

PB_12-Cell1

Display All

Status

Data Set
PB_12-Cell1

Data Set ID
2332

Data Set UUID
50d21e7b-2ccd-4abc-b266-f13f6ad14cb8

Well Sample Name
PB_12

Biological Sample Name
unknown

Description

Number of Records
12,487,670

Total Length
28,025,440,328

Status
SUCCESSFUL

Date Created
2021-05-07, 01:39:38 PM

Date Imported
2021-05-08, 08:36:05 PM

Date Updated
2021-05-08, 08:38:25 PM

Job ID
[1522](#)

Data Path
/opt/pacbio/data_root/PB_12/r54123_20210507_115909/1_A01/m54123_210507_122044.subreadset.xml

Run name
[PB_12](#)

Cell Index
0

Cell Id
CA056608

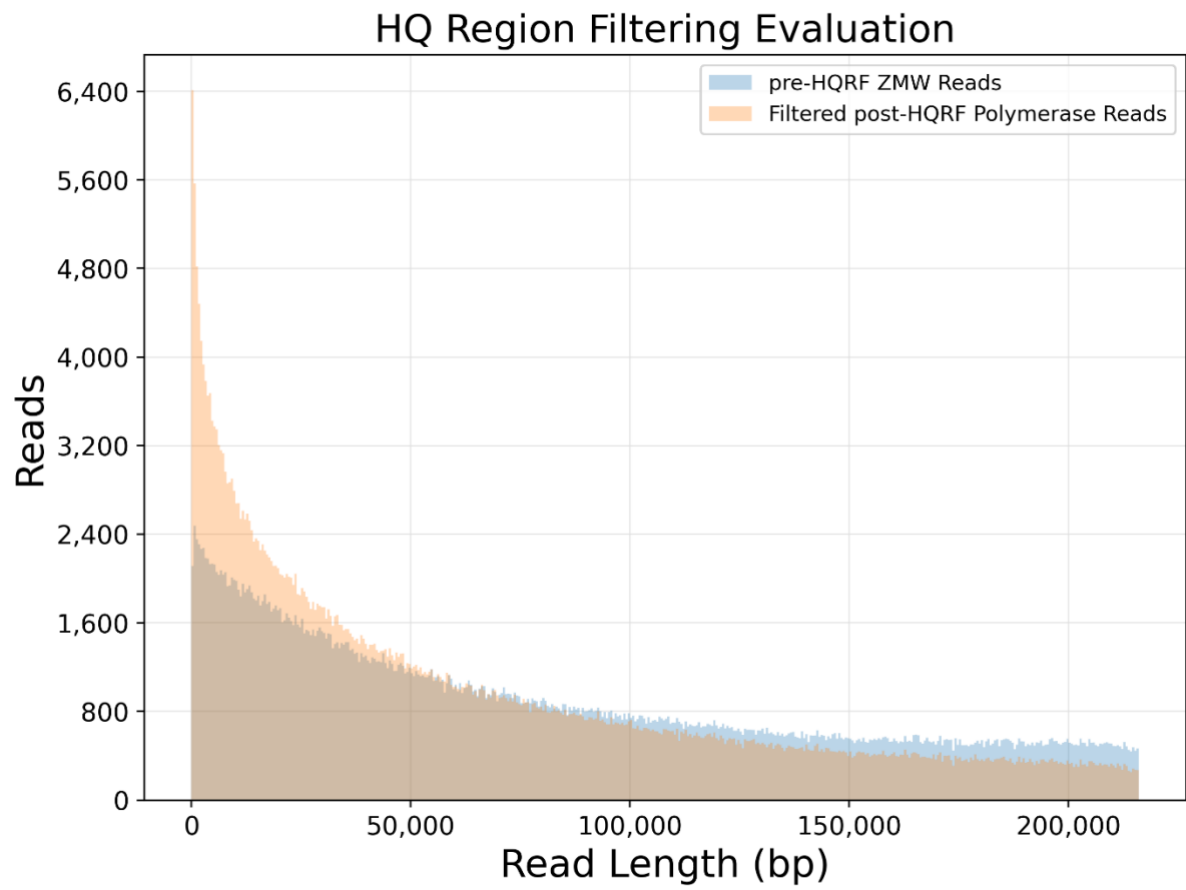
Instrument Name
54123

Well Name
A01

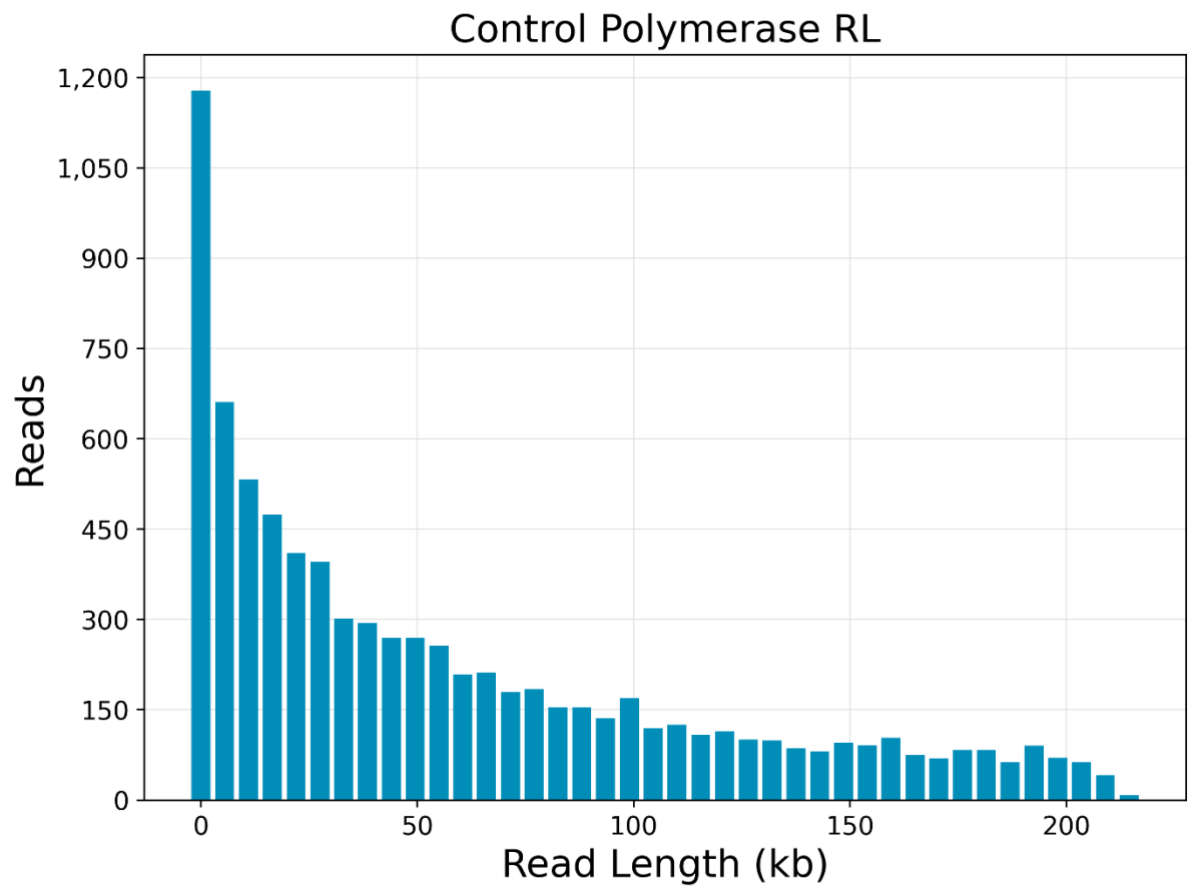
Metadata Context Id
m54123_210507_122044

