# COVID-19 subject 228

2020-08-13

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.

Table 1. Sample summary.

Experiment	Type	Input genomes	Sample type	Sample date	Largest contig (KD)	Reference read coverage	Reference read coverage (>= 5 reads)
VSP0021	composite	NA	NP	4/22/2020	29.82	99.8%	99.7%
VSP0022	composite	NA	OP	4/22/2020	1.92	78.9%	38.3%
VSP0069	composite	NA	NP-OP	04/24/2020	10.79	98.5%	98.3%
VSP0187	composite	NA	ETA	05/29/2020	NA	NA	NA
VSP0188	composite	NA	NP-OP	05/29/2020	29.90	99.8%	99.8%
VSP0021-1a	single experiment	2.20e+03	NP	4/22/2020	0.52	64.8%	61.9%
VSP0021-1b	single experiment	2.20e+03	NP	4/22/2020	0.57	63.0%	62.1%
VSP0022-1a	single experiment	2.68e+05	OP	4/22/2020	1.75	78.3%	37.7%
VSP0022-2	single experiment	1.34e+06	OP	4/22/2020	0.24	6.1%	0.0%
VSP0069-1	single experiment	9.75e+01	NP-OP	04/24/2020	6.54	92.2%	88.2%
VSP0069-2	single experiment	9.75e+01	NP-OP	04/24/2020	9.29	90.5%	90.0%
VSP0187-1	single experiment	6.02e+01	ETA	05/29/2020	NA	NA	NA
VSP0187-2	single experiment	NA	ETA	05/29/2020	NA	NA	NA
VSP0188-1	single experiment	2.04e+03	NP-OP	05/29/2020	9.60	93.7%	93.5%
VSP0188-2	single experiment	1.02e+04	NP-OP	05/29/2020	22.61	99.1%	99.1%
VSP0189-1	single experiment	8.51e+04	Saliva	05/29/2020	29.82	99.8%	99.8%

Variants shared across samples
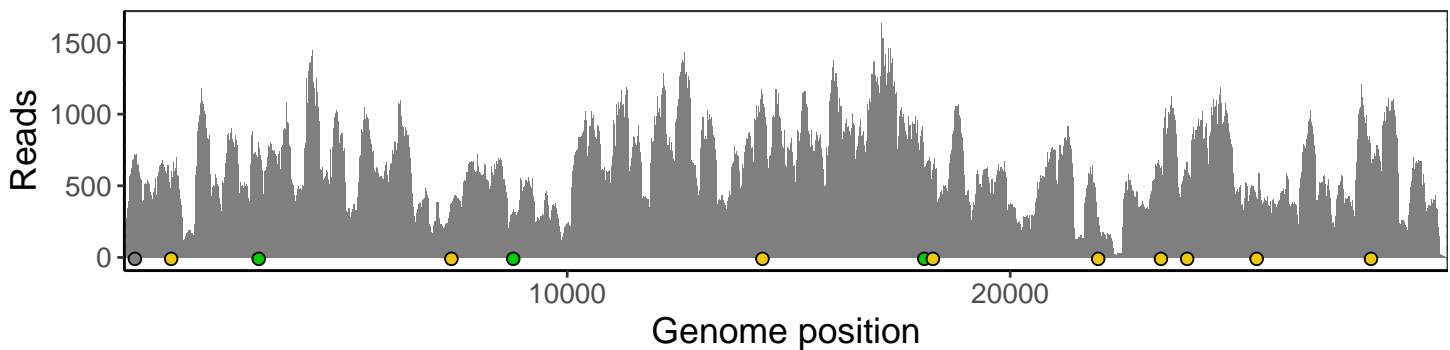
The heat map below shows how variants are shared across subject samples. The quality scores are PHRED scaled values [Q = -10log10(error rate)] where a score of 30 represents a probabilty of 99.9% that a variant is called correctly and a score of 50 represents a probabilty of 99.999% Gray tiles denote that 10 or more reads covered the variant position and the reference base was observed. Tiles are ommited if there are less than 10 reads covering a variant position.
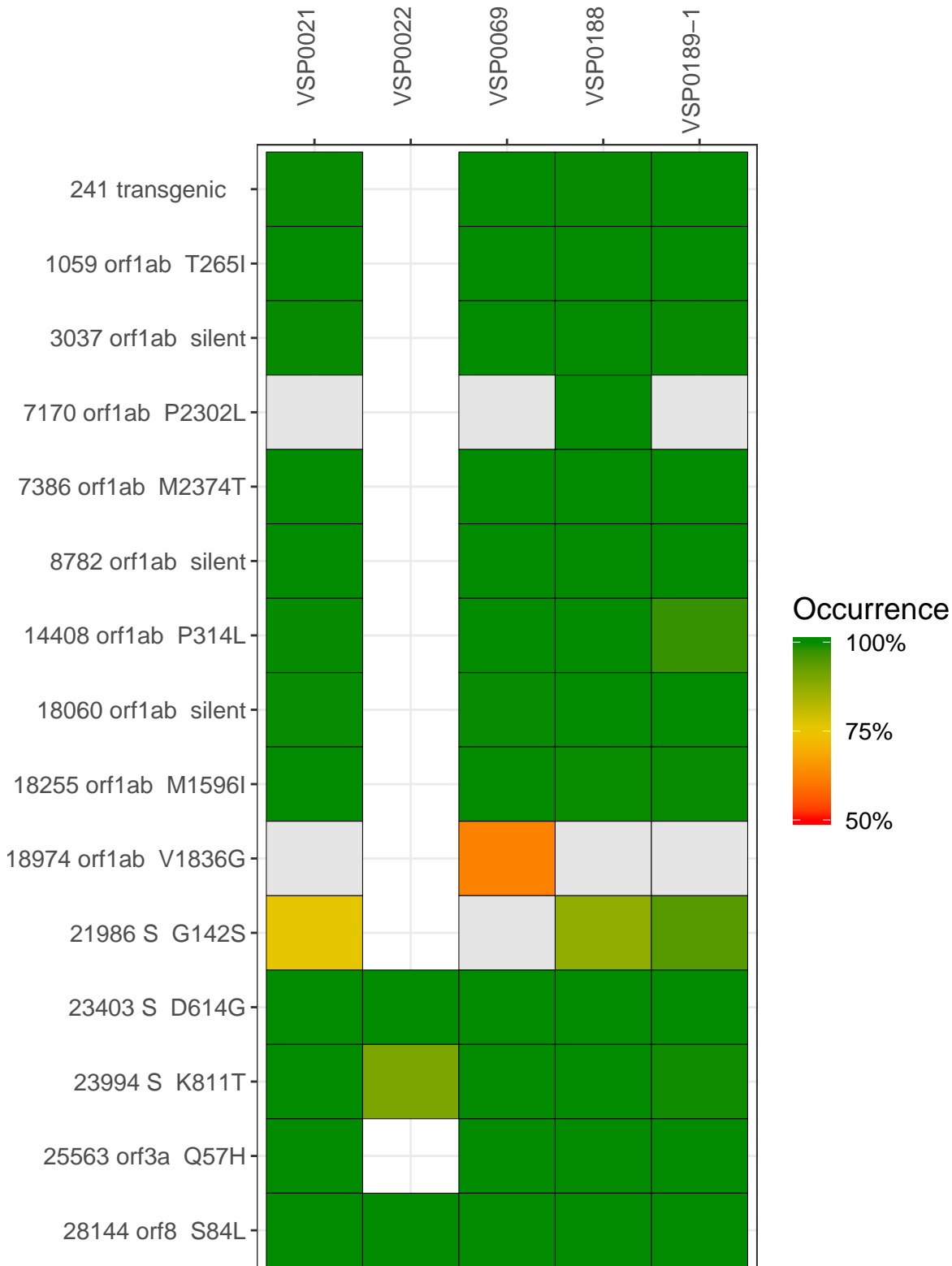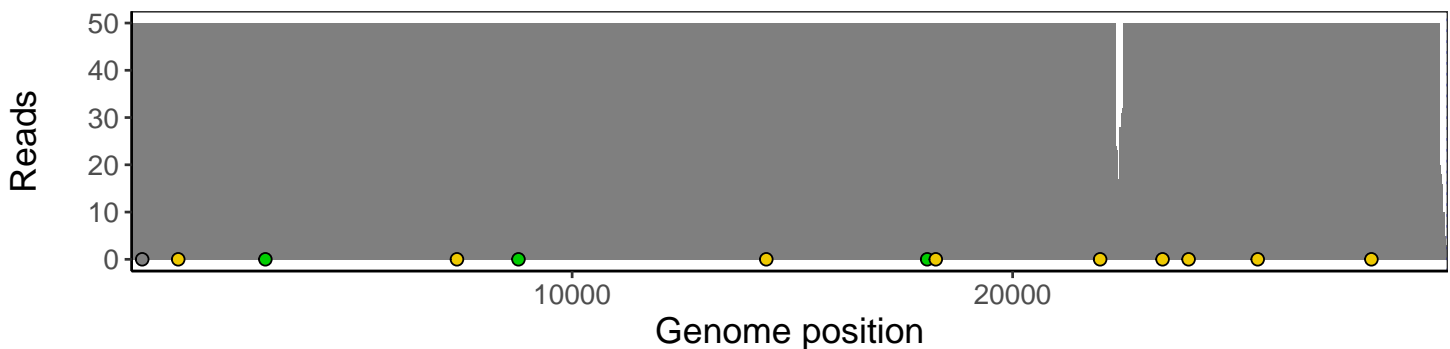
Analyses of individual experiments and composite results.

