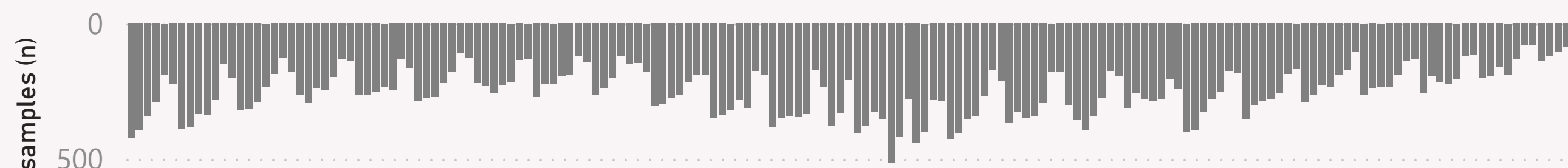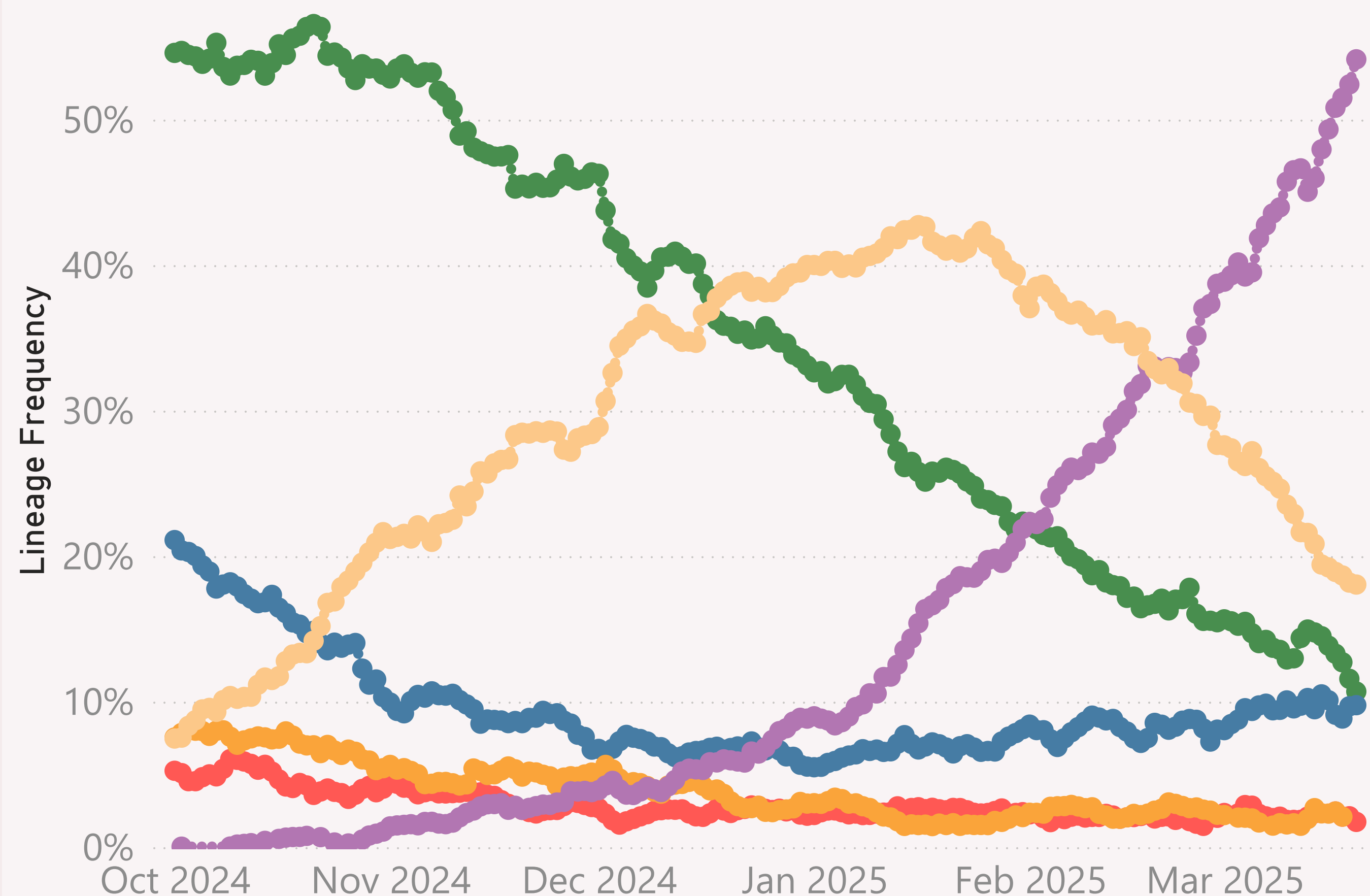n=42,833 sequenced genomes, up to 20 March 2025

