# SO11HosotaniDummyCase Failed-Global-Constr

# September 11, 2019

Statistics for SO11HosotaniDummyCase attributes. The following is for points that Failed-Global-Constr the constraints:

The following are the statistics for  ${\bf Param}$  :

### k(GeV):

- The average value for k(GeV) is : 116922.33406432599
- Standard deviation for k(GeV) is : 56825.905093406844
- Minimum value for k(GeV) is : 23002.74017850886
- Maximum value for k(GeV) is : 568436.9874120001

#### $z_L$ :

- $\bullet$  The average value for  $z_L$  is : 35.49828775122954
- $\bullet$  Standard deviation for  $z_L$  is : 3.360765883208013
- Minimum value for  $z_L$  is : 20.069850350315654
- $\bullet$  Maximum value for  $z_L$  is : 51.226730749863854

#### $c_0$ :

- The average value for  $c_0$  is : 0.3105614502219211
- Standard deviation for  $c_0$  is : 0.2355604115759787
- Minimum value for  $c_0$  is : 0.0014
- Maximum value for  $c_0$  is : 1.3829290111473

### $c_1$ :

- $\bullet$  The average value for  $c_1$  is : 0.13049340823307823
- Standard deviation for  $c_1$  is : 0.10610640934577786

- Minimum value for  $c_1$  is : 1.9287109375015765e-05
- Maximum value for  $c_1$  is: 0.6183685816320001

 $c_2$ :

- The average value for  $c_2$  is : -0.7207518116862363
- Standard deviation for  $c_2$  is : 0.19559361176705095
- Minimum value for  $c_2$  is: -1.2471465930399999
- Maximum value for  $c_2$  is : -0.12421837759999999

 $c'_{0}:$ 

- The average value for  $c'_0$  is : 0.566348569008465
- Standard deviation for  $c'_0$  is : 0.22500433291837513
- $\bullet$  Minimum value for  $c_0'$  is : 0.062000923215999953
- $\bullet$  Maximum value for  $c_0'$  is : 3.4910387209040272

 $\mu_1$ :

- The average value for  $\mu_1$  is: 13.900686149899272
- Standard deviation for  $\mu_1$  is : 3.496978396366205
- Minimum value for  $\mu_1$  is : 6.841778826343697
- $\bullet$  Maximum value for  $\mu_1$  is : 45.608172958521905

 $\mu_{11}$  :

- The average value for  $\mu_{11}$  is : 0.2649519755801136
- Standard deviation for  $\mu_{11}$  is : 0.22355617260988356
- Minimum value for  $\mu_{11}$  is : 0.0006094063999999913
- Maximum value for  $\mu_{11}$  is : 2.23977

 $\mu'_{11}$ :

- $\bullet$  The average value for  $\mu'_{11}$  is : 0.31326089064129875
- Standard deviation for  $\mu'_{11}$  is : 0.2692551823645437
- $\bullet$  Minimum value for  $\mu'_{11}$  is : 0.0005893571040000156
- Maximum value for  $\mu'_{11}$  is : 1.8800560000000002

 $\tilde{\mu_2}$ :

- $\bullet$  The average value for  $\tilde{\mu_2}$  is : 1.426302666690016
- • Minimum value for  $\tilde{\mu_2}$  is : 0.0045119999999998495
- Maximum value for  $\tilde{\mu_2}$  is : 7.690852906865141

### The following are the statistics for **Attr**:

### $m_H(GeV)$ :

- The average value for  $m_H(GeV)$  is: 197.40866878067146
- Standard deviation for  $m_H(GeV)$  is : 326.789390429196
- Minimum value for  $m_H(GeV)$  is : 8.823135854901555
- Maximum value for  $m_H(GeV)$  is : 4610.913997282132

# $m_{\psi_D}(GeV)$ :

- The average value for  $m_{\psi_D}(GeV)$  is : 2889.2254000211137
- Standard deviation for  $m_{\psi_D}(GeV)$  is : 1969.0394840943143
- Minimum value for  $m_{\psi_D}(GeV)$  is : 539.2456808043827
- Maximum value for  $m_{\psi_D}(GeV)$  is : 32477.56040605542

### $m_{\tau}(GeV)$ :

- The average value for  $m_{\tau}(GeV)$  is : 31.416813436203753
- Standard deviation for  $m_{\tau}(GeV)$  is : 310.20851970907273
- Minimum value for  $m_{\tau}(GeV)$  is : 6.016735820959428e-08
- Maximum value for  $m_{\tau}(GeV)$  is : 7345.817334940683