VSP0021 | 4/22/2020 | NP | 228n | composite result

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
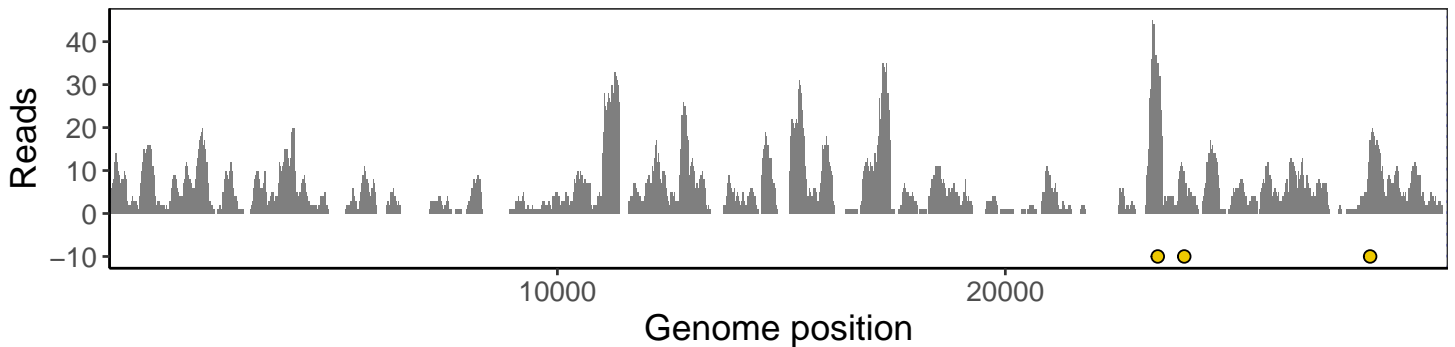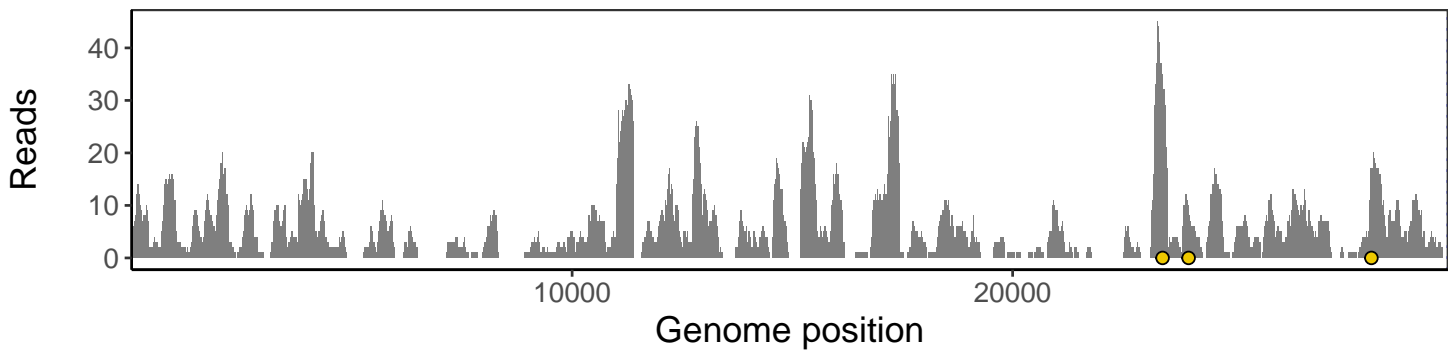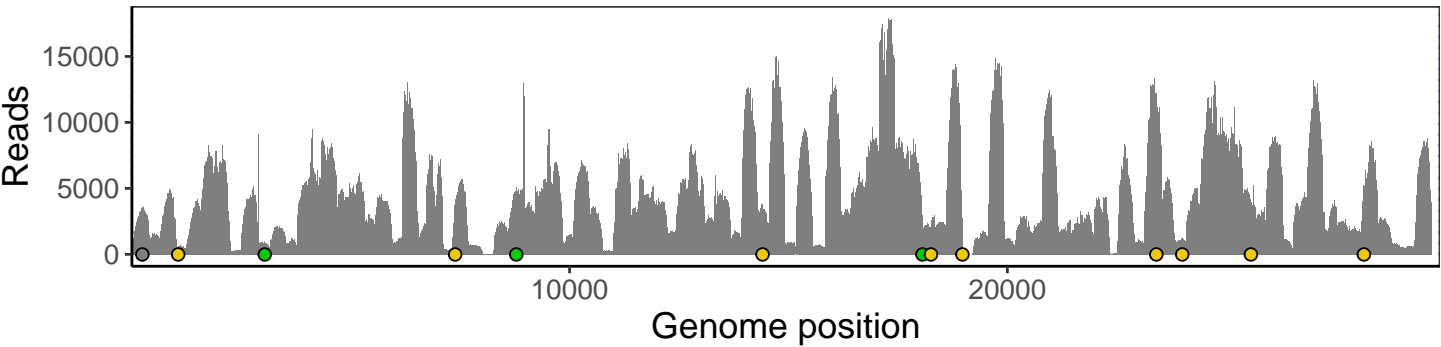

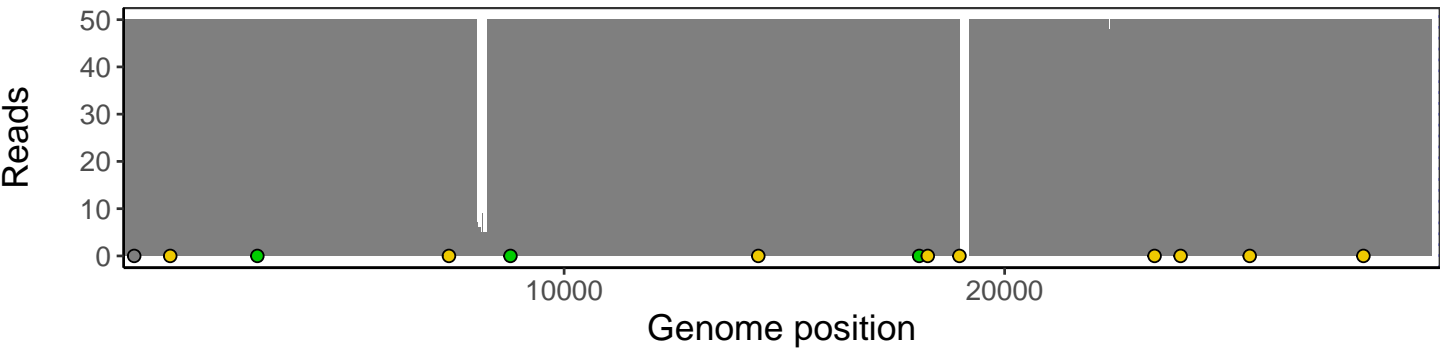Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

