

Reviewer Report

Title: SeQuiLa-cov: A fast and scalable library for depth of coverage calculations

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Reviewer Comments to Author:

This manuscript covers a distributed computing method for calculating coverage from NGS data. The authors compare several commonly used methods of calculating coverage (GATK, samtools, bedtools etc.)

In general this manuscript explains the method well and show evidence that the SeQuiLa-cov tool has improved performance relative to the other tools it is compared too. There are two items that I feel would help the reader have a better understanding of the performance of the tool. 1: The authors compare samtools per-base result to the the SeqQuiLa-cov blocks and fixed length results, showing a significant reduction in time. This is reasonable given that samtools has not event or window level output. However, SeQuila-cov has a base level output in addition to event and window. It would be useful of the authors could also include this comparison. 2: Long-read sequencing is becoming a more important tool for WGS. Like with short read approaches, coverage is critical tool for a successful study. There has been very little work done on coverage calculator comparisons with long reads as a data input. It would be useful for the authors to discuss the performance of the tool on a long read data set.

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