

# SO11HosotaniDummyCase Passed-Global-Constr

January 21, 2020

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

---

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

$k(\text{GeV})$  :

- The average value for  $k(\text{GeV})$  is : 108545.54913646114
- Standard deviation for  $k(\text{GeV})$  is : 33810.07560221113
- Minimum value for  $k(\text{GeV})$  is : 55445.246882626576
- Maximum value for  $k(\text{GeV})$  is : 257388.06076967347

$z_L$  :

- The average value for  $z_L$  is : 33.68042190888927
- Standard deviation for  $z_L$  is : 2.961857696960879
- Minimum value for  $z_L$  is : 27.190748623708306
- Maximum value for  $z_L$  is : 37.91522304445407

$c_0$  :

- The average value for  $c_0$  is : 0.2916377982302255
- Standard deviation for  $c_0$  is : 0.07715815789209249
- Minimum value for  $c_0$  is : 0.10509088
- Maximum value for  $c_0$  is : 0.361

$c_1$  :

- The average value for  $c_1$  is : 0.07537444045054158
- Standard deviation for  $c_1$  is : 0.07772814007771128

- Minimum value for  $c_1$  is : 0.013383665466308509
- Maximum value for  $c_1$  is : 0.33233057182169856

$c_2$  :

- The average value for  $c_2$  is : -0.588156068564607
- Standard deviation for  $c_2$  is : 0.08607103037166765
- Minimum value for  $c_2$  is : -0.845352
- Maximum value for  $c_2$  is : -0.385170518272

$c'_0$  :

- The average value for  $c'_0$  is : 0.526033611546817
- Standard deviation for  $c'_0$  is : 0.041579576810386
- Minimum value for  $c'_0$  is : 0.40862289943999996
- Maximum value for  $c'_0$  is : 0.5897

$\mu_1$  :

- The average value for  $\mu_1$  is : 15.161263629941825
- Standard deviation for  $\mu_1$  is : 2.834296873228901
- 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 : 0.21140616562157571
- Standard deviation for  $\mu_{11}$  is : 0.08848749947383941
- Minimum value for  $\mu_{11}$  is : 0.1162980146214366
- Maximum value for  $\mu_{11}$  is : 0.3896164149785195

$\mu'_{11}$  :

- The average value for  $\mu'_{11}$  is : 0.18826679704753163
- Standard deviation for  $\mu'_{11}$  is : 0.058364737718231315
- Minimum value for  $\mu'_{11}$  is : 0.11117737733801236
- Maximum value for  $\mu'_{11}$  is : 0.37802739375647987

$\tilde{\mu}_2$  :

- The average value for  $\tilde{\mu}_2$  is : 1.8657068661438572
- Standard deviation for  $\tilde{\mu}_2$  is : 1.255701621838265
- Minimum value for  $\tilde{\mu}_2$  is : 0.8471479999999998
- 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 : 127.23467500553723
- Standard deviation for  $m_H(\text{GeV})$  is : 2.0227347355446725
- Minimum value for  $m_H(\text{GeV})$  is : 122.3673385421512
- Maximum value for  $m_H(\text{GeV})$  is : 129.80513509684775

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

- The average value for  $m_{\psi_D}(\text{GeV})$  is : 2596.6152447725212
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 786.8524258940381
- Minimum value for  $m_{\psi_D}(\text{GeV})$  is : 1371.6746227479453
- Maximum value for  $m_{\psi_D}(\text{GeV})$  is : 5354.988490529566

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

- The average value for  $m_\tau(\text{GeV})$  is : 1.75900319541381
- Standard deviation for  $m_\tau(\text{GeV})$  is : 0.02612048926116398
- Minimum value for  $m_\tau(\text{GeV})$  is : 1.7167560943085807
- 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 : 1407.3810881707311
- Standard deviation for  $m_\tau^{(1)}(\text{GeV})$  is : 426.39846229929907
- Minimum value for  $m_\tau^{(1)}(\text{GeV})$  is : 727.3069068822812
- Maximum value for  $m_\tau^{(1)}(\text{GeV})$  is : 2551.0692462747534

$m_\nu(\text{eV})$  :

- The average value for  $m_\nu(\text{eV})$  is : 0.08628744049129751

- Standard deviation for  $m_\nu(eV)$  is : 0.035877619826273084
- Minimum value for  $m_\nu(eV)$  is : 0.020601423117924678
- Maximum value for  $m_\nu(eV)$  is : 0.1330574871341866

$m_b(\text{GeV})$  :

- The average value for  $m_b(\text{GeV})$  is : 4.159058019275145
- Standard deviation for  $m_b(\text{GeV})$  is : 0.07308771322187127
- Minimum value for  $m_b(\text{GeV})$  is : 3.9917906958817246
- Maximum value for  $m_b(\text{GeV})$  is : 4.384711470085788

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

- The average value for  $m_b^{(1)}(\text{GeV})$  is : 3574.9531654274992
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 1283.2272545550404
- Minimum value for  $m_b^{(1)}(\text{GeV})$  is : 1495.2767699310994
- Maximum value for  $m_b^{(1)}(\text{GeV})$  is : 8613.456653862164

$m_t(\text{GeV})$  :

- The average value for  $m_t(\text{GeV})$  is : 172.79878565924486
- Standard deviation for  $m_t(\text{GeV})$  is : 3.043403644653775
- Minimum value for  $m_t(\text{GeV})$  is : 167.15526346429266
- Maximum value for  $m_t(\text{GeV})$  is : 178.92299178539824

$\langle\theta_H\rangle(\text{rad})$  :

