

# SO11HosotaniDummyCase Passed-Global-Constr

February 24, 2020

Statistics for SO11HosotaniDummyCase attributes. The following is for points that **Passed-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 : 107809.78542149678
- Standard deviation for  $k(\text{GeV})$  is : 32068.540826980694
- Minimum value for  $k(\text{GeV})$  is : 55445.246882626576
- Maximum value for  $k(\text{GeV})$  is : 253212.00976388998

$z_L$  :

- The average value for  $z_L$  is : 34.24784737932291
- Standard deviation for  $z_L$  is : 2.7564236121502392
- Minimum value for  $z_L$  is : 27.190748623708306
- Maximum value for  $z_L$  is : 37.91522304445407

$c_0$  :

- The average value for  $c_0$  is : 0.3112925589242991
- Standard deviation for  $c_0$  is : 0.06641213435319059
- Minimum value for  $c_0$  is : 0.10509088
- Maximum value for  $c_0$  is : 0.361

$c_1$  :

- The average value for  $c_1$  is : 0.07136741274663543
- Standard deviation for  $c_1$  is : 0.08184128674494111

- 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 : -0.5836169446353631
- Standard deviation for  $c_2$  is : 0.08121085036963116
- 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 : 0.5314527024710343
- Standard deviation for  $c'_0$  is : 0.037274267574094404
- Minimum value for  $c'_0$  is : 0.40862289943999996
- Maximum value for  $c'_0$  is : 0.5897

$\mu_1$  :

- The average value for  $\mu_1$  is : 14.72117544905115
- Standard deviation for  $\mu_1$  is : 2.6061953798335193
- Minimum value for  $\mu_1$  is : 10.286653277462635
- Maximum value for  $\mu_1$  is : 24.34001746864883

$\mu_{11}$  :

- The average value for  $\mu_{11}$  is : 0.19313491510139752
- Standard deviation for  $\mu_{11}$  is : 0.08766341844434038
- Minimum value for  $\mu_{11}$  is : 0.1162980146214366
- Maximum value for  $\mu_{11}$  is : 0.3896164149785195

$\mu'_{11}$  :

- The average value for  $\mu'_{11}$  is : 0.18695943020684236
- Standard deviation for  $\mu'_{11}$  is : 0.05818268528992056
- Minimum value for  $\mu'_{11}$  is : 0.11117737733801236
- Maximum value for  $\mu'_{11}$  is : 0.37802739375647987

$\tilde{\mu}_2$  :

- The average value for  $\tilde{\mu}_2$  is : 1.7880051023658141
- Standard deviation for  $\tilde{\mu}_2$  is : 1.2736443353120785
- Minimum value for  $\tilde{\mu}_2$  is : 0.8471479999999998
- Maximum value for  $\tilde{\mu}_2$  is : 6.416193034836342

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

$m_H(\text{GeV})$  :

- The average value for  $m_H(\text{GeV})$  is : 127.37864964482884
- Standard deviation for  $m_H(\text{GeV})$  is : 1.9782998019975193
- Minimum value for  $m_H(\text{GeV})$  is : 122.3673385421512
- Maximum value for  $m_H(\text{GeV})$  is : 129.80513509684775

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

- The average value for  $m_{\psi_D}(\text{GeV})$  is : 2497.772099391411
- Standard deviation for  $m_{\psi_D}(\text{GeV})$  is : 730.452397790814
- Minimum value for  $m_{\psi_D}(\text{GeV})$  is : 1371.6904066415134
- Maximum value for  $m_{\psi_D}(\text{GeV})$  is : 5268.105264186319

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

- The average value for  $m_\tau(\text{GeV})$  is : 1.7545665167341082
- Standard deviation for  $m_\tau(\text{GeV})$  is : 0.02159752359528236
- Minimum value for  $m_\tau(\text{GeV})$  is : 1.7167560943085807
- Maximum value for  $m_\tau(\text{GeV})$  is : 1.8068016093967403

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

- The average value for  $m_\tau^{(1)}(\text{GeV})$  is : 1379.9916747584812
- Standard deviation for  $m_\tau^{(1)}(\text{GeV})$  is : 416.10679292238115
- Minimum value for  $m_\tau^{(1)}(\text{GeV})$  is : 727.3069068822812
- Maximum value for  $m_\tau^{(1)}(\text{GeV})$  is : 2551.0692462747534

$m_\nu(\text{eV})$  :

- The average value for  $m_\nu(\text{eV})$  is : 0.09552918607103777

- Standard deviation for  $m_\nu(eV)$  is : 0.0331760702028017
- Minimum value for  $m_\nu(eV)$  is : 0.020601423117924678
- Maximum value for  $m_\nu(eV)$  is : 0.1328272849724689

$m_b(\text{GeV})$  :