Thumbnails

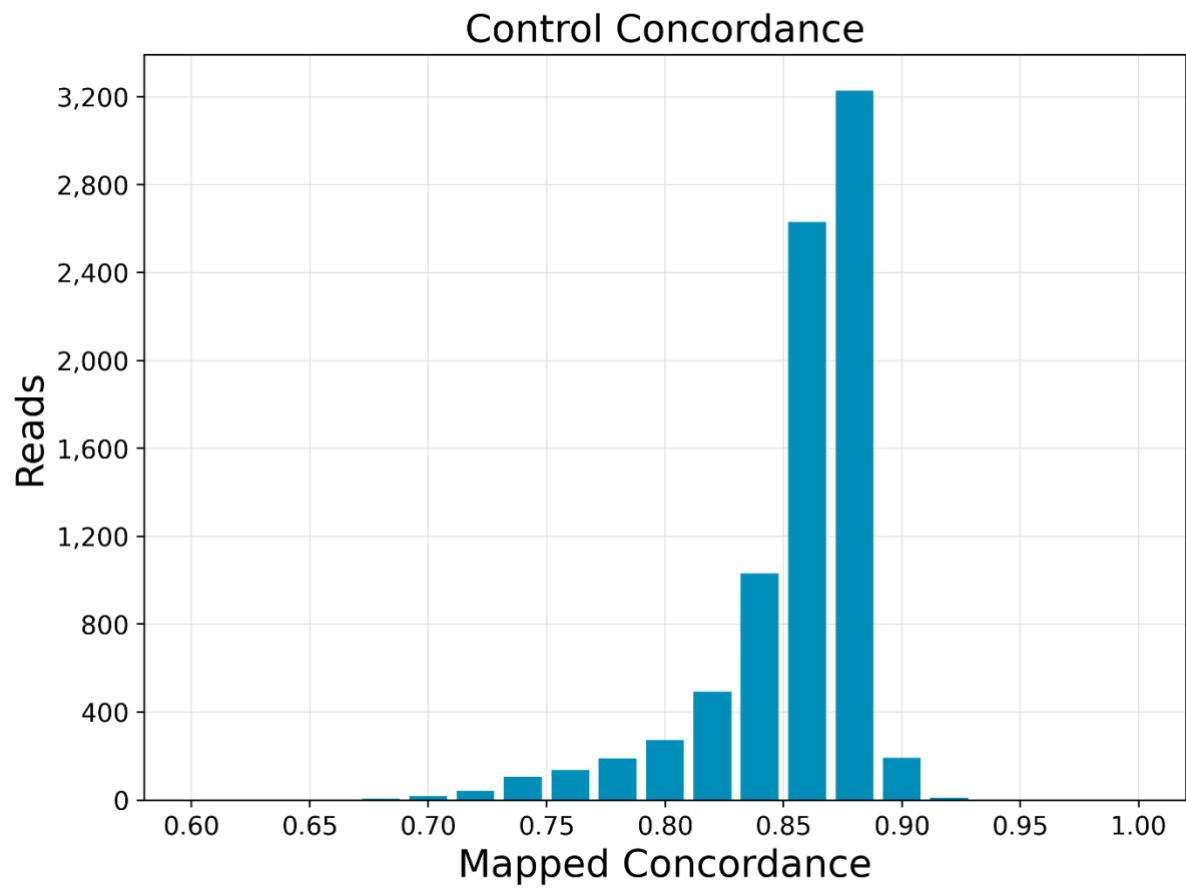
HQ Region Filtering Evaluation



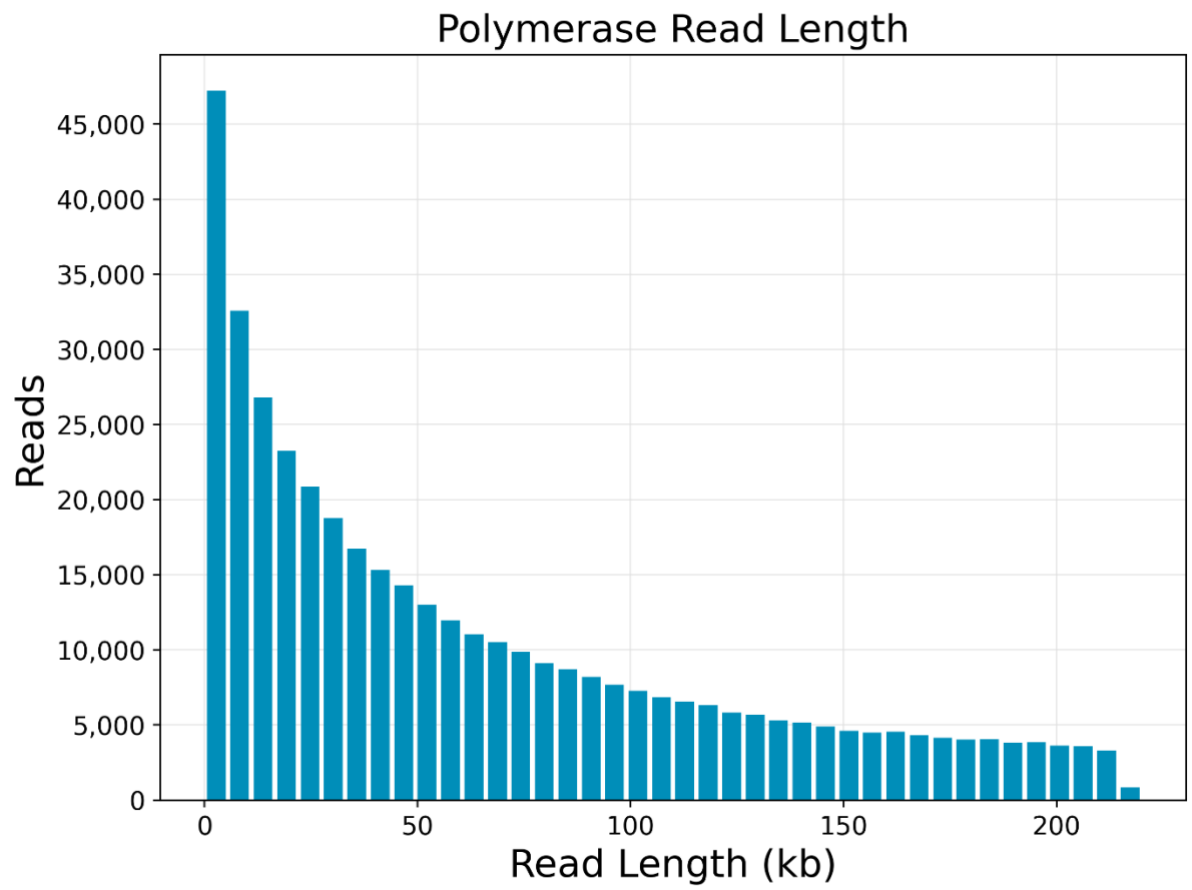
Control Polymerase RL



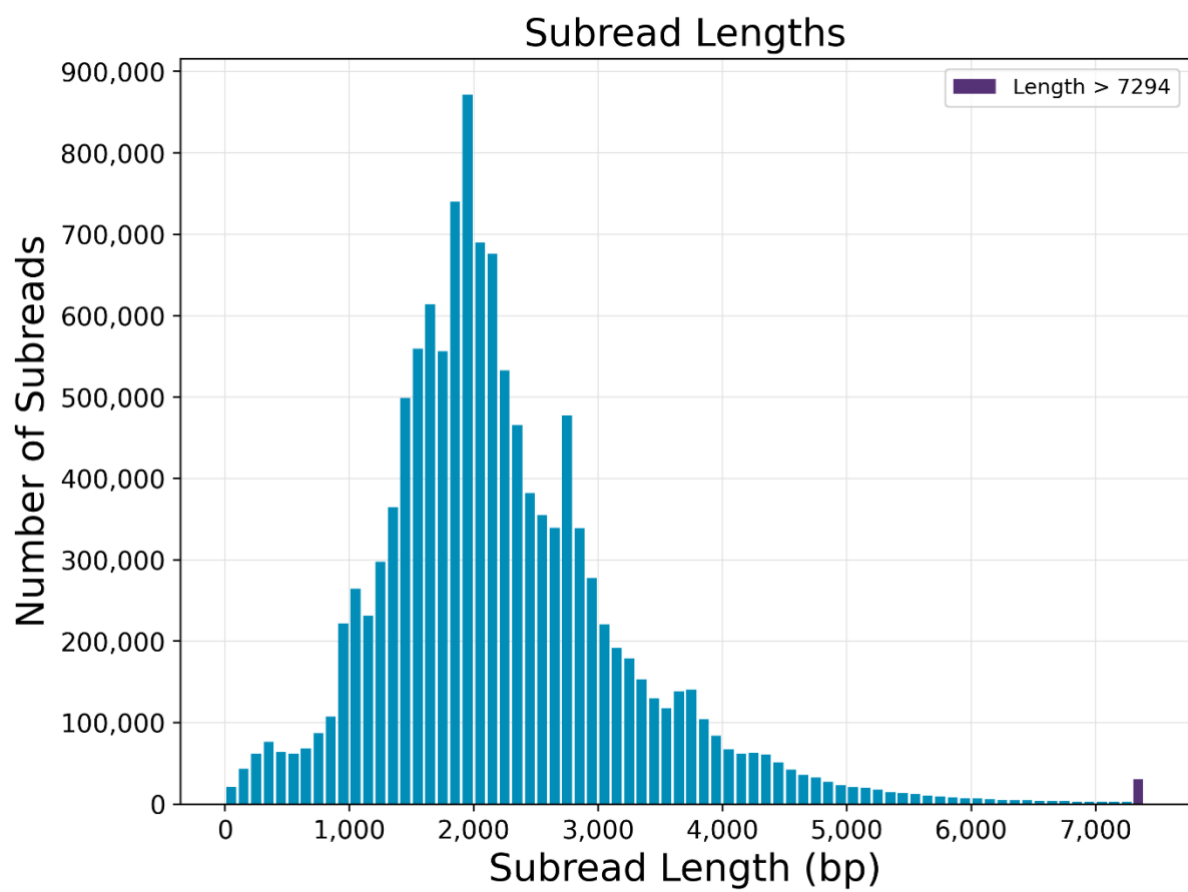
Control Concordance



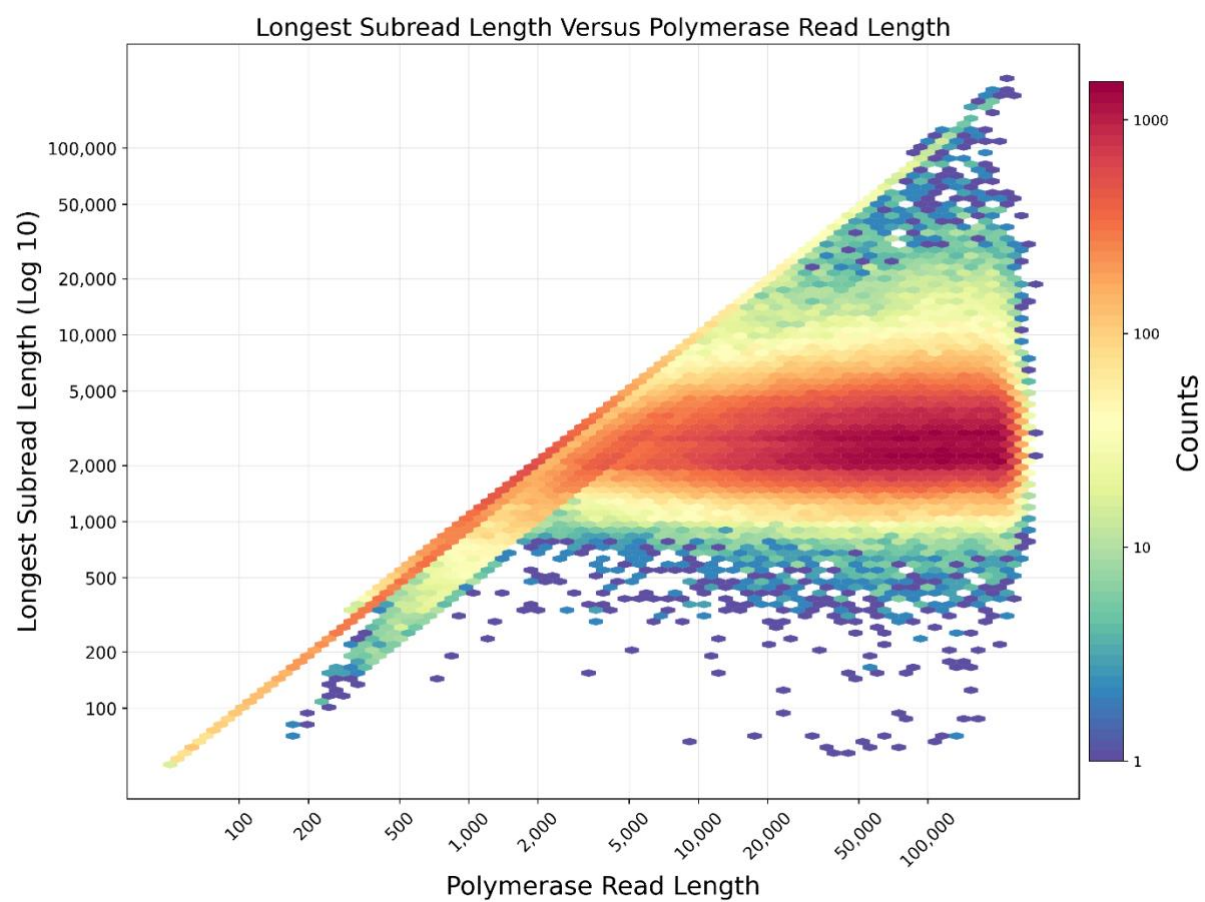
Polymerase Read Length



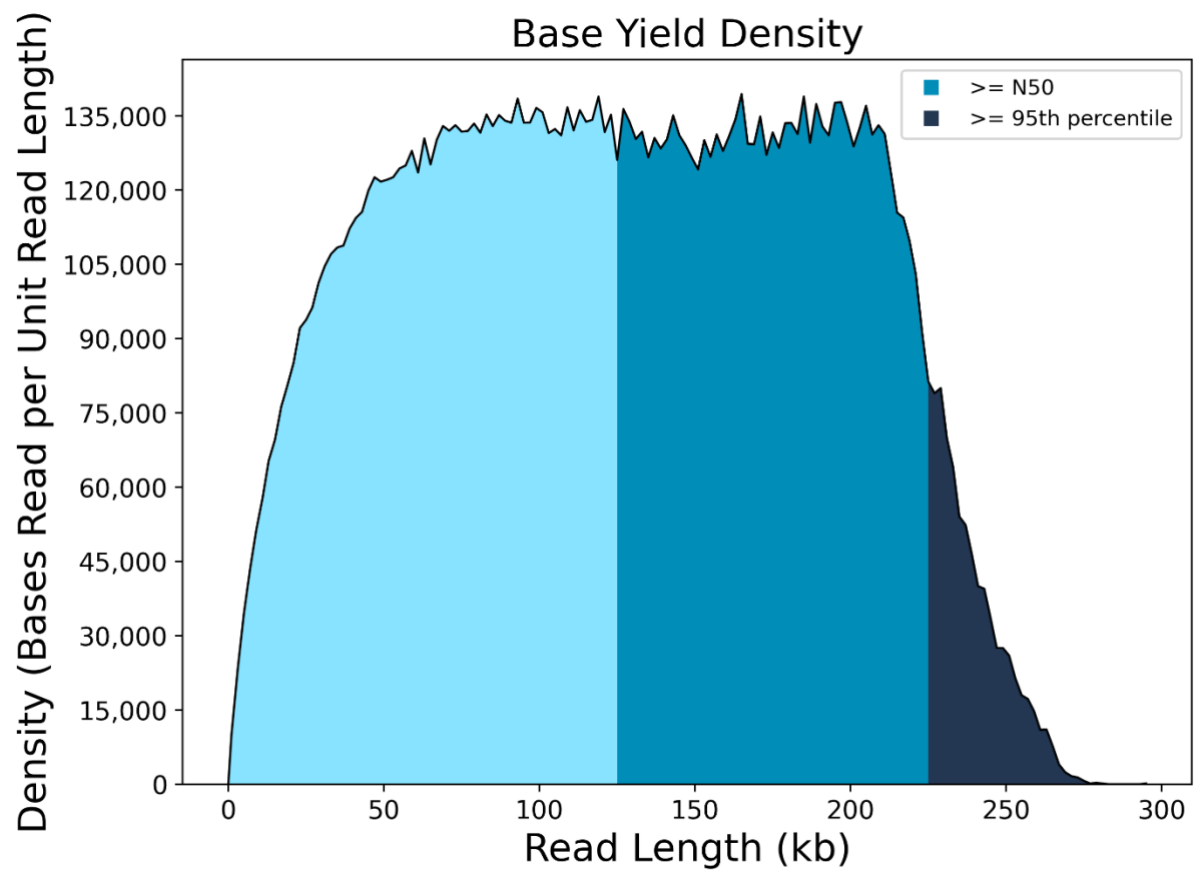
Subread Length



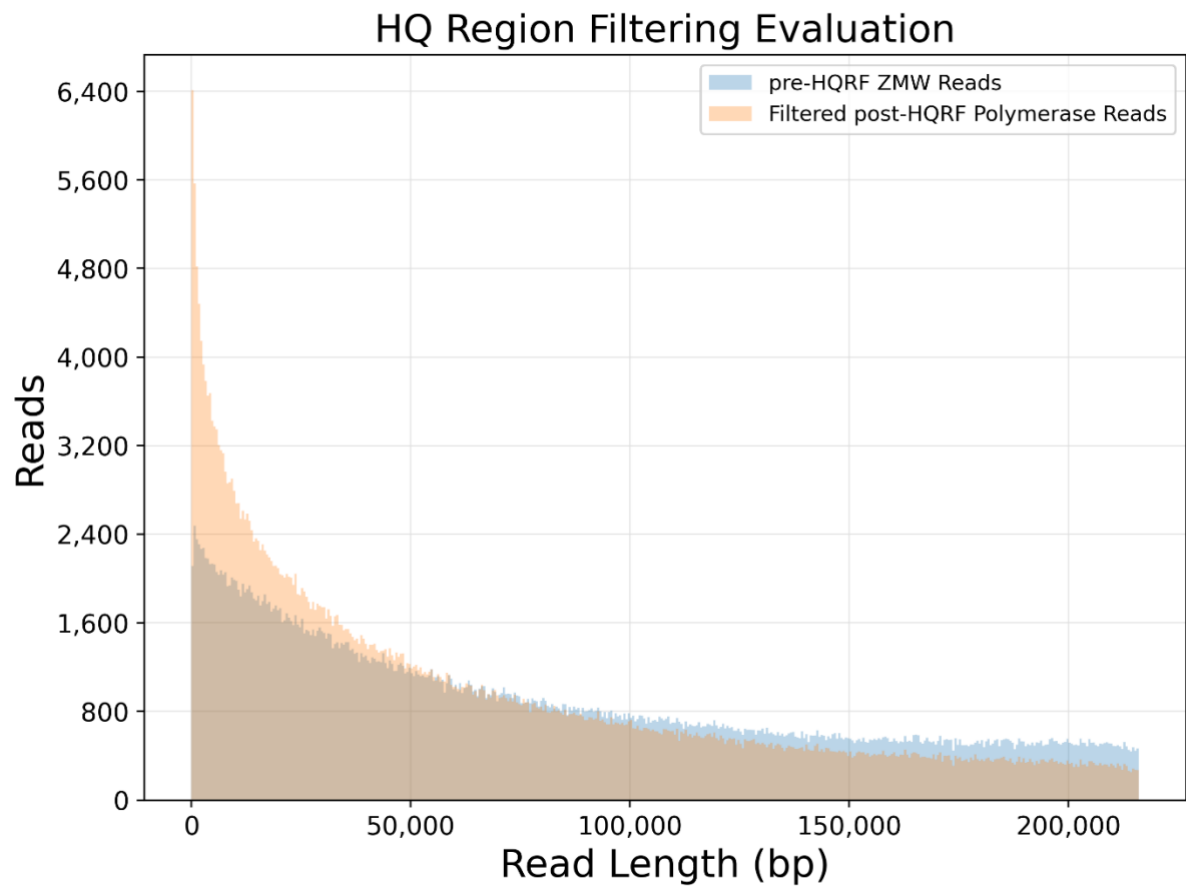
Longest Subread Length Versus Polymerase Read Length



