

Update 9/24/2021

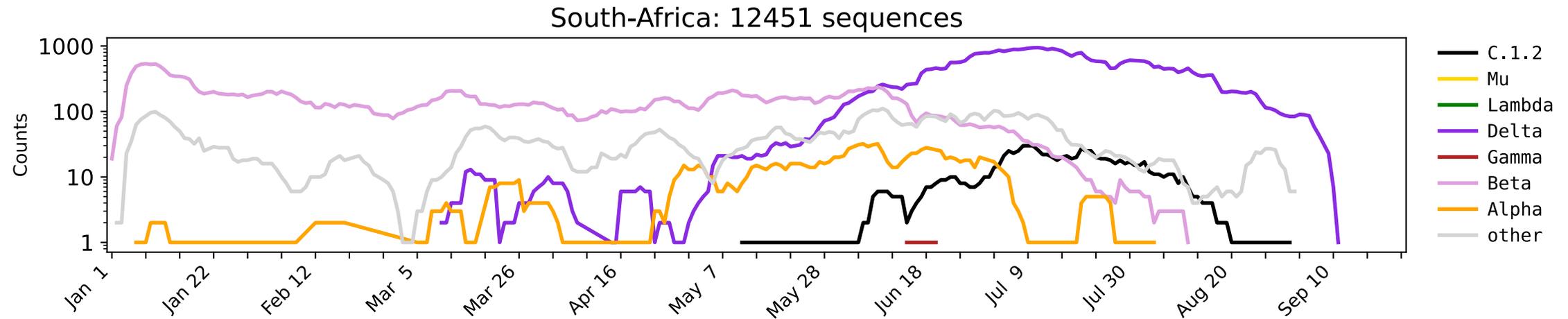
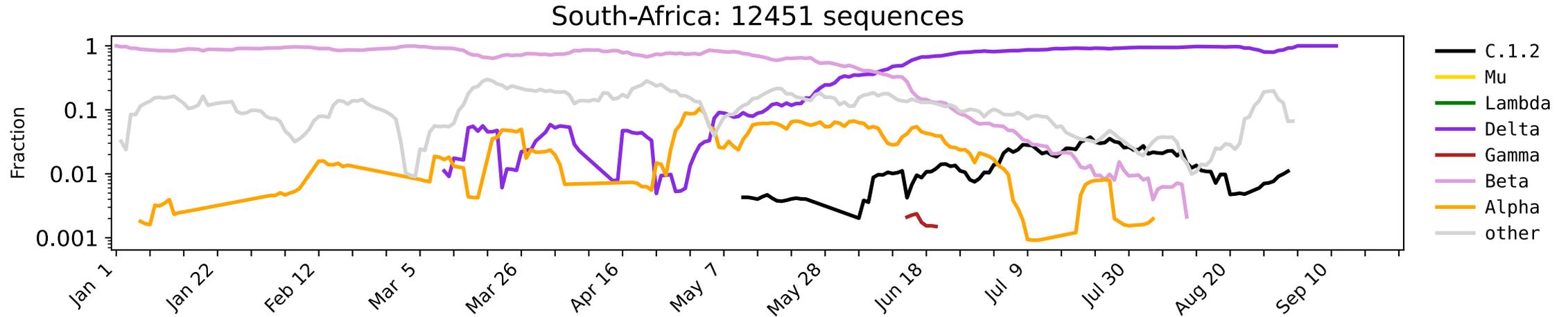
Variants we are closely following: C.1.2, Mu, Gamma Variants

Bette Korber and James Theiler

- 1. C.1.2:** This variant was increasingly sampled in South Africa in July, but has not been sampled through September, and seems to be in decline there. It currently not be expanding in other countries where it has been found.
- 2. Mu:** In the most recent sampling in GISAID, Delta variants have been increasing relative to Mu even in Chile and Columbia, where a strong Mu presence had been maintained through the summer. In the USA and Mexico Mu continues to decline.
- 3. Gamma:** Gamma variants with positive charge in the furin cleavage site gain in frequency relative to baseline Gamma in parts of S. America, in particular the added mutation P681H. There was a transient increase in frequency of Gamma relative to Delta in S. America in the late summer, based on the early September GISAID sample; we noted this 9/11/2021, with the caveat that it might be a sampling artifact due to small size. Indeed, continuing sampling through Sept suggests Delta has been increasing relative to Gamma in S. America, particularly in Brazil; Peru and Chili are still in flux.

All of these three should still be monitored, but are currently diminishing.

