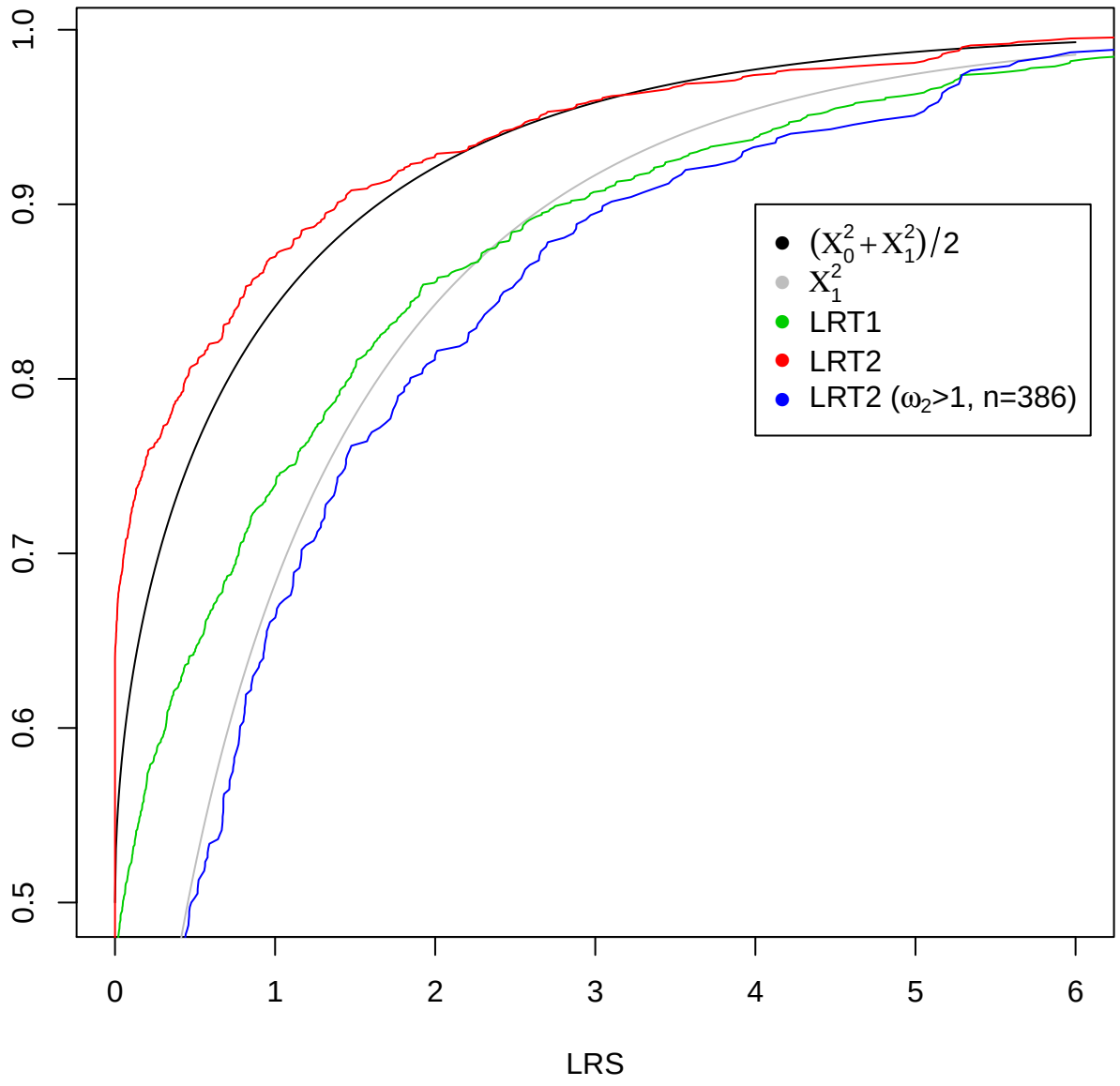
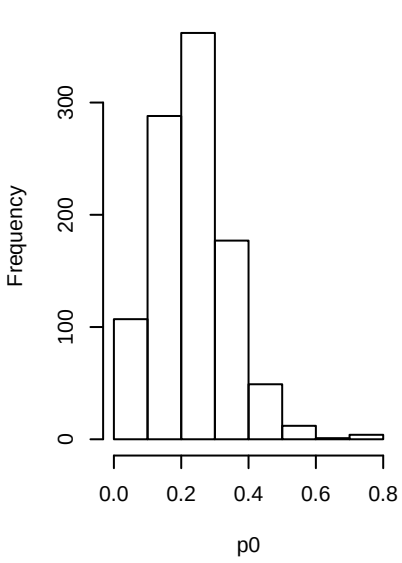
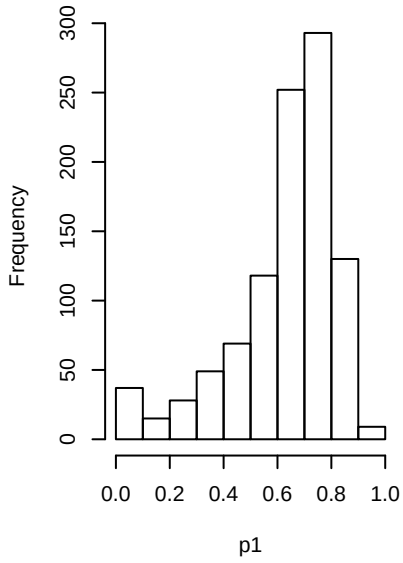
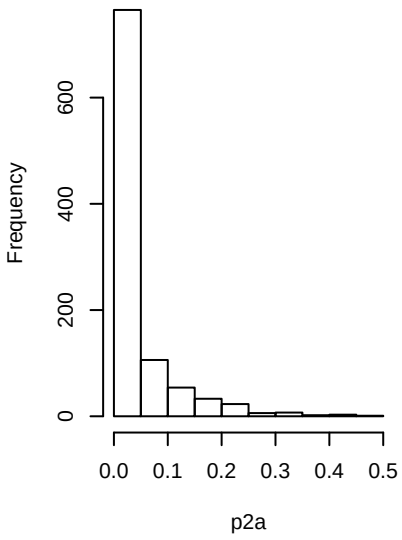
- Simulation under the null for branch-site model A
- 500 codons
- Symmetric, 8-taxon tree with one foreground branch
  The total tree length is 3.
  tree: (((A#1:0.214286,B:0.214286):0.214286,(C:0.214286,D:0.214286):0.214286):0.214286,
  ((E:0.214286,F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);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

