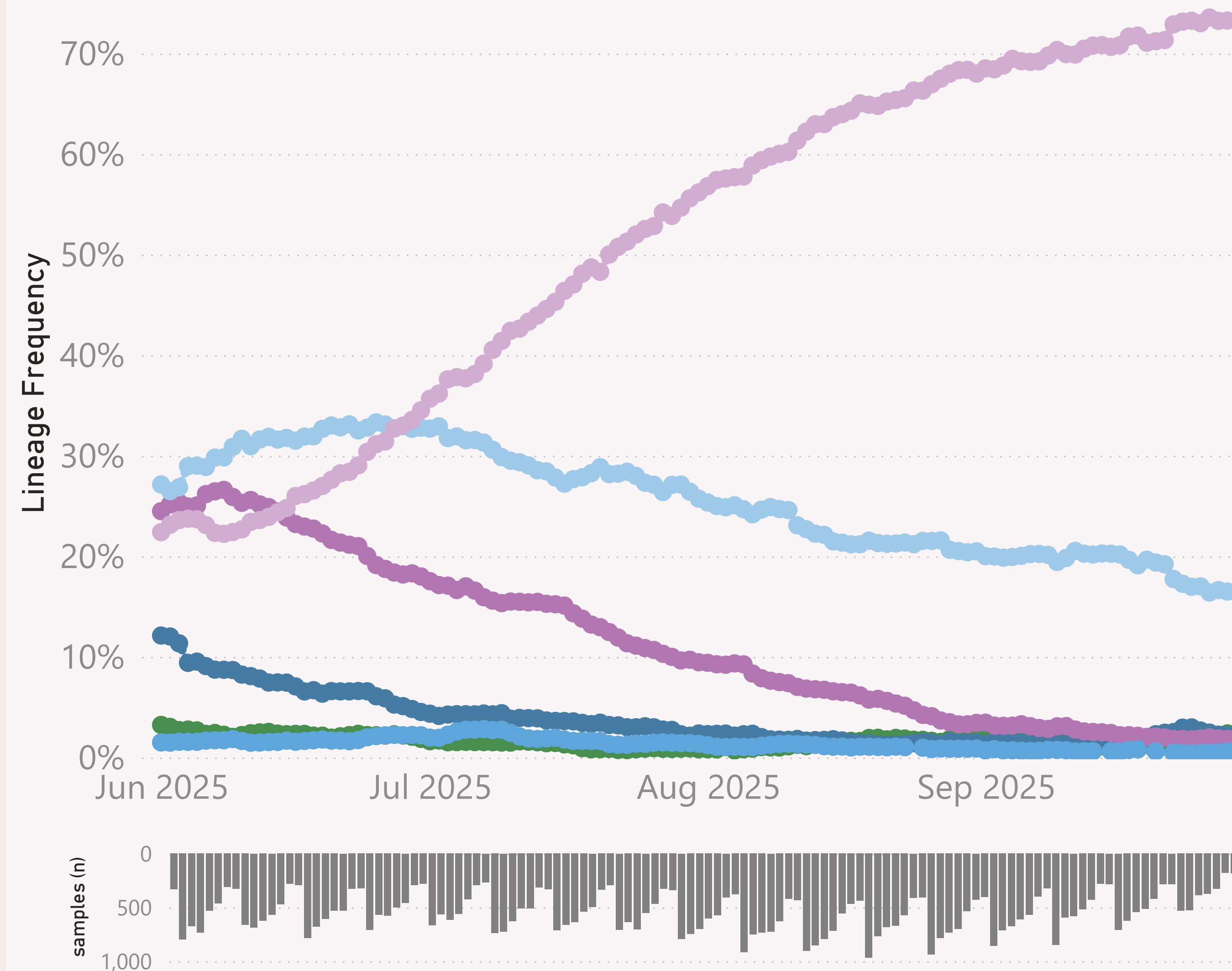


n=65,754 sequenced genomes, from 1 June 2025 up to 28 September 2025

Global

● JN.1.* +DeFLuQE ● JN.1.* +FLiRT ● LP.8.1.* ● NB.1.8.1.* Nimbus ● XFC.* ● XFG.*



This page shows the frequency of the top 6 "L2" lineages, across recent months.

The detailed Lineage classifications are provided by Nextclade. I roll those up into "L2" groups, which roughly follow the WHO Variant definitions. For example, my "BA.2.86.*" group includes BA.2.86 and all it's descendants, e.g. the JN.* lineages.

The detailed Lineage classifications are quite numerous and dynamic, so the "Lineage L2" groups give a simpler and more stable basis for analysis and comparison.

The frequency shown at each point is based on the 7-day rolling average across all lineages.

