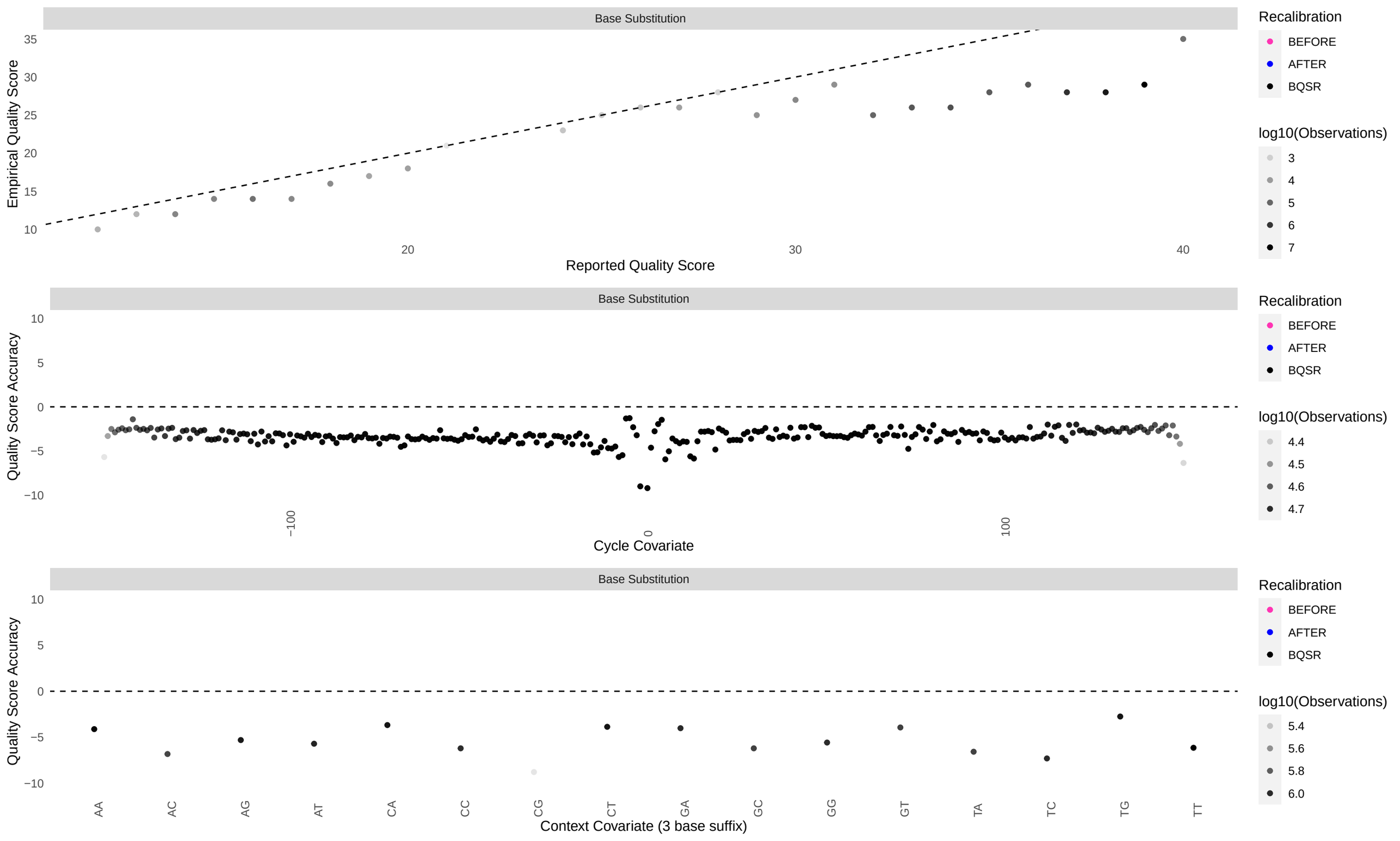
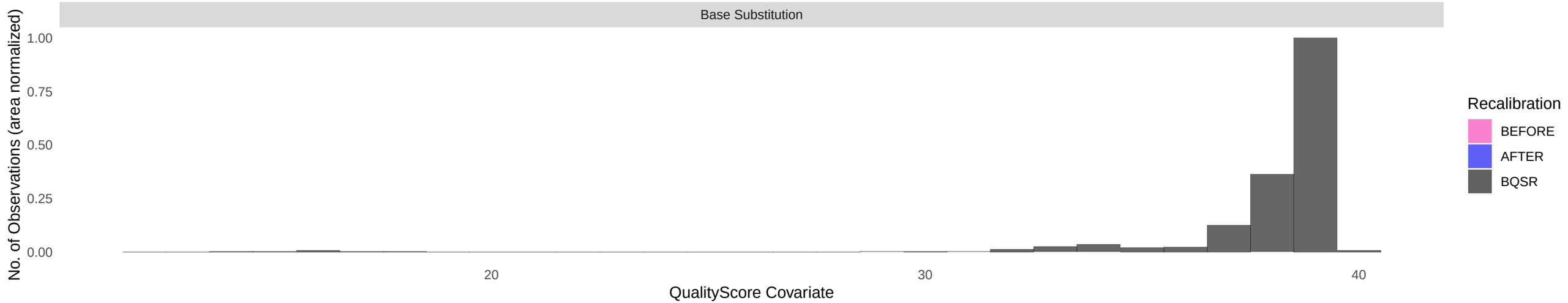
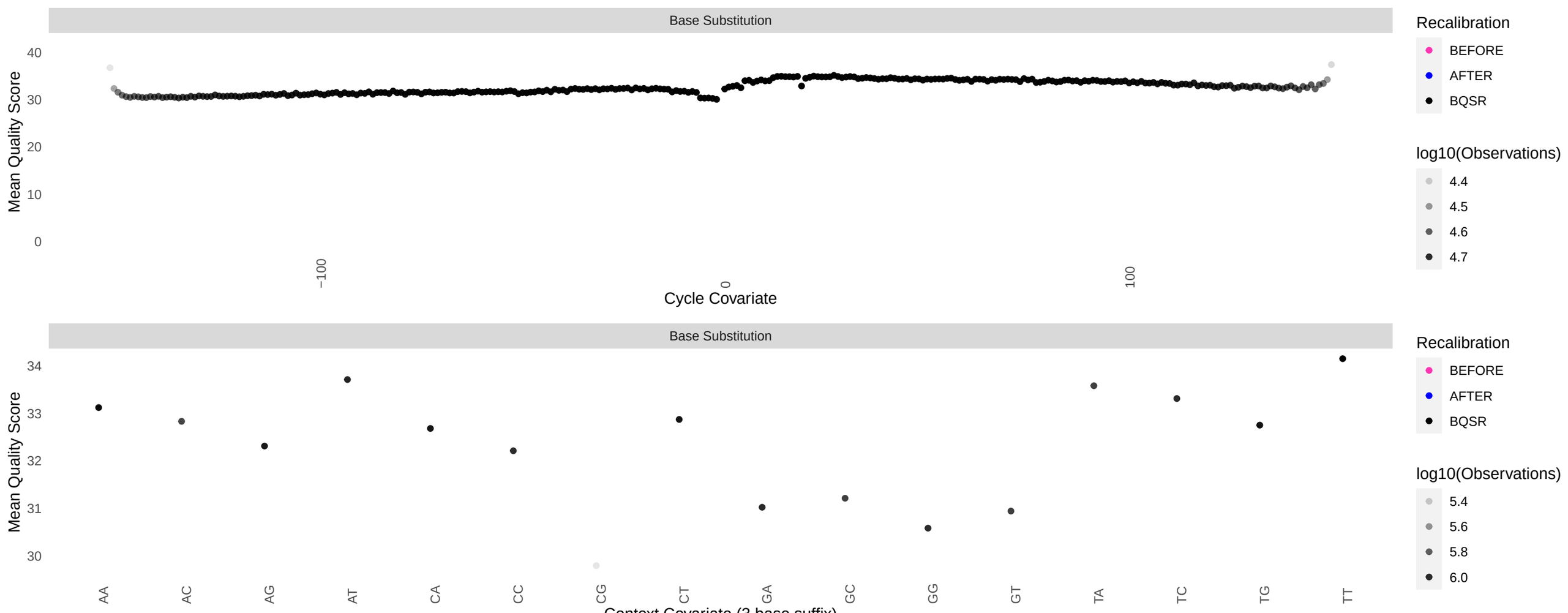
Argument	Value
binary_tag_name	None
covariate	ReadGroup,QualityScore,Context,Cycle
default_platform	None
deletions_default_quality	45
force_platform	None
indels_context_size	3
insertions_default_quality	45
low_quality_tail	2
maximum_cycle_value	500
mismatches_context_size	2
mismatches_default_quality	−1
no_standard_covs	false
quantizing_levels	16
recalibration_report	None
run_without_dbsnp	false
solid_nocall_strategy	THROW_EXCEPTION
solid_recal_mode	SET_Q_ZERO