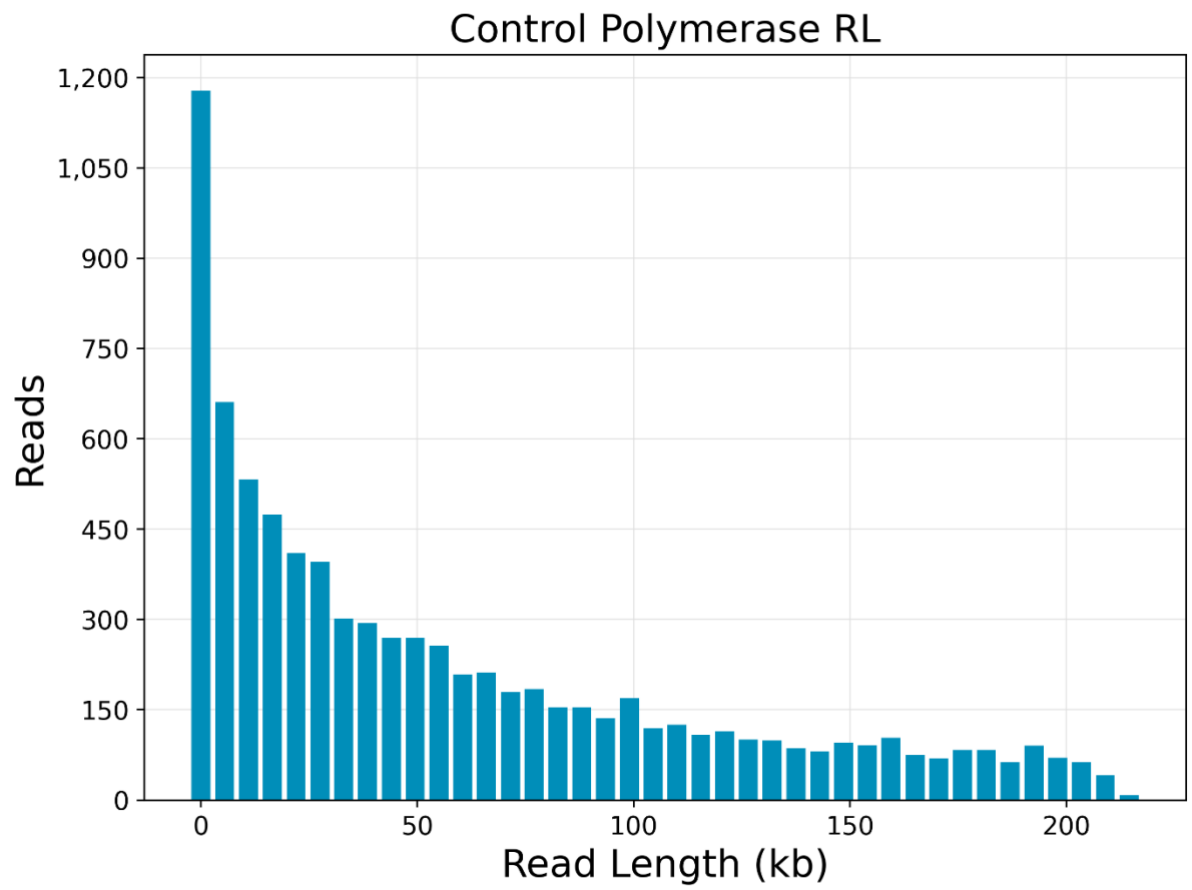
Base Yield Density



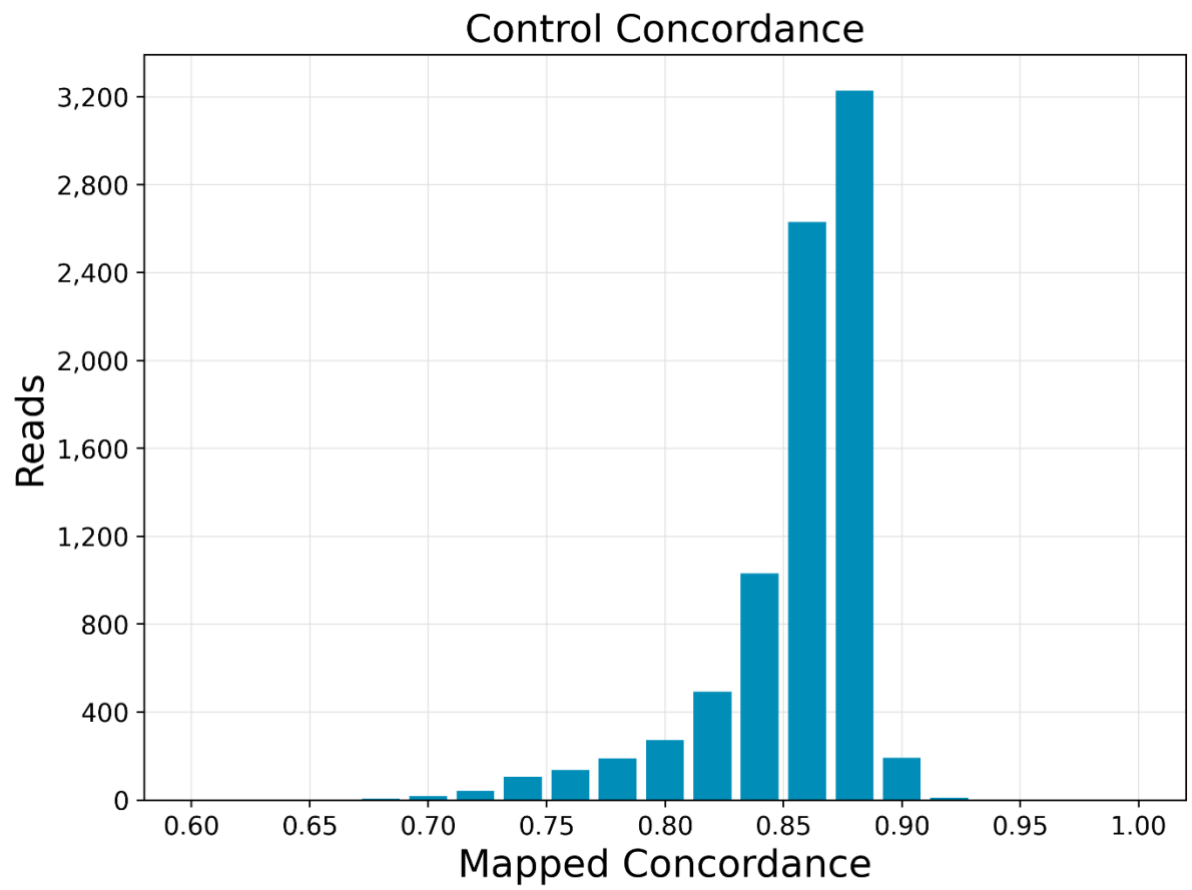
HQ Region Filtering Evaluation



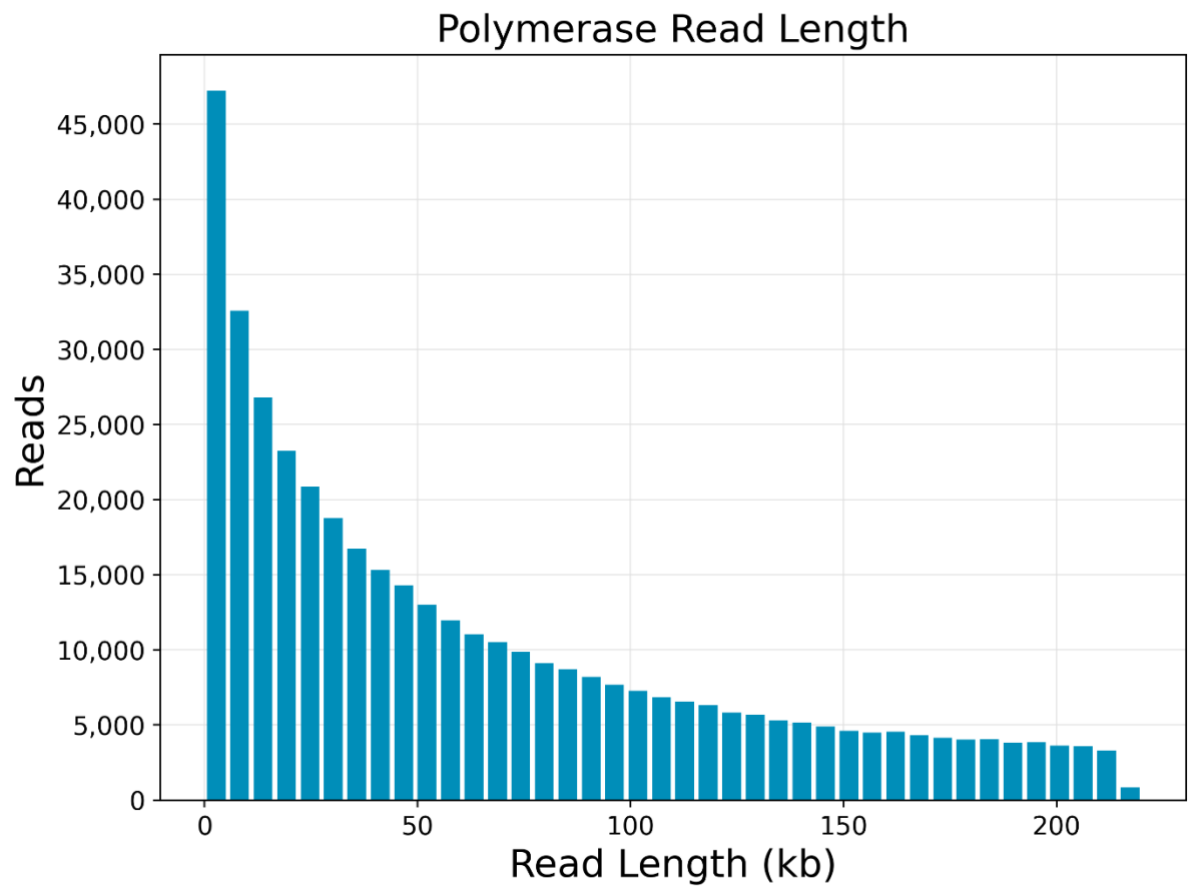
Control Polymerase RL



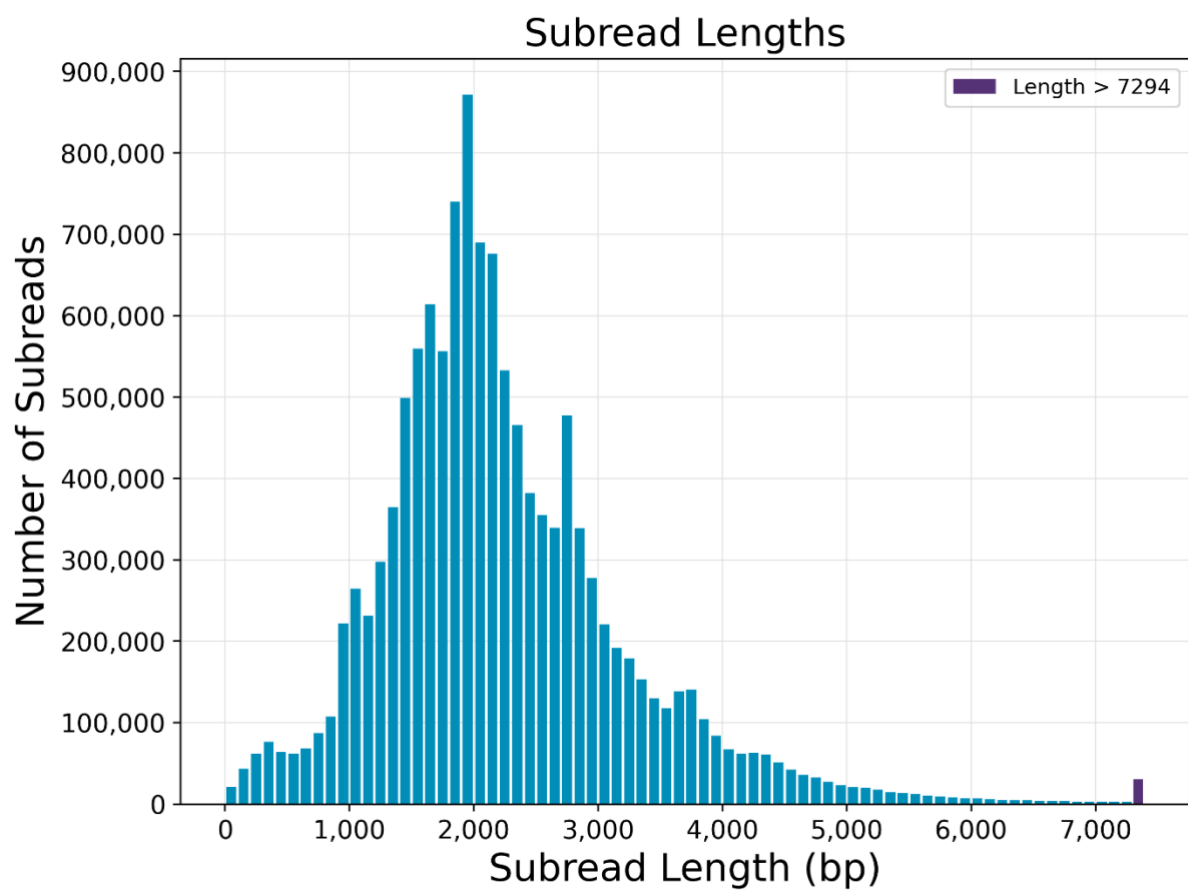
Control Concordance



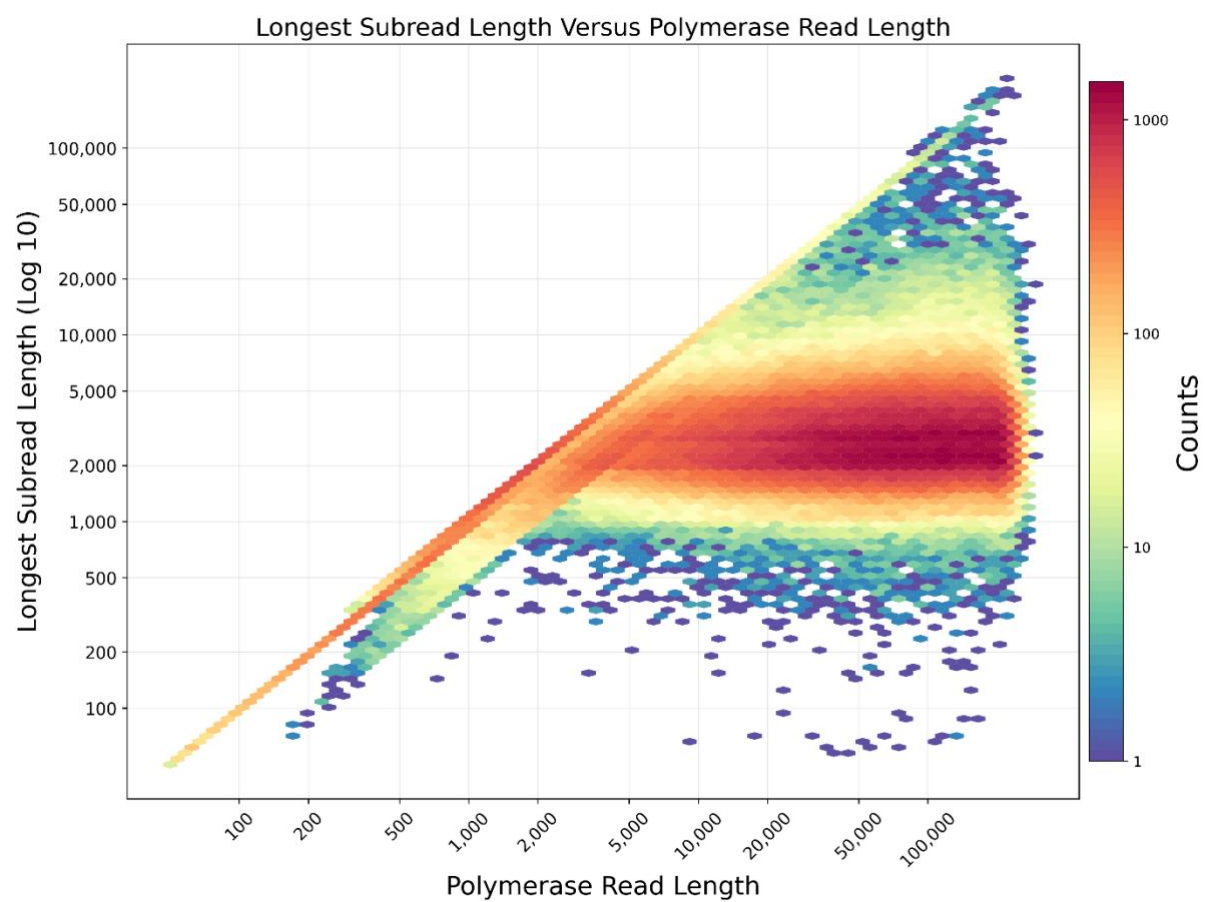
Polymerase Read Length



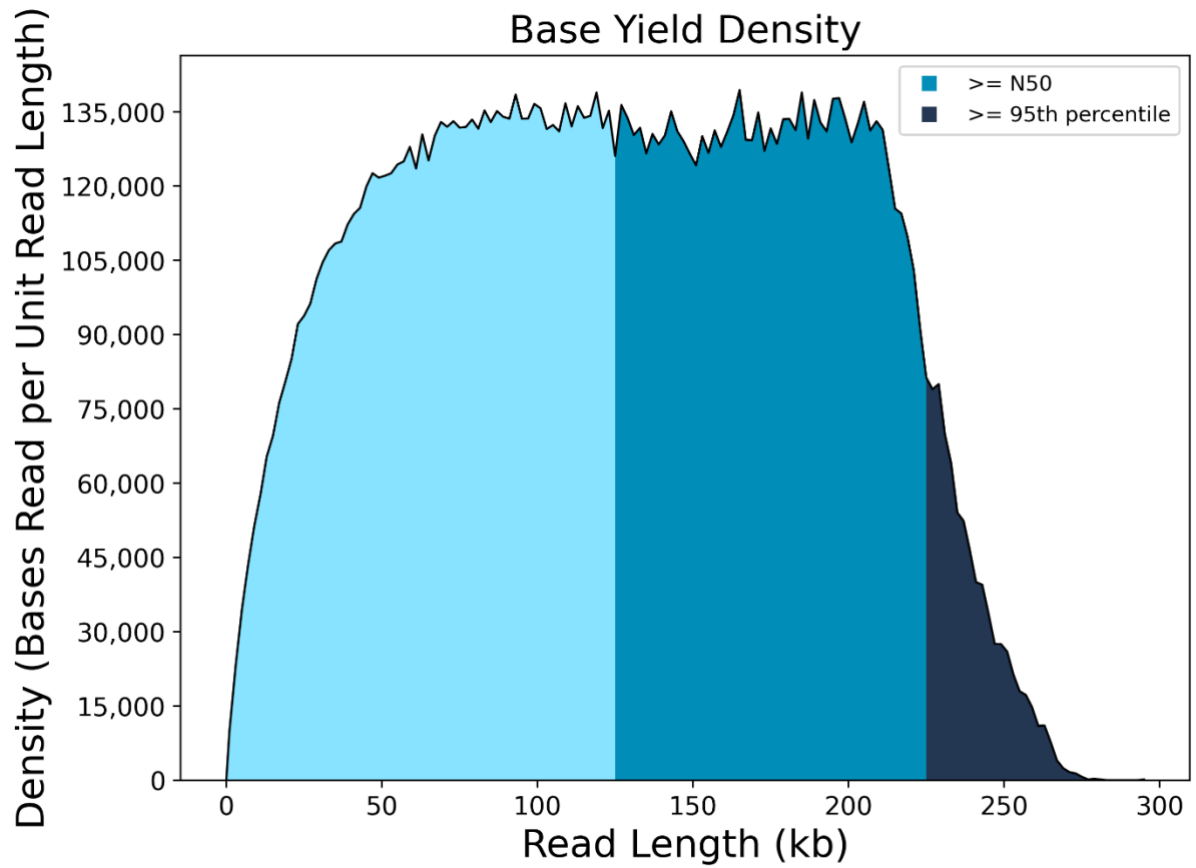
Subread Length



Longest Subread Length Versus Polymerase Read Length



Base Yield Density



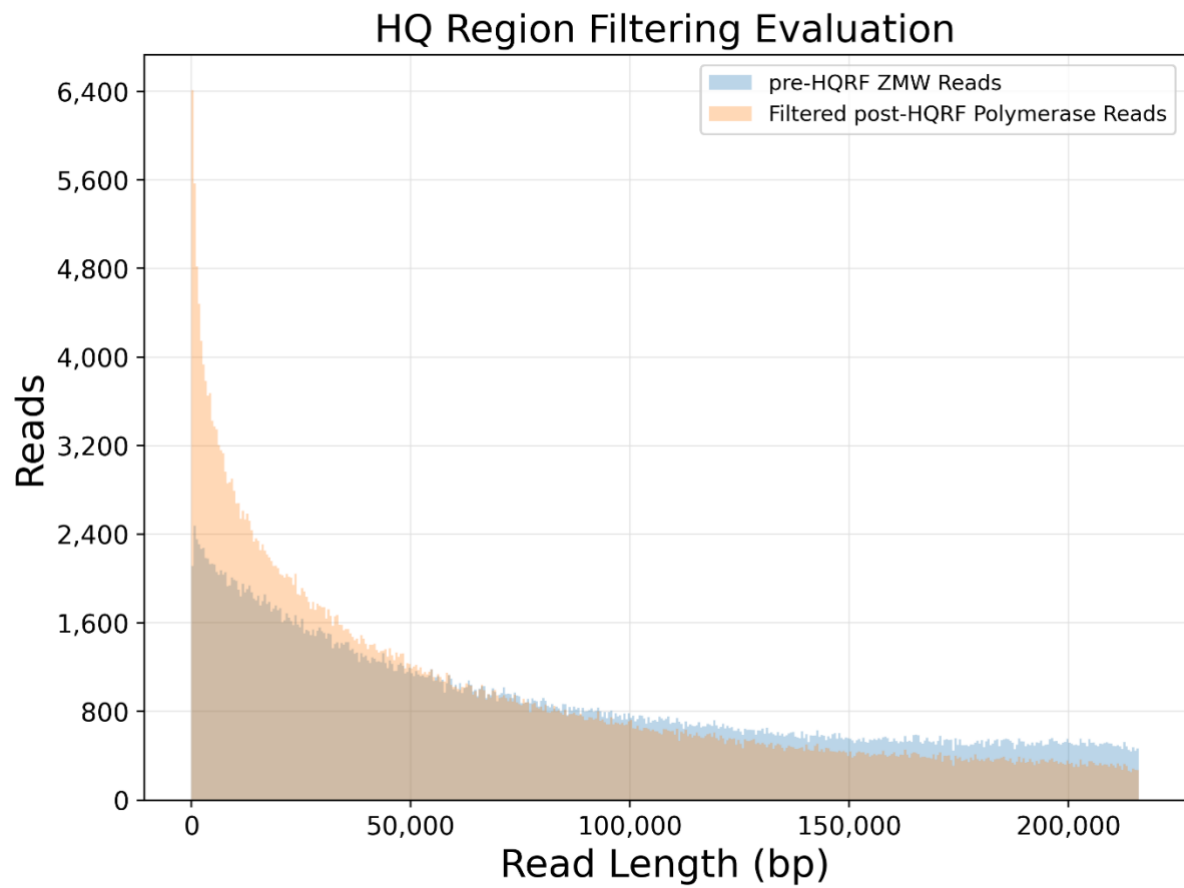
Loading Report

Value	Analysis Metric
1,009,994	Productive ZMWs
