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 : 129698.02166413018
- Standard deviation for k(GeV) is : 63822.906435694174
- 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 : 35.65104709570578
- \bullet 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 :

- \bullet 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

 $c'_{0}:$

- \bullet 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
- \bullet Maximum value for c_0' is : 3.4910387209040272

 μ_1 :

- The average value for μ_1 is : 14.58610662620646
- Standard deviation for μ_1 is : 4.2422553897502455
- 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 : 0.28951174531354046
- Standard deviation for μ_{11} is : 0.21983971344093337
- 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 : 0.36094824555598576
- Standard deviation for μ'_{11} is : 0.28590698748669613
- \bullet Minimum value for μ'_{11} is : 0.0005893571040000156
- \bullet Maximum value for μ'_{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 : 0.004511999999998495
- \bullet 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: 161.07789814061255
- 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

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

- \bullet The average value for $m_{\psi_D}({\rm GeV})$ 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 $m_{\tau}^{(1)}({\rm GeV})$ 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 $m_{\nu}(eV)$:
 - The average value for $m_{\nu}(eV)$ is : 8.03697363320635

- Standard deviation for $m_{\nu}(eV)$ is : 232.5113764077143
- Minimum value for $m_{\nu}(eV)$ is : 6.905872012793404e-17
- $\bullet\,$ Maximum value for $m_{\nu}(eV)$ is : 20070.359124082406 $m_b({\rm GeV}):$
 - 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 $m_h^{(1)}(\text{GeV})$ is: 164.1576766665587
- - 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 $\langle \theta_H \rangle$ (rad) is: 0.19328311539835777
 - Standard deviation for $\langle \theta_H \rangle$ (rad) is : 0.407418319426308
 - Minimum value for $\langle \theta_H \rangle$ (rad) is : 5.5389874692659366e-09
- Maximum value for $\langle \theta_H \rangle ({\rm rad})$ is : 3.141592653524363 $m_Z ({\rm GeV})$:
 - 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
- \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 : 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

τ_H :

- The average value for τ_H is : 31.94559822459232
- Standard deviation for τ_H is : 39.235801851405064
- \bullet 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 : 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

Δ_{HH} :

- The average value for Δ_{HH} is : 8.860480612559195
- Standard deviation for Δ_{HH} is : 240.74701438632687
- 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 : 129218336.37272088
- • Standard deviation for χ^2_G is : 1945831612.331026
- 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 : 1470310.4900477438
- Standard deviation for $\Lambda_{\rm Max}({\rm GeV})$ is : 1263678.8553461153
- Minimum value for $\Lambda_{\rm Max}({\rm GeV})$ 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

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

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

- \bullet Maximum value for $\sin^2\theta_W(M_{\rm KK_5})$ is : 0.19679382444382307 $(\alpha)_{1Y}^{-1}$:
 - \bullet 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
 - \bullet 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