

# SO11HosotaniDummyCase Failed-Global-Constr

February 26, 2020

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

---

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

$k(\text{GeV})$  :

- The average value for  $k(\text{GeV})$  is : 130372.898781399
- Standard deviation for  $k(\text{GeV})$  is : 64337.96049469177
- Minimum value for  $k(\text{GeV})$  is : 23684.801448552284
- Maximum value for  $k(\text{GeV})$  is : 568436.9874120001

$z_L$  :

- The average value for  $z_L$  is : 35.637552608711594
- Standard deviation for  $z_L$  is : 3.4448440678648047
- Minimum value for  $z_L$  is : 17.43649508024567
- Maximum value for  $z_L$  is : 51.226730749863854

$c_0$  :

- The average value for  $c_0$  is : 0.26825196871598384
- Standard deviation for  $c_0$  is : 0.16924343160707886
- Minimum value for  $c_0$  is : 0.0014
- Maximum value for  $c_0$  is : 1.231647031325609

$c_1$  :

- The average value for  $c_1$  is : 0.12505953504398487
- Standard deviation for  $c_1$  is : 0.09957676927880345

- Minimum value for  $c_1$  is : 1.9287109375015765e-05
- Maximum value for  $c_1$  is : 0.6756655423950202

$c_2$  :

- The average value for  $c_2$  is : -0.7070273097324224
- Standard deviation for  $c_2$  is : 0.18484848027637693
- Minimum value for  $c_2$  is : -1.2083085984
- Maximum value for  $c_2$  is : -0.1545541855833397

$c'_0$  :

- The average value for  $c'_0$  is : 0.5754959203447861
- Standard deviation for  $c'_0$  is : 0.2052532031156907
- Minimum value for  $c'_0$  is : 0.062000923215999953
- Maximum value for  $c'_0$  is : 3.4910387209040272

$\mu_1$  :

- The average value for  $\mu_1$  is : 14.651238908896802
- Standard deviation for  $\mu_1$  is : 4.292102045400668
- Minimum value for  $\mu_1$  is : 6.144251796106855
- Maximum value for  $\mu_1$  is : 64.49975233857032

$\mu_{11}$  :

- The average value for  $\mu_{11}$  is : 0.28874199887409907
- Standard deviation for  $\mu_{11}$  is : 0.2187934410929418
- Minimum value for  $\mu_{11}$  is : 0.00016414231999992146
- Maximum value for  $\mu_{11}$  is : 2.23977

$\mu'_{11}$  :

- The average value for  $\mu'_{11}$  is : 0.36526796859631566
- Standard deviation for  $\mu'_{11}$  is : 0.2862199681977786
- Minimum value for  $\mu'_{11}$  is : 0.0005893571040000156
- Maximum value for  $\mu'_{11}$  is : 2.2649599043224953

$\tilde{\mu}_2$  :

- The average value for  $\tilde{\mu}_2$  is : 1.7125959421496588
- Standard deviation for  $\tilde{\mu}_2$  is : 1.0342075727065434
- Minimum value for  $\tilde{\mu}_2$  is : 0.0045119999999998495
- Maximum value for  $\tilde{\mu}_2$  is : 9.44110403644189

---

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

$m_H(\text{GeV})$  :

- The average value for  $m_H(\text{GeV})$  is : 161.38746633185357
- Standard deviation for  $m_H(\text{GeV})$  is : 225.5415684554819
- Minimum value for  $m_H(\text{GeV})$  is : 6.035070957702646
- Maximum value for  $m_H(\text{GeV})$  is : 3569.183086071825

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

- The average value for  $m_{\psi_D}(\text{GeV})$  is : 2792.8129244948786
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 1353.4159975994712
- Minimum value for  $m_{\psi_D}(\text{GeV})$  is : 539.2456808043827
- Maximum value for  $m_{\psi_D}(\text{GeV})$  is : 30817.778632083326

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

- The average value for  $m_\tau(\text{GeV})$  is : 16.78037412070499
- Standard deviation for  $m_\tau(\text{GeV})$  is : 185.0512092725433
- Minimum value for  $m_\tau(\text{GeV})$  is : 4.4043053013378107e-07
- Maximum value for  $m_\tau(\text{GeV})$  is : 5353.710492830509

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

- The average value for  $m_\tau^{(1)}(\text{GeV})$  is : 1326.5853427598797
- Standard deviation for  $m_\tau^{(1)}(\text{GeV})$  is : 1734.186712918724
- Minimum value for  $m_\tau^{(1)}(\text{GeV})$  is : 0.39981220509084303
- Maximum value for  $m_\tau^{(1)}(\text{GeV})$  is : 26727.41983603022

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

- The average value for  $m_\nu(\text{eV})$  is : 8.421051538933789

- Standard deviation for  $m_\nu(eV)$  is : 238.2990511983606
- Minimum value for  $m_\nu(eV)$  is : 6.905872012793404e-17
- Maximum value for  $m_\nu(eV)$  is : 20070.359124082406

$m_b(\text{GeV})$  :

- The average value for  $m_b(\text{GeV})$  is : 21.967096357487254
- Standard deviation for  $m_b(\text{GeV})$  is : 286.4230244459695
- Minimum value for  $m_b(\text{GeV})$  is : 4.4286077974223163e-07
- Maximum value for  $m_b(\text{GeV})$  is : 8986.708693002925

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

- The average value for  $m_b^{(1)}(\text{GeV})$  is : 4042.391539661444
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 2169.2734456516573
- Minimum value for  $m_b^{(1)}(\text{GeV})$  is : 164.1576766665587
- Maximum value for  $m_b^{(1)}(\text{GeV})$  is : 19681.236900376316

