

```

# SUSY Les Houches Accord 2 - mnuSSM Spectrum + Decays + Flavor Observables
# SPheno module generated by SARAH
# -----
# SPheno v3.3.6
# W. Porod, Comput. Phys. Commun. 153 (2003) 275-315, hep-ph/0301101
# W. Porod, F.Staub, Comput.Phys.Commun.183 (2012) 2458-2469, arXiv:1104.1573
# SARAH: 4.5.9b3
# F. Staub; arXiv:0806.0538 (online manual)
# F. Staub; Comput. Phys. Commun. 181 (2010) 1077-1086; arXiv:0909.2863
# F. Staub; Comput. Phys. Commun. 182 (2011) 808-833; arXiv:1002.0840
# F. Staub; Comput. Phys. Commun. 184 (2013) 1792-1809; arXiv:1207.0906
# F. Staub; Comput. Phys. Commun. 185 (2014) 1773-1790; arXiv:1309.7223
# Including the calculation of flavor observables based on the FlavorKit
# W. Porod, F. Staub, A. Vicente; Eur.Phys.J. C74 (2014) 8, 2992; arXiv:1405.1434
# Two-loop mass corrections to Higgs fields based on
# M. D. Goodsell, K. Nickel, F. Staub; arXiv:1411.0675
# M. D. Goodsell, K. Nickel, F. Staub; arXiv:1503.03098
#
# in case of problems send email to florian.staub@cern.ch and goodsell@lpthe.jussieu.fr
# -----
# Created: 26.09.2019, 14:15
Block SPINFO # Program information
  1 SPhenoSARAH # spectrum calculator
  2 v3.3.6 # version number of SPheno
  9 4.5.9b3 # version number of SARAH
Block MODSEL # Input parameters
  1 0 # SUSY Scale input
  2 1 # Boundary conditions
  6 1 # switching on flavour violation
Block MINPAR # Input parameters
  3 1.68026137E+00 # TanBeta
Block EXTPAR # Input parameters
  65 4.24154790E+02 # vR1Input
  66 4.24154790E+02 # vR2Input
  67 4.24154790E+02 # vR3Input
  200 1.50000007E-04 # vL1Input
  201 4.00999998E-04 # vL2Input
  202 5.49999997E-04 # vL3Input
Block SMINPUTS # SM parameters
  1 1.27932000E+02 # alpha_em^-1(MZ)^MSbar
  2 1.16637000E-05 # G_mu [GeV^-2]
  3 1.18700000E-01 # alpha_s(MZ)^MSbar
  4 9.11887000E+01 # m_Z(pole)
  5 4.20000000E+00 # m_b(m_b), MSbar
  6 1.72600000E+02 # m_t(pole)
  7 1.77669000E+00 # m_tau(pole)
Block MSOFT # (SUSY Scale)
  21 2.71006753E+05 # mHd2
  22 6.58182697E+04 # mHu2
  1 9.00000000E+02 # M1
  2 1.80000000E+03 # M2
  3 2.70000000E+03 # M3
Block HMX # (SUSY Scale)
  102 1.21966134E+02 # vd
  103 2.04934984E+02 # vu
Block PHASES # (SUSY Scale)
  1 1.00000000E+00 # pG
Block Yd # (SUSY Scale)
  1 1 2.78829649E-05 # Real(Yd(1,1),dp)
  1 2 0.00000000E+00 # Real(Yd(1,2),dp)
  1 3 0.00000000E+00 # Real(Yd(1,3),dp)
  2 1 0.00000000E+00 # Real(Yd(2,1),dp)
  2 2 5.28814848E-04 # Real(Yd(2,2),dp)
  2 3 0.00000000E+00 # Real(Yd(2,3),dp)
  3 1 0.00000000E+00 # Real(Yd(3,1),dp)
  3 2 0.00000000E+00 # Real(Yd(3,2),dp)
  3 3 2.74022232E-02 # Real(Yd(3,3),dp)
Block Ye # (SUSY Scale)
  1 1 5.58344499E-06 # Real(Ye(1,1),dp)
  1 2 0.00000000E+00 # Real(Ye(1,2),dp)
  1 3 0.00000000E+00 # Real(Ye(1,3),dp)
  2 1 0.00000000E+00 # Real(Ye(2,1),dp)
  2 2 1.18010590E-03 # Real(Ye(2,2),dp)

```

```

2 3      0.00000000E+00 # Real(Ye(2,3),dp)
3 1      0.00000000E+00 # Real(Ye(3,1),dp)
3 2      0.00000000E+00 # Real(Ye(3,2),dp)
3 3      2.00618006E-02 # Real(Ye(3,3),dp)
Block {NMSSMRUN, 1} # (SUSY Scale)
1      3.67255432E-01 # Real(lam(1),dp)
2      3.67255432E-01 # Real(lam(2),dp)
3      3.67255432E-01 # Real(lam(3),dp)
Block Yv # (SUSY Scale)
1 1      2.00000002E-07 # Real(Yv(1,1),dp)
1 2      0.00000000E+00 # Real(Yv(1,2),dp)
1 3      0.00000000E+00 # Real(Yv(1,3),dp)
2 1      0.00000000E+00 # Real(Yv(2,1),dp)
2 2      4.00000005E-07 # Real(Yv(2,2),dp)
2 3      0.00000000E+00 # Real(Yv(2,3),dp)
3 1      0.00000000E+00 # Real(Yv(3,1),dp)
3 2      0.00000000E+00 # Real(Yv(3,2),dp)
3 3      5.00000006E-08 # Real(Yv(3,3),dp)
Block Yu # (SUSY Scale)
1 1      7.00835254E-06 # Real(Yu(1,1),dp)
1 2      1.62102854E-06 # Real(Yu(1,2),dp)
1 3      2.46374310E-08 # Real(Yu(1,3),dp)
2 1      -7.89908003E-04 # Real(Yu(2,1),dp)
2 2      3.41289253E-03 # Real(Yu(2,2),dp)
2 3      1.44396285E-04 # Real(Yu(2,3),dp)
3 1      5.85400264E-03 # Real(Yu(3,1),dp)
3 2      -4.02576029E-02 # Real(Yu(3,2),dp)
3 3      9.83536354E-01 # Real(Yu(3,3),dp)
Block {NMSSMRUN, 2} # (SUSY Scale)
1 1 1      1.03160742E-01 # Real(kap(1,1,1),dp)
1 1 2      0.00000000E+00 # Real(kap(1,1,2),dp)
1 1 3      0.00000000E+00 # Real(kap(1,1,3),dp)
1 2 1      0.00000000E+00 # Real(kap(1,2,1),dp)
1 2 2      0.00000000E+00 # Real(kap(1,2,2),dp)
1 2 3      0.00000000E+00 # Real(kap(1,2,3),dp)
1 3 1      0.00000000E+00 # Real(kap(1,3,1),dp)
1 3 2      0.00000000E+00 # Real(kap(1,3,2),dp)
1 3 3      0.00000000E+00 # Real(kap(1,3,3),dp)
2 1 1      0.00000000E+00 # Real(kap(2,1,1),dp)
2 1 2      0.00000000E+00 # Real(kap(2,1,2),dp)
2 1 3      0.00000000E+00 # Real(kap(2,1,3),dp)
2 2 1      0.00000000E+00 # Real(kap(2,2,1),dp)
2 2 2      1.05223955E-01 # Real(kap(2,2,2),dp)
2 2 3      0.00000000E+00 # Real(kap(2,2,3),dp)
2 3 1      0.00000000E+00 # Real(kap(2,3,1),dp)
2 3 2      0.00000000E+00 # Real(kap(2,3,2),dp)
2 3 3      0.00000000E+00 # Real(kap(2,3,3),dp)
3 1 1      0.00000000E+00 # Real(kap(3,1,1),dp)
3 1 2      0.00000000E+00 # Real(kap(3,1,2),dp)
3 1 3      0.00000000E+00 # Real(kap(3,1,3),dp)
3 2 1      0.00000000E+00 # Real(kap(3,2,1),dp)
3 2 2      0.00000000E+00 # Real(kap(3,2,2),dp)
3 2 3      0.00000000E+00 # Real(kap(3,2,3),dp)
3 3 1      0.00000000E+00 # Real(kap(3,3,1),dp)
3 3 2      0.00000000E+00 # Real(kap(3,3,2),dp)
3 3 3      1.07287168E-01 # Real(kap(3,3,3),dp)
Block Td # (SUSY Scale)
1 1      0.00000000E+00 # Real(Td(1,1),dp)
1 2      0.00000000E+00 # Real(Td(1,2),dp)
1 3      0.00000000E+00 # Real(Td(1,3),dp)
2 1      0.00000000E+00 # Real(Td(2,1),dp)
2 2      0.00000000E+00 # Real(Td(2,2),dp)
2 3      0.00000000E+00 # Real(Td(2,3),dp)
3 1      0.00000000E+00 # Real(Td(3,1),dp)
3 2      0.00000000E+00 # Real(Td(3,2),dp)
3 3      1.00000000E+02 # Real(Td(3,3),dp)
Block Te # (SUSY Scale)
1 1      0.00000000E+00 # Real(Te(1,1),dp)
1 2      0.00000000E+00 # Real(Te(1,2),dp)
1 3      0.00000000E+00 # Real(Te(1,3),dp)
2 1      0.00000000E+00 # Real(Te(2,1),dp)
2 2      0.00000000E+00 # Real(Te(2,2),dp)
2 3      0.00000000E+00 # Real(Te(2,3),dp)

```

```

3 1      0.00000000E+00 # Real(Te(3,1),dp)
3 2      0.00000000E+00 # Real(Te(3,2),dp)
3 3      4.00000000E+01 # Real(Te(3,3),dp)
Block {NMSSMRUN, 3} # (SUSY Scale)
  1      2.56627074E+02 # Real(Tlam(1) ,dp)
  2      2.56627074E+02 # Real(Tlam(2) ,dp)
  3      2.56627074E+02 # Real(Tlam(3) ,dp)
Block Tv # (SUSY Scale)
  1 1     -1.00000005E-03 # Real(Tv(1,1),dp)
  1 2      0.00000000E+00 # Real(Tv(1,2),dp)
  1 3      0.00000000E+00 # Real(Tv(1,3),dp)
  2 1      0.00000000E+00 # Real(Tv(2,1),dp)
  2 2     -1.00000005E-03 # Real(Tv(2,2),dp)
  2 3      0.00000000E+00 # Real(Tv(2,3),dp)
  3 1      0.00000000E+00 # Real(Tv(3,1),dp)
  3 2      0.00000000E+00 # Real(Tv(3,2),dp)
  3 3     -3.00000014E-04 # Real(Tv(3,3),dp)
Block Tu # (SUSY Scale)
  1 1      0.00000000E+00 # Real(Tu(1,1),dp)
  1 2      0.00000000E+00 # Real(Tu(1,2),dp)
  1 3      0.00000000E+00 # Real(Tu(1,3),dp)
  2 1      0.00000000E+00 # Real(Tu(2,1),dp)
  2 2      0.00000000E+00 # Real(Tu(2,2),dp)
  2 3      0.00000000E+00 # Real(Tu(2,3),dp)
  3 1      0.00000000E+00 # Real(Tu(3,1),dp)
  3 2      0.00000000E+00 # Real(Tu(3,2),dp)
  3 3     -4.58512274E+02 # Real(Tu(3,3),dp)
Block {NMSSMRUN, 4} # (SUSY Scale)
  1 1 1     -1.75475758E+00 # Real(Tk(1,1,1),dp)
  1 1 2      0.00000000E+00 # Real(Tk(1,1,2),dp)
  1 1 3      0.00000000E+00 # Real(Tk(1,1,3),dp)
  1 2 1      0.00000000E+00 # Real(Tk(1,2,1),dp)
  1 2 2      0.00000000E+00 # Real(Tk(1,2,2),dp)
  1 2 3      0.00000000E+00 # Real(Tk(1,2,3),dp)
  1 3 1      0.00000000E+00 # Real(Tk(1,3,1),dp)
  1 3 2      0.00000000E+00 # Real(Tk(1,3,2),dp)
  1 3 3      0.00000000E+00 # Real(Tk(1,3,3),dp)
  2 1 1      0.00000000E+00 # Real(Tk(2,1,1),dp)
  2 1 2      0.00000000E+00 # Real(Tk(2,1,2),dp)
  2 1 3      0.00000000E+00 # Real(Tk(2,1,3),dp)
  2 2 1      0.00000000E+00 # Real(Tk(2,2,1),dp)
  2 2 2     -1.75475758E+00 # Real(Tk(2,2,2),dp)
  2 2 3      0.00000000E+00 # Real(Tk(2,2,3),dp)
  2 3 1      0.00000000E+00 # Real(Tk(2,3,1),dp)
  2 3 2      0.00000000E+00 # Real(Tk(2,3,2),dp)
  2 3 3      0.00000000E+00 # Real(Tk(2,3,3),dp)
  3 1 1      0.00000000E+00 # Real(Tk(3,1,1),dp)
  3 1 2      0.00000000E+00 # Real(Tk(3,1,2),dp)
  3 1 3      0.00000000E+00 # Real(Tk(3,1,3),dp)
  3 2 1      0.00000000E+00 # Real(Tk(3,2,1),dp)
  3 2 2      0.00000000E+00 # Real(Tk(3,2,2),dp)
  3 2 3      0.00000000E+00 # Real(Tk(3,2,3),dp)
  3 3 1      0.00000000E+00 # Real(Tk(3,3,1),dp)
  3 3 2      0.00000000E+00 # Real(Tk(3,3,2),dp)
  3 3 3     -1.75475758E+00 # Real(Tk(3,3,3),dp)
Block MSQ2 # (SUSY Scale)
  1 1      1.00000000E+06 # Real(mq2(1,1),dp)
  1 2      0.00000000E+00 # Real(mq2(1,2),dp)
  1 3      0.00000000E+00 # Real(mq2(1,3),dp)
  2 1      0.00000000E+00 # Real(mq2(2,1),dp)
  2 2      1.00000000E+06 # Real(mq2(2,2),dp)
  2 3      0.00000000E+00 # Real(mq2(2,3),dp)
  3 1      0.00000000E+00 # Real(mq2(3,1),dp)
  3 2      0.00000000E+00 # Real(mq2(3,2),dp)
  3 3      1.78300873E+06 # Real(mq2(3,3),dp)
Block MSL2 # (SUSY Scale)
  1 1      4.22660121E+05 # Real(ml2(1,1),dp)
  1 2      0.00000000E+00 # Real(ml2(1,2),dp)
  1 3      0.00000000E+00 # Real(ml2(1,3),dp)
  2 1      0.00000000E+00 # Real(ml2(2,1),dp)
  2 2      1.58287491E+05 # Real(ml2(2,2),dp)
  2 3      0.00000000E+00 # Real(ml2(2,3),dp)
  3 1      0.00000000E+00 # Real(ml2(3,1),dp)

```

```

3 2      0.00000000E+00 # Real(ml2(3,2),dp)
3 3      2.48393724E+04 # Real(ml2(3,3),dp)
Block MSD2 # (SUSY Scale)
1 1      1.00000000E+06 # Real(md2(1,1),dp)
1 2      0.00000000E+00 # Real(md2(1,2),dp)
1 3      0.00000000E+00 # Real(md2(1,3),dp)
2 1      0.00000000E+00 # Real(md2(2,1),dp)
2 2      1.00000000E+06 # Real(md2(2,2),dp)
2 3      0.00000000E+00 # Real(md2(2,3),dp)
3 1      0.00000000E+00 # Real(md2(3,1),dp)
3 2      0.00000000E+00 # Real(md2(3,2),dp)
3 3      1.00000000E+06 # Real(md2(3,3),dp)
Block MSU2 # (SUSY Scale)
1 1      1.00000000E+06 # Real(mu2(1,1),dp)
1 2      0.00000000E+00 # Real(mu2(1,2),dp)
1 3      0.00000000E+00 # Real(mu2(1,3),dp)
2 1      0.00000000E+00 # Real(mu2(2,1),dp)
2 2      1.00000000E+06 # Real(mu2(2,2),dp)
2 3      0.00000000E+00 # Real(mu2(2,3),dp)
3 1      0.00000000E+00 # Real(mu2(3,1),dp)
3 2      0.00000000E+00 # Real(mu2(3,2),dp)
3 3      1.78300873E+06 # Real(mu2(3,3),dp)
Block MSE2 # (SUSY Scale)
1 1      1.00000000E+06 # Real(me2(1,1),dp)
1 2      0.00000000E+00 # Real(me2(1,2),dp)
1 3      0.00000000E+00 # Real(me2(1,3),dp)
2 1      0.00000000E+00 # Real(me2(2,1),dp)
2 2      1.00000000E+06 # Real(me2(2,2),dp)
2 3      0.00000000E+00 # Real(me2(2,3),dp)
3 1      0.00000000E+00 # Real(me2(3,1),dp)
3 2      0.00000000E+00 # Real(me2(3,2),dp)
3 3      1.00000000E+06 # Real(me2(3,3),dp)
Block mv2 # (SUSY Scale)
1 1      6.21415265E+03 # Real(mv2(1,1),dp)
1 2      0.00000000E+00 # Real(mv2(1,2),dp)
1 3      0.00000000E+00 # Real(mv2(1,3),dp)
2 1      0.00000000E+00 # Real(mv2(2,1),dp)
2 2      6.16635110E+03 # Real(mv2(2,2),dp)
2 3      0.00000000E+00 # Real(mv2(2,3),dp)
3 1      0.00000000E+00 # Real(mv2(3,1),dp)
3 2      0.00000000E+00 # Real(mv2(3,2),dp)
3 3      6.11701097E+03 # Real(mv2(3,3),dp)
Block RVM2LH1 # (SUSY Scale)
1      0.00000000E+00 # mlHd2(1)
2      0.00000000E+00 # mlHd2(2)
3      0.00000000E+00 # mlHd2(3)
Block RIGHTVEV # (SUSY Scale)
1      4.24154790E+02 # vR(1)
2      4.24154790E+02 # vR(2)
3      4.24154790E+02 # vR(3)
Block RVSNEV # (SUSY Scale)
1      1.50000007E-04 # vL(1)
2      4.00999998E-04 # vL(2)
3      5.49999997E-04 # vL(3)
Block MASS # Mass spectrum
# PDG code      mass      particle
1000001      1.00011223E+03 # Sd_1
1000003      1.00014328E+03 # Sd_2
1000005      1.00014351E+03 # Sd_3
2000001      1.00081297E+03 # Sd_4
2000003      1.00081321E+03 # Sd_5
2000005      1.33593004E+03 # Sd_6
1000002      9.99329928E+02 # Su_1
1000004      9.99339759E+02 # Su_2
1000006      9.99712912E+02 # Su_3
2000002      9.99719718E+02 # Su_4
2000004      1.30686997E+03 # Su_5
2000006      1.37726490E+03 # Su_6
      25      9.73626055E+01 # hh_1
      35      9.82813096E+01 # hh_2
1000012      1.24549869E+02 # hh_3
1000014      1.25469308E+02 # hh_4
1000016      1.90289438E+02 # hh_5

```

```

2000012      4.15060844E+02 # hh_6
2000014      6.63870401E+02 # hh_7
2000016      7.27270466E+02 # hh_8
   36      8.86359436E+01 # Ah_2
1000017      1.03328148E+02 # Ah_3
1000018      1.03655508E+02 # Ah_4
1000019      1.90289441E+02 # Ah_5
2000018      4.15060848E+02 # Ah_6
2000019      6.63870407E+02 # Ah_7
2000020      7.31427297E+02 # Ah_8
   37      1.98412546E+02 # Hpm_2
1000011      4.17739113E+02 # Hpm_3
2000011      6.64579592E+02 # Hpm_4
1000013      7.25663884E+02 # Hpm_5
2000013      1.00300394E+03 # Hpm_6
1000015      1.00304374E+03 # Hpm_7
2000015      1.00304376E+03 # Hpm_8
   23      9.11887000E+01 # VZ
   24      8.03497269E+01 # VWm
   1      5.00000000E-03 # Fd_1
   3      9.50000000E-02 # Fd_2
   5      4.20000000E+00 # Fd_3
   2      2.50000000E-03 # Fu_1
   4      1.27000000E+00 # Fu_2
   6      1.72600000E+02 # Fu_3
1000021      2.70000000E+03 # Glu
   12      6.17378824E-12 # Chi_1
   14      2.28450207E-11 # Chi_2
   16      6.74607816E-11 # Chi_3
1000022      6.23326249E+01 # Chi_4
1000023      6.37578073E+01 # Chi_5
1000025      8.64599052E+01 # Chi_6
1000039      3.28434729E+02 # Chi_7
1000045      3.57736729E+02 # Chi_8
1000055      8.89728461E+02 # Chi_9
1000065      1.77063747E+03 # Chi_10
   11      5.10998930E-04 # Cha_1
   13      1.05658372E-01 # Cha_2
   15      1.77669000E+00 # Cha_3
1000024      3.29242181E+02 # Cha_4
1000037      1.77070847E+03 # Cha_5
Block DSQMIX # ( )
 1 1 -0.00000000E+00 # Real(ZD(1,1),dp)
 1 2 -0.00000000E+00 # Real(ZD(1,2),dp)
 1 3  9.32136692E-03 # Real(ZD(1,3),dp)
 1 4 -0.00000000E+00 # Real(ZD(1,4),dp)
 1 5 -0.00000000E+00 # Real(ZD(1,5),dp)
 1 6 -9.99956555E-01 # Real(ZD(1,6),dp)
 2 1 -0.00000000E+00 # Real(ZD(2,1),dp)
 2 2  1.88934617E-02 # Real(ZD(2,2),dp)
 2 3 -0.00000000E+00 # Real(ZD(2,3),dp)
 2 4 -0.00000000E+00 # Real(ZD(2,4),dp)
 2 5  9.99821503E-01 # Real(ZD(2,5),dp)
 2 6 -0.00000000E+00 # Real(ZD(2,6),dp)
 3 1 -9.96733003E-04 # Real(ZD(3,1),dp)
 3 2 -0.00000000E+00 # Real(ZD(3,2),dp)
 3 3 -0.00000000E+00 # Real(ZD(3,3),dp)
 3 4 -9.99999503E-01 # Real(ZD(3,4),dp)
 3 5 -0.00000000E+00 # Real(ZD(3,5),dp)
 3 6 -0.00000000E+00 # Real(ZD(3,6),dp)
 4 1 -9.99999503E-01 # Real(ZD(4,1),dp)
 4 2  0.00000000E+00 # Real(ZD(4,2),dp)
 4 3  0.00000000E+00 # Real(ZD(4,3),dp)
 4 4  9.96733003E-04 # Real(ZD(4,4),dp)
 4 5  0.00000000E+00 # Real(ZD(4,5),dp)
 4 6  0.00000000E+00 # Real(ZD(4,6),dp)
 5 1  0.00000000E+00 # Real(ZD(5,1),dp)
 5 2  9.99821503E-01 # Real(ZD(5,2),dp)
 5 3  0.00000000E+00 # Real(ZD(5,3),dp)
 5 4  0.00000000E+00 # Real(ZD(5,4),dp)
 5 5 -1.88934617E-02 # Real(ZD(5,5),dp)
 5 6  0.00000000E+00 # Real(ZD(5,6),dp)
 6 1  0.00000000E+00 # Real(ZD(6,1),dp)