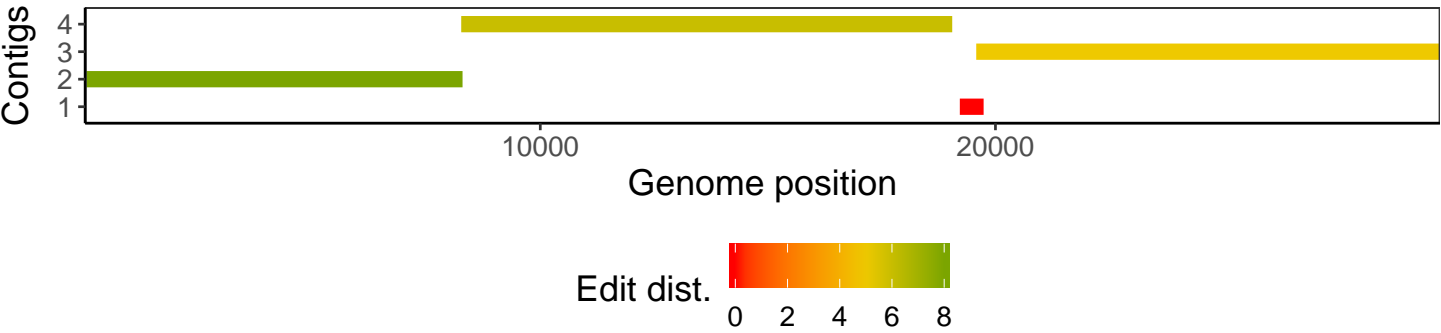**VSP0022 | 4/22/2020 | OP | 228o | composite result**

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
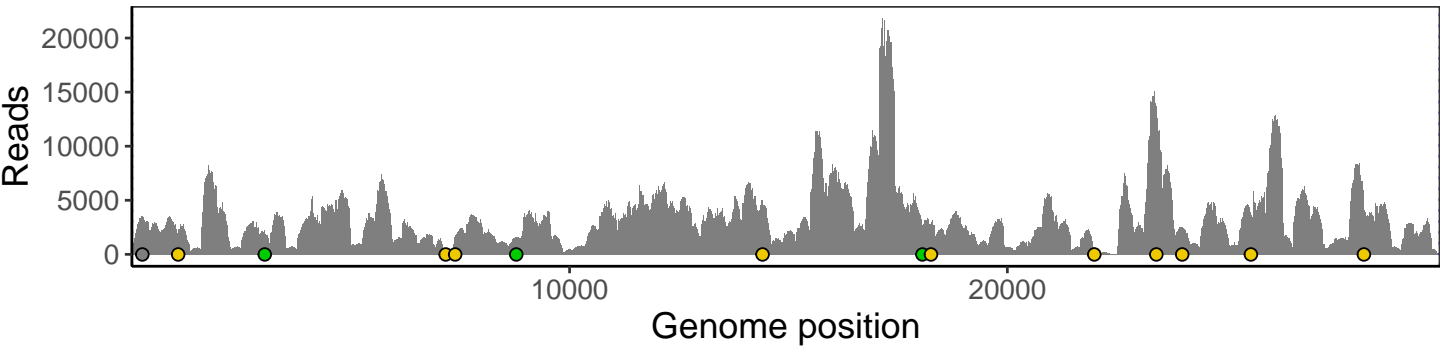
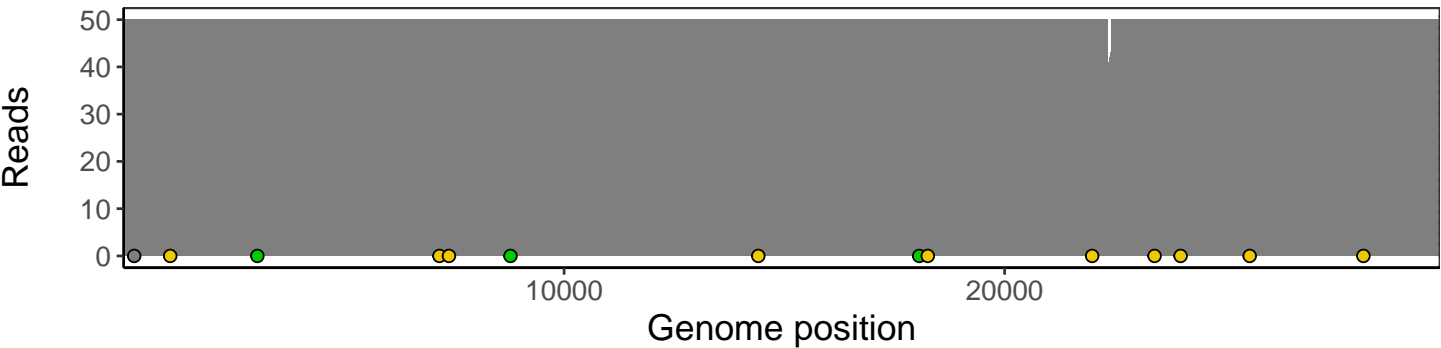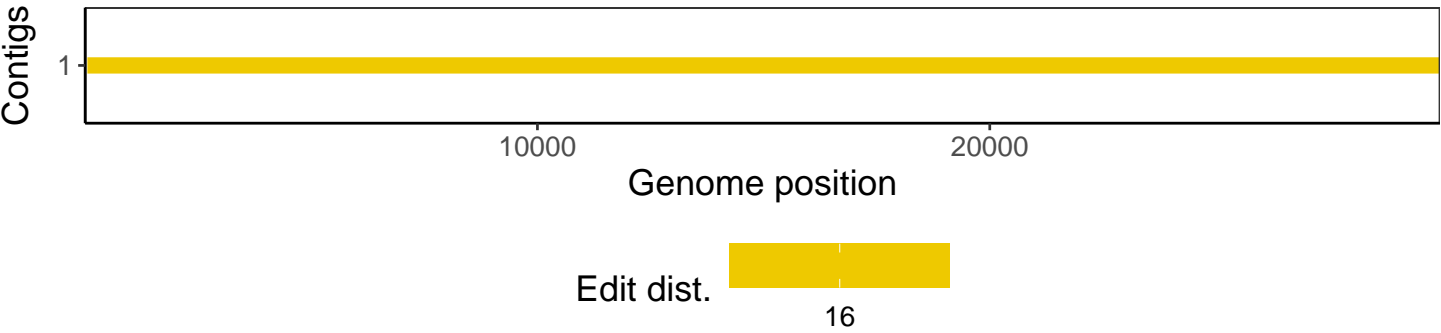**VSP0069 | 04/24/2020 | NP-OP | 228no-t | composite result**

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
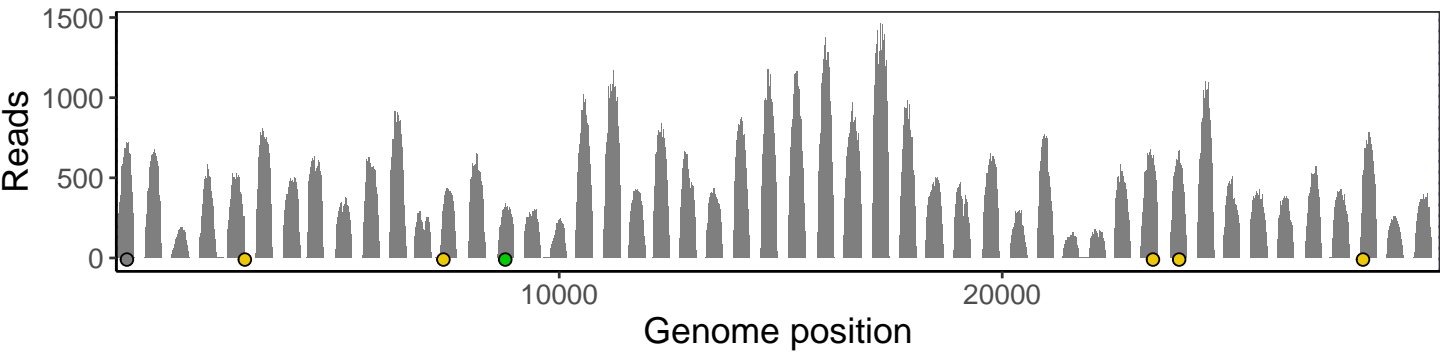

Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

No pileup data available.

