Twitter Thread by Dr Emma Hodcroft

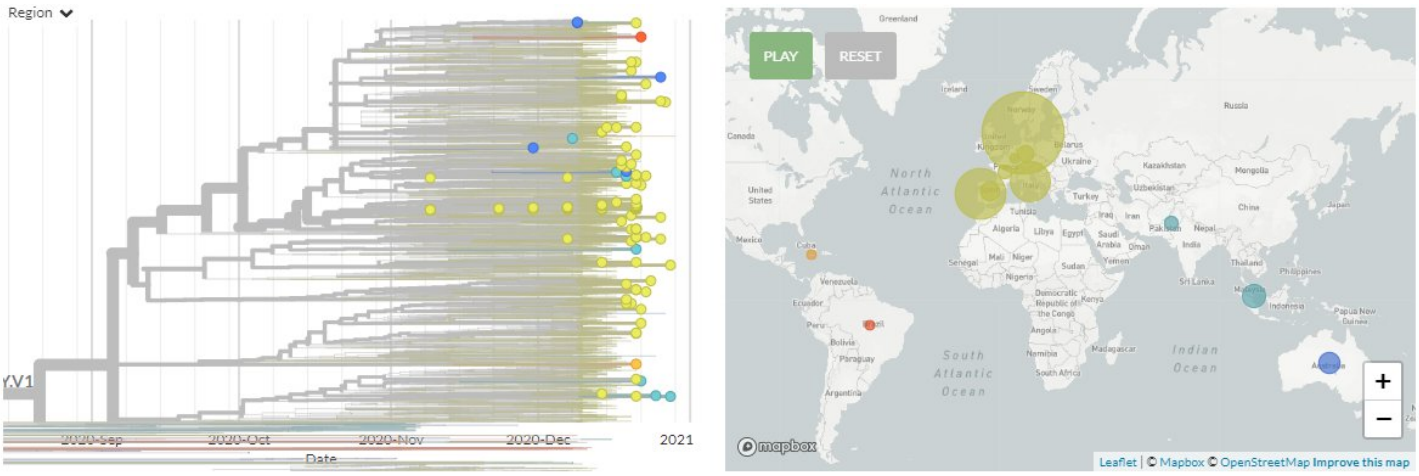
Dr Emma Hodcroft
@firefoxx66

The latest focal S:N501 build is now up! It includes data from 4 Jan 2021.

We have new sequences in 501Y.V1/B.1.1.7 from Denmark, Singapore, Australia, Italy, Spain, France, Portugal, Germany, Brazil, Jamaica, Luxembourg, Pakistan & the USA.

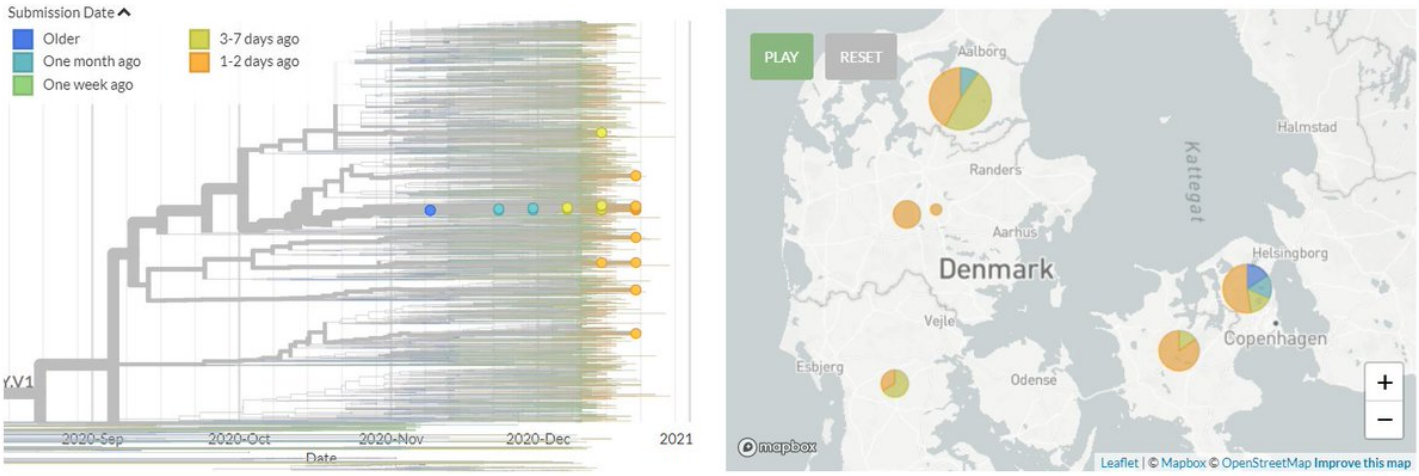
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https://t.co/FTjvV7T7wL