470,915	Productivity 0
428,040	Productivity 1
119,391	Productivity 2

Loading Statistics

Collection Context	Productive ZMWs	Productivity 0 (%)	Productivity 1 (%)	Productivity 2 (%)	Loading type			
m54123_210507_122044	1,009,994	470,915	46.24	428,040	42.03	119,391	11.72	Diffusion

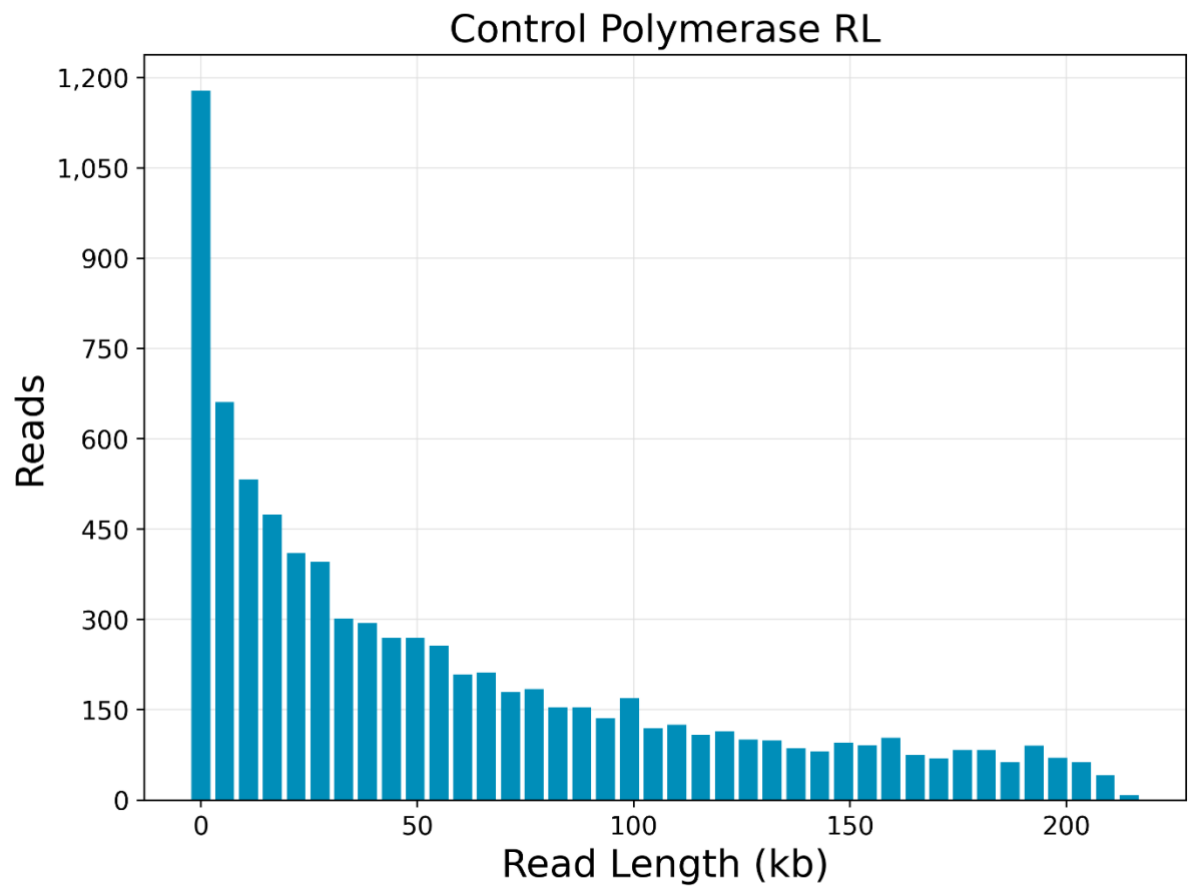
HQ Region Filtering Evaluation



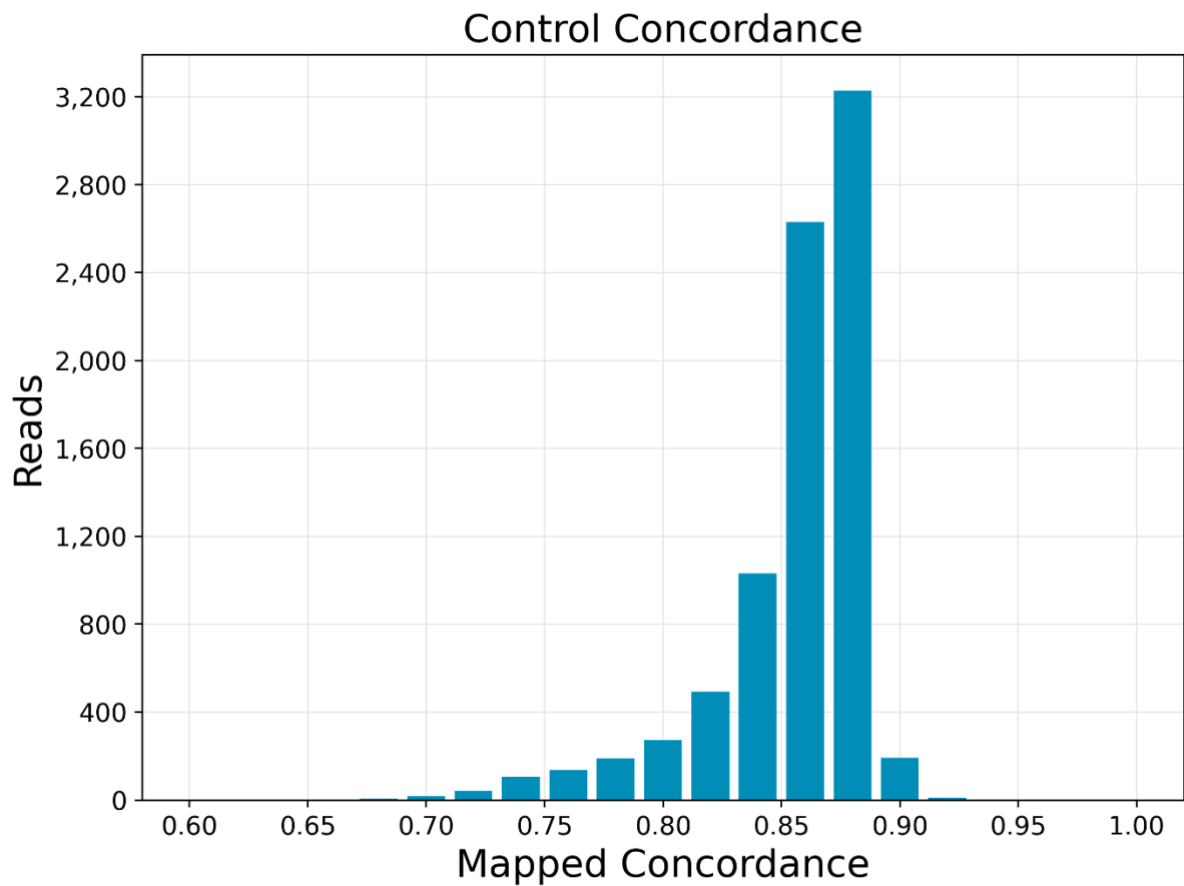
Control Report

Value	Analysis Metric
8,352	Number of of Control Reads
63,282	Control Read Length Mean
0.87	Control Read Concordance Mean
0.89	Control Read Concordance Mode