```

```

6 2      0.00000000E+00 # Real(ZD(6,2),dp)
6 3      9.99956555E-01 # Real(ZD(6,3),dp)
6 4      0.00000000E+00 # Real(ZD(6,4),dp)
6 5      0.00000000E+00 # Real(ZD(6,5),dp)
6 6      9.32136692E-03 # Real(ZD(6,6),dp)
Block USQMIX # ( )
1 1     -9.95657700E-01 # Real(ZU(1,1),dp)
1 2     -9.13993532E-02 # Real(ZU(1,2),dp)
1 3      4.70339456E-05 # Real(ZU(1,3),dp)
1 4     -2.65259684E-04 # Real(ZU(1,4),dp)
1 5      1.76585425E-02 # Real(ZU(1,5),dp)
1 6     -7.06382763E-05 # Real(ZU(1,6),dp)
2 1      8.83104992E-02 # Real(ZU(2,1),dp)
2 2     -9.87391155E-01 # Real(ZU(2,2),dp)
2 3     -8.80276727E-04 # Real(ZU(2,3),dp)
2 4     -3.75051520E-05 # Real(ZU(2,4),dp)
2 5     -1.31367551E-01 # Real(ZU(2,5),dp)
2 6      1.32369759E-03 # Real(ZU(2,6),dp)
3 1      2.60990282E-04 # Real(ZU(3,1),dp)
3 2      6.04229640E-05 # Real(ZU(3,2),dp)
3 3      1.89249309E-08 # Real(ZU(3,3),dp)
3 4     -9.99999964E-01 # Real(ZU(3,4),dp)
3 5      6.79145181E-06 # Real(ZU(3,5),dp)
3 6     -2.98662097E-08 # Real(ZU(3,6),dp)
4 1      2.94427866E-02 # Real(ZU(4,1),dp)
4 2     -1.29237517E-01 # Real(ZU(4,2),dp)
4 3     -1.12354206E-04 # Real(ZU(4,3),dp)
4 4      6.60688722E-06 # Real(ZU(4,4),dp)
4 5      9.91176444E-01 # Real(ZU(4,5),dp)
4 6      1.77470470E-04 # Real(ZU(4,6),dp)
5 1      4.51832069E-05 # Real(ZU(5,1),dp)
5 2     -3.10715512E-04 # Real(ZU(5,2),dp)
5 3     -7.08604154E-01 # Real(ZU(5,3),dp)
5 4      7.09774295E-10 # Real(ZU(5,4),dp)
5 5      4.15988372E-06 # Real(ZU(5,5),dp)
5 6     -7.05606161E-01 # Real(ZU(5,6),dp)
6 1     -2.26603070E-04 # Real(ZU(6,1),dp)
6 2      1.55833961E-03 # Real(ZU(6,2),dp)
6 3     -7.05605671E-01 # Real(ZU(6,3),dp)
6 4      5.22263612E-10 # Real(ZU(6,4),dp)
6 5      3.06091044E-06 # Real(ZU(6,5),dp)
6 6      7.08602962E-01 # Real(ZU(6,6),dp)
Block SCALARMIX # ( )
1 1     -4.98259357E-03 # ZH(1,1)
1 2     -1.00707868E-02 # ZH(1,2)
1 3      7.98022737E-01 # ZH(1,3)
1 4     -5.64928098E-01 # ZH(1,4)
1 5     -2.09498705E-01 # ZH(1,5)
1 6      2.74700230E-07 # ZH(1,6)
1 7     -5.71403987E-07 # ZH(1,7)
1 8     -3.88758692E-07 # ZH(1,8)
2 1      5.03593198E-03 # ZH(2,1)
2 2      1.02129582E-02 # ZH(2,2)
2 3     -2.13027130E-01 # ZH(2,3)
2 4     -5.89944262E-01 # ZH(2,4)
2 5      7.78752557E-01 # ZH(2,5)
2 6     -6.77524514E-08 # ZH(2,6)
2 7     -5.45238980E-07 # ZH(2,7)
2 8      1.37980423E-06 # ZH(2,8)
3 1      9.70222033E-02 # ZH(3,1)
3 2      2.96420679E-01 # ZH(3,2)
3 3     -5.31964223E-01 # ZH(3,3)
3 4     -5.48006924E-01 # ZH(3,4)
3 5     -5.65176034E-01 # ZH(3,5)
3 6      2.83096019E-08 # ZH(3,6)
3 7      4.98824121E-08 # ZH(3,7)
3 8      3.72441524E-07 # ZH(3,8)
4 1      5.09058199E-01 # ZH(4,1)
4 2      8.05370644E-01 # ZH(4,2)
4 3      1.81754741E-01 # ZH(4,3)
4 4      1.75342276E-01 # ZH(4,4)
4 5      1.68695512E-01 # ZH(4,5)
4 6      6.86258946E-07 # ZH(4,6)

```

4	7	1.98567385E-06	# ZH(4,7)
4	8	4.80797026E-06	# ZH(4,8)
5	1	-2.59229059E-06	# ZH(5,1)
5	2	-3.94076404E-06	# ZH(5,2)
5	3	-6.66816193E-08	# ZH(5,3)
5	4	-3.96530126E-08	# ZH(5,4)
5	5	-1.75164861E-06	# ZH(5,5)
5	6	-3.21960988E-12	# ZH(5,6)
5	7	-9.96272051E-12	# ZH(5,7)
5	8	1.00000000E+00	# ZH(5,8)
6	1	-1.31391028E-06	# ZH(6,1)
6	2	-1.43528661E-06	# ZH(6,2)
6	3	2.00916131E-08	# ZH(6,3)
6	4	-9.50651143E-07	# ZH(6,4)
6	5	1.27937127E-08	# ZH(6,5)
6	6	-1.78016404E-12	# ZH(6,6)
6	7	1.00000000E+00	# ZH(6,7)
6	8	8.86611049E-13	# ZH(6,8)
7	1	1.51149119E-06	# ZH(7,1)
7	2	-1.39045255E-07	# ZH(7,2)
7	3	2.86388881E-07	# ZH(7,3)
7	4	-6.74461776E-08	# ZH(7,4)
7	5	-6.77044831E-08	# ZH(7,5)
7	6	-1.00000000E+00	# ZH(7,6)
7	7	-6.27367260E-14	# ZH(7,7)
7	8	4.85011337E-14	# ZH(7,8)
8	1	8.55217081E-01	# ZH(8,1)
8	2	-5.13134662E-01	# ZH(8,2)
8	3	-4.19336656E-02	# ZH(8,3)
8	4	-4.20179539E-02	# ZH(8,4)
8	5	-4.21025282E-02	# ZH(8,5)
8	6	1.35767717E-06	# ZH(8,6)
8	7	3.48619955E-07	# ZH(8,7)
8	8	1.16617392E-07	# ZH(8,8)
Block PSEUDOSCALARMIX # ()			
1	1	-4.75385161E-01	# ZA(1,1)
1	2	8.52522139E-01	# ZA(1,2)
1	3	1.28967473E-01	# ZA(1,3)
1	4	1.25373521E-01	# ZA(1,4)
1	5	1.21917274E-01	# ZA(1,5)
1	6	-5.72476911E-07	# ZA(1,6)
1	7	-1.52545205E-06	# ZA(1,7)
1	8	-2.00197745E-06	# ZA(1,8)
2	1	-2.15254389E-01	# ZA(2,1)
2	2	1.26767355E-01	# ZA(2,2)
2	3	-5.75544609E-01	# ZA(2,3)
2	4	-5.58652884E-01	# ZA(2,4)
2	5	-5.42449024E-01	# ZA(2,5)
2	6	-2.97563040E-07	# ZA(2,6)
2	7	-7.95689962E-07	# ZA(2,7)
2	8	-1.16194096E-06	# ZA(2,8)
3	1	1.77408337E-03	# ZA(3,1)
3	2	8.37805077E-04	# ZA(3,2)
3	3	-7.76281229E-01	# ZA(3,3)
3	4	5.93815653E-01	# ZA(3,4)
3	5	2.11581128E-01	# ZA(3,5)
3	6	-2.81835937E-07	# ZA(3,6)
3	7	6.02515334E-07	# ZA(3,7)
3	8	3.85018341E-07	# ZA(3,8)
4	1	1.76810566E-03	# ZA(4,1)
4	2	8.40129448E-04	# ZA(4,2)
4	3	-2.10756273E-01	# ZA(4,3)
4	4	-5.60808079E-01	# ZA(4,4)
4	5	8.00669882E-01	# ZA(4,5)
4	6	-7.70034018E-08	# ZA(4,6)
4	7	-5.73065177E-07	# ZA(4,7)
4	8	1.47074562E-06	# ZA(4,8)
5	1	-1.27447290E-06	# ZA(5,1)
5	2	1.81123356E-06	# ZA(5,2)
5	3	2.04091161E-07	# ZA(5,3)
5	4	2.03837035E-07	# ZA(5,4)
5	5	-1.63948585E-06	# ZA(5,5)
5	6	-1.33294606E-12	# ZA(5,6)

5	7	-3.75575851E-12	# ZA(5,7)
5	8	1.00000000E+00	# ZA(5,8)
6	1	-1.16027682E-06	# ZA(6,1)
6	2	1.24452949E-06	# ZA(6,2)
6	3	1.07772597E-07	# ZA(6,3)
6	4	-9.10418073E-07	# ZA(6,4)
6	5	1.07678640E-07	# ZA(6,5)
6	6	-1.42842380E-12	# ZA(6,6)
6	7	1.00000000E+00	# ZA(6,7)
6	8	3.63002664E-13	# ZA(6,8)
7	1	1.40429049E-06	# ZA(7,1)
7	2	1.09231384E-07	# ZA(7,2)
7	3	2.43102453E-07	# ZA(7,3)
7	4	-1.18883774E-07	# ZA(7,4)
7	5	-1.18667781E-07	# ZA(7,5)
7	6	-1.00000000E+00	# ZA(7,6)
7	7	-5.66365440E-14	# ZA(7,7)
7	8	3.90042545E-14	# ZA(7,8)
8	1	8.53034714E-01	# ZA(8,1)
8	2	5.07084443E-01	# ZA(8,2)
8	3	-7.13094702E-02	# ZA(8,3)
8	4	-7.11737557E-02	# ZA(8,4)
8	5	-7.10380254E-02	# ZA(8,5)
8	6	1.25285390E-06	# ZA(8,6)
8	7	3.09211470E-07	# ZA(8,7)
8	8	8.13169097E-08	# ZA(8,8)
Block CHARGEMIX # ()			
1	1	-5.11026101E-01	# ZP(1,1)
1	2	8.59565195E-01	# ZP(1,2)
1	3	-6.28375280E-07	# ZP(1,3)
1	4	-1.67675557E-06	# ZP(1,4)
1	5	-2.27305994E-06	# ZP(1,5)
1	6	3.74310270E-16	# ZP(1,6)
1	7	2.90721524E-13	# ZP(1,7)
1	8	-7.35239695E-11	# ZP(1,8)
2	1	-1.25340048E-06	# ZP(2,1)
2	2	1.89925309E-06	# ZP(2,2)
2	3	-1.50984299E-12	# ZP(2,3)
2	4	-4.84105846E-12	# ZP(2,4)
2	5	9.99996685E-01	# ZP(2,5)
2	6	-3.89489173E-20	# ZP(2,6)
2	7	-1.36266762E-16	# ZP(2,7)
2	8	-2.57490383E-03	# ZP(2,8)
3	1	-1.14876543E-06	# ZP(3,1)
3	2	1.26774147E-06	# ZP(3,2)
3	3	-1.54228043E-12	# ZP(3,3)
3	4	9.99999998E-01	# ZP(3,4)
3	5	9.93383051E-13	# ZP(3,5)
3	6	1.50641937E-21	# ZP(3,6)
3	7	6.88879816E-05	# ZP(3,7)
3	8	-2.04875801E-14	# ZP(3,8)
4	1	1.49526335E-06	# ZP(4,1)
4	2	1.57920913E-07	# ZP(4,2)
4	3	-1.00000000E+00	# ZP(4,3)
4	4	-2.49324788E-14	# ZP(4,4)
4	5	6.44956302E-14	# ZP(4,5)
4	6	-4.76681804E-07	# ZP(4,6)
4	7	7.38636335E-17	# ZP(4,7)
4	8	4.13065634E-14	# ZP(4,8)
5	1	-8.59565195E-01	# ZP(5,1)
5	2	-5.11026101E-01	# ZP(5,2)
5	3	-1.36597804E-06	# ZP(5,3)
5	4	-3.39589792E-07	# ZP(5,4)
5	5	-1.06890697E-07	# ZP(5,5)
5	6	-1.09658968E-12	# ZP(5,6)
5	7	-1.99722458E-10	# ZP(5,7)
5	8	-3.06109111E-08	# ZP(5,8)
6	1	2.95771305E-08	# ZP(6,1)
6	2	1.06894174E-08	# ZP(6,2)
6	3	4.44118456E-15	# ZP(6,3)
6	4	2.49262925E-15	# ZP(6,4)
6	5	-2.57490383E-03	# ZP(6,5)
6	6	1.16883932E-16	# ZP(6,6)

6	7	5.07167792E-14	# ZP(6,7)
6	8	-9.99996685E-01	# ZP(6,8)
7	1	9.23897020E-11	# ZP(7,1)
7	2	1.89645556E-10	# ZP(7,2)
7	3	6.43547371E-14	# ZP(7,3)
7	4	6.88879816E-05	# ZP(7,4)
7	5	-1.41934636E-16	# ZP(7,5)
7	6	-1.34830215E-07	# ZP(7,6)
7	7	-9.99999998E-01	# ZP(7,7)
7	8	-5.07115580E-14	# ZP(7,8)
8	1	2.29796479E-13	# ZP(8,1)
8	2	4.85376219E-13	# ZP(8,2)
8	3	4.76681804E-07	# ZP(8,3)
8	4	-9.28818016E-12	# ZP(8,4)
8	5	1.06534465E-19	# ZP(8,5)
8	6	-1.00000000E+00	# ZP(8,6)
8	7	1.34830215E-07	# ZP(8,7)
8	8	-1.16862730E-16	# ZP(8,8)
Block UVMIX # ()			
1	1	-0.00000000E+00	# Real(UV(1,1), dp)
1	2	-0.00000000E+00	# Real(UV(1,2), dp)
1	3	0.00000000E+00	# Real(UV(1,3), dp)
1	4	0.00000000E+00	# Real(UV(1,4), dp)
1	5	-0.00000000E+00	# Real(UV(1,5), dp)
1	6	-0.00000000E+00	# Real(UV(1,6), dp)
1	7	-0.00000000E+00	# Real(UV(1,7), dp)
1	8	0.00000000E+00	# Real(UV(1,8), dp)
1	9	0.00000000E+00	# Real(UV(1,9), dp)
1	10	-0.00000000E+00	# Real(UV(1,10), dp)
2	1	0.00000000E+00	# Real(UV(2,1), dp)
2	2	-0.00000000E+00	# Real(UV(2,2), dp)
2	3	0.00000000E+00	# Real(UV(2,3), dp)
2	4	0.00000000E+00	# Real(UV(2,4), dp)
2	5	-0.00000000E+00	# Real(UV(2,5), dp)
2	6	-0.00000000E+00	# Real(UV(2,6), dp)
2	7	-0.00000000E+00	# Real(UV(2,7), dp)
2	8	-0.00000000E+00	# Real(UV(2,8), dp)
2	9	0.00000000E+00	# Real(UV(2,9), dp)
2	10	-0.00000000E+00	# Real(UV(2,10), dp)
3	1	-0.00000000E+00	# Real(UV(3,1), dp)
3	2	-0.00000000E+00	# Real(UV(3,2), dp)
3	3	-0.00000000E+00	# Real(UV(3,3), dp)
3	4	-0.00000000E+00	# Real(UV(3,4), dp)
3	5	0.00000000E+00	# Real(UV(3,5), dp)
3	6	-0.00000000E+00	# Real(UV(3,6), dp)
3	7	0.00000000E+00	# Real(UV(3,7), dp)
3	8	-0.00000000E+00	# Real(UV(3,8), dp)
3	9	0.00000000E+00	# Real(UV(3,9), dp)
3	10	-0.00000000E+00	# Real(UV(3,10), dp)
4	1	3.64828667E-07	# Real(UV(4,1), dp)
4	2	-5.25003494E-07	# Real(UV(4,2), dp)
4	3	-2.65819113E-08	# Real(UV(4,3), dp)
4	4	2.50771210E-04	# Real(UV(4,4), dp)
4	5	-2.07964581E-04	# Real(UV(4,5), dp)
4	6	-3.05293493E-03	# Real(UV(4,6), dp)
4	7	-7.01604432E-03	# Real(UV(4,7), dp)
4	8	8.07157523E-01	# Real(UV(4,8), dp)
4	9	-5.53204630E-01	# Real(UV(4,9), dp)
4	10	-2.05919205E-01	# Real(UV(4,10), dp)
5	1	-9.01114364E-08	# Real(UV(5,1), dp)
5	2	-5.27823522E-07	# Real(UV(5,2), dp)
5	3	8.95014188E-08	# Real(UV(5,3), dp)
5	4	-2.60076999E-04	# Real(UV(5,4), dp)
5	5	2.15516492E-04	# Real(UV(5,5), dp)
5	6	3.12550735E-03	# Real(UV(5,6), dp)
5	7	7.24388888E-03	# Real(UV(5,7), dp)
5	8	-2.16371330E-01	# Real(UV(5,8), dp)
5	9	-6.01919756E-01	# Real(UV(5,9), dp)
5	10	7.68644065E-01	# Real(UV(5,10), dp)
6	1	6.97538519E-09	# Real(UV(6,1), dp)
6	2	-2.65120066E-09	# Real(UV(6,2), dp)
6	3	2.33819662E-08	# Real(UV(6,3), dp)
6	4	-9.30235843E-03	# Real(UV(6,4), dp)

```

6 5      7.61592603E-03 # Real(UV(6,5),dp)
6 6      8.91739938E-02 # Real(UV(6,6),dp)
6 7      2.40978784E-01 # Real(UV(6,7),dp)
6 8     -5.28688149E-01 # Real(UV(6,8),dp)
6 9     -5.56382616E-01 # Real(UV(6,9),dp)
6 10    -5.87162596E-01 # Real(UV(6,10),dp)
7 1     -1.49170658E-07 # Real(UV(7,1),dp)
7 2     -3.05317136E-07 # Real(UV(7,2),dp)
7 3     -8.52004072E-08 # Real(UV(7,3),dp)
7 4      7.23144035E-02 # Real(UV(7,4),dp)
7 5     -5.23310422E-02 # Real(UV(7,5),dp)
7 6      7.13739857E-01 # Real(UV(7,6),dp)
7 7     -6.86485255E-01 # Real(UV(7,7),dp)
7 8     -6.12121247E-02 # Real(UV(7,8),dp)
7 9     -6.14953005E-02 # Real(UV(7,9),dp)
7 10    -6.17811000E-02 # Real(UV(7,10),dp)
8 1     -0.00000000E+00 # Real(UV(8,1),dp)
8 2     -0.00000000E+00 # Real(UV(8,2),dp)
8 3     -0.00000000E+00 # Real(UV(8,3),dp)
8 4     -0.00000000E+00 # Real(UV(8,4),dp)
8 5      0.00000000E+00 # Real(UV(8,5),dp)
8 6      0.00000000E+00 # Real(UV(8,6),dp)
8 7      0.00000000E+00 # Real(UV(8,7),dp)
8 8      0.00000000E+00 # Real(UV(8,8),dp)
8 9      0.00000000E+00 # Real(UV(8,9),dp)
8 10     0.00000000E+00 # Real(UV(8,10),dp)
9 1      2.51070248E-08 # Real(UV(9,1),dp)
9 2      6.99488344E-08 # Real(UV(9,2),dp)
9 3      1.05951353E-07 # Real(UV(9,3),dp)
9 4     -9.97302935E-01 # Real(UV(9,4),dp)
9 5     -6.58347495E-03 # Real(UV(9,5),dp)
9 6      4.52901584E-02 # Real(UV(9,6),dp)
9 7     -5.73757709E-02 # Real(UV(9,7),dp)
9 8     -3.34632034E-04 # Real(UV(9,8),dp)
9 9     -3.35166744E-04 # Real(UV(9,9),dp)
9 10    -3.35702825E-04 # Real(UV(9,10),dp)
10 1     -2.63550989E-08 # Real(UV(10,1),dp)
10 2     -7.14860941E-08 # Real(UV(10,2),dp)
10 3     -1.01787136E-07 # Real(UV(10,3),dp)
10 4      2.64344688E-03 # Real(UV(10,4),dp)
10 5     -9.98539583E-01 # Real(UV(10,5),dp)
10 6     -3.08687434E-02 # Real(UV(10,6),dp)
10 7      4.42577496E-02 # Real(UV(10,7),dp)
10 8      1.69106936E-04 # Real(UV(10,8),dp)
10 9      1.69285735E-04 # Real(UV(10,9),dp)
10 10     1.69464435E-04 # Real(UV(10,10),dp)

```

Block IMUVMIX # ()

```

1 1     -8.22332876E-01 # Aimag(UV(1,1))
1 2     -2.56560759E-01 # Aimag(UV(1,2))
1 3      5.07883076E-01 # Aimag(UV(1,3))
1 4      5.21465984E-09 # Aimag(UV(1,4))
1 5     -4.83021242E-09 # Aimag(UV(1,5))
1 6     -2.22873860E-07 # Aimag(UV(1,6))
1 7     -7.62300187E-10 # Aimag(UV(1,7))
1 8      1.91740824E-07 # Aimag(UV(1,8))
1 9      4.70877539E-08 # Aimag(UV(1,9))
1 10    -2.39957459E-07 # Aimag(UV(1,10))
2 1      5.66409616E-01 # Aimag(UV(2,1))
2 2     -4.54273806E-01 # Aimag(UV(2,2))
2 3      6.87615777E-01 # Aimag(UV(2,3))
2 4      5.58935899E-08 # Aimag(UV(2,4))
2 5     -5.25071733E-08 # Aimag(UV(2,5))
2 6     -1.39068008E-08 # Aimag(UV(2,6))
2 7     -1.28107498E-08 # Aimag(UV(2,7))
2 8     -2.81665806E-07 # Aimag(UV(2,8))
2 9      3.96106079E-07 # Aimag(UV(2,9))
2 10    -9.45004577E-08 # Aimag(UV(2,10))
3 1     -5.43027518E-02 # Aimag(UV(3,1))
3 2     -8.53118917E-01 # Aimag(UV(3,2))
3 3     -5.18882766E-01 # Aimag(UV(3,3))
3 4     -1.36709272E-07 # Aimag(UV(3,4))
3 5      1.28512732E-07 # Aimag(UV(3,5))
3 6     -3.88131811E-07 # Aimag(UV(3,6))