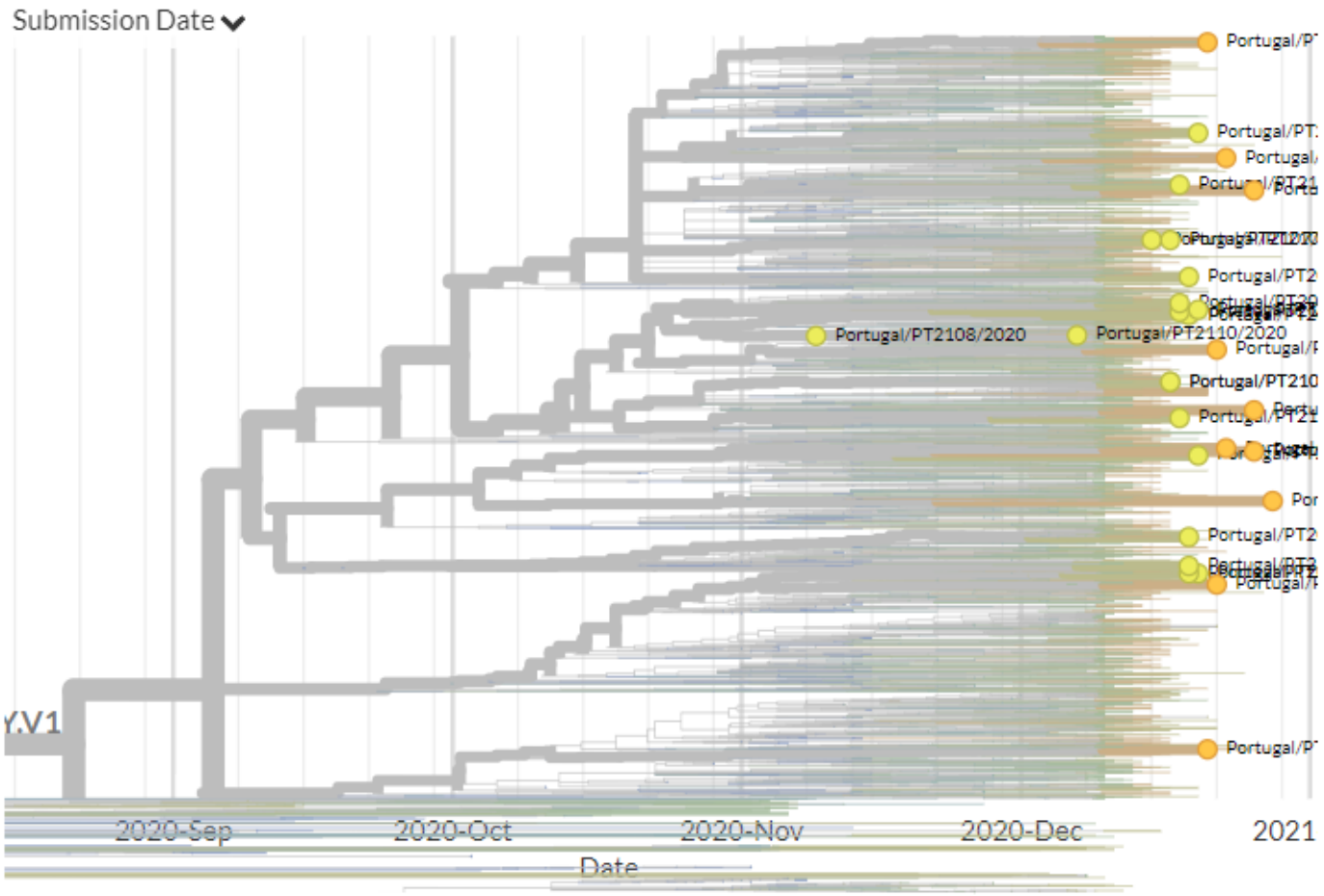
Denmark has 43 new sequences (in orange). These indicate additional introductions, as well as further expansion of the existing large local transmission cluster we saw previously (shown in zoomed divergence view).