# $m_{\tau}^{(1)}(GeV)$ :

- The average value for  $m_{\tau}^{(1)}(GeV)$  is: 1269.0294753455457
- Standard deviation for  $m_{\tau}^{(1)}(GeV)$  is : 2137.5766225507095
- Minimum value for  $m_{\tau}^{(1)}(GeV)$  is: 0.39981220509084303
- Maximum value for  $m_{\tau}^{(1)}(GeV)$  is : 26727.41983603022  $m_{\nu}(eV)$  :
  - The average value for  $m_{\nu}(eV)$  is : 35.261761477490936

- Standard deviation for  $m_{\nu}(eV)$  is : 564.7530598439251
- Minimum value for  $m_{\nu}(eV)$  is : 4.2801281026368174e-17
- $\bullet$  Maximum value for  $m_{\nu}(eV)$  is : 23208.84250684303  $m_b(GeV)$  :
  - The average value for  $m_b(GeV)$  is : 44.43774590243604
  - Standard deviation for  $m_b(GeV)$  is : 425.25419299636906
  - Minimum value for  $m_b(GeV)$  is: 2.799992332437624e-07
- $\bullet$  Maximum value for  $m_b(GeV)$  is : 8986.845743286196  $m_b^{(1)}(GeV):$ 
  - The average value for  $m_h^{(1)}(GeV)$  is : 3548.385200560615
  - Standard deviation for  $m_h^{(1)}(GeV)$  is : 1973.0753905262698
  - Minimum value for  $m_h^{(1)}(GeV)$  is: 79.42419523485768
- $\bullet$  Maximum value for  $m_b^{(1)}(GeV)$  is : 19681.236900376316  $m_t(GeV)$  :
  - The average value for  $m_t(GeV)$  is : 401.07650113224213
  - Standard deviation for  $m_t(GeV)$  is: 1484.2448816720098
  - Minimum value for  $m_t(GeV)$  is: 8.883477218365486e-06
- Maximum value for  $m_t(GeV)$  is : 27948.000246701922  $\langle \theta_H \rangle (rads)$  :
  - The average value for  $\langle \theta_H \rangle (rads)$  is : 0.38532274349622
  - Standard deviation for  $\langle \theta_H \rangle (rads)$  is : 0.821830540759536
  - Minimum value for  $\langle \theta_H \rangle (rads)$  is : 7.849498828704782e-10
- Maximum value for  $\langle \theta_H \rangle (rads)$  is : 3.141592653524363  $m_Z(GeV)$  :
  - The average value for  $m_Z(GeV)$  is : 112.68079579543335
  - Standard deviation for  $m_Z(GeV)$  is : 495.7785625178413
  - Minimum value for  $m_Z(GeV)$  is : 8.389991418610911e-08
  - Maximum value for  $m_Z(GeV)$  is : 33173.26121266854

## $m_{W^{\pm}}(GeV)$ :

- The average value for  $m_{W^{\pm}}(GeV)$  is : 98.79991997239496
- Standard deviation for  $m_{W^{\pm}}(GeV)$  is : 434.7047955688726
- Minimum value for  $m_{W^{\pm}}(GeV)$  is: 7.356448584483929e-08
- Maximum value for  $m_{W^{\pm}}(GeV)$  is : 29086.72706736274

### $m_{Z'}(GeV)$ :

- The average value for  $m_{Z'}(GeV)$  is : 12217.54323642451
- Standard deviation for  $m_{Z'}(GeV)$  is : 5961.055306087
- Minimum value for  $m_{Z'}(GeV)$  is : 2406.1721144785306
- Maximum value for  $m_{Z'}(GeV)$  is : 55776.075175680104

### T:

- The average value for T is : 0.0
- Standard deviation for T is : 0.0
- Minimum value for T is : 0
- Maximum value for T is : 0

### The following are the statistics for **Calc**:

# $\chi_G^2$ :

- $\bullet$  The average value for  $\chi^2_G$  is : 363647987.52343106
- $\bullet$  Standard deviation for  $\chi^2_G$  is : 4887568277.5192
- $\bullet$  Minimum value for  $\chi^2_G$  is : 11.246562163997389
- $\bullet$  Maximum value for  $\chi^2_G$  is : 171018837861.34985