

Simulations2

Arthur Tena

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Scénario 1 : T ~ C	1
tau = 0	1
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Soit $U \sim \mathcal{U}([0, 1])$, on simulera nos lois tte comme ceci :

$$X = \frac{-\log(1 - U)}{\lambda (e^{\beta Z})^{1/k}}$$

Scénario 1 : T ~ C

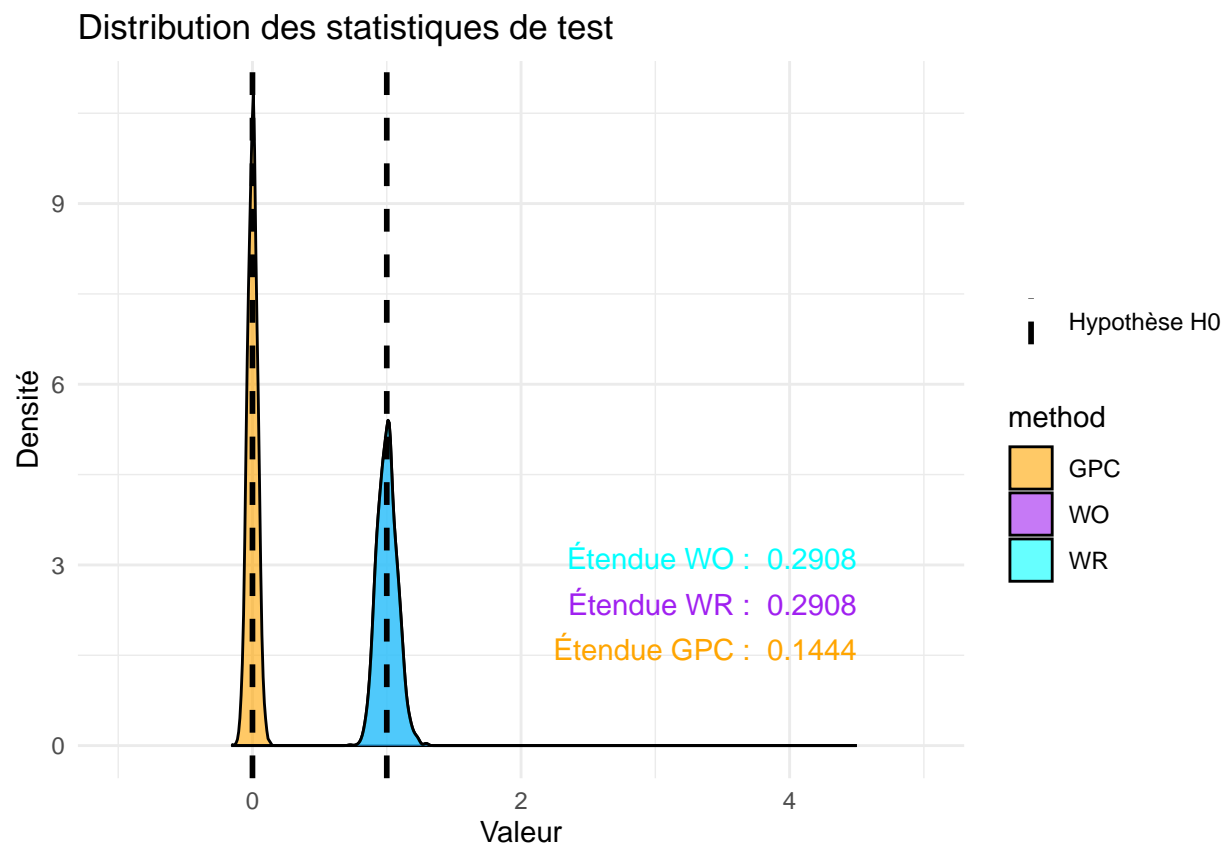
Paramètres :

