SO11HosotaniDummyCase Failed-Global-Constr

February 17, 2020

Statistics for SO11Hosotani Dummy
Case attributes. The following is for points that ${\bf Failed\text{-}Global\text{-}Constr}$
the constraints:

The following are the statistics for ${\bf Param}$:

k(GeV):

- The average value for k(GeV) is : 128860.13578913895
- Standard deviation for k(GeV) is : 62627.43653276483
- Minimum value for k(GeV) is : 23684.801448552284
- Maximum value for k(GeV) is : 568436.9874120001

z_L :

- \bullet The average value for z_L is : 35.64398353452242
- \bullet 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 :

- \bullet 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 :

- \bullet 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 :

- \bullet The average value for c_0' is : 0.5657991760509632
- Standard deviation for c'_0 is: 0.19831363245088507
- \bullet Minimum value for c_0' is : 0.062000923215999953
- \bullet Maximum value for c_0' is : 3.4910387209040272

 μ_1 :

- The average value for μ_1 is : 14.479954305439783
- Standard deviation for μ_1 is : 4.129599880119857
- Minimum value for μ_1 is : 6.144251796106855
- Maximum value for μ_1 is : 64.49975233857032

 μ_{11} :

- The average value for μ_{11} is : 0.29371407391485044
- Standard deviation for μ_{11} is : 0.22921755168759816
- Minimum value for μ_{11} is : 0.00016414231999992146
- Maximum value for μ_{11} is : 2.23977

 μ'_{11} :

- \bullet The average value for μ'_{11} is : 0.35051725305405623
- Standard deviation for μ'_{11} is : 0.28737247897468843
- \bullet Minimum value for μ'_{11} is : 0.0005893571040000156
- Maximum value for μ'_{11} is : 2.2649599043224953

 $\tilde{\mu_2}$:

- \bullet 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 : 0.004511999999998495
- 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: 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

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

- The average value for $m_{\psi_D}({\rm GeV})$ 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 $m_{\tau}^{(1)}(\mathrm{GeV})$ 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 $m_{\nu}(eV)$:
 - The average value for $m_{\nu}(eV)$ is : 7.586811408060578

- Standard deviation for $m_{\nu}(eV)$ is : 222.91610387151354
- Minimum value for $m_{\nu}(eV)$ is : 4.2801281026368174e-17
- \bullet Maximum value for $m_{\nu}(eV)$ is : 20070.359124082406 $m_b({\rm GeV}):$
 - 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
- \bullet Maximum value for $m_b({\rm GeV})$ is : 8986.845743286196 $m_b^{(1)}({\rm GeV}):$
 - The average value for $m_b^{(1)}(\text{GeV})$ is: 3960.830199126924
 - Standard deviation for $m_h^{(1)}(\text{GeV})$ is : 2124.297820850276
 - Minimum value for $m_h^{(1)}(\text{GeV})$ is : 79.42419523485768
- - 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 $\langle \theta_H \rangle$ (rad) is: 0.18668909394686475
 - Standard deviation for $\langle \theta_H \rangle$ (rad) is: 0.39123421971840666
 - Minimum value for $\langle \theta_H \rangle$ (rad) is : 5.5389874692659366e-09
- Maximum value for $\langle \theta_H \rangle$ (rad) is : 3.141592653524363 $m_Z({\rm GeV})$:
 - 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

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

- 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
- \bullet Maximum value for $m_{W^\pm}({\rm GeV})$ is : 26126.787046465266 $m_{Z'}({\rm GeV})$:
 - 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:

- \bullet 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
- \bullet Maximum value for y_t is : 0.9913292142098233

τ_H :

- The average value for τ_H is : 32.43880219995017
- Standard deviation for τ_H is : 39.56995695998936
- Minimum value for τ_H is : 1.3514550664823795e-09
- Maximum value for τ_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

Δ_{HH} :

- The average value for Δ_{HH} is : 8.278625264938228
- Standard deviation for Δ_{HH} is : 229.63030293306423
- Minimum value for Δ_{HH} is : 2.3341307108570765e-20
- Maximum value for Δ_{HH} is : 24842.93813309167

The following are the statistics for ${\bf \ Calc}$:

χ_G^2 :

- \bullet The average value for χ^2_G is : 122925343.55314432
- Minimum value for χ_G^2 is : 18.644696044894935
- \bullet Maximum value for χ^2_G is : 90824743137.21648

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

- The average value for $\Lambda_{\rm Max}({\rm GeV})$ is : 2789890.24038208
- Standard deviation for $\Lambda_{\rm Max}({\rm GeV})$ is : 1442825.6442069372
- Minimum value for $\Lambda_{Max}(GeV)$ is : 293165.53916079487
- Maximum value for $\Lambda_{\rm Max}({\rm GeV})$ 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

$\sin^2\theta_W(M_{\rm KK_5}):$

- \bullet The average value for $\sin^2\theta_W(M_{\rm KK_5})$ 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

- \bullet Maximum value for $\sin^2\theta_W(M_{\rm KK_5})$ is : 0.23843504721977146 $(\alpha)_{1Y}^{-1}$:
 - \bullet 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 $(\alpha)_{2L}^{-1}$:
 - \bullet 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