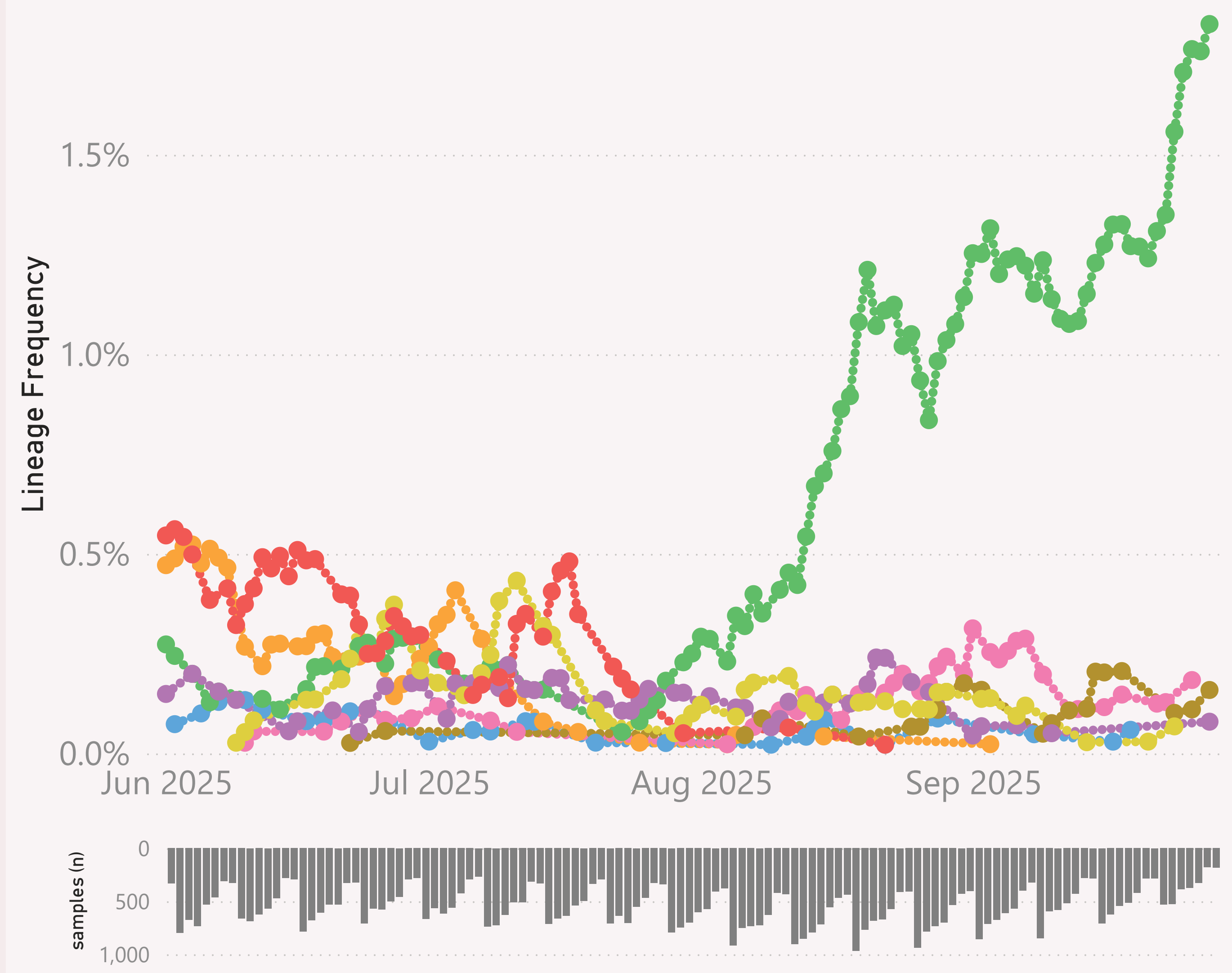
The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

The frequency results calculated for the most recent dates might not be representative, due to those lower sample sizes.

n=65,754 sequenced genomes, from 1 June 2025 up to 28 September 2025

Global

● MC.10.2.1 ● MC.21.1 ● PE.1.4 ● PE.1.4.2 ● PE.1.7 ● PE.2 ● PE.3 ● PG.3.1



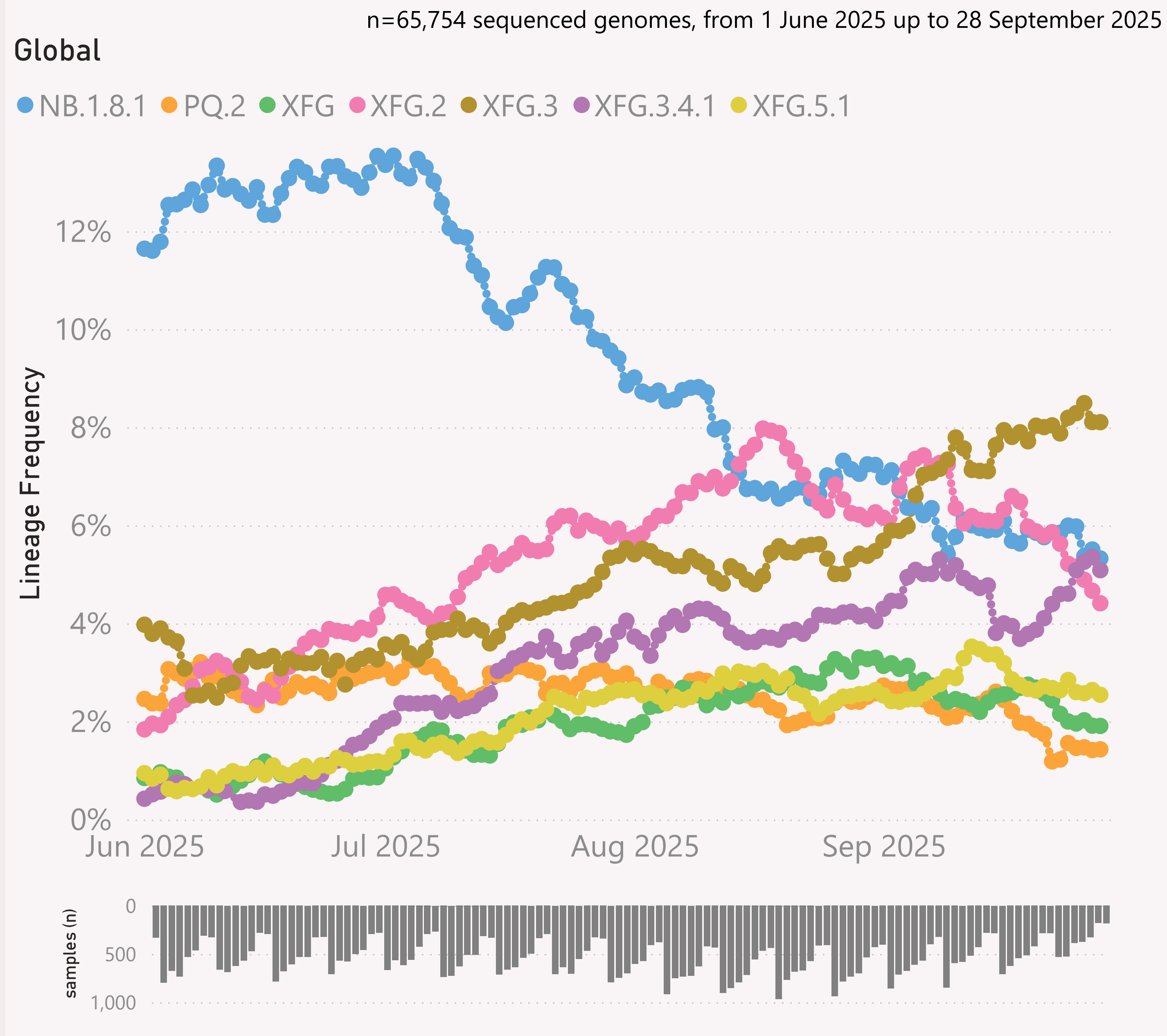
This page shows the frequency of the top 7 lineages, across recent months. The lineages are filtered for a "Lineage L2" group of interest.