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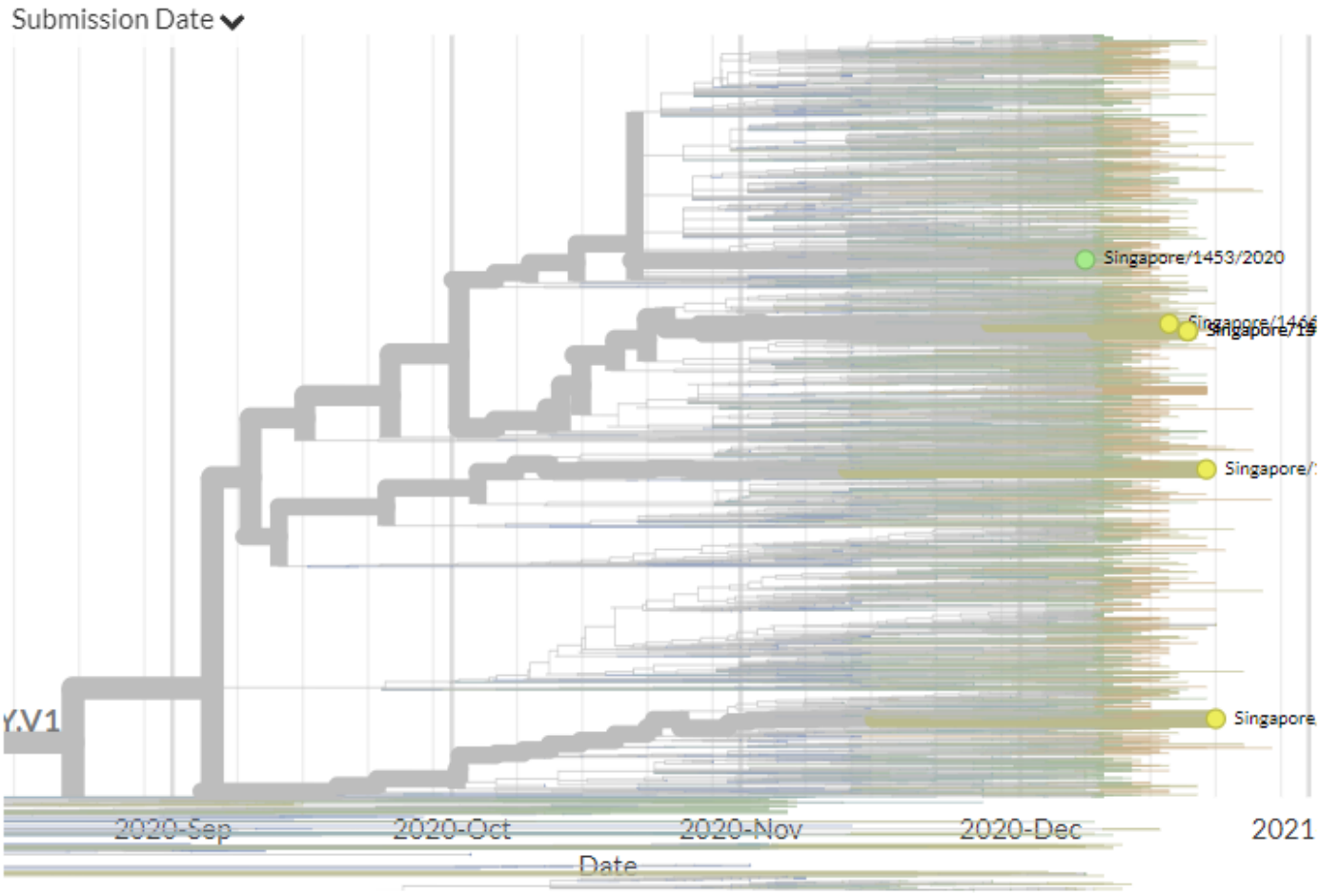
10 new sequences from Portugal (orange) indicate additional, separate introductions.

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Singapore has 5 new sequences (yellow). These indicate at least 5 separate introductions for the total of 6 sequences, with two identical sequences likely being 1 introduction.

