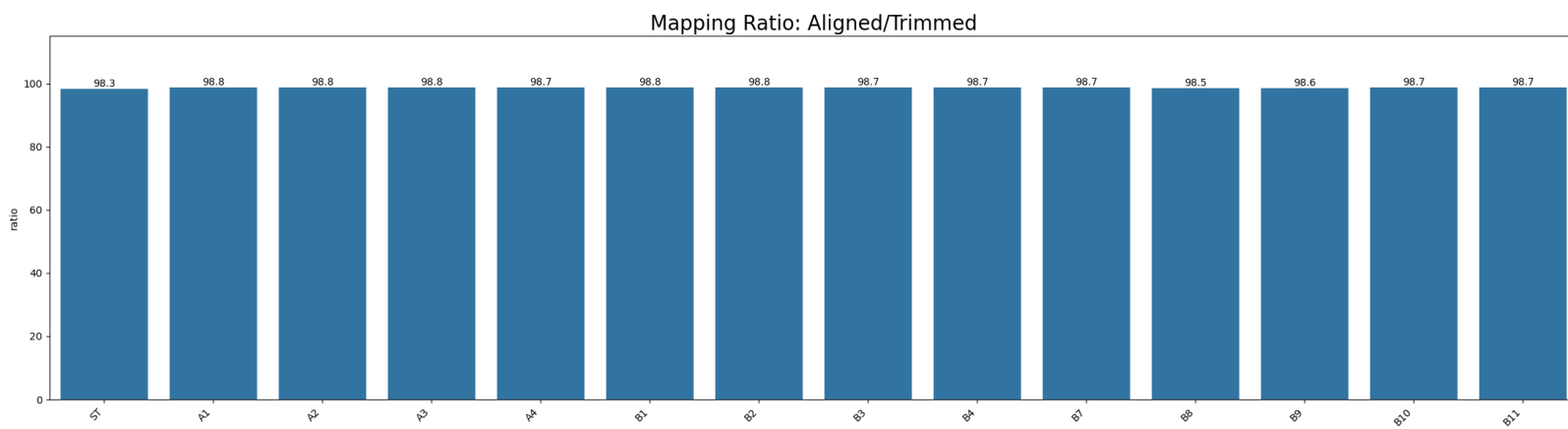


Low Temperature UMBS Optimization

Investigator: Yushuai Liu
Analysis: C. Bryan Daniels
Sequencing: Chang Ye
Supervisor: Qing Dai

October 16, 2024

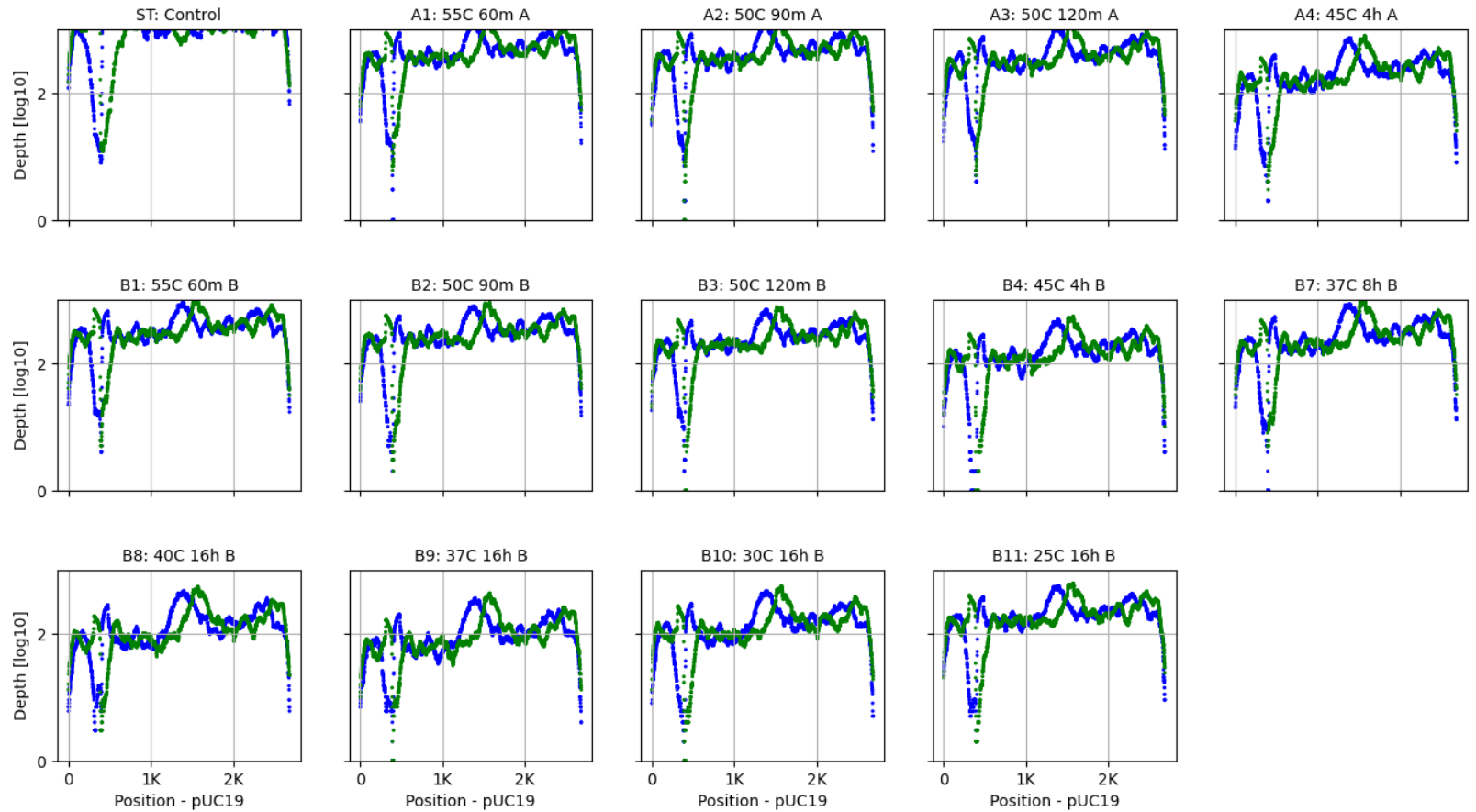
ID	Content	qPCR	PCR 9 uL sample	Index#	Kit	Qubit (ng/ul)	QC (ng/ul)	Dilution fold for QC	i7