United States

● BA.2.86.* ● JN.1.* +DeFLuQE ● JN.1.* +FLiRT ● JN.1.* +FLuQE ● LP.8.1.* ● XEC.*

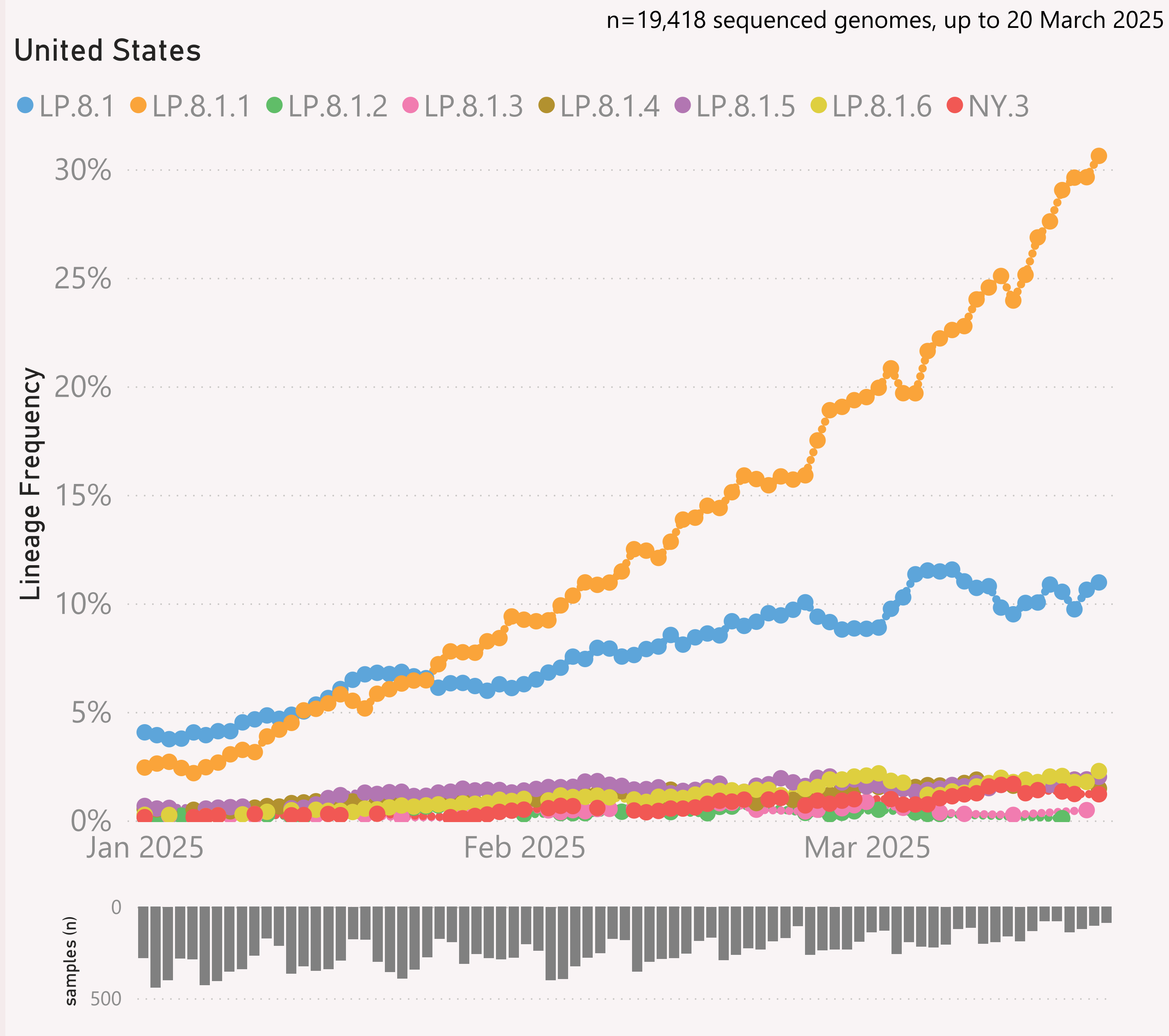This page shows the frequency of the top 7 "L2" lineages, across recent months.

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=19,418 sequenced genomes, up to 20 March 2025

United States

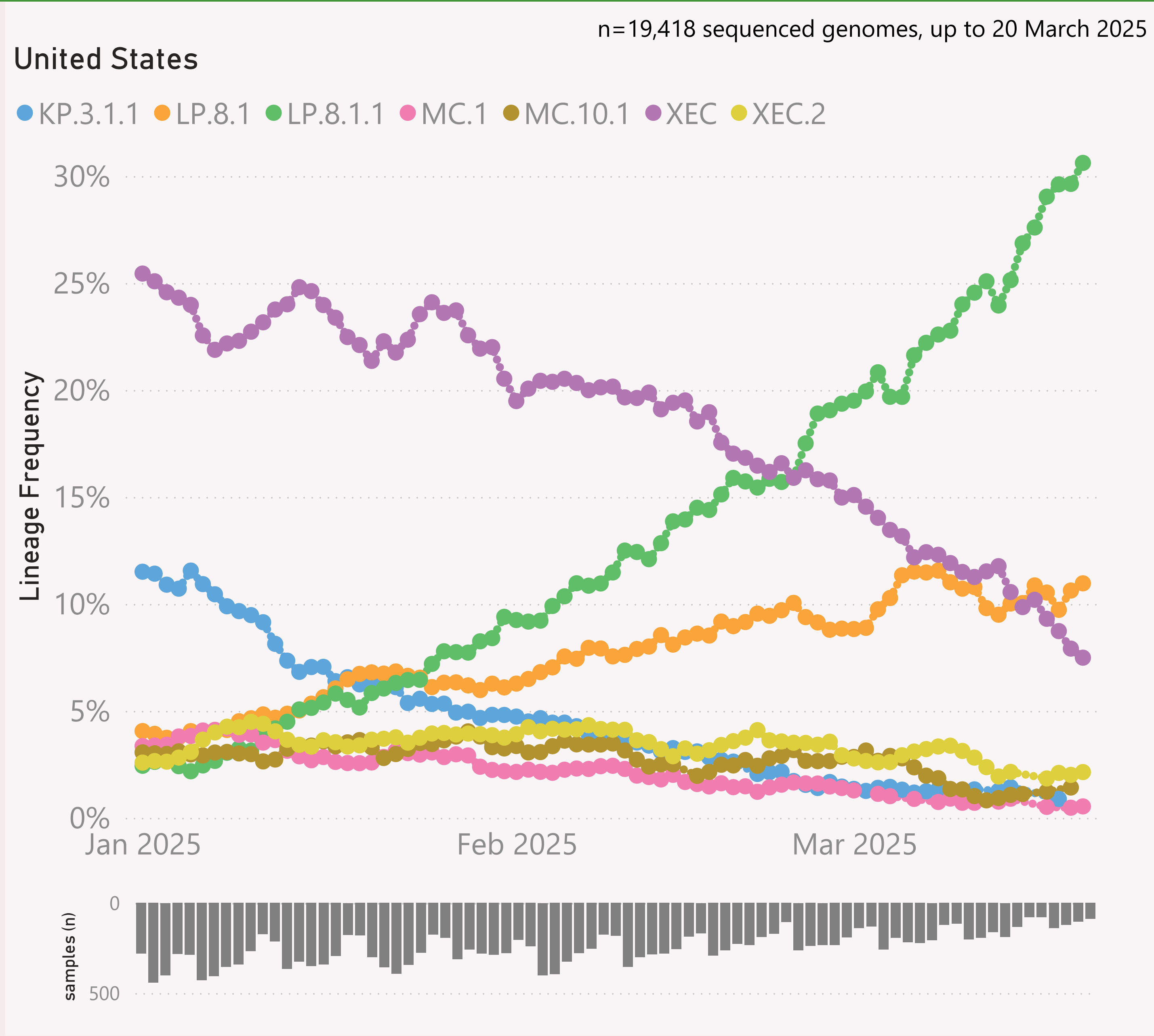● LP.8.1　● LP.8.1.1　● LP.8.1.2　● LP.8.1.3　● LP.8.1.4　● LP.8.1.5　● LP.8.1.6　● NY.3

