





```
MD results:
flux1: flux through: -100000001.18000001
flux3: effective flux through:
                      1.179999999999999
flux(ns)^1), error, relative error (%)
     0.000000
              0.000000
                          0.000000
2
     0.000000
                0.000000
                          0.000000
3
     0.000000
                0.000000
                          0.000000
           10000
MDcycles:
NSA, NSB, NOSA, NOSB
                  0
                                          0
                          0
                                  0
                   0
                           0
NCROSS
                             0
NEFFCROSS
             0
                     0
NEFFCROSS/NCROSS
                                           NaN
reactive flux correction: c1=NOSA/(MDcycles-NSB)
c1= 0.0000000000000000
flux1*c1,flux2*c1,flux3*c1:
                          0.000000
     0.000000 0.000000
flux1: one effective crossing per
                                 Infinity timesteps
flux2: one effective crossing per
                                 Infinity timesteps
flux3: one effective crossing per
                                 Infinity timesteps
(1-p)/p
                                     Infinity
(1-p)/p
                                     Infinity
(1-p)/p
                                     Infinity
```

transmission results: !! units might need a check!!!!!!!!!

(unnormalized) kappa (A/ns), error, relative error (%)

0.000000 0.000000 0.000000

(unnoormalized) kappaTST (A/ns), error, relative error (%)

0.000000 0.000000 0.000000

exact TST result 363.77042704416266

reactive flux result rate

two-point method:

```
TIS results
 ensemble
                    1
IL, IM, IR, Idetect
                    0.0000
                                         0.7000
                               0.0000
                                                    0.0300
pcross, err, rel. e(%)
                             0.272229
                                             0.080463
                                                             29.556972
 Lacc, Ltr, Ltr/Lacc
                            73.059601
                                             38.032216
                                                              0.520564
 TIScycles, Totsim
                           3104
                                  118051.99999999999
 accRate, cor 0.70844072164948457
                                           101.40097510664563
 teff
        10313.194940617313
 ensemble
                    2
IL, IM, IR, Idetect
                    0.0000
                               0.0300
                                         0.7000
                                                    0.0700
pcross, err, rel. e(%)
                             0.272229
                                             0.089037
                                                             32.706721
 Lacc, Ltr, Ltr/Lacc
                           200.729381
                                            53.581186
                                                              0.266932
 TIScycles, Totsim
                           3104
                                  166316.00000000000
 accRate, cor 0.52673969072164950
                                           124.16416120562262
 teff
        17791.314497568852
 ensemble
                    3
IL, IM, IR, Idetect
                    0.0000
                                         0.7000
                               0.0700
                                                    0.1300
pcross, err, rel. e(%)
                             0.116302
                                             0.060501
                                                             52.020746
 Lacc, Ltr, Ltr/Lacc
                           350.666881
                                            81.937178
                                                              0.233661
 TIScycles, Totsim
                           3104
                                  254333.00000000000
 accRate, cor 0.44104381443298968
                                           110.51375336468278
 teff
        68826.529802570789
 ensemble
IL, IM, IR, Idetect
                    0.0000
                               0.1300
                                         0.7000
                                                    0.3100
pcross,err,rel. e(%)
                             0.018686
                                             0.009221
                                                             49.350316
                                            111.574420
 Lacc, Ltr, Ltr/Lacc
                           527.573454
                                                              0.211486
 TIScycles, Totsim
                           3104
                                  346327.00000000000
 accRate, cor 0.34826030927835050
                                           14.389965492558082
        84346.338260326389
 teff
 ensemble
                    5
IL, IM, IR, Idetect
                    0.0000
                               0.3100
                                         0.7000
                                                   0.3400
pcross,err,rel. e(%)
                             0.048647
                                             0.008708
                                                             17.899740
 Lacc, Ltr, Ltr/Lacc
                         1649.226482
                                           210.472938
                                                              0.127619
 TIScycles, Totsim
                           3104
                                  653308.00000000000
 accRate, cor 0.28060567010309279
                                           5.0838029119104711
        20932.032769020414
 teff
 ensemble
                    6
IL, IM, IR, Idetect
                    0.0000
                               0.3400
                                         0.7000
                                                    0.7000
                                             0.000019
pcross, err, rel. e(%)
                             0.003222
                                                              0.580467
 Lacc, Ltr, Ltr/Lacc
                          2048.837629
                                           305.448776
                                                              0.149084
 TIScycles, Totsim
                          3104
                                  948112.9999999988
 accRate, cor 0.52641752577319589
                                           3.3792158294022959E-004
        31.945858678719095
 teff
```

additional PPS 000/001 results:

T0,err,rel.e(%)	4415.170829	673.916241	15.263650
T1,err,rel.e(%)	71.059601	7.240358	10.189134
T . TTO T . /T	0507 507000	0 574460	

LtrT0, Ltr/Lacc 2537.527806 0.574469 LtrT1, Ltr/Lacc 38.032216 0.520564 cyclesT0, Totsim 3003 7620196.0000000000 cyclesT1, Totsim 3104 118051.99999999999

accRateT0, cor 0.84082584082584078 11.718092692677027 accRateT1, cor 0.70844072164948457 11.249513712169289

teffT0 177534.58274593906 teffT1 1225.5975917066194 Combining all results:

flux= 218.95207974446259 +- 15.183272668301559 %
Pcross= 2.5240344903356297E-008 +- 86.056339557159546 %
rate= 5.5264260100574079E-006 +- 87.385498493154657 %

-----

flux:sim.time, teff 7620196.000000000 175669.72633970561
Pcross:sim.time, teff 2486449.000000000 1841387.9391267688
Rate:sim.time, teff 10106645.00000000 7717661.8721091188

Optimeze Pcross teff: 879922.12138274824 Optimeze rate teff: 1841914.1182033566

- 1 1.0336330336330337
- 2 1.0336330336330337
- 3 1.0336330336330337
- 4 1.0336330336330337
- 5 1.0336330336330337
- 6 1.0336330336330337

ratio of optimal NCYCLES flux: 8.9262440856943979 TIS:

- 1 144.30324011935008
- 2 134.53113473008170
- 3 173.03264277466937
- 4 140.66938349109810
- 5 37.148436935446412
- 6 1.00000000000000000