ST	2 ng ligated DNA, Denaturation but without BS treatment	10.4	9	1	NEBNext Set # 1 and 2	5.02	1.43	5	ATCACG
A-1	2 ng ligated DNA, BS + DNA protect buffer, 55C 60 mins, method A	12.1	12	2		7.46	1.91	5	CGATGT
A-2	2 ng ligated DNA, BS + DNA protect buffer, 50C 90 mins, method A	15.1	12	4		8.58	2.12	5	TGACCA
A-3	2 ng ligated DNA, BS + DNA protect buffer, 50C 120 mins, method A	8.6	13	5		8.34	2.18	5	ACAGTG
A-4	2 ng ligated DNA, BS + DNA protect buffer, 45C 4 hrs, method A	12	12	6		8.26	2.18	5	GCCAAT
B-1	2 ng ligated DNA, BS + DNA protect buffer, 55C 60 mins, method B	15.3	12	7		13.3	3.41	5	CAGATC
B-2	2 ng ligated DNA, BS + DNA protect buffer, 50C 90 mins, method B	9	12	8		12.3	2.73	5	ACTTGA
B-3	2 ng ligated DNA, BS + DNA protect buffer, 50C 120 mins, method B	12.2	12	9		14.7	3.83	5	GATCAG
B-4	2 ng ligated DNA, BS + DNA protect buffer, 45C 4 hrs, method B	15.6	12	10		7.64	1.83	5	TAGCTT
B-7	2 ng ligated DNA, BS + DNA protect buffer, 37C 8 hrs, method B	9.7	12	11		8.5	2.09	5	GGCTAC
B-8	2 ng ligated DNA, BS + DNA protect buffer, 40C 16 hrs, method B	12	13	12		6.12	1.47	5	CTTGTA
B-9	2 ng ligated DNA, BS + DNA protect buffer, 37C 16 hrs, method B	17	13	13		9.6	2.87	5	AGTCAA
