SO11HosotaniDummyCase Passed-Global-Constr

February 17, 2020

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

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

k(GeV):

- The average value for k(GeV) is : 108545.54913646114
- Standard deviation for k(GeV) is : 33810.07560221113
- Minimum value for k(GeV) is : 55445.246882626576
- Maximum value for k(GeV) is : 257388.06076967347

z_L :

- \bullet The average value for z_L is : 33.68042190888927
- \bullet Minimum value for z_L is : 27.190748623708306
- \bullet Maximum value for z_L is : 37.91522304445407

c_0 :

- \bullet The average value for c_0 is : 0.2916377982302256
- Standard deviation for c_0 is : 0.07715815789209247
- Minimum value for c_0 is : 0.10509088
- Maximum value for c_0 is: 0.361

c_1 :

- \bullet The average value for c_1 is : 0.07537444045054156
- Standard deviation for c_1 is : 0.07772814007771128

- Minimum value for c_1 is : 0.013383665466308509
- Maximum value for c_1 is: 0.33233057182169856

 c_2 :

- The average value for c_2 is: -0.588156068564607
- Standard deviation for c_2 is : 0.08607103037166765
- Minimum value for c_2 is : -0.845352
- Maximum value for c_2 is : -0.385170518272

 c'_0 :

- The average value for c_0' is : 0.5260336115468169
- Standard deviation for c'_0 is : 0.04157957681038601
- Minimum value for c'_0 is : 0.40862289943999996
- Maximum value for c'_0 is : 0.5897

 μ_1 :

- The average value for μ_1 is : 15.161263629941828
- Standard deviation for μ_1 is : 2.834296873228901
- Minimum value for μ_1 is : 10.286653277462635
- Maximum value for μ_1 is : 24.34001746864883

 μ_{11} :

- The average value for μ_{11} is : 0.21140616562157574
- Standard deviation for μ_{11} is : 0.08848749947383941
- Minimum value for μ_{11} is : 0.1162980146214366
- Maximum value for μ_{11} is : 0.3896164149785195

 μ'_{11} :

- \bullet The average value for μ'_{11} is : 0.18826679704753163
- \bullet Standard deviation for μ'_{11} is : 0.058364737718231315
- \bullet Minimum value for μ'_{11} is : 0.11117737733801236
- \bullet Maximum value for μ'_{11} is : 0.37802739375647987

 $\tilde{\mu_2}$:

- The average value for $\tilde{\mu_2}$ is : 1.8657068661438578
- Standard deviation for $\tilde{\mu_2}$ is : 1.255701621838265
- Minimum value for $\tilde{\mu_2}$ is : 0.847147999999998
- Maximum value for $\tilde{\mu_2}$ is : 6.416193034836342

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

$m_H(\text{GeV})$:

- The average value for $m_H(\text{GeV})$ is : 127.23467500553723
- Standard deviation for $m_H(\text{GeV})$ is : 2.0227347355446725
- Minimum value for $m_H(\text{GeV})$ is : 122.3673385421512
- Maximum value for $m_H(\text{GeV})$ is : 129.80513509684775

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

- The average value for $m_{\psi_D}({\rm GeV})$ is : 2596.6152447725212
- Standard deviation for $m_{\psi_D}(\text{GeV})$ is : 786.8524258940381
- Minimum value for $m_{\psi_D}({\rm GeV})$ is : 1371.6746227479453
- Maximum value for $m_{\psi_D}(\text{GeV})$ is : 5354.988490529566

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

- The average value for $m_{\tau}(\text{GeV})$ is : 1.75900319541381
- Standard deviation for $m_{\tau}(\text{GeV})$ is : 0.026120489261163983
- Minimum value for $m_{\tau}(\text{GeV})$ is : 1.7167560943085807
- Maximum value for $m_{\tau}(\text{GeV})$ is : 1.8302559924229869

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

- The average value for $m_{\tau}^{(1)}(\text{GeV})$ is: 1407.381088170731
- Standard deviation for $m_{\tau}^{(1)}({\rm GeV})$ is : 426.39846229929907
- Minimum value for $m_{\tau}^{(1)}(\text{GeV})$ is : 727.3069068822812
- Maximum value for $m_{\tau}^{(1)}(\text{GeV})$ is : 2551.0692462747534 $m_{\nu}(eV)$:
 - The average value for $m_{\nu}(eV)$ is: 0.08628744049129751

