

# SO11HosotaniDummyCase Failed-Global-Constr

February 24, 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 : 129005.43871070193
- Standard deviation for  $k(\text{GeV})$  is : 63192.211056847395
- Minimum value for  $k(\text{GeV})$  is : 23684.801448552284
- Maximum value for  $k(\text{GeV})$  is : 516137.0118230985

$z_L$  :

- The average value for  $z_L$  is : 35.68719791018386
- Standard deviation for  $z_L$  is : 3.539360342878731
- Minimum value for  $z_L$  is : 17.43649508024567
- Maximum value for  $z_L$  is : 51.20359494476422

$c_0$  :

- The average value for  $c_0$  is : 0.26728656367752396
- Standard deviation for  $c_0$  is : 0.16460630530900208
- Minimum value for  $c_0$  is : 0.0024
- Maximum value for  $c_0$  is : 1.313746039493909

$c_1$  :

- The average value for  $c_1$  is : 0.13328287082728346
- Standard deviation for  $c_1$  is : 0.10782430256669821

- 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 : -0.7192109930058841
- Standard deviation for  $c_2$  is : 0.1896417090945794
- 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 : 0.5641582935584702
- Standard deviation for  $c'_0$  is : 0.18441283222194332
- 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 : 14.49496169438743
- Standard deviation for  $\mu_1$  is : 4.134241760181286
- 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 : 0.3004203525638625
- Standard deviation for  $\mu_{11}$  is : 0.23604066029493412
- 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 : 0.35899946062257204
- Standard deviation for  $\mu'_{11}$  is : 0.2922333331932605
- 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 : 1.6277168986527066
- Standard deviation for  $\tilde{\mu}_2$  is : 1.0457664975235765
- 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 : 158.6014662372495
- Standard deviation for  $m_H(\text{GeV})$  is : 206.3713895910285
- 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 : 2779.489829647192
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 1322.4708368707059
- 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 : 14.656197240758637
- Standard deviation for  $m_\tau(\text{GeV})$  is : 168.790299273006
- Minimum value for  $m_\tau(\text{GeV})$  is : 2.7271938653701917e-07
- Maximum value for  $m_\tau(\text{GeV})$  is : 4419.930454068088

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

- The average value for  $m_\tau^{(1)}(\text{GeV})$  is : 1242.185455209309
- Standard deviation for  $m_\tau^{(1)}(\text{GeV})$  is : 1696.9209460932343
- 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 : 6.482069271872906

- Standard deviation for  $m_\nu(eV)$  is : 209.14214936886827
- 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 : 19.821352172459736
- Standard deviation for  $m_b(\text{GeV})$  is : 274.4141889572091
- Minimum value for  $m_b(\text{GeV})$  is : 3.644996621464028e-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 : 3963.0225183684647
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 2143.2522050250845
- Minimum value for  $m_b^{(1)}(\text{GeV})$  is : 92.65515215519748
- Maximum value for  $m_b^{(1)}(\text{GeV})$  is : 19678.59531163743

$m_t(\text{GeV})$  :

- The average value for  $m_t(\text{GeV})$  is : 244.83684919355548
- Standard deviation for  $m_t(\text{GeV})$  is : 801.7681420604007
- 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 : 0.18077377228276514
- Standard deviation for  $\langle\theta_H\rangle(\text{rad})$  is : 0.367468842691238
- Minimum value for  $\langle\theta_H\rangle(\text{rad})$  is : 5.924162493897711e-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 : 108.54336734703641
- Standard deviation for  $m_Z(\text{GeV})$  is : 328.9419358241167
- 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 : 95.17217136885078
- Standard deviation for  $m_{W^\pm}(\text{GeV})$  is : 288.4203710629502
- 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 : 13418.494393296389
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 6597.127441375112
- Minimum value for  $m_{Z'}(\text{GeV})$  is : 2406.1721144785306
- Maximum value for  $m_{Z'}(\text{GeV})$  is : 61616.383955444464

$T :$

- 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 : 0.8648786725507704
- Standard deviation for  $y_t$  is : 0.4515553393258978
- 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 : 32.46222736134907
- Standard deviation for  $\tau_H$  is : 40.48070837958475
- 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 : 1012.3759477720895
- Standard deviation for  $\sigma(hh)(fb)$  is : 25029.005222339856

- Minimum value for  $\sigma(hh)(fb)$  is : 8.398056069054864e-17
- Maximum value for  $\sigma(hh)(fb)$  is : 2108484.05431032

$\Delta_{HH}$  :

- The average value for  $\Delta_{HH}$  is : 10.305859797820393
- Standard deviation for  $\Delta_{HH}$  is : 282.3321776093463
- Minimum value for  $\Delta_{HH}$  is : 2.098690138866986e-18
- 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 : 113788966.54636192
- Standard deviation for  $\chi_G^2$  is : 1770433766.8232453
- Minimum value for  $\chi_G^2$  is : 18.644696044894935
- Maximum value for  $\chi_G^2$  is : 61900853266.42548

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

- The average value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1055633.2336116997
- Standard deviation for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 737104.1162775971
- Minimum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 433860.4721865347
- Maximum value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 2753774.5690759397

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

- The average value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.04243850223185698
- Standard deviation for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.012726849549564274
- Minimum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.029321836931655264
- Maximum value for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.0672290640658904

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

- The average value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.03390953370571145
- Standard deviation for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.013396241927709444
- Minimum value for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.020113772348552446

- Maximum value for  $\sin^2 \theta_W(M_{KK_5})$  is : 0.05998553898918482
- $(\alpha)_{1Y}^{-1}$  :
- The average value for  $(\alpha)_{1Y}^{-1}$  is : 74.20168469433155
  - Standard deviation for  $(\alpha)_{1Y}^{-1}$  is : 1.2662508295166603
  - Minimum value for  $(\alpha)_{1Y}^{-1}$  is : 71.98885747661801
  - Maximum value for  $(\alpha)_{1Y}^{-1}$  is : 75.62434621187636
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 4.333653083763989
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 1.701892908503516
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 2.5861083048276208
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 7.653243263929254
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 12.648536264159404
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 0.4680015565981991
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 12.13786007020721
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 13.498164861956129
- $(\alpha)_{4C}^{-1}$  :
- The average value for  $(\alpha)_{4C}^{-1}$  is : 10.308875029728252
  - Standard deviation for  $(\alpha)_{4C}^{-1}$  is : 0.3520393498941914
  - Minimum value for  $(\alpha)_{4C}^{-1}$  is : 9.522318254414696
  - Maximum value for  $(\alpha)_{4C}^{-1}$  is : 10.556171747324495
- $(\alpha)_{2L}^{-1}$  :
- The average value for  $(\alpha)_{2L}^{-1}$  is : 5.239939052810236
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 1.5082014747311834
  - Minimum value for  $(\alpha)_{2L}^{-1}$  is : 3.678697420856124
  - Maximum value for  $(\alpha)_{2L}^{-1}$  is : 8.159075073865814
- $(\alpha)_{3C}^{-1}$  :
- The average value for  $(\alpha)_{3C}^{-1}$  is : 111.90417165450425
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 2.7573910022098462
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 106.97881825962466
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 114.95783759043304