2/14/2021 Non-matching variants between David Maxwell and Bert Maxwell, FTDNA matches:

Mr. Larry A Maxwell II	8775214, 9782193

Checking both David and Bert's Big Y Data files, you can search on a chromosome position number (if the SNP is unnamed) or on the SNP name. The two position numbers are 8775214 & 9782193:

682832_BigY_Data_20190817 **David Maxwell is positive for 8775214**

	A	B	C	D	E	F	G
1	Type	Position	SNPName	Derived	OnTree	Reference	Genotype
420754	Novel Variar	8775214				G	T

David has no result for 9782193

942876_BigY_Data_20210214 **Bert Maxwell is negative for 8775214:**

	A	B	C	D	E	F	G
1	Type	Position	SNPName	Derived	OnTree	Reference	Genotype
546383	Novel Variar	8775214				G	G

And positive for 9782193 (the reference or archetypal value is G and his value is A):

3902	Novel Variar	9782193				G	A

When I looked at each of their private variants, I noticed that David and Bert share the private variant 10093098, also known as SNP FT361807 (as found on ybrowse.org) which may create a new branch on Alex Williamson's Big Tree. I thought it would create one on the FTDNA tree, as FTDNA is the one who named the SNP—the prefix "FT" indicates that FTDNA named this SNP:

David Maxwell Private Variants

Position	Reference	Genotype
Position Search	Show All	Show All
10093098	C	T
3127073	A	T
8775214	G	T