- Standard deviation for $m_{\nu}(eV)$ is: 0.035877619826273084
- Minimum value for $m_{\nu}(eV)$ is: 0.020601423117924678
- \bullet Maximum value for $m_{\nu}(eV)$ is : 0.1330574871341866 $m_b({\rm GeV})$:
 - The average value for $m_b(\text{GeV})$ is : 4.159058019275147
 - Standard deviation for $m_b(\text{GeV})$ is : 0.07308771322187127
 - Minimum value for $m_b(\text{GeV})$ is : 3.9917906958817246
- Maximum value for $m_b(\text{GeV})$ is : 4.384711470085788 $m_b^{(1)}(\text{GeV})$:
- The average value for $m_h^{(1)}(\text{GeV})$ is : 3574.9531654274992
 - Standard deviation for $m_b^{(1)}(\text{GeV})$ is: 1283.2272545550404
 - Minimum value for $m_b^{(1)}(\text{GeV})$ is: 1495.2767699310994
- • Maximum value for $m_b^{(1)}({\rm GeV})$ is : 8613.456653862164 $m_t({\rm GeV})$:
 - The average value for $m_t(\text{GeV})$ is : 172.79878565924486
 - Standard deviation for $m_t(\text{GeV})$ is : 3.043403644653775
 - Minimum value for $m_t(\text{GeV})$ is : 167.15526346429266
- Maximum value for $m_t(\text{GeV})$ is : 178.92299178539824 $\langle \theta_H \rangle (\text{rad})$:
 - The average value for $\langle \theta_H \rangle$ (rad) is: 0.12610642317016404
 - Standard deviation for $\langle \theta_H \rangle$ (rad) is: 0.0366503776497081
 - Minimum value for $\langle \theta_H \rangle$ (rad) is : 0.050170164720943586
- Maximum value for $\langle \theta_H \rangle$ (rad) is : 0.2222597944309811 $m_Z(\text{GeV})$:
 - The average value for $m_Z(\text{GeV})$ is : 91.72318037459324
 - Standard deviation for $m_Z(\text{GeV})$ is : 1.3123667804972343
 - \bullet Minimum value for $m_Z({\rm GeV})$ is : 88.8937820474113
 - Maximum value for $m_Z(\text{GeV})$ is : 94.65471272418216

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

- The average value for $m_{W^{\pm}}(\text{GeV})$ is : 80.42402271524094
- Standard deviation for $m_{W^{\pm}}(\text{GeV})$ is: 1.1506994778680049
- Minimum value for $m_{W^{\pm}}(\text{GeV})$ is : 77.94317115289397
- Maximum value for $m_{W^{\pm}}(\text{GeV})$ is : 82.9944266557819

$m_{Z'}(\text{GeV})$:

- \bullet The average value for $m_{Z'}({\rm GeV})$ is : 11938.646555640813
- Standard deviation for $m_{Z'}(\text{GeV})$ is : 3689.985976609086
- Minimum value for $m_{Z'}(\text{GeV})$ is : 6262.967650411356
- Maximum value for $m_{Z'}(\text{GeV})$ is : 27541.267472358228

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 :

- \bullet The average value for y_t is : 0.9827979213782879
- Standard deviation for y_t is: 0.005270102671480638
- Minimum value for y_t is : 0.9669443037702264
- \bullet Maximum value for y_t is : 0.9900818655456609

τ_H :

- The average value for τ_H is : 29.842453204286205
- Standard deviation for τ_H is : 1.265210356414497
- Minimum value for τ_H is : 27.20407111212093
- \bullet Maximum value for τ_H is : 31.632099263565543

$\sigma(hh)(fb)$:

- The average value for $\sigma(hh)(fb)$ is : 17.5211100927511
- Standard deviation for $\sigma(hh)(fb)$ is: 0.8308867640492298

- Minimum value for $\sigma(hh)(fb)$ is : 16.124911402304566
- Maximum value for $\sigma(hh)(fb)$ is : 19.67112228470861

Δ_{HH} :

- The average value for Δ_{HH} is : 0.12144985645422236
- Standard deviation for Δ_{HH} is : 0.005161119851057237
- Minimum value for Δ_{HH} is : 0.11339357454058306
- Maximum value for Δ_{HH} is : 0.13496472214819547