The Lineage classifications are provided by Nextclade. The colour assignments are random.

The frequency shown at each point is based on the 7-day rolling average across all lineages.

The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

The frequency results calculated for the most recent dates might not be representative, due to those lower sample sizes.



This page shows the frequency of the top 7 lineages, across recent months.

The Lineage classifications are provided by Nextclade. The colour assignments are random.

The frequency shown at each point is based on the 7-day rolling average across all lineages.

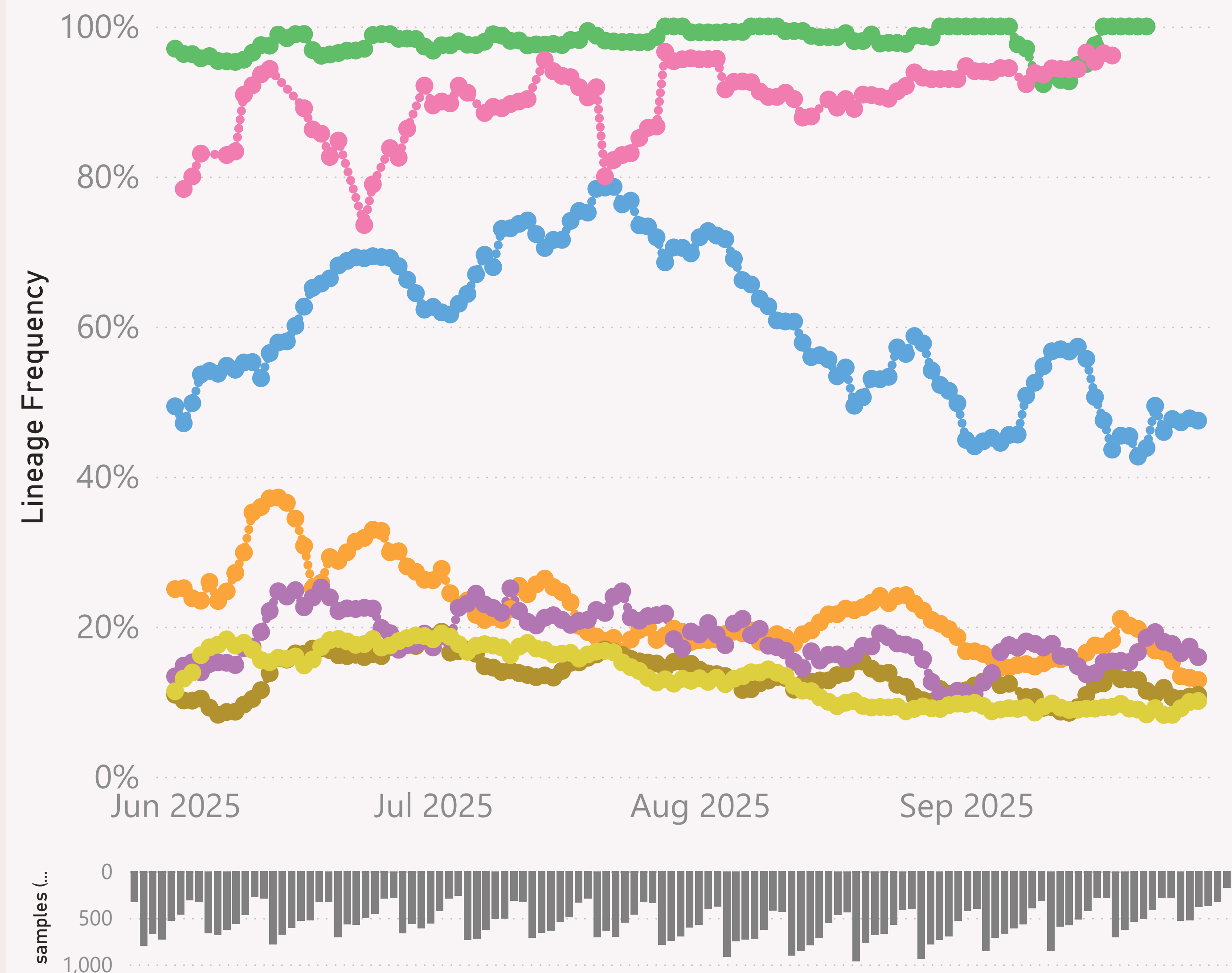
The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

The frequency results calculated for the most recent dates might not be representative, due to those lower sample sizes.

n=65,754 sequenced genomes, from 1 June 2025 up to 28 September 2025

NB.1.8.1.* Nimbus

● Australia ● Canada ● China ● South Korea ● Spain ● United Kingd... ● United St...



This page shows the frequency of a selected "Lineage L2" group of interest, for the 7 countries reporting the most samples over recent months.

The detailed Lineage classifications are provided by Nextclade. I roll those up into "L2" groups, which roughly follow the WHO Variant definitions. For example, my "JN.1.* +FLiRT" group includes the descendants of JN.1.* with the mutations: F456L & R346T.

The detailed Lineage classifications are quite numerous and dynamic, so the "Lineage L2" groups give a simpler and more stable basis for analysis and comparison.

The frequency shown at each point is based on the 7-day rolling average across all lineages, for that country.