Control Read Length



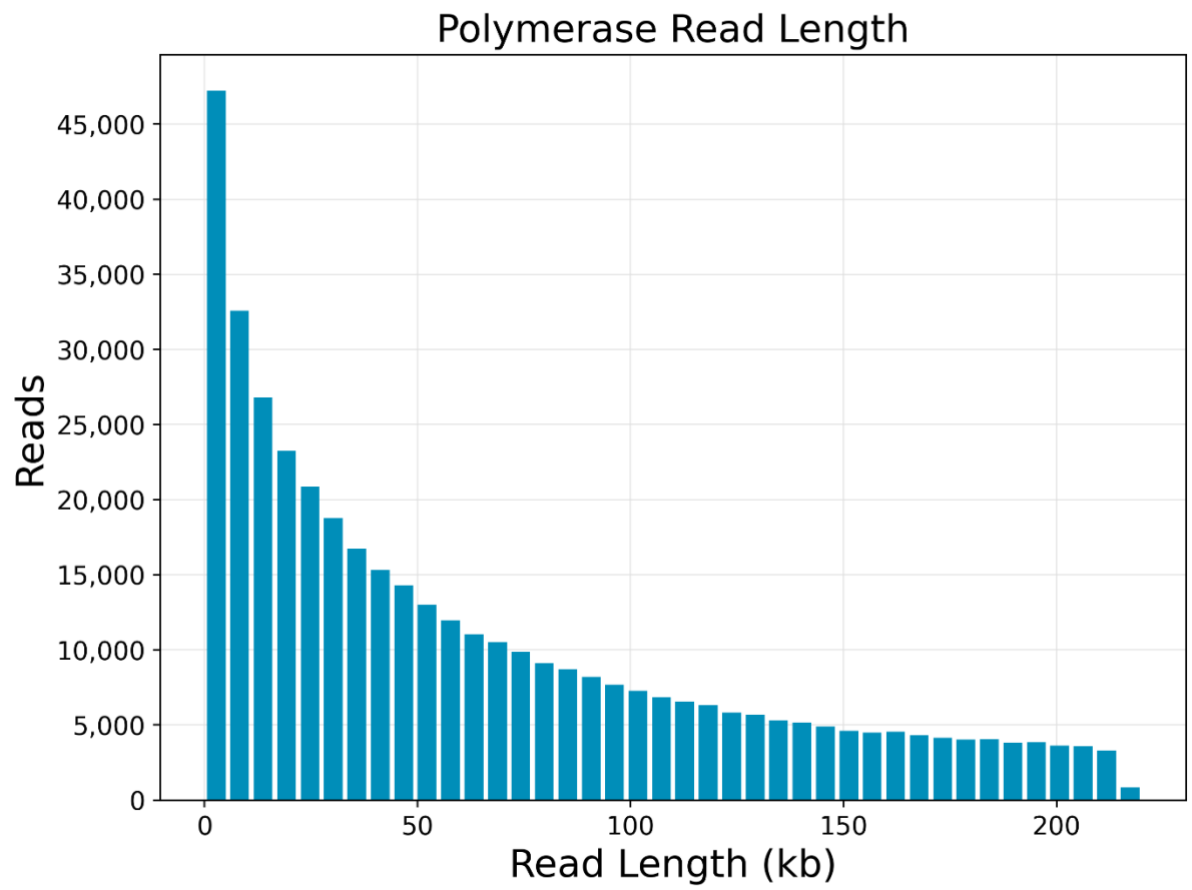
Control Read Quality



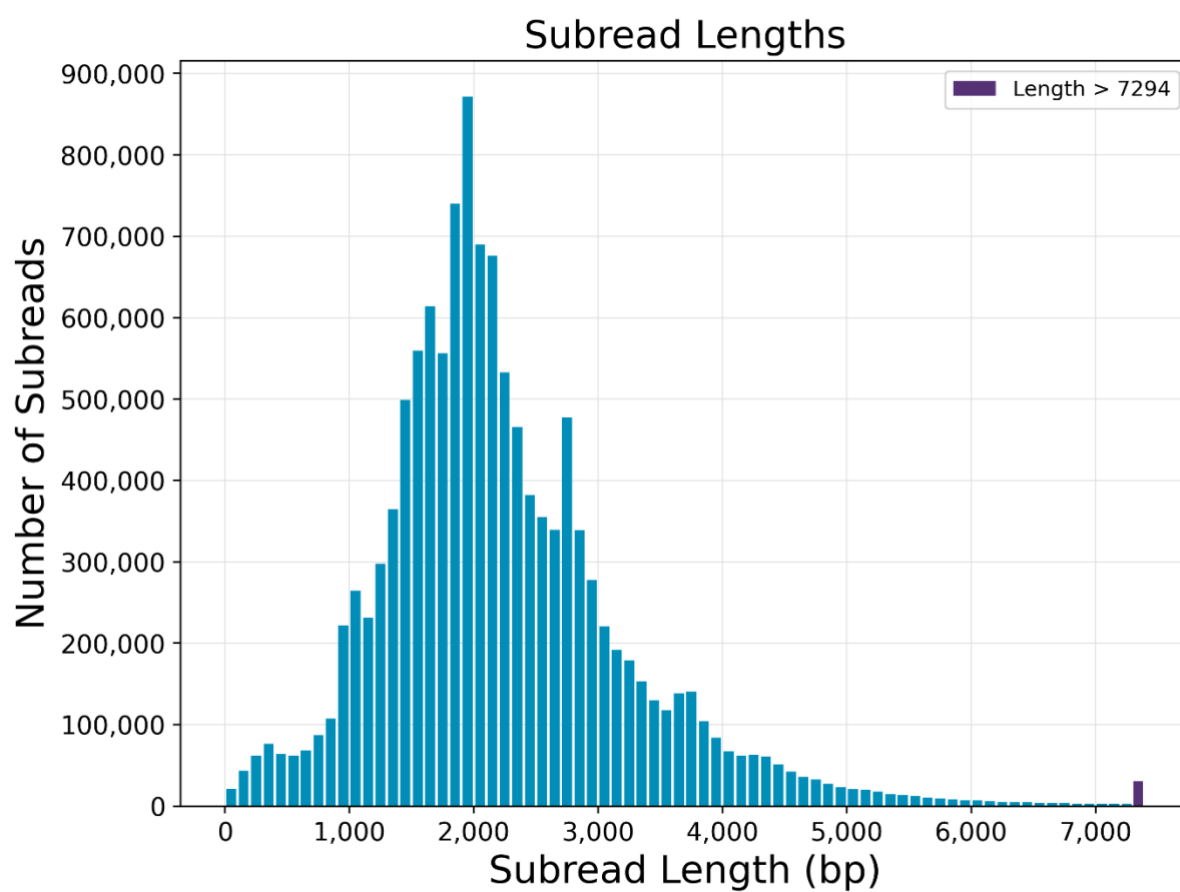
Raw Data Report

Value	Analysis Metric
28,562,526,159	Polymerase Read Bases
419,674	Polymerase Reads
68,058	Polymerase Read Length (mean)
126,248	Polymerase Read N50
2,244	Subread Length (mean)
2,427	Subread N50
3,133	Longest Subread Length (mean)
3,345	Longest Subread N50
1,149,749,504	Unique Molecular Yield

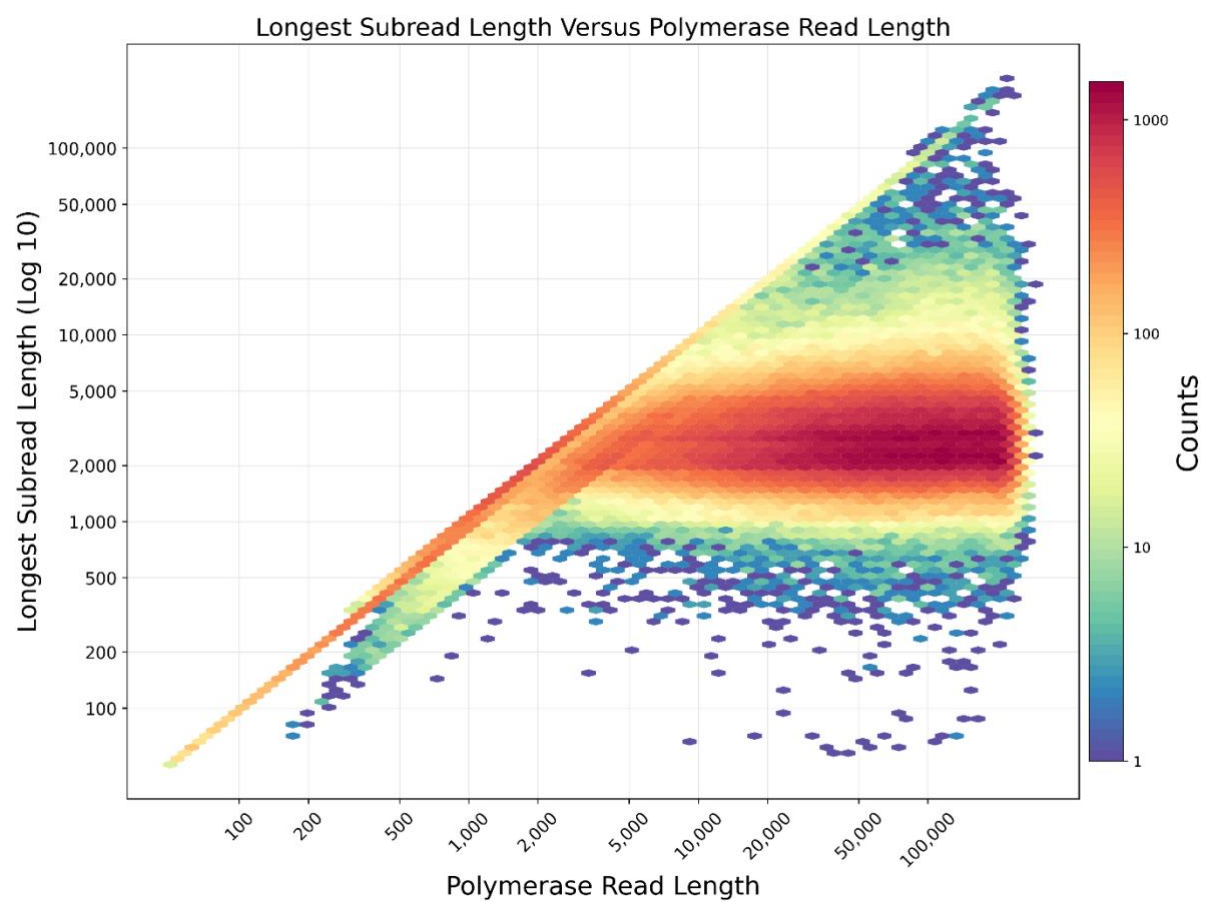
Polymerase Read Length



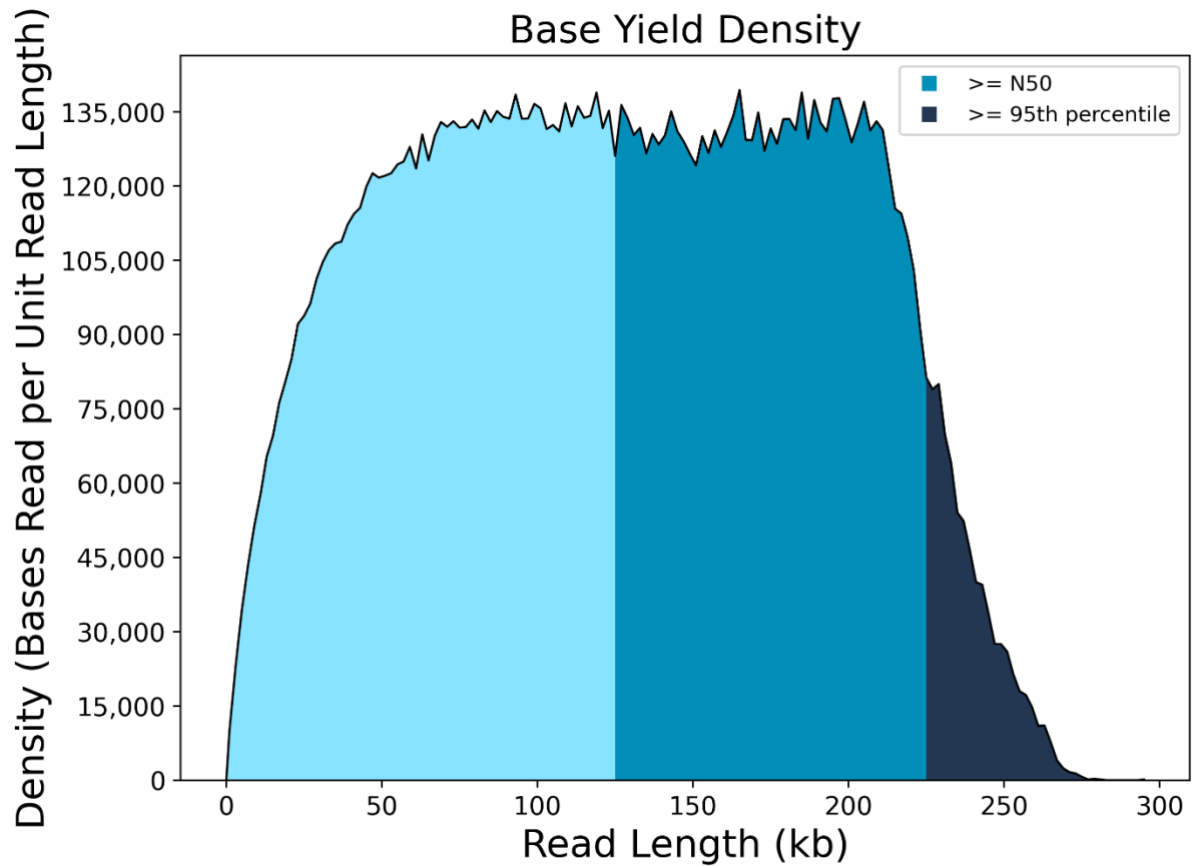
Subread Length



Longest Subread Length Versus Polymerase Read Length



Base Yield Density



Adapter Report

Value	Analysis Metric
0.00 %	Adapter Dimers (0-10bp) %
0.00 %	Short Inserts (11-100bp) %
3.05	Local Base Rate

Completed Analyses

Name	State	Id	Date Created	Created By	Analysis Application
Auto Analyses of PB_12	SUCCESSFUL	1520	2021-05-07, 01:39:38 PM	lab	
CCS of PB_12	SUCCESSFUL	1521	2021-05-07, 01:39:38 PM	lab	Circular Consensus Sequencing (CCS)

File Downloads

Example:analysis-_Bio Sample Name_-1522

File
Size
Type
[Analysis Log](#)
8 KB
log
[PB_12-Cell1](#)
17 KB

SubreadSet

[SMRT Link Log](#)

