# SO11HosotaniDummyCase Passed-Global-Constr

## January 10, 2020

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

The following are the statistics for **Param**:

### k(GeV):

- The average value for k(GeV) is : 106447.88401431666
- Standard deviation for k(GeV) is : 28287.701034672595
- Minimum value for k(GeV) is : 70585.77667404075
- Maximum value for k(GeV) is : 151335.5565540908

#### $z_L$ :

- $\bullet$  The average value for  $z_L$  is : 31.103442573094064
- $\bullet$  Standard deviation for  $z_L$  is : 3.373295193756028
- $\bullet$  Minimum value for  $z_L$  is : 27.190748623708306
- $\bullet$  Maximum value for  $z_L$  is : 37.91522304445407

## $c_0$ :

- $\bullet$  The average value for  $c_0$  is : 0.22005115076152892
- $\bullet$  Standard deviation for  $c_0$  is : 0.10497640030711194
- Minimum value for  $c_0$  is : 0.10509088
- Maximum value for  $c_0$  is: 0.361

### $c_1$ :

- $\bullet$  The average value for  $c_1$  is : 0.11398343403614894
- Standard deviation for  $c_1$  is : 0.03259549382087628

- Minimum value for  $c_1$  is : 0.026803799390436617
- Maximum value for  $c_1$  is : 0.13364866504201686

#### $c_2$ :

- The average value for  $c_2$  is : -0.5453478554382223
- Standard deviation for  $c_2$  is: 0.10640993806273609
- Minimum value for  $c_2$  is : -0.6342196800000001
- Maximum value for  $c_2$  is : -0.385170518272

#### $c'_0$ :

- $\bullet$  The average value for  $c_0'$  is : 0.5005309050359972
- Standard deviation for  $c'_0$  is : 0.04223416794342355
- Minimum value for  $c'_0$  is : 0.45441993876039605
- Maximum value for  $c'_0$  is : 0.560516139392

#### $\mu_1$ :

- $\bullet$  The average value for  $\mu_1$  is : 14.406764451799976
- Standard deviation for  $\mu_1$  is : 3.8618280375342278
- Minimum value for  $\mu_1$  is : 10.286653277462635
- Maximum value for  $\mu_1$  is : 24.34001746864883

#### $\mu_{11}$ :

- The average value for  $\mu_{11}$  is : 0.2668709345199617
- • Standard deviation for  $\mu_{11}$  is : 0.09461534605314834
- Minimum value for  $\mu_{11}$  is : 0.1568383727964729
- Maximum value for  $\mu_{11}$  is : 0.37149381272156784

## $\mu'_{11}$ :

- $\bullet$  The average value for  $\mu'_{11}$  is : 0.22487366932747876
- • Standard deviation for  $\mu'_{11}$  is : 0.09359205186742706
- $\bullet$  Minimum value for  $\mu'_{11}$  is : 0.1515651091085874
- Maximum value for  $\mu'_{11}$  is : 0.37802739375647987

#### $\tilde{\mu_2}$ :

- The average value for  $\tilde{\mu_2}$  is : 3.057387218390781
- Standard deviation for  $\tilde{\mu_2}$  is : 1.8761634804717158
- $\bullet$  Minimum value for  $\tilde{\mu_2}$  is : 1.4820825611724695
- Maximum value for  $\tilde{\mu_2}$  is : 6.416193034836342

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

#### $m_H(\text{GeV})$ :

- The average value for  $m_H(\text{GeV})$  is: 127.35902930202867
- Standard deviation for  $m_H(\text{GeV})$  is: 1.8875038573521314
- Minimum value for  $m_H(\text{GeV})$  is : 123.65087081631302
- Maximum value for  $m_H(\text{GeV})$  is : 129.7274907294242

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

- The average value for  $m_{\psi_D}(\text{GeV})$  is : 2978.706254187265
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 868.2388534321411
- Minimum value for  $m_{\psi_D}({\rm GeV})$  is : 1371.6904066415134
- Maximum value for  $m_{\psi_D}(\text{GeV})$  is : 3896.9585469352683

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

- The average value for  $m_{\tau}(\text{GeV})$  is : 1.7705840700136644
- Standard deviation for  $m_{\tau}(\text{GeV})$  is : 0.030706917029193374
- Minimum value for  $m_{\tau}(\text{GeV})$  is : 1.7409229751011943
- Maximum value for  $m_{\tau}(\text{GeV})$  is : 1.8302559924229869

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

- The average value for  $m_{\tau}^{(1)}(\text{GeV})$  is : 1881.9065468276483
- Standard deviation for  $m_{\tau}^{(1)}(\text{GeV})$  is : 445.28795835601557
- Minimum value for  $m_{\tau}^{(1)}(\text{GeV})$  is : 1315.8444065327599
- Maximum value for  $m_{\tau}^{(1)}(\text{GeV})$  is : 2551.0692462747534  $m_{\nu}(eV)$  :
  - The average value for  $m_{\nu}(eV)$  is: 0.056740948310631395