- The average value for  $m_b(\text{GeV})$  is : 4.158269670968372
- Standard deviation for  $m_b(\text{GeV})$  is : 0.07542866591087509
- 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  $m_b^{(1)}(\text{GeV})$  is : 3381.4482989923795
- Standard deviation for  $m_b^{(1)}(\text{GeV})$  is : 1172.7573134294475
- Minimum value for  $m_b^{(1)}(\text{GeV})$  is : 1495.2767699310994
- Maximum value for  $m_b^{(1)}(\text{GeV})$  is : 8473.705671593076

$m_t(\text{GeV})$  :

- The average value for  $m_t(\text{GeV})$  is : 172.40578630156546
- Standard deviation for  $m_t(\text{GeV})$  is : 2.8199596306776504
- 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  $\langle\theta_H\rangle(\text{rad})$  is : 0.13013723675730435
- Standard deviation for  $\langle\theta_H\rangle(\text{rad})$  is : 0.03606578575844282
- Minimum value for  $\langle\theta_H\rangle(\text{rad})$  is : 0.05017016818823639
- Maximum value for  $\langle\theta_H\rangle(\text{rad})$  is : 0.2222597944309811

$m_Z(\text{GeV})$  :

- The average value for  $m_Z(\text{GeV})$  is : 91.94910226805946
- Standard deviation for  $m_Z(\text{GeV})$  is : 1.1724041602891588
- Minimum value for  $m_Z(\text{GeV})$  is : 88.8937820474113
- Maximum value for  $m_Z(\text{GeV})$  is : 94.65471272418216

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

- The average value for  $m_{W^\pm}(\text{GeV})$  is : 80.62211383482264
- Standard deviation for  $m_{W^\pm}(\text{GeV})$  is : 1.0279785157194135
- Minimum value for  $m_{W^\pm}(\text{GeV})$  is : 77.94317115289397
- Maximum value for  $m_{W^\pm}(\text{GeV})$  is : 82.9944266557819

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

- The average value for  $m_{Z'}(\text{GeV})$  is : 11635.701836232463
- Standard deviation for  $m_{Z'}(\text{GeV})$  is : 3474.2253091836146
- Minimum value for  $m_{Z'}(\text{GeV})$  is : 6262.967650411356
- Maximum value for  $m_{Z'}(\text{GeV})$  is : 27094.417927659804

$T :$

- 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 : 0.9823084621126157
- Standard deviation for  $y_t$  is : 0.00525724134379962
- Minimum value for  $y_t$  is : 0.9669443037702264
- Maximum value for  $y_t$  is : 0.9900818653732869

$\tau_H :$

- The average value for  $\tau_H$  is : 29.882675047130252
- Standard deviation for  $\tau_H$  is : 1.1957862254688123
- Minimum value for  $\tau_H$  is : 27.20407111212093
- Maximum value for  $\tau_H$  is : 31.632099263565543

$\sigma(hh)(fb) :$

- The average value for  $\sigma(hh)(fb)$  is : 17.625166681729528
- Standard deviation for  $\sigma(hh)(fb)$  is : 0.8499101989424039

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

$\Delta_{HH}$  :

- The average value for  $\Delta_{HH}$  is : 0.12201598804280298
- Standard deviation for  $\Delta_{HH}$  is : 0.0054822375386911785
- Minimum value for  $\Delta_{HH}$  is : 0.11339357454058306
- Maximum value for  $\Delta_{HH}$  is : 0.13496472214819547

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

$\chi_G^2$  :

- The average value for  $\chi_G^2$  is : 14.115373275999378
- Standard deviation for  $\chi_G^2$  is : 3.575416533931879
- Minimum value for  $\chi_G^2$  is : 3.776936935524515
- Maximum value for  $\chi_G^2$  is : 19.65299759891989

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

- The average value for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 1019791.6177266919
- Standard deviation for  $\Lambda_{\text{Max}}(\text{GeV})$  is : 759027.4519538343
- 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 : 0.041429816990297234
- Standard deviation for  $\sin^2 \theta_W(\Lambda_{\text{Max}})$  is : 0.013163903206694503
- 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 : 0.03284968242887869
- Standard deviation for  $\sin^2 \theta_W(M_{\text{KK}_5})$  is : 0.01385508284785603
- 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 : 74.32465038903123
  - Standard deviation for  $(\alpha)_{1Y}^{-1}$  is : 1.3118440829157212
  - 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 : 4.199916956142213
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 1.7599787131846718
  - 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 : 12.606145497627212
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 0.48461959597004406
  - 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 : 10.300835715006423
  - Standard deviation for  $(\alpha)_{4C}^{-1}$  is : 0.3488867931470378
  - 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 : 5.119164000860411
  - Standard deviation for  $(\alpha)_{2L}^{-1}$  is : 1.5600487127024751
  - 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 : 112.1628322220332
  - Standard deviation for  $(\alpha)_{3C}^{-1}$  is : 2.856331749836001
  - Minimum value for  $(\alpha)_{3C}^{-1}$  is : 106.97881825962466
  - Maximum value for  $(\alpha)_{3C}^{-1}$  is : 114.95783759043304