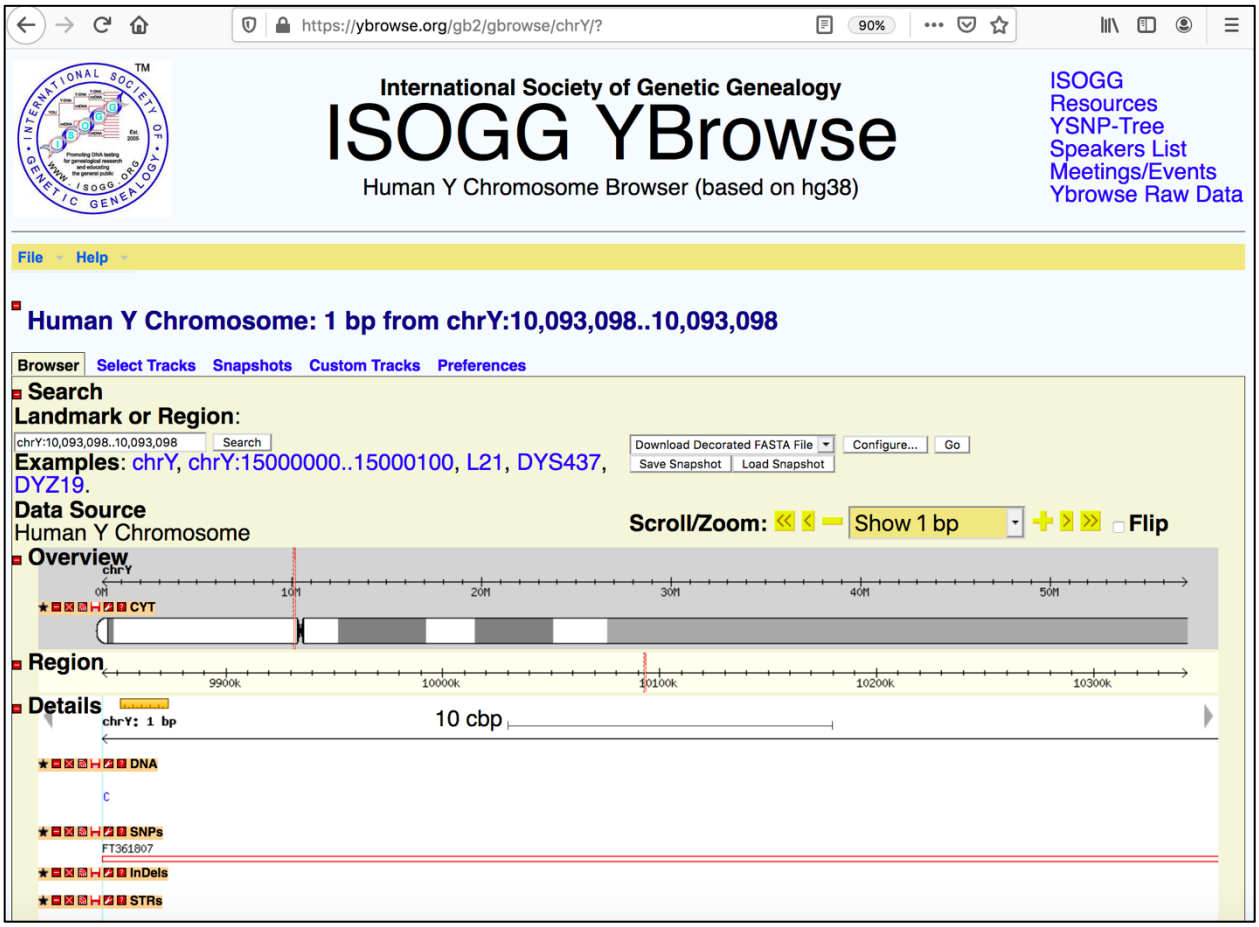
Bert Maxwell Private Variants

Named Variants | Private Variants | Matching

Position	Reference	Genotype
Position Search	Show All	Show All
10093098	C	T
9782193	G	A

They both share the private variant, Y chromosome position number 10093098, change from the ancestral, or reference value of C to the genotype, or mutation of T.

I typed the Y chromosome position number, 10093098, into the ybrowse.org search to see if that might be a named SNP and it was; the following came up: https://ybrowse.org/gb2/gbrowse/chrY/?



I clicked on the name of the SNP (see FT361807 in tiny letters/numbers near the bottom of the screen capture immediately above the red line) and the following came up:

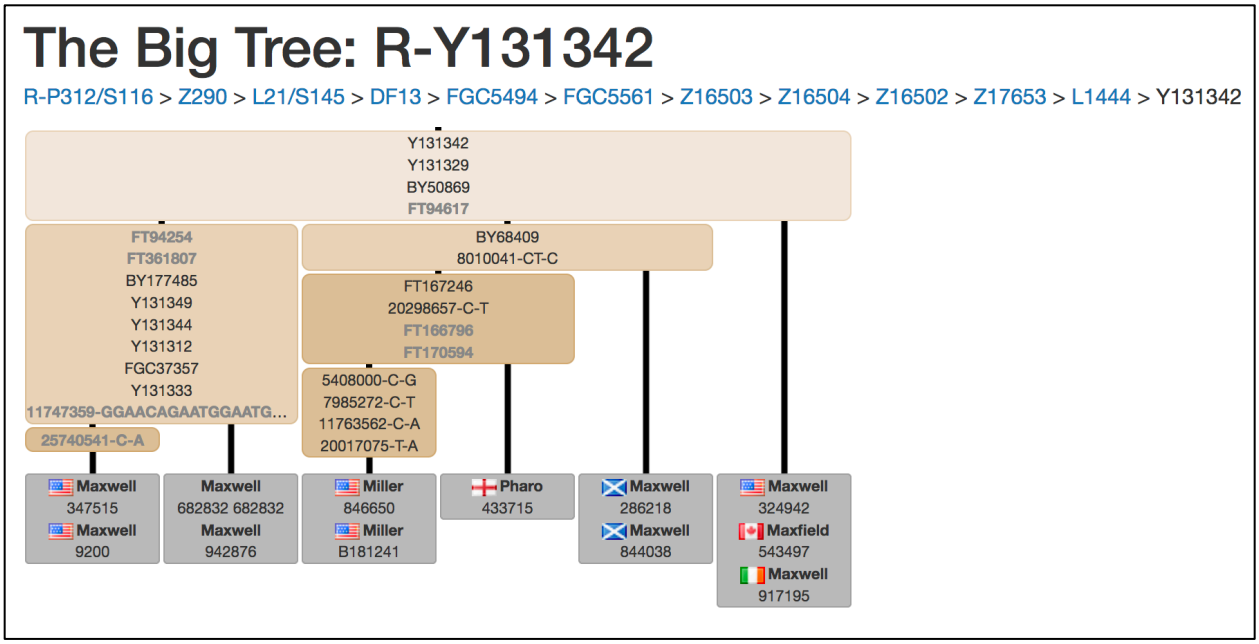
FT361807 Details

Name:	**FT361807**
Type:	snp
Source:	point
Position:	chrY:10093098..10093098 (+ strand)
Length:	1
allele_anc:	C
allele_der:	T
comment:	.
count_derived:	0
count_tested:	0
isogg_haplogroup:	unknown
load_id:	FT361807
mutation:	C to T
primer_f:	TBD
primer_r:	TBD
ref:	FTDNA (2020)
ycc_haplogroup:	unknown
yfull_node:	Not found on the YFull Ytree
primary_id:	1189626
gbrowse_dbid:	chrY:database

https://ybrowse.org/gb2/gbrowse_details/chrY?ref=chrY;start=10093098;end=10093098;name=FT361807;class=Sequence;feature_id=1189626;db_id=chrY%3Adatabase

Alex Williamson has placed David and Bert together (the complete analysis of Bert's kit is not finished yet and may take a few more days; anyone who has completed a Big Y can click on his name on the Big Tree and see the detailed analysis for your particular kit).

The branch that David and Burt is on is shown below, second from the far left hand side):



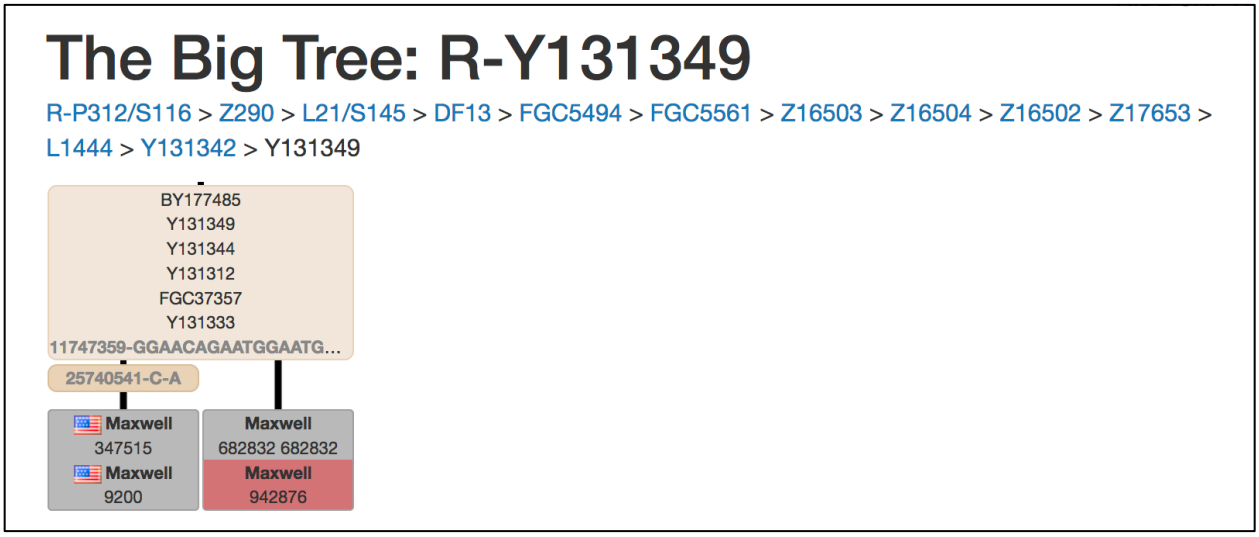
https://www.ytree.net/DisplayTree.php?blockID=3793&star=false

I was a bit surprised that FTDNA did not make a new branch as they are they are the ones who named that SNP in 2020. I checked YSEQ's "wish-a-SNP" list of the areas that YSEQ does not provide primers for: "sections of the Y chromosome [that] suffer from frequent recombination events and are therefore not useful for phylogenetic studies." (https://www.yseq.net/product_info.php?products_id=108)