2 KB

log

SMRT Link Log

```
[INFO] [2021-05-08T20:36:04.829+02:00] Initial Setup of resources. Starting to run
engine job id:1522 type:import-dataset
[INFO] [2021-05-08T20:36:04.829+02:00] Job output directory is
/opt/pacbio/smrt/userdata/jobs_root/0000/0000001/0000001522
[INFO] [2021-05-08T20:36:05.580+02:00] Submitting Cromwell workflow to
http://localhost:9096
[INFO] [2021-05-08T20:36:05.637+02:00] Started Cromwell workflow f5f6eab2-93cc-
4388-bee8-2dc560b3f6c5 from SMRT Link job b433b8a1-db74-4437-bda2-25dcae61ee48
[INFO] [2021-05-08T20:36:15.807+02:00] Cromwell workflow now in state RUNNING
[INFO] [2021-05-08T20:36:15.825+02:00] Created symlink to
/opt/pacbio/jobs_root/cromwell-executions/sl_import_subreads/f5f6eab2-93cc-4388-
bee8-2dc560b3f6c5
[INFO] [2021-05-08T20:36:15.836+02:00] 0 tasks finished
[INFO] [2021-05-08T20:36:25.927+02:00] 0 tasks finished, task
sl_dataset_reports.dataset_absolutize and 0 others running
[INFO] [2021-05-08T20:36:37.992+02:00] 1 task finished, task
sl_dataset_reports.import_dataset_reports and 0 others running
[INFO] [2021-05-08T20:38:25.402+02:00] Cromwell workflow now in state SUCCEEDED
[INFO] [2021-05-08T20:38:25.453+02:00] 2 tasks finished
[INFO] [2021-05-08T20:38:25.553+02:00] Cromwell workflow completed, importing 5
outputs
[INFO] [2021-05-08T20:38:25.557+02:00] about to write datastore for job b433b8a1-
db74-4437-bda2-25dcae61ee48
[INFO] [2021-05-08T20:38:25.576+02:00] Done writing datastore for job b433b8a1-
db74-4437-bda2-25dcae61ee48
[INFO] [2021-05-08T20:38:25.576+02:00] Successfully completed running core job
id:b433b8a1-db74-4437-bda2-25dcae61ee48
[INFO] [2021-05-08T20:38:25.593+02:00] Imported 2 files
Linked 4 reports to 4 datasets
[INFO] [2021-05-08T20:38:25.598+02:00] Updated job b433b8a1-db74-4437-bda2-
25dcae61ee48 state to SUCCESSFUL
[INFO] [2021-05-08T20:38:25.603+02:00] Job 1522 type:import-dataset
state:SUCCESSFUL is NOT eligible for email sending. no createdByEmail user.
Skipping sending Email
```

CCS of PB_12

SUCCESSFUL

Display All

Status

Analysis

CCS of PB_12

Analysis ID

1521

From Multi-Job

[1520](#)

Status

SUCCESSFUL: 38 tasks finished

Created By

lab

Date Created

2021-05-07, 01:39:38 PM

Date Updated

2021-05-09, 07:01:13 AM

Application

Circular Consensus Sequencing (CCS)

SMRT Link Version

10.1.0.119588

Inputs

Data Type

Name

Import Complete

SubreadSet

[Continuous Long Reads: PB_12-Cell1](#)

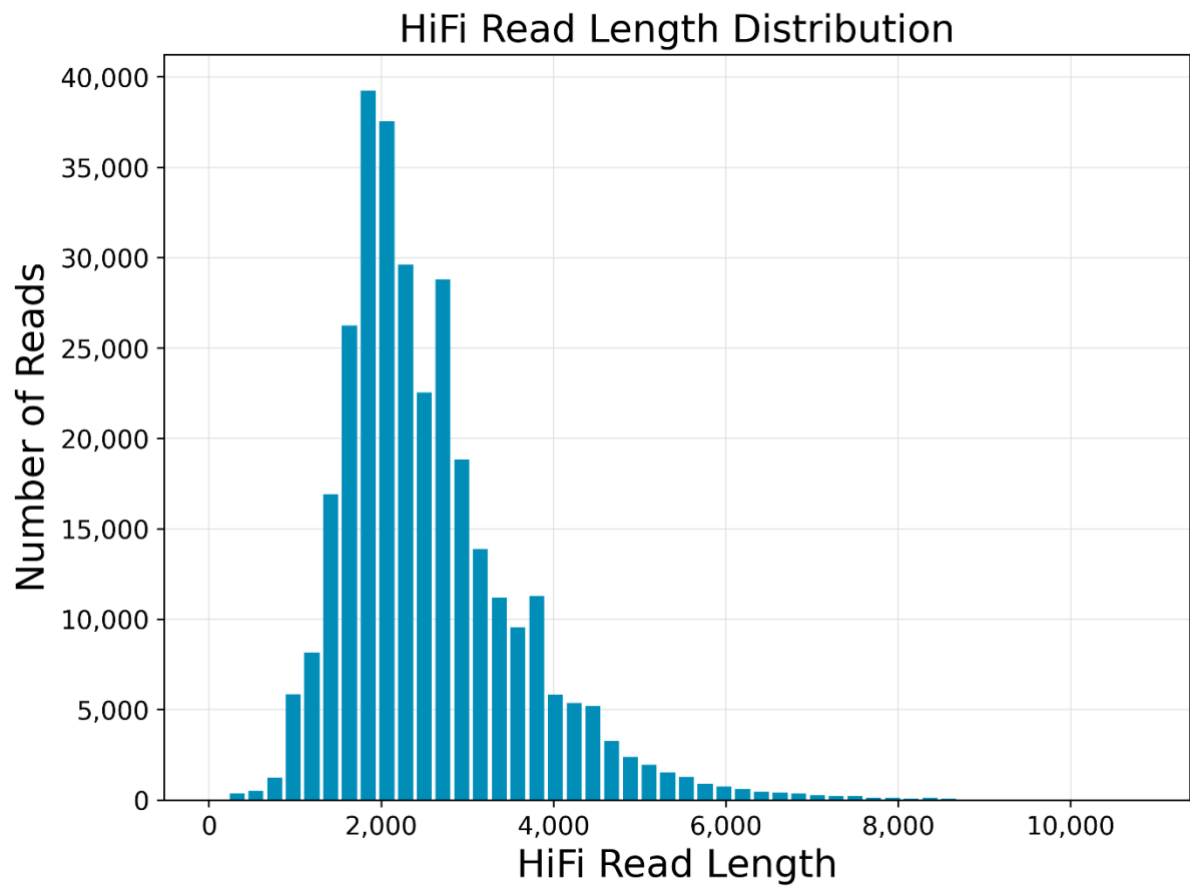
Yes

Path

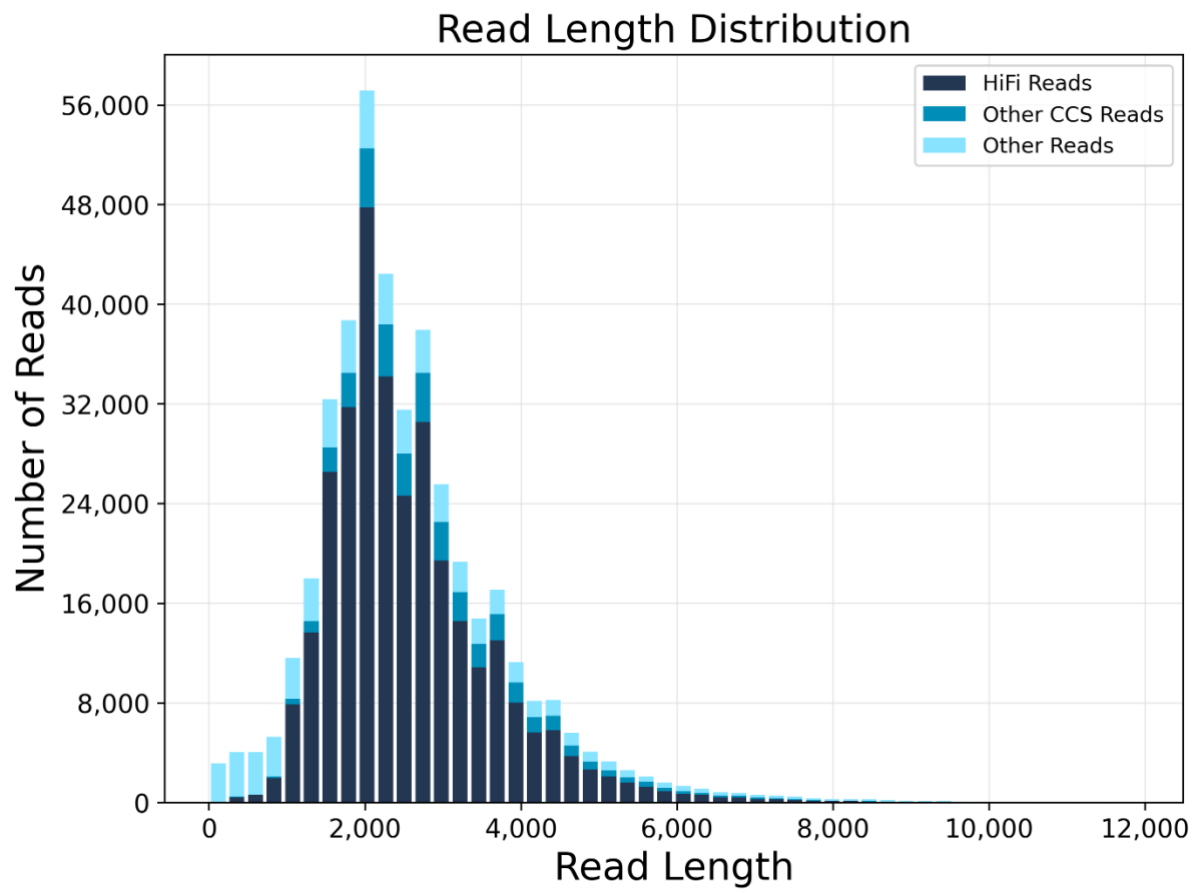
/opt/pacbio/smrtd/userdata/jobs_root/0000/0000001/0000001521