- tte :
 $\lambda = 0.5, k = 0.5, \beta = 0, \mathcal{W}(1, 2)$
- Continue :
 $\mathcal{N}_T(3, 2) ; \mathcal{N}_C(3, 2)$
- Binaire :
 $\mathcal{B}_T(0.5) ; \mathcal{B}_C(0.5)$

tau = 0

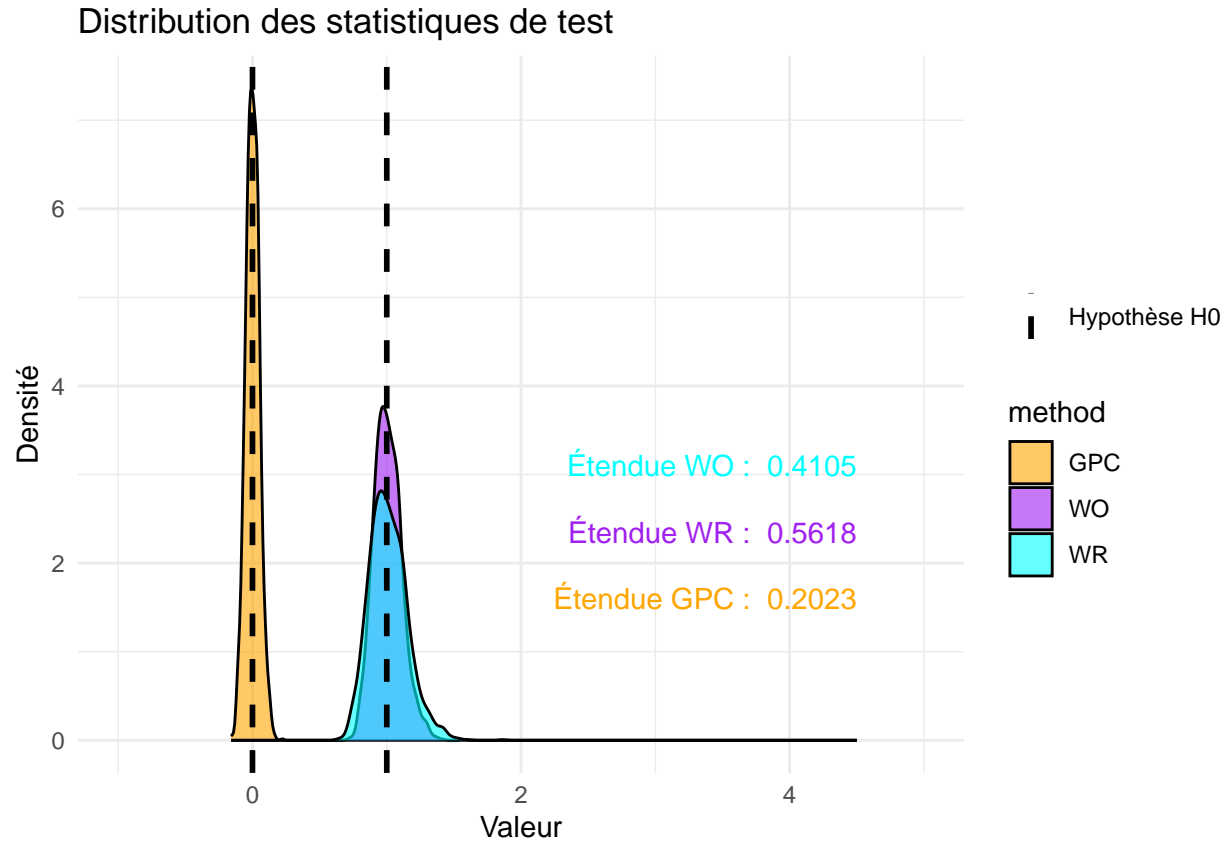
```
## $Count
##      Win Loose Tie      WR      WO      GPC
## endpoint1 2446  2446 5108 1.00000 1.00000 0.00000
## endpoint2 1278  1276 2554 1.00157 1.00078 0.00039
## endpoint3 1278  1275   0 1.00235 1.00235 0.00118
## overall   5002  4997   0 1.00100 1.00100 0.00050
```

```
##
## $value_tte_cont_C
##      Y_1_C (tte) Y_3_C (continue)
## min      0.0050355      0.038966
## median    0.6977995      3.003709
## max      5.8626785      8.483481
##
## $value_tte_cont_T
##      Y_1_T (tte) Y_3_T (Continue)
## min      0.0049400      0.037754
## median    0.6944358      3.013819
## max      5.8321740      8.494100
##
## $value_binary
##      C      T
## 1 0 99.8925 100.1075
## 2 1 99.8260 100.1740
##
## $censure_rate_T
## [1] 0.50076
##
## $censure_rate_C
## [1] 0.5000975
```