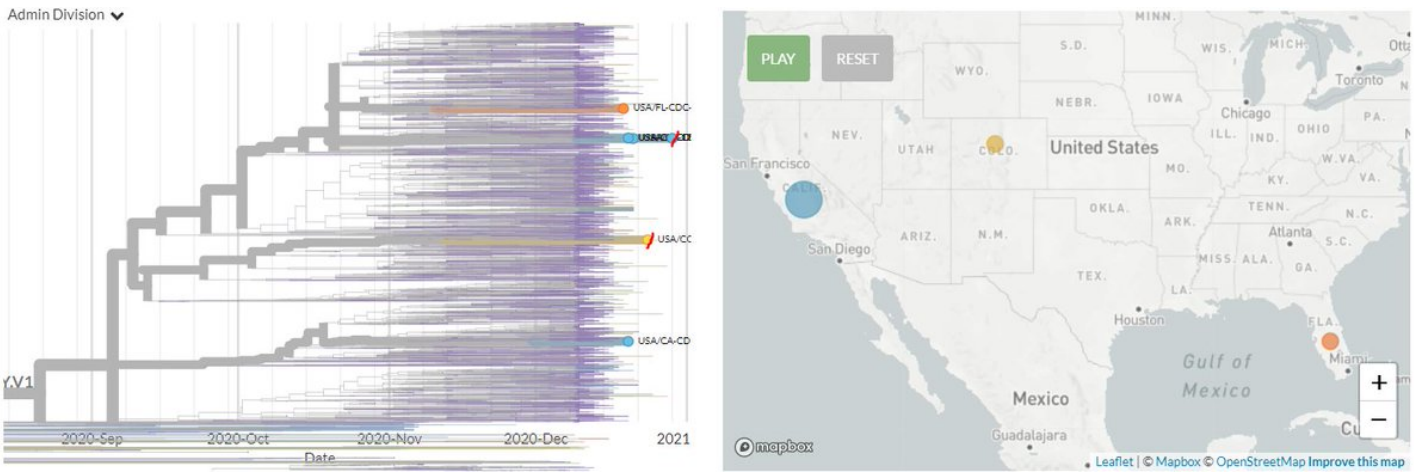
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5 new sequences from the US, from Florida & California (older sequences crossed through).

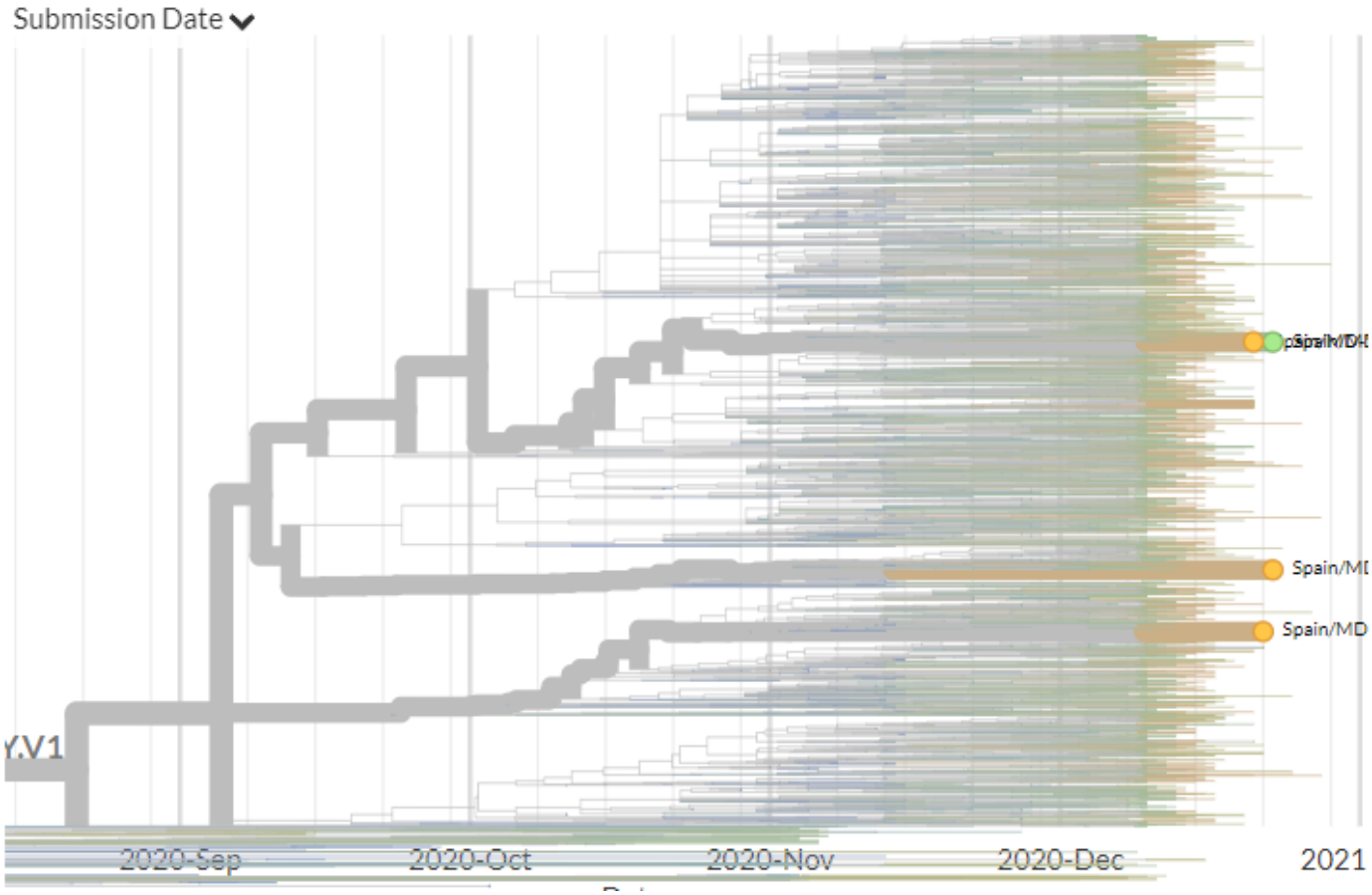
Zooming in (divergence view) on the California cluster, the relationship between these samples is difficult to infer from phylogenies alone.