```

3 7 3.35095269E-08 # Aimag(UV(3,7))
3 8 -2.88785880E-07 # Aimag(UV(3,8))
3 9 4.69817932E-07 # Aimag(UV(3,9))
3 10 -2.43980233E-07 # Aimag(UV(3,10))
4 1 0.00000000E+00 # Aimag(UV(4,1))
4 2 0.00000000E+00 # Aimag(UV(4,2))
4 3 0.00000000E+00 # Aimag(UV(4,3))
4 4 0.00000000E+00 # Aimag(UV(4,4))
4 5 0.00000000E+00 # Aimag(UV(4,5))
4 6 0.00000000E+00 # Aimag(UV(4,6))
4 7 0.00000000E+00 # Aimag(UV(4,7))
4 8 0.00000000E+00 # Aimag(UV(4,8))
4 9 0.00000000E+00 # Aimag(UV(4,9))
4 10 0.00000000E+00 # Aimag(UV(4,10))
5 1 0.00000000E+00 # Aimag(UV(5,1))
5 2 0.00000000E+00 # Aimag(UV(5,2))
5 3 0.00000000E+00 # Aimag(UV(5,3))
5 4 0.00000000E+00 # Aimag(UV(5,4))
5 5 0.00000000E+00 # Aimag(UV(5,5))
5 6 0.00000000E+00 # Aimag(UV(5,6))
5 7 0.00000000E+00 # Aimag(UV(5,7))
5 8 0.00000000E+00 # Aimag(UV(5,8))
5 9 0.00000000E+00 # Aimag(UV(5,9))
5 10 0.00000000E+00 # Aimag(UV(5,10))
6 1 0.00000000E+00 # Aimag(UV(6,1))
6 2 0.00000000E+00 # Aimag(UV(6,2))
6 3 0.00000000E+00 # Aimag(UV(6,3))
6 4 0.00000000E+00 # Aimag(UV(6,4))
6 5 0.00000000E+00 # Aimag(UV(6,5))
6 6 0.00000000E+00 # Aimag(UV(6,6))
6 7 0.00000000E+00 # Aimag(UV(6,7))
6 8 0.00000000E+00 # Aimag(UV(6,8))
6 9 0.00000000E+00 # Aimag(UV(6,9))
6 10 0.00000000E+00 # Aimag(UV(6,10))
7 1 0.00000000E+00 # Aimag(UV(7,1))
7 2 0.00000000E+00 # Aimag(UV(7,2))
7 3 0.00000000E+00 # Aimag(UV(7,3))
7 4 0.00000000E+00 # Aimag(UV(7,4))
7 5 0.00000000E+00 # Aimag(UV(7,5))
7 6 0.00000000E+00 # Aimag(UV(7,6))
7 7 0.00000000E+00 # Aimag(UV(7,7))
7 8 0.00000000E+00 # Aimag(UV(7,8))
7 9 0.00000000E+00 # Aimag(UV(7,9))
7 10 0.00000000E+00 # Aimag(UV(7,10))
8 1 -1.31668139E-07 # Aimag(UV(8,1))
8 2 -2.62507973E-07 # Aimag(UV(8,2))
8 3 -4.07405600E-08 # Aimag(UV(8,3))
8 4 -7.98946351E-03 # Aimag(UV(8,4))
8 5 8.87295620E-03 # Aimag(UV(8,5))
8 6 6.92531767E-01 # Aimag(UV(8,6))
8 7 6.82139864E-01 # Aimag(UV(8,7))
8 8 1.35727510E-01 # Aimag(UV(8,8))
8 9 1.35328549E-01 # Aimag(UV(8,9))
8 10 1.34931921E-01 # Aimag(UV(8,10))
9 1 0.00000000E+00 # Aimag(UV(9,1))
9 2 0.00000000E+00 # Aimag(UV(9,2))
9 3 0.00000000E+00 # Aimag(UV(9,3))
9 4 0.00000000E+00 # Aimag(UV(9,4))
9 5 0.00000000E+00 # Aimag(UV(9,5))
9 6 0.00000000E+00 # Aimag(UV(9,6))
9 7 0.00000000E+00 # Aimag(UV(9,7))
9 8 0.00000000E+00 # Aimag(UV(9,8))
9 9 0.00000000E+00 # Aimag(UV(9,9))
9 10 0.00000000E+00 # Aimag(UV(9,10))
10 1 0.00000000E+00 # Aimag(UV(10,1))
10 2 0.00000000E+00 # Aimag(UV(10,2))
10 3 0.00000000E+00 # Aimag(UV(10,3))
10 4 0.00000000E+00 # Aimag(UV(10,4))
10 5 0.00000000E+00 # Aimag(UV(10,5))
10 6 0.00000000E+00 # Aimag(UV(10,6))
10 7 0.00000000E+00 # Aimag(UV(10,7))
10 8 0.00000000E+00 # Aimag(UV(10,8))
10 9 0.00000000E+00 # Aimag(UV(10,9))

```

10 10      0.00000000E+00 # Aimag(UV(10,10))
Block UERMIX # ( )
  1 1      1.00000000E+00 # Real(ZER(1,1),dp)
  1 2      1.89015164E-06 # Real(ZER(1,2),dp)
  1 3      6.07265435E-09 # Real(ZER(1,3),dp)
  1 4     -4.59693449E-08 # Real(ZER(1,4),dp)
  1 5      2.00516647E-07 # Real(ZER(1,5),dp)
  2 1      1.89015172E-06 # Real(ZER(2,1),dp)
  2 2     -1.00000000E+00 # Real(ZER(2,2),dp)
  2 3     -1.60507092E-08 # Real(ZER(2,3),dp)
  2 4      1.18652610E-07 # Real(ZER(2,4),dp)
  2 5     -4.05479933E-07 # Real(ZER(2,5),dp)
  3 1     -6.07264928E-09 # Real(ZER(3,1),dp)
  3 2     -1.60507755E-08 # Real(ZER(3,2),dp)
  3 3      1.00000000E+00 # Real(ZER(3,3),dp)
  3 4     -1.47753665E-07 # Real(ZER(3,4),dp)
  3 5      9.13946179E-08 # Real(ZER(3,5),dp)
  4 1      2.02328170E-07 # Real(ZER(4,1),dp)
  4 2      4.10264494E-07 # Real(ZER(4,2),dp)
  4 3      9.77448051E-08 # Real(ZER(4,3),dp)
  4 4      4.35654282E-02 # Real(ZER(4,4),dp)
  4 5     -9.99050576E-01 # Real(ZER(4,5),dp)
  5 1      3.71899153E-08 # Real(ZER(5,1),dp)
  5 2      1.00875120E-07 # Real(ZER(5,2),dp)
  5 3      1.43631741E-07 # Real(ZER(5,3),dp)
  5 4      9.99050576E-01 # Real(ZER(5,4),dp)
  5 5      4.35654282E-02 # Real(ZER(5,5),dp)
Block UELMIX # ( )
  1 1      1.00000000E+00 # Real(ZEL(1,1),dp)
  1 2      2.36400965E-14 # Real(ZEL(1,2),dp)
  1 3      1.77328011E-15 # Real(ZEL(1,3),dp)
  1 4     -1.25911283E-13 # Real(ZEL(1,4),dp)
  1 5      2.08270918E-12 # Real(ZEL(1,5),dp)
  2 1      2.36399636E-14 # Real(ZEL(2,1),dp)
  2 2     -1.00000000E+00 # Real(ZEL(2,2),dp)
  2 3     -9.71200494E-13 # Real(ZEL(2,3),dp)
  2 4      6.89166927E-11 # Real(ZEL(2,4),dp)
  2 5     -1.13660048E-09 # Real(ZEL(2,5),dp)
  3 1     -1.77334745E-15 # Real(ZEL(3,1),dp)
  3 2     -9.71222693E-13 # Real(ZEL(3,2),dp)
  3 3      1.00000000E+00 # Real(ZEL(3,3),dp)
  3 4     -1.45504528E-09 # Real(ZEL(3,4),dp)
  3 5      2.40398710E-08 # Real(ZEL(3,5),dp)
  4 1      2.08650669E-12 # Real(ZEL(4,1),dp)
  4 2      1.13868559E-09 # Real(ZEL(4,2),dp)
  4 3      2.40838106E-08 # Real(ZEL(4,3),dp)
  4 4      6.25385265E-02 # Real(ZEL(4,4),dp)
  4 5     -9.98042551E-01 # Real(ZEL(4,5),dp)
  5 1     -4.58474478E-15 # Real(ZEL(5,1),dp)
  5 2     -2.29952755E-12 # Real(ZEL(5,2),dp)
  5 3     -5.12210103E-11 # Real(ZEL(5,3),dp)
  5 4      9.98042551E-01 # Real(ZEL(5,4),dp)
  5 5      6.25385265E-02 # Real(ZEL(5,5),dp)
Block UDLMIX # ( )
  1 1      1.00000000E+00 # Real(ZDL(1,1),dp)
  1 2      0.00000000E+00 # Real(ZDL(1,2),dp)
  1 3      0.00000000E+00 # Real(ZDL(1,3),dp)
  2 1      0.00000000E+00 # Real(ZDL(2,1),dp)
  2 2      1.00000000E+00 # Real(ZDL(2,2),dp)
  2 3      0.00000000E+00 # Real(ZDL(2,3),dp)
  3 1      0.00000000E+00 # Real(ZDL(3,1),dp)
  3 2      0.00000000E+00 # Real(ZDL(3,2),dp)
  3 3      1.00000000E+00 # Real(ZDL(3,3),dp)
Block UDRMIX # ( )
  1 1      1.00000000E+00 # Real(ZDR(1,1),dp)
  1 2      0.00000000E+00 # Real(ZDR(1,2),dp)
  1 3      0.00000000E+00 # Real(ZDR(1,3),dp)
  2 1      0.00000000E+00 # Real(ZDR(2,1),dp)
  2 2      1.00000000E+00 # Real(ZDR(2,2),dp)
  2 3      0.00000000E+00 # Real(ZDR(2,3),dp)
  3 1      0.00000000E+00 # Real(ZDR(3,1),dp)
  3 2      0.00000000E+00 # Real(ZDR(3,2),dp)
  3 3      1.00000000E+00 # Real(ZDR(3,3),dp)

```

```

Block UULMIX # ( )
 1 1 9.74272160E-01 # Real(ZUL(1,1),dp)
 1 2 2.25348678E-01 # Real(ZUL(1,2),dp)
 1 3 3.42499367E-03 # Real(ZUL(1,3),dp)
 2 1 -2.25296231E-01 # Real(ZUL(2,1),dp)
 2 2 9.73419462E-01 # Real(ZUL(2,2),dp)
 2 3 4.11844653E-02 # Real(ZUL(2,3),dp)
 3 1 5.94690932E-03 # Real(ZUL(3,1),dp)
 3 2 -4.08965161E-02 # Real(ZUL(3,2),dp)
 3 3 9.99145690E-01 # Real(ZUL(3,3),dp)
Block UURMIX # ( )
 1 1 1.00000000E+00 # Real(ZUR(1,1),dp)
 1 2 0.00000000E+00 # Real(ZUR(1,2),dp)
 1 3 0.00000000E+00 # Real(ZUR(1,3),dp)
 2 1 0.00000000E+00 # Real(ZUR(2,1),dp)
 2 2 1.00000000E+00 # Real(ZUR(2,2),dp)
 2 3 0.00000000E+00 # Real(ZUR(2,3),dp)
 3 1 0.00000000E+00 # Real(ZUR(3,1),dp)
 3 2 0.00000000E+00 # Real(ZUR(3,2),dp)
 3 3 1.00000000E+00 # Real(ZUR(3,3),dp)
DECAY 25 1.70376269E-07 # hh_1
# BR NDA ID1 ID2
3.13633386E-03 2 22 22 # BR(hh_1 -> VP VP )
1.32750315E-01 2 21 21 # BR(hh_1 -> VG VG )
1.96723977E-05 2 23 23 # BR(hh_1 -> VZ VZ )
6.07198552E-03 2 24 -24 # BR(hh_1 -> Vwm^* Vwm_virt )
8.79890516E-09 2 -11 11 # BR(hh_1 -> Cha_1^* Cha_1 )
2.49462744E-26 2 -11 13 # BR(hh_1 -> Cha_1^* Cha_2 )
4.04045781E-23 2 -11 15 # BR(hh_1 -> Cha_1^* Cha_3 )
2.49462744E-26 2 -13 11 # BR(hh_1 -> Cha_2^* Cha_1 )
3.93063801E-04 2 -13 13 # BR(hh_1 -> Cha_2^* Cha_2 )
4.68450079E-22 2 -13 15 # BR(hh_1 -> Cha_2^* Cha_3 )
4.04045781E-23 2 -15 11 # BR(hh_1 -> Cha_3^* Cha_1 )
4.68450079E-22 2 -15 13 # BR(hh_1 -> Cha_3^* Cha_2 )
1.13369357E-01 2 -15 15 # BR(hh_1 -> Cha_3^* Cha_3 )
2.14644941E-22 2 12 12 # BR(hh_1 -> Chi_1 Chi_1 )
1.81840847E-23 2 12 14 # BR(hh_1 -> Chi_1 Chi_2 )
2.33615064E-20 2 12 16 # BR(hh_1 -> Chi_1 Chi_3 )
3.04183467E-09 2 12 1000022 # BR(hh_1 -> Chi_1 Chi_4 )
3.54728676E-11 2 12 1000023 # BR(hh_1 -> Chi_1 Chi_5 )
8.10569450E-10 2 12 1000025 # BR(hh_1 -> Chi_1 Chi_6 )
2.27922027E-21 2 14 14 # BR(hh_1 -> Chi_2 Chi_2 )
2.77379575E-21 2 14 16 # BR(hh_1 -> Chi_2 Chi_3 )
9.44896465E-10 2 14 1000022 # BR(hh_1 -> Chi_2 Chi_4 )
6.51104446E-09 2 14 1000023 # BR(hh_1 -> Chi_2 Chi_5 )
4.46880692E-09 2 14 1000025 # BR(hh_1 -> Chi_2 Chi_6 )
9.44356235E-20 2 16 16 # BR(hh_1 -> Chi_3 Chi_3 )
6.83118013E-10 2 16 1000022 # BR(hh_1 -> Chi_3 Chi_4 )
1.00400101E-08 2 16 1000023 # BR(hh_1 -> Chi_3 Chi_5 )
5.13742436E-09 2 16 1000025 # BR(hh_1 -> Chi_3 Chi_6 )
7.26139562E-07 2 -1 1 # BR(hh_1 -> Fd_1^* Fd_1 )
2.61185653E-04 2 -3 3 # BR(hh_1 -> Fd_2^* Fd_2 )
6.97112367E-01 2 -5 5 # BR(hh_1 -> Fd_3^* Fd_3 )
1.97437374E-07 2 -2 2 # BR(hh_1 -> Fu_1^* Fu_1 )
4.68847548E-02 2 -4 4 # BR(hh_1 -> Fu_2^* Fu_2 )
DECAY 35 1.76726362E-07 # hh_2
# BR NDA ID1 ID2
3.21391450E-03 2 22 22 # BR(hh_2 -> VP VP )
1.35666392E-01 2 21 21 # BR(hh_2 -> VG VG )
3.82479907E-05 2 23 23 # BR(hh_2 -> VZ VZ )
7.70517434E-03 2 24 -24 # BR(hh_2 -> Vwm^* Vwm_virt )
8.74709686E-09 2 -11 11 # BR(hh_2 -> Cha_1^* Cha_1 )
1.77508981E-25 2 -11 13 # BR(hh_2 -> Cha_1^* Cha_2 )
1.00096048E-22 2 -11 15 # BR(hh_2 -> Cha_1^* Cha_3 )
1.77508981E-25 2 -13 11 # BR(hh_2 -> Cha_2^* Cha_1 )
3.90749478E-04 2 -13 13 # BR(hh_2 -> Cha_2^* Cha_2 )
1.20270630E-22 2 -13 15 # BR(hh_2 -> Cha_2^* Cha_3 )
1.00096048E-22 2 -15 11 # BR(hh_2 -> Cha_3^* Cha_1 )
1.20270630E-22 2 -15 13 # BR(hh_2 -> Cha_3^* Cha_2 )
1.12706030E-01 2 -15 15 # BR(hh_2 -> Cha_3^* Cha_3 )
4.67615158E-25 2 12 12 # BR(hh_2 -> Chi_1 Chi_1 )
1.45951617E-20 2 12 14 # BR(hh_2 -> Chi_1 Chi_2 )
1.07180554E-19 2 12 16 # BR(hh_2 -> Chi_1 Chi_3 )

```

3.46395307E-11	2	12	1000022	# BR(hh_2 -> Chi_1 Chi_4)
2.02425245E-09	2	12	1000023	# BR(hh_2 -> Chi_1 Chi_5)
2.30102933E-09	2	12	1000025	# BR(hh_2 -> Chi_1 Chi_6)
7.44042195E-20	2	14	14	# BR(hh_2 -> Chi_2 Chi_2)
1.00048163E-19	2	14	16	# BR(hh_2 -> Chi_2 Chi_3)
6.77046761E-09	2	14	1000022	# BR(hh_2 -> Chi_2 Chi_4)
1.06067046E-09	2	14	1000023	# BR(hh_2 -> Chi_2 Chi_5)
2.28104380E-09	2	14	1000025	# BR(hh_2 -> Chi_2 Chi_6)
1.95737699E-20	2	16	16	# BR(hh_2 -> Chi_3 Chi_3)
1.05453324E-08	2	16	1000022	# BR(hh_2 -> Chi_3 Chi_4)
6.34277486E-11	2	16	1000023	# BR(hh_2 -> Chi_3 Chi_5)
4.71290175E-09	2	16	1000025	# BR(hh_2 -> Chi_3 Chi_6)
7.21864024E-07	2	-1	1	# BR(hh_2 -> Fd_1^* Fd_1)
2.59647785E-04	2	-3	3	# BR(hh_2 -> Fd_2^* Fd_2)
6.93094546E-01	2	-5	5	# BR(hh_2 -> Fd_3^* Fd_3)
1.97602386E-07	2	-2	2	# BR(hh_2 -> Fu_1^* Fu_1)
4.69243400E-02	2	-4	4	# BR(hh_2 -> Fu_2^* Fu_2)
DECAY	1000012	2.01538017E-04	# hh_3	
#	BR	NDA	ID1	ID2
6.02059215E-03	2	22	22	# BR(hh_3 -> VP VP)
2.18517911E-01	2	21	21	# BR(hh_3 -> VG VG)
3.84918658E-02	2	23	23	# BR(hh_3 -> VZ VZ)
3.59663263E-01	2	24	-24	# BR(hh_3 -> Vwm^* Vwm_virt)
3.60797226E-09	2	-11	11	# BR(hh_3 -> Cha_1^* Cha_1)
1.07191412E-29	2	-11	13	# BR(hh_3 -> Cha_1^* Cha_2)
5.96369342E-28	2	-11	15	# BR(hh_3 -> Cha_1^* Cha_3)
1.07191412E-29	2	-13	11	# BR(hh_3 -> Cha_2^* Cha_1)
1.61175414E-04	2	-13	13	# BR(hh_3 -> Cha_2^* Cha_2)
2.96248631E-27	2	-13	15	# BR(hh_3 -> Cha_2^* Cha_3)
5.96369342E-28	2	-15	11	# BR(hh_3 -> Cha_3^* Cha_1)
2.96248631E-27	2	-15	13	# BR(hh_3 -> Cha_3^* Cha_2)
4.65230382E-02	2	-15	15	# BR(hh_3 -> Cha_3^* Cha_3)
8.61425766E-24	2	12	12	# BR(hh_3 -> Chi_1 Chi_1)
4.88553331E-26	2	12	14	# BR(hh_3 -> Chi_1 Chi_2)
8.17537786E-26	2	12	16	# BR(hh_3 -> Chi_1 Chi_3)
1.26936986E-11	2	12	1000022	# BR(hh_3 -> Chi_1 Chi_4)
2.70977760E-11	2	12	1000023	# BR(hh_3 -> Chi_1 Chi_5)
1.02340131E-13	2	12	1000025	# BR(hh_3 -> Chi_1 Chi_6)
7.58540728E-23	2	14	14	# BR(hh_3 -> Chi_2 Chi_2)
6.52543949E-23	2	14	16	# BR(hh_3 -> Chi_2 Chi_3)
7.27193103E-11	2	14	1000022	# BR(hh_3 -> Chi_2 Chi_4)
2.62942398E-11	2	14	1000023	# BR(hh_3 -> Chi_2 Chi_5)
3.92520841E-13	2	14	1000025	# BR(hh_3 -> Chi_2 Chi_6)
2.26918228E-22	2	16	16	# BR(hh_3 -> Chi_3 Chi_3)
7.86173789E-11	2	16	1000022	# BR(hh_3 -> Chi_3 Chi_4)
6.94048895E-11	2	16	1000023	# BR(hh_3 -> Chi_3 Chi_5)
1.50144409E-12	2	16	1000025	# BR(hh_3 -> Chi_3 Chi_6)
2.97751975E-07	2	-1	1	# BR(hh_3 -> Fd_1^* Fd_1)
1.07098645E-04	2	-3	3	# BR(hh_3 -> Fd_2^* Fd_2)
2.86580631E-01	2	-5	5	# BR(hh_3 -> Fd_3^* Fd_3)
1.84979147E-07	2	-2	2	# BR(hh_3 -> Fu_1^* Fu_1)
4.39339377E-02	2	-4	4	# BR(hh_3 -> Fu_2^* Fu_2)
DECAY	1000014	3.13834601E-03	# hh_4	
#	BR	NDA	ID1	ID2
2.63488862E-03	2	22	22	# BR(hh_4 -> VP VP)
1.03296383E-01	2	21	21	# BR(hh_4 -> VG VG)
2.75360196E-02	2	23	23	# BR(hh_4 -> VZ VZ)
2.51007822E-01	2	24	-24	# BR(hh_4 -> Vwm^* Vwm_virt)
6.42548895E-09	2	-11	11	# BR(hh_4 -> Cha_1^* Cha_1)
4.48550572E-30	2	-11	13	# BR(hh_4 -> Cha_1^* Cha_2)
5.06206951E-26	2	-11	15	# BR(hh_4 -> Cha_1^* Cha_3)
4.48550572E-30	2	-13	11	# BR(hh_4 -> Cha_2^* Cha_1)
2.87039599E-04	2	-13	13	# BR(hh_4 -> Cha_2^* Cha_2)
2.25295678E-25	2	-13	15	# BR(hh_4 -> Cha_2^* Cha_3)
5.06206951E-26	2	-15	11	# BR(hh_4 -> Cha_3^* Cha_1)
2.25295678E-25	2	-15	13	# BR(hh_4 -> Cha_3^* Cha_2)
8.28550168E-02	2	-15	15	# BR(hh_4 -> Cha_3^* Cha_3)
2.17577863E-24	2	12	12	# BR(hh_4 -> Chi_1 Chi_1)
2.07656324E-24	2	12	14	# BR(hh_4 -> Chi_1 Chi_2)
1.06967304E-23	2	12	16	# BR(hh_4 -> Chi_1 Chi_3)
1.40555146E-12	2	12	1000022	# BR(hh_4 -> Chi_1 Chi_4)
2.92791112E-12	2	12	1000023	# BR(hh_4 -> Chi_1 Chi_5)
6.83788946E-16	2	12	1000025	# BR(hh_4 -> Chi_1 Chi_6)

5.71901203E-23	2		14	14	# BR(hh_4 -> Chi_2 Chi_2)
4.67177466E-23	2		14	16	# BR(hh_4 -> Chi_2 Chi_3)
7.95164225E-12	2		14	1000022	# BR(hh_4 -> Chi_2 Chi_4)
2.85266095E-12	2		14	1000023	# BR(hh_4 -> Chi_2 Chi_5)
1.47030380E-13	2		14	1000025	# BR(hh_4 -> Chi_2 Chi_6)
4.67536021E-22	2		16	16	# BR(hh_4 -> Chi_3 Chi_3)
8.70542579E-12	2		16	1000022	# BR(hh_4 -> Chi_3 Chi_4)
7.40002795E-12	2		16	1000023	# BR(hh_4 -> Chi_3 Chi_5)
4.39067277E-13	2		16	1000025	# BR(hh_4 -> Chi_3 Chi_6)
8.05940627E-04	2	1000022		1000022	# BR(hh_4 -> Chi_4 Chi_4)
5.30270714E-07	2		-1	1	# BR(hh_4 -> Fd_1^* Fd_1)
1.90733497E-04	2		-3	3	# BR(hh_4 -> Fd_2^* Fd_2)
5.10404503E-01	2		-5	5	# BR(hh_4 -> Fd_3^* Fd_3)
8.83380381E-08	2		-2	2	# BR(hh_4 -> Fu_1^* Fu_1)
2.09810280E-02	2		-4	4	# BR(hh_4 -> Fu_2^* Fu_2)

