

# SO11HosotaniDummyCase Failed-Global-Constr

February 12, 2020

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

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

$k(\text{GeV})$  :

- The average value for  $k(\text{GeV})$  is : 129698.02166413018
- Standard deviation for  $k(\text{GeV})$  is : 63822.906435694174
- 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 : 35.65104709570578
- Standard deviation for  $z_L$  is : 3.4553551784175855
- 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 : 0.26891058410216256
- Standard deviation for  $c_0$  is : 0.1699922206465127
- 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 : 0.12715263351394462
- Standard deviation for  $c_1$  is : 0.101667731850835

- 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 : -0.7116692027642937
- Standard deviation for  $c_2$  is : 0.18675632197025355
- 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 : 0.5724782463145851
- Standard deviation for  $c'_0$  is : 0.2031060411388896
- 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 : 14.58610662620646
- Standard deviation for  $\mu_1$  is : 4.2422553897502455
- 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 : 0.28951174531354046
- Standard deviation for  $\mu_{11}$  is : 0.21983971344093337
- 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 : 0.36094824555598576
- Standard deviation for  $\mu'_{11}$  is : 0.28590698748669613
- 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 : 1.680533810672358
- Standard deviation for  $\tilde{\mu}_2$  is : 1.0294124933951359
- Minimum value for  $\tilde{\mu}_2$  is : 0.0045119999999998495
- Maximum value for  $\tilde{\mu}_2$  is : 9.44110403644189

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

$m_H(\text{GeV})$  :

- The average value for  $m_H(\text{GeV})$  is : 161.07789814061255
- Standard deviation for  $m_H(\text{GeV})$  is : 222.39627382901858
- 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 : 2787.2309519046416
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 1342.6343095330624
- 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 : 16.096417823684657
- Standard deviation for  $m_\tau(\text{GeV})$  is : 180.61723779206326
- 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 : 1291.8505985936163
- Standard deviation for  $m_\tau^{(1)}(\text{GeV})$  is : 1701.9865789523658
- 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 : 8.03697363320635

- Standard deviation for  $m_\nu(eV)$  is : 232.5113764077143
- 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 : 21.648284318633863
- Standard deviation for  $m_b(\text{GeV})$  is : 287.10759904861266
- Minimum value for  $m_b(\text{GeV})$  is : 4.4286077974223163e-07
- Maximum value for  $m_b(\text{GeV})$  is : 8986.845743286196

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

- The average value for  $m_b^{(1)}(\text{GeV})$  is : 4007.801863956702
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 2154.795607308433
- 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 : 260.19164347836164
- Standard deviation for  $m_t(\text{GeV})$  is : 890.5197414666272
- 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 : 0.19328311539835777
- Standard deviation for  $\langle\theta_H\rangle(\text{rad})$  is : 0.407418319426308
- 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 : 111.51582561265116
- Standard deviation for  $m_Z(\text{GeV})$  is : 330.97923115864
- 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 : 97.77845966039942
- Standard deviation for  $m_{W^\pm}(\text{GeV})$  is : 290.2066968923885
- 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 : 13488.746956049217
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 6643.344390664471
- 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 : 0.8654535072317986
- Standard deviation for  $y_t$  is : 0.4486111473687849
- 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 : 31.94559822459232
- Standard deviation for  $\tau_H$  is : 39.235801851405064
- 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 : 886.1075566403018
- Standard deviation for  $\sigma(hh)(fb)$  is : 21456.524900507113

- 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 : 8.860480612559195
- Standard deviation for  $\Delta_{HH}$  is : 240.74701438632687
- Minimum value for  $\Delta_{HH}$  is : 2.3341307108570765e-20
- Maximum value for  $\Delta_{HH}$  is : 24842.93813309167

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

$\chi_G^2$  :

- The average value for  $\chi_G^2$  is : 129218336.37272088
- Standard deviation for  $\chi_G^2$  is : 1945831612.331026
- Minimum value for  $\chi_G^2$  is : 18.644696044894935
- Maximum value for  $\chi_G^2$  is : 90824743137.21648

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

- The average value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1470310.4900477438
- Standard deviation for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1263678.8553461153
- Minimum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 71295.45760415505
- Maximum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 10683637.20798487

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

- The average value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.05345316509134524
- Standard deviation for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.03397499008142587
- Minimum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.008423233718834073
- Maximum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.21018275972024553

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

- The average value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.04544094569313219
- Standard deviation for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.03510148181426021
- Minimum value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 6.464799329763525e-06

- Maximum value for  $\sin^2 \theta_W(M_{KK_5})$  is : 0.19679382444382307
- $(\alpha)_{1Y}^{-1}$  :
- The average value for  $(\alpha)_{1Y}^{-1}$  is : 73.22209176165896
  - Standard deviation for  $(\alpha)_{1Y}^{-1}$  is : 3.0245778442674456
  - Minimum value for  $(\alpha)_{1Y}^{-1}$  is : 60.31724004823647
  - Maximum value for  $(\alpha)_{1Y}^{-1}$  is : 77.73637645805941
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 5.784847883253804
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 4.427442312690425
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 0.000793187458654715
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 24.61842877200085
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 12.885697833998544
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 0.6219057321899707
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 10.779466016775926
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 15.035048072368802
- $(\alpha)_{4C}^{-1}$  :
- The average value for  $(\alpha)_{4C}^{-1}$  is : 9.829461163617795
  - Standard deviation for  $(\alpha)_{4C}^{-1}$  is : 1.6910781309280603
  - Minimum value for  $(\alpha)_{4C}^{-1}$  is : 4.670984399811434
  - Maximum value for  $(\alpha)_{4C}^{-1}$  is : 13.158916975793897
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 6.446417270503606
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 3.8474508210404226
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 1.063286206041109
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 23.59003138192766
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 109.82084312355688
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 6.130419654477829
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 84.61160720025853
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 119.1909454498855