Supplementary File 1

Effect of file split size and number of cores per file

Read Length = 75 bp

DATA RANGE

File size (number of reads): $10^6$, $2 \times 10^6$, $3 \times 10^6$, $4 \times 10^6$, $5 \times 10^6$, $10^7$, $2 \times 10^7$, $3 \times 10^7$, $5 \times 10^7$, $10^8$

Segment size (number of reads): $10^5$, $2 \times 10^5$, $5 \times 10^5$, $10^6$, $2 \times 10^6$, $5 \times 10^6$, $10^7$, $3 \times 10^7$, $5 \times 10^7$, $10^8$

Number of cores: 10, 16, 20, 30, 40, 50, 60, 70, 80, 90, 100, 120, 140
Analysis Time of a FASTQ File with $2 \times 10^9$ Reads

Analysis Time of a FASTQ File with $3 \times 10^9$ Reads
Analysis Time of a FASTQ File with 4 \times 10^6 Reads

Analysis Time of a FASTQ File with 5 \times 10^6 Reads
Analysis Time of a FASTQ File with 2 \times 10^7 Reads

Number of Processors Assigned to the FASTQ File

Analysis Time of a FASTQ File with 3 \times 10^7 Reads

Number of Processors Assigned to the FASTQ File