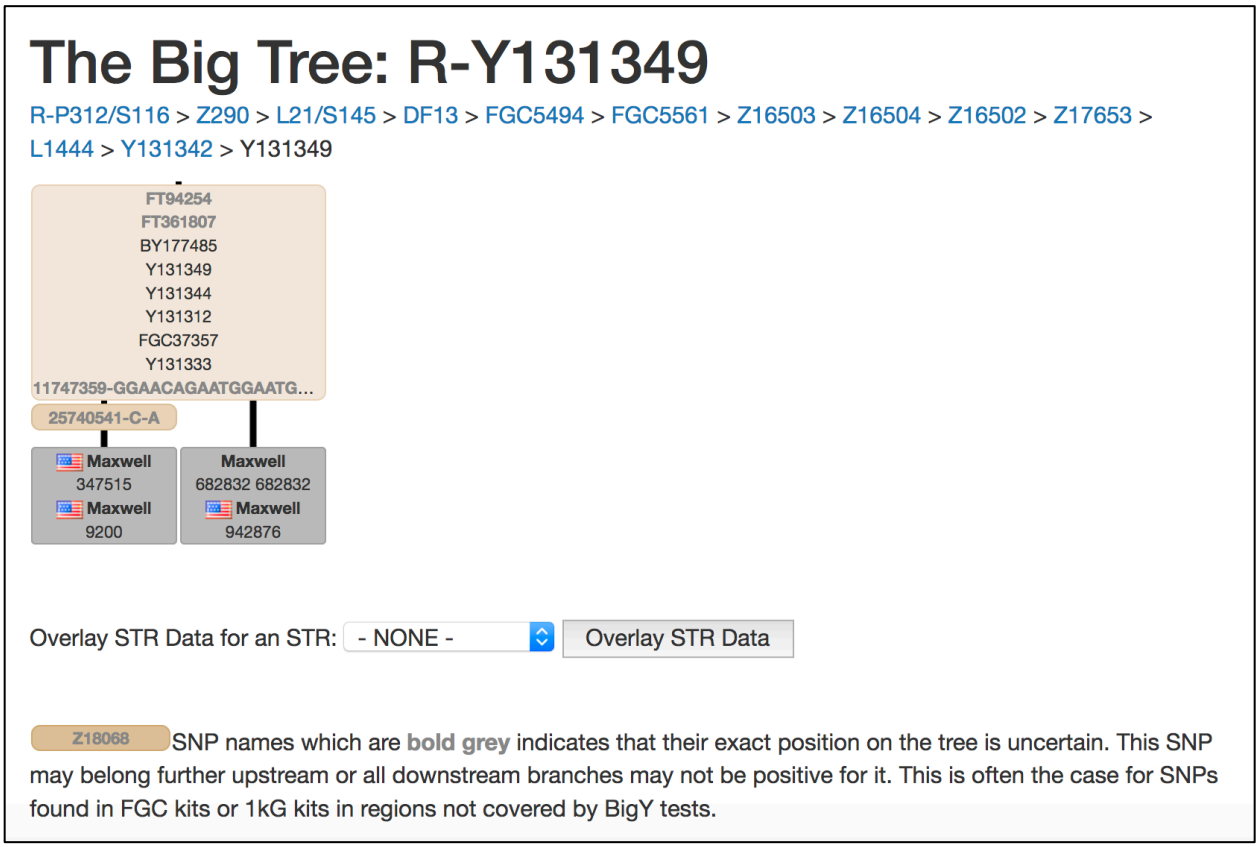
SNP FT361807 (10093098) is in one of these sections: "chrY:10072350..11686750 [are in the] synthetic assembled centromeric region [or] CEN" region. I had guessed that might have been why that SNP was not used to label the branch.

However, the actual answer is that the kits closest to David and Bert—kits 347515 and 9200—don't have any results for that SNP, which is one of the dilemmas in comparing the Big Y 500 tests to Big Y 700 tests. Alex Williamson explained that without knowing the status of that SNP in kits 347515 and 9200, the FT361807 SNP can only be placed as an equivalent to SNP Y131349 and the other SNPs in that block (tan block above kits 347515, 9200, 682832 and 942876). Perhaps YSEQ or FTDNA might be persuaded to make a primer for SNP FT361807 so that we could test kits 347515 and 9200 to see if they had this mutation or not.