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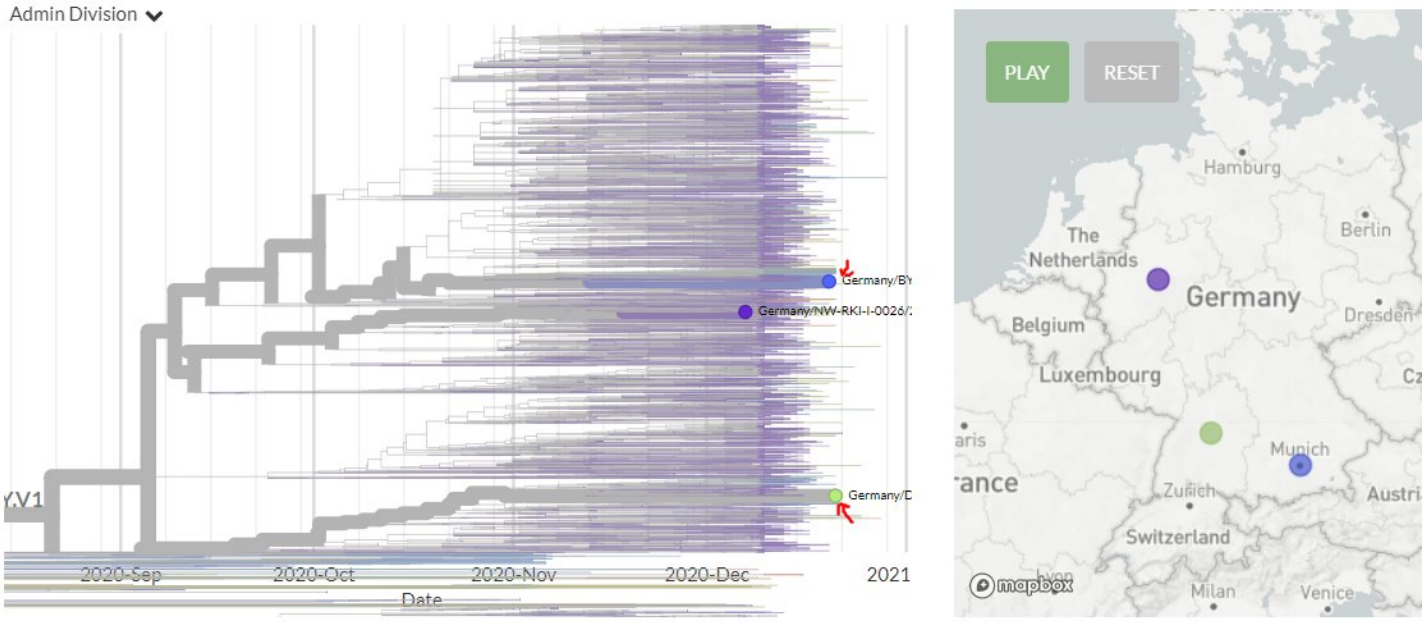
3 new sequences from Spain (orange) indicate 2 more introductions, with the 3rd new sequence linking to the first sequence (green).