- Standard deviation for  $m_{\nu}(eV)$  is: 0.03667572860142034
- Minimum value for  $m_{\nu}(eV)$  is: 0.020601423117924678
- $\bullet$  Maximum value for  $m_{\nu}(eV)$  is : 0.1328272849724689  $m_b({\rm GeV}) :$ 
  - The average value for  $m_b(\text{GeV})$  is : 4.1552465758782064
  - Standard deviation for  $m_b(\text{GeV})$  is : 0.06166328287311014
  - Minimum value for  $m_b(\text{GeV})$  is : 4.085062817470879
  - Maximum value for  $m_b(\text{GeV})$  is : 4.25023287408794

## $m_b^{(1)}(\text{GeV})$ :

- The average value for  $m_h^{(1)}(\text{GeV})$  is : 4100.8260845522445
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 1239.0911086719727
- Minimum value for  $m_b^{(1)}(\text{GeV})$  is: 1896.6296922821427
- - The average value for  $m_t(\text{GeV})$  is: 171.51561407672
  - Standard deviation for  $m_t(\text{GeV})$  is : 2.311365906117229
  - Minimum value for  $m_t(\text{GeV})$  is : 168.91627790518456
- Maximum value for  $m_t(\text{GeV})$  is : 176.35798280039646  $\langle \theta_H \rangle (\text{rad})$  :
  - The average value for  $\langle \theta_H \rangle$  (rad) is : 0.11343059358121566
  - Standard deviation for  $\langle \theta_H \rangle$  (rad) is: 0.04102880370496169
  - Minimum value for  $\langle \theta_H \rangle$  (rad) is : 0.08049762809791912
- Maximum value for  $\langle \theta_H \rangle ({\rm rad})$  is : 0.20952280463006473  $m_Z ({\rm GeV})$  :
  - The average value for  $m_Z(\text{GeV})$  is : 90.9868593350899
  - Standard deviation for  $m_Z(\text{GeV})$  is: 1.381097034837288
  - Minimum value for  $m_Z(\text{GeV})$  is : 89.0412449214728
  - Maximum value for  $m_Z(\text{GeV})$  is : 93.74218337225348

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

- The average value for  $m_{W^{\pm}}(\text{GeV})$  is : 79.77840729103866
- Standard deviation for  $m_{W^{\pm}}(\text{GeV})$  is : 1.2109630177245045
- Minimum value for  $m_{W^{\pm}}(\text{GeV})$  is : 78.0724684306894
- Maximum value for  $m_{W^{\pm}}(\text{GeV})$  is : 82.19430959673404

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

- The average value for  $m_{Z'}(\text{GeV})$  is : 12833.150390821149
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 3453.236532348032
- Minimum value for  $m_{Z'}(\text{GeV})$  is : 6846.897000348874
- Maximum value for  $m_{Z'}(\text{GeV})$  is : 16996.988034396873

#### 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

#### $y_t$ :

- The average value for  $y_t$  is : 0.98413160300455
- Standard deviation for  $y_t$  is: 0.005702761600355013
- Minimum value for  $y_t$  is : 0.9696491213349282
- Maximum value for  $y_t$  is: 0.9881191069038079

#### $\tau_H$ :

- The average value for  $\tau_H$  is : 30.244322909432185
- Standard deviation for  $\tau_H$  is : 1.2382439682071849
- Minimum value for  $\tau_H$  is : 27.94609800398461
- $\bullet$  Maximum value for  $\tau_H$  is : 31.61719496464271

#### $\sigma(hh)(fb)$ :

- The average value for  $\sigma(hh)(fb)$  is : 17.988437386835887
- Standard deviation for  $\sigma(hh)(fb)$  is: 0.812675688807743

- Minimum value for  $\sigma(hh)(fb)$  is : 16.93674320790359
- Maximum value for  $\sigma(hh)(fb)$  is : 19.26838353991684

## $\Delta_{HH}$ :

- $\bullet$  The average value for  $\Delta_{HH}$  is : 0.12451371544294483
- Standard deviation for  $\Delta_{HH}$  is : 0.005373134171189239
- $\bullet$  Minimum value for  $\Delta_{HH}$  is : 0.1179584408614722
- $\bullet$  Maximum value for  $\Delta_{HH}$  is : 0.13201571844736298

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

## $\chi_G^2$ :

- $\bullet$  The average value for  $\chi^2_G$  is : 14.104212740037434
- Standard deviation for  $\chi^2_G$  is : 5.412403599024601
- $\bullet$  Minimum value for  $\chi^2_G$  is : 3.8213646260526097
- $\bullet$  Maximum value for  $\chi^2_G$  is : 20.393717686809502

## $\sin^2 \theta_W$ :

- The average value for  $\sin^2 \theta_W$  is : 0.23675576985805247
- Standard deviation for  $\sin^2 \theta_W$  is : 0.006421137713583821
- Minimum value for  $\sin^2 \theta_W$  is : 0.23150434029505543
- Maximum value for  $\sin^2 \theta_W$  is : 0.24848012171212483