No contig data available.

VSP0188 | 05/29/2020 | NP-OP | 228no-q | composite result

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
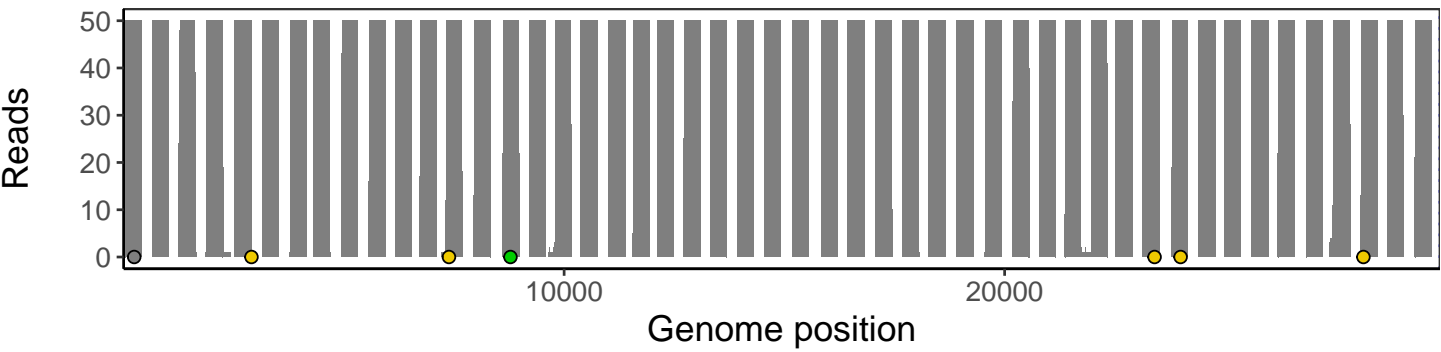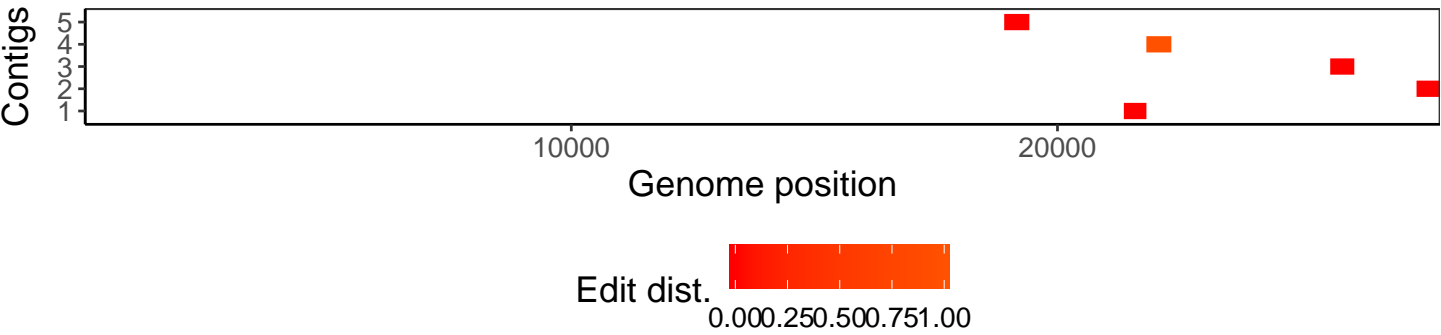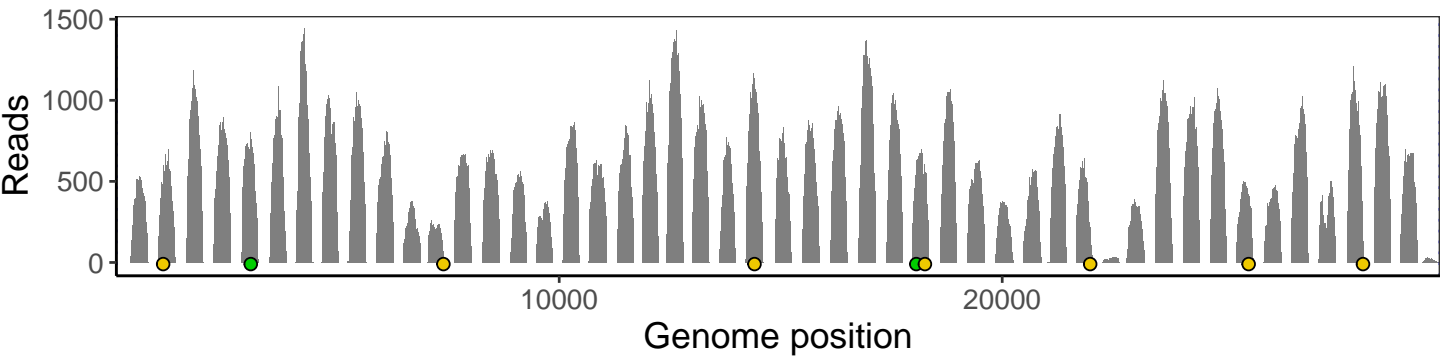

The longest five assembled contigs are shown below colored by their edit distance to the reference genome.

VSP0021-1a | 4/22/2020 | NP | 228n | 2200 genomes | single experiment

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.

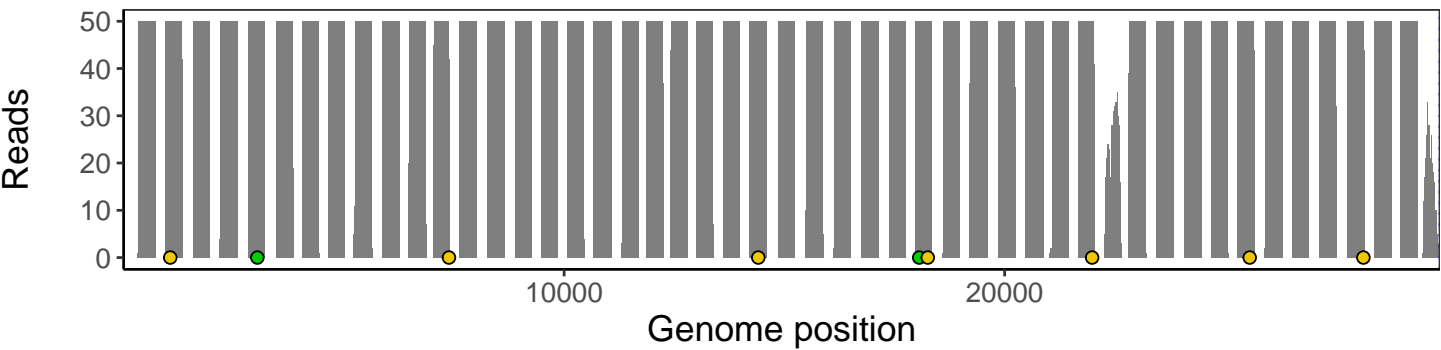Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