DECAY	1000016	8.33126029E-05	#	hh_5	
#	BR	NDA	ID1	ID2	
3.46881684E-12	2		22	22	# BR(hh_5 -> VP VP)
3.75814225E-10	2		21	21	# BR(hh_5 -> VG VG)
7.19773820E-09	2		36	36	# BR(hh_5 -> Ah_2 Ah_2)
1.06390835E-11	2		36	23	# BR(hh_5 -> Ah_2 VZ)
9.51932108E-18	2		-11	11	# BR(hh_5 -> Cha_1^* Cha_1)
3.47183456E-13	2		-11	15	# BR(hh_5 -> Cha_1^* Cha_3)
4.25248366E-13	2		-13	13	# BR(hh_5 -> Cha_2^* Cha_2)
1.44501463E-12	2		-13	15	# BR(hh_5 -> Cha_2^* Cha_3)
3.47183456E-13	2		-15	11	# BR(hh_5 -> Cha_3^* Cha_1)
1.44501463E-12	2		-15	13	# BR(hh_5 -> Cha_3^* Cha_2)
1.36121287E-10	2		-15	15	# BR(hh_5 -> Cha_3^* Cha_3)
2.99271166E-13	2		12	12	# BR(hh_5 -> Chi_1 Chi_1)
2.21570770E-11	2		12	14	# BR(hh_5 -> Chi_1 Chi_2)
1.13033265E-10	2		12	16	# BR(hh_5 -> Chi_1 Chi_3)
2.40472389E-04	2		12	1000022	# BR(hh_5 -> Chi_1 Chi_4)
2.5545215E-04	2		12	1000023	# BR(hh_5 -> Chi_1 Chi_5)
2.57449178E-01	2		12	1000025	# BR(hh_5 -> Chi_1 Chi_6)
6.41586235E-11	2		14	14	# BR(hh_5 -> Chi_2 Chi_2)
3.28808388E-10	2		14	16	# BR(hh_5 -> Chi_2 Chi_3)
4.40787642E-04	2		14	1000022	# BR(hh_5 -> Chi_2 Chi_4)
4.68416234E-04	2		14	1000023	# BR(hh_5 -> Chi_2 Chi_5)
4.71906211E-01	2		14	1000025	# BR(hh_5 -> Chi_2 Chi_6)
2.18748157E-10	2		16	16	# BR(hh_5 -> Chi_3 Chi_3)
2.51001446E-04	2		16	1000022	# BR(hh_5 -> Chi_3 Chi_4)
2.66734244E-04	2		16	1000023	# BR(hh_5 -> Chi_3 Chi_5)
2.68721565E-01	2		16	1000025	# BR(hh_5 -> Chi_3 Chi_6)
7.86478150E-12	2	1000022		1000022	# BR(hh_5 -> Chi_4 Chi_4)
6.82957977E-11	2	1000022		1000023	# BR(hh_5 -> Chi_4 Chi_5)
1.08336353E-12	2	1000022		1000025	# BR(hh_5 -> Chi_4 Chi_6)
4.75561670E-10	2	1000023		1000023	# BR(hh_5 -> Chi_5 Chi_5)
2.02052368E-10	2	1000023		1000025	# BR(hh_5 -> Chi_5 Chi_6)
2.83974422E-09	2	1000025		1000025	# BR(hh_5 -> Chi_6 Chi_6)
7.85592694E-16	2		-1	1	# BR(hh_5 -> Fd_1^* Fd_1)
2.82570504E-13	2		-3	3	# BR(hh_5 -> Fd_2^* Fd_2)
7.57732787E-10	2		-5	5	# BR(hh_5 -> Fd_3^* Fd_3)
1.20832657E-16	2		-2	2	# BR(hh_5 -> Fu_1^* Fu_1)
2.87027158E-11	2		-4	4	# BR(hh_5 -> Fu_2^* Fu_2)
5.93178849E-08	2		-24	24	# BR(hh_5 -> VVWm VVWm^*)
1.69512733E-08	2		23	23	# BR(hh_5 -> VZ VZ)

DECAY	2000012	4.29313682E-03	#	hh_6	
#	BR	NDA	ID1	ID2	
3.48140466E-14	2		22	22	# BR(hh_6 -> VP VP)
2.40725457E-11	2		21	21	# BR(hh_6 -> VG VG)
7.65960074E-12	2		36	36	# BR(hh_6 -> Ah_2 Ah_2)
2.25597027E-11	2		36	1000017	# BR(hh_6 -> Ah_2 Ah_3)
2.43598813E-11	2		36	1000018	# BR(hh_6 -> Ah_2 Ah_4)
1.84916766E-22	2		36	1000019	# BR(hh_6 -> Ah_2 Ah_5)
3.04438357E-12	2	1000017		1000017	# BR(hh_6 -> Ah_3 Ah_3)
4.33369432E-13	2	1000017		1000018	# BR(hh_6 -> Ah_3 Ah_4)
4.20240945E-21	2	1000017		1000019	# BR(hh_6 -> Ah_3 Ah_5)
2.57347776E-12	2	1000018		1000018	# BR(hh_6 -> Ah_4 Ah_4)
1.12019095E-20	2	1000018		1000019	# BR(hh_6 -> Ah_4 Ah_5)
1.27972377E-11	2	1000019		1000019	# BR(hh_6 -> Ah_5 Ah_5)
4.50769543E-10	2		36	23	# BR(hh_6 -> Ah_2 VZ)
1.40013593E-09	2	1000017		23	# BR(hh_6 -> Ah_3 VZ)
1.27442367E-09	2	1000018		23	# BR(hh_6 -> Ah_4 VZ)

4.03472179E-21	2	1000019	23	# BR(hh_6 -> Ah_5 VZ)
1.03514952E-19	2	-11	11	# BR(hh_6 -> Cha_1^* Cha_1)
5.08592493E-17	2	-11	13	# BR(hh_6 -> Cha_1^* Cha_2)
1.07870054E-25	2	-11	-1000024	# BR(hh_6 -> Cha_1^* Cha_4)
5.08592493E-17	2	-13	11	# BR(hh_6 -> Cha_2^* Cha_1)
8.20416086E-15	2	-13	13	# BR(hh_6 -> Cha_2^* Cha_2)
9.07140291E-16	2	-13	15	# BR(hh_6 -> Cha_2^* Cha_3)
2.21802545E-01	2	-13	-1000024	# BR(hh_6 -> Cha_2^* Cha_4)
9.07140291E-16	2	-15	13	# BR(hh_6 -> Cha_3^* Cha_2)
1.33625910E-12	2	-15	15	# BR(hh_6 -> Cha_3^* Cha_3)
3.10250054E-24	2	-15	-1000024	# BR(hh_6 -> Cha_3^* Cha_4)
1.07870054E-25	2	1000024	11	# BR(hh_6 -> Cha_4^* Cha_1)
2.21802545E-01	2	1000024	13	# BR(hh_6 -> Cha_4^* Cha_2)
3.10250054E-24	2	1000024	15	# BR(hh_6 -> Cha_4^* Cha_3)
3.23259214E-15	2	12	12	# BR(hh_6 -> Chi_1 Chi_1)
2.56004427E-13	2	12	14	# BR(hh_6 -> Chi_1 Chi_2)
8.65273832E-13	2	12	16	# BR(hh_6 -> Chi_1 Chi_3)
3.11405950E-06	2	12	1000022	# BR(hh_6 -> Chi_1 Chi_4)
3.33921364E-06	2	12	1000023	# BR(hh_6 -> Chi_1 Chi_5)
4.04100728E-03	2	12	1000025	# BR(hh_6 -> Chi_1 Chi_6)
3.22583873E-02	2	12	1000039	# BR(hh_6 -> Chi_1 Chi_7)
3.17969007E-04	2	12	1000045	# BR(hh_6 -> Chi_1 Chi_8)
1.18530964E-12	2	14	14	# BR(hh_6 -> Chi_2 Chi_2)
1.91841081E-13	2	14	16	# BR(hh_6 -> Chi_2 Chi_3)
9.76296715E-06	2	14	1000022	# BR(hh_6 -> Chi_2 Chi_4)
1.04688537E-05	2	14	1000023	# BR(hh_6 -> Chi_2 Chi_5)
1.26690648E-02	2	14	1000025	# BR(hh_6 -> Chi_2 Chi_6)
1.01134092E-01	2	14	1000039	# BR(hh_6 -> Chi_2 Chi_7)
9.96872732E-04	2	14	1000045	# BR(hh_6 -> Chi_2 Chi_8)
2.50298421E-11	2	16	16	# BR(hh_6 -> Chi_3 Chi_3)
3.44322642E-05	2	16	1000022	# BR(hh_6 -> Chi_3 Chi_4)
3.69218016E-05	2	16	1000023	# BR(hh_6 -> Chi_3 Chi_5)
4.46815585E-02	2	16	1000025	# BR(hh_6 -> Chi_3 Chi_6)
3.56682114E-01	2	16	1000039	# BR(hh_6 -> Chi_3 Chi_7)
3.51579441E-03	2	16	1000045	# BR(hh_6 -> Chi_3 Chi_8)
2.57977405E-12	2	1000022	1000022	# BR(hh_6 -> Chi_4 Chi_4)
7.51471709E-12	2	1000022	1000023	# BR(hh_6 -> Chi_4 Chi_5)
1.63208399E-11	2	1000022	1000025	# BR(hh_6 -> Chi_4 Chi_6)
1.63861706E-12	2	1000022	1000039	# BR(hh_6 -> Chi_4 Chi_7)
4.64033119E-12	2	1000023	1000023	# BR(hh_6 -> Chi_5 Chi_5)
3.34712525E-11	2	1000023	1000025	# BR(hh_6 -> Chi_5 Chi_6)
1.63481238E-12	2	1000023	1000039	# BR(hh_6 -> Chi_5 Chi_7)
3.50039964E-10	2	1000025	1000025	# BR(hh_6 -> Chi_6 Chi_6)
8.65721891E-17	2	1000025	1000039	# BR(hh_6 -> Chi_6 Chi_7)
8.54268812E-18	2	-1	1	# BR(hh_6 -> Fd_1^* Fd_1)
3.07272675E-15	2	-3	3	# BR(hh_6 -> Fd_2^* Fd_2)
8.24885066E-12	2	-5	5	# BR(hh_6 -> Fd_3^* Fd_3)
6.78474882E-19	2	-2	2	# BR(hh_6 -> Fu_1^* Fu_1)
1.61176838E-13	2	-4	4	# BR(hh_6 -> Fu_2^* Fu_2)
2.94061679E-09	2	-6	6	# BR(hh_6 -> Fu_3^* Fu_3)
8.92119418E-14	2	25	25	# BR(hh_6 -> hh_1 hh_1)
2.87880055E-13	2	25	35	# BR(hh_6 -> hh_1 hh_2)
1.12983206E-10	2	25	1000012	# BR(hh_6 -> hh_1 hh_3)
1.16989480E-09	2	25	1000014	# BR(hh_6 -> hh_1 hh_4)
2.68977991E-20	2	25	1000016	# BR(hh_6 -> hh_1 hh_5)
2.18735121E-12	2	35	35	# BR(hh_6 -> hh_2 hh_2)
1.23761833E-10	2	35	1000012	# BR(hh_6 -> hh_2 hh_3)
1.21283685E-09	2	35	1000014	# BR(hh_6 -> hh_2 hh_4)
1.69198673E-20	2	35	1000016	# BR(hh_6 -> hh_2 hh_5)
3.86549613E-12	2	1000012	1000012	# BR(hh_6 -> hh_3 hh_3)
4.87827744E-10	2	1000012	1000014	# BR(hh_6 -> hh_3 hh_4)
1.34909102E-20	2	1000012	1000016	# BR(hh_6 -> hh_3 hh_5)
1.53740552E-09	2	1000014	1000014	# BR(hh_6 -> hh_4 hh_4)
6.35321113E-20	2	1000014	1000016	# BR(hh_6 -> hh_4 hh_5)
1.27972385E-11	2	1000016	1000016	# BR(hh_6 -> hh_5 hh_5)
5.66368984E-12	2	-37	37	# BR(hh_6 -> Hpm_2^* Hpm_2)
3.52073173E-22	2	37	24	# BR(hh_6 -> Hpm_2 Vwm^*)
3.52073173E-22	2	-37	-24	# BR(hh_6 -> Hpm_2^* Vwm)
2.82448472E-10	2	-24	24	# BR(hh_6 -> Vwm Vwm^*)
1.32982529E-10	2	23	23	# BR(hh_6 -> VZ VZ)

DECAY 2000014 2.70206056E-02 # hh_7

#	BR	NDA	ID1	ID2	
2.17401272E-16	2		22	22	# BR(hh_7 -> VP VP)

6.24235671E-14	2	21	21	# BR(hh_7 -> VG VG)
5.42965097E-12	2	36	36	# BR(hh_7 -> Ah_2 Ah_2)
5.29968008E-12	2	36	1000017	# BR(hh_7 -> Ah_2 Ah_3)
4.64042399E-13	2	36	1000018	# BR(hh_7 -> Ah_2 Ah_4)
2.71806666E-23	2	36	1000019	# BR(hh_7 -> Ah_2 Ah_5)
2.24620226E-24	2	36	2000018	# BR(hh_7 -> Ah_2 Ah_6)
1.12751088E-13	2	1000017	1000017	# BR(hh_7 -> Ah_3 Ah_3)
5.64625386E-16	2	1000017	1000018	# BR(hh_7 -> Ah_3 Ah_4)
1.11464033E-21	2	1000017	1000019	# BR(hh_7 -> Ah_3 Ah_5)
3.79889369E-22	2	1000017	2000018	# BR(hh_7 -> Ah_3 Ah_6)
6.28798730E-14	2	1000018	1000018	# BR(hh_7 -> Ah_4 Ah_4)
8.48338789E-23	2	1000018	1000019	# BR(hh_7 -> Ah_4 Ah_5)
1.91731452E-23	2	1000018	2000018	# BR(hh_7 -> Ah_4 Ah_6)
3.98794705E-14	2	1000019	1000019	# BR(hh_7 -> Ah_5 Ah_5)
3.36964114E-13	2	36	23	# BR(hh_7 -> Ah_2 VZ)
2.58728105E-10	2	1000017	23	# BR(hh_7 -> Ah_3 VZ)
2.03225618E-11	2	1000018	23	# BR(hh_7 -> Ah_4 VZ)
2.25480330E-22	2	1000019	23	# BR(hh_7 -> Ah_5 VZ)
3.04332381E-23	2	2000018	23	# BR(hh_7 -> Ah_6 VZ)
4.51479837E-20	2	-11	11	# BR(hh_7 -> Cha_1^* Cha_1)
5.09253153E-19	2	-11	13	# BR(hh_7 -> Cha_1^* Cha_2)
2.27869269E-16	2	-11	15	# BR(hh_7 -> Cha_1^* Cha_3)
2.32947621E-01	2	-11	-1000024	# BR(hh_7 -> Cha_1^* Cha_4)
5.09253153E-19	2	-13	11	# BR(hh_7 -> Cha_2^* Cha_1)
1.55514723E-15	2	-13	13	# BR(hh_7 -> Cha_2^* Cha_2)
5.34193159E-27	2	-13	-1000024	# BR(hh_7 -> Cha_2^* Cha_4)
2.27869269E-16	2	-15	11	# BR(hh_7 -> Cha_3^* Cha_1)
4.49418316E-13	2	-15	15	# BR(hh_7 -> Cha_3^* Cha_3)
7.51111087E-26	2	-15	-1000024	# BR(hh_7 -> Cha_3^* Cha_4)
2.32947621E-01	2	1000024	11	# BR(hh_7 -> Cha_4^* Cha_1)
5.34193159E-27	2	1000024	13	# BR(hh_7 -> Cha_4^* Cha_2)
7.51111087E-26	2	1000024	15	# BR(hh_7 -> Cha_4^* Cha_3)
1.10927825E-16	2	1000024	-1000024	# BR(hh_7 -> Cha_4^* Cha_4)
8.43950443E-15	2	12	12	# BR(hh_7 -> Chi_1 Chi_1)
4.32665658E-13	2	12	14	# BR(hh_7 -> Chi_1 Chi_2)
2.94025693E-12	2	12	16	# BR(hh_7 -> Chi_1 Chi_3)
8.36017438E-06	2	12	1000022	# BR(hh_7 -> Chi_1 Chi_4)
8.97641004E-06	2	12	1000023	# BR(hh_7 -> Chi_1 Chi_5)
1.11411088E-02	2	12	1000025	# BR(hh_7 -> Chi_1 Chi_6)
3.43698027E-01	2	12	1000039	# BR(hh_7 -> Chi_1 Chi_7)
6.32191252E-03	2	12	1000045	# BR(hh_7 -> Chi_1 Chi_8)
4.68283498E-13	2	14	14	# BR(hh_7 -> Chi_2 Chi_2)
1.51392155E-12	2	14	16	# BR(hh_7 -> Chi_2 Chi_3)
3.96626078E-06	2	14	1000022	# BR(hh_7 -> Chi_2 Chi_4)
4.25861729E-06	2	14	1000023	# BR(hh_7 -> Chi_2 Chi_5)
5.28560063E-03	2	14	1000025	# BR(hh_7 -> Chi_2 Chi_6)
1.63058322E-01	2	14	1000039	# BR(hh_7 -> Chi_2 Chi_7)
2.99926204E-03	2	14	1000045	# BR(hh_7 -> Chi_2 Chi_8)
2.57711521E-14	2	16	16	# BR(hh_7 -> Chi_3 Chi_3)
3.64555550E-08	2	16	1000022	# BR(hh_7 -> Chi_3 Chi_4)
3.91427247E-08	2	16	1000023	# BR(hh_7 -> Chi_3 Chi_5)
4.85821563E-05	2	16	1000025	# BR(hh_7 -> Chi_3 Chi_6)
1.49873693E-03	2	16	1000039	# BR(hh_7 -> Chi_3 Chi_7)
2.75674663E-05	2	16	1000045	# BR(hh_7 -> Chi_3 Chi_8)
3.04767320E-13	2	1000022	1000022	# BR(hh_7 -> Chi_4 Chi_4)
9.94837341E-14	2	1000022	1000023	# BR(hh_7 -> Chi_4 Chi_5)
3.31134287E-12	2	1000022	1000025	# BR(hh_7 -> Chi_4 Chi_6)
4.79114856E-12	2	1000022	1000039	# BR(hh_7 -> Chi_4 Chi_7)
3.85358255E-12	2	1000022	1000045	# BR(hh_7 -> Chi_4 Chi_8)
2.27295811E-14	2	1000023	1000023	# BR(hh_7 -> Chi_5 Chi_5)
4.95950564E-13	2	1000023	1000025	# BR(hh_7 -> Chi_5 Chi_6)
6.55378837E-13	2	1000023	1000039	# BR(hh_7 -> Chi_5 Chi_7)
5.06045013E-13	2	1000023	1000045	# BR(hh_7 -> Chi_5 Chi_8)
5.27548152E-11	2	1000025	1000025	# BR(hh_7 -> Chi_6 Chi_6)
1.21621880E-10	2	1000025	1000039	# BR(hh_7 -> Chi_6 Chi_7)
9.32404272E-11	2	1000025	1000045	# BR(hh_7 -> Chi_6 Chi_8)
3.37045682E-14	2	1000039	1000039	# BR(hh_7 -> Chi_7 Chi_7)
2.87293336E-18	2	-1	1	# BR(hh_7 -> Fd_1^* Fd_1)
1.03336784E-15	2	-3	3	# BR(hh_7 -> Fd_2^* Fd_2)
2.77452285E-12	2	-5	5	# BR(hh_7 -> Fd_3^* Fd_3)
1.61815472E-21	2	-2	2	# BR(hh_7 -> Fu_1^* Fu_1)
3.84408092E-16	2	-4	4	# BR(hh_7 -> Fu_2^* Fu_2)
2.10868529E-11	2	-6	6	# BR(hh_7 -> Fu_3^* Fu_3)

2.48316085E-13	2		25	25	# BR(hh_7 -> hh_1 hh_1)
4.48295031E-14	2		25	35	# BR(hh_7 -> hh_1 hh_2)
2.68694937E-11	2		25	1000012	# BR(hh_7 -> hh_1 hh_3)
2.28899647E-10	2		25	1000014	# BR(hh_7 -> hh_1 hh_4)
5.36575698E-21	2		25	1000016	# BR(hh_7 -> hh_1 hh_5)
4.55313153E-22	2		25	2000012	# BR(hh_7 -> hh_1 hh_6)
1.39190264E-13	2		35	35	# BR(hh_7 -> hh_2 hh_2)
1.78261180E-12	2		35	1000012	# BR(hh_7 -> hh_2 hh_3)
1.55163952E-11	2		35	1000014	# BR(hh_7 -> hh_2 hh_4)
4.13094035E-22	2		35	1000016	# BR(hh_7 -> hh_2 hh_5)
4.17426958E-23	2		35	2000012	# BR(hh_7 -> hh_2 hh_6)
1.65766373E-12	2	1000012		1000012	# BR(hh_7 -> hh_3 hh_3)
1.28863685E-11	2	1000012		1000014	# BR(hh_7 -> hh_3 hh_4)
5.04153649E-22	2	1000012		1000016	# BR(hh_7 -> hh_3 hh_5)
2.08067627E-22	2	1000012		2000012	# BR(hh_7 -> hh_3 hh_6)
3.60120650E-11	2	1000014		1000014	# BR(hh_7 -> hh_4 hh_4)
6.78382279E-22	2	1000014		1000016	# BR(hh_7 -> hh_4 hh_5)
8.52944715E-23	2	1000014		2000012	# BR(hh_7 -> hh_4 hh_6)
3.98794707E-14	2	1000016		1000016	# BR(hh_7 -> hh_5 hh_5)
2.49771664E-14	2		-37	37	# BR(hh_7 -> Hpm_2^* Hpm_2)
1.35045873E-23	2		37	24	# BR(hh_7 -> Hpm_2 Vwm^*)
1.35045873E-23	2		-37	-24	# BR(hh_7 -> Hpm_2^* Vwm)
4.36826917E-24	2	1000011		24	# BR(hh_7 -> Hpm_3 Vwm^*)
4.36826917E-24	2	-1000011		-24	# BR(hh_7 -> Hpm_3^* Vwm)
4.04427208E-12	2		-24	24	# BR(hh_7 -> Vwm Vwm^*)
1.97885128E-12	2		23	23	# BR(hh_7 -> VZ VZ)
DECAY	2000016	1.49321957E+01	#	hh_8	
#	BR	NDA	ID1	ID2	
3.62155199E-06	2		22	22	# BR(hh_8 -> VP VP)
1.66611680E-03	2		21	21	# BR(hh_8 -> VG VG)
1.36491025E-02	2		36	36	# BR(hh_8 -> Ah_2 Ah_2)
1.96219860E-06	2		36	1000017	# BR(hh_8 -> Ah_2 Ah_3)
1.94723501E-06	2		36	1000018	# BR(hh_8 -> Ah_2 Ah_4)
5.29082175E-13	2		36	1000019	# BR(hh_8 -> Ah_2 Ah_5)
7.09769795E-14	2		36	2000018	# BR(hh_8 -> Ah_2 Ah_6)
1.32891380E-05	2	1000017		1000017	# BR(hh_8 -> Ah_3 Ah_3)
4.95995529E-12	2	1000017		1000018	# BR(hh_8 -> Ah_3 Ah_4)
7.64743786E-16	2	1000017		1000019	# BR(hh_8 -> Ah_3 Ah_5)
3.90628192E-14	2	1000017		2000018	# BR(hh_8 -> Ah_3 Ah_6)
1.38453879E-05	2	1000018		1000018	# BR(hh_8 -> Ah_4 Ah_4)
1.96879295E-14	2	1000018		1000019	# BR(hh_8 -> Ah_4 Ah_5)
4.02467727E-14	2	1000018		2000018	# BR(hh_8 -> Ah_4 Ah_6)
7.04852254E-04	2	1000019		1000019	# BR(hh_8 -> Ah_5 Ah_5)
1.91172419E-25	2	1000019		2000018	# BR(hh_8 -> Ah_5 Ah_6)
1.12113242E-01	2		36	23	# BR(hh_8 -> Ah_2 VZ)
2.94869571E-05	2	1000017		23	# BR(hh_8 -> Ah_3 VZ)
2.93562599E-05	2	1000018		23	# BR(hh_8 -> Ah_4 VZ)
1.27911310E-14	2	1000019		23	# BR(hh_8 -> Ah_5 VZ)
5.90894746E-17	2	2000018		23	# BR(hh_8 -> Ah_6 VZ)
2.20932516E-11	2		-11	11	# BR(hh_8 -> Cha_1^* Cha_1)
8.51593929E-29	2		-11	15	# BR(hh_8 -> Cha_1^* Cha_3)
6.97305705E-16	2		-11	-1000024	# BR(hh_8 -> Cha_1^* Cha_4)
9.86954347E-07	2		-13	13	# BR(hh_8 -> Cha_2^* Cha_2)
4.24240997E-28	2		-13	15	# BR(hh_8 -> Cha_2^* Cha_3)
2.99004717E-17	2		-13	-1000024	# BR(hh_8 -> Cha_2^* Cha_4)
8.51593929E-29	2		-15	11	# BR(hh_8 -> Cha_3^* Cha_1)
4.24240997E-28	2		-15	13	# BR(hh_8 -> Cha_3^* Cha_2)
2.85219636E-04	2		-15	15	# BR(hh_8 -> Cha_3^* Cha_3)
4.77813502E-16	2		-15	-1000024	# BR(hh_8 -> Cha_3^* Cha_4)
6.97305705E-16	2	1000024		11	# BR(hh_8 -> Cha_4^* Cha_1)
2.99004717E-17	2	1000024		13	# BR(hh_8 -> Cha_4^* Cha_2)
4.77813502E-16	2	1000024		15	# BR(hh_8 -> Cha_4^* Cha_3)
3.27211103E-04	2	1000024		-1000024	# BR(hh_8 -> Cha_4^* Cha_4)
1.32883530E-27	2		12	12	# BR(hh_8 -> Chi_1 Chi_1)
1.90581035E-27	2		12	14	# BR(hh_8 -> Chi_1 Chi_2)
1.20834170E-26	2		12	16	# BR(hh_8 -> Chi_1 Chi_3)
1.40388107E-15	2		12	1000022	# BR(hh_8 -> Chi_1 Chi_4)
2.97812927E-15	2		12	1000023	# BR(hh_8 -> Chi_1 Chi_5)
2.53594416E-17	2		12	1000025	# BR(hh_8 -> Chi_1 Chi_6)
1.92507385E-15	2		12	1000039	# BR(hh_8 -> Chi_1 Chi_7)
7.73078915E-17	2		12	1000045	# BR(hh_8 -> Chi_1 Chi_8)
1.51212902E-27	2		14	14	# BR(hh_8 -> Chi_2 Chi_2)
4.67197560E-26	2		14	16	# BR(hh_8 -> Chi_2 Chi_3)