This page shows the frequency of the top 7 lineages, across recent months. The lineages are filtered for a "Lineage L2" group of interest, currently "LP.8.1.*.

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=19,418 sequenced genomes, up to 20 March 2025

United States

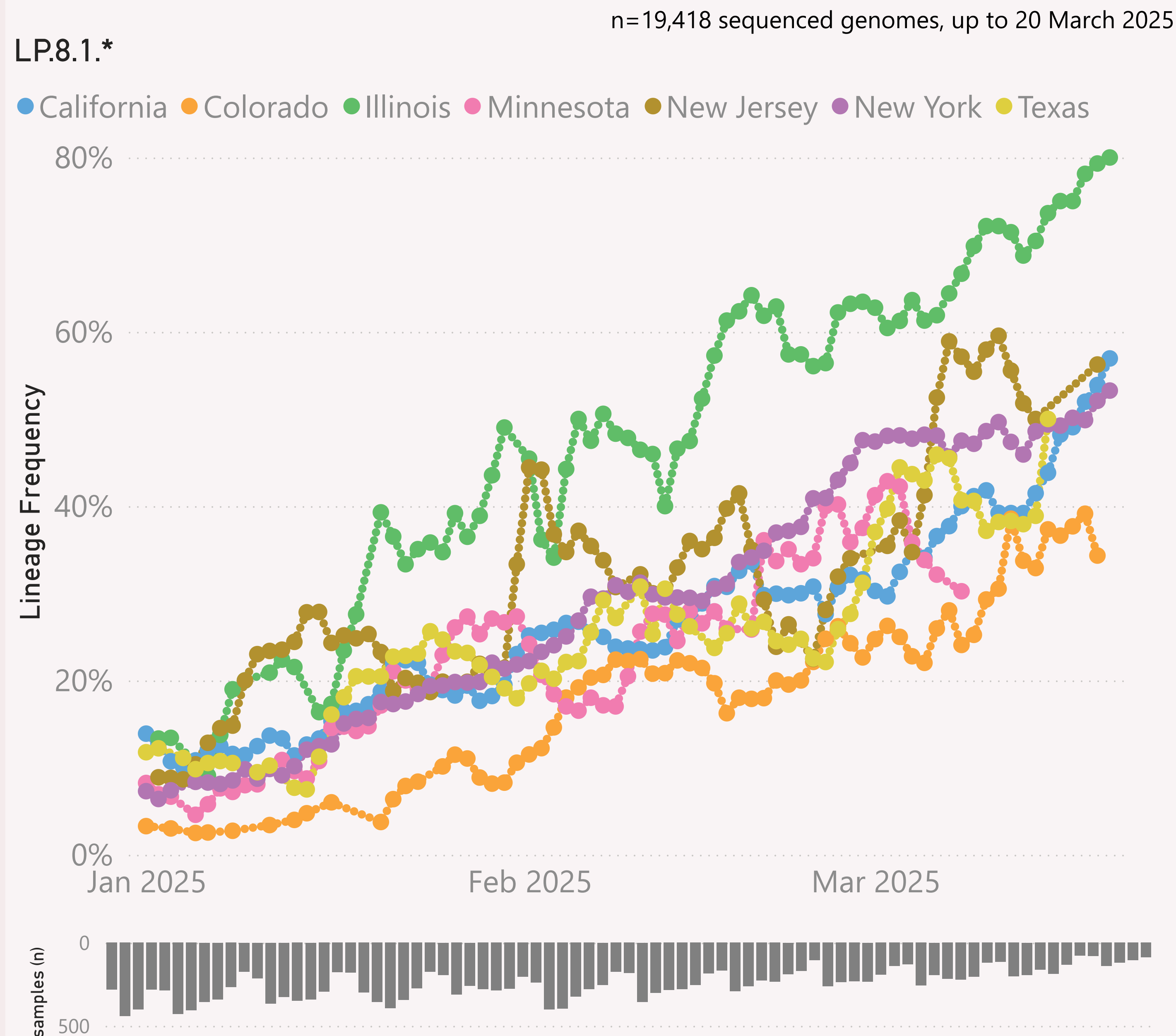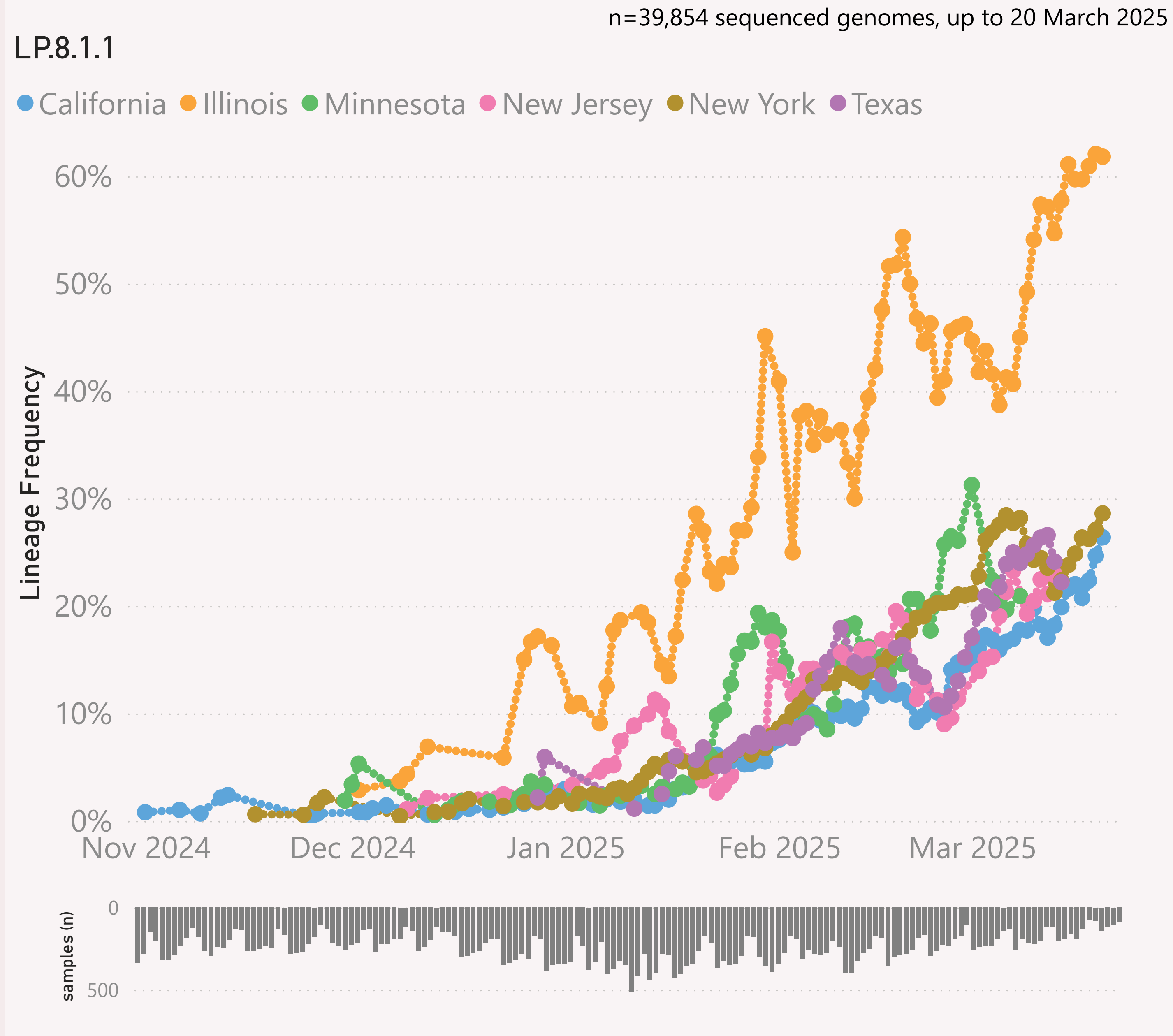● KP.3.1.1 ● LP.8.1 ● LP.8.1.1 ● MC.1 ● MC.10.1 ● XEC ● XEC.2

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.

COVID-19 Genomic Sequencing analysis - top Locations for a Lineage. Data from gisaid.org, with nextclade lineages Source files and info on github.

Last Update: 2025-04-12 07:37 (UTC)

n=19,418 sequenced genomes, up to 20 March 2025

LP.8.1.*

● California ● Colorado ● Illinois ● Minnesota ● New Jersey ● New York ● Texas

This page shows the frequency of a selected "Lineage L2" group of interest, across the leading States, 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 "BA.2.86.*" group includes BA.2.86 and all it's descendants, e.g. the JN.* lineages.

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

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=39,854 sequenced genomes, up to 20 March 2025

LP.8.1.1

● California ● Illinois ● Minnesota ● New Jersey ● New York ● Texas

This page shows the frequency of a selected Lineage of interest, across the leading States, over recent months.

The Lineage classifications are provided by Nextclade.