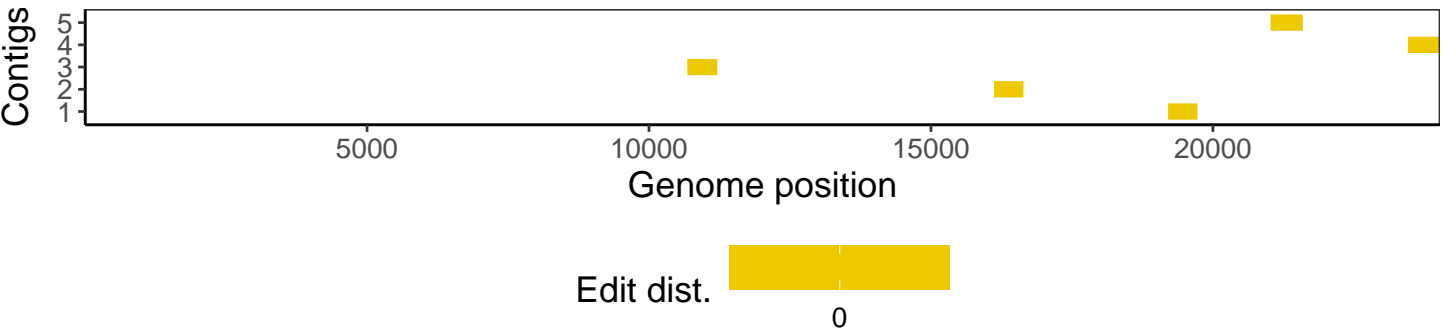**VSP0021-1b | 4/22/2020 | NP | 228n | 2200 genomes | single experiment**

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
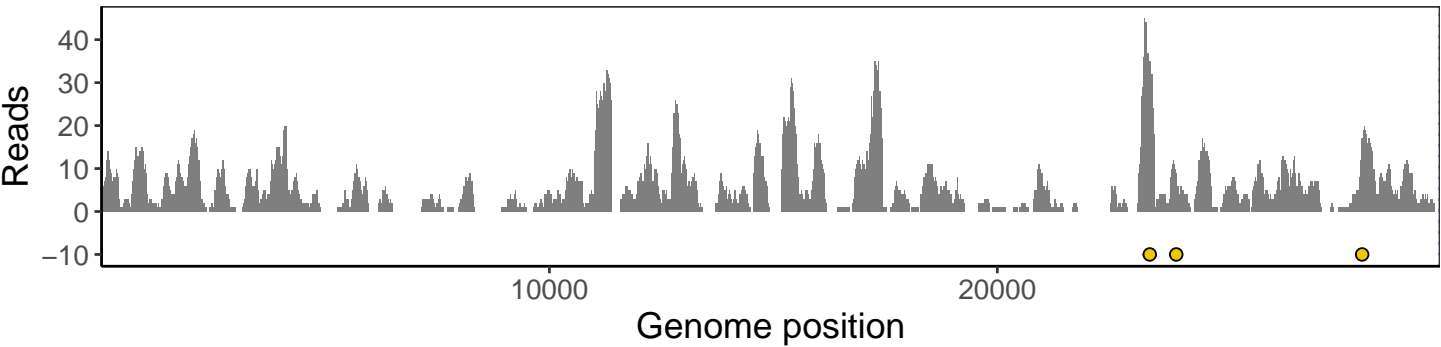

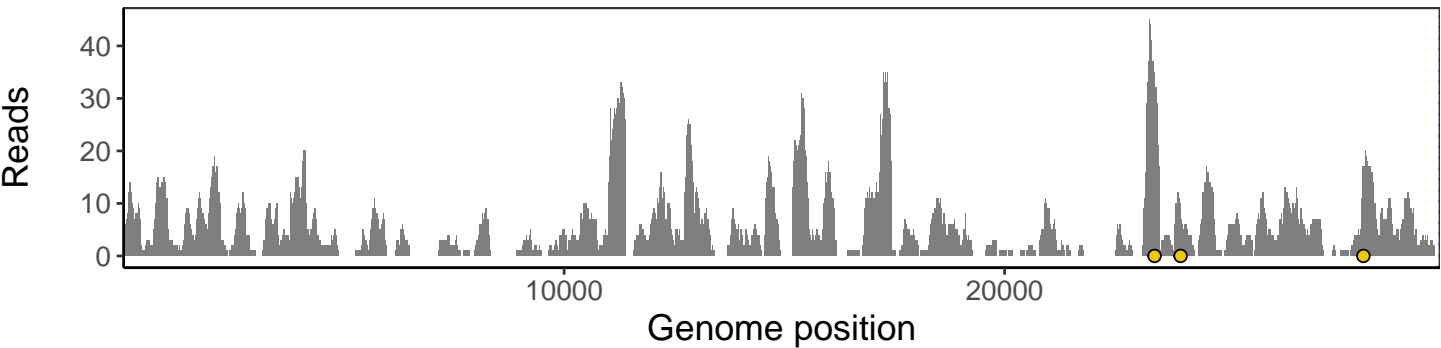Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

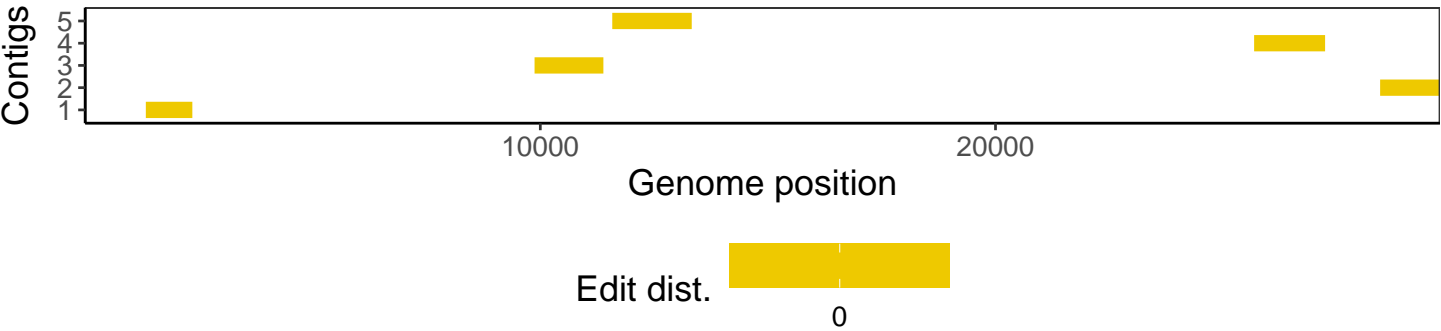**VSP0022-1a | 4/22/2020 | OP | 228o | 268000 genomes | single experiment**

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
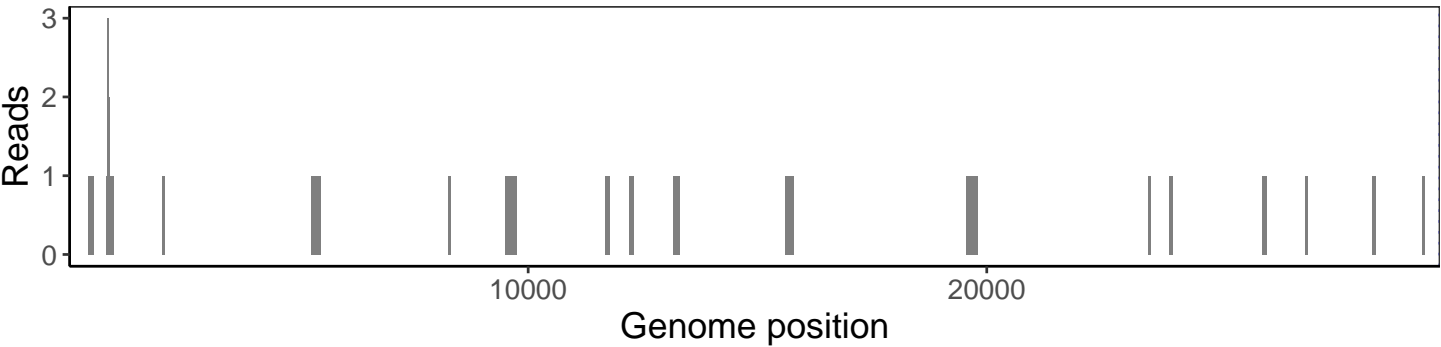

