

# 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 : 128860.13578913895
- Standard deviation for  $k(\text{GeV})$  is : 62627.43653276483
- 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 : 35.64398353452242
- Standard deviation for  $z_L$  is : 3.4611712725505837
- 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 : 0.27008100193585954
- Standard deviation for  $c_0$  is : 0.16798143116442213
- Minimum value for  $c_0$  is : 0.0014
- Maximum value for  $c_0$  is : 1.3829290111473

$c_1$  :

- The average value for  $c_1$  is : 0.13159445124548727
- Standard deviation for  $c_1$  is : 0.10668681937736384

- Minimum value for  $c_1$  is : 1.9287109375015765e-05
- Maximum value for  $c_1$  is : 0.6766512788619184

$c_2$  :

- The average value for  $c_2$  is : -0.7188293055362515
- Standard deviation for  $c_2$  is : 0.18820195925026947
- Minimum value for  $c_2$  is : -1.2471465930399999
- Maximum value for  $c_2$  is : -0.1545541855833397

$c'_0$  :

- The average value for  $c'_0$  is : 0.5657991760509632
- Standard deviation for  $c'_0$  is : 0.19831363245088507
- 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 : 14.479954305439783
- Standard deviation for  $\mu_1$  is : 4.129599880119857
- 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 : 0.29371407391485044
- Standard deviation for  $\mu_{11}$  is : 0.22921755168759816
- 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 : 0.35051725305405623
- Standard deviation for  $\mu'_{11}$  is : 0.28737247897468843
- 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 : 1.600336291939635
- Standard deviation for  $\tilde{\mu}_2$  is : 1.0381237690855571
- 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 : 160.82194335022572
- Standard deviation for  $m_H(\text{GeV})$  is : 216.30610748522133
- 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 : 2790.6132254060467
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 1321.9968380393786
- 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 : 14.981132512273032
- Standard deviation for  $m_\tau(\text{GeV})$  is : 172.40606478208676
- Minimum value for  $m_\tau(\text{GeV})$  is : 2.7271938653701917e-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 : 1239.3195799451235
- Standard deviation for  $m_\tau^{(1)}(\text{GeV})$  is : 1711.8940577859205
- 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 : 7.586811408060578

- Standard deviation for  $m_\nu(eV)$  is : 222.91610387151354
- Minimum value for  $m_\nu(eV)$  is : 4.2801281026368174e-17
- Maximum value for  $m_\nu(eV)$  is : 20070.359124082406

$m_b(\text{GeV})$  :

- The average value for  $m_b(\text{GeV})$  is : 22.488043431315354
- Standard deviation for  $m_b(\text{GeV})$  is : 304.1026486041843
- Minimum value for  $m_b(\text{GeV})$  is : 2.799992332437624e-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 : 3960.830199126924
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 2124.297820850276
- Minimum value for  $m_b^{(1)}(\text{GeV})$  is : 79.42419523485768
- Maximum value for  $m_b^{(1)}(\text{GeV})$  is : 19681.236900376316

$m_t(\text{GeV})$  :

- The average value for  $m_t(\text{GeV})$  is : 254.87455313273955
- Standard deviation for  $m_t(\text{GeV})$  is : 893.2374627921027
- Minimum value for  $m_t(\text{GeV})$  is : 8.883477218365486e-06
- 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 : 0.18668909394686475
- Standard deviation for  $\langle\theta_H\rangle(\text{rad})$  is : 0.39123421971840666
- 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 : 109.05438930641026
- Standard deviation for  $m_Z(\text{GeV})$  is : 315.9799638762224
- 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 : 95.62024176393331
- Standard deviation for  $m_{W^\pm}(\text{GeV})$  is : 277.055153218187
- 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 : 13407.553276133642
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 6526.743074777152
- 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 : 0.8653775759927009
- Standard deviation for  $y_t$  is : 0.450235801070716
- 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 : 32.43880219995017
- Standard deviation for  $\tau_H$  is : 39.56995695998936
- 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 : 830.5934096645315
- Standard deviation for  $\sigma(hh)(fb)$  is : 20471.389438012153

- 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 : 8.278625264938228
- Standard deviation for  $\Delta_{HH}$  is : 229.63030293306423
- 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 : 122925343.55314432
- Standard deviation for  $\chi_G^2$  is : 1880122053.4827085
- 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 : 2789890.24038208
- Standard deviation for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1442825.6442069372
- Minimum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 293165.53916079487
- Maximum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 13085275.593233941

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

- The average value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.21744402284893824
- Standard deviation for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.01372826094715697
- Minimum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.05894206939487062
- Maximum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.2645621273607718

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

- The average value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.18801012695897226
- Standard deviation for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.014697211012305448
- Minimum value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.026186115222089613

- Maximum value for  $\sin^2 \theta_W(M_{KK_5})$  is : 0.23843504721977146
- $(\alpha)_{1Y}^{-1}$  :
- The average value for  $(\alpha)_{1Y}^{-1}$  is : 61.38517995764549
  - Standard deviation for  $(\alpha)_{1Y}^{-1}$  is : 1.134639412617423
  - Minimum value for  $(\alpha)_{1Y}^{-1}$  is : 56.97905896655781
  - Maximum value for  $(\alpha)_{1Y}^{-1}$  is : 70.53586350378542
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 23.67675339380618
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 1.818157436143466
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 3.1598326312384732
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 29.716678481187063
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 13.626163867662282
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 1.2352695664326487
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 11.675452097054693
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 33.26337093079051
- $(\alpha)_{4C}^{-1}$  :
- The average value for  $(\alpha)_{4C}^{-1}$  is : 21.132731448882872
  - Standard deviation for  $(\alpha)_{4C}^{-1}$  is : 1.1827840767697597
  - Minimum value for  $(\alpha)_{4C}^{-1}$  is : 18.836287913272937
  - Maximum value for  $(\alpha)_{4C}^{-1}$  is : 39.116980351673284
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 30.296948722462446
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 1.907850977689659
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 7.602998179464359
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 36.59991462078179
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 95.05905904394166
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 1.8842497558054585
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 86.80485514598269
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 102.34012159301507