- The average value for  $\langle\theta_H\rangle(\text{rad})$  is : 0.12610642317016404
- Standard deviation for  $\langle\theta_H\rangle(\text{rad})$  is : 0.0366503776497081
- Minimum value for  $\langle\theta_H\rangle(\text{rad})$  is : 0.050170164720943586
- Maximum value for  $\langle\theta_H\rangle(\text{rad})$  is : 0.2222597944309811

$m_Z(\text{GeV})$  :

- The average value for  $m_Z(\text{GeV})$  is : 91.72318037459324
- Standard deviation for  $m_Z(\text{GeV})$  is : 1.3123667804972343
- Minimum value for  $m_Z(\text{GeV})$  is : 88.8937820474113
- Maximum value for  $m_Z(\text{GeV})$  is : 94.65471272418216

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

- The average value for  $m_{W^\pm}(\text{GeV})$  is : 80.42402271524095
- Standard deviation for  $m_{W^\pm}(\text{GeV})$  is : 1.1506994778680046
- Minimum value for  $m_{W^\pm}(\text{GeV})$  is : 77.94317115289397
- Maximum value for  $m_{W^\pm}(\text{GeV})$  is : 82.9944266557819

$m_{Z'}(\text{GeV}) :$

- The average value for  $m_{Z'}(\text{GeV})$  is : 11938.646555640811
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 3689.9859766090863
- Minimum value for  $m_{Z'}(\text{GeV})$  is : 6262.967650411356
- Maximum value for  $m_{Z'}(\text{GeV})$  is : 27541.267472358228

$T :$

- 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 : 0.9827979213782879
- Standard deviation for  $y_t$  is : 0.005270102671480639
- Minimum value for  $y_t$  is : 0.9669443037702264
- Maximum value for  $y_t$  is : 0.9900818655456609

$\tau_H :$

- The average value for  $\tau_H$  is : 29.842453204286205
- Standard deviation for  $\tau_H$  is : 1.265210356414497
- Minimum value for  $\tau_H$  is : 27.20407111212093
- Maximum value for  $\tau_H$  is : 31.632099263565543

$\sigma(hh)(fb) :$

- The average value for  $\sigma(hh)(fb)$  is : 17.521110092751105
- Standard deviation for  $\sigma(hh)(fb)$  is : 0.8308867640492297

- Minimum value for  $\sigma(hh)(fb)$  is : 16.124911402304566
- Maximum value for  $\sigma(hh)(fb)$  is : 19.67112228470861

$\Delta_{HH}$  :

- The average value for  $\Delta_{HH}$  is : 0.12144985645422239
- Standard deviation for  $\Delta_{HH}$  is : 0.005161119851057237
- Minimum value for  $\Delta_{HH}$  is : 0.11339357454058306
- Maximum value for  $\Delta_{HH}$  is : 0.13496472214819547

---

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

$\chi_G^2$  :

- The average value for  $\chi_G^2$  is : 14.577460916596705
- Standard deviation for  $\chi_G^2$  is : 3.602677140800299
- Minimum value for  $\chi_G^2$  is : 3.776936935524515
- Maximum value for  $\chi_G^2$  is : 20.50197661986195

$\Lambda_{\text{Max}}$  :

- The average value for  $\Lambda_{\text{Max}}$  is : 1180499.9021752172
- Standard deviation for  $\Lambda_{\text{Max}}$  is : 518337.3144158941
- Minimum value for  $\Lambda_{\text{Max}}$  is : 461965.7206136725
- Maximum value for  $\Lambda_{\text{Max}}$  is : 2865032.2708073105

$\sin^2 \theta_W @ \Lambda$  :

- The average value for  $\sin^2 \theta_W @ \Lambda$  is : 0.055985442853952204
- Standard deviation for  $\sin^2 \theta_W @ \Lambda$  is : 0.027060637756256018
- Minimum value for  $\sin^2 \theta_W @ \Lambda$  is : 0.027089873655094746
- Maximum value for  $\sin^2 \theta_W @ \Lambda$  is : 0.16194998193348448

$\sin^2 \theta_W @ \text{KK}_5$  :

- The average value for  $\sin^2 \theta_W @ \text{KK}_5$  is : 0.048562659516086
- Standard deviation for  $\sin^2 \theta_W @ \text{KK}_5$  is : 0.028197402590787304
- Minimum value for  $\sin^2 \theta_W @ \text{KK}_5$  is : 0.018676864338676234

- Maximum value for  $\sin^2 \theta_W @ KK_5$  is : 0.15556425923435244
- $(\alpha)_{1Y}^{-1}$  :
- The average value for  $(\alpha)_{1Y}^{-1}$  is : 72.8815152707313
  - Standard deviation for  $(\alpha)_{1Y}^{-1}$  is : 2.4167201317199214
  - Minimum value for  $(\alpha)_{1Y}^{-1}$  is : 63.71649976528311
  - Maximum value for  $(\alpha)_{1Y}^{-1}$  is : 75.43390805027802
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 6.183048183431909
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 3.5435232777370085
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 2.391815603229294
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 19.554218726400613
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 12.856902037644941
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 0.32918694432880435
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 12.16364895377236
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 13.669178509158897
- $(\alpha)_{4C}^{-1}$  :
- The average value for  $(\alpha)_{4C}^{-1}$  is : 9.695784510478546
  - Standard deviation for  $(\alpha)_{4C}^{-1}$  is : 1.5019484773225582
  - Minimum value for  $(\alpha)_{4C}^{-1}$  is : 5.215849376059399
  - Maximum value for  $(\alpha)_{4C}^{-1}$  is : 11.95673739318038
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 6.773933573099051
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 2.9923231145699534
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 3.3932029283915583
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 18.28417556170465
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 109.2248920756786
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 4.815621100402179
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 91.26249858719312
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 114.61813612696693