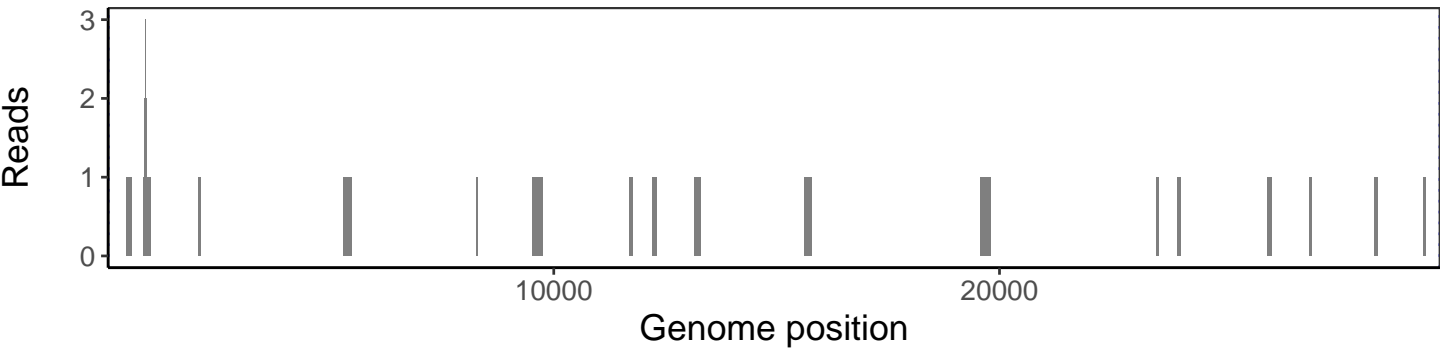Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

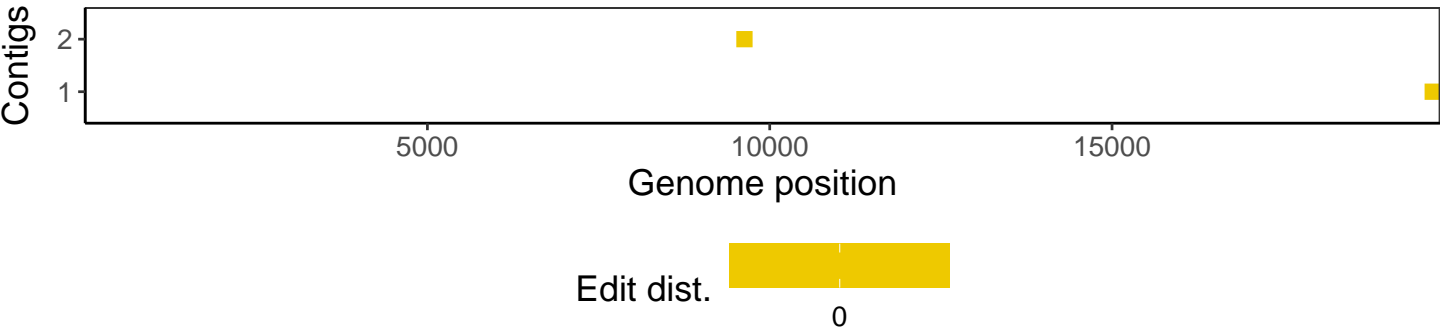**VSP0022-2 | 4/22/2020 | OP | 228o | 1340000 genomes | single experiment**

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
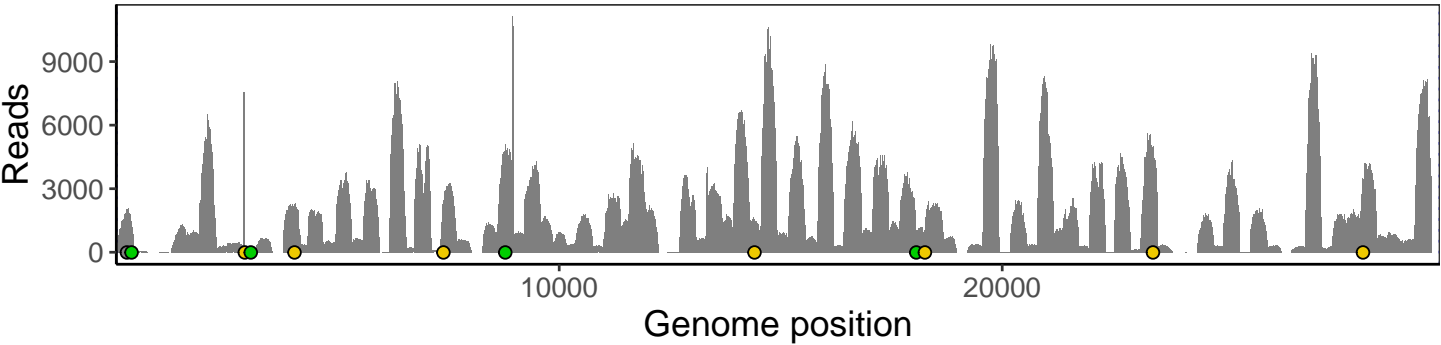

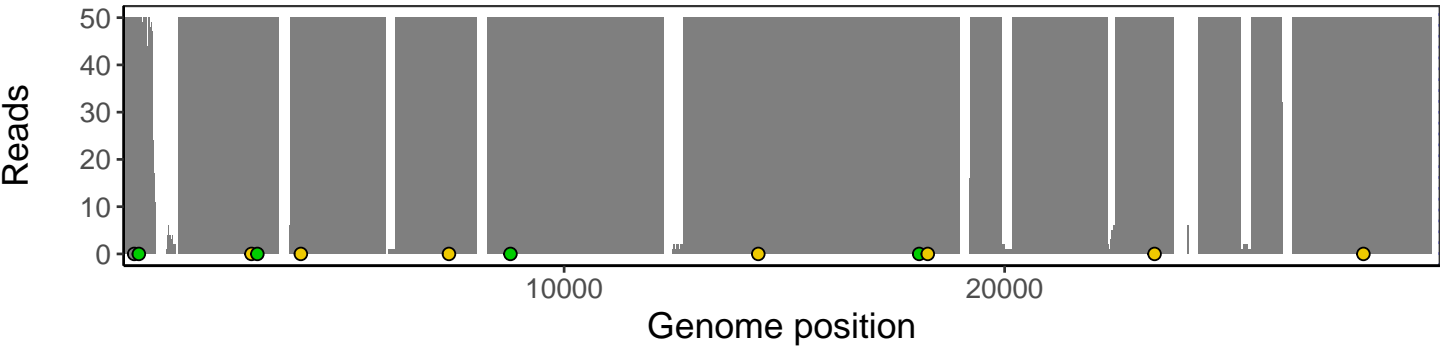Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

VSP0069-1 | 04/24/2020 | NP-OP | 228no-t | 97.5 genomes | single experiment

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.
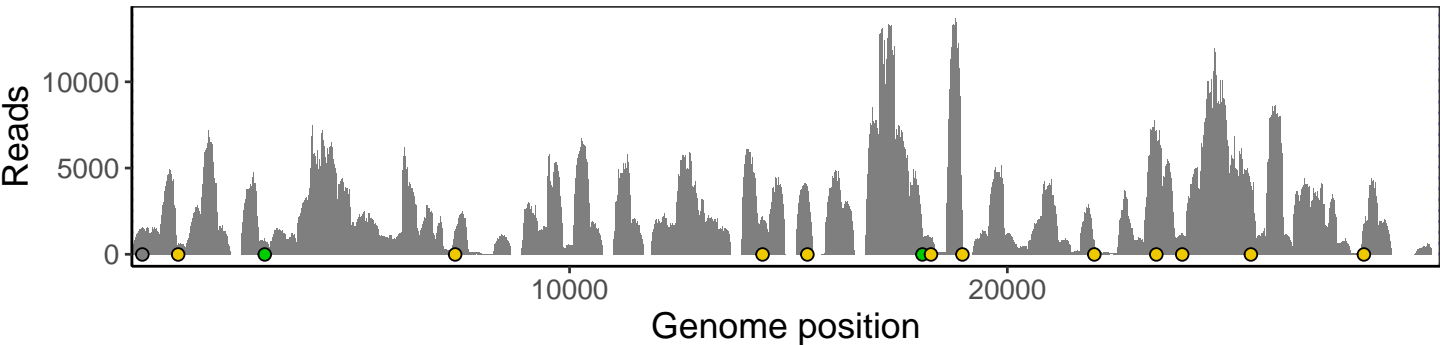