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

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=19,418 sequenced genomes, up to 20 March 2025

United States – LP.8.1.* vs XEC.*

● log (1st Lineage / 2nd Lineage)   ● trend

growth of 3.3% per day, crossover on 16-Feb-25
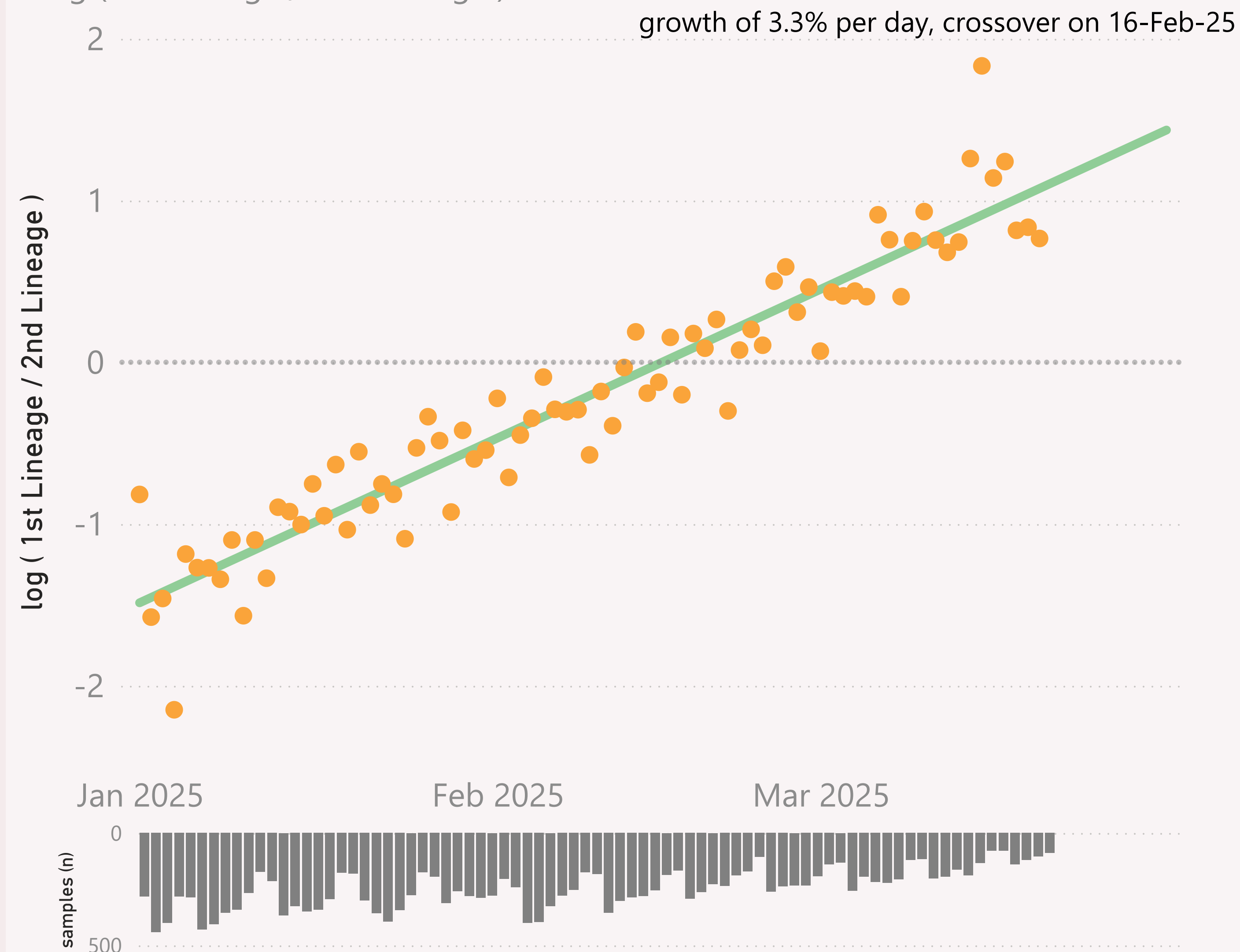
This page compares the relative frequency of 2 selected "Lineage L2" groups, over recent months. A challenging Lineage L2 is selected first, and compared to the incumbent.

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=19,418 sequenced genomes, up to 20 March 2025

