Twitter Thread by <u>Dr Emma Hodcroft</u>

Dr Emma Hodcroft

@firefoxx66



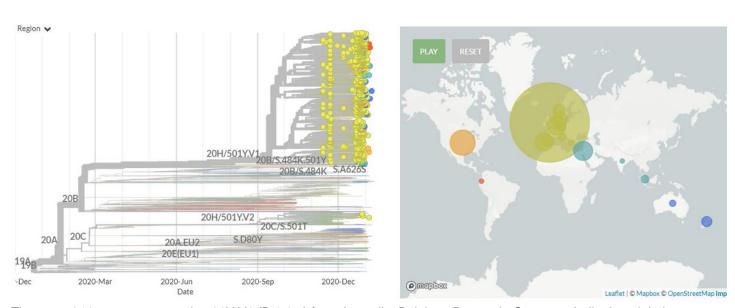
The focal S:N501 build is now updated with data from 13 Jan!

There are a total of 247 non-UK & non-South African sequences in 501Y.V1 (B.1.1.7 #b117) & 501Y.V2.

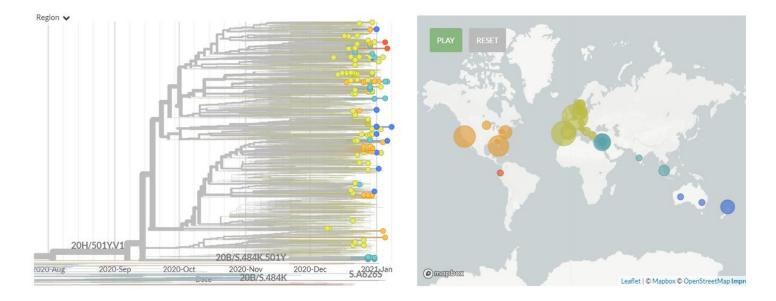
I'll do an additional thread later on, covering S:E484 & the 'Ohio variants'.

1/18

https://t.co/3bdttjKVI4



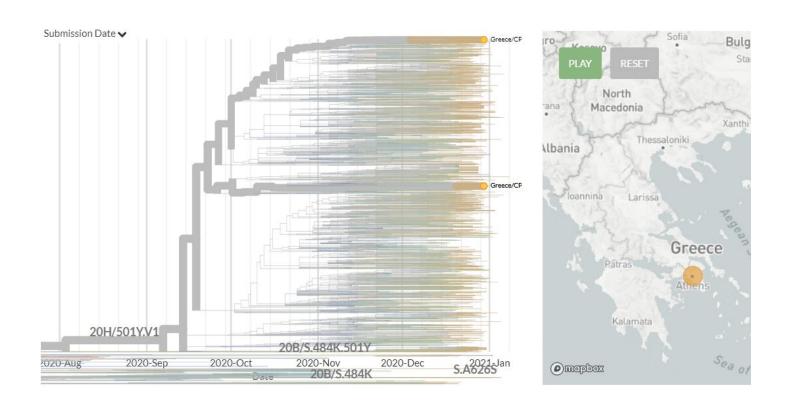
There are 244 new sequences in 501Y.V1 (B.1.1.7) from Australia, Belgium, Denmark, Germany, India, Israel, Italy, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain & USA, as well sequences as from Ecuador and Greece for the first time.



Greece has 3 new sequences in 501Y.V1 for the first time. They indicate 2 separate introductions.

Ecuador has 2 sequences for the first time. They also indicate 2 separate introductions.

3/18



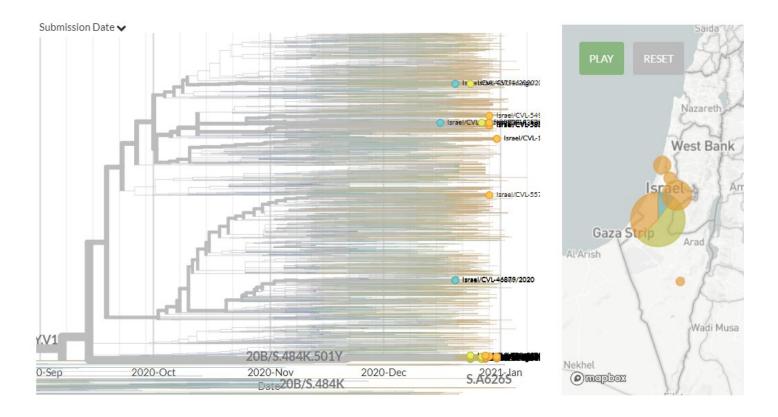
The USA has 61 new sequences (orange), from Florida, Minnesota, California, Pennsylvania, & New York.

A few of these represent separate introductions. Others form distinct clusters that may indicate ongoing local transmission.