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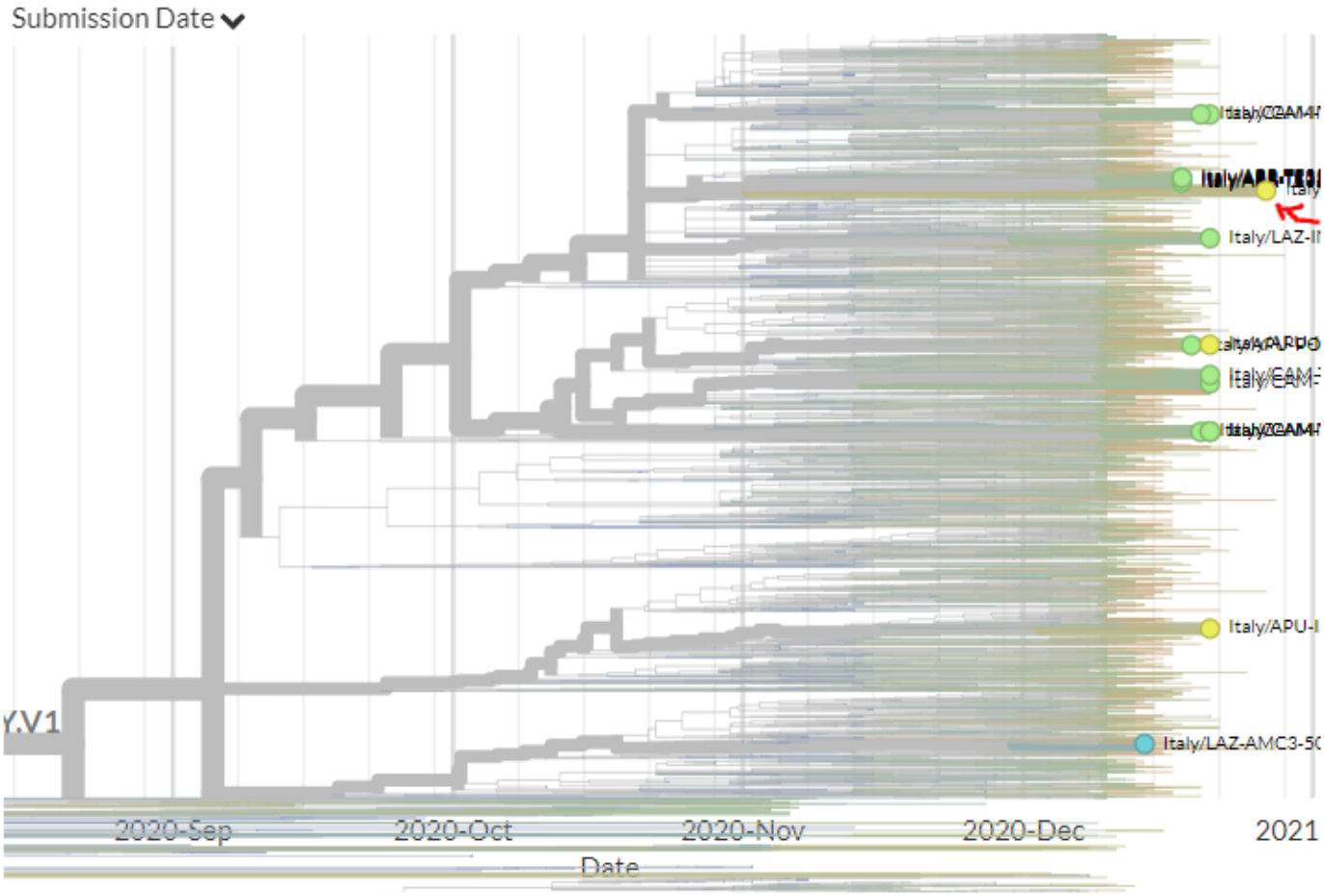
2 new sequences in Germany & 1 new sequence in Australia indicate separate introductions

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1 new sequences in Italy represents another separate introduction (little hard to see in this picture), and 1 new sequence from France (yellow) indicates an additional introduction.

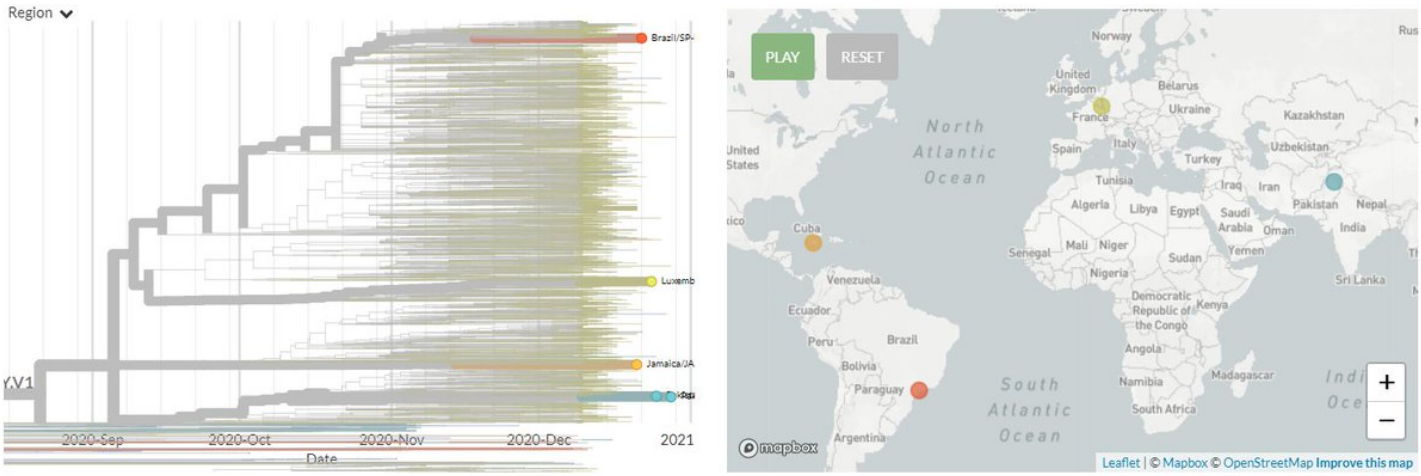
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Additionally, we have the first sequences that fall in 501Y.V1 from Brazil (1), Jamaica (1), Luxembourg (1), & Pakistan (2).