United States – LF.7.7.2 vs LP.8.1.1

● log (1st Lineage / 2nd Lineage)   ● trend

growth of 0.8% per day
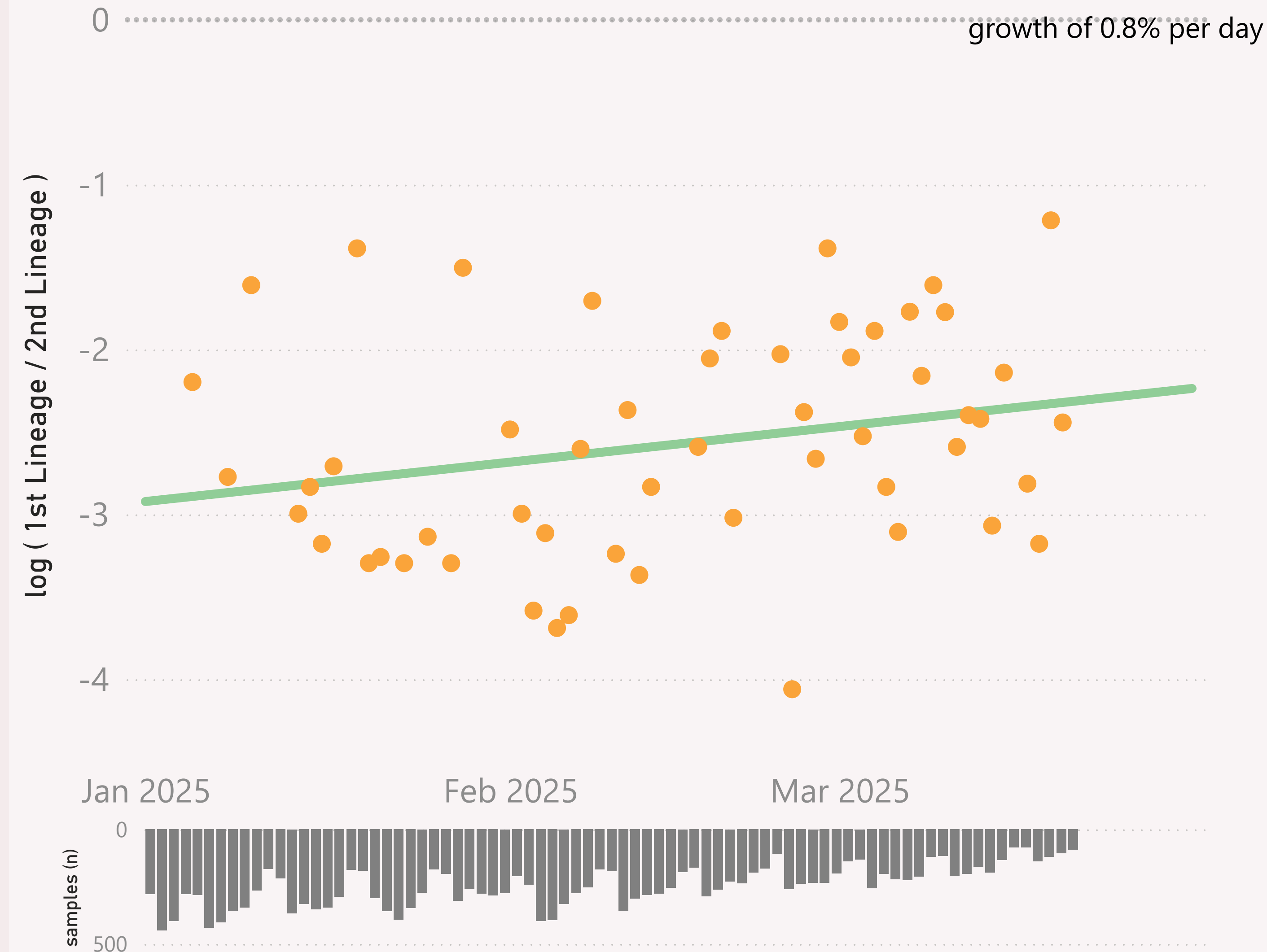
This page compares the relative frequency of 2 selected Lineages, over recent months. A challenging Lineage is selected first, and compared to the incumbent.

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=19,450 sequenced genomes, up to 20 March 2025

