# SO11HosotaniDummyCase Failed-Global-Constr

# September 5, 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 : 116897.26125610093
- Standard deviation for k(GeV) is : 56753.66577322478
- 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 : 35.51158350417501
- $\bullet$  Standard deviation for  $z_L$  is : 3.353918807299803
- $\bullet$  Minimum value for  $z_L$  is : 20.069850350315654
- Maximum value for  $z_L$  is : 51.226730749863854

### $c_0$ :

- $\bullet$  The average value for  $c_0$  is : 0.31087783893179227
- $\bullet$  Standard deviation for  $c_0$  is : 0.23639113188912023
- 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 : 0.1307403227400963
- Standard deviation for  $c_1$  is: 0.10618800928929559

- 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 : -0.7214982890629599
- Standard deviation for  $c_2$  is: 0.19574939461347296
- 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 : 0.5666514700302607
- Standard deviation for  $c'_0$  is : 0.22584778677532832
- $\bullet$  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: 13.888735291347261
- Standard deviation for  $\mu_1$  is : 3.500201755726813
- 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 : 0.26519463245451474
- Standard deviation for  $\mu_{11}$  is : 0.22433254933879357
- 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 : 0.31394200750708656
- Standard deviation for  $\mu'_{11}$  is : 0.2699873323427414
- $\bullet$  Minimum value for  $\mu'_{11}$  is : 0.0005893571040000156
- Maximum value for  $\mu'_{11}$  is : 1.8800560000000002

 $\tilde{\mu_2}$ :

- The average value for  $\tilde{\mu_2}$  is : 1.4223915407014283
- Standard deviation for  $\tilde{\mu_2}$  is : 0.9552462024015388
- • 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: 197.99580066390504
- Standard deviation for  $m_H(GeV)$  is : 328.07437698665655
- Minimum value for  $m_H(GeV)$  is : 8.823135854901555
- Maximum value for  $m_H(GeV)$  is : 4610.913997282132

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

- $\bullet$  The average value for  $m_{\psi_D}(GeV)$  is : 2890.295640939804
- Standard deviation for  $m_{\psi_D}(GeV)$  is : 1974.7385809123414
- 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 : 31.662172738164287
- Standard deviation for  $m_{\tau}(GeV)$  is : 311.47744607293913
- 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 : 1268.77011678956
- Standard deviation for  $m_{\tau}^{(1)}(GeV)$  is : 2146.069634724397
- 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 : 35.552836109947066

- Standard deviation for  $m_{\nu}(eV)$  is : 567.0755515499432
- 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: 44.771049016877924
  - Standard deviation for  $m_b(GeV)$  is : 426.99401201186606
  - 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  $m_b^{(1)}(GeV)$  is: 3545.32146820829
  - Standard deviation for  $m_b^{(1)}(GeV)$  is: 1974.5367074235264
  - 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 : 402.94976693740654
  - Standard deviation for  $m_t(GeV)$  is: 1490.2290973524666
  - 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 : 0.3874396638797592
  - Standard deviation for  $\langle \theta_H \rangle (rads)$  is : 0.8248729667963653
  - 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: 112.85736088360093
  - Standard deviation for  $m_Z(GeV)$  is : 497.8215473290166
  - 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 : 98.95473443263843
- Standard deviation for  $m_{W^{\pm}}(GeV)$  is : 436.49611000203805
- 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 : 12211.042794945288
- Standard deviation for  $m_{Z'}(GeV)$  is : 5960.648115731036
- 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 ${\bf Calc}$ :

# $\chi_G^2$ :

- $\bullet$  The average value for  $\chi^2_G$  is : 366656842.30700296
- $\bullet$  Standard deviation for  $\chi^2_G$  is : 4907634309.267094
- $\bullet$  Minimum value for  $\chi^2_G$  is : 18.644696044894935
- $\bullet$  Maximum value for  $\chi^2_G$  is : 171018837861.34985