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

χ_G^2 :

- \bullet The average value for χ^2_G is : 14.577460916596705
- Standard deviation for χ_G^2 is : 3.6026771408002993
- Minimum value for χ_G^2 is : 3.776936935524515
- Maximum value for χ_G^2 is : 20.50197661986195

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

- The average value for $\Lambda_{\rm Max}({\rm GeV})$ is : 2359294.2213837206
- Standard deviation for $\Lambda_{\rm Max}({\rm GeV})$ is : 777314.4630181412
- Minimum value for $\Lambda_{\rm Max}({\rm GeV})$ is : 1165659.728419664
- Maximum value for $\Lambda_{\rm Max}({\rm GeV})$ is : 5815010.829070556

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

- The average value for $\sin^2 \theta_W(\Lambda_{\text{Max}})$ is: 0.21978623367082364
- Standard deviation for $\sin^2 \theta_W(\Lambda_{\text{Max}})$ is: 0.007301035682935422
- Minimum value for $\sin^2 \theta_W(\Lambda_{\text{Max}})$ is: 0.21090383371507956
- Maximum value for $\sin^2 \theta_W(\Lambda_{\text{Max}})$ is : 0.24848012171212483

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

- \bullet The average value for $\sin^2\theta_W(M_{\rm KK_5})$ is : 0.19091876928754456
- Standard deviation for $\sin^2 \theta_W(M_{\text{KK}_5})$ is : 0.008124440708082669
- \bullet Minimum value for $\sin^2\theta_W(M_{\rm KK_5})$ is : 0.18204151185031872

- \bullet Maximum value for $\sin^2\theta_W(M_{\rm KK_5})$ is : 0.2229120190186542 $(\alpha)_{1Y}^{-1}$:
 - The average value for $(\alpha)_{1Y}^{-1}$ is : 61.14569559973914
 - Standard deviation for $(\alpha)_{1Y}^{-1}$ is: 0.7018921457370692
 - Minimum value for $(\alpha)_{1Y}^{-1}$ is: 58.37694692877908
- • Maximum value for $(\alpha)_{1Y}^{-1}$ is : 61.93145435262621 $(\alpha)_{2L}^{-1}$:
 - The average value for $(\alpha)_{2L}^{-1}$ is : 24.033967102777552
 - Standard deviation for $(\alpha)_{2L}^{-1}$ is : 0.9848015837750325
 - Minimum value for $(\alpha)_{2L}^{-1}$ is: 22.96089368208452
- • Maximum value for $(\alpha)_{2L}^{-1}$ is : 27.895322891027106 $(\alpha)_{3C}^{-1}$:
 - The average value for $(\alpha)_{3C}^{-1}$ is: 13.515041929071428
 - Standard deviation for $(\alpha)_{3C}^{-1}$ is: 0.3110763382076777
 - Minimum value for $(\alpha)_{3C}^{-1}$ is : 12.8352546355795
- \bullet Maximum value for $(\alpha)_{3C}^{-1}$ is : 14.435458495354027 $(\alpha)_{4C}^{-1}$:
 - The average value for $(\alpha)_{4C}^{-1}$ is : 20.979716318607164
 - Standard deviation for $(\alpha)_{4C}^{-1}$ is : 0.33859061122231404
 - Minimum value for $(\alpha)_{4C}^{-1}$ is : 20.22554120259216
- • Maximum value for $(\alpha)_{4C}^{-1}$ is : 22.021947340105058 $(\alpha)_{2L}^{-1}$:
 - The average value for $(\alpha)_{2L}^{-1}$ is : 30.593622015236594
 - Standard deviation for $(\alpha)_{2L}^{-1}$ is : 0.9742578275044803
 - Minimum value for $(\alpha)_{2L}^{-1}$ is : 29.37105728715833
- Maximum value for $(\alpha)_{2L}^{-1}$ is : 34.41629814498653 $(\alpha)_{3C}^{-1}$:
 - The average value for $(\alpha)_{3C}^{-1}$ is: 94.74677322381085
 - Standard deviation for $(\alpha)_{3C}^{-1}$ is: 1.231176826023571
 - Minimum value for $(\alpha)_{3C}^{-1}$ is: 89.9443200374149
 - Maximum value for $(\alpha)_{3C}^{-1}$ is: 96.31204168082759