Narrowing in on this smaller section of Alex Williamson's Big Tree, you can see the speed at which he completed this analysis. He received Bert's kit yesterday. The screen capture below shows where Bert's in-progress placement was when I saw it at 12:30 pm (the red background indicates that the placement is in-progress:

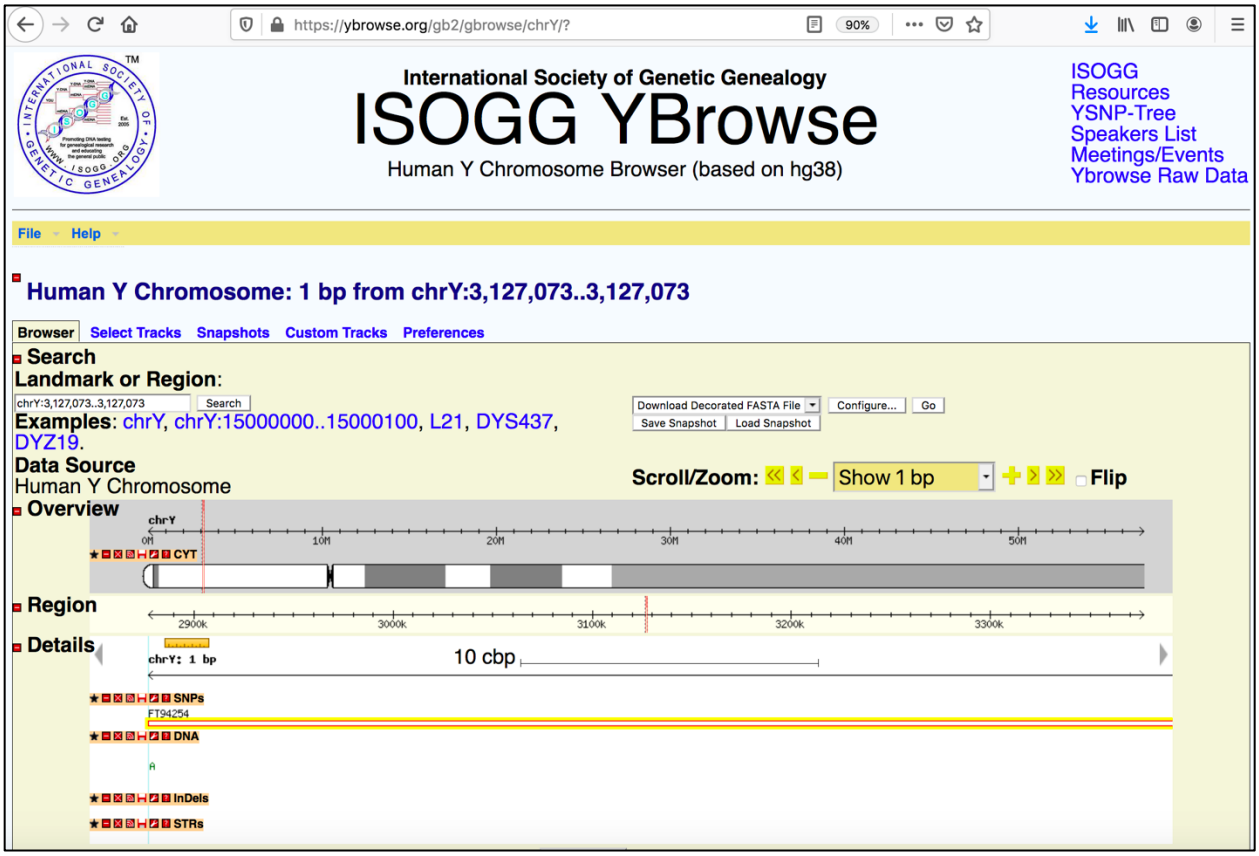


An hour later, the section looks like this:



SNP FT94254 (one I had not noticed) and SNP FT361807 (the one I've been writing about) have been added to the top of the tan block.