7.89096691E-15	2		14	1000022	# BR(hh_8 -> Chi_2 Chi_4)
2.89713540E-15	2		14	1000023	# BR(hh_8 -> Chi_2 Chi_5)
2.97178996E-16	2		14	1000025	# BR(hh_8 -> Chi_2 Chi_6)
7.09820631E-16	2		14	1000039	# BR(hh_8 -> Chi_2 Chi_7)
5.32224885E-16	2		14	1000045	# BR(hh_8 -> Chi_2 Chi_8)
2.10773938E-28	2		16	16	# BR(hh_8 -> Chi_3 Chi_3)
8.76811982E-15	2		16	1000022	# BR(hh_8 -> Chi_3 Chi_4)
7.38676531E-15	2		16	1000023	# BR(hh_8 -> Chi_3 Chi_5)
2.28509625E-15	2		16	1000025	# BR(hh_8 -> Chi_3 Chi_6)
9.94476985E-16	2		16	1000039	# BR(hh_8 -> Chi_3 Chi_7)
3.72349576E-15	2		16	1000045	# BR(hh_8 -> Chi_3 Chi_8)
3.39898859E-05	2	1000022	1000022	1000022	# BR(hh_8 -> Chi_4 Chi_4)
2.65823997E-08	2	1000022	1000023	1000023	# BR(hh_8 -> Chi_4 Chi_5)
3.06060655E-05	2	1000022	1000025	1000025	# BR(hh_8 -> Chi_4 Chi_6)
1.49389130E-04	2	1000022	1000039	1000039	# BR(hh_8 -> Chi_4 Chi_7)
9.21243986E-06	2	1000022	1000045	1000045	# BR(hh_8 -> Chi_4 Chi_8)
3.55949034E-05	2	1000023	1000023	1000023	# BR(hh_8 -> Chi_5 Chi_5)
3.27123241E-05	2	1000023	1000025	1000025	# BR(hh_8 -> Chi_5 Chi_6)
1.58979452E-04	2	1000023	1000039	1000039	# BR(hh_8 -> Chi_5 Chi_7)
9.84899777E-06	2	1000023	1000045	1000045	# BR(hh_8 -> Chi_5 Chi_8)
1.65396813E-02	2	1000025	1000025	1000025	# BR(hh_8 -> Chi_6 Chi_6)
1.68778482E-01	2	1000025	1000039	1000039	# BR(hh_8 -> Chi_6 Chi_7)
1.12461055E-02	2	1000025	1000045	1000045	# BR(hh_8 -> Chi_6 Chi_8)
1.48221548E-03	2	1000039	1000039	1000039	# BR(hh_8 -> Chi_7 Chi_7)
4.58995364E-03	2	1000039	1000045	1000045	# BR(hh_8 -> Chi_7 Chi_8)
4.81903725E-07	2	1000045	1000045	1000045	# BR(hh_8 -> Chi_8 Chi_8)
1.82327045E-09	2	-1	1	1	# BR(hh_8 -> Fd_1^* Fd_1)
6.55813699E-07	2	-3	3	3	# BR(hh_8 -> Fd_2^* Fd_2)
1.76084041E-03	2	-5	5	5	# BR(hh_8 -> Fd_3^* Fd_3)
4.36872279E-11	2	-2	2	2	# BR(hh_8 -> Fu_1^* Fu_1)
1.03783248E-05	2	-4	4	4	# BR(hh_8 -> Fu_2^* Fu_2)
6.12798697E-01	2	-6	6	6	# BR(hh_8 -> Fu_3^* Fu_3)
2.53780259E-05	2	25	25	25	# BR(hh_8 -> hh_1 hh_1)
7.78339772E-09	2	25	35	35	# BR(hh_8 -> hh_1 hh_2)
2.25450553E-05	2	25	1000012	1000012	# BR(hh_8 -> hh_1 hh_3)
3.11601502E-06	2	25	1000014	1000014	# BR(hh_8 -> hh_1 hh_4)
1.31718834E-15	2	25	1000016	1000016	# BR(hh_8 -> hh_1 hh_5)
3.63622447E-14	2	25	2000012	2000012	# BR(hh_8 -> hh_1 hh_6)
2.68301457E-05	2	35	35	35	# BR(hh_8 -> hh_2 hh_2)
2.34918470E-05	2	35	1000012	1000012	# BR(hh_8 -> hh_2 hh_3)
3.33248576E-06	2	35	1000014	1000014	# BR(hh_8 -> hh_2 hh_4)
2.35904377E-14	2	35	1000016	1000016	# BR(hh_8 -> hh_2 hh_5)
3.80172926E-14	2	35	2000012	2000012	# BR(hh_8 -> hh_2 hh_6)
2.48395811E-02	2	1000012	1000012	1000012	# BR(hh_8 -> hh_3 hh_3)
2.29786899E-02	2	1000012	1000014	1000014	# BR(hh_8 -> hh_3 hh_4)
5.55102461E-13	2	1000012	1000016	1000016	# BR(hh_8 -> hh_3 hh_5)
2.12689638E-14	2	1000012	2000012	2000012	# BR(hh_8 -> hh_3 hh_6)
4.28706253E-03	2	1000014	1000014	1000014	# BR(hh_8 -> hh_4 hh_4)
4.06988643E-13	2	1000014	1000016	1000016	# BR(hh_8 -> hh_4 hh_5)
5.10469583E-14	2	1000014	2000012	2000012	# BR(hh_8 -> hh_4 hh_6)
7.04852257E-04	2	1000016	1000016	1000016	# BR(hh_8 -> hh_5 hh_5)
7.36490359E-25	2	1000016	2000012	2000012	# BR(hh_8 -> hh_5 hh_6)
4.24187549E-04	2	-37	37	37	# BR(hh_8 -> Hpm_2^* Hpm_2)
1.00787866E-26	2	-37	1000011	1000011	# BR(hh_8 -> Hpm_2^* Hpm_3)
1.00787866E-26	2	-1000011	37	37	# BR(hh_8 -> Hpm_3^* Hpm_2)
2.43776781E-15	2	37	24	24	# BR(hh_8 -> Hpm_2 Vwm^*)
2.43776781E-15	2	-37	-24	-24	# BR(hh_8 -> Hpm_2^* Vwm)
6.51075642E-16	2	1000011	24	24	# BR(hh_8 -> Hpm_3 Vwm^*)
6.51075642E-16	2	-1000011	-24	-24	# BR(hh_8 -> Hpm_3^* Vwm)
1.02478817E-04	2	-24	24	24	# BR(hh_8 -> Vwm Vwm^*)
5.03534414E-05	2	23	23	23	# BR(hh_8 -> VZ VZ)
DECAY	36	2.45965153E-04	# Ah_2		
#	BR	NDA	ID1	ID2	
3.62102803E-04	2		22	22	# BR(Ah_2 -> VP VP)
3.66934920E-02	2		21	21	# BR(Ah_2 -> VG VG)
1.03555924E-08	2		-11	11	# BR(Ah_2 -> Cha_1^* Cha_1)
1.72442225E-27	2		-11	15	# BR(Ah_2 -> Cha_1^* Cha_3)
4.62605930E-04	2		-13	13	# BR(Ah_2 -> Cha_2^* Cha_2)
8.69943350E-27	2		-13	15	# BR(Ah_2 -> Cha_2^* Cha_3)
1.72442225E-27	2		-15	11	# BR(Ah_2 -> Cha_3^* Cha_1)
8.69943350E-27	2		-15	13	# BR(Ah_2 -> Cha_3^* Cha_2)
1.33586019E-01	2		-15	15	# BR(Ah_2 -> Cha_3^* Cha_3)
5.58949518E-29	2		12	12	# BR(Ah_2 -> Chi_1 Chi_1)

2.63997100E-25	2		12	14	# BR(Ah_2 -> Chi_1 Chi_2)
1.29877794E-24	2		12	16	# BR(Ah_2 -> Chi_1 Chi_3)
2.32394137E-13	2		12	1000022	# BR(Ah_2 -> Chi_1 Chi_4)
3.96938289E-13	2		12	1000023	# BR(Ah_2 -> Chi_1 Chi_5)
5.36636827E-18	2		12	1000025	# BR(Ah_2 -> Chi_1 Chi_6)
7.10366955E-24	2		14	14	# BR(Ah_2 -> Chi_2 Chi_2)
8.92999943E-23	2		14	16	# BR(Ah_2 -> Chi_2 Chi_3)
1.34316873E-12	2		14	1000022	# BR(Ah_2 -> Chi_2 Chi_4)
3.81512312E-13	2		14	1000023	# BR(Ah_2 -> Chi_2 Chi_5)
6.37448604E-17	2		14	1000025	# BR(Ah_2 -> Chi_2 Chi_6)
2.36069901E-22	2		16	16	# BR(Ah_2 -> Chi_3 Chi_3)
1.42864901E-12	2		16	1000022	# BR(Ah_2 -> Chi_3 Chi_4)
1.03036297E-12	2		16	1000023	# BR(Ah_2 -> Chi_3 Chi_5)
1.83593742E-16	2		16	1000025	# BR(Ah_2 -> Chi_3 Chi_6)
8.54606929E-07	2		-1	1	# BR(Ah_2 -> Fd_1^* Fd_1)
3.07394333E-04	2		-3	3	# BR(Ah_2 -> Fd_2^* Fd_2)
8.23901532E-01	2		-5	5	# BR(Ah_2 -> Fd_3^* Fd_3)
1.97274353E-08	2		-2	2	# BR(Ah_2 -> Fu_1^* Fu_1)
4.68596869E-03	2		-4	4	# BR(Ah_2 -> Fu_2^* Fu_2)
DECAY 1000017		1.91396077E-08	# Ah_3		
# BR	NDA	ID1	ID2		
4.79905754E-04	2	22	22	# BR(Ah_3 -> VP VP)	
2.08102492E-02	2	21	21	# BR(Ah_3 -> VG VG)	
1.05382449E-08	2	-11	11	# BR(Ah_3 -> Cha_1^* Cha_1)	
5.87455420E-24	2	-11	13	# BR(Ah_3 -> Cha_1^* Cha_2)	
1.66812772E-21	2	-11	15	# BR(Ah_3 -> Cha_1^* Cha_3)	
5.87455420E-24	2	-13	11	# BR(Ah_3 -> Cha_2^* Cha_1)	
4.70765753E-04	2	-13	13	# BR(Ah_3 -> Cha_2^* Cha_2)	
5.68211408E-22	2	-13	15	# BR(Ah_3 -> Cha_2^* Cha_3)	
1.66812772E-21	2	-15	11	# BR(Ah_3 -> Cha_3^* Cha_1)	
5.68211408E-22	2	-15	13	# BR(Ah_3 -> Cha_3^* Cha_2)	
1.35971118E-01	2	-15	15	# BR(Ah_3 -> Cha_3^* Cha_3)	
1.33476012E-21	2	12	12	# BR(Ah_3 -> Chi_1 Chi_1)	
1.73425381E-22	2	12	14	# BR(Ah_3 -> Chi_1 Chi_2)	
2.19469254E-19	2	12	16	# BR(Ah_3 -> Chi_1 Chi_3)	
3.00613620E-08	2	12	1000022	# BR(Ah_3 -> Chi_1 Chi_4)	
9.41231918E-10	2	12	1000023	# BR(Ah_3 -> Chi_1 Chi_5)	
1.46310762E-08	2	12	1000025	# BR(Ah_3 -> Chi_1 Chi_6)	
3.44914937E-20	2	14	14	# BR(Ah_3 -> Chi_2 Chi_2)	
3.77808189E-20	2	14	16	# BR(Ah_3 -> Chi_2 Chi_3)	
5.35964271E-09	2	14	1000022	# BR(Ah_3 -> Chi_2 Chi_4)	
8.09714216E-08	2	14	1000023	# BR(Ah_3 -> Chi_2 Chi_5)	
8.76123409E-08	2	14	1000025	# BR(Ah_3 -> Chi_2 Chi_6)	
8.81691676E-19	2	16	16	# BR(Ah_3 -> Chi_3 Chi_3)	
3.11046519E-09	2	16	1000022	# BR(Ah_3 -> Chi_3 Chi_4)	
1.27088267E-07	2	16	1000023	# BR(Ah_3 -> Chi_3 Chi_5)	
1.00326090E-07	2	16	1000025	# BR(Ah_3 -> Chi_3 Chi_6)	
8.69680533E-07	2	-1	1	# BR(Ah_3 -> Fd_1^* Fd_1)	
3.12816168E-04	2	-3	3	# BR(Ah_3 -> Fd_2^* Fd_2)	
8.38887363E-01	2	-5	5	# BR(Ah_3 -> Fd_3^* Fd_3)	
1.29089544E-08	2	-2	2	# BR(Ah_3 -> Fu_1^* Fu_1)	
3.06643841E-03	2	-4	4	# BR(Ah_3 -> Fu_2^* Fu_2)	
DECAY 1000018		1.90939835E-08	# Ah_4		
# BR	NDA	ID1	ID2		
4.84201416E-04	2	22	22	# BR(Ah_4 -> VP VP)	
2.19341580E-02	2	21	21	# BR(Ah_4 -> VG VG)	
1.05256008E-08	2	-11	11	# BR(Ah_4 -> Cha_1^* Cha_1)	
3.36323080E-25	2	-11	13	# BR(Ah_4 -> Cha_1^* Cha_2)	
2.54652005E-21	2	-11	15	# BR(Ah_4 -> Cha_1^* Cha_3)	
3.36323080E-25	2	-13	11	# BR(Ah_4 -> Cha_2^* Cha_1)	
4.70200920E-04	2	-13	13	# BR(Ah_4 -> Cha_2^* Cha_2)	
1.70659686E-20	2	-13	15	# BR(Ah_4 -> Cha_2^* Cha_3)	
2.54652005E-21	2	-15	11	# BR(Ah_4 -> Cha_3^* Cha_1)	
1.70659686E-20	2	-15	13	# BR(Ah_4 -> Cha_3^* Cha_2)	
1.35808483E-01	2	-15	15	# BR(Ah_4 -> Cha_3^* Cha_3)	
6.41672550E-23	2	12	12	# BR(Ah_4 -> Chi_1 Chi_1)	
1.63280118E-19	2	12	14	# BR(Ah_4 -> Chi_1 Chi_2)	
1.19156910E-18	2	12	16	# BR(Ah_4 -> Chi_1 Chi_3)	
6.82810607E-10	2	12	1000022	# BR(Ah_4 -> Chi_1 Chi_4)	
2.74425349E-08	2	12	1000023	# BR(Ah_4 -> Chi_1 Chi_5)	
4.23222696E-08	2	12	1000025	# BR(Ah_4 -> Chi_1 Chi_6)	
7.50179940E-19	2	14	14	# BR(Ah_4 -> Chi_2 Chi_2)	
1.22549555E-18	2	14	16	# BR(Ah_4 -> Chi_2 Chi_3)	

6.35417160E-08	2	14	1000022	# BR(Ah_4 -> Chi_2 Chi_4)
8.04947873E-09	2	14	1000023	# BR(Ah_4 -> Chi_2 Chi_5)
3.82033646E-08	2	14	1000025	# BR(Ah_4 -> Chi_2 Chi_6)
1.84965951E-19	2	16	16	# BR(Ah_4 -> Chi_3 Chi_3)
1.01763365E-07	2	16	1000022	# BR(Ah_4 -> Chi_3 Chi_4)
9.52032190E-12	2	16	1000023	# BR(Ah_4 -> Chi_3 Chi_5)
8.06731060E-08	2	16	1000025	# BR(Ah_4 -> Chi_3 Chi_6)
8.68637065E-07	2	-1	1	# BR(Ah_4 -> Fd_1^* Fd_1)
3.12440842E-04	2	-3	3	# BR(Ah_4 -> Fd_2^* Fd_2)
8.37888622E-01	2	-5	5	# BR(Ah_4 -> Fd_3^* Fd_3)
1.30529218E-08	2	-2	2	# BR(Ah_4 -> Fu_1^* Fu_1)
3.10063867E-03	2	-4	4	# BR(Ah_4 -> Fu_2^* Fu_2)

DECAY 1000019 8.33125976E-05 # Ah_5

#	BR	NDA	ID1	ID2	
4.73501814E-13	2		22	22	# BR(Ah_5 -> VP VP)
2.18101239E-10	2		21	21	# BR(Ah_5 -> VG VG)
2.81473356E-11	2		25	36	# BR(Ah_5 -> hh_1 Ah_2)
2.77045514E-10	2		35	36	# BR(Ah_5 -> hh_2 Ah_2)
2.30091117E-18	2		-11	11	# BR(Ah_5 -> Cha_1^* Cha_1)
3.47183482E-13	2		-11	15	# BR(Ah_5 -> Cha_1^* Cha_3)
1.02786734E-13	2		-13	13	# BR(Ah_5 -> Cha_2^* Cha_2)
1.44501473E-12	2		-13	15	# BR(Ah_5 -> Cha_2^* Cha_3)
3.47183482E-13	2		-15	11	# BR(Ah_5 -> Cha_3^* Cha_1)
1.44501473E-12	2		-15	13	# BR(Ah_5 -> Cha_3^* Cha_2)
3.16110163E-11	2		-15	15	# BR(Ah_5 -> Cha_3^* Cha_3)
2.99271188E-13	2		12	12	# BR(Ah_5 -> Chi_1 Chi_1)
2.21570786E-11	2		12	14	# BR(Ah_5 -> Chi_1 Chi_2)
1.13033274E-10	2		12	16	# BR(Ah_5 -> Chi_1 Chi_3)
2.40472409E-04	2		12	1000022	# BR(Ah_5 -> Chi_1 Chi_4)
2.55545237E-04	2		12	1000023	# BR(Ah_5 -> Chi_1 Chi_5)
2.57449200E-01	2		12	1000025	# BR(Ah_5 -> Chi_1 Chi_6)
6.41586283E-11	2		14	14	# BR(Ah_5 -> Chi_2 Chi_2)
3.28808413E-10	2		14	16	# BR(Ah_5 -> Chi_2 Chi_3)
4.40787674E-04	2		14	1000022	# BR(Ah_5 -> Chi_2 Chi_4)
4.68416273E-04	2		14	1000023	# BR(Ah_5 -> Chi_2 Chi_5)
4.71906251E-01	2		14	1000025	# BR(Ah_5 -> Chi_2 Chi_6)
2.18748174E-10	2		16	16	# BR(Ah_5 -> Chi_3 Chi_3)
2.51001468E-04	2		16	1000022	# BR(Ah_5 -> Chi_3 Chi_4)
2.66734263E-04	2		16	1000023	# BR(Ah_5 -> Chi_3 Chi_5)
2.68721588E-01	2		16	1000025	# BR(Ah_5 -> Chi_3 Chi_6)
1.12874281E-11	2		1000022	1000022	# BR(Ah_5 -> Chi_4 Chi_4)
1.34192443E-10	2		1000022	1000023	# BR(Ah_5 -> Chi_4 Chi_5)
6.98875553E-11	2		1000022	1000025	# BR(Ah_5 -> Chi_4 Chi_6)
6.13359657E-10	2		1000023	1000023	# BR(Ah_5 -> Chi_5 Chi_5)
8.33441251E-10	2		1000023	1000025	# BR(Ah_5 -> Chi_5 Chi_6)
1.14698628E-10	2		1000025	1000025	# BR(Ah_5 -> Chi_6 Chi_6)
1.89885286E-16	2		-1	1	# BR(Ah_5 -> Fd_1^* Fd_1)
6.83000035E-14	2		-3	3	# BR(Ah_5 -> Fd_2^* Fd_2)
1.83339129E-10	2		-5	5	# BR(Ah_5 -> Fd_3^* Fd_3)
2.55253911E-17	2		-2	2	# BR(Ah_5 -> Fu_1^* Fu_1)
6.06373444E-12	2		-4	4	# BR(Ah_5 -> Fu_2^* Fu_2)
9.06619621E-12	2		25	23	# BR(Ah_5 -> hh_1 VZ)
4.07502262E-11	2		35	23	# BR(Ah_5 -> hh_2 VZ)

DECAY 2000018 4.29313718E-03 # Ah_6

#	BR	NDA	ID1	ID2	
7.34231351E-14	2		22	22	# BR(Ah_6 -> VP VP)
3.85880783E-11	2		21	21	# BR(Ah_6 -> VG VG)
3.89388798E-11	2		25	36	# BR(Ah_6 -> hh_1 Ah_2)
1.74094467E-12	2		25	1000017	# BR(Ah_6 -> hh_1 Ah_3)
1.26262324E-12	2		25	1000018	# BR(Ah_6 -> hh_1 Ah_4)
5.35118834E-21	2		25	1000019	# BR(Ah_6 -> hh_1 Ah_5)
3.44286012E-11	2		35	36	# BR(Ah_6 -> hh_2 Ah_2)
4.97616247E-14	2		35	1000017	# BR(Ah_6 -> hh_2 Ah_3)
2.35606361E-13	2		35	1000018	# BR(Ah_6 -> hh_2 Ah_4)
2.64790583E-21	2		35	1000019	# BR(Ah_6 -> hh_2 Ah_5)
3.83626125E-12	2		1000012	36	# BR(Ah_6 -> hh_3 Ah_2)
1.39261206E-10	2		1000012	1000017	# BR(Ah_6 -> hh_3 Ah_3)
1.26814176E-10	2		1000012	1000018	# BR(Ah_6 -> hh_3 Ah_4)
5.22468787E-21	2		1000012	1000019	# BR(Ah_6 -> hh_3 Ah_5)
1.00773993E-09	2		1000014	36	# BR(Ah_6 -> hh_4 Ah_2)
1.43110240E-09	2		1000014	1000017	# BR(Ah_6 -> hh_4 Ah_3)
1.29554617E-09	2		1000014	1000018	# BR(Ah_6 -> hh_4 Ah_4)
6.33173146E-22	2		1000014	1000019	# BR(Ah_6 -> hh_4 Ah_5)

