COVID-19 subject deWit_RM4_Remdesivir

2020-10-02

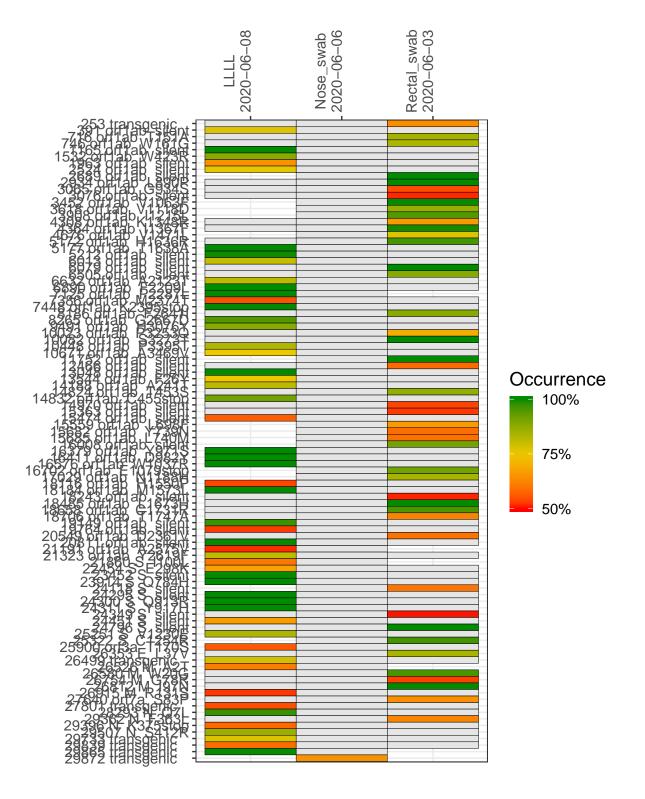
The table below provides a summary of subject samples for which sequencing data is available. The experiments column shows the number of sequencing experiments performed for each specimen. Experiment specific analyses are shown at the end of this report. The code base for this analysis can be found (here).

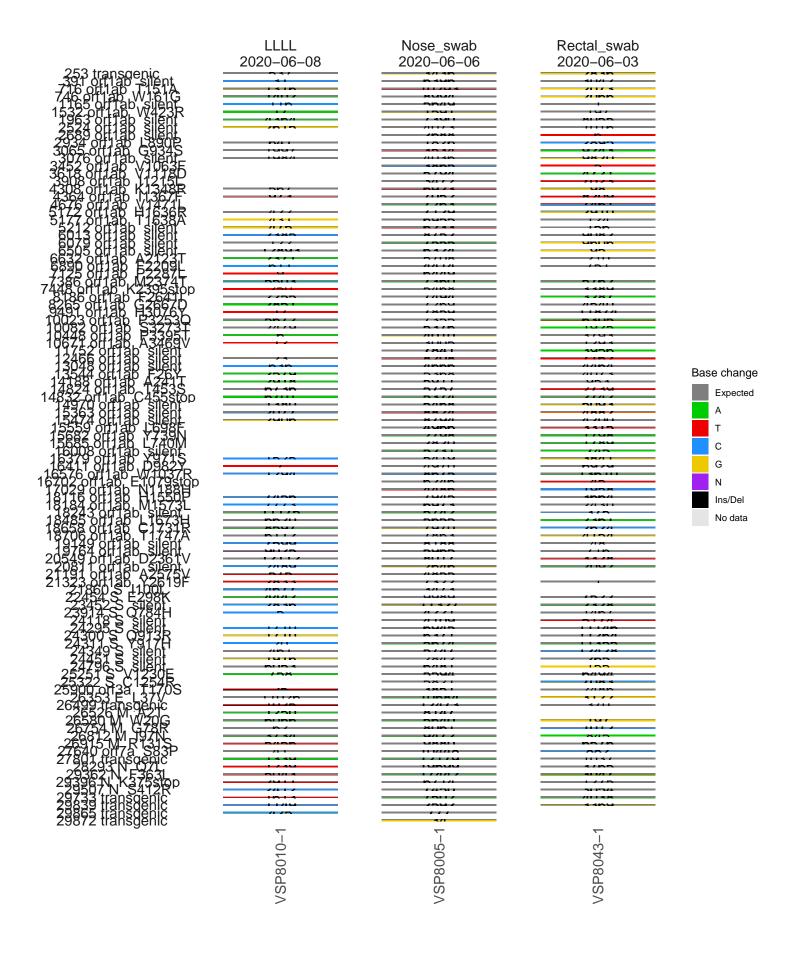
Table 1. Sample summary.