Though hard to see on the larger tree, the 2 Pakistan sequences sit apart on the phylogeny, & thus indicate separate introductions.

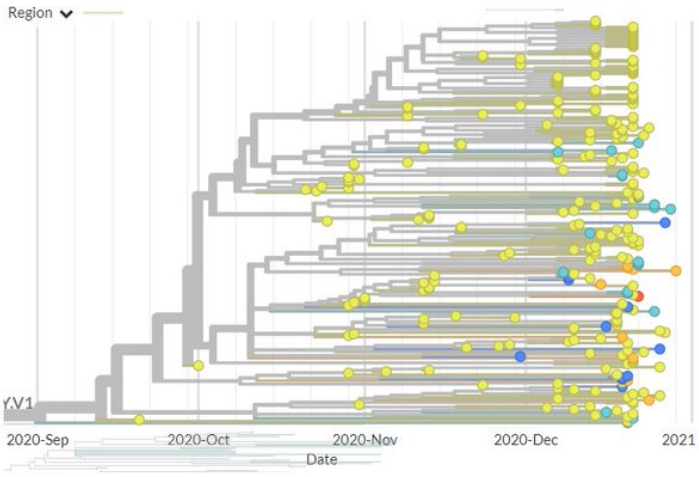
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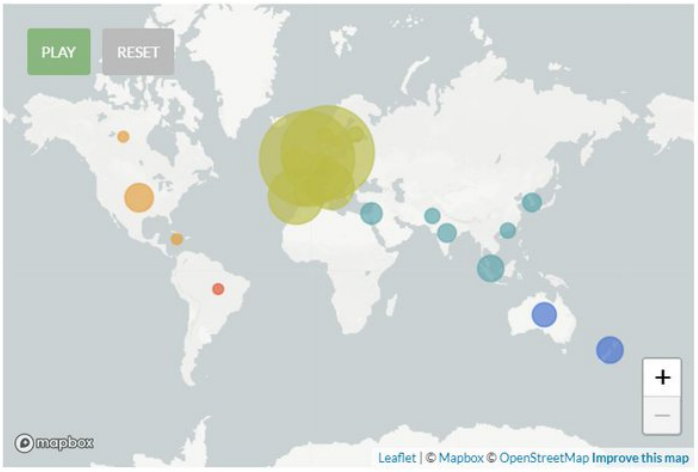


The S:N501 'reduced UK' build is also updated. *Please remember not to use this build to look at connections between countries!* Use it only alongside the larger, complete S:N501 build.