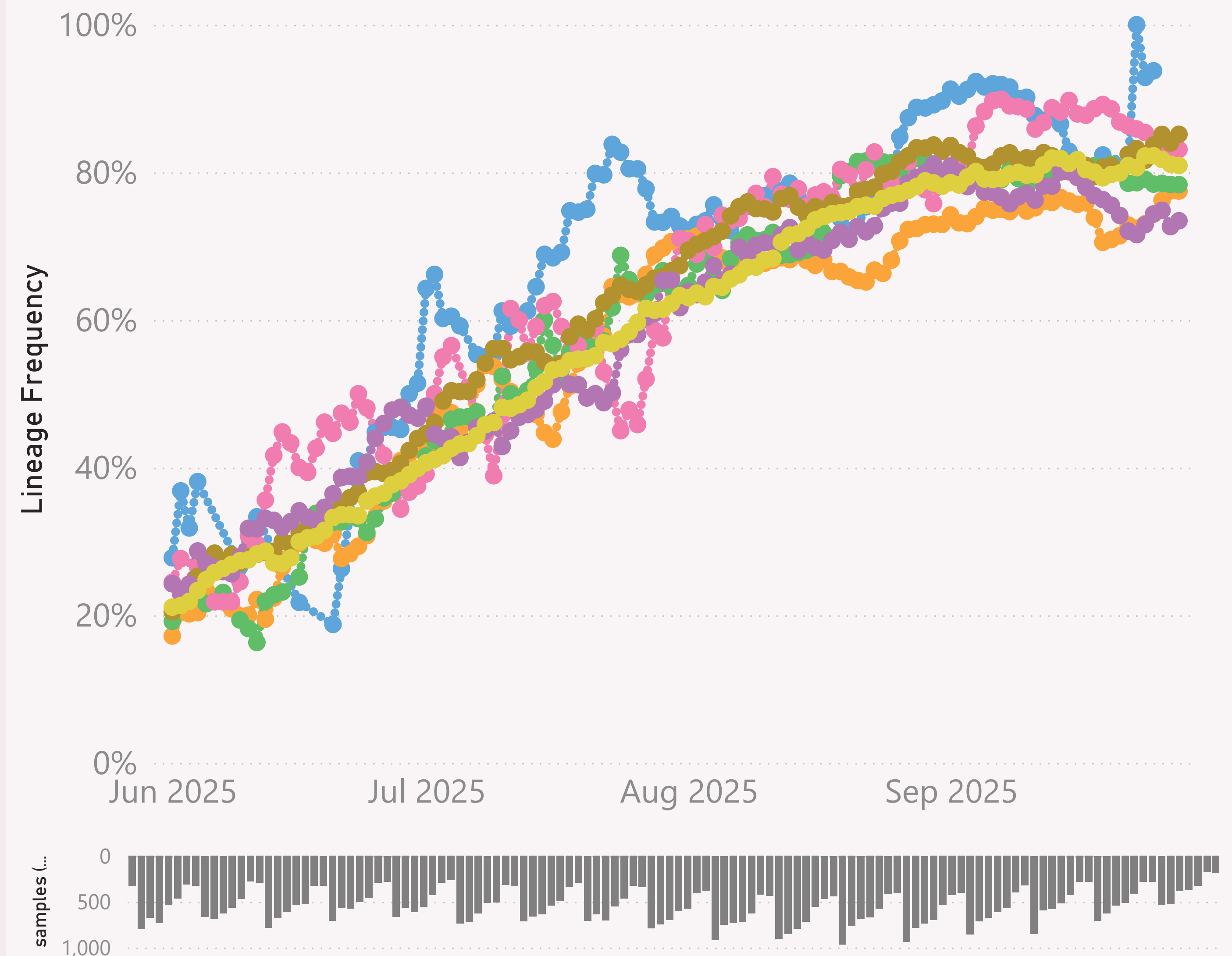
The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

The frequency results calculated for the most recent dates might not be representative, due to those lower sample sizes.

n=65,754 sequenced genomes, from 1 June 2025 up to 28 September 2025

XFG.*

● Brazil ● Canada ● France ● Netherlands ● Spain ● United Kingdom ● United States



This page shows the frequency of a selected "Lineage L2" group of interest, for the 7 countries reporting the most samples over recent months.

The detailed Lineage classifications are provided by Nextclade. I roll those up into "L2" groups, which roughly follow the WHO Variant definitions. For example, my "JN.1.* +FLiRT" group includes the descendants of JN.1.* with the mutations: F456L & R346T.

The detailed Lineage classifications are quite numerous and dynamic, so the "Lineage L2" groups give a simpler and more stable basis for analysis and comparison.

The frequency shown at each point is based on the 7-day rolling average across all lineages, for that country.