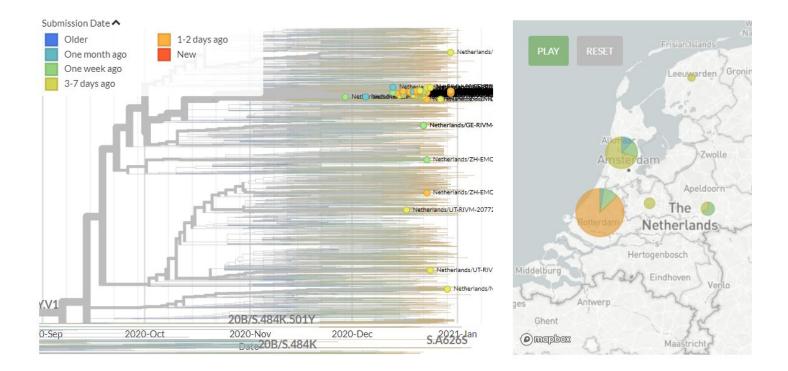


Israel has 35 new sequences (orange). Some of these show separate introductions, but many link with older sequences, indicating ongoing local transmission.

5/18

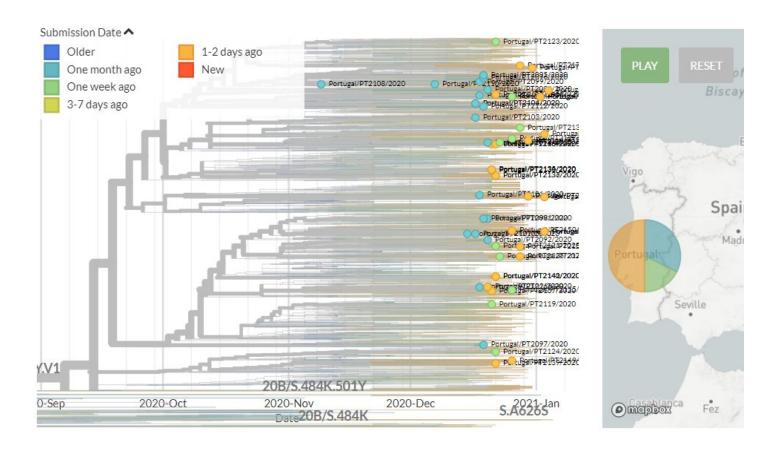


The Netherlands has 34 new sequences (orange). A few of these represent separate introductions, but most form a large cluster with older sequences from the Netherlands, indicating ongoing local transmission.

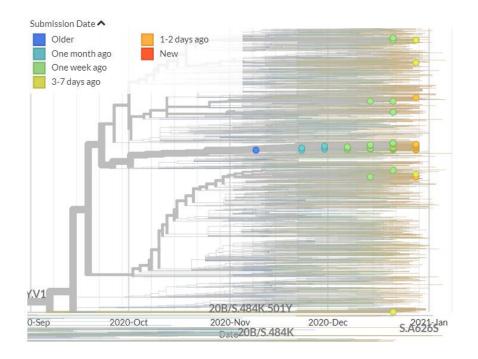


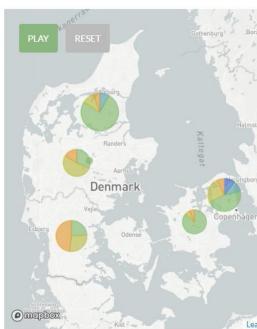
Portugal has 31 new sequences (orange). Though hard to see in the zoomed-out view, most of these represent separate introductions. There is one case where 2 new seqs are identical to an older one, but this could be a common exposure source.

7/18



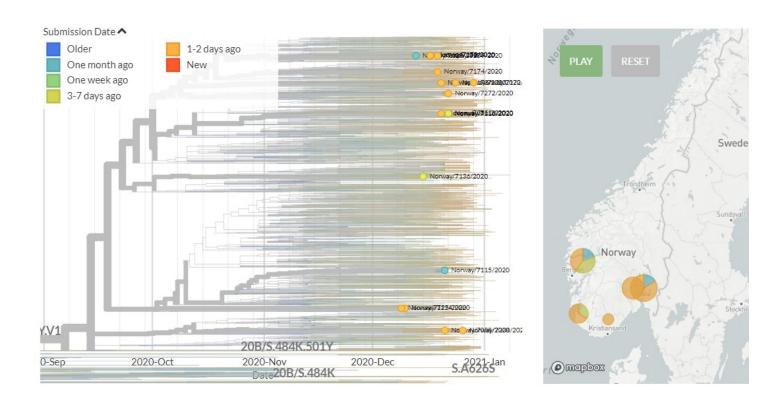
Denmark has 20 new sequences (orange). A few of these indicate separate introductions, but must cluster with older sequences in smaller groups or in the very large Danish group previously identified, indicating local transmission.