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https://t.co/9md0yn9Qgp

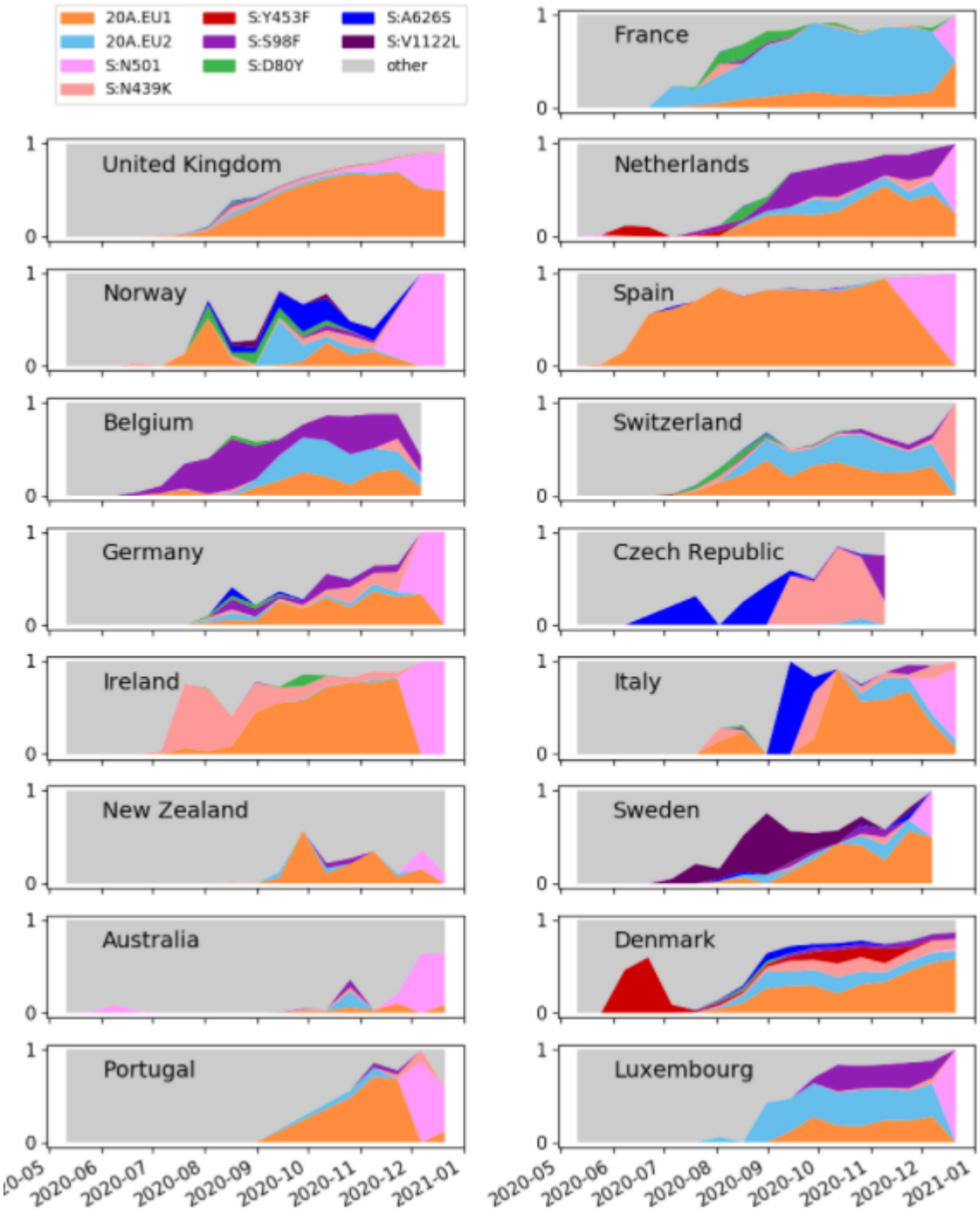




Finally, the country plots have also been updated. As countries are preferentially sequencing 501Y.V1 samples at the moment, the 'hot pink' sections *do not* represent true frequencies of the variant in countries!

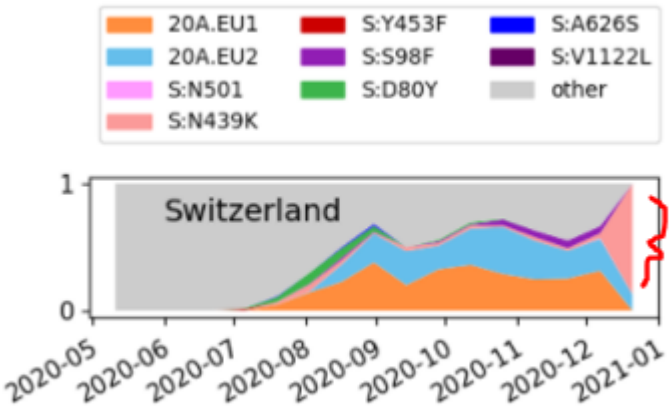
https://t.co/c7wlQOLRiq

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We can see the current screening process in action in the Swiss chart - variants with the 69/70 deletion are being preferentially sampled. Sequences from the 439K cluster also have that deletion - they're being picked up in the search to find 501Y.V1! ■

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20A.EU1
20A.EU2
S:N501
S:N439K
S:Y453F
S:S98F
S:D80Y
S:A626S
S:V1122L
other
Switzerland
1
0
2020-05
2020-06
2020-07
2020-08
2020-09
2020-10
2020-11
2020-12
2021-01