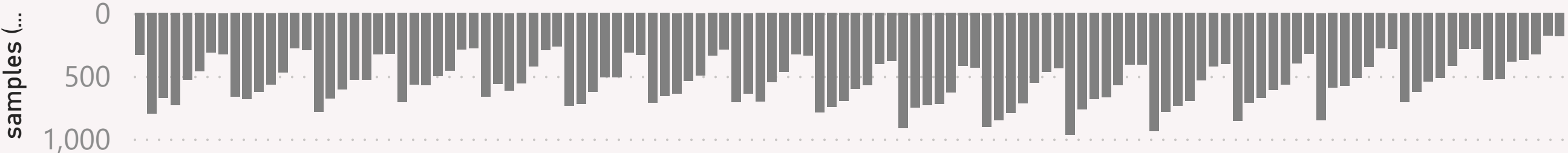
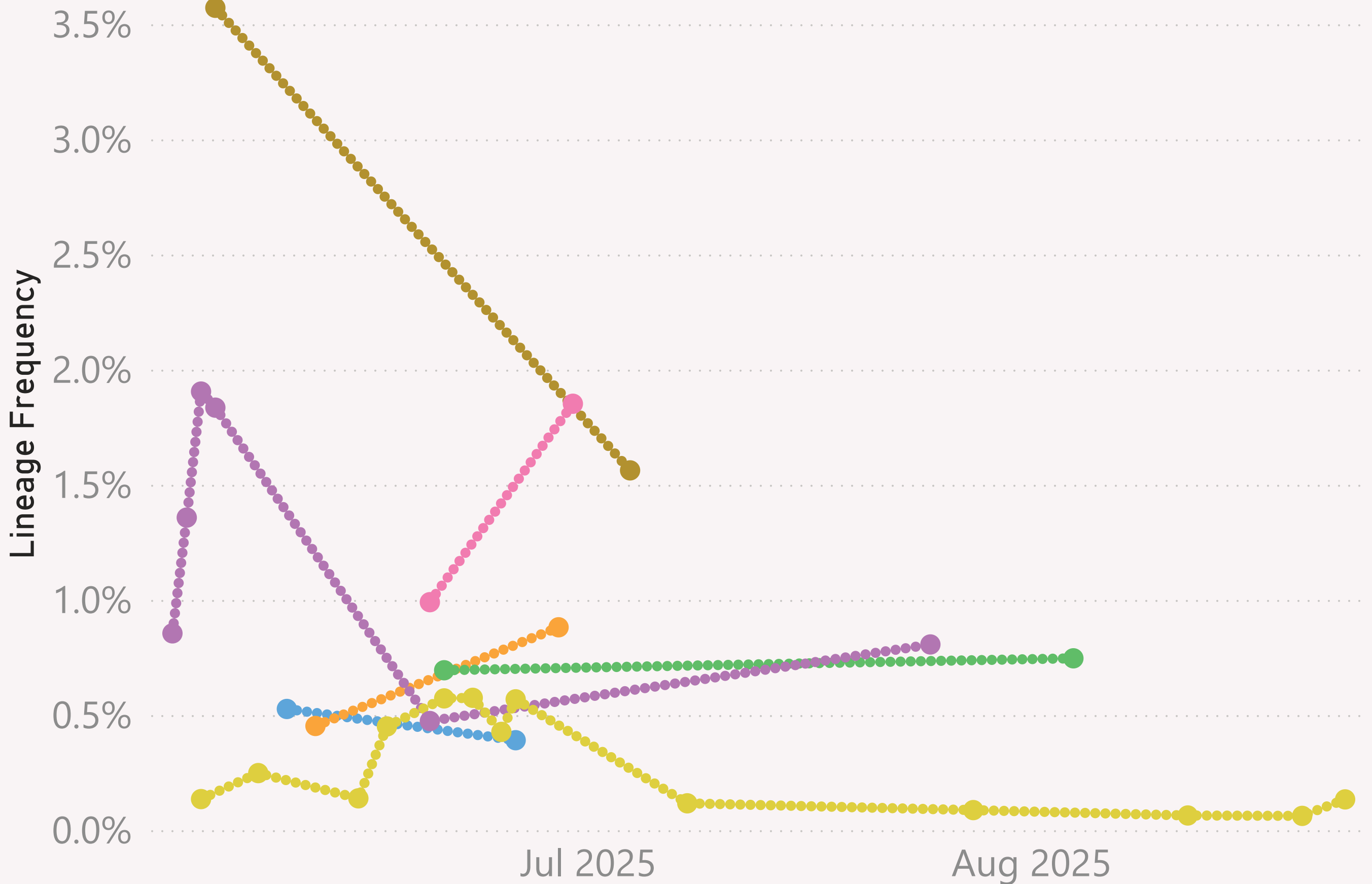
The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

The frequency results calculated for the most recent dates might not be representative, due to those lower sample sizes.

n=65,754 sequenced genomes, from 1 June 2025 up to 28 September 2025

XFP

AustraliaCanadaFranceIndiaIrelandSingaporeUnited States



Date

01/01/202531/12/2025

Host

Human

Continent, Country, Location

All

Lineage L2, Lineage (nextclade)

XFP.* (Lineage L2) + XFP (Lineage (nextclad...

Samples Sequenced (gisaid)