Thumbnails

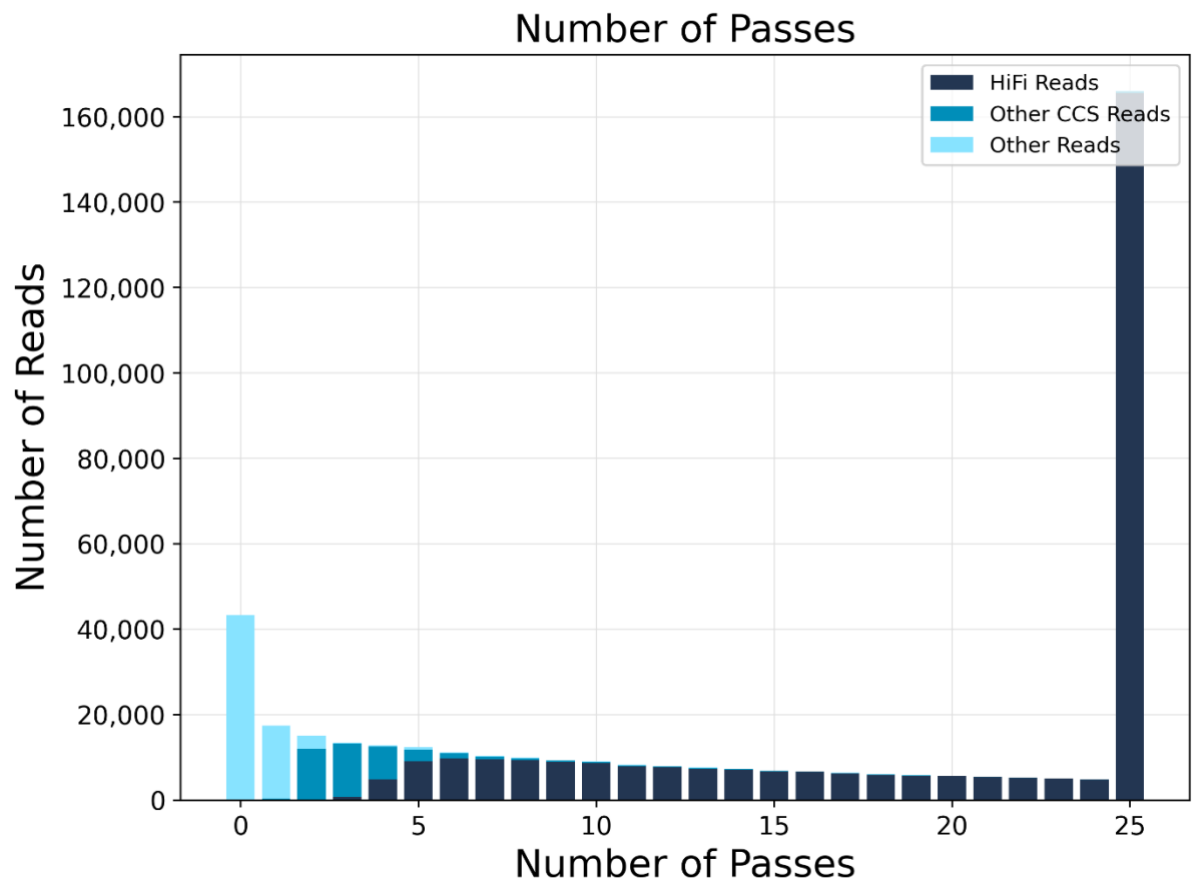
HiFi Read Length Distribution



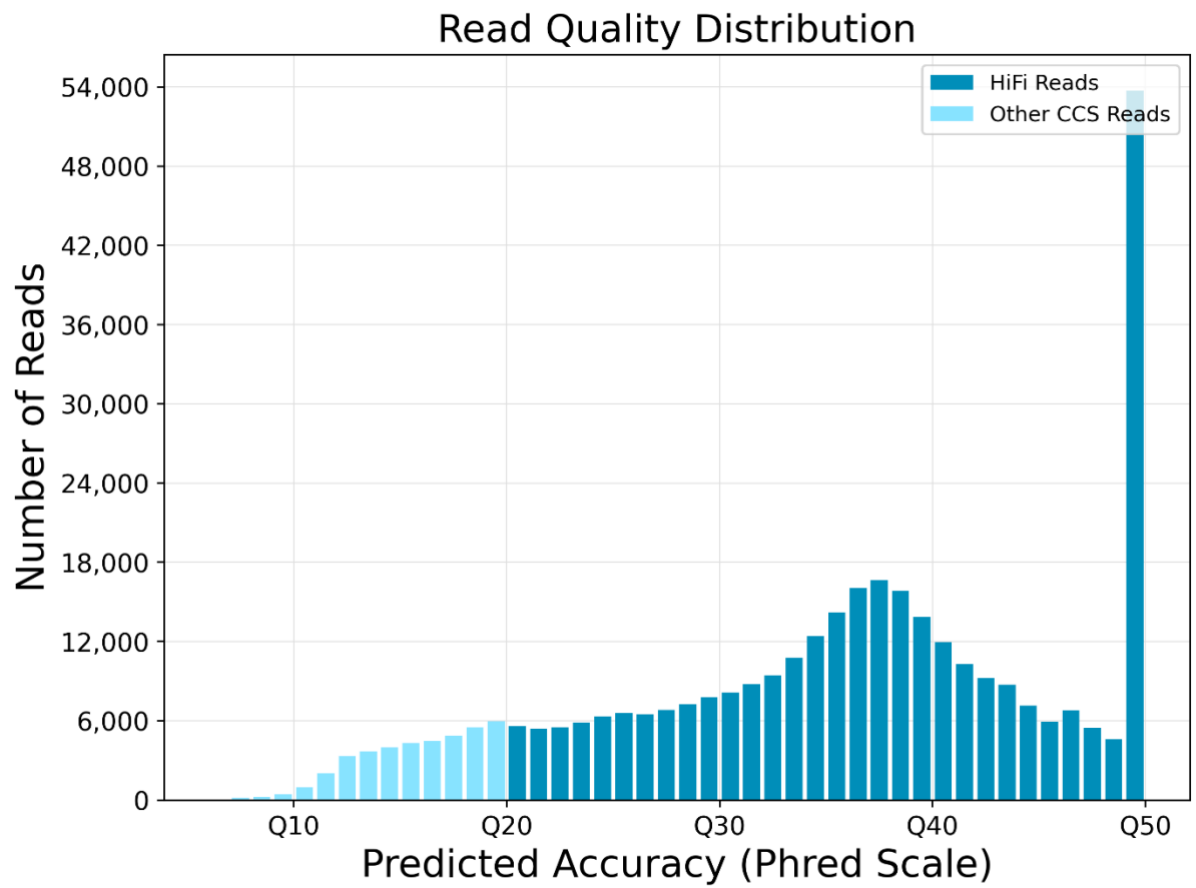
Read Length Distribution



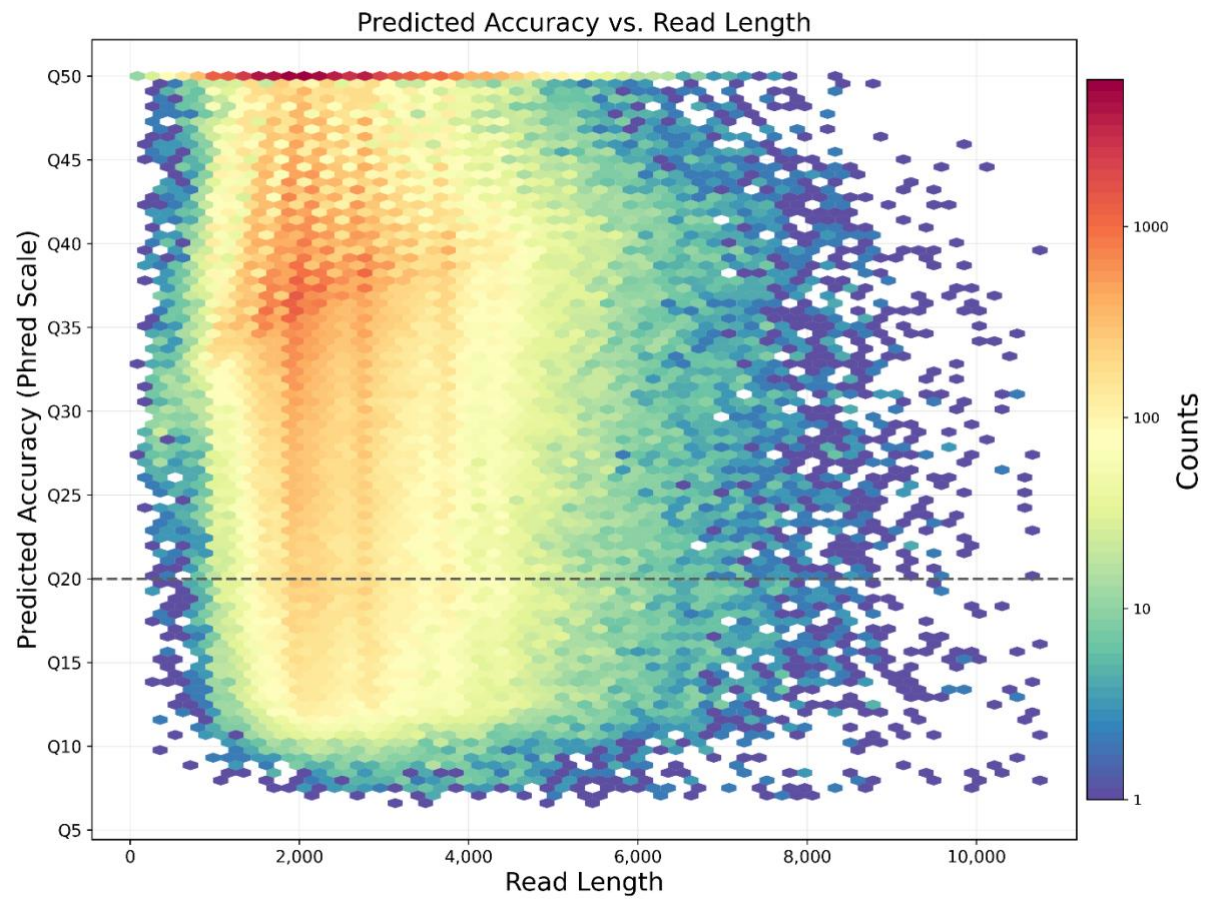
Number of Passes



Read Quality Distribution



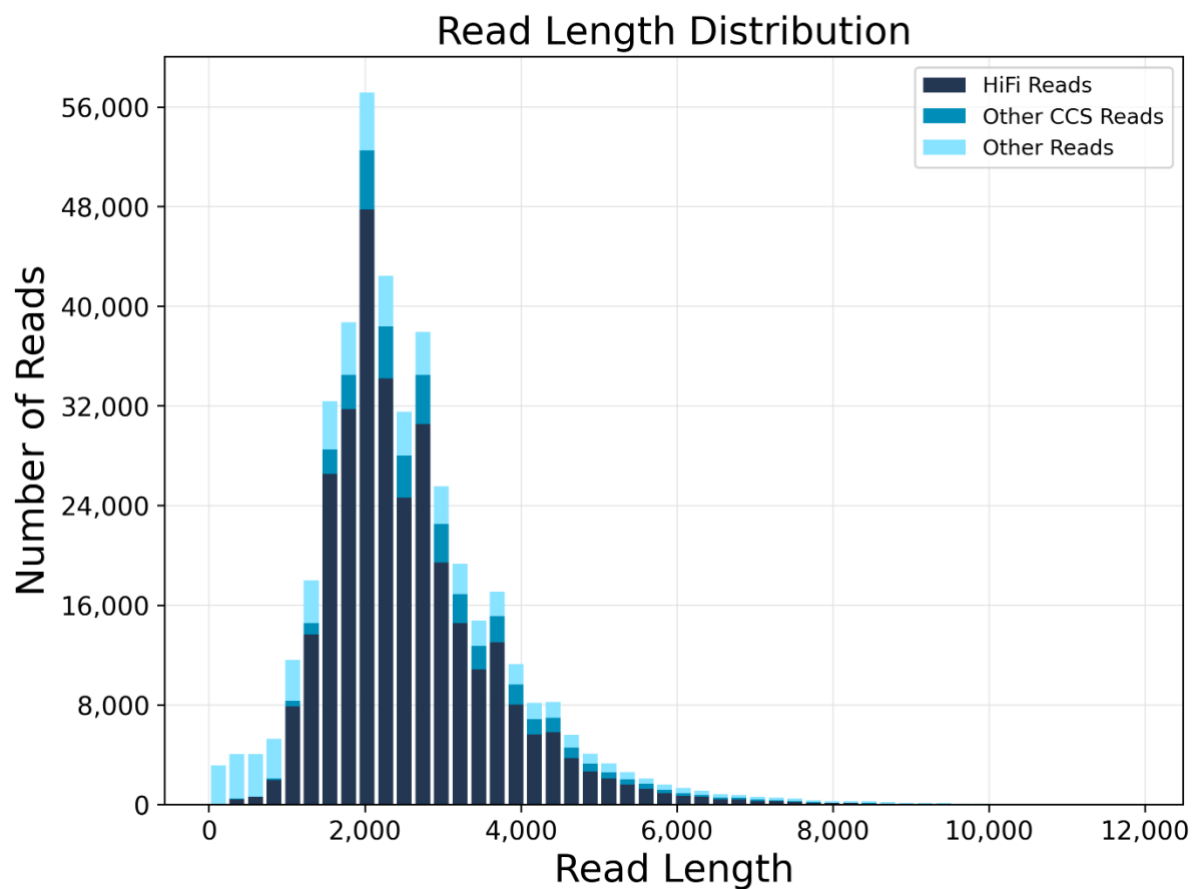
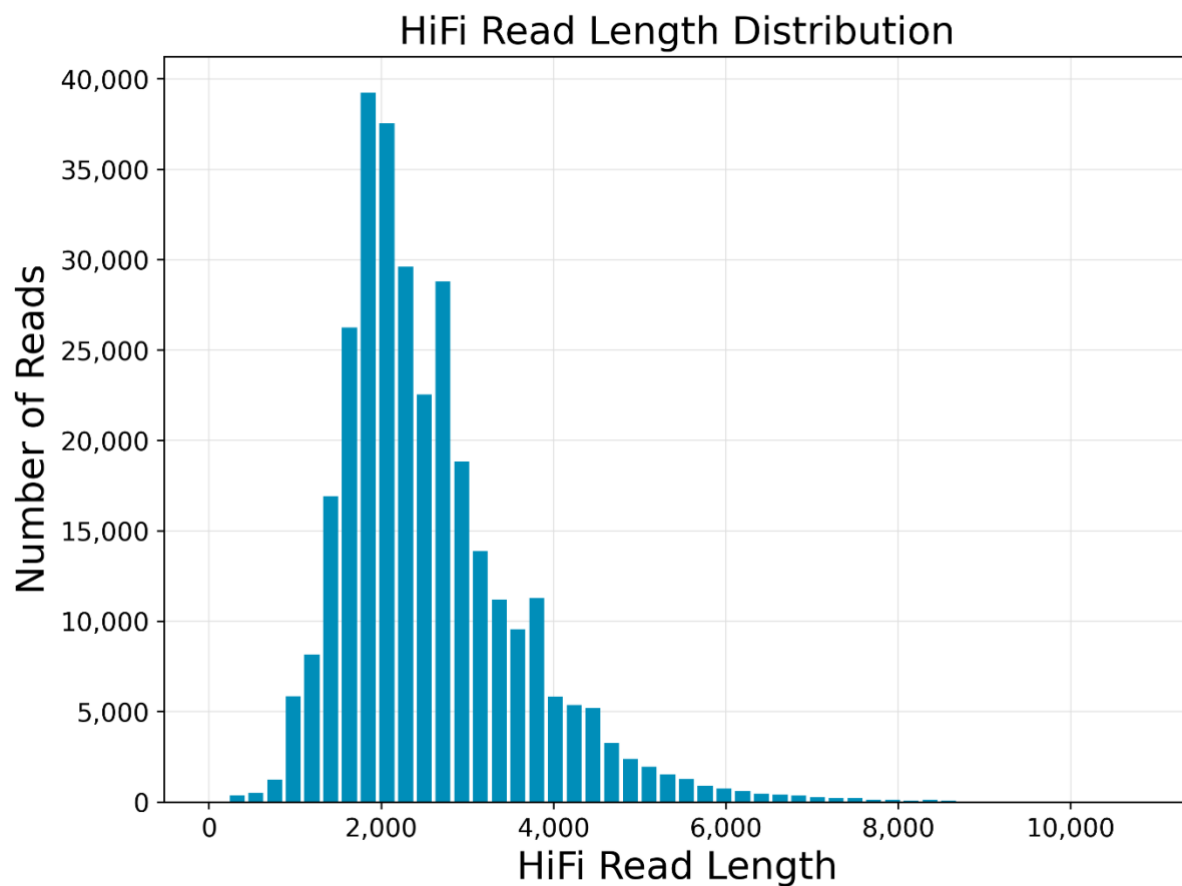
Predicted Accuracy vs. Read Length



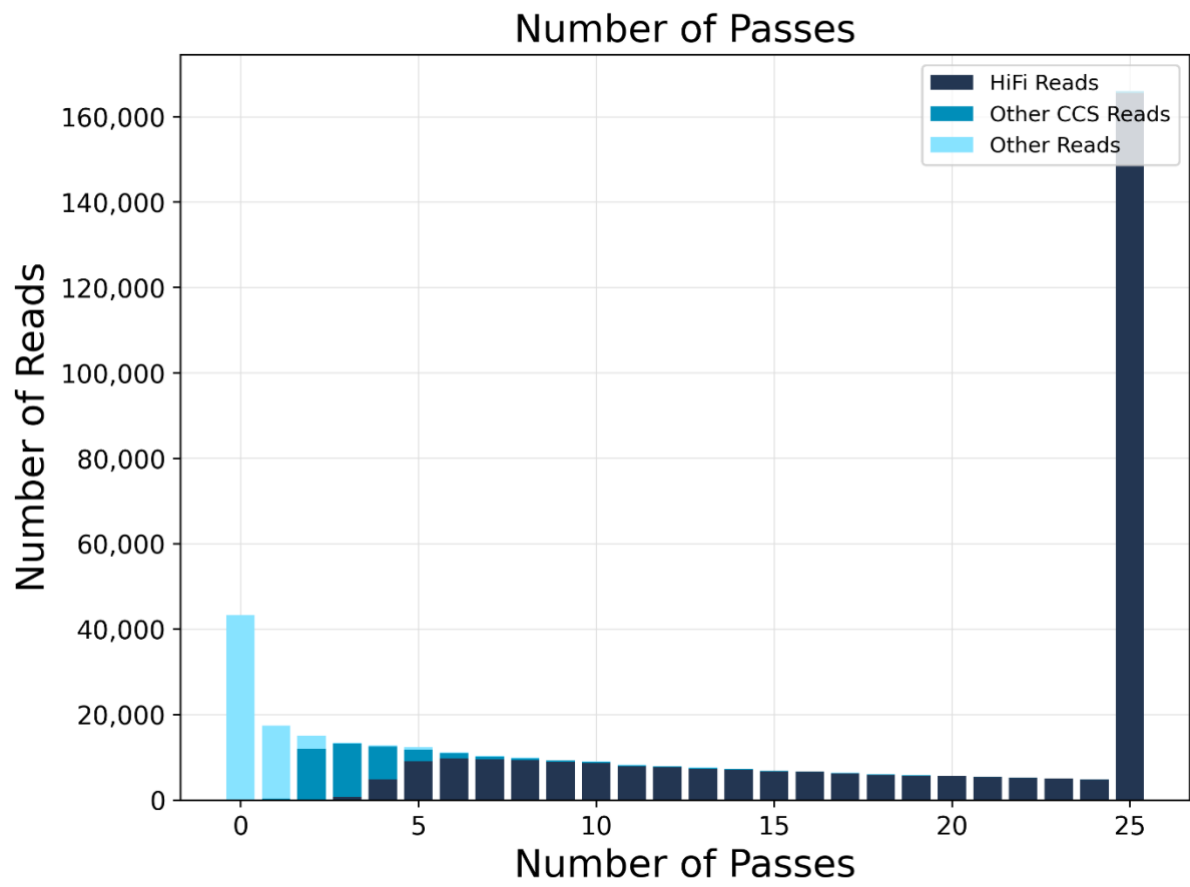
CCS Analysis Report

Value	Analysis Metric
313,563	HiFi Reads
805,344,539	HiFi Yield (bp)
2,568	HiFi Read Length (mean, bp)
Q37	HiFi Read Quality (median)
19	HiFi Number of Passes (mean)
39,945	<Q20 Reads
119,455,021	<Q20 Yield (bp)
2,990	<Q20 Read Length (mean, bp)
Q16	<Q20 Read Quality (median)