United States
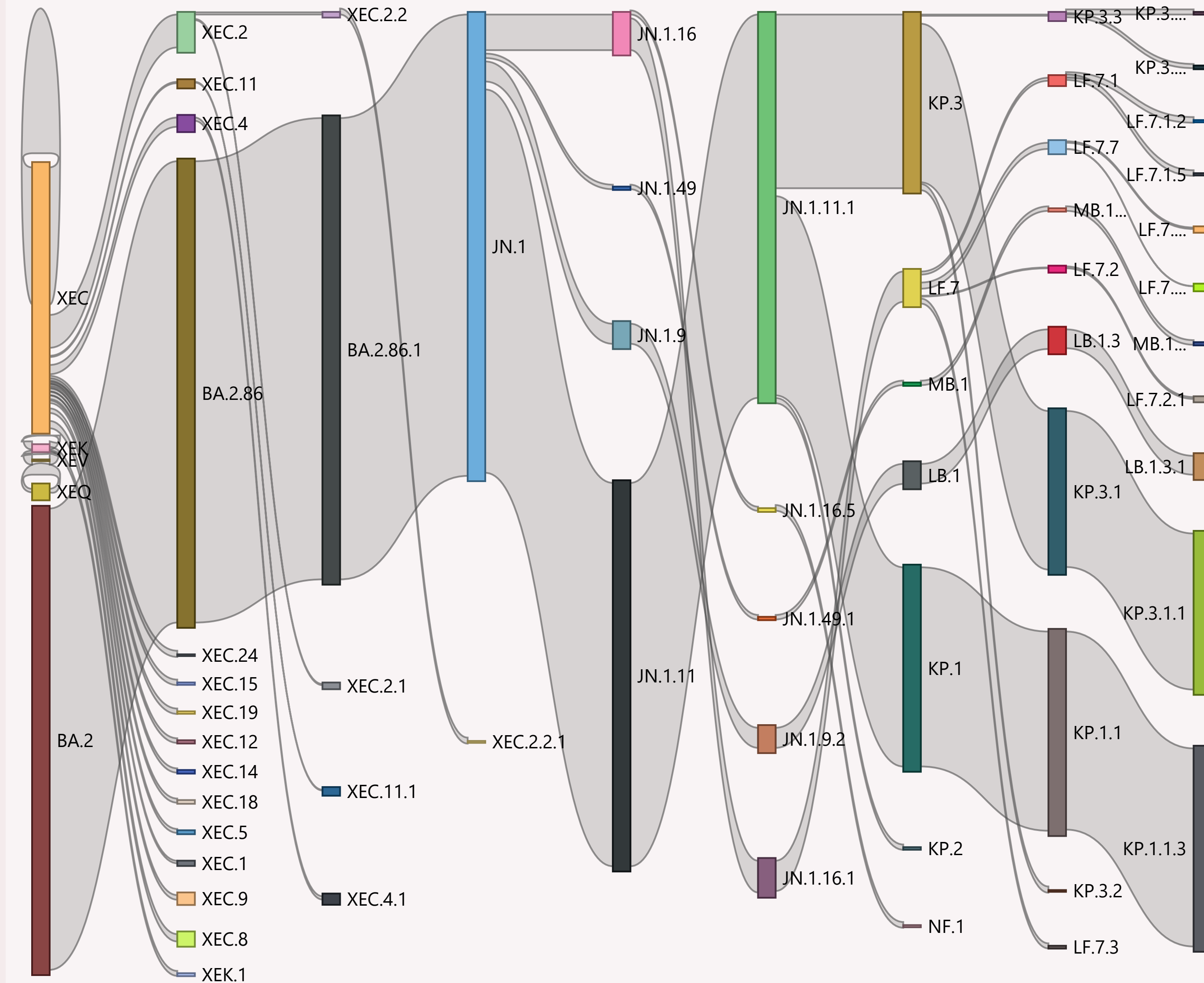
This page shows the hierarchy of the significant Lineages, over recent months.
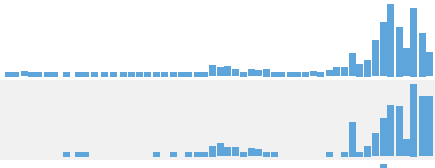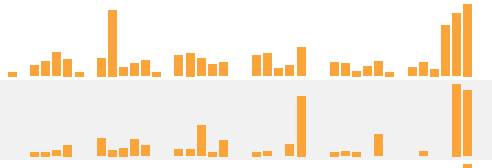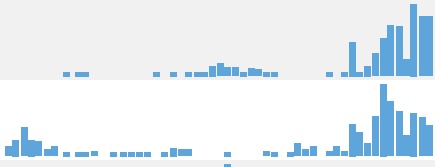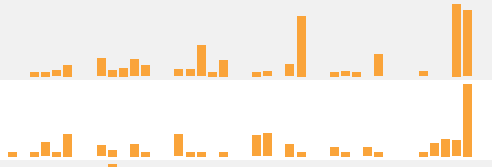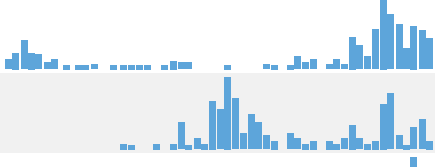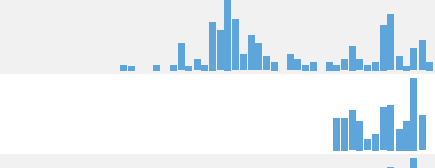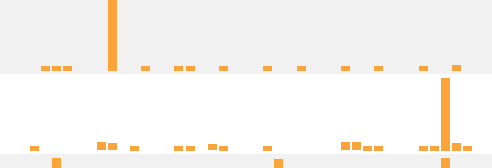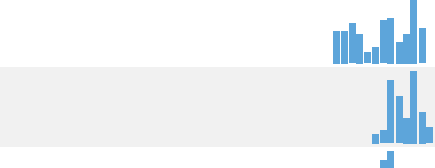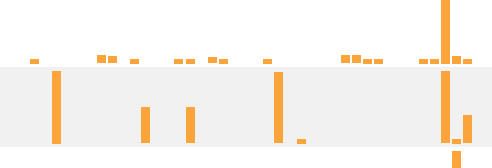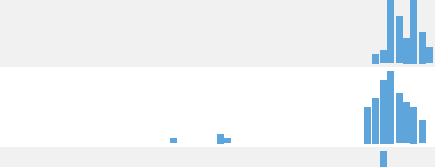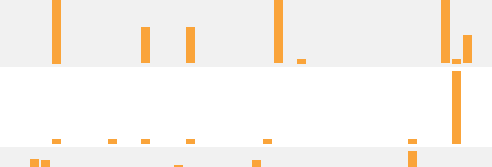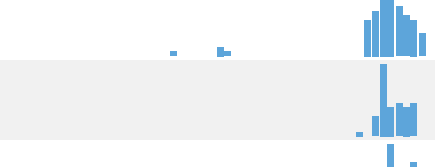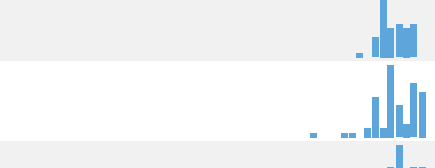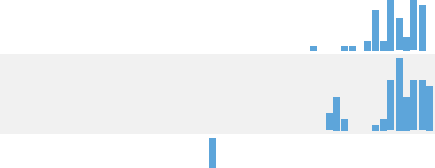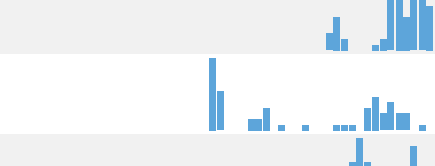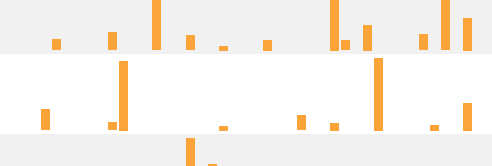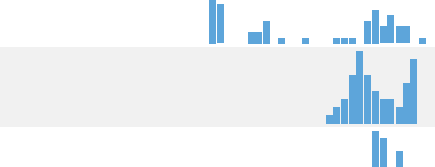