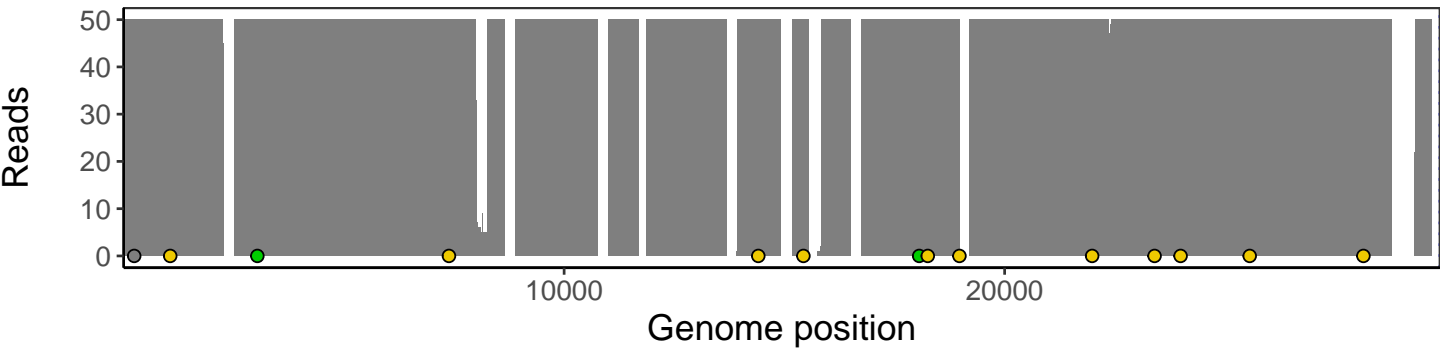Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

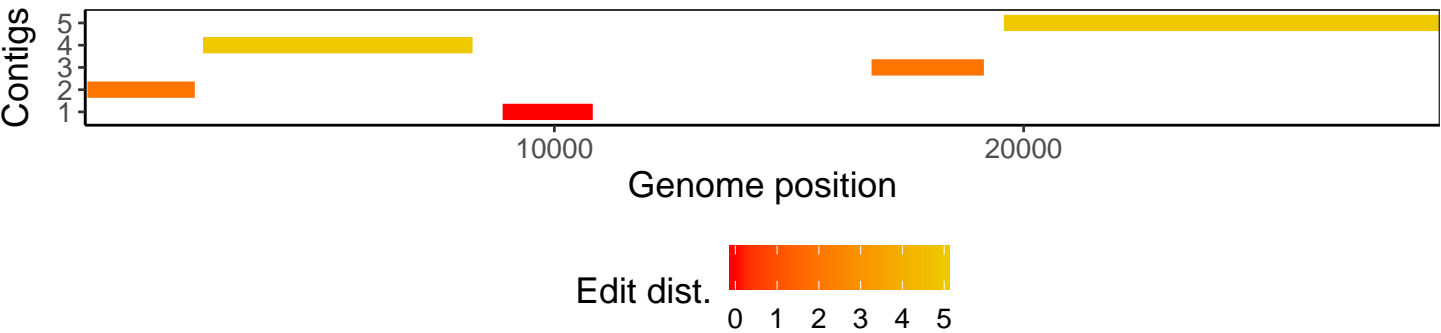**VSP0069-2 | 04/24/2020 | NP-OP | 228no-t | 97.5 genomes | single experiment**

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.

VSP0187-1 | 05/29/2020 | ETA | 228e-q | 60.2 genomes | single experiment
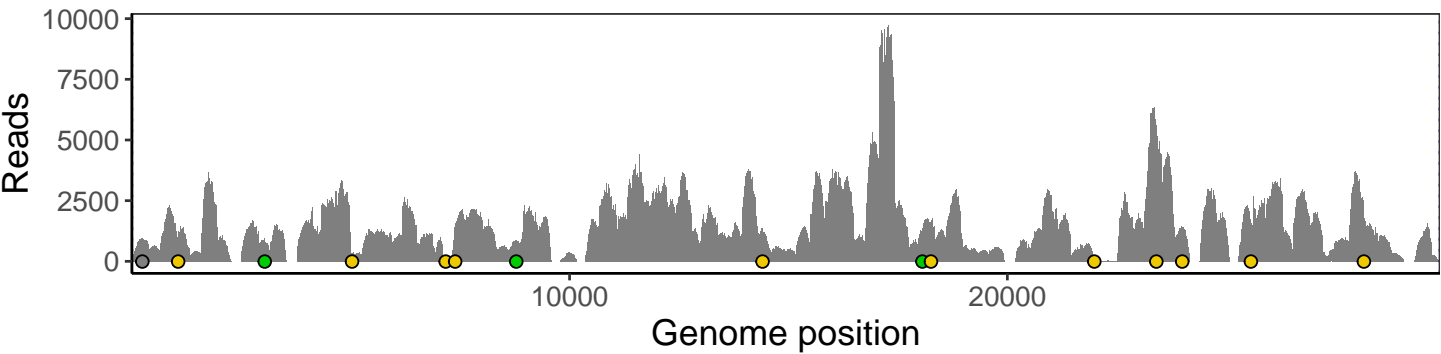
No pileup data available.

No contig data available.

No pileup data available.

15

No contig data available.

VSP0188-1 | 05/29/2020 | NP-OP | 228no-q | 2040 genomes | single experiment
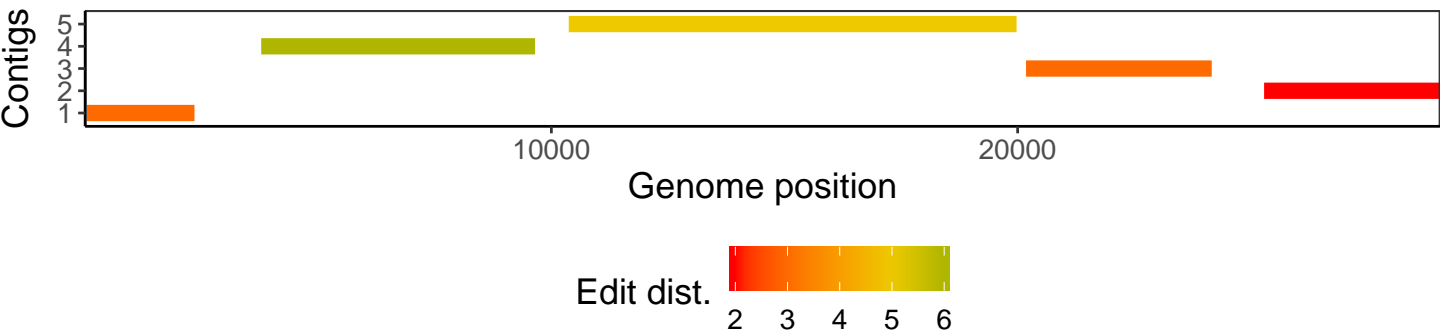
The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.
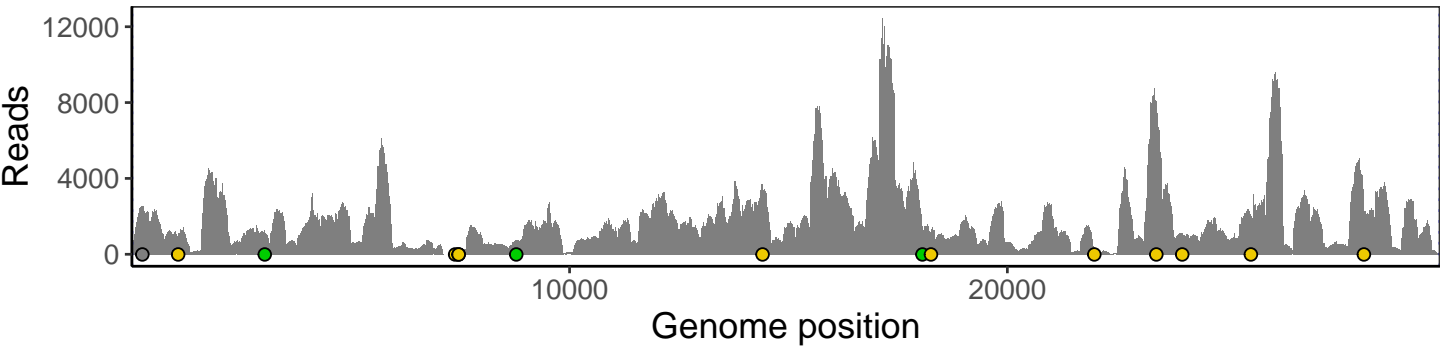