Base Substitution
Empirical Quality Score
35
30
25
20
15
10
20
30
40
Reported Quality Score
Recalibration
BEFORE
AFTER
BQSR
log10(Observations)
3
4
5
6
7
Base Substitution
e Accuracy
10
5
0
−5
−10
−100
0
100
Cycle Covariate
log10(Observations)
4.4
4.5
4.6
4.7
Base Substitution
Quality Score Accuracy
10
5
0
−5
−10
AA
AC
AG
AT
CA
CC
CG
CT
GA
GC
GG
GT
TA
TC
TG
TT
Context Covariate (3 base suffix)
log10(Observations)
5.4
5.6
5.8
6.0


Base Substitution
No. of Observations (area normalized)
1.00
0.75
0.50
0.25
0.00
20
30
40
QualityScore Covariate
Recalibration
BEFORE
AFTER
BQSR


Base Substitution
Quality Score
40
30
20
Mean
10
0
−100
0
100
Cycle Covariate
Recalibration
BEFORE
AFTER
BQSR
log10(Observations)
4.4
4.5
4.6
4.7
Base Substitution
Mean Quality Score
34
33
32
31
30
AA
AC
AG
AT
CA
CC
CG
CT
GA
GC
GG
GT
TA
TC
TG
TT
Context Covariate (3 base suffix)
Recalibration
BEFORE
AFTER
BQSR
log10(Observations)
5.4
5.6
5.8
6.0

Overall error rates by event type

ReadGroup	unit1
EventType	M
EmpiricalQuality	27.0
EstimatedQReported	32.4
Observations	1.67e+07
Errors	3.61e+04

Error rates by event type and initial quality score

ReadGroup	QualityScore	EventType	EmpiricalQuality	Observations	Errors
unit1	12	M	10	5753	569
unit1	13	M	12	5059	309
unit1	14	M	12	38395	2316
unit1	15	M	14	37712	1687
unit1	16	M	14	88794	3812
unit1	17	M	14	32766	1467
unit1	18	M	16	28572	732
unit1	19	M	17	9891	230
unit1	20	M	18	11786	232
unit1	21	M	21	626	12
unit1	24	M	23	2523	19
unit1	25	M	25	1888	5
unit1	26	M	26	2461	13
unit1	27	M	26	12408	49
unit1	28	M	28	1403	4
unit1	29	M	25	21434	137
unit1	30	M	27	31794	103
unit1	31	M	29	23829	72
unit1	32	M	25	133882	501
unit1	33	M	26	257049	792
unit1	34	M	26	358572	973
unit1	35	M	28	215209	435
unit1	36	M	29	239988	445
unit1	37	M	28	1278099	2035
unit1	38	M	28	3672490	6243
unit1	39	M	29	10130345	12823
unit1	40	M	35	88152	112