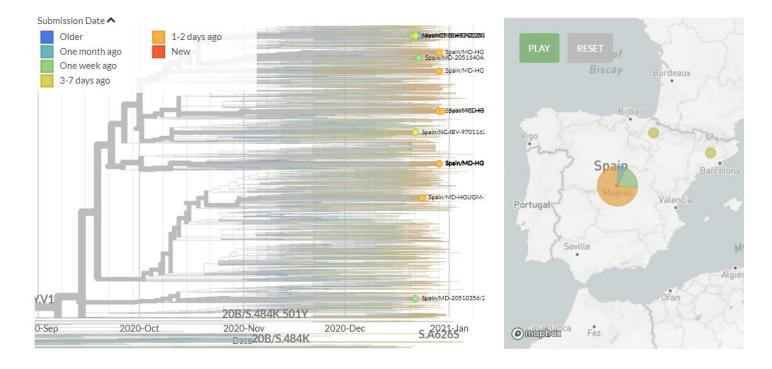


Norway has 14 new sequences (orange). Most indicate separate introductions, but a few are identical to or related to an older sequence, which may indicate local transmission.

9/18

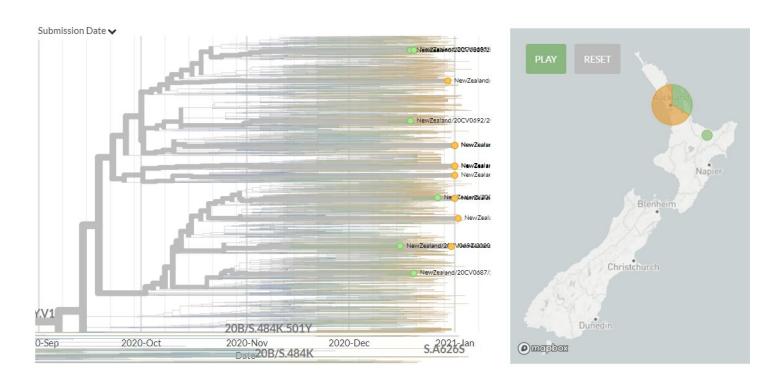


Spain has 11 new sequences (orange). All of these indicate separate introductions, though some new sequences link together to form tight clusters. This could indicate local transmission or a common source.

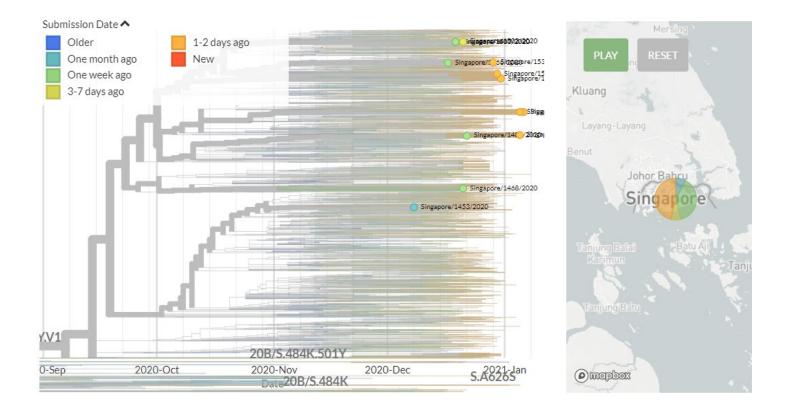


New Zealand has 10 new sequences (orange). All represent separate introductions, though some new sequences are linked together.

11/18

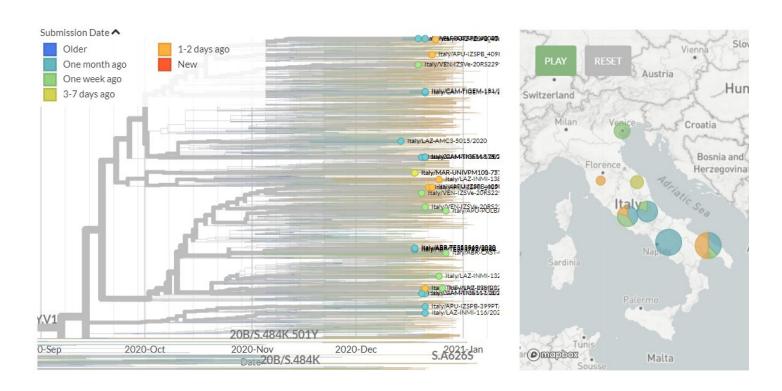


Singapore has 6 new sequences (orange). Though hard to see in zoomed-out view, most of these indicate separate introductions.