I looked up SNP FT94254 on ybrowse.org:

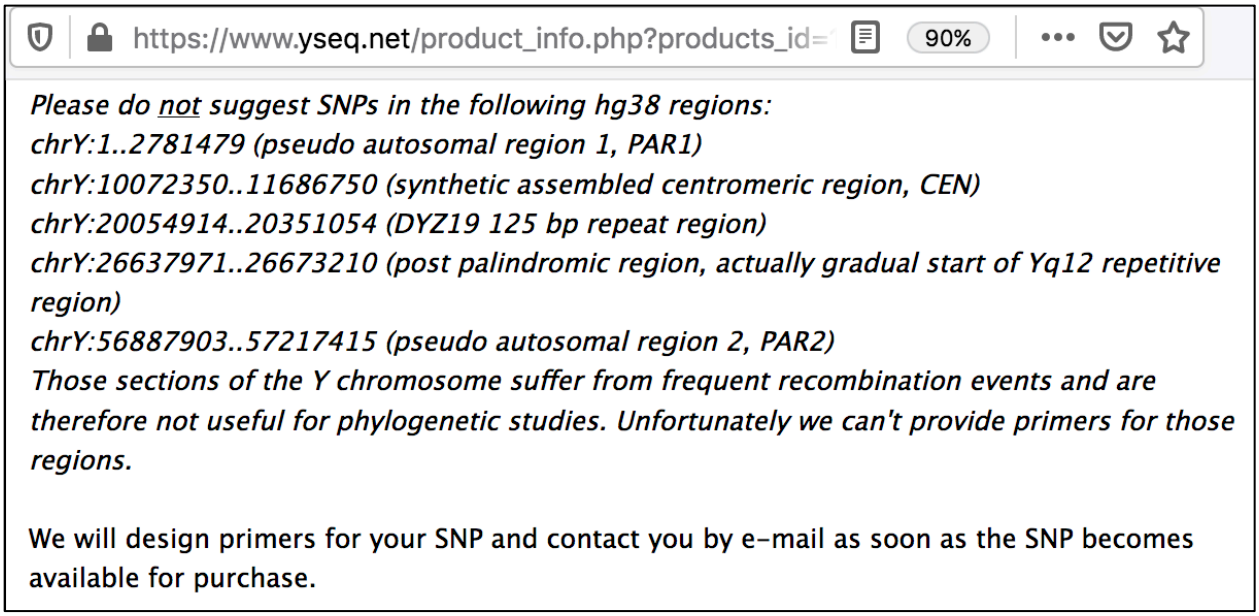


FT94254 Details

Name:	**FT94254**
Type:	snp
Source:	point
Position:	chrY:3127073..3127073 (+ strand)
Length:	1
allele_anc:	A
allele_der:	T
comment:	.
count_derived:	0
count_tested:	0
isogg_haplogroup:	unknown
load_id:	FT94254
mutation:	A to T
primer_f:	TBD
primer_r:	TBD
ref:	FTDNA (2019)
ycc_haplogroup:	unknown
yfull_node:	Not found on the YFull Ytree
primary_id:	1242760
gbrowse_dbid:	chrY:database

```
>FT94254 class=Sequence position=chrY:3127073..3127073 (+ strand)
A
```

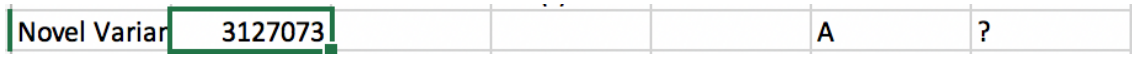
FT94254 (3127073) is not on YSEQs list of primers they do not make and therefore should be fine to request a primer for:



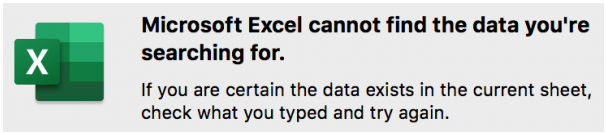
Checking the Big Y Data files, David is positive for the FT94254 (3127073) mutation (meaning there is a change from A to T. The FTDNA website is having scheduled maintenance, and once it is up and running again, Bert can check on his Y DNA results and type in 3127073 to see if he can see from the chromosome viewer whether he also has the A to T mutation that David has. Kits 347515 and 9200 were not tested for it; hence it is not in their Big Y data files when viewed in Microsoft Excel.

David

Bert



347515 and 9200



If anyone has done a Big Y and want to compare your results with another kit, click on your name on Alex Williamson's Big Tree https://www.ytree.net/DisplayTree.php?blockID=266 and you will find the detailed analysis on your kit. Click on any other kit and you can see their analysis too. This is a level of analysis that is beyond my abilities, but it is useful to be able to see, and invaluable for someone adept at Y DNA analysis.