1.70269938E-20	2	1000016	36	# BR(Ah_6 -> hh_5 Ah_2)
2.78886757E-20	2	1000016	1000017	# BR(Ah_6 -> hh_5 Ah_3)
3.36267272E-20	2	1000016	1000018	# BR(Ah_6 -> hh_5 Ah_4)
8.07225476E-20	2	-11	11	# BR(Ah_6 -> Cha_1^* Cha_1)
5.08592455E-17	2	-11	13	# BR(Ah_6 -> Cha_1^* Cha_2)
6.24009983E-25	2	-11	-1000024	# BR(Ah_6 -> Cha_1^* Cha_4)
5.08592455E-17	2	-13	11	# BR(Ah_6 -> Cha_2^* Cha_1)
6.18209497E-15	2	-13	13	# BR(Ah_6 -> Cha_2^* Cha_2)
9.07140224E-16	2	-13	15	# BR(Ah_6 -> Cha_2^* Cha_3)
2.21802545E-01	2	-13	-1000024	# BR(Ah_6 -> Cha_2^* Cha_4)
9.07140224E-16	2	-15	13	# BR(Ah_6 -> Cha_3^* Cha_2)
1.04211172E-12	2	-15	15	# BR(Ah_6 -> Cha_3^* Cha_3)
9.38372756E-25	2	-15	-1000024	# BR(Ah_6 -> Cha_3^* Cha_4)
6.24009983E-25	2	1000024	11	# BR(Ah_6 -> Cha_4^* Cha_1)
2.21802545E-01	2	1000024	13	# BR(Ah_6 -> Cha_4^* Cha_2)
9.38372756E-25	2	1000024	15	# BR(Ah_6 -> Cha_4^* Cha_3)
3.23259190E-15	2	12	12	# BR(Ah_6 -> Chi_1 Chi_1)
2.56004408E-13	2	12	14	# BR(Ah_6 -> Chi_1 Chi_2)
8.65273768E-13	2	12	16	# BR(Ah_6 -> Chi_1 Chi_3)
3.11405928E-06	2	12	1000022	# BR(Ah_6 -> Chi_1 Chi_4)
3.33921340E-06	2	12	1000023	# BR(Ah_6 -> Chi_1 Chi_5)
4.04100699E-03	2	12	1000025	# BR(Ah_6 -> Chi_1 Chi_6)
3.22583873E-02	2	12	1000039	# BR(Ah_6 -> Chi_1 Chi_7)
3.17969025E-04	2	12	1000045	# BR(Ah_6 -> Chi_1 Chi_8)
1.18530955E-12	2	14	14	# BR(Ah_6 -> Chi_2 Chi_2)
1.91841067E-13	2	14	16	# BR(Ah_6 -> Chi_2 Chi_3)
9.76296645E-06	2	14	1000022	# BR(Ah_6 -> Chi_2 Chi_4)
1.04688529E-05	2	14	1000023	# BR(Ah_6 -> Chi_2 Chi_5)
1.26690639E-02	2	14	1000025	# BR(Ah_6 -> Chi_2 Chi_6)
1.01134092E-01	2	14	1000039	# BR(Ah_6 -> Chi_2 Chi_7)
9.96872787E-04	2	14	1000045	# BR(Ah_6 -> Chi_2 Chi_8)
2.50298402E-11	2	16	16	# BR(Ah_6 -> Chi_3 Chi_3)
3.44322618E-05	2	16	1000022	# BR(Ah_6 -> Chi_3 Chi_4)
3.69217989E-05	2	16	1000023	# BR(Ah_6 -> Chi_3 Chi_5)
4.46815553E-02	2	16	1000025	# BR(Ah_6 -> Chi_3 Chi_6)
3.56682114E-01	2	16	1000039	# BR(Ah_6 -> Chi_3 Chi_7)
3.51579460E-03	2	16	1000045	# BR(Ah_6 -> Chi_3 Chi_8)
1.93635093E-12	2	1000022	1000022	# BR(Ah_6 -> Chi_4 Chi_4)
9.39255814E-12	2	1000022	1000023	# BR(Ah_6 -> Chi_4 Chi_5)
9.33186849E-13	2	1000022	1000025	# BR(Ah_6 -> Chi_4 Chi_6)
3.46797672E-12	2	1000022	1000039	# BR(Ah_6 -> Chi_4 Chi_7)
2.40286134E-12	2	1000023	1000023	# BR(Ah_6 -> Chi_5 Chi_5)
1.60141140E-13	2	1000023	1000025	# BR(Ah_6 -> Chi_5 Chi_6)
9.28376864E-12	2	1000023	1000039	# BR(Ah_6 -> Chi_5 Chi_7)
6.63177412E-11	2	1000025	1000025	# BR(Ah_6 -> Chi_6 Chi_6)
3.73506838E-11	2	1000025	1000039	# BR(Ah_6 -> Chi_6 Chi_7)
6.66171923E-18	2	-1	1	# BR(Ah_6 -> Fd_1^* Fd_1)
2.39615942E-15	2	-3	3	# BR(Ah_6 -> Fd_2^* Fd_2)
6.43370818E-12	2	-5	5	# BR(Ah_6 -> Fd_3^* Fd_3)
5.10113551E-19	2	-2	2	# BR(Ah_6 -> Fu_1^* Fu_1)
1.21182596E-13	2	-4	4	# BR(Ah_6 -> Fu_2^* Fu_2)
6.55617292E-09	2	-6	6	# BR(Ah_6 -> Fu_3^* Fu_3)
1.21575652E-09	2	25	23	# BR(Ah_6 -> hh_1 VZ)
1.25832091E-09	2	35	23	# BR(Ah_6 -> hh_2 VZ)
6.46745752E-10	2	1000012	23	# BR(Ah_6 -> hh_3 VZ)
5.32651784E-10	2	1000014	23	# BR(Ah_6 -> hh_4 VZ)
5.82037132E-21	2	1000016	23	# BR(Ah_6 -> hh_5 VZ)
8.76395889E-22	2	37	24	# BR(Ah_6 -> Hpm_2 VWm^*)
8.76395889E-22	2	-37	-24	# BR(Ah_6 -> Hpm_2^* VWm)
DECAY #	2000019	2.70206062E-02	# Ah_7	
#	BR	NDA	ID1	ID2
1.75896349E-16	2	22	22	# BR(Ah_7 -> VP VP)
6.08220493E-14	2	21	21	# BR(Ah_7 -> VG VG)
6.35405291E-12	2	25	36	# BR(Ah_7 -> hh_1 Ah_2)
1.09702569E-13	2	25	1000017	# BR(Ah_7 -> hh_1 Ah_3)
2.37211302E-16	2	25	1000018	# BR(Ah_7 -> hh_1 Ah_4)
1.09096808E-21	2	25	1000019	# BR(Ah_7 -> hh_1 Ah_5)
3.06447928E-22	2	25	2000018	# BR(Ah_7 -> hh_1 Ah_6)
4.68255947E-13	2	35	36	# BR(Ah_7 -> hh_2 Ah_2)
2.25387500E-14	2	35	1000017	# BR(Ah_7 -> hh_2 Ah_3)
9.25560694E-14	2	35	1000018	# BR(Ah_7 -> hh_2 Ah_4)
7.16925325E-23	2	35	1000019	# BR(Ah_7 -> hh_2 Ah_5)
3.87388816E-23	2	35	2000018	# BR(Ah_7 -> hh_2 Ah_6)

8.32113552E-12	2	1000012	36	# BR(Ah_7 -> hh_3 Ah_2)
2.82593382E-11	2	1000012	1000017	# BR(Ah_7 -> hh_3 Ah_3)
2.30926982E-12	2	1000012	1000018	# BR(Ah_7 -> hh_3 Ah_4)
2.50375026E-22	2	1000012	1000019	# BR(Ah_7 -> hh_3 Ah_5)
1.95202055E-22	2	1000012	2000018	# BR(Ah_7 -> hh_3 Ah_6)
3.79120110E-12	2	1000014	36	# BR(Ah_7 -> hh_4 Ah_2)
2.40309192E-10	2	1000014	1000017	# BR(Ah_7 -> hh_4 Ah_3)
1.87424947E-11	2	1000014	1000018	# BR(Ah_7 -> hh_4 Ah_4)
1.41649982E-23	2	1000014	1000019	# BR(Ah_7 -> hh_4 Ah_5)
1.41856433E-24	2	1000014	2000018	# BR(Ah_7 -> hh_4 Ah_6)
4.17370809E-23	2	1000016	36	# BR(Ah_7 -> hh_5 Ah_2)
5.52058744E-21	2	1000016	1000017	# BR(Ah_7 -> hh_5 Ah_3)
4.08730689E-22	2	1000016	1000018	# BR(Ah_7 -> hh_5 Ah_4)
8.42503193E-24	2	2000012	36	# BR(Ah_7 -> hh_6 Ah_2)
5.30900367E-22	2	2000012	1000017	# BR(Ah_7 -> hh_6 Ah_3)
2.84438841E-23	2	2000012	1000018	# BR(Ah_7 -> hh_6 Ah_4)
3.82430383E-20	2	-11	11	# BR(Ah_7 -> Cha_1^* Cha_1)
5.09253148E-19	2	-11	13	# BR(Ah_7 -> Cha_1^* Cha_2)
2.27869266E-16	2	-11	15	# BR(Ah_7 -> Cha_1^* Cha_3)
2.32947622E-01	2	-11	-1000024	# BR(Ah_7 -> Cha_1^* Cha_4)
5.09253148E-19	2	-13	11	# BR(Ah_7 -> Cha_2^* Cha_1)
1.34237613E-15	2	-13	13	# BR(Ah_7 -> Cha_2^* Cha_2)
2.07359677E-26	2	-13	-1000024	# BR(Ah_7 -> Cha_2^* Cha_4)
2.27869266E-16	2	-15	11	# BR(Ah_7 -> Cha_3^* Cha_1)
3.87941175E-13	2	-15	15	# BR(Ah_7 -> Cha_3^* Cha_3)
3.04436388E-25	2	-15	-1000024	# BR(Ah_7 -> Cha_3^* Cha_4)
2.32947622E-01	2	1000024	11	# BR(Ah_7 -> Cha_4^* Cha_1)
2.07359677E-26	2	1000024	13	# BR(Ah_7 -> Cha_4^* Cha_2)
3.04436388E-25	2	1000024	15	# BR(Ah_7 -> Cha_4^* Cha_3)
2.75547500E-13	2	1000024	-1000024	# BR(Ah_7 -> Cha_4^* Cha_4)
8.43950434E-15	2	12	12	# BR(Ah_7 -> Chi_1 Chi_1)
4.32665653E-13	2	12	14	# BR(Ah_7 -> Chi_1 Chi_2)
2.94025690E-12	2	12	16	# BR(Ah_7 -> Chi_1 Chi_3)
8.36017429E-06	2	12	1000022	# BR(Ah_7 -> Chi_1 Chi_4)
8.97640994E-06	2	12	1000023	# BR(Ah_7 -> Chi_1 Chi_5)
1.11411087E-02	2	12	1000025	# BR(Ah_7 -> Chi_1 Chi_6)
3.43698027E-01	2	12	1000039	# BR(Ah_7 -> Chi_1 Chi_7)
6.32191254E-03	2	12	1000045	# BR(Ah_7 -> Chi_1 Chi_8)
4.68283493E-13	2	14	14	# BR(Ah_7 -> Chi_2 Chi_2)
1.51392154E-12	2	14	16	# BR(Ah_7 -> Chi_2 Chi_3)
3.96626074E-06	2	14	1000022	# BR(Ah_7 -> Chi_2 Chi_4)
4.25861724E-06	2	14	1000023	# BR(Ah_7 -> Chi_2 Chi_5)
5.28560057E-03	2	14	1000025	# BR(Ah_7 -> Chi_2 Chi_6)
1.63058322E-01	2	14	1000039	# BR(Ah_7 -> Chi_2 Chi_7)
2.99926205E-03	2	14	1000045	# BR(Ah_7 -> Chi_2 Chi_8)
2.57711518E-14	2	16	16	# BR(Ah_7 -> Chi_3 Chi_3)
3.64555544E-08	2	16	1000022	# BR(Ah_7 -> Chi_3 Chi_4)
3.91427243E-08	2	16	1000023	# BR(Ah_7 -> Chi_3 Chi_5)
4.85821557E-05	2	16	1000025	# BR(Ah_7 -> Chi_3 Chi_6)
1.49873693E-03	2	16	1000039	# BR(Ah_7 -> Chi_3 Chi_7)
2.75674664E-05	2	16	1000045	# BR(Ah_7 -> Chi_3 Chi_8)
1.10288699E-13	2	1000022	1000022	# BR(Ah_7 -> Chi_4 Chi_4)
6.11941206E-14	2	1000022	1000023	# BR(Ah_7 -> Chi_4 Chi_5)
1.48435316E-13	2	1000022	1000025	# BR(Ah_7 -> Chi_4 Chi_6)
3.93434411E-12	2	1000022	1000039	# BR(Ah_7 -> Chi_4 Chi_7)
3.55725143E-12	2	1000022	1000045	# BR(Ah_7 -> Chi_4 Chi_8)
1.24018882E-13	2	1000023	1000023	# BR(Ah_7 -> Chi_5 Chi_5)
1.01061914E-13	2	1000023	1000025	# BR(Ah_7 -> Chi_5 Chi_6)
5.41858524E-13	2	1000023	1000039	# BR(Ah_7 -> Chi_5 Chi_7)
4.64511171E-13	2	1000023	1000045	# BR(Ah_7 -> Chi_5 Chi_8)
5.43834233E-11	2	1000025	1000025	# BR(Ah_7 -> Chi_6 Chi_6)
1.08403100E-10	2	1000025	1000039	# BR(Ah_7 -> Chi_6 Chi_7)
7.54585118E-11	2	1000025	1000045	# BR(Ah_7 -> Chi_6 Chi_8)
4.12603661E-14	2	1000039	1000039	# BR(Ah_7 -> Chi_7 Chi_7)
2.47986602E-18	2	-1	1	# BR(Ah_7 -> Fd_1^* Fd_1)
8.91985113E-16	2	-3	3	# BR(Ah_7 -> Fd_2^* Fd_2)
2.39506143E-12	2	-5	5	# BR(Ah_7 -> Fd_3^* Fd_3)
9.98625311E-22	2	-2	2	# BR(Ah_7 -> Fu_1^* Fu_1)
2.37233735E-16	2	-4	4	# BR(Ah_7 -> Fu_2^* Fu_2)
1.70251879E-11	2	-6	6	# BR(Ah_7 -> Fu_3^* Fu_3)
2.53678109E-10	2	25	23	# BR(Ah_7 -> hh_1 VZ)
1.74814820E-11	2	35	23	# BR(Ah_7 -> hh_2 VZ)
1.75867286E-11	2	1000012	23	# BR(Ah_7 -> hh_3 VZ)

1.08373226E-11	2	1000014	23	# BR(Ah_7 -> hh_4 VZ)
6.23675539E-24	2	1000016	23	# BR(Ah_7 -> hh_5 VZ)
8.15361268E-25	2	2000012	23	# BR(Ah_7 -> hh_6 VZ)
3.81950365E-26	2	37	24	# BR(Ah_7 -> Hpm_2 Vwm^*)
3.81950365E-26	2	-37	-24	# BR(Ah_7 -> Hpm_2^* Vwm)
8.03292665E-26	2	1000011	24	# BR(Ah_7 -> Hpm_3 Vwm^*)
8.03292665E-26	2	-1000011	-24	# BR(Ah_7 -> Hpm_3^* Vwm)
DECAY 2000020	1.68857143E+01	# Ah_8		
# BR	NDA	ID1	ID2	
5.08434451E-06	2	22	22	# BR(Ah_8 -> VP VP)
1.97998897E-03	2	21	21	# BR(Ah_8 -> VG VG)
2.16422999E-05	2	25	36	# BR(Ah_8 -> hh_1 Ah_2)
1.06462504E-04	2	25	1000017	# BR(Ah_8 -> hh_1 Ah_3)
1.43132541E-08	2	25	1000018	# BR(Ah_8 -> hh_1 Ah_4)
3.64095299E-16	2	25	1000019	# BR(Ah_8 -> hh_1 Ah_5)
2.26137248E-14	2	25	2000018	# BR(Ah_8 -> hh_1 Ah_6)
2.22847974E-05	2	35	36	# BR(Ah_8 -> hh_2 Ah_2)
8.71272389E-08	2	35	1000017	# BR(Ah_8 -> hh_2 Ah_3)
1.11103126E-04	2	35	1000018	# BR(Ah_8 -> hh_2 Ah_4)
5.54458380E-15	2	35	1000019	# BR(Ah_8 -> hh_2 Ah_5)
2.39907444E-14	2	35	2000018	# BR(Ah_8 -> hh_2 Ah_6)
2.39457503E-02	2	1000012	36	# BR(Ah_8 -> hh_3 Ah_2)
1.19677678E-05	2	1000012	1000017	# BR(Ah_8 -> hh_3 Ah_3)
1.20485829E-05	2	1000012	1000018	# BR(Ah_8 -> hh_3 Ah_4)
8.11882827E-14	2	1000012	1000019	# BR(Ah_8 -> hh_3 Ah_5)
1.71139926E-14	2	1000012	2000018	# BR(Ah_8 -> hh_3 Ah_6)
9.56653777E-02	2	1000014	36	# BR(Ah_8 -> hh_4 Ah_2)
2.37433432E-05	2	1000014	1000017	# BR(Ah_8 -> hh_4 Ah_3)
2.36830057E-05	2	1000014	1000018	# BR(Ah_8 -> hh_4 Ah_4)
1.09935486E-13	2	1000014	1000019	# BR(Ah_8 -> hh_4 Ah_5)
1.98276214E-14	2	1000014	2000018	# BR(Ah_8 -> hh_4 Ah_6)
2.16732994E-12	2	1000016	36	# BR(Ah_8 -> hh_5 Ah_2)
2.02758167E-17	2	1000016	1000017	# BR(Ah_8 -> hh_5 Ah_3)
7.29125884E-15	2	1000016	1000018	# BR(Ah_8 -> hh_5 Ah_4)
2.30826240E-24	2	1000016	1000019	# BR(Ah_8 -> hh_5 Ah_5)
2.86234040E-25	2	1000016	2000018	# BR(Ah_8 -> hh_5 Ah_6)
1.01732315E-13	2	2000012	36	# BR(Ah_8 -> hh_6 Ah_2)
2.86515050E-14	2	2000012	1000017	# BR(Ah_8 -> hh_6 Ah_3)
3.03683739E-14	2	2000012	1000018	# BR(Ah_8 -> hh_6 Ah_4)
3.06048661E-25	2	2000012	1000019	# BR(Ah_8 -> hh_6 Ah_5)
1.95487848E-11	2	-11	11	# BR(Ah_8 -> Cha_1^* Cha_1)
1.13585644E-28	2	-11	15	# BR(Ah_8 -> Cha_1^* Cha_3)
1.51105137E-15	2	-11	-1000024	# BR(Ah_8 -> Cha_1^* Cha_4)
8.73287470E-07	2	-13	13	# BR(Ah_8 -> Cha_2^* Cha_2)
4.18907489E-28	2	-13	15	# BR(Ah_8 -> Cha_2^* Cha_3)
1.28211048E-15	2	-13	-1000024	# BR(Ah_8 -> Cha_2^* Cha_4)
1.13585644E-28	2	-15	11	# BR(Ah_8 -> Cha_3^* Cha_1)
4.18907489E-28	2	-15	13	# BR(Ah_8 -> Cha_3^* Cha_2)
2.52377117E-04	2	-15	15	# BR(Ah_8 -> Cha_3^* Cha_3)
9.27070362E-16	2	-15	-1000024	# BR(Ah_8 -> Cha_3^* Cha_4)
1.51105137E-15	2	1000024	11	# BR(Ah_8 -> Cha_4^* Cha_1)
1.28211048E-15	2	1000024	13	# BR(Ah_8 -> Cha_4^* Cha_2)
9.27070362E-16	2	1000024	15	# BR(Ah_8 -> Cha_4^* Cha_3)
6.10986265E-03	2	1000024	-1000024	# BR(Ah_8 -> Cha_4^* Cha_4)
1.10735232E-27	2	12	12	# BR(Ah_8 -> Chi_1 Chi_1)
1.49070280E-27	2	12	14	# BR(Ah_8 -> Chi_1 Chi_2)
9.41641105E-27	2	12	16	# BR(Ah_8 -> Chi_1 Chi_3)
1.14621367E-15	2	12	1000022	# BR(Ah_8 -> Chi_1 Chi_4)
2.43450047E-15	2	12	1000023	# BR(Ah_8 -> Chi_1 Chi_5)
9.54948689E-18	2	12	1000025	# BR(Ah_8 -> Chi_1 Chi_6)
1.41174420E-15	2	12	1000039	# BR(Ah_8 -> Chi_1 Chi_7)
4.53398116E-17	2	12	1000045	# BR(Ah_8 -> Chi_1 Chi_8)
1.39048100E-27	2	14	14	# BR(Ah_8 -> Chi_2 Chi_2)
3.84810327E-26	2	14	16	# BR(Ah_8 -> Chi_2 Chi_3)
6.56692258E-15	2	14	1000022	# BR(Ah_8 -> Chi_2 Chi_4)
2.30538299E-15	2	14	1000023	# BR(Ah_8 -> Chi_2 Chi_5)
5.57107005E-17	2	14	1000025	# BR(Ah_8 -> Chi_2 Chi_6)
2.43138621E-15	2	14	1000039	# BR(Ah_8 -> Chi_2 Chi_7)
4.89153171E-19	2	14	1000045	# BR(Ah_8 -> Chi_2 Chi_8)
1.48168821E-28	2	16	16	# BR(Ah_8 -> Chi_3 Chi_3)
6.87997407E-15	2	16	1000022	# BR(Ah_8 -> Chi_3 Chi_4)
6.33645965E-15	2	16	1000023	# BR(Ah_8 -> Chi_3 Chi_5)
3.07304763E-16	2	16	1000025	# BR(Ah_8 -> Chi_3 Chi_6)