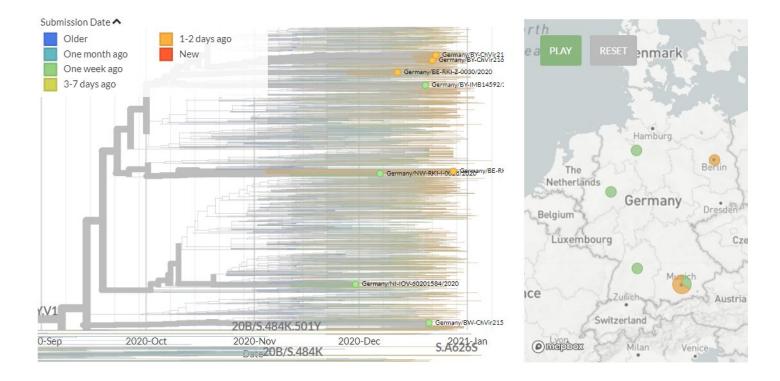


Italy has 6 new sequences (orange). It's a bit hard to see in the zoomed-out view, but none of these link directly with older samples, indicating separate introductions - though 2 new seqs link together.

13/18

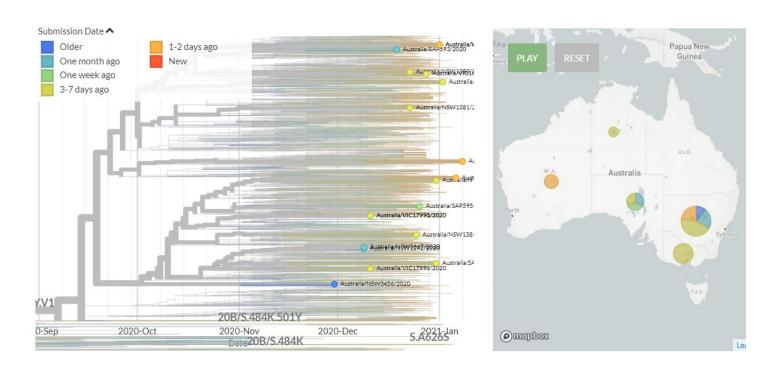


Germany has 4 new sequences (orange). Though hard to see in the zoomed-out view, these all represent separate introductions.



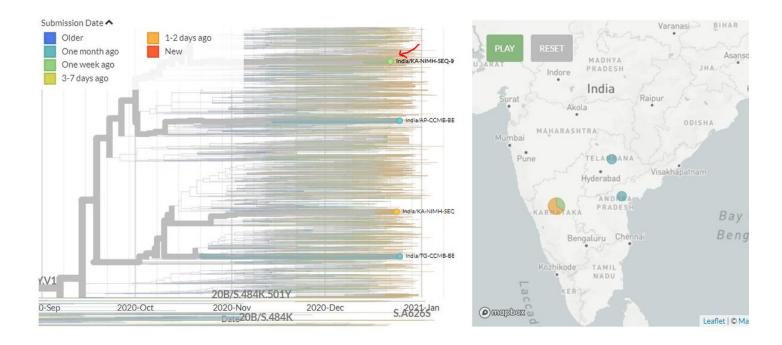
Australia also has 4 new sequences (orange), including the first from Western Australia. These indicate separate introductions, though 2 of the new sequences are identical (marked in red).

15/18



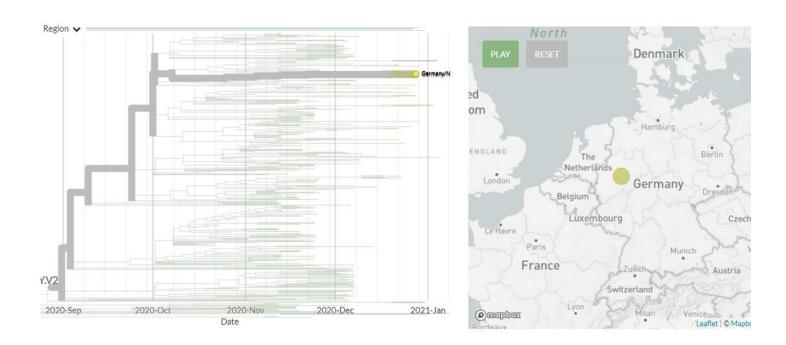
India has 2 new sequences (orange, one hidden behind the green - pic 1). One is a separate introduction, the other links with a previous sequence (pic 2).

Belgium has 1 new sequence, which links 1 mutation away from a previous sequence (pic 3).



There are 3 new non-South African sequences in 501Y.V2, from Germany for the first time. They are identical, which may indicate a common exposure.

17/18



The updated country plots will go up soon, and I'll add another thread later on S:E484 & the 'Ohio variants'.

18/18

The updated country plots are now up. As always, be careful interpreting plots as many countries are selectively sequencing S:N501 & S-drop outs (which often increases S:N439), so frequencies are often not representative!

19/18

https://t.co/c7wlQOufTQ