| Experiment | Туре | Input genomes | Sample type | Sample date | Largest contig (KD) | Reference read coverage | Reference read coverage (>= 5 reads) |
|------------|-------------------|---------------|----------------------|-------------|------------------------|----------------------------|--------------------------------------|
| VSP8005-1 | single experiment | NA | Nose_swab | 2020-06-06 | 30.10 | 100.0% | 100.0% |
| VSP8010-1 | single experiment | NA | LLLL | 2020-06-08 | 1.45 | 83.6% | 81.8% |
| VSP8043-1 | single experiment | NA | Rectal_swab | 2020-06-03 | 1.27 | 86.9% | 85.5% |
| VSP8044-1 | single experiment | NA | RLLL | 2020-06-08 | NA | 0.5% | 0.5% |
| VSP8045-1 | single experiment | NA | BAL | 2020-06-04 | 29.98 | 99.9% | 99.9% |

Variants shared across samples

The heat map below shows how variants (reference genome USA-WA1-2020) are shared across subject samples where the percent variance is colored. Variants are called if a variant position is covered by 5 for more reads, the alternative base is found in > 50% of read pairs and the variant yields a PHRED score > 20. Gray tiles denote positions where the variant was not the major variant or no variants were found. The relative base compositions of each experiment used to calculate tiles are shown in the following plot where the total number of position reads are shown atop of each plot.

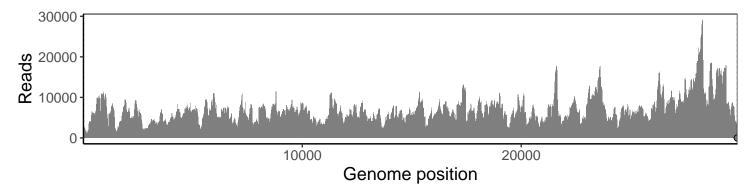




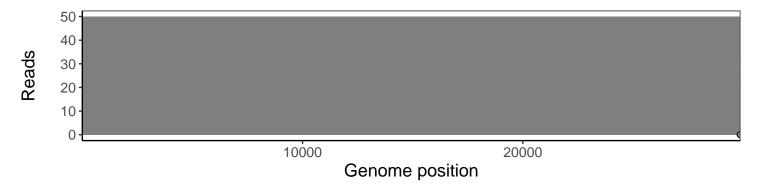
Analyses of individual experiments and composite results.

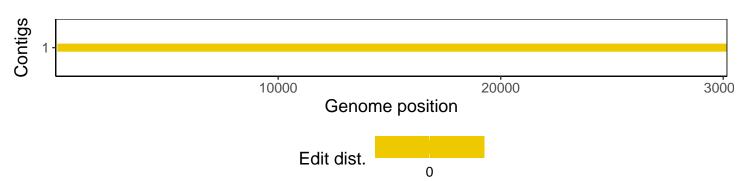
VSP8005-1 | 2020-06-06 | Nose_swab | SRR11783618 | genomes | single experiment

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



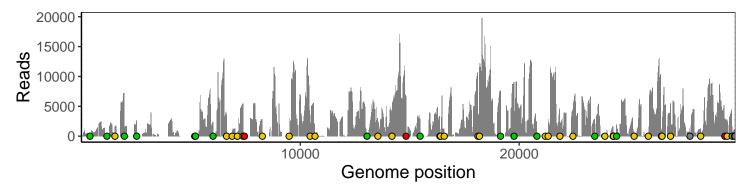
Excerpt from plot above focusing on reads coverage from 0 to 50 NT.