$\tau = 2$

```
## $Count
##      Win Loose Tie      WR      WD      GPC
## endpoint1  330   332 9338 0.99398 0.99960 -0.00020
## endpoint2 2336  2333 4670 1.00129 1.00064  0.00032
## endpoint3 1040  1030 2600 1.00971 1.00429  0.00214
## overall   3705  3695 2600 1.00271 1.00200  0.00100
##
## $value_tte_cont_C
##      Y_1_C (tte) Y_3_C (continue)
## min      0.0050355      0.038966
## median    0.6977995      3.003709
## max      5.8626785      8.483481
##
## $value_tte_cont_T
##      Y_1_T (tte) Y_3_T (Continue)
## min      0.0049400      0.037754
## median    0.6944358      3.013819
## max      5.8321740      8.494100
##
## $value_binary
##      C      T
## 1 0 99.8925 100.1075
## 2 1 99.8260 100.1740
##
## $censure_rate_T
## [1] 0.50076
##
## $censure_rate_C
## [1] 0.5000975
```



Scénario 2 : T»C

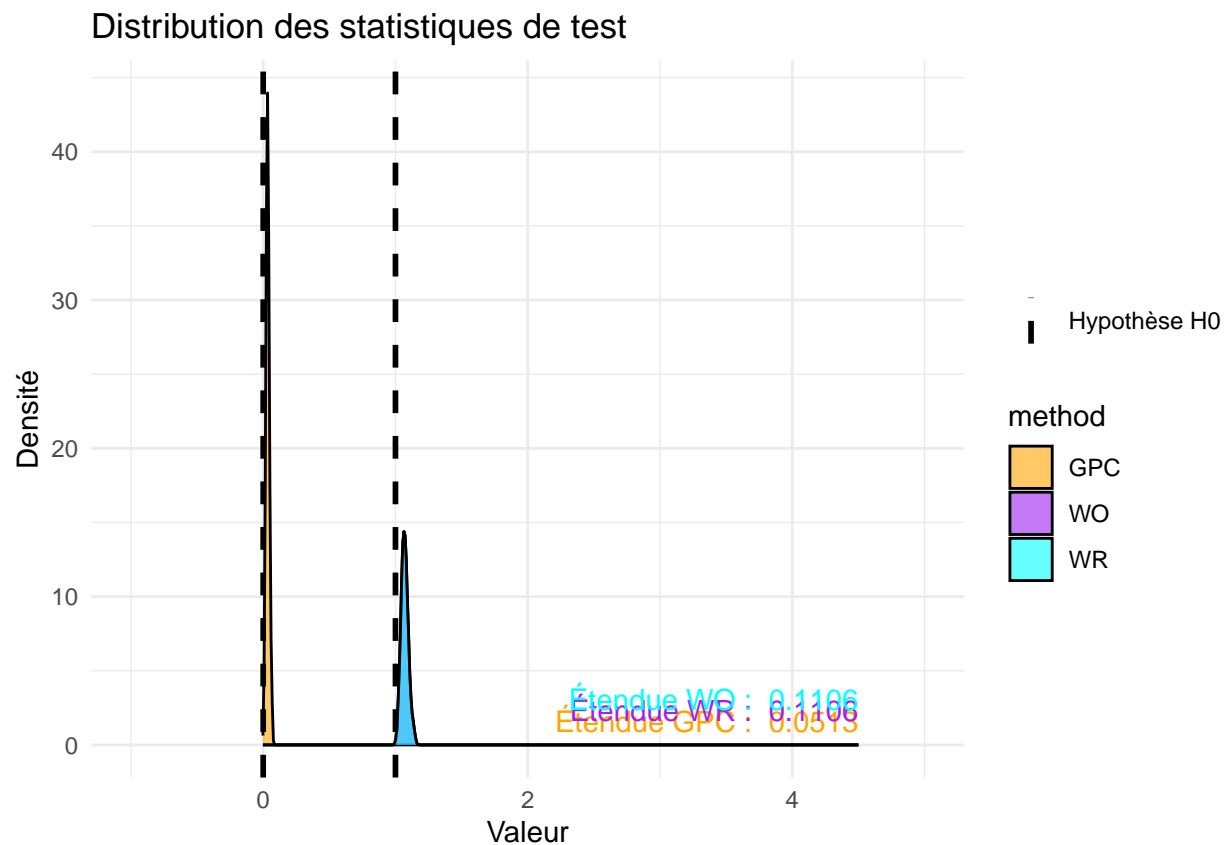
Paramètres :