B-10	2 ng ligated DNA, BS + DNA protect buffer, 30C 16 hrs, method B	8.7	12	14		9.28	2.57	5	AGTTCC
B-11	2 ng ligated DNA, BS + DNA protect buffer, 25C 16 hrs, method B	15.6	12	15		8.38	1.99	5	ATGTCA



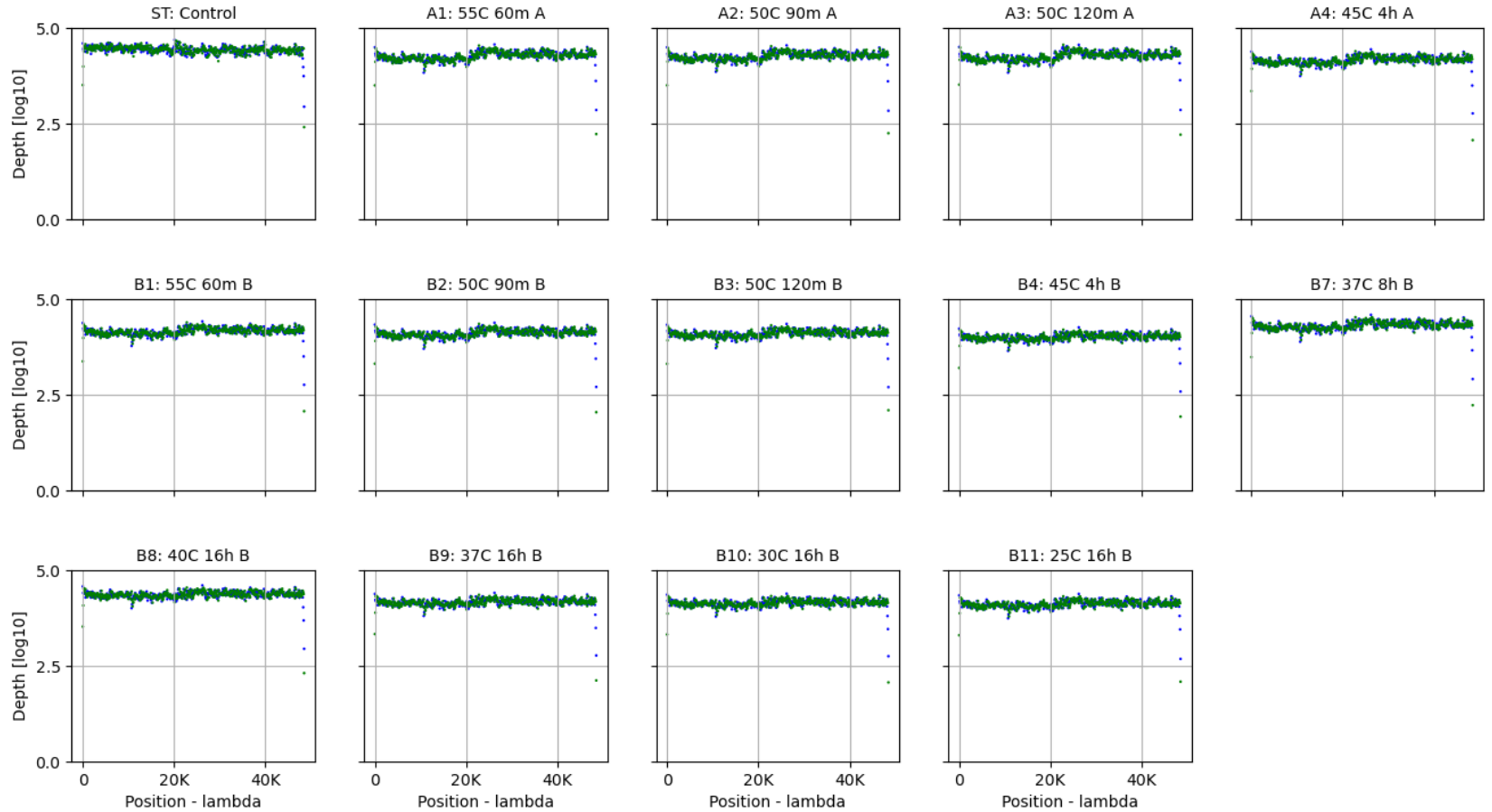
UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Read Counts



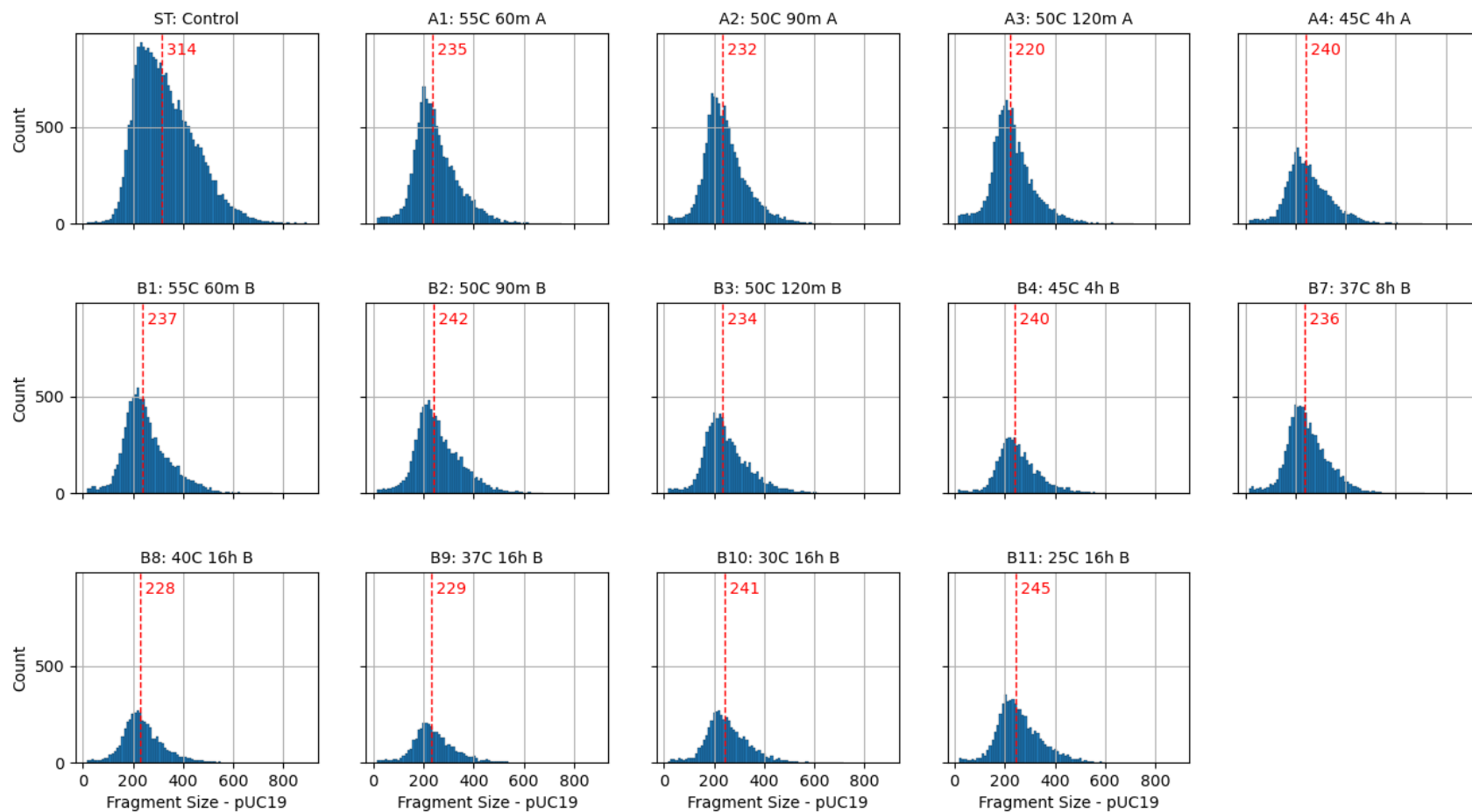
UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Depth Coverage - pUC19



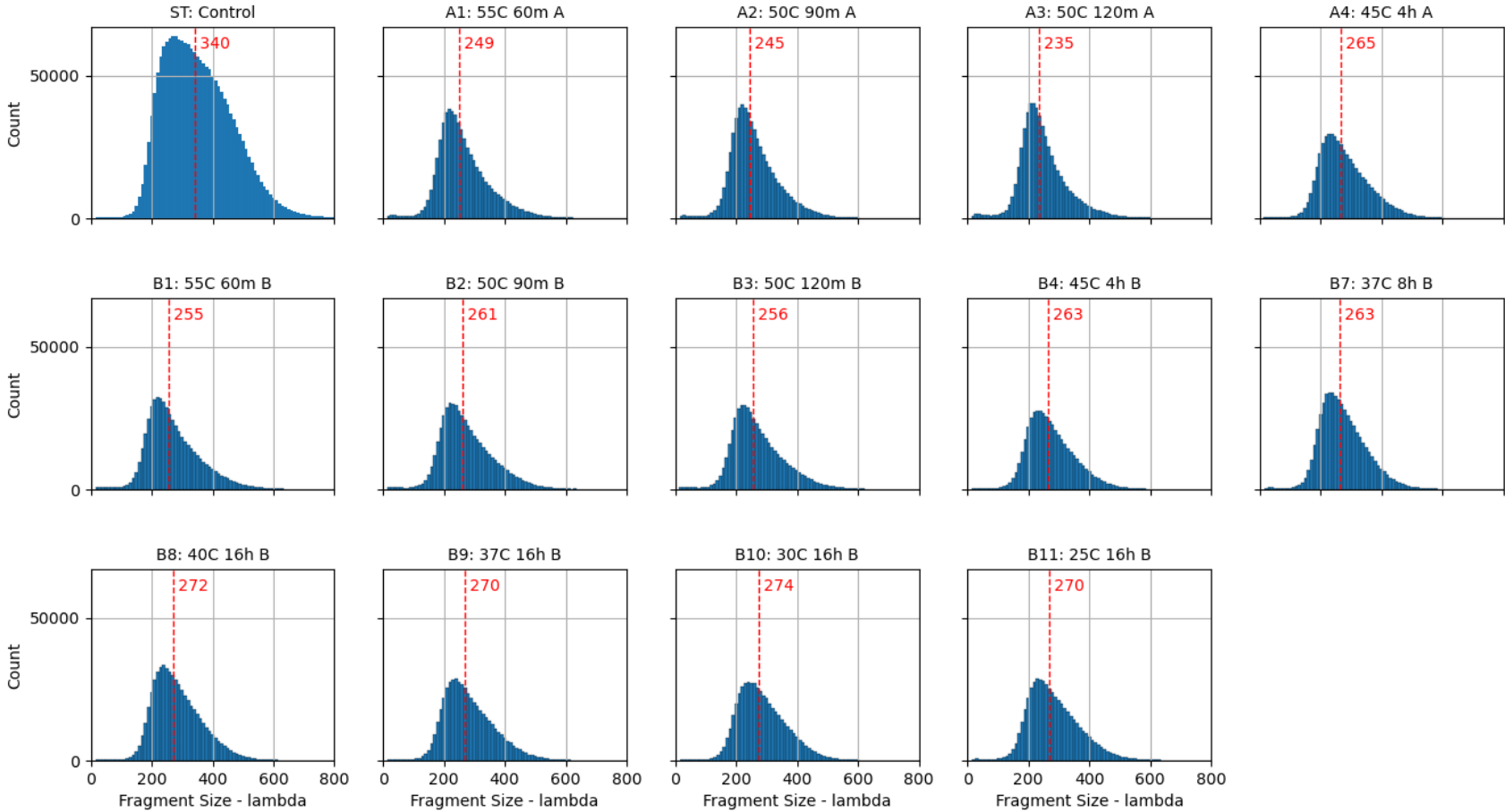
UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Depth Coverage - lambda



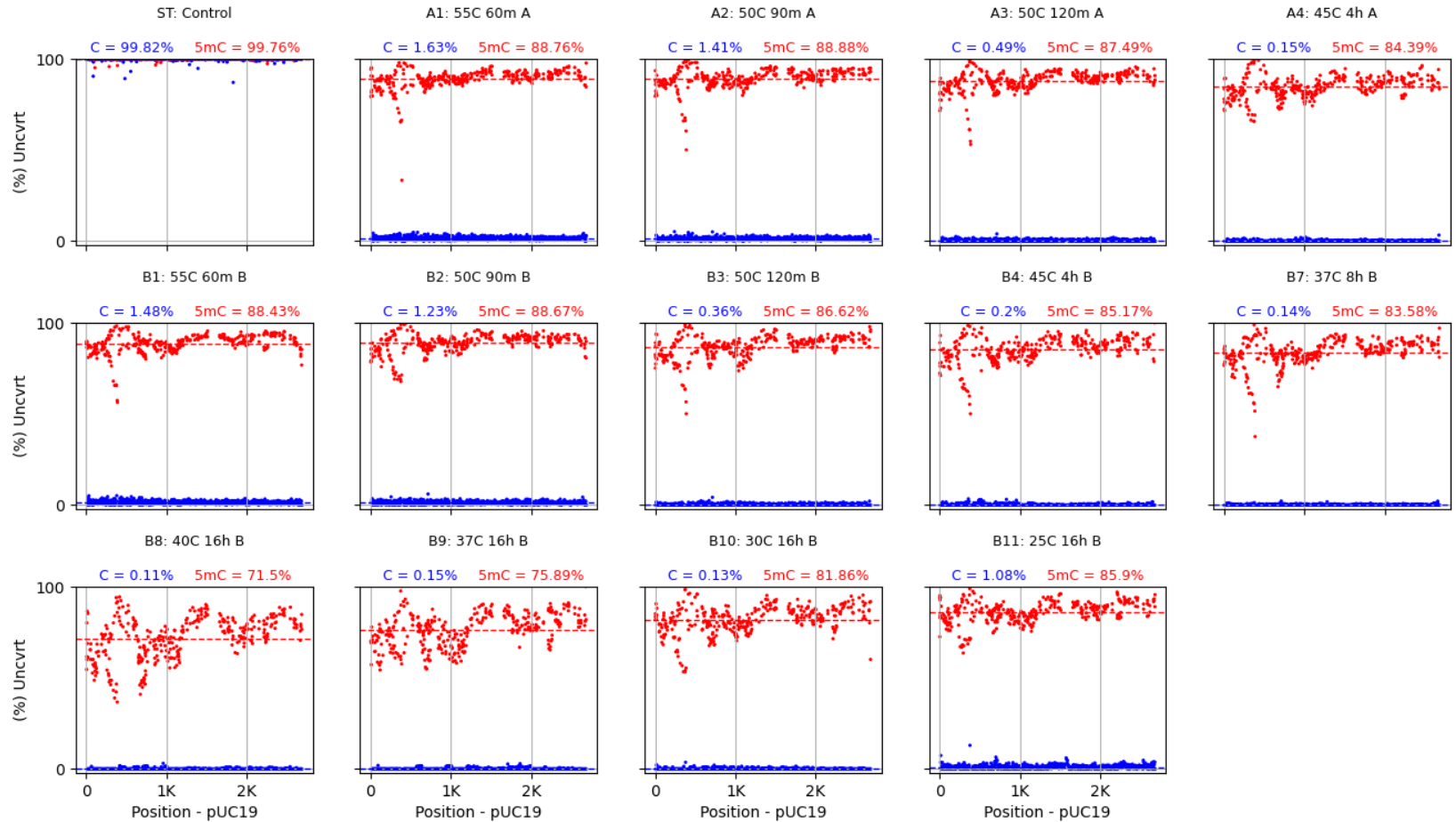
UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Read Length - pUC19



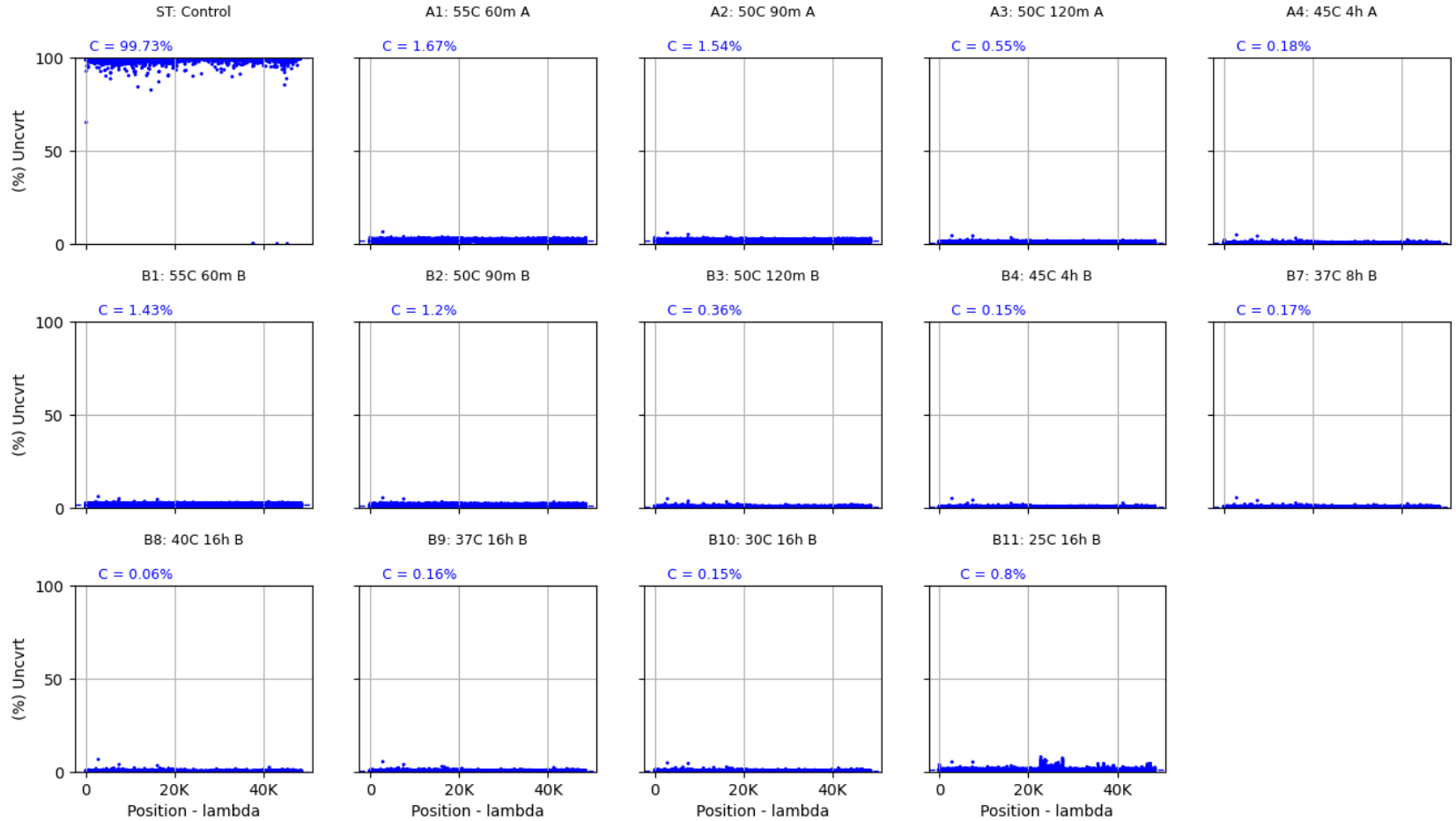
UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Read Length - lambda



UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Unconverted Ratio
Un-Filtered
Depth ≥ 10 - pUC19



UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Unconverted Ratio
Un-Filtered
Depth ≥ 20 - lambda



UBS-seq: Low Temperature UMBS Optimization 10-02-2024
Lambda Background (%)
Un-Filtered