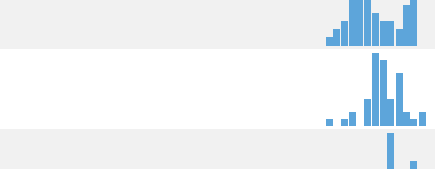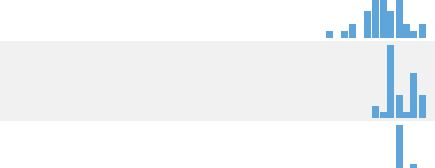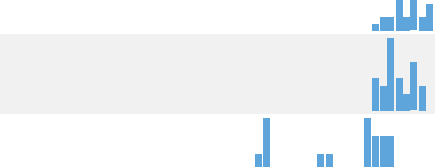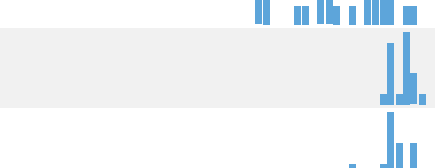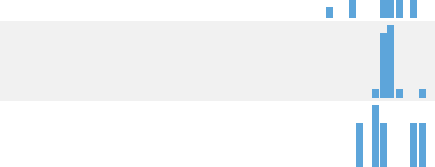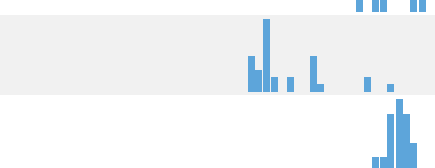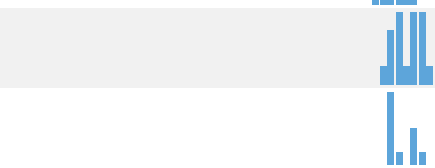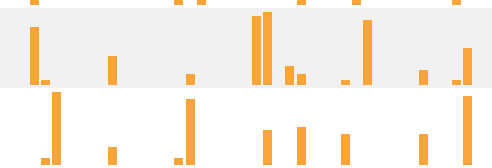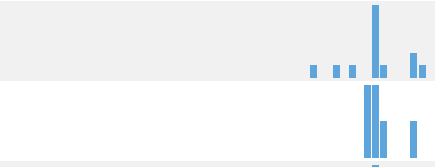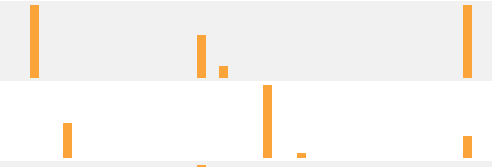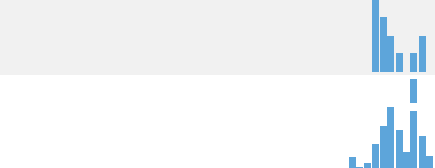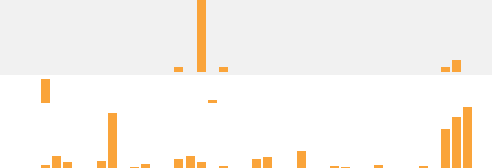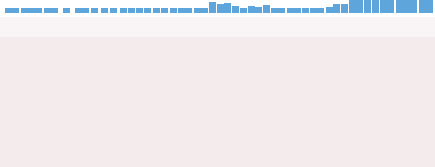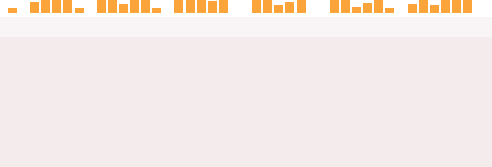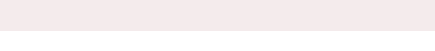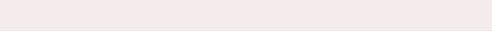
The hierarchy can be read from left to right, starting with the earliest/highest Lineages being broken down into more detailed child Lineages.