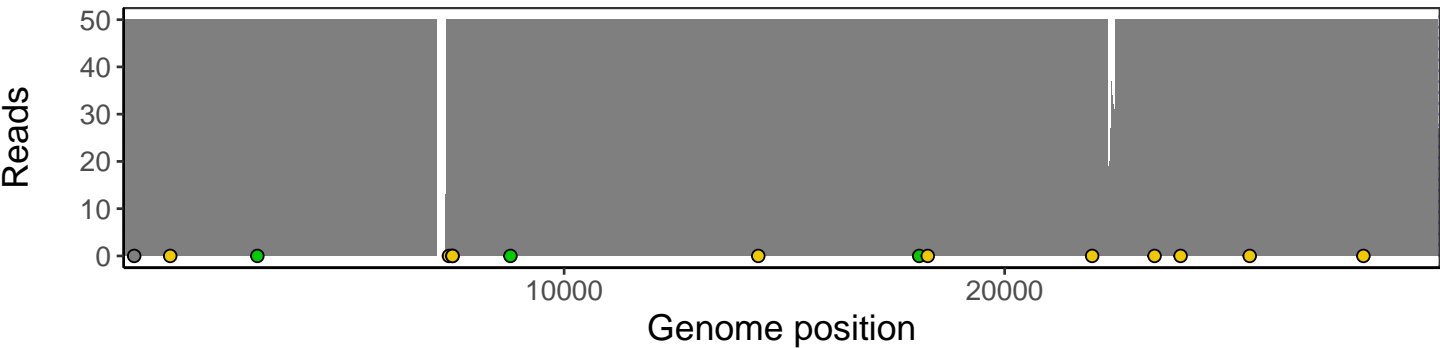Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

VSP0188-2 | 05/29/2020 | NP-OP | 228no-q | 10200 genomes | single experiment
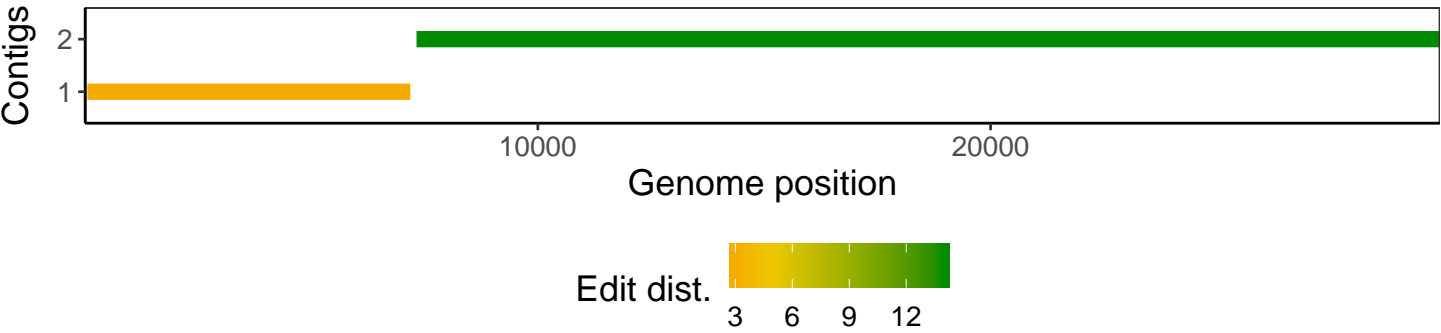
The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.
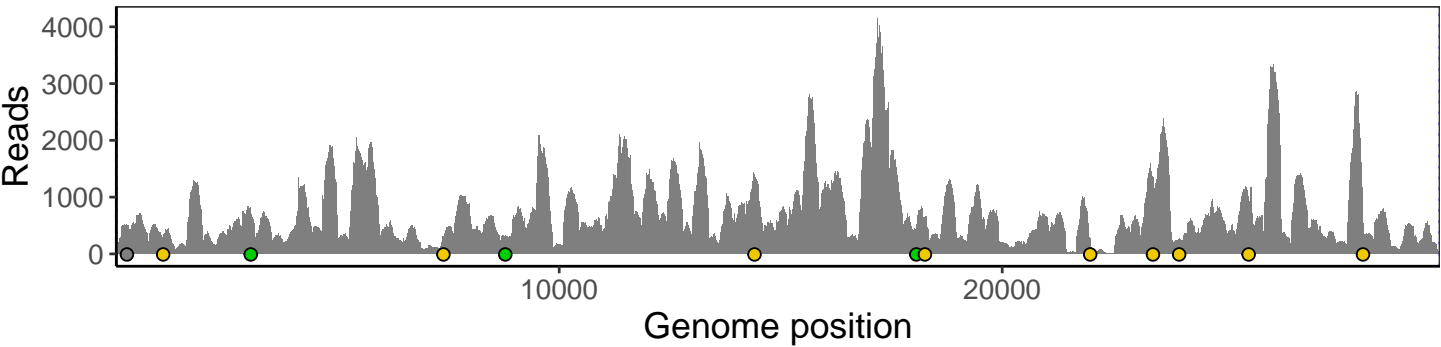

Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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

VSP0189-1 | 05/29/2020 | Saliva | 228s-q | 85100 genomes | single experiment

The plot below shows the number of reads covering each nucleotide position in the reference genome (USA-WA1-2020). 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.

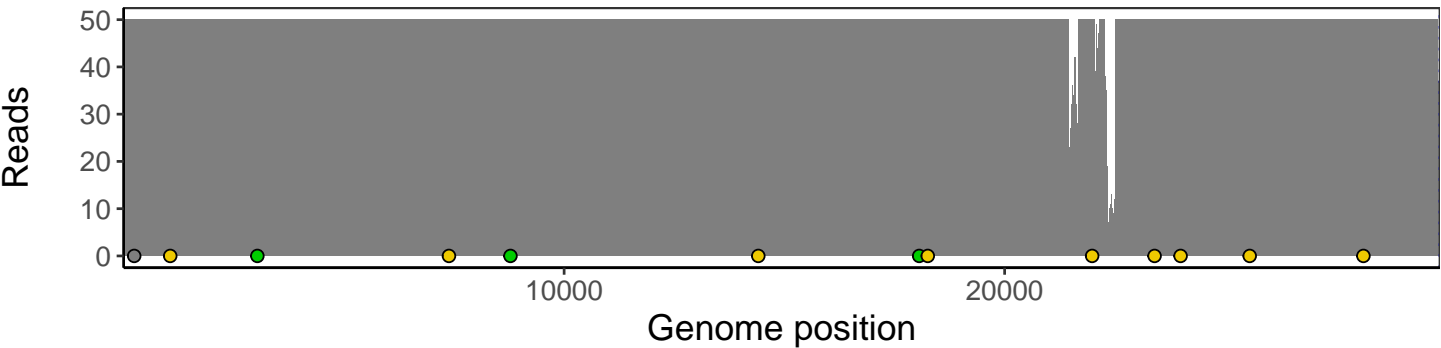Excerpt from plot above focusing on reads coverage from 0 to 50 NT.

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