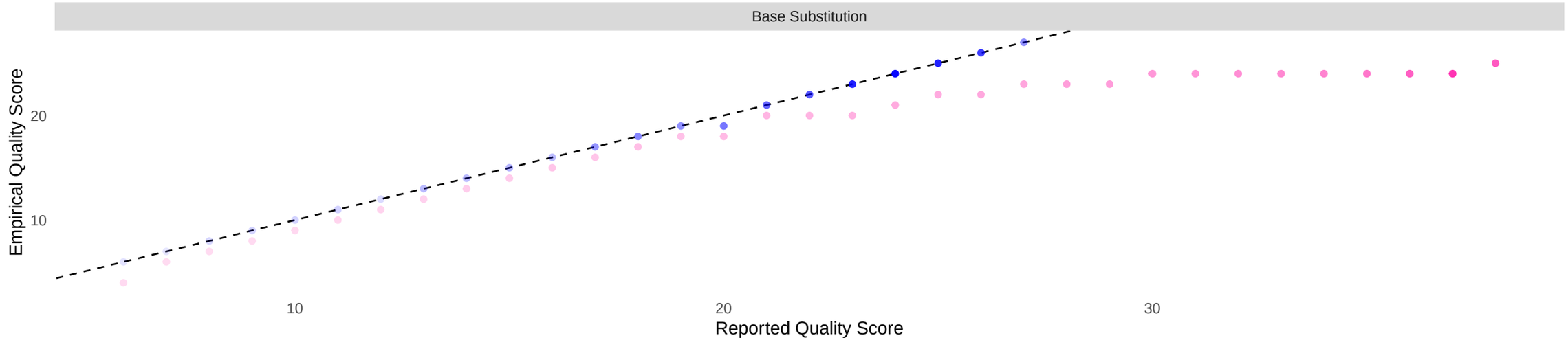
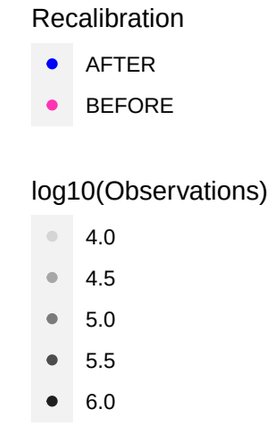
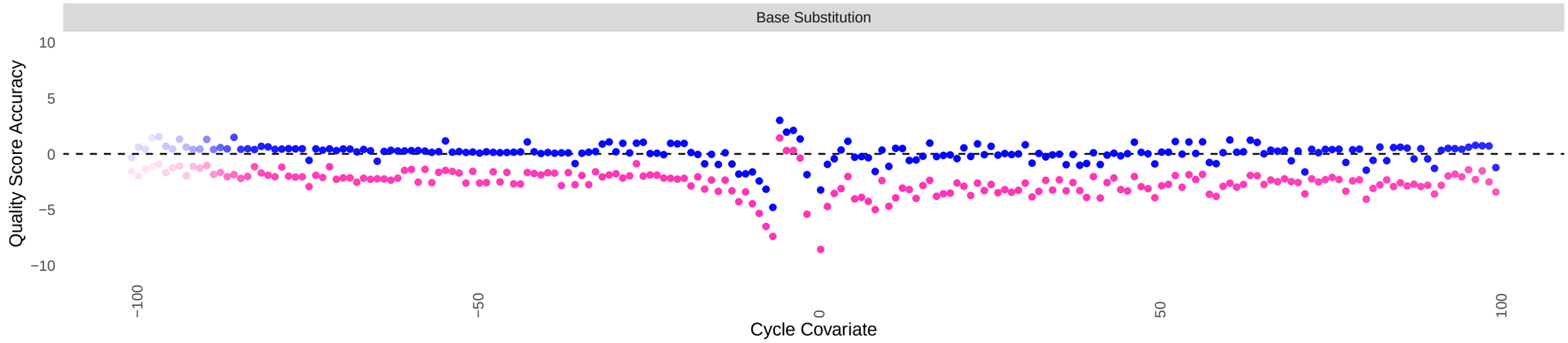
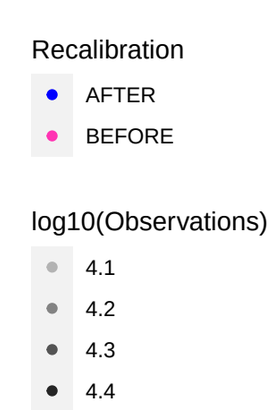
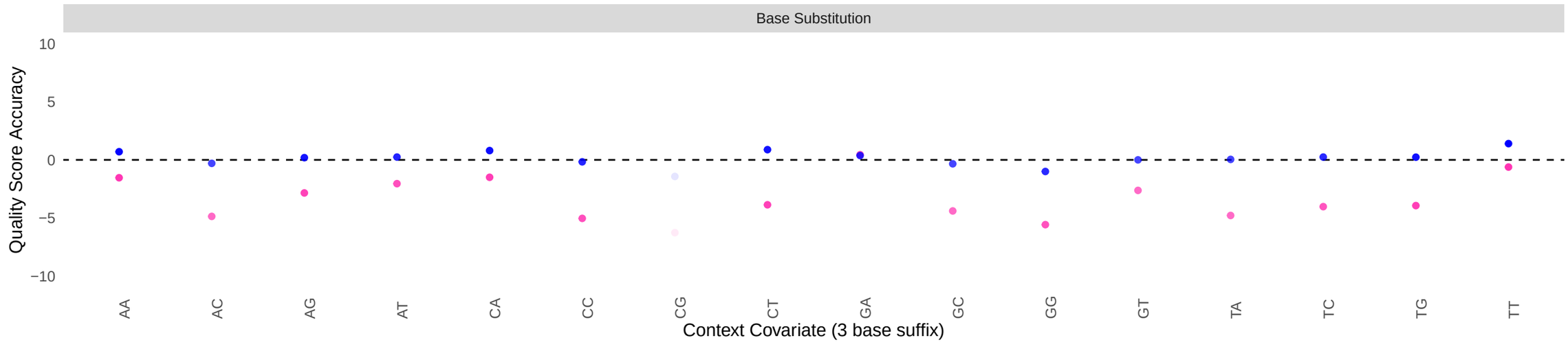
Argument	Value
binary_tag_name	None
covariate	ReadGroup,QualityScore,Context,Cycle
default_platform	None
deletions_default_quality	45
force_platform	None
indels_context_size	3
insertions_default_quality	45
low_quality_tail	2
maximum_cycle_value	500
mismatches_context_size	2
mismatches_default_quality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

