COVID-19 subject 2754

2021-01-08

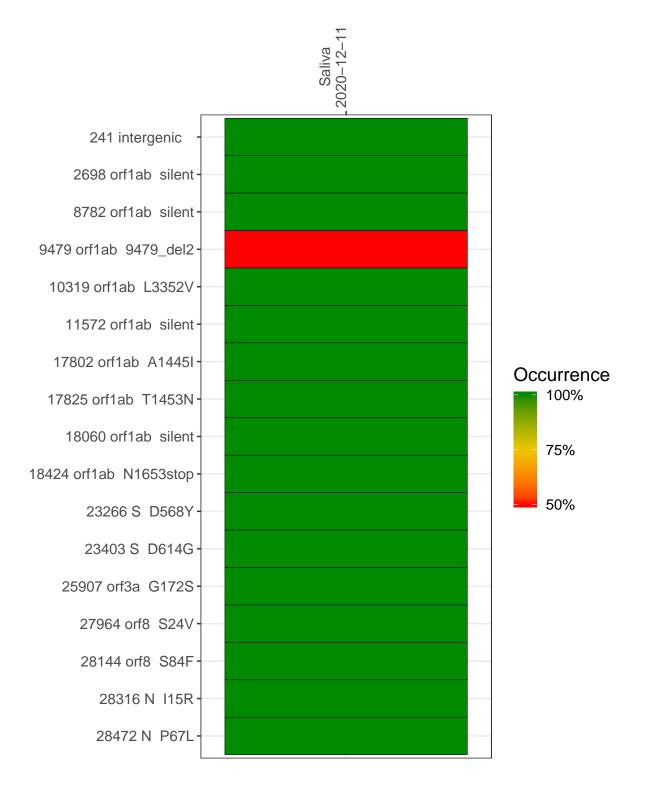
The table below provides a summary of subject samples for which sequencing data is available. The experiments column shows the number of sequencing experiments performed for each specimen. Experiment specific analyses are shown at the end of this report. The code base for this analysis can be found (here).

Table 1. Sample summary.

Experiment	Туре	Input genomes	Sample type	Sample date	Largest contig (KD)	Reference read coverage	Reference read coverage (>= 5 reads)
VSP0535-1	single experiment	NA	Saliva	2020-12-11	1.92	100.0%	56.3%

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 2020–12–11

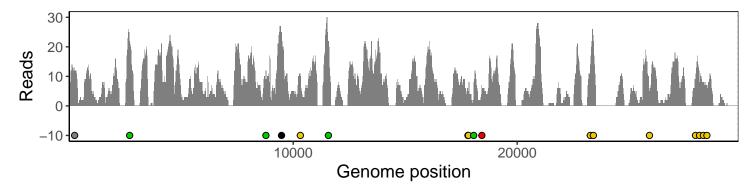
241 intergenic	11
2698 orf1ab silent	21
8782 orf1ab silent	12
9479 orf1ab 9479_del2	24
10319 orf1ab L3352V	11
11572 orf1ab silent	22
17802 orf1ab A1445I	5
17825 orf1ab T1453N	5
18060 orf1ab silent	5
18424 orf1ab N1653stop	7
23266 S D568Y	14
23403 S D614G	24
25907 orf3a G172S	5
27964 orf8 S24V	9
28144 orf8 S84F	7
28316 N I15R	8
28472 N P67L	5
	VSP0535-1



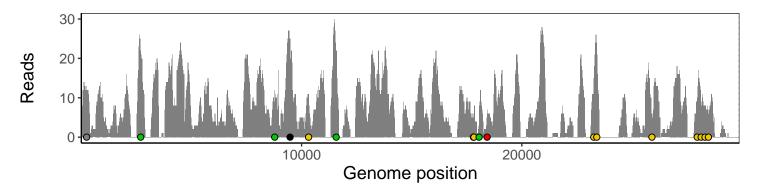
Analyses of individual experiments and composite results.

VSP0535-1 | 2020-12-11 | Saliva | 2754 | 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.



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

