COVID-19 subject 382

2021-01-11

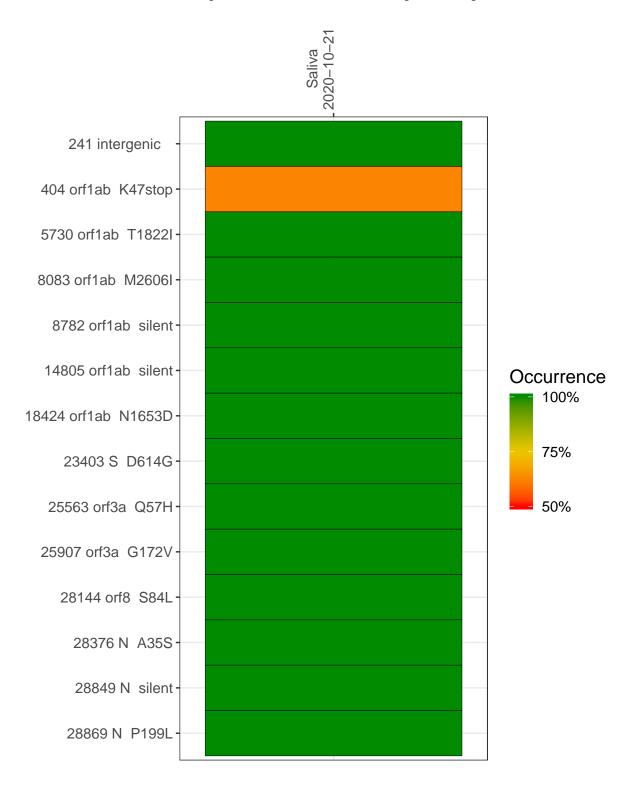
The table below provides a summary of subject samples for which sequencing data is available. The experiments column shows the number of sequencing experiments performed for each specimen. Experiment specific analyses are shown at the end of this report. The code base for this analysis can be found (here).

Table 1. Sample summary.

Experiment	Туре	Input genomes	Sample type	Sample date	Largest contig (KD)	Reference read coverage	Reference read coverage (>= 5 reads)
VSP0424-1	single experiment	NA	Saliva	2020-10-21	1.13	70.1%	64.5%

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.



Saliva 2020–10–21

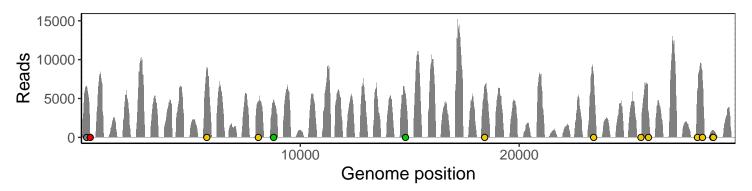
241 intergenic	6179
404 orf1ab K47stop	8
5730 orf1ab T1822I	8276
8083 orf1ab M2606I	4586
8782 orf1ab silent	4786
14805 orf1ab silent	5549
18424 orf1ab N1653D	6627
23403 S D614G	8048
25563 orf3a Q57H	6
25907 orf3a G172V	3226
28144 orf8 S84L	5880
28376 N A35S	7289
28849 N silent	939
28869 N P199L	866
	VSP0424-1



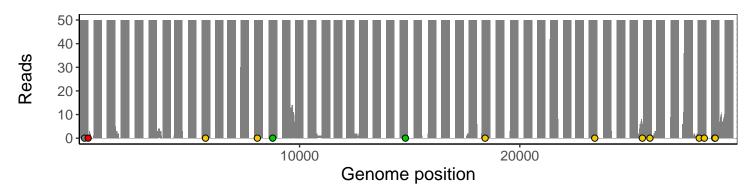
Analyses of individual experiments and composite results.

$VSP0424-1 \mid 2020-10-21 \mid Saliva \mid 382s-q \mid genomes \mid single experiment$

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.



The longest five assembled contigs are shown below colored by their edit distance to the reference genome.

