

SARS-CoV-2 Variant Timemaps

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SARS-CoV-2 variants 2020 timemap

Genbank MN908947 vs 209,633 GISAID genomes

Top regions

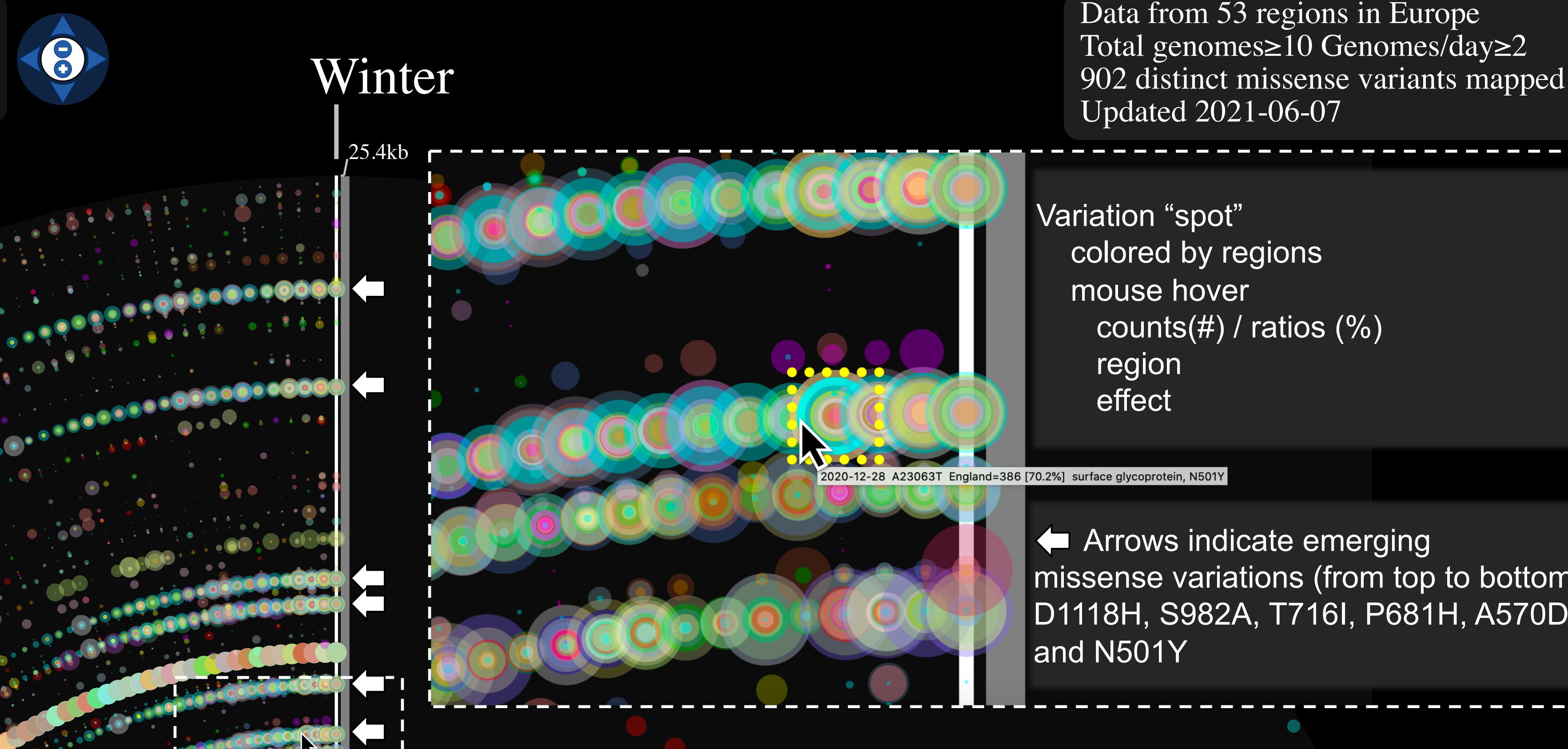
- England
- Denmark
- Wales
- Switzerland
- Scotland
- Netherlands
- Spain
- France
- Germany
- Luxembourg

- Iceland
- Italy
- Belgium
- Sweden
- Norway
- Finland
- Portugal
- Austria
- Russia
- Ireland

1 10 100% daily sample fraction

2021 #

S gene, Europe, missense



Fall

SARS-CoV-2, S gene, Europe, missense



- **Nucleotide variation in >1.6M GISAID genomes accumulating since ground zero strain**
- **Interactive Scalable Vector Graphics (SVG) drag, pan, zoom, tilt, highlight, hover / tooltip**
- **Over 120 SVG timemaps, web-hosted world / regional views genes / genome / variation types variants of concerns, WHO convention, custom**
- **Panorama of longitudinal strain evolution in human hosts**

