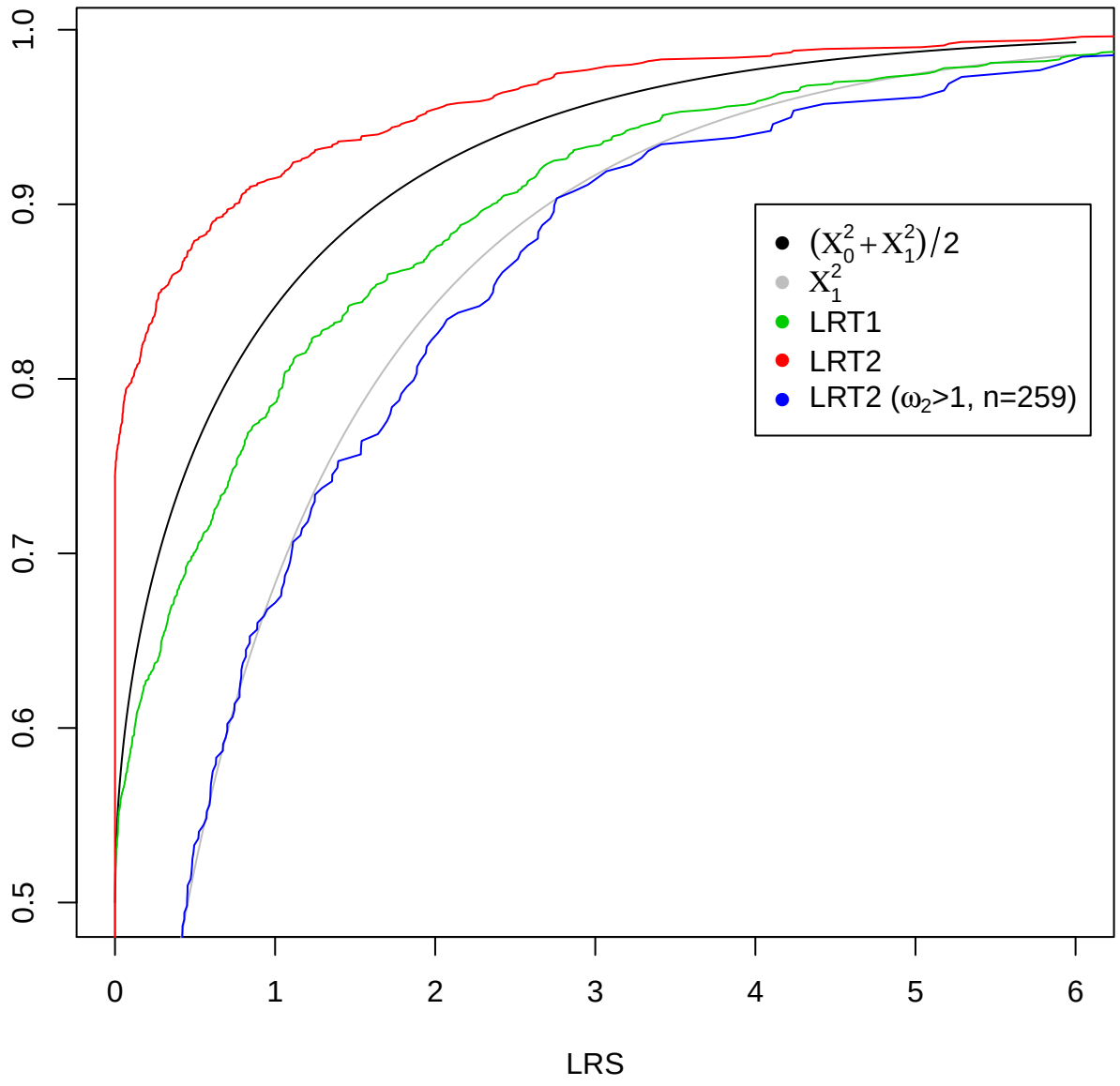
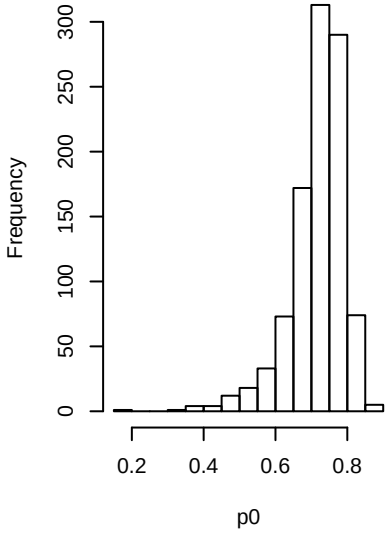
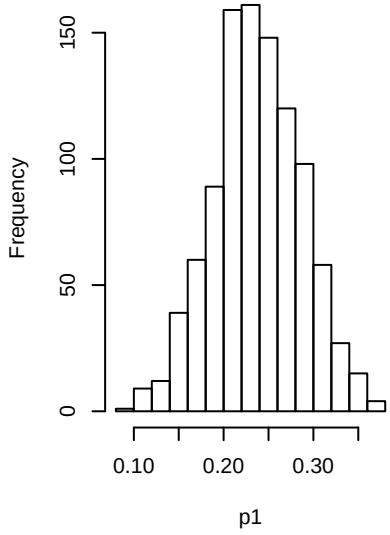
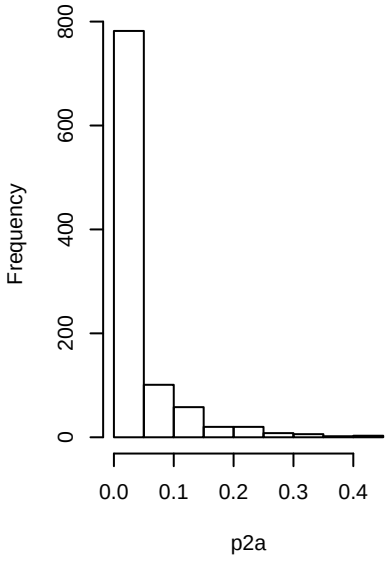
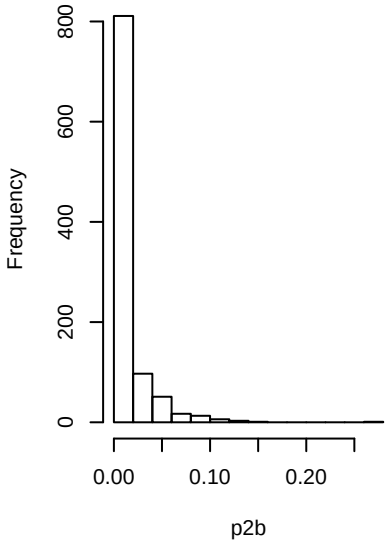
- Simulation under the null for branch-site model A
- 500 codons
- Symmetric, 8-taxon tree with one foreground branch
  The total tree length is 3.
  tree: (((A#1:0.214286,B:0.214286):0.214286,(C:0.214286,D:0.214286):0.214286):0.214286,
  ((E:0.214286,F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);
- $\kappa = 2.0$ $p_0 = 0.75$ $p_1 = 0.25$ $\omega_0 = 0.3$