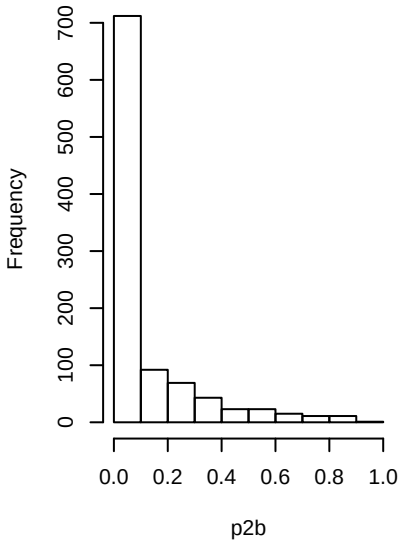


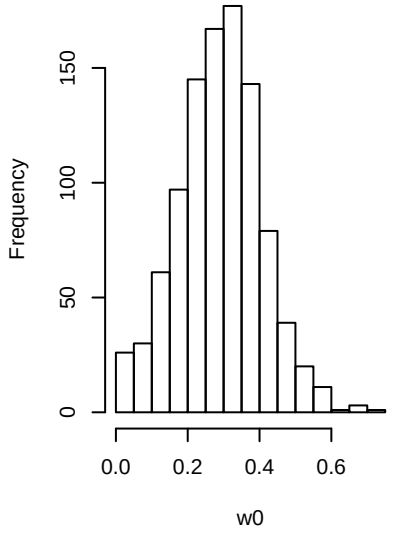

Frequency
0
100
200
300
0.0
0.2
0.4
0.6
0.8
p0

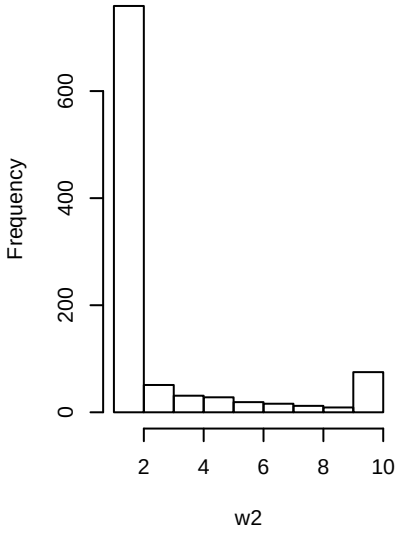

Frequency
0
50
100
150
200
250
300
0.0
0.2
0.4
0.6
0.8
1.0
p1


Frequency
0
200
400
600
0.0
0.1
0.2
0.3
0.4
0.5
p2a

71 ω_2>= 10


Frequency
0
100
200
300
400
500
600
700
0.0
0.2
0.4
0.6
0.8
1.0
p2b


Frequency
0
50
100
150
0.0
0.2
0.4
0.6
w0


Frequency
0
200
400
600
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
0.30188 0.67760 0.00632 0.01420 0.46859  10.62116
0.37278 0.62306 0.00156 0.00260 0.44714 999.00000
0.38821 0.59210 0.00780 0.01190 0.34194  16.60354
0.41563 0.58058 0.00158 0.00221 0.46488 236.76372
0.38393 0.61041 0.00219 0.00348 0.35656  20.29449
0.36738 0.61907 0.00504 0.00850 0.37513  21.58949
0.13047 0.86586 0.00048 0.00319 0.22469 219.01515
0.32454 0.64823 0.00908 0.01814 0.27204  13.01056
0.18594 0.80811 0.00111 0.00484 0.28810  78.65652
0.14672 0.84390 0.00139 0.00799 0.13070  11.49255
0.31513 0.66886 0.00513 0.01088 0.27741  30.29583
0.24096 0.74203 0.00417 0.01284 0.26435  23.57573
0.26834 0.72205 0.00260 0.00701 0.27391  13.83916
0.25406 0.73507 0.00279 0.00808 0.20973  20.50823
0.37375 0.62153 0.00177 0.00295 0.33532  61.58306
0.36541 0.59700 0.01427 0.02331 0.39585  14.15037
0.27526 0.70584 0.00530 0.01360 0.32472  10.77420
0.30846 0.67768 0.00433 0.00952 0.35905  56.08216
0.25306 0.73607 0.00278 0.00809 0.31422  37.55759
0.24633 0.74584 0.00194 0.00588 0.30052  25.85882
0.24333 0.74774 0.00219 0.00674 0.20232  33.82114
0.34305 0.63044 0.00934 0.01717 0.31715  10.23738
0.28058 0.68818 0.00905 0.02219 0.35514  11.46421
0.22017 0.75562 0.00546 0.01875 0.23744  18.16154
0.28770 0.70126 0.00321 0.00783 0.38601  12.27975
0.25386 0.71679 0.00768 0.02167 0.27836  18.31089
0.20782 0.76447 0.00592 0.02178 0.27185  13.15104
0.14241 0.85525 0.00033 0.00201 0.37414  70.86753
0.44006 0.55136 0.00381 0.00477 0.48435  21.31864
0.28494 0.68491 0.00886 0.02129 0.31633  10.65598