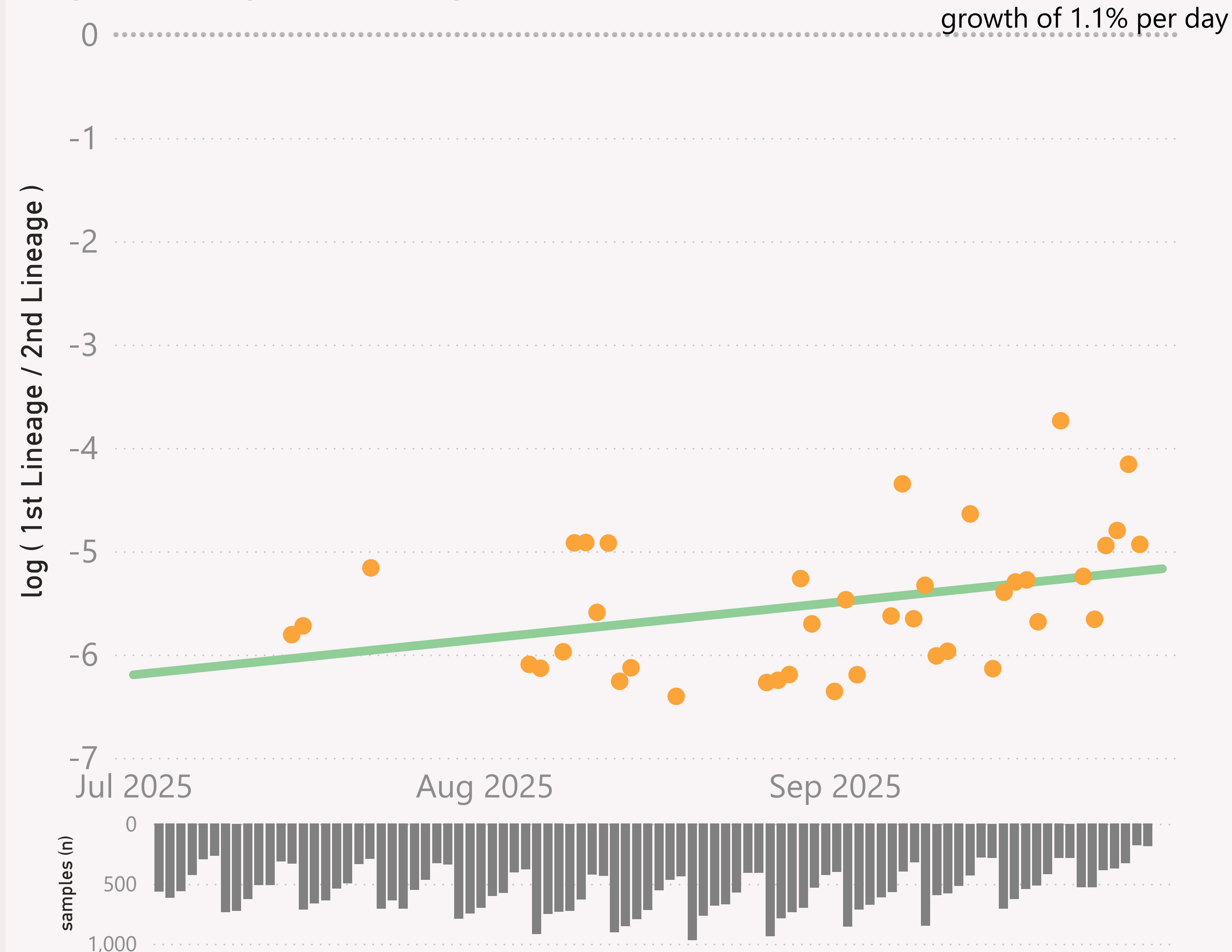
40

Country	Location	Addi...	Collection date	Lineage L2	Lineage (nextc
USA	Illinois		23/08/2025	XFP.*	XFP
USA	California		20/08/2025	XFP.*	XFP
USA	California		12/08/2025	XFP.*	XFP
France	Auvergne-Rho...		04/08/2025	XFP.*	XFP
USA	California		28/07/2025	XFP.*	XFP
Singapore			25/07/2025	XFP.*	XFP
Luxembourg			24/07/2025	XFP.*	XFP
Japan		Quar...	15/07/2025	XFP.*	XFP
USA	Texas		08/07/2025	XFP.*	XFP
Ireland	Dublin		04/07/2025	XFP.*	XFP
India	Maharashtra		30/06/2025	XFP.*	XFP
Canada	Ontario		29/06/2025	XFP.*	XFP
Germany	Rhineland-Pala...		27/06/2025	XFP.*	XFP
United Kingdom	Wales		27/06/2025	XFP.*	XFP
USA	Minnesota		26/06/2025	XFP.*	XFP
Australia	Victoria		26/06/2025	XFP.*	XFP
USA	Minnesota		25/06/2025	XFP.*	XFP
USA	California		23/06/2025	XFP.*	XFP
USA	Oregon		21/06/2025	XFP.*	XFP
France	Provence-Alpe...		21/06/2025	XFP.*	XFP
Singapore			20/06/2025	XFP.*	XFP
India	Chhattisgarh		20/06/2025	XFP.*	XFP

n=50,123 sequenced genomes, from 1 July 2025 up to 28 September 2025

Global - XGA vs XFG.*

● $\log (1st \text{ Lineage} / 2nd \text{ Lineage})$ ● trend



This page compares the relative frequency of 2 selected "Lineage L2" groups, over recent months. A challenging Lineage L2 is selected first, and compared to the incumbent.

The trend is shown as a green line and expressed as a daily growth % advantage. If the green line crosses over the 0.0 line, the date when that occurred or is predicted to occur will be shown. At that point the challenging Lineage L2 is considered to have "crossed over" or taken over dominance from the incumbent Lineage L2.

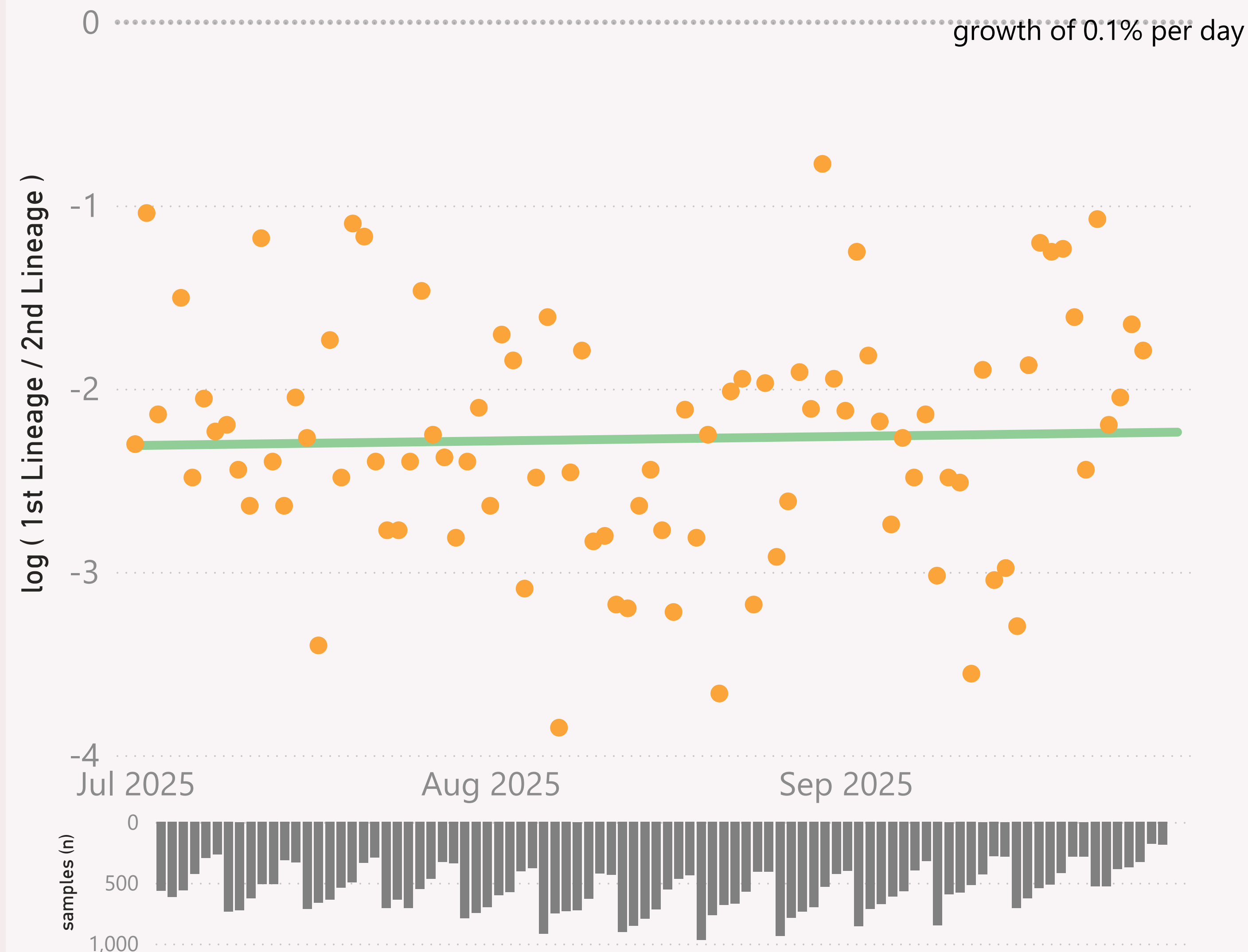
The Lineage classifications are provided by Nextclade. I add the "Lineage L2" groups, typically following common variant groupings, but occasionally being "creative".