- tte :
 $\lambda = 0.1, k = 5, \beta = 5, \mathcal{W}(1, 1)$
- Continue :
 $\mathcal{N}_T(3, 2) ; \mathcal{N}_C(2, 2)$
- Binaire :
 $\mathcal{B}_T(0.65) ; \mathcal{B}_C(0.3)$

tau = 0

```
## $Count
##           Win Loose Tie      WR      WO      GPC
## endpoint1 4638  4636 726 1.00043 1.00040 0.00020
## endpoint2  330   76 319 4.34211 2.07856 0.35034
## endpoint3  201  119   0 1.68908 1.68908 0.25625
## overall   5169 4831   0 1.06996 1.06996 0.03380
##
## $value_tte_cont_C
```

```
##      Y_1_C (tte) Y_3_C (continue)
## min      0.014511      0.021259
## median    2.033888      2.099138
## max      17.254918      7.483628
##
## $value_tte_cont_T
##      Y_1_T (tte) Y_3_T (Continue)
## min      0.013773      0.037754
## median    1.938065      3.013819
## max      16.393799      8.494100
##
## $value_binary
##      C      T
## 1 0 139.8835  60.1165
## 2 1  70.0675 129.9325
##
## $censure_rate_T
## [1] 0.0763
##
## $censure_rate_C
## [1] 0.02975
```



$\tau = 2$

```
## $Count
```

```

##           Win Loose Tie           WR           WD           GPC
## endpoint1 1927  2192 5881 0.87911 0.94837 -0.02650
## endpoint2 2673   619 2589 4.31826 2.07343  0.34926
## endpoint3  806   324 1458 2.48765 1.45774  0.18624
## overall   5407  3135 1458 1.72472 1.58799  0.22720
##
## $value_tte_cont_C
##           Y_1_C (tte) Y_3_C (continue)
## min           0.014511           0.021259
## median        2.033888           2.099138
## max          17.254918           7.483628
##
## $value_tte_cont_T
##           Y_1_T (tte) Y_3_T (Continue)
## min           0.012084           0.037754
## median        1.709661           3.013819
## max          14.377486           8.494100
##
## $value_binary
##           C           T
## 1 0 139.8835  60.1165
## 2 1  70.0675 129.9325
##
## $censure_rate_T
## [1] 0.181855
##
## $censure_rate_C
## [1] 0.02975

```