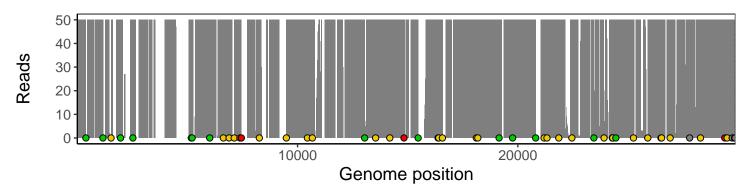


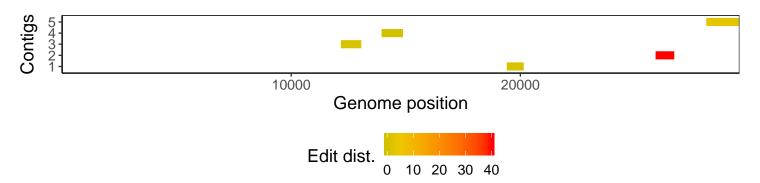
$VSP8010\text{-}1 \mid 2020\text{-}06\text{-}08 \mid LLLL \mid SRR11783619 \mid genomes \mid single \ experiment$

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



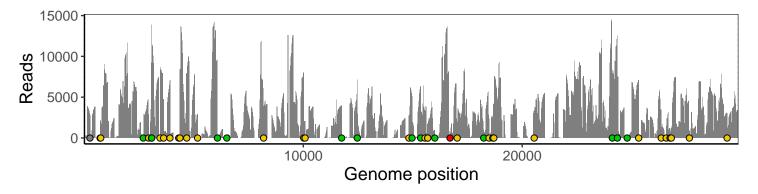
Excerpt from plot above focusing on reads coverage from 0 to 50 NT.



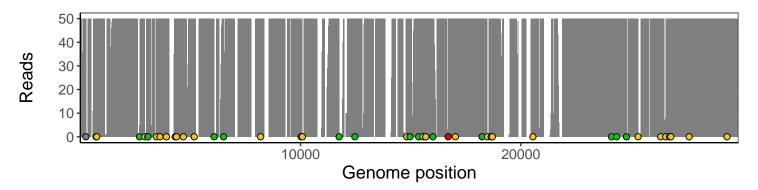


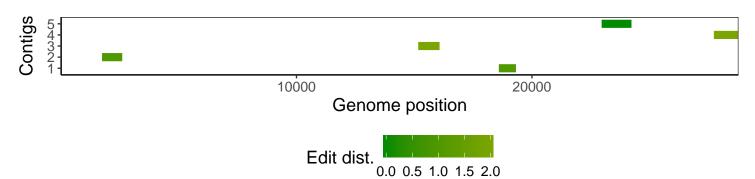
$VSP8043-1 \mid 2020-06-03 \mid Rectal_swab \mid SRR11783616 \mid genomes \mid single \; experiment$

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



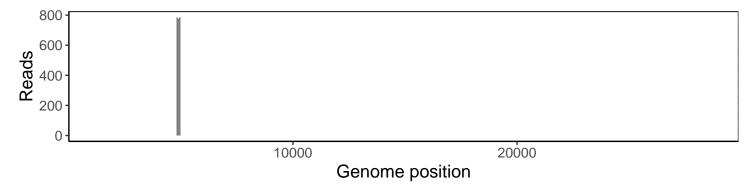
Excerpt from plot above focusing on reads coverage from 0 to 50 NT.



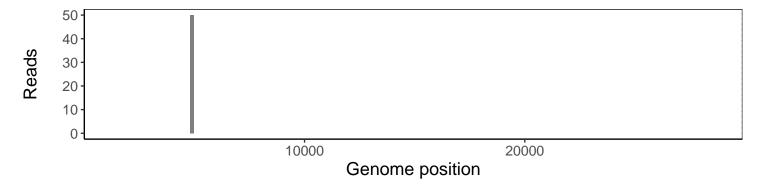


$VSP8044-1 \mid 2020\text{-}06\text{-}08 \mid RLLL \mid SRR11783617 \mid genomes \mid single \ experiment$

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



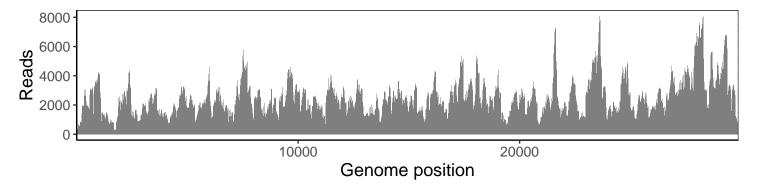
Excerpt from plot above focusing on reads coverage from 0 to 50 NT.



No contig data available.

$VSP8045\text{-}1 \mid 2020\text{-}06\text{-}04 \mid BAL \mid SRR11783620 \mid genomes \mid single \ experiment$

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