The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

n=50,123 sequenced genomes, from 1 July 2025 up to 28 September 2025

Global - PY.1.1.1 vs XFG.3

● $\log (1st \text{ Lineage} / 2nd \text{ Lineage})$ ● trend



This page compares the relative frequency of 2 selected Lineages, over recent months. A challenging Lineage is selected first, and compared to the incumbent.

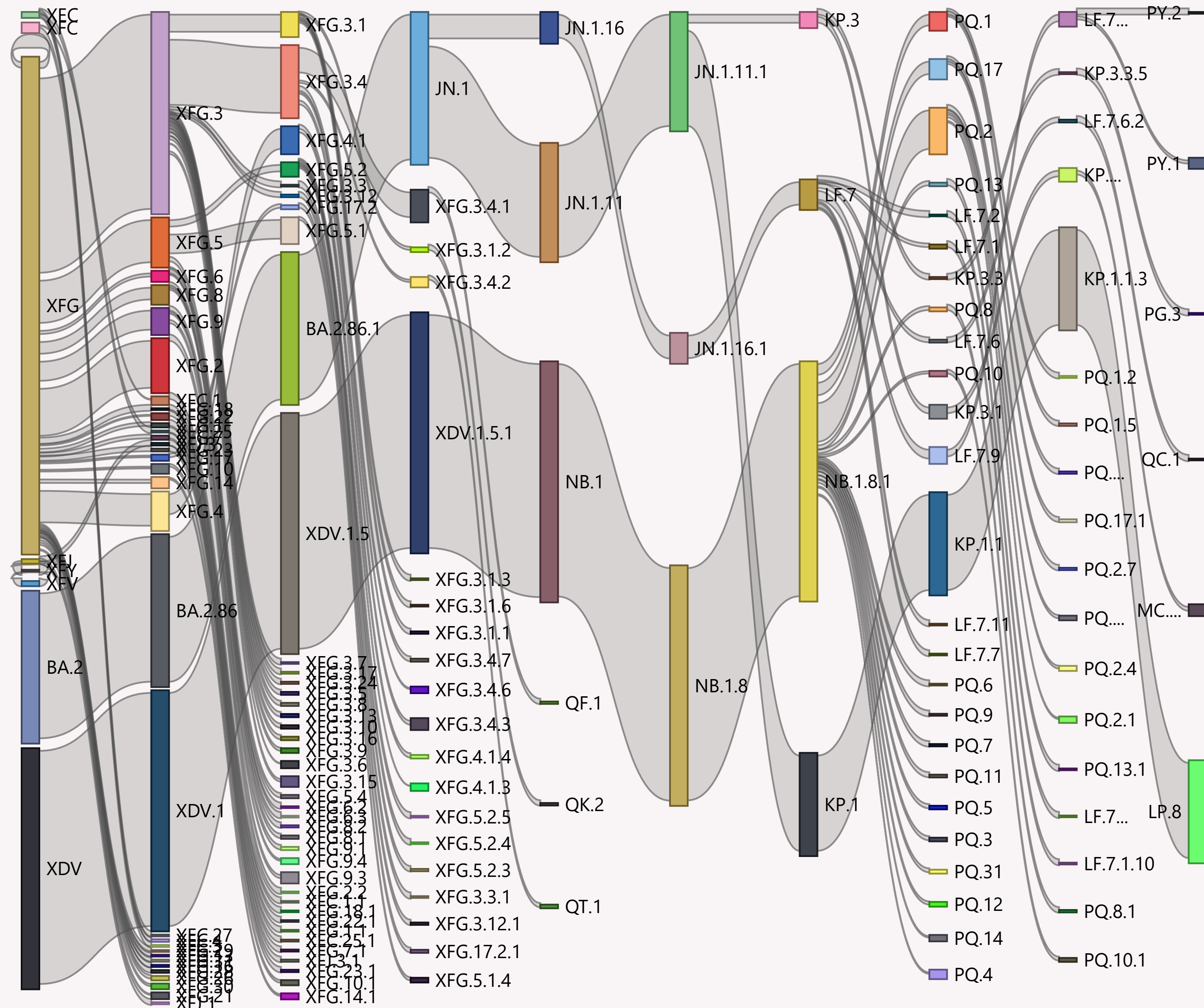
The trend is shown as a green line and expressed as a daily growth % advantage. If the green line crosses over the 0.0 line, the date when that occurred or is predicted to occur will be shown. At that point the challenging Lineage is considered to have "crossed over" or taken over dominance from the incumbent Lineage

The Lineage classifications are provided by Nextclade.

The grey column chart across the bottom shows the volume of sequences available by date. As there can be long sample and data processing times, it is quite routine for recent dates to show lower sample sizes.

n=65,754 sequenced genomes, from 1 June 2025 up to 28 September 2025

Global



This page shows the hierarchy of the significant Lineages, over recent months.