0.11588 0.88114 0.00035 0.00264 0.11360  75.97987
0.27684 0.68236 0.01178 0.02902 0.30070  12.92072
0.21162 0.78253 0.00124 0.00460 0.22388  18.46036
0.19693 0.79436 0.00173 0.00698 0.35078 192.63631
0.40212 0.59341 0.00181 0.00267 0.47176 154.04901
0.31422 0.66222 0.00758 0.01597 0.30030  10.71660
0.34923 0.61038 0.01470 0.02569 0.34761  12.07670
0.16065 0.83698 0.00038 0.00199 0.16903 451.23035
0.23688 0.75424 0.00212 0.00676 0.26141 825.53471
0.21306 0.77496 0.00258 0.00940 0.28159  34.40875
0.10238 0.86511 0.00344 0.02907 0.00826  12.12208
0.24895 0.73858 0.00314 0.00932 0.36574  10.75480
0.38911 0.60782 0.00120 0.00187 0.35189 998.99984
0.27666 0.71906 0.00119 0.00309 0.25530  72.81209
0.11242 0.87843 0.00104 0.00811 0.15136  28.43205
0.49737 0.49656 0.00304 0.00303 0.47392 163.36893
0.28073 0.71455 0.00133 0.00339 0.32784  18.68247
0.47414 0.48277 0.02135 0.02174 0.40810  10.92064
```

0.17703	0.81366	0.00166	0.00765	0.19901	85.29903
0.14842	0.83514	0.00248	0.01396	0.20457	11.58724
0.33897	0.65709	0.00134	0.00260	0.49515	201.78540
0.20803	0.78479	0.00151	0.00568	0.23370	281.35902
0.40562	0.57721	0.00709	0.01009	0.34503	12.19623
0.27465	0.72535	0.00000	0.00000	0.24939	12.16055
0.26627	0.70962	0.00658	0.01753	0.32286	11.34912
0.29264	0.68938	0.00536	0.01262	0.29295	21.76654
0.22659	0.75241	0.00486	0.01614	0.23891	16.08245
0.28095	0.70422	0.00423	0.01060	0.29899	998.99954
0.32114	0.65382	0.00825	0.01680	0.29870	10.85800
0.31289	0.68315	0.00124	0.00272	0.38380	999.00000
0.29391	0.68983	0.00486	0.01141	0.35738	11.68232
0.18194	0.80759	0.00193	0.00855	0.21818	999.00000
0.17003	0.81626	0.00236	0.01135	0.17543	21.76413
0.17959	0.80666	0.00251	0.01125	0.31701	63.57962
0.70148	0.29107	0.00527	0.00219	0.65788	73.63285
0.23047	0.73004	0.00948	0.03001	0.19761	10.22197
0.40316	0.58799	0.00360	0.00525	0.52798	11.98952
0.34624	0.62330	0.01088	0.01958	0.40512	11.65468
0.27624	0.71848	0.00147	0.00381	0.32517	998.99995
0.27403	0.70663	0.00540	0.01393	0.25074	15.19904
0.23363	0.76099	0.00126	0.00411	0.43845	48.96210