-04-050 601-050-050 601-050-050-050 601-050-050-050 601-050-050-050 601-050-050-050 601-050-050-050 601-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050 601-050	Section 2 of the control of the cont
D7D1MFP1:180:6	23	M	23	9451342	42755.42