9.33041250E-15	2		16	1000039	# BR(Ah_8 -> Chi_3 Chi_7)
3.05670356E-18	2		16	1000045	# BR(Ah_8 -> Chi_3 Chi_8)
9.65287677E-05	2	1000022		1000022	# BR(Ah_8 -> Chi_4 Chi_4)
5.99480079E-08	2	1000022		1000023	# BR(Ah_8 -> Chi_4 Chi_5)
6.49611449E-05	2	1000022		1000025	# BR(Ah_8 -> Chi_4 Chi_6)
8.65594753E-06	2	1000022		1000039	# BR(Ah_8 -> Chi_4 Chi_7)
9.33560990E-05	2	1000022		1000045	# BR(Ah_8 -> Chi_4 Chi_8)
1.00637516E-04	2	1000023		1000023	# BR(Ah_8 -> Chi_5 Chi_5)
6.91970236E-05	2	1000023		1000025	# BR(Ah_8 -> Chi_5 Chi_6)
9.26952431E-06	2	1000023		1000039	# BR(Ah_8 -> Chi_5 Chi_7)
9.93681370E-05	2	1000023		1000045	# BR(Ah_8 -> Chi_5 Chi_8)
4.26589147E-02	2	1000025		1000025	# BR(Ah_8 -> Chi_6 Chi_6)
1.08923815E-02	2	1000025		1000039	# BR(Ah_8 -> Chi_6 Chi_7)
1.05705835E-01	2	1000025		1000045	# BR(Ah_8 -> Chi_6 Chi_8)
3.12570379E-03	2	1000039		1000039	# BR(Ah_8 -> Chi_7 Chi_7)
3.56517413E-04	2	1000039		1000045	# BR(Ah_8 -> Chi_7 Chi_8)
1.12493331E-02	2	1000045		1000045	# BR(Ah_8 -> Chi_8 Chi_8)
1.61328554E-09	2		-1	1	# BR(Ah_8 -> Fd_1^* Fd_1)
5.80284017E-07	2		-3	3	# BR(Ah_8 -> Fd_2^* Fd_2)
1.55812011E-03	2		-5	5	# BR(Ah_8 -> Fd_3^* Fd_3)
3.79430084E-11	2		-2	2	# BR(Ah_8 -> Fu_1^* Fu_1)
9.01375367E-06	2		-4	4	# BR(Ah_8 -> Fu_2^* Fu_2)
6.60014153E-01	2		-6	6	# BR(Ah_8 -> Fu_3^* Fu_3)
5.17520262E-06	2		25	23	# BR(Ah_8 -> hh_1 VZ)
5.49566844E-06	2		35	23	# BR(Ah_8 -> hh_2 VZ)
3.10430782E-02	2	1000012		23	# BR(Ah_8 -> hh_3 VZ)
4.54131090E-03	2	1000014		23	# BR(Ah_8 -> hh_4 VZ)
1.03769052E-13	2	1000016		23	# BR(Ah_8 -> hh_5 VZ)
1.48861428E-14	2	2000012		23	# BR(Ah_8 -> hh_6 VZ)
3.64695819E-15	2		37	24	# BR(Ah_8 -> Hpm_2 Vwm^*)
3.64695819E-15	2		-37	-24	# BR(Ah_8 -> Hpm_2^* Vwm)
1.66422103E-15	2	1000011		24	# BR(Ah_8 -> Hpm_3 Vwm^*)
1.66422103E-15	2	-1000011		-24	# BR(Ah_8 -> Hpm_3^* Vwm)
DECAY	37	1.24129657E-05	#	Hpm_2	
#	BR	NDA	ID1	ID2	
1.29149489E-08	2		36	-24	# BR(Hpm_2 -> Ah_2 Vwm)
1.66051542E-09	2	1000017		-24	# BR(Hpm_2 -> Ah_3 Vwm)
2.35008756E-08	2	1000018		-24	# BR(Hpm_2 -> Ah_4 Vwm)
7.34241471E-11	2		12	11	# BR(Hpm_2 -> Chi_1 Cha_1)
4.90932904E-10	2		12	13	# BR(Hpm_2 -> Chi_1 Cha_2)
7.54456145E-10	2		12	15	# BR(Hpm_2 -> Chi_1 Cha_3)
1.34586980E-10	2		14	11	# BR(Hpm_2 -> Chi_2 Cha_1)
8.99943206E-10	2		14	13	# BR(Hpm_2 -> Chi_2 Cha_2)
1.08158555E-09	2		14	15	# BR(Hpm_2 -> Chi_2 Cha_3)
7.66390052E-11	2		16	11	# BR(Hpm_2 -> Chi_3 Cha_1)
5.12886918E-10	2		16	13	# BR(Hpm_2 -> Chi_3 Cha_2)
3.24734813E-10	2		16	15	# BR(Hpm_2 -> Chi_3 Cha_3)
2.31594774E-20	2	1000022		11	# BR(Hpm_2 -> Chi_4 Cha_1)
4.89333414E-20	2	1000022		13	# BR(Hpm_2 -> Chi_4 Cha_2)
1.28850283E-03	2	1000022		15	# BR(Hpm_2 -> Chi_4 Cha_3)
1.35939886E-21	2	1000023		11	# BR(Hpm_2 -> Chi_5 Cha_1)
4.88378089E-20	2	1000023		13	# BR(Hpm_2 -> Chi_5 Cha_2)
1.34405024E-03	2	1000023		15	# BR(Hpm_2 -> Chi_5 Cha_3)
1.08005131E-22	2	1000025		11	# BR(Hpm_2 -> Chi_6 Cha_1)
1.85968980E-22	2	1000025		13	# BR(Hpm_2 -> Chi_6 Cha_2)
9.97367175E-01	2	1000025		15	# BR(Hpm_2 -> Chi_6 Cha_3)
1.27504222E-15	2		-2	1	# BR(Hpm_2 -> Fu_1^* Fd_1)
2.12924814E-14	2		-2	3	# BR(Hpm_2 -> Fu_1^* Fd_2)
1.31894477E-14	2		-2	5	# BR(Hpm_2 -> Fu_1^* Fd_3)
2.14703964E-12	2		-4	1	# BR(Hpm_2 -> Fu_2^* Fd_1)
4.04764428E-11	2		-4	3	# BR(Hpm_2 -> Fu_2^* Fd_2)
1.97882576E-12	2		-4	5	# BR(Hpm_2 -> Fu_2^* Fd_3)
6.97876913E-12	2		-6	1	# BR(Hpm_2 -> Fu_3^* Fd_1)
3.30039998E-10	2		-6	3	# BR(Hpm_2 -> Fu_3^* Fd_2)
1.95145283E-07	2		-6	5	# BR(Hpm_2 -> Fu_3^* Fd_3)
2.43576344E-09	2		25	-24	# BR(Hpm_2 -> hh_1 Vwm)
3.16720908E-08	2		35	-24	# BR(Hpm_2 -> hh_2 Vwm)
7.77456212E-14	2		-24	23	# BR(Hpm_2 -> Vwm VZ)
DECAY	1000011	1.04609189E-03	#	Hpm_3	
#	BR	NDA	ID1	ID2	
6.80196007E-21	2		37	36	# BR(Hpm_3 -> Hpm_2 Ah_2)
2.24074817E-20	2		37	1000017	# BR(Hpm_3 -> Hpm_2 Ah_3)
4.47775504E-20	2		37	1000018	# BR(Hpm_3 -> Hpm_2 Ah_4)

5.44043206E-11	2		37	1000019	# BR(Hpm_3 -> Hpm_2 Ah_5)
2.69839000E-09	2		36	-24	# BR(Hpm_3 -> Ah_2 Vwm)
6.12865376E-09	2	1000017		-24	# BR(Hpm_3 -> Ah_3 Vwm)
5.57306281E-09	2	1000018		-24	# BR(Hpm_3 -> Ah_4 Vwm)
9.28115607E-21	2	1000019		-24	# BR(Hpm_3 -> Ah_5 Vwm)
4.68413386E-13	2		12	11	# BR(Hpm_3 -> Chi_1 Cha_1)
3.43931485E-12	2		12	13	# BR(Hpm_3 -> Chi_1 Cha_2)
5.94786471E-12	2		12	15	# BR(Hpm_3 -> Chi_1 Cha_3)
6.18787393E-02	2		12	-1000024	# BR(Hpm_3 -> Chi_1 Cha_4)
1.46853415E-12	2		14	11	# BR(Hpm_3 -> Chi_2 Cha_1)
1.65397269E-11	2		14	13	# BR(Hpm_3 -> Chi_2 Cha_2)
1.72301053E-11	2		14	15	# BR(Hpm_3 -> Chi_2 Cha_3)
1.93997612E-01	2		14	-1000024	# BR(Hpm_3 -> Chi_2 Cha_4)
5.17926071E-12	2		16	11	# BR(Hpm_3 -> Chi_3 Cha_1)
1.29631336E-11	2		16	13	# BR(Hpm_3 -> Chi_3 Cha_2)
5.48675465E-11	2		16	15	# BR(Hpm_3 -> Chi_3 Cha_3)
6.84195380E-01	2		16	-1000024	# BR(Hpm_3 -> Chi_3 Cha_4)
2.59152866E-22	2	1000022		11	# BR(Hpm_3 -> Chi_4 Cha_1)
8.91264687E-06	2	1000022		13	# BR(Hpm_3 -> Chi_4 Cha_2)
3.24870912E-23	2	1000022		15	# BR(Hpm_3 -> Chi_4 Cha_3)
2.42063620E-11	2	1000022		-1000024	# BR(Hpm_3 -> Chi_4 Cha_4)
3.33123463E-23	2	1000023		11	# BR(Hpm_3 -> Chi_5 Cha_1)
9.52214045E-06	2	1000023		13	# BR(Hpm_3 -> Chi_5 Cha_2)
5.47893126E-25	2	1000023		15	# BR(Hpm_3 -> Chi_5 Cha_3)
5.23906659E-11	2	1000023		-1000024	# BR(Hpm_3 -> Chi_5 Cha_4)
1.27044298E-24	2	1000025		11	# BR(Hpm_3 -> Chi_6 Cha_1)
1.08721154E-02	2	1000025		13	# BR(Hpm_3 -> Chi_6 Cha_2)
7.50773347E-24	2	1000025		15	# BR(Hpm_3 -> Chi_6 Cha_3)
6.01848284E-10	2	1000025		-1000024	# BR(Hpm_3 -> Chi_6 Cha_4)
7.65770774E-25	2	1000039		11	# BR(Hpm_3 -> Chi_7 Cha_1)
4.60860080E-02	2	1000039		13	# BR(Hpm_3 -> Chi_7 Cha_2)
1.14632006E-23	2	1000039		15	# BR(Hpm_3 -> Chi_7 Cha_3)
7.48142789E-25	2	1000045		11	# BR(Hpm_3 -> Chi_8 Cha_1)
2.95165415E-03	2	1000045		13	# BR(Hpm_3 -> Chi_8 Cha_2)
7.11328032E-24	2	1000045		15	# BR(Hpm_3 -> Chi_8 Cha_3)
2.50920776E-17	2		-2	1	# BR(Hpm_3 -> Fu_1^* Fd_1)
4.46749988E-16	2		-2	3	# BR(Hpm_3 -> Fu_1^* Fd_2)
2.76982799E-16	2		-2	5	# BR(Hpm_3 -> Fu_1^* Fd_3)
2.39009769E-14	2		-4	1	# BR(Hpm_3 -> Fu_2^* Fd_1)
4.54488549E-13	2		-4	3	# BR(Hpm_3 -> Fu_2^* Fd_2)
4.08482064E-14	2		-4	5	# BR(Hpm_3 -> Fu_2^* Fd_3)
9.02737960E-13	2		-6	1	# BR(Hpm_3 -> Fu_3^* Fd_1)
4.26925241E-11	2		-6	3	# BR(Hpm_3 -> Fu_3^* Fd_2)
2.55037833E-08	2		-6	5	# BR(Hpm_3 -> Fu_3^* Fd_3)
2.76681213E-20	2		37	25	# BR(Hpm_3 -> Hpm_2 hh_1)
1.07765286E-20	2		37	35	# BR(Hpm_3 -> Hpm_2 hh_2)
1.67498519E-20	2		37	1000012	# BR(Hpm_3 -> Hpm_2 hh_3)
2.61122346E-20	2		37	1000014	# BR(Hpm_3 -> Hpm_2 hh_4)
5.44043225E-11	2		37	1000016	# BR(Hpm_3 -> Hpm_2 hh_5)
5.30816542E-09	2		25	-24	# BR(Hpm_3 -> hh_1 Vwm)
5.50213447E-09	2		35	-24	# BR(Hpm_3 -> hh_2 Vwm)
2.92298032E-09	2	1000012		-24	# BR(Hpm_3 -> hh_3 Vwm)
2.19423694E-09	2	1000014		-24	# BR(Hpm_3 -> hh_4 Vwm)
9.23772984E-21	2	1000016		-24	# BR(Hpm_3 -> hh_5 Vwm)
2.25329629E-29	2		37	23	# BR(Hpm_3 -> Hpm_2 VZ)
4.87387427E-13	2		-24	23	# BR(Hpm_3 -> Vwm VZ)
DECAY	2000011	6.55191639E-03	# Hpm_4		
#	BR	NDA	ID1	ID2	
8.00481515E-25	2		37	36	# BR(Hpm_4 -> Hpm_2 Ah_2)
5.18963570E-21	2		37	1000017	# BR(Hpm_4 -> Hpm_2 Ah_3)
3.56269977E-22	2		37	1000018	# BR(Hpm_4 -> Hpm_2 Ah_4)
2.10905897E-13	2		37	1000019	# BR(Hpm_4 -> Hpm_2 Ah_5)
2.20953044E-24	2	1000011		36	# BR(Hpm_4 -> Hpm_3 Ah_2)
1.61686212E-21	2	1000011		1000017	# BR(Hpm_4 -> Hpm_3 Ah_3)
9.94324971E-23	2	1000011		1000018	# BR(Hpm_4 -> Hpm_3 Ah_4)
2.50084741E-13	2		36	-24	# BR(Hpm_4 -> Ah_2 Vwm)
1.08364039E-09	2	1000017		-24	# BR(Hpm_4 -> Ah_3 Vwm)
8.50987780E-11	2	1000018		-24	# BR(Hpm_4 -> Ah_4 Vwm)
5.44727808E-22	2	1000019		-24	# BR(Hpm_4 -> Ah_5 Vwm)
5.24554079E-23	2	2000018		-24	# BR(Hpm_4 -> Ah_6 Vwm)
1.31798630E-12	2		12	11	# BR(Hpm_4 -> Chi_1 Cha_1)
8.17128140E-12	2		12	13	# BR(Hpm_4 -> Chi_1 Cha_2)
1.31495197E-11	2		12	15	# BR(Hpm_4 -> Chi_1 Cha_3)

6.40670751E-01	2	12	-1000024	# BR(Hpm_4 -> Chi_1 Cha_4)
8.47441958E-14	2	14	11	# BR(Hpm_4 -> Chi_2 Cha_1)
3.87774600E-12	2	14	13	# BR(Hpm_4 -> Chi_2 Cha_2)
6.87478110E-12	2	14	15	# BR(Hpm_4 -> Chi_2 Cha_3)
3.03949075E-01	2	14	-1000024	# BR(Hpm_4 -> Chi_2 Cha_4)
1.16500827E-12	2	16	11	# BR(Hpm_4 -> Chi_3 Cha_1)
4.02031029E-14	2	16	13	# BR(Hpm_4 -> Chi_3 Cha_2)
5.44193387E-13	2	16	15	# BR(Hpm_4 -> Chi_3 Cha_3)
2.79372252E-03	2	16	-1000024	# BR(Hpm_4 -> Chi_3 Cha_4)
2.30104626E-06	2	1000022	11	# BR(Hpm_4 -> Chi_4 Cha_1)
8.29729567E-24	2	1000022	13	# BR(Hpm_4 -> Chi_4 Cha_2)
2.84724607E-24	2	1000022	15	# BR(Hpm_4 -> Chi_4 Cha_3)
3.86458520E-11	2	1000022	-1000024	# BR(Hpm_4 -> Chi_4 Cha_4)
2.46214589E-06	2	1000023	11	# BR(Hpm_4 -> Chi_5 Cha_1)
1.72488205E-24	2	1000023	13	# BR(Hpm_4 -> Chi_5 Cha_2)
5.14018715E-25	2	1000023	15	# BR(Hpm_4 -> Chi_5 Cha_3)
5.44033355E-12	2	1000023	-1000024	# BR(Hpm_4 -> Chi_5 Cha_4)
2.89163793E-03	2	1000025	11	# BR(Hpm_4 -> Chi_6 Cha_1)
4.30988126E-25	2	1000025	13	# BR(Hpm_4 -> Chi_6 Cha_2)
1.87910775E-24	2	1000025	15	# BR(Hpm_4 -> Chi_6 Cha_3)
1.10406625E-09	2	1000025	-1000024	# BR(Hpm_4 -> Chi_6 Cha_4)
4.50439461E-02	2	1000039	11	# BR(Hpm_4 -> Chi_7 Cha_1)
8.54970750E-24	2	1000039	13	# BR(Hpm_4 -> Chi_7 Cha_2)
1.40422961E-23	2	1000039	15	# BR(Hpm_4 -> Chi_7 Cha_3)
8.75144230E-13	2	1000039	-1000024	# BR(Hpm_4 -> Chi_7 Cha_4)
4.64610004E-03	2	1000045	11	# BR(Hpm_4 -> Chi_8 Cha_1)
8.68496750E-24	2	1000045	13	# BR(Hpm_4 -> Chi_8 Cha_2)
1.31106501E-23	2	1000045	15	# BR(Hpm_4 -> Chi_8 Cha_3)
9.99599942E-18	2	-2	1	# BR(Hpm_4 -> Fu_1^* Fd_1)
1.92213384E-16	2	-2	3	# BR(Hpm_4 -> Fu_1^* Fd_2)
1.19212525E-16	2	-2	5	# BR(Hpm_4 -> Fu_1^* Fd_3)
9.47359312E-17	2	-4	1	# BR(Hpm_4 -> Fu_2^* Fd_1)
5.34502333E-15	2	-4	3	# BR(Hpm_4 -> Fu_2^* Fd_2)
1.72403090E-14	2	-4	5	# BR(Hpm_4 -> Fu_2^* Fd_3)
4.49944186E-15	2	-6	1	# BR(Hpm_4 -> Fu_3^* Fd_1)
2.12794046E-13	2	-6	3	# BR(Hpm_4 -> Fu_3^* Fd_2)
1.35584044E-10	2	-6	5	# BR(Hpm_4 -> Fu_3^* Fd_3)
5.17591635E-21	2	37	25	# BR(Hpm_4 -> Hpm_2 hh_1)
4.06304909E-22	2	37	35	# BR(Hpm_4 -> Hpm_2 hh_2)
4.58979592E-22	2	37	1000012	# BR(Hpm_4 -> Hpm_2 hh_3)
1.56470343E-22	2	37	1000014	# BR(Hpm_4 -> Hpm_2 hh_4)
2.10905898E-13	2	37	1000016	# BR(Hpm_4 -> Hpm_2 hh_5)
1.44443890E-21	2	1000011	25	# BR(Hpm_4 -> Hpm_3 hh_1)
1.35350987E-22	2	1000011	35	# BR(Hpm_4 -> Hpm_3 hh_2)
5.91954136E-22	2	1000011	1000012	# BR(Hpm_4 -> Hpm_3 hh_3)
1.21701120E-22	2	1000011	1000014	# BR(Hpm_4 -> Hpm_3 hh_4)
1.06215846E-09	2	25	-24	# BR(Hpm_4 -> hh_1 Vwm)
7.31386675E-11	2	35	-24	# BR(Hpm_4 -> hh_2 Vwm)
6.31761329E-11	2	1000012	-24	# BR(Hpm_4 -> hh_3 Vwm)
3.52102336E-11	2	1000014	-24	# BR(Hpm_4 -> hh_4 Vwm)
1.01142279E-23	2	1000016	-24	# BR(Hpm_4 -> hh_5 Vwm)
8.57977444E-25	2	2000012	-24	# BR(Hpm_4 -> hh_6 Vwm)
1.19946654E-28	2	37	23	# BR(Hpm_4 -> Hpm_2 VZ)
1.95681579E-29	2	1000011	23	# BR(Hpm_4 -> Hpm_3 VZ)
7.37414332E-14	2	-24	23	# BR(Hpm_4 -> Vwm VZ)
DECAY	1000013	1.51174904E+01	# Hpm_5	
#	BR	NDA	ID1	ID2
5.00287516E-13	2	37	36	# BR(Hpm_5 -> Hpm_2 Ah_2)
6.52512756E-16	2	37	1000017	# BR(Hpm_5 -> Hpm_2 Ah_3)
1.76737017E-14	2	37	1000018	# BR(Hpm_5 -> Hpm_2 Ah_4)
8.34694972E-04	2	37	1000019	# BR(Hpm_5 -> Hpm_2 Ah_5)
3.02067890E-26	2	37	2000018	# BR(Hpm_5 -> Hpm_2 Ah_6)
6.88605455E-14	2	1000011	36	# BR(Hpm_5 -> Hpm_3 Ah_2)
3.67016108E-14	2	1000011	1000017	# BR(Hpm_5 -> Hpm_3 Ah_3)
3.79748400E-14	2	1000011	1000018	# BR(Hpm_5 -> Hpm_3 Ah_4)
1.30628434E-25	2	1000011	1000019	# BR(Hpm_5 -> Hpm_3 Ah_5)
1.13258069E-01	2	36	-24	# BR(Hpm_5 -> Ah_2 Vwm)
2.93766926E-05	2	1000017	-24	# BR(Hpm_5 -> Ah_3 Vwm)
2.92459937E-05	2	1000018	-24	# BR(Hpm_5 -> Ah_4 Vwm)
2.60935656E-14	2	1000019	-24	# BR(Hpm_5 -> Ah_5 Vwm)
1.09880701E-15	2	2000018	-24	# BR(Hpm_5 -> Ah_6 Vwm)
1.48745346E-11	2	12	11	# BR(Hpm_5 -> Chi_1 Cha_1)
6.46794036E-08	2	12	13	# BR(Hpm_5 -> Chi_1 Cha_2)