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.

Data Submitted in the last 8 weeks

Country	# Samples Sequenced	Latest Collection date	by Collection date	Latest Submission date	by Submission date
⊟ **United States**	**17,641**	**20/03/2025**		**29/03/2025**	
New York	3,672	20/03/2025		29/03/2025	
California	3,447	20/03/2025		29/03/2025	
Virginia	1,679	20/03/2025		28/03/2025	
Texas	1,314	15/03/2025		29/03/2025	
Colorado	817	20/03/2025		29/03/2025	
Wisconsin	703	15/03/2025		28/03/2025	
Minnesota	662	09/03/2025		29/03/2025	
New Jersey	635	19/03/2025		29/03/2025	
Illinois	589	20/03/2025		29/03/2025	
Michigan	455	19/03/2025		29/03/2025	
New Mexico	341	09/03/2025		29/03/2025	
Massachusetts	327	19/03/2025		29/03/2025	
Pennsylvania	305	17/03/2025		29/03/2025	
Nebraska	255	20/03/2025		29/03/2025	
Maryland	230	18/03/2025		29/03/2025	
Kentucky	191	05/03/2025		29/03/2025	
Delaware	189	17/03/2025		29/03/2025	
District of Columbia	145	17/03/2025		29/03/2025	
Connecticut	136	12/03/2025		28/03/2025	
Louisiana	133	13/03/2025		25/03/2025	
North Dakota	127	27/02/2025		28/03/2025	
Utah	120	03/03/2025		28/03/2025	
Arizona	109	20/03/2025		29/03/2025	
North Carolina	108	17/03/2025		29/03/2025	
Hawaii	107	19/03/2025		29/03/2025	
Oregon	102	19/03/2025		29/03/2025	
Rhode Island	93	12/03/2025		28/03/2025	
Total	**17,641**	**20/03/2025**		**29/03/2025**	

This page shows the volume and currency/timeliness of the genomic sequencing data shared via GISAID, over the last 8 weeks. A breakdown of the leading states (by volume) is shown.

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.