The hierarchy can be read from left to right, starting with the earliest/highest Lineages being broken down into more detailed child Lineages.

The vertical height of each bar segment represents the relative volume of all the samples of that specific Lineage, as well as all it's descendants.

The full picture is typically quite busy, so insignificant Lineages (with few samples, or at the extreme top or bottom of the hierarchy) are not shown.





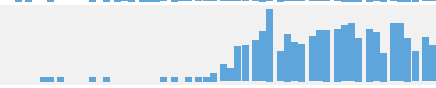





















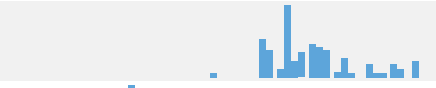




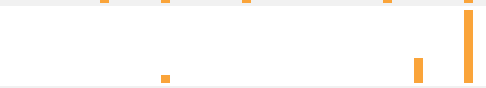

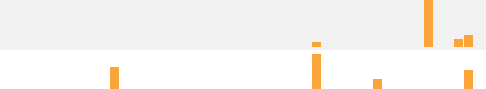

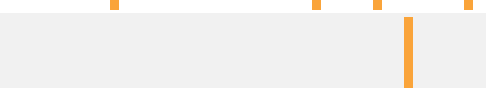
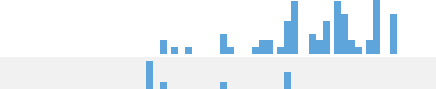



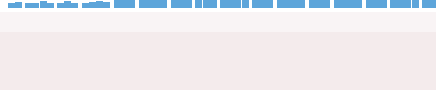
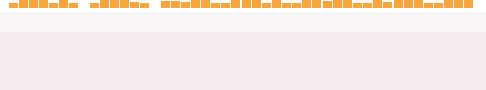
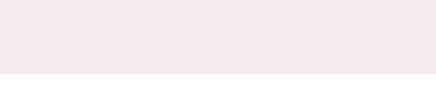
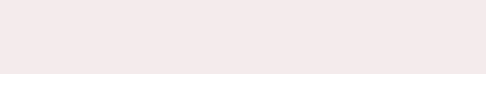
The Lineage classifications are provided by Nextclade.

Global

This plot shows the lineage frequency of various genotypes over time. The y-axis represents the lineage frequency from 0% to 80%. The x-axis shows dates from June 2025 to September 2025. The purple line, representing the *gla*⁺ genotype, starts at approximately 28% in early June, fluctuates, and then rises sharply to nearly 80% by late August. The light blue line, representing the *gla*⁻ genotype, starts at approximately 45% in early June, drops to around 20% by mid-June, and then fluctuates between 20% and 40% until late August, where it drops sharply to around 15%. The dark blue line, representing the *gla*⁺ *gla*⁻ genotype, starts at approximately 15% in early June, drops to around 5% by mid-June, and then remains low, fluctuating between 2% and 10% until late August, where it drops sharply to around 2%. The orange line, representing the *gla*⁻ *gla*⁻ genotype, starts at approximately 2% in early June, drops to around 1% by mid-June, and then remains low, fluctuating between 1% and 5% until late August, where it drops sharply to around 1%.

These samples are mainly collected from arrivals into the US and Japan.

Data Submitted in the last 8 weeks

Country	# Samples Sequenced	Latest Collection date	by Collection date	Latest Submission date	by Submission date
<div>+ </div> United States	12,549	28/09/2025		08/10/2025	
<div>+ </div> Spain	4,675	28/09/2025		08/10/2025	
<div>+ </div> Canada	4,286	28/09/2025		08/10/2025	
<div>+ </div> United Kingdom	3,293	28/09/2025		08/10/2025	
<div>+ </div> France	1,942	28/09/2025		08/10/2025	
<div>+ </div> Australia	1,720	28/09/2025		08/10/2025	
<div>+ </div> South Korea	1,306	18/09/2025		08/10/2025	
<div>+ </div> China	1,280	22/09/2025		08/10/2025	
<div>+ </div> Brazil	1,207	25/09/2025		08/10/2025	
<div>+ </div> Netherlands	881	28/09/2025		08/10/2025	
<div>+ </div> Japan	733	28/09/2025		08/10/2025	
<div>+ </div> Italy	645	28/09/2025		08/10/2025	
<div>+ </div> New Zealand	551	28/09/2025		08/10/2025	
<div>+ </div> Ireland	545	28/09/2025		08/10/2025	
<div>+ </div> Germany	542	28/09/2025		08/10/2025	
<div>+ </div> Russia	438	13/09/2025		06/10/2025	
<div>+ </div> Ukraine	425	28/09/2025		08/10/2025	
<div>+ </div> Denmark	380	22/09/2025		08/10/2025	
<div>+ </div> Luxembourg	363	31/08/2025		22/09/2025	
<div>+ </div> Puerto Rico	304	25/09/2025		08/10/2025	
<div>+ </div> Portugal	243	03/08/2025		29/08/2025	
<div>+ </div> Sweden	239	28/09/2025		08/10/2025	
<div>+ </div> Slovenia	236	28/09/2025		08/10/2025	
<div>+ </div> Switzerland	234	15/09/2025		08/10/2025	
<div>+ </div> Costa Rica	233	25/09/2025		08/10/2025	
<div>+ </div> Finland	180	11/09/2025		02/10/2025	
<div>+ </div> Romania	172	22/09/2025		08/10/2025	
<div>+ </div> Argentina	167	30/08/2025		08/10/2025	
<div>— </div> Total	41,824	28/09/2025		08/10/2025	

This page shows the volume and currency/timeliness of the genomic sequencing data shared via GISAID, over the last 8 weeks, for the countries sharing the most samples.

Each sample shared comes with a Collection date - when the PCR test for that sample was collected. The GISAID system also records a Submission date for each sample, which is typically the date that sample was uploaded.

The latest date of each type is shown, along with "sparkline"-style mini charts to give a flavour for the spread of recent data by Collection date and by Submission date.