$m_t(\text{GeV})$  :

- The average value for  $m_t(\text{GeV})$  is : 263.9466952308671
- Standard deviation for  $m_t(\text{GeV})$  is : 912.3293092669131
- Minimum value for  $m_t(\text{GeV})$  is : 1.1140066853307358e-05
- Maximum value for  $m_t(\text{GeV})$  is : 27948.000246701922

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

- The average value for  $\langle\theta_H\rangle(\text{rad})$  is : 0.19455668447955726
- Standard deviation for  $\langle\theta_H\rangle(\text{rad})$  is : 0.41285771620437767
- Minimum value for  $\langle\theta_H\rangle(\text{rad})$  is : 5.5389874692659366e-09
- Maximum value for  $\langle\theta_H\rangle(\text{rad})$  is : 3.141592653524363

$m_Z(\text{GeV})$  :

- The average value for  $m_Z(\text{GeV})$  is : 112.25821749724867
- Standard deviation for  $m_Z(\text{GeV})$  is : 338.9879664800321
- Minimum value for  $m_Z(\text{GeV})$  is : 1.2121014312745615e-07
- Maximum value for  $m_Z(\text{GeV})$  is : 29797.464985761995

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

- The average value for  $m_{W^\pm}(\text{GeV})$  is : 98.42939807691138
- Standard deviation for  $m_{W^\pm}(\text{GeV})$  is : 297.2288553999493
- Minimum value for  $m_{W^\pm}(\text{GeV})$  is : 1.0627855755098015e-07
- Maximum value for  $m_{W^\pm}(\text{GeV})$  is : 26126.787046465266

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

- The average value for  $m_{Z'}(\text{GeV})$  is : 13564.493646759913
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 6702.012935817822
- Minimum value for  $m_{Z'}(\text{GeV})$  is : 2406.1721144785306
- Maximum value for  $m_{Z'}(\text{GeV})$  is : 62589.662924720586

$T :$

- 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 : 0.8607971390114797
- Standard deviation for  $y_t$  is : 0.45714914390098355
- Minimum value for  $y_t$  is : -0.9913292142098233
- Maximum value for  $y_t$  is : 0.9913292142098233

$\tau_H :$

- The average value for  $\tau_H$  is : 31.460828261006405
- Standard deviation for  $\tau_H$  is : 38.3337085989086
- Minimum value for  $\tau_H$  is : 1.3514550664823795e-09
- Maximum value for  $\tau_H$  is : 656.4358702272674

$\sigma(hh)(fb) :$

- The average value for  $\sigma(hh)(fb)$  is : 903.8791617453286
- Standard deviation for  $\sigma(hh)(fb)$  is : 21760.443882250864

- Minimum value for  $\sigma(hh)(fb)$  is : 9.769117128787467e-19
- Maximum value for  $\sigma(hh)(fb)$  is : 2108484.05431032

$\Delta_{HH}$  :

- The average value for  $\Delta_{HH}$  is : 9.032552733468595
- Standard deviation for  $\Delta_{HH}$  is : 244.48465884294956
- Minimum value for  $\Delta_{HH}$  is : 2.3341307108570765e-20
- Maximum value for  $\Delta_{HH}$  is : 24842.93813309167

---

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

$\chi_G^2$  :

- The average value for  $\chi_G^2$  is : 134328744.81800553
- Standard deviation for  $\chi_G^2$  is : 1985946436.1815445
- Minimum value for  $\chi_G^2$  is : 20.758817868524343
- Maximum value for  $\chi_G^2$  is : 90824743137.21648

$\Lambda_{\text{Max}}(\text{GeV})$  :

- The average value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1420519.7560920455
- Standard deviation for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1247669.056853391
- Minimum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 71048.44443786184
- Maximum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 10734602.556548439

$\sin^2 \theta_W(\Lambda_{\text{Max}})$  :

- The average value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.05280875807868461
- Standard deviation for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.034412139819863116
- Minimum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.008875321841529392
- Maximum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.21004570858761845

$\sin^2 \theta_W(M_{\text{KK}_5})$  :

- The average value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.044209813918006866
- Standard deviation for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.035595116795871205
- Minimum value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 6.554643840686932e-07

- Maximum value for  $\sin^2 \theta_W(M_{KK_5})$  is : 0.19658013474750155
- $(\alpha)_{1Y}^{-1}$  :
- The average value for  $(\alpha)_{1Y}^{-1}$  is : 70.2401614371159
  - Standard deviation for  $(\alpha)_{1Y}^{-1}$  is : 2.4649585577864106
  - Minimum value for  $(\alpha)_{1Y}^{-1}$  is : 59.701038817004466
  - Maximum value for  $(\alpha)_{1Y}^{-1}$  is : 73.95135300744876
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 5.424182128307899
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 4.390421596091838
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 5.661749778857178e-05
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 24.333869868167394
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 13.528506899028244
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 0.6094056543548813
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 11.543439258267522
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 15.356915161238378
- $(\alpha)_{4C}^{-1}$  :
- The average value for  $(\alpha)_{4C}^{-1}$  is : 10.62866774108337
  - Standard deviation for  $(\alpha)_{4C}^{-1}$  is : 1.7748600588229835
  - Minimum value for  $(\alpha)_{4C}^{-1}$  is : 4.744878073636897
  - Maximum value for  $(\alpha)_{4C}^{-1}$  is : 14.202369969550235
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 6.127763296728694
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 3.8172196979693145
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 1.076003383059033
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 23.263397027387263
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 104.49285930318213
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 5.152786586773395
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 83.3819152341482
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 112.81995656455294