SARS-CoV-2 variants 2021 timemap

Genbank MN908947 vs 105,279 GISAID genomes

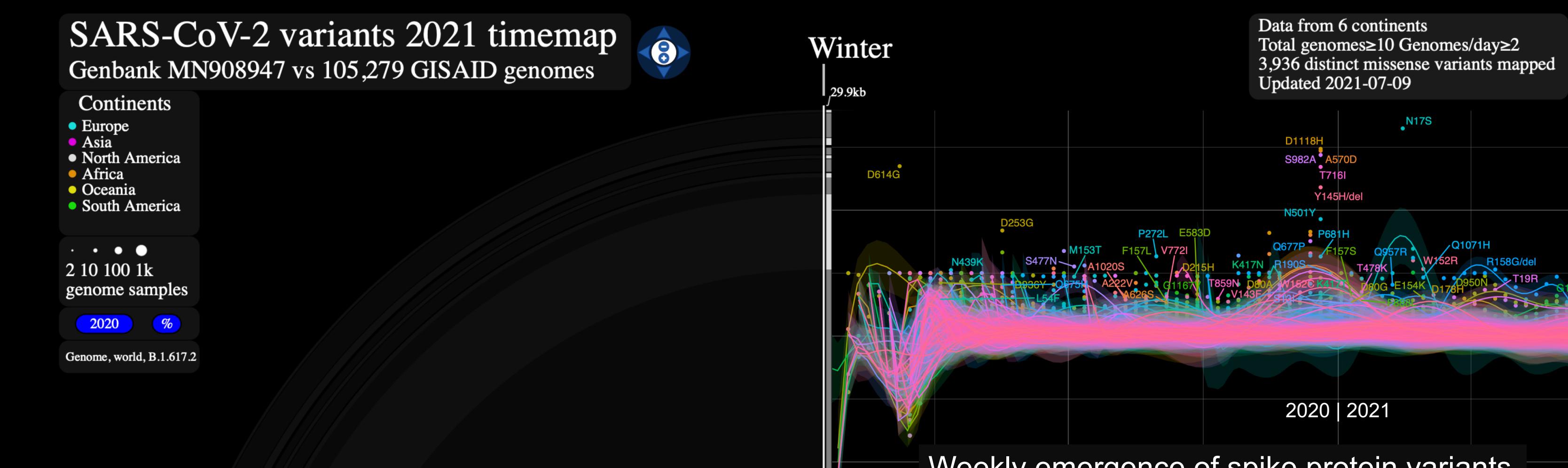
Continents

- Europe
- Asia
- North America
- Africa
- Oceania
- South America

2 10 100 1k genome samples

2020 %

Genome, world, B.1.617.2



Spring

Fall

GENOME DOWNLOAD
GISAID

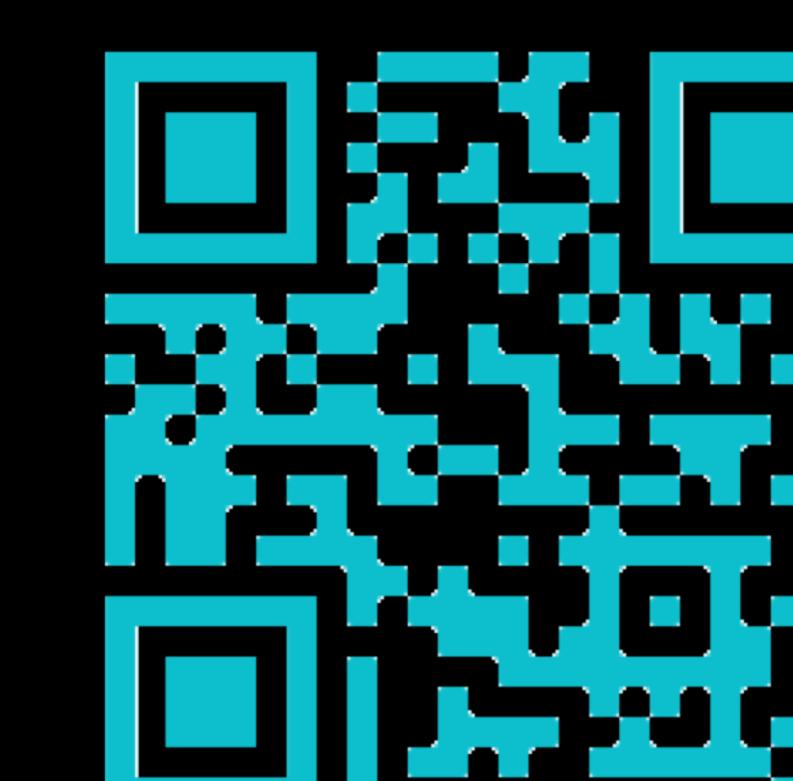
VARIANT PROFILING
ntEdit

PLOTTING
SVG

WEB HOSTING
bcgsc.github.io

Analysis process

B.1.617.2 [20 A/S]
Delta variant
Genome, world,
missense



<https://bcgsc.github.io/SARS2>

Funding

NIH

Genome BC / Canada

John Jambor Education Fund

<http://warrenlr.github.io>



<http://birol-lab.ca>