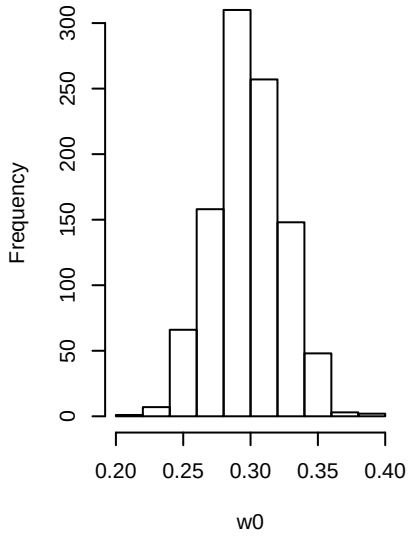

Frequency
0
50
100
150
200
250
300
0.2
0.4
0.6
0.8
p0

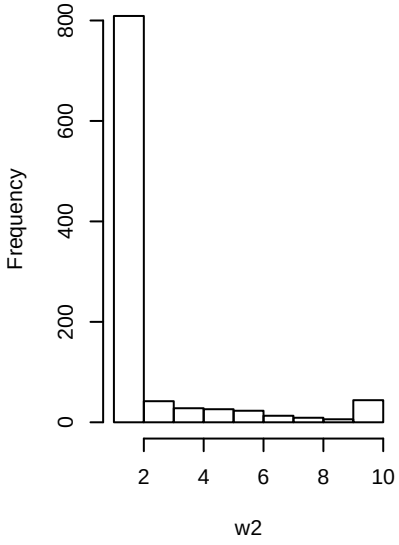

Frequency
0
50
100
150
0.10
0.20
0.30
p1


Frequency
0
200
400
600
800
0.0
0.1
0.2
0.3
0.4
p2a


Frequency
0
200
400
600
800
0.00
0.10
0.20
p2b

39 $\omega_2$>= 10


Frequency
0
50
100
150
200
250
300
0.20
0.25
0.30
0.35
0.40
w0


Frequency
0
200
400
600
800
2
4
6
8
10
w2

It looks like trouble when p0+p1 is close to 1.

```
> subset(params,w2>=10)
      p0       p1       p2a      p2b       w0         w2
0.66806  0.32417  0.00523  0.00254  0.29262   11.40713
0.74277  0.25290  0.00323  0.00110  0.29100   63.02795
0.83833  0.15722  0.00375  0.00070  0.34804  663.19371
0.71539  0.27553  0.00656  0.00253  0.28696   45.42719
0.76112  0.23217  0.00514  0.00157  0.29497   28.47234
0.78927  0.20013  0.00845  0.00214  0.32839  998.99965
0.72141  0.27009  0.00619  0.00232  0.28625   90.59841
0.75694  0.23114  0.00913  0.00279  0.32758  159.83998
0.69529  0.28448  0.01436  0.00587  0.30877   11.14156
0.75828  0.23864  0.00235  0.00074  0.32390  999.00000
0.77731  0.21691  0.00452  0.00126  0.30700   42.87754
0.68340  0.30325  0.00925  0.00410  0.27158   12.87590
0.68478  0.30585  0.00647  0.00289  0.27623   80.35478
0.76661  0.22596  0.00574  0.00169  0.27745  998.99969
0.67546  0.31922  0.00361  0.00171  0.27283   11.40887
0.79381  0.19562  0.00848  0.00209  0.31121   14.57206
0.71717  0.27323  0.00695  0.00265  0.24705   15.84686
0.77950  0.21497  0.00433  0.00119  0.33214  692.41967
0.77098  0.21896  0.00783  0.00222  0.30197   13.50125
0.79101  0.20304  0.00474  0.00122  0.29936  672.10568
0.77265  0.20377  0.01866  0.00492  0.31806   10.93935
0.71447  0.27844  0.00510  0.00199  0.29404   14.42786
0.69474  0.29347  0.00829  0.00350  0.27703   18.76982
0.74259  0.23647  0.01589  0.00506  0.30013   64.98670
0.73578  0.25558  0.00641  0.00223  0.29561   36.50829
0.66396  0.32715  0.00595  0.00293  0.28102   17.73306
0.80797  0.17788  0.01160  0.00255  0.31680   11.42403
0.83595  0.15437  0.00817  0.00151  0.31905   15.49704
0.77730  0.21161  0.00872  0.00237  0.29618   42.27299
0.73124  0.26019  0.00632  0.00225  0.31894  998.99969
0.71541  0.28216  0.00174  0.00069  0.29553   52.92020
0.67430  0.31836  0.00498  0.00235  0.25440   21.75579
0.81092  0.18177  0.00597  0.00134  0.32588   13.58634
0.72490  0.26573  0.00686  0.00251  0.28425   25.39505
0.72122  0.27454  0.00307  0.00117  0.25432   35.11208
0.71240  0.26782  0.01438  0.00541  0.29446   12.35679
0.69327  0.29980  0.00484  0.00209  0.29772   14.21954
0.69064  0.30322  0.00426  0.00187  0.25633   31.60063
0.71727  0.27603  0.00484  0.00186  0.25009   10.37322
```