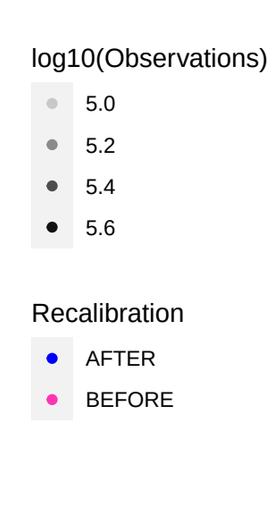

Base Substitution
Empirical Quality Score
20
10
10
20
30
Reported Quality Score

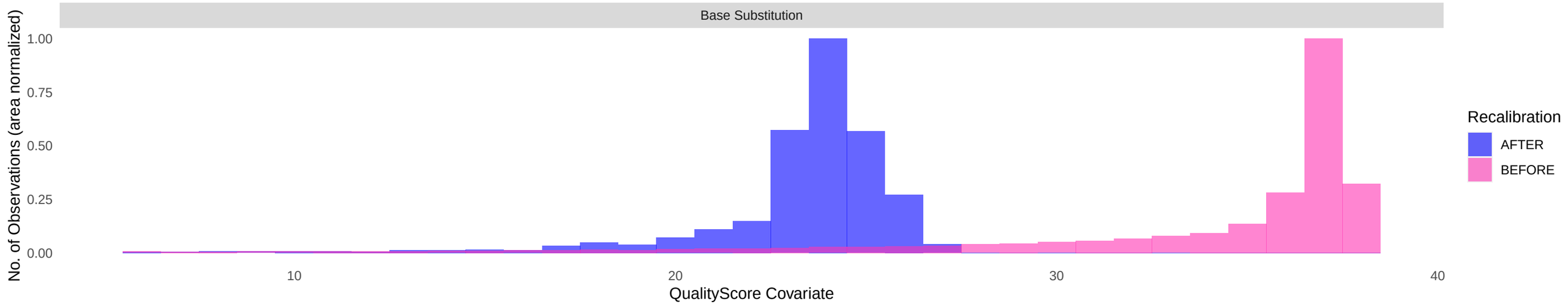

Recalibration
AFTER
BEFORE
log10(Observations)
4.0
4.5
5.0
5.5
6.0


Base Substitution
Quality Score Accuracy
10
5
0
−5
−10
−100
−50
0
50
100
Cycle Covariate


log10(Observations)
4.1
4.2
4.3
4.4


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)
5.0
5.2
5.4
5.6
Recalibration
AFTER
BEFORE


Base Substitution
No. of Observations (area normalized)
1.00
0.75
0.50
0.25
0.00
10
20
30
40
QualityScore Covariate
Recalibration
AFTER
BEFORE

Base Substitution
Mean Quality Score
40
30
20
10
0
−100
−50
0
50
100
Cycle Covariate
Recalibration
AFTER
BEFORE
log10(Observations)
4.1
4.2
4.3
4.4
Base Substitution
Mean Quality Score
25.0
22.5
20.0
17.5
AA
AC
AG
AT
CA
CC
CG
CT
GA
GC
GG
GT
TA
TC
TG
TT
Context Covariate (3 base suffix)
log10(Observations)
5.0
5.2
5.4
5.6
Recalibration
AFTER
BEFORE

Overall error rates by event type

ReadGroup	unit1
EventType	M
EmpiricalQuality	20.0
EstimatedQReported	23.7
Observations	5.50e+06
Errors	4.98e+04

Error rates by event type and initial quality score

ReadGroup	QualityScore	EventType	EmpiricalQuality	Observations	Errors
unit1	6	M	4	15068	5488
unit1	7	M	6	14769	4058
unit1	8	M	7	14560	3120
unit1	9	M	8	14953	2425
unit1	10	M	9	15896	1970
unit1	11	M	10	17690	1665
unit1	12	M	11	18181	1375
unit1	13	M	12	19657	1210
unit1	14	M	13	22419	1050
unit1	15	M	14	23503	879
unit1	16	M	15	27877	836
unit1	17	M	16	28487	656
unit1	18	M	17	34079	685
unit1	19	M	18	30943	523
unit1	20	M	18	39109	588
unit1	21	M	20	43885	516
unit1	22	M	20	46796	499
unit1	23	M	20	51865	507
unit1	24	M	21	59880	485
unit1	25	M	22	62430	446
unit1	26	M	22	68066	498
unit1	27	M	23	75452	462
unit1	28	M	23	87699	513
unit1	29	M	23	98077	534
unit1	30	M	24	110199	573
unit1	31	M	24	124006	617
unit1	32	M	24	148635	781
unit1	33	M	24	171411	780
unit1	34	M	24	202036	982
unit1	35	M	24	297434	1280
unit1	36	M	24	616268	2635
unit1	37	M	24	2187223	8568
unit1	38	M	25	706559	2566