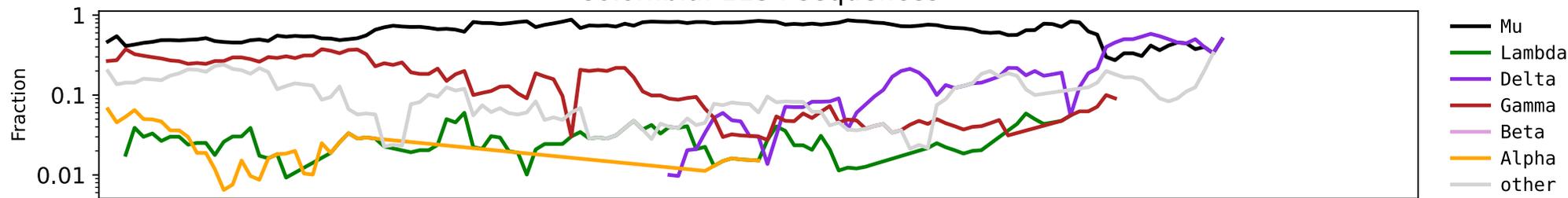
C.1.2: not recently sampled in South Africa – by Pango lineage name



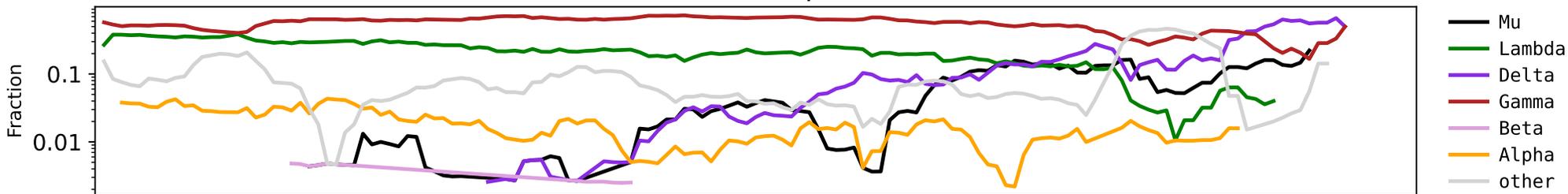
9/24/2021: Current count: 21 times outside of S. Africa, no increase in rare samples in other countries.
Found one 162 times inside South Africa

Countries that had high frequency of Mu (Columbia and Chile) are transitioning towards Delta, Mu is rare in USA and Mexico

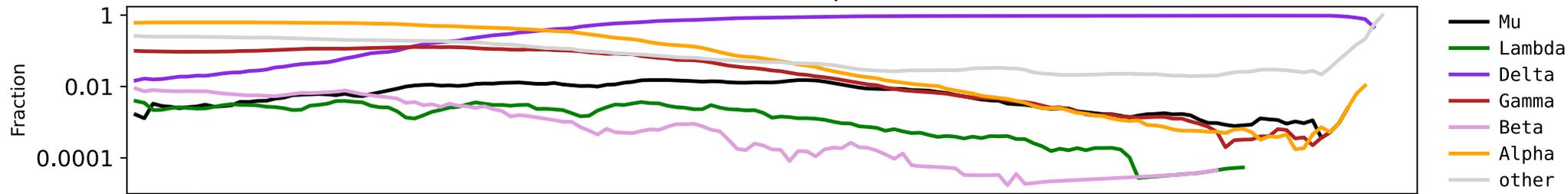
Colombia: 1134 sequences



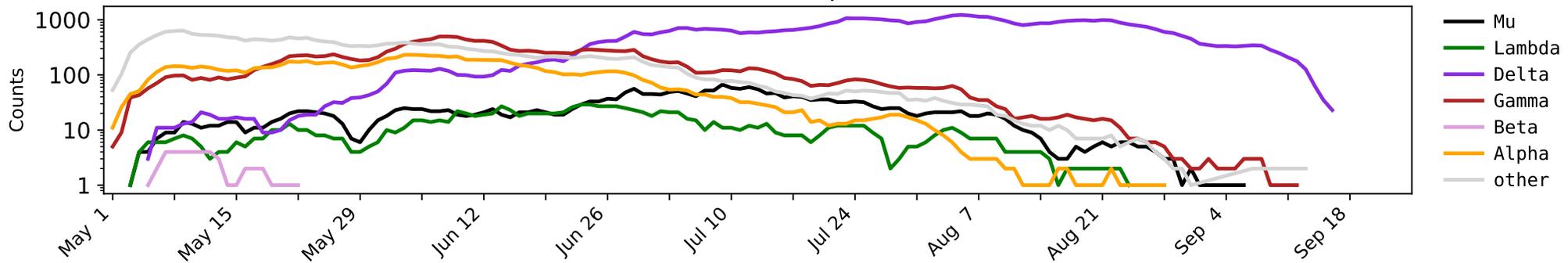
Chile: 5392 sequences



USA: 464296 sequences



Mexico: 16818 sequences



Plots based on Spike sequences,
not Pango lineages

Gamma Variants in
South America are
diminishing as Delta
increases, Brazil is
further along in this
progression, Chile
and Peru still in flux.

Sampling is still very
limited for
monitoring this
transition.