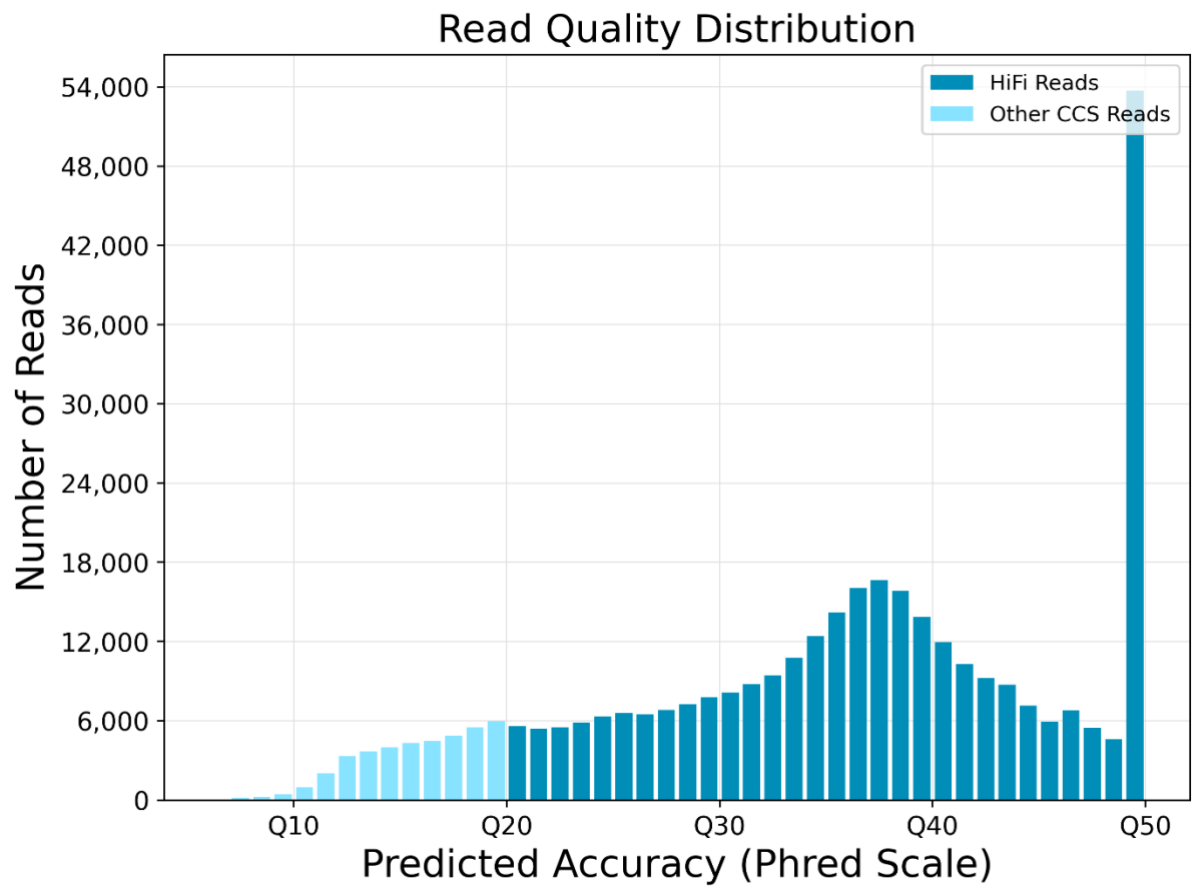
Read Length Distribution



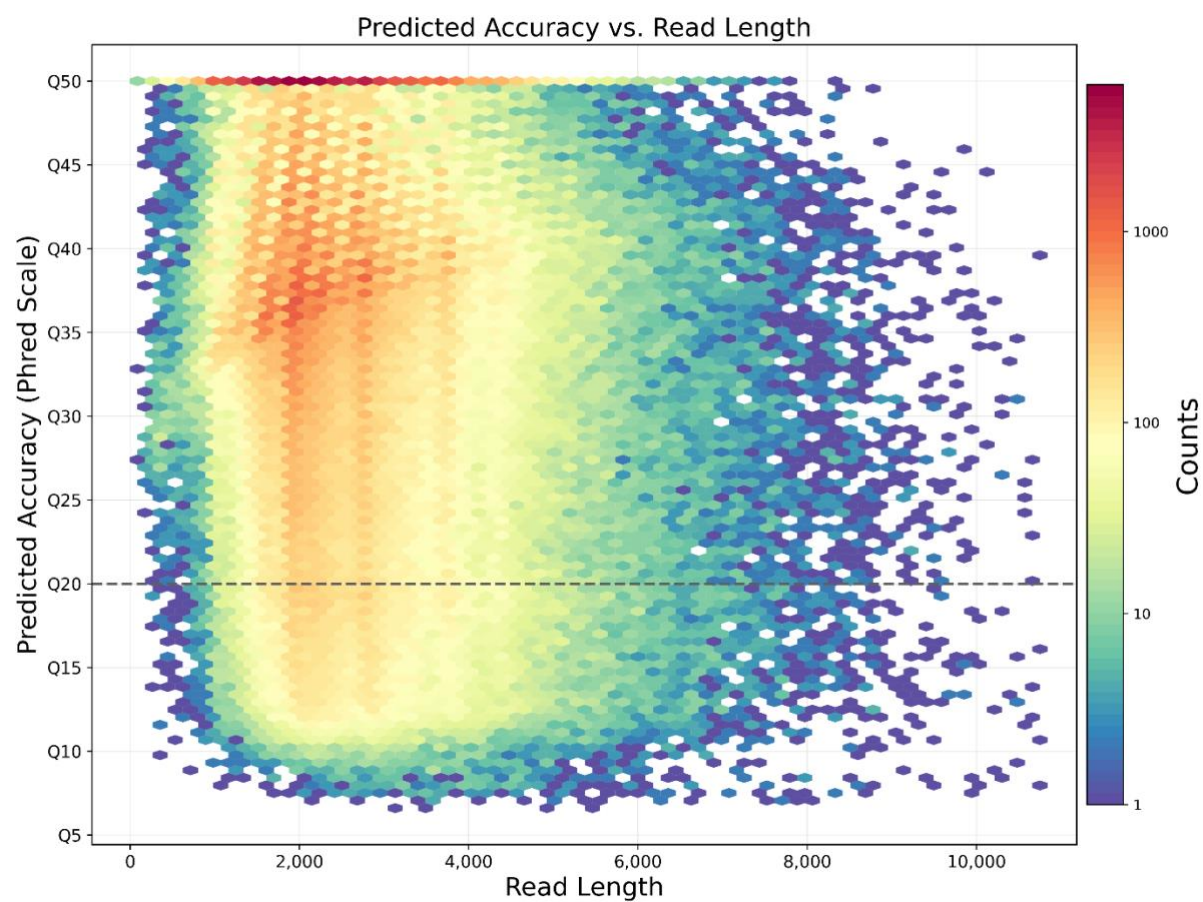
Number of Passes



Read Quality Distribution



Predicted Accuracy vs. Read Length



File Downloads

Example:analysis-unknown-1521

File

Size

Type

[PB_12-Cell1 \(CCS\)](#)

15 KB

ConsensusReadSet

[m54123_210507_122044.hifi_reads.fasta.gz](#)

272 MB

Fasta

[m54123_210507_122044.hifi_reads.bam](#)

478 MB

ConsensusReadBamFile

[m54123_210507_122044.hifi_reads.fastq.gz](#)

492 MB

Fastq

[All Reads \(BAM\)](#)

678 MB

bam

[CCS Analysis Per-Read Details](#)

3 MB

zip

[Analysis Log](#)

73 KB

log

[SMRT Link Log](#)

5 KB

log

SMRT Link Log

```
[INFO] [2021-05-08T20:38:29.827+02:00] Initial Setup of resources. Starting to run
engine job id:1521 type:analysis Parent MultiJobId:1520
[INFO] [2021-05-08T20:38:29.828+02:00] Job output directory is
/opt/pacbio/smrtd/userdata/jobs_root/0000/0000001/0000001521
[INFO] [2021-05-08T20:38:29.926+02:00] Final task options before converting to
Cromwell inputs:
[INFO] [2021-05-08T20:38:29.927+02:00] [{
  "id": "ccs_use_run_design_uuid",
  "value": true,
  "optionTypeId": "boolean"
}, {
  "id": "ccs_include_kinetics",
  "value": false,
  "optionTypeId": "boolean"
}, {
  "id": "ccs_min_predicted_accuracy",
  "value": 0.0,
  "optionTypeId": "float"
}, {
  "id": "ccs_min_passes",
  "value": 0,
  "optionTypeId": "integer"
}, {
  "id": "ccs_min_snr",
  "value": 2.5,
  "optionTypeId": "float"
}, {
  "id": "ccs_min_length",
  "value": 10,
  "optionTypeId": "integer"
}, {
  "id": "ccs_max_length",
  "value": 50000,
  "optionTypeId": "integer"
}, {
  "id": "ccs_polish",
  "value": true,
  "optionTypeId": "boolean"
}, {
  "id": "ccs_model_args",
```

```

    "value": "",
    "optionTypeId": "string"
  }, {
    "id": "ccs_override_args",
    "value": "",
    "optionTypeId": "string"
  }, {
    "id": "ccs_by_strand",
    "value": false,
    "optionTypeId": "boolean"
  }, {
    "id": "ccs_process_all",
    "value": true,
    "optionTypeId": "boolean"
  }
]
[INFO] [2021-05-08T20:38:29.927+02:00] Workflow options from job submission:
List(ServiceTaskIntOption(cromwell.workflow_options.max_nchunks,24,integer),
ServiceTaskStrOption(cromwell.engine_options.memory,16 G,string),
ServiceTaskIntOption(cromwell.workflow_options.nproc,4,integer),
ServiceTaskStrOption(cromwell.workflow_options.log_level,INFO,string),
ServiceTaskIntOption(cromwell.workflow_options.memory_per_core,4,integer),
ServiceTaskBooleanOption(cromwell.engine_options.read_from_cache,false,boolean),
ServiceTaskStrOption(cromwell.engine_options.backend,Local,string),
ServiceTaskBooleanOption(cromwell.engine_options.write_to_cache,true,boolean))
[INFO] [2021-05-08T20:38:29.928+02:00] Final engine options for analysis:
{"read_from_cache":false,"write_to_cache":true,"backend":"Local","default_runtime_attributes":{"backend":"Local","maxRetries":1,"memory":"16 G","username":"lab"}}
[INFO] [2021-05-08T20:38:29.955+02:00] Submitting Cromwell workflow to
http://localhost:9096
[INFO] [2021-05-08T20:38:29.982+02:00] Started Cromwell workflow 666c3e35-40e5-43b3-b878-37f89b0f1cc9 from SMRT Link job d98ba246-4bf0-4d5a-87d2-b49f123970bb
[INFO] [2021-05-08T20:38:39.990+02:00] Cromwell workflow now in state RUNNING
[INFO] [2021-05-08T20:38:40.007+02:00] Created symlink to
/opt/pacbio/jobs_root/cromwell-executions/pb_ccs/666c3e35-40e5-43b3-b878-37f89b0f1cc9
[INFO] [2021-05-08T20:38:40.020+02:00] 0 tasks finished
[INFO] [2021-05-08T20:38:50.096+02:00] 1 task finished, task
get_input_sizes.get_bam_size and 0 others running
[INFO] [2021-05-08T20:39:02.192+02:00] 2 tasks finished
[INFO] [2021-05-08T20:39:17.390+02:00] 3 tasks finished, task pb_ccs.ccs1 and 9
others running
[INFO] [2021-05-09T00:55:29.389+02:00] 8 tasks finished, task pb_ccs.ccs1 and 9
others running
[INFO] [2021-05-09T01:00:30.151+02:00] 11 tasks finished, task pb_ccs.ccs1 and 9
others running
[INFO] [2021-05-09T01:05:30.849+02:00] 12 tasks finished, task pb_ccs.ccs1 and 9
others running
[INFO] [2021-05-09T01:10:31.646+02:00] 13 tasks finished, task pb_ccs.ccs1 and 9
others running
[INFO] [2021-05-09T05:05:57.222+02:00] 14 tasks finished, task pb_ccs.ccs1 and 9
others running
[INFO] [2021-05-09T05:10:58.102+02:00] 18 tasks finished, task pb_ccs.ccs1 and 8
others running
[INFO] [2021-05-09T05:15:59.069+02:00] 22 tasks finished, task pb_ccs.ccs1 and 4
others running
[INFO] [2021-05-09T05:21:00.240+02:00] 23 tasks finished, task pb_ccs.ccs1 and 3
others running
[INFO] [2021-05-09T06:56:12.125+02:00] 26 tasks finished, task pb_ccs.ccs1 and 0
others running
[INFO] [2021-05-09T07:01:12.276+02:00] Cromwell workflow now in state SUCCEEDED
[INFO] [2021-05-09T07:01:12.497+02:00] 38 tasks finished
[INFO] [2021-05-09T07:01:13.327+02:00] Cromwell workflow completed, importing 11
outputs
[INFO] [2021-05-09T07:01:13.332+02:00] about to write datastore for job d98ba246-4bf0-4d5a-87d2-b49f123970bb
[INFO] [2021-05-09T07:01:13.334+02:00] Done writing datastore for job d98ba246-4bf0-4d5a-87d2-b49f123970bb

```

[INFO] [2021-05-09T07:01:13.334+02:00] Successfully completed running core job
id:d98ba246-4bf0-4d5a-87d2-b49f123970bb
[INFO] [2021-05-09T07:01:13.546+02:00] Imported 12 files
Linked 2 reports to 2 datasets
Job id:1521 DataStoreFile 07b09b39-5694-4a42-bf3a-89af16331751 imported
[INFO] [2021-05-09T07:01:13.551+02:00] Updated job d98ba246-4bf0-4d5a-87d2-
b49f123970bb state to SUCCESSFUL
[INFO] [2021-05-09T07:01:13.555+02:00] Job 1521 type:analysis state:SUCCESSFUL is
NOT eligible for email sending. no createdByEmail user. Skipping sending Email