7.32496730E-05	2		12	15	# BR(Hpm_5 -> Chi_1 Cha_3)
9.15719339E-16	2		12	-1000024	# BR(Hpm_5 -> Chi_1 Cha_4)
7.05682447E-12	2		14	11	# BR(Hpm_5 -> Chi_2 Cha_1)
2.02778046E-07	2		14	13	# BR(Hpm_5 -> Chi_2 Cha_2)
1.34267182E-04	2		14	15	# BR(Hpm_5 -> Chi_2 Cha_3)
3.29673191E-17	2		14	-1000024	# BR(Hpm_5 -> Chi_2 Cha_4)
6.48622121E-14	2		16	11	# BR(Hpm_5 -> Chi_3 Cha_1)
7.15162423E-07	2		16	13	# BR(Hpm_5 -> Chi_3 Cha_2)
7.64569027E-05	2		16	15	# BR(Hpm_5 -> Chi_3 Cha_3)
1.20591456E-16	2		16	-1000024	# BR(Hpm_5 -> Chi_3 Cha_4)
6.11381081E-15	2	1000022		11	# BR(Hpm_5 -> Chi_4 Cha_1)
1.28565556E-14	2	1000022		13	# BR(Hpm_5 -> Chi_4 Cha_2)
3.81819271E-17	2	1000022		15	# BR(Hpm_5 -> Chi_4 Cha_3)
1.69660589E-04	2	1000022	-1000024		# BR(Hpm_5 -> Chi_4 Cha_4)
3.82306658E-16	2	1000023		11	# BR(Hpm_5 -> Chi_5 Cha_1)
1.33384347E-14	2	1000023		13	# BR(Hpm_5 -> Chi_5 Cha_2)
4.07432858E-16	2	1000023		15	# BR(Hpm_5 -> Chi_5 Cha_3)
1.80636601E-04	2	1000023	-1000024		# BR(Hpm_5 -> Chi_5 Cha_4)
1.18181233E-16	2	1000025		11	# BR(Hpm_5 -> Chi_6 Cha_1)
2.94295655E-16	2	1000025		13	# BR(Hpm_5 -> Chi_6 Cha_2)
5.47464794E-16	2	1000025		15	# BR(Hpm_5 -> Chi_6 Cha_3)
1.93290627E-01	2	1000025	-1000024		# BR(Hpm_5 -> Chi_6 Cha_4)
5.18438052E-17	2	1000039		11	# BR(Hpm_5 -> Chi_7 Cha_1)
1.19095565E-15	2	1000039		13	# BR(Hpm_5 -> Chi_7 Cha_2)
2.11089677E-15	2	1000039		15	# BR(Hpm_5 -> Chi_7 Cha_3)
3.17048111E-04	2	1000039	-1000024		# BR(Hpm_5 -> Chi_7 Cha_4)
2.21428555E-16	2	1000045		11	# BR(Hpm_5 -> Chi_8 Cha_1)
1.10288095E-15	2	1000045		13	# BR(Hpm_5 -> Chi_8 Cha_2)
1.61097675E-15	2	1000045		15	# BR(Hpm_5 -> Chi_8 Cha_3)
4.58903544E-03	2	1000045	-1000024		# BR(Hpm_5 -> Chi_8 Cha_4)
1.59882753E-09	2	-2		1	# BR(Hpm_5 -> Fu_1^* Fd_1)
3.00614934E-08	2	-2		3	# BR(Hpm_5 -> Fu_1^* Fd_2)
1.86434770E-08	2	-2		5	# BR(Hpm_5 -> Fu_1^* Fd_3)
4.66897388E-07	2	-4		1	# BR(Hpm_5 -> Fu_2^* Fd_1)
9.27524592E-06	2	-4		3	# BR(Hpm_5 -> Fu_2^* Fd_2)
2.71128985E-06	2	-4		5	# BR(Hpm_5 -> Fu_2^* Fd_3)
2.28200001E-05	2	-6		1	# BR(Hpm_5 -> Fu_3^* Fd_1)
1.07920990E-03	2	-6		3	# BR(Hpm_5 -> Fu_3^* Fd_2)
6.45343008E-01	2	-6		5	# BR(Hpm_5 -> Fu_3^* Fd_3)
1.11606811E-15	2	37		25	# BR(Hpm_5 -> Hpm_2 hh_1)
1.78827527E-14	2	37		35	# BR(Hpm_5 -> Hpm_2 hh_2)
1.66978175E-13	2	37	1000012		# BR(Hpm_5 -> Hpm_2 hh_3)
1.08093385E-13	2	37	1000014		# BR(Hpm_5 -> Hpm_2 hh_4)
8.34694974E-04	2	37	1000016		# BR(Hpm_5 -> Hpm_2 hh_5)
4.64006495E-26	2	37	2000012		# BR(Hpm_5 -> Hpm_2 hh_6)
3.20188249E-14	2	1000011		25	# BR(Hpm_5 -> Hpm_3 hh_1)
3.42159947E-14	2	1000011		35	# BR(Hpm_5 -> Hpm_3 hh_2)
2.84261875E-14	2	1000011	1000012		# BR(Hpm_5 -> Hpm_3 hh_3)
2.04969492E-14	2	1000011	1000014		# BR(Hpm_5 -> Hpm_3 hh_4)
1.19484179E-25	2	1000011	1000016		# BR(Hpm_5 -> Hpm_3 hh_5)
5.78491968E-06	2	25		-24	# BR(Hpm_5 -> hh_1 Vwm)
6.14296237E-06	2	35		-24	# BR(Hpm_5 -> hh_2 Vwm)
3.46628860E-02	2	1000012		-24	# BR(Hpm_5 -> hh_3 Vwm)
5.04951323E-03	2	1000014		-24	# BR(Hpm_5 -> hh_4 Vwm)
7.59669911E-14	2	1000016		-24	# BR(Hpm_5 -> hh_5 Vwm)
7.36644152E-15	2	2000012		-24	# BR(Hpm_5 -> hh_6 Vwm)
3.95380322E-20	2	37		23	# BR(Hpm_5 -> Hpm_2 VZ)
4.16719768E-28	2	1000011		23	# BR(Hpm_5 -> Hpm_3 VZ)
8.52403586E-08	2	-24		23	# BR(Hpm_5 -> Vwm VZ)
DECAY	2000013	2.90585555E-01	# Hpm_6		
#	BR	NDA	ID1	ID2	
1.15070446E-03	2		37	36	# BR(Hpm_6 -> Hpm_2 Ah_2)
6.53610380E-08	2		37	1000017	# BR(Hpm_6 -> Hpm_2 Ah_3)
6.47381084E-08	2		37	1000018	# BR(Hpm_6 -> Hpm_2 Ah_4)
2.66243192E-17	2		37	1000019	# BR(Hpm_6 -> Hpm_2 Ah_5)
3.68885461E-14	2		37	2000018	# BR(Hpm_6 -> Hpm_2 Ah_6)
4.99778182E-14	2		37	2000019	# BR(Hpm_6 -> Hpm_2 Ah_7)
1.54181037E-02	2		37	2000020	# BR(Hpm_6 -> Hpm_2 Ah_8)
2.70572388E-26	2	1000011		36	# BR(Hpm_6 -> Hpm_3 Ah_2)
1.00254170E-26	2	1000011	1000017		# BR(Hpm_6 -> Hpm_3 Ah_3)
7.41171862E-26	2	1000011	1000018		# BR(Hpm_6 -> Hpm_3 Ah_4)
3.76817712E-14	2	1000011	1000019		# BR(Hpm_6 -> Hpm_3 Ah_5)
9.12469818E-18	2	1000011	2000018		# BR(Hpm_6 -> Hpm_3 Ah_6)

9.86277371E-26	2	2000011	36	# BR(Hpm_6 -> Hpm_4 Ah_2)
4.86069338E-27	2	2000011	1000017	# BR(Hpm_6 -> Hpm_4 Ah_3)
1.39742423E-25	2	2000011	1000018	# BR(Hpm_6 -> Hpm_4 Ah_4)
5.82018522E-14	2	2000011	1000019	# BR(Hpm_6 -> Hpm_4 Ah_5)
3.53156959E-14	2	1000013	36	# BR(Hpm_6 -> Hpm_5 Ah_2)
3.18714851E-15	2	1000013	1000017	# BR(Hpm_6 -> Hpm_5 Ah_3)
4.61312454E-14	2	1000013	1000018	# BR(Hpm_6 -> Hpm_5 Ah_4)
1.67019489E-02	2	1000013	1000019	# BR(Hpm_6 -> Hpm_5 Ah_5)
4.57095007E-15	2	36	-24	# BR(Hpm_6 -> Ah_2 Vwm)
9.60770207E-16	2	1000017	-24	# BR(Hpm_6 -> Ah_3 Vwm)
1.54181085E-14	2	1000018	-24	# BR(Hpm_6 -> Ah_4 Vwm)
6.80236091E-03	2	1000019	-24	# BR(Hpm_6 -> Ah_5 Vwm)
2.43941052E-25	2	2000018	-24	# BR(Hpm_6 -> Ah_6 Vwm)
2.76279509E-25	2	2000019	-24	# BR(Hpm_6 -> Ah_7 Vwm)
9.67035563E-14	2	2000020	-24	# BR(Hpm_6 -> Ah_8 Vwm)
2.81494129E-16	2	12	11	# BR(Hpm_6 -> Chi_1 Cha_1)
1.18371711E-15	2	12	13	# BR(Hpm_6 -> Chi_1 Cha_2)
2.65924154E-15	2	12	15	# BR(Hpm_6 -> Chi_1 Cha_3)
5.70654523E-03	2	12	-1000024	# BR(Hpm_6 -> Chi_1 Cha_4)
5.15980779E-16	2	14	11	# BR(Hpm_6 -> Chi_2 Cha_1)
2.16976922E-15	2	14	13	# BR(Hpm_6 -> Chi_2 Cha_2)
5.62616784E-14	2	14	15	# BR(Hpm_6 -> Chi_2 Cha_3)
1.04601388E-02	2	14	-1000024	# BR(Hpm_6 -> Chi_2 Cha_4)
2.93819321E-16	2	16	11	# BR(Hpm_6 -> Chi_3 Cha_1)
1.23560119E-15	2	16	13	# BR(Hpm_6 -> Chi_3 Cha_2)
3.32261401E-13	2	16	15	# BR(Hpm_6 -> Chi_3 Cha_3)
5.95640575E-03	2	16	-1000024	# BR(Hpm_6 -> Chi_3 Cha_4)
2.06043881E-28	2	1000022	11	# BR(Hpm_6 -> Chi_4 Cha_1)
3.72673718E-28	2	1000022	13	# BR(Hpm_6 -> Chi_4 Cha_2)
1.34076905E-06	2	1000022	15	# BR(Hpm_6 -> Chi_4 Cha_3)
2.09827211E-17	2	1000022	-1000024	# BR(Hpm_6 -> Chi_4 Cha_4)
3.57195602E-29	2	1000023	11	# BR(Hpm_6 -> Chi_5 Cha_1)
6.58652916E-28	2	1000023	13	# BR(Hpm_6 -> Chi_5 Cha_2)
1.43463519E-06	2	1000023	15	# BR(Hpm_6 -> Chi_5 Cha_3)
1.54299972E-16	2	1000023	-1000024	# BR(Hpm_6 -> Chi_5 Cha_4)
1.93341152E-28	2	1000025	11	# BR(Hpm_6 -> Chi_6 Cha_1)
7.97556863E-28	2	1000025	13	# BR(Hpm_6 -> Chi_6 Cha_2)
1.70012716E-03	2	1000025	15	# BR(Hpm_6 -> Chi_6 Cha_3)
1.93763257E-14	2	1000025	-1000024	# BR(Hpm_6 -> Chi_6 Cha_4)
9.69109941E-27	2	1000039	11	# BR(Hpm_6 -> Chi_7 Cha_1)
4.21070175E-26	2	1000039	13	# BR(Hpm_6 -> Chi_7 Cha_2)
8.40172139E-02	2	1000039	15	# BR(Hpm_6 -> Chi_7 Cha_3)
9.39543406E-17	2	1000039	-1000024	# BR(Hpm_6 -> Chi_7 Cha_4)
8.54231706E-27	2	1000045	11	# BR(Hpm_6 -> Chi_8 Cha_1)
3.65884332E-26	2	1000045	13	# BR(Hpm_6 -> Chi_8 Cha_2)
1.09136602E-02	2	1000045	15	# BR(Hpm_6 -> Chi_8 Cha_3)
8.41487721E-16	2	1000045	-1000024	# BR(Hpm_6 -> Chi_8 Cha_4)
8.27561077E-30	2	1000055	11	# BR(Hpm_6 -> Chi_9 Cha_1)
4.24292400E-27	2	1000055	13	# BR(Hpm_6 -> Chi_9 Cha_2)
7.87884488E-01	2	1000055	15	# BR(Hpm_6 -> Chi_9 Cha_3)
1.34149716E-22	2	-2	1	# BR(Hpm_6 -> Fu_1^* Fd_1)
2.55929232E-21	2	-2	3	# BR(Hpm_6 -> Fu_1^* Fd_2)
1.58733288E-21	2	-2	5	# BR(Hpm_6 -> Fu_1^* Fd_3)
1.46943360E-20	2	-4	1	# BR(Hpm_6 -> Fu_2^* Fd_1)
3.21930220E-19	2	-4	3	# BR(Hpm_6 -> Fu_2^* Fd_2)
2.30007061E-19	2	-4	5	# BR(Hpm_6 -> Fu_2^* Fd_3)
7.59598735E-19	2	-6	1	# BR(Hpm_6 -> Fu_3^* Fd_1)
3.59232096E-17	2	-6	3	# BR(Hpm_6 -> Fu_3^* Fd_2)
2.15631995E-14	2	-6	5	# BR(Hpm_6 -> Fu_3^* Fd_3)
8.12304079E-07	2	37	25	# BR(Hpm_6 -> Hpm_2 hh_1)
8.31431193E-07	2	37	35	# BR(Hpm_6 -> Hpm_2 hh_2)
4.42112894E-04	2	37	1000012	# BR(Hpm_6 -> Hpm_2 hh_3)
6.73380045E-03	2	37	1000014	# BR(Hpm_6 -> Hpm_2 hh_4)
4.64849347E-14	2	37	1000016	# BR(Hpm_6 -> Hpm_2 hh_5)
4.66652353E-14	2	37	2000012	# BR(Hpm_6 -> Hpm_2 hh_6)
5.78625394E-14	2	37	2000014	# BR(Hpm_6 -> Hpm_2 hh_7)
1.58990279E-02	2	37	2000016	# BR(Hpm_6 -> Hpm_2 hh_8)
3.41060791E-27	2	1000011	25	# BR(Hpm_6 -> Hpm_3 hh_1)
9.14101950E-26	2	1000011	35	# BR(Hpm_6 -> Hpm_3 hh_2)
2.12450270E-26	2	1000011	1000012	# BR(Hpm_6 -> Hpm_3 hh_3)
9.98464185E-25	2	1000011	1000014	# BR(Hpm_6 -> Hpm_3 hh_4)
3.76817712E-14	2	1000011	1000016	# BR(Hpm_6 -> Hpm_3 hh_5)
9.12469829E-18	2	1000011	2000012	# BR(Hpm_6 -> Hpm_3 hh_6)

1.68155701E-26	2	2000011	25	# BR(Hpm_6 -> Hpm_4 hh_1)	
1.33748617E-25	2	2000011	35	# BR(Hpm_6 -> Hpm_4 hh_2)	
1.43196708E-28	2	2000011	1000012	# BR(Hpm_6 -> Hpm_4 hh_3)	
1.58498719E-24	2	2000011	1000014	# BR(Hpm_6 -> Hpm_4 hh_4)	
5.82018525E-14	2	2000011	1000016	# BR(Hpm_6 -> Hpm_4 hh_5)	
3.08151809E-15	2	1000013	25	# BR(Hpm_6 -> Hpm_5 hh_1)	
4.02263887E-14	2	1000013	35	# BR(Hpm_6 -> Hpm_5 hh_2)	
2.15038762E-15	2	1000013	1000012	# BR(Hpm_6 -> Hpm_5 hh_3)	
5.11657970E-13	2	1000013	1000014	# BR(Hpm_6 -> Hpm_5 hh_4)	
1.67019491E-02	2	1000013	1000016	# BR(Hpm_6 -> Hpm_5 hh_5)	
1.03039915E-15	2		25	# BR(Hpm_6 -> hh_1 Vwm)	
1.37539894E-14	2		35	# BR(Hpm_6 -> hh_2 Vwm)	
1.73193464E-15	2	1000012	-24	# BR(Hpm_6 -> hh_3 Vwm)	
3.84938120E-14	2	1000014	-24	# BR(Hpm_6 -> hh_4 Vwm)	
6.80236093E-03	2	1000016	-24	# BR(Hpm_6 -> hh_5 Vwm)	
3.50129888E-25	2	2000012	-24	# BR(Hpm_6 -> hh_6 Vwm)	
3.28728442E-25	2	2000014	-24	# BR(Hpm_6 -> hh_7 Vwm)	
1.01172134E-13	2	2000016	-24	# BR(Hpm_6 -> hh_8 Vwm)	
6.70450219E-03	2		37	# BR(Hpm_6 -> Hpm_2 VZ)	
2.66230541E-25	2	1000011	23	# BR(Hpm_6 -> Hpm_3 VZ)	
3.13946880E-25	2	2000011	23	# BR(Hpm_6 -> Hpm_4 VZ)	
9.97244330E-14	2	1000013	23	# BR(Hpm_6 -> Hpm_5 VZ)	
5.62382929E-19	2		-24	# BR(Hpm_6 -> Vwm VZ)	
DECAY	1000015	2.50956065E-01	# Hpm_7		
#	BR	NDA	ID1	ID2	
1.00092430E-29	2		37	1000017	# BR(Hpm_7 -> Hpm_2 Ah_3)
1.21526147E-29	2		37	1000018	# BR(Hpm_7 -> Hpm_2 Ah_4)
5.40579829E-21	2		37	1000019	# BR(Hpm_7 -> Hpm_2 Ah_5)
1.71286534E-17	2		37	2000018	# BR(Hpm_7 -> Hpm_2 Ah_6)
2.19129266E-30	2		37	2000020	# BR(Hpm_7 -> Hpm_2 Ah_8)
7.89109384E-07	2		1000011	36	# BR(Hpm_7 -> Hpm_3 Ah_2)
7.52897026E-11	2		1000011	1000017	# BR(Hpm_7 -> Hpm_3 Ah_3)
7.51288897E-11	2		1000011	1000018	# BR(Hpm_7 -> Hpm_3 Ah_4)
1.88599982E-17	2		1000011	1000019	# BR(Hpm_7 -> Hpm_3 Ah_5)
3.86832134E-20	2		1000011	2000018	# BR(Hpm_7 -> Hpm_3 Ah_6)
2.12130444E-25	2		2000011	36	# BR(Hpm_7 -> Hpm_4 Ah_2)
2.22197497E-29	2		2000011	1000017	# BR(Hpm_7 -> Hpm_4 Ah_3)
2.61153631E-29	2		2000011	1000018	# BR(Hpm_7 -> Hpm_4 Ah_4)
2.43125151E-18	2		1000013	36	# BR(Hpm_7 -> Hpm_5 Ah_2)
6.16635451E-19	2		1000013	1000017	# BR(Hpm_7 -> Hpm_5 Ah_3)
5.34145074E-19	2		1000013	1000018	# BR(Hpm_7 -> Hpm_5 Ah_4)
4.21147238E-30	2		1000013	1000019	# BR(Hpm_7 -> Hpm_5 Ah_5)
3.33051702E-18	2		36	-24	# BR(Hpm_7 -> Ah_2 Vwm)
2.25099958E-18	2		1000017	-24	# BR(Hpm_7 -> Ah_3 Vwm)
1.97196408E-18	2		1000018	-24	# BR(Hpm_7 -> Ah_4 Vwm)
3.63525240E-29	2		1000019	-24	# BR(Hpm_7 -> Ah_5 Vwm)
3.54157647E-06	2		2000018	-24	# BR(Hpm_7 -> Ah_6 Vwm)
9.05962650E-25	2		2000019	-24	# BR(Hpm_7 -> Ah_7 Vwm)
4.65720080E-18	2		2000020	-24	# BR(Hpm_7 -> Ah_8 Vwm)
2.71858676E-19	2		12	11	# BR(Hpm_7 -> Chi_1 Cha_1)
5.50854848E-16	2		12	13	# BR(Hpm_7 -> Chi_1 Cha_2)
5.01192976E-20	2		12	15	# BR(Hpm_7 -> Chi_1 Cha_3)
5.77266232E-06	2		12	-1000024	# BR(Hpm_7 -> Chi_1 Cha_4)
8.52311060E-19	2		14	11	# BR(Hpm_7 -> Chi_2 Cha_1)
6.30998216E-14	2		14	13	# BR(Hpm_7 -> Chi_2 Cha_2)
1.57038534E-19	2		14	15	# BR(Hpm_7 -> Chi_2 Cha_3)
1.80980205E-05	2		14	-1000024	# BR(Hpm_7 -> Chi_2 Cha_4)
3.00595087E-18	2		16	11	# BR(Hpm_7 -> Chi_3 Cha_1)
3.77469754E-13	2		16	13	# BR(Hpm_7 -> Chi_3 Cha_2)
5.53465252E-19	2		16	15	# BR(Hpm_7 -> Chi_3 Cha_3)
6.38285284E-05	2		16	-1000024	# BR(Hpm_7 -> Chi_3 Cha_4)
2.29115330E-20	2		1000022	11	# BR(Hpm_7 -> Chi_4 Cha_1)
1.26134794E-06	2		1000022	13	# BR(Hpm_7 -> Chi_4 Cha_2)
2.38697165E-17	2		1000022	-1000024	# BR(Hpm_7 -> Chi_4 Cha_4)
2.46346803E-20	2		1000023	11	# BR(Hpm_7 -> Chi_5 Cha_1)
1.35618410E-06	2		1000023	13	# BR(Hpm_7 -> Chi_5 Cha_2)
2.44071337E-17	2		1000023	-1000024	# BR(Hpm_7 -> Chi_5 Cha_4)
3.13017075E-17	2		1000025	11	# BR(Hpm_7 -> Chi_6 Cha_1)
1.72271856E-03	2		1000025	13	# BR(Hpm_7 -> Chi_6 Cha_2)
1.00523090E-29	2		1000025	15	# BR(Hpm_7 -> Chi_6 Cha_3)
4.88357018E-19	2		1000025	-1000024	# BR(Hpm_7 -> Chi_6 Cha_4)
1.53039069E-15	2		1000039	11	# BR(Hpm_7 -> Chi_7 Cha_1)
8.42280104E-02	2		1000039	13	# BR(Hpm_7 -> Chi_7 Cha_2)

4.89501053E-28	2	1000039	15	# BR(Hpm_7 -> Chi_7 Cha_3)	
1.76080808E-19	2	1000039	-1000024	# BR(Hpm_7 -> Chi_7 Cha_4)	
1.78535531E-17	2	1000045	11	# BR(Hpm_7 -> Chi_8 Cha_1)	
1.02255211E-03	2	1000045	13	# BR(Hpm_7 -> Chi_8 Cha_2)	
3.98565408E-29	2	1000045	15	# BR(Hpm_7 -> Chi_8 Cha_3)	
9.45869045E-20	2	1000045	-1000024	# BR(Hpm_7 -> Chi_8 Cha_4)	
1.65961722E-14	2	1000055	11	# BR(Hpm_7 -> Chi_9 Cha_1)	
9.12921197E-01	2	1000055	13	# BR(Hpm_7 -> Chi_9 Cha_2)	
4.91019336E-27	2	1000055	15	# BR(Hpm_7 -> Chi_9 Cha_3)	
1.92405108E-27	2	-2	1	# BR(Hpm_7 -> Fu_1^* Fd_1)	
2.89385309E-26	2	-2	3	# BR(Hpm_7 -> Fu_1^* Fd_2)	
1.79348087E-26	2	-2	5	# BR(Hpm_7 -> Fu_1^* Fd_3)	
5.35324438E-24	2	-4	1	# BR(Hpm_7 -> Fu_2^* Fd_1)	
1.00471117E-22	2	-4	3	# BR(Hpm_7 -> Fu_2^* Fd_2)	
2.77210151E-24	2	-4	5	# BR(Hpm_7 -> Fu_2^* Fd_3)	
2.76858052E-22	2	-6	1	# BR(Hpm_7 -> Fu_3^* Fd_1)	
1.30932412E-20	2	-6	3	# BR(Hpm_7 -> Fu_3^* Fd_2)	
7.81588871E-18	2	-6	5	# BR(Hpm_7 -> Fu_3^* Fd_3)	
9.08741515E-30	2	37	25	# BR(Hpm_7 -> Hpm_2 hh_1)	
7.69234976E-30	2	37	35	# BR(Hpm_7 -> Hpm_2 hh_2)	
2.23130358E-29	2	37	1000012	# BR(Hpm_7 -> Hpm_2 hh_3)	
1.64133074E-29	2	37	1000014	# BR(Hpm_7 -> Hpm_2 hh_4)	
5.40579830E-21	2	37	1000016	# BR(Hpm_7 -> Hpm_2 hh_5)	
1.71286535E-17	2	37	2000012	# BR(Hpm_7 -> Hpm_2 hh_6)	
1.78945500E-30	2	37	2000016	# BR(Hpm_7 -> Hpm_2 hh_8)	
1.88585125E-10	2	1000011	25	# BR(Hpm_7 -> Hpm_3 hh_1)	
1.90977246E-10	2	1000011	35	# BR(Hpm_7 -> Hpm_3 hh_2)	
3.58335682E-09	2	1000011	1000012	# BR(Hpm_7 -> Hpm_3 hh_3)	
3.84363699E-06	2	1000011	1000014	# BR(Hpm_7 -> Hpm_3 hh_4)	
8.40258168E-17	2	1000011	1000016	# BR(Hpm_7 -> Hpm_3 hh_5)	
2.51929830E-19	2	1000011	2000012	# BR(Hpm_7 -> Hpm_3 hh_6)	
3.59583460E-29	2	2000011	25	# BR(Hpm_7 -> Hpm_4 hh_1)	
5.51584278E-29	2	2000011	35	# BR(Hpm_7 -> Hpm_4 hh_2)	
9.84599204E-28	2	2000011	1000012	# BR(Hpm_7 -> Hpm_4 hh_3)	
1.00784072E-24	2	2000011	1000014	# BR(Hpm_7 -> Hpm_4 hh_4)	
5.36599943E-19	2	1000013	25	# BR(Hpm_7 -> Hpm_5 hh_1)	
5.36118047E-19	2	1000013	35	# BR(Hpm_7 -> Hpm_5 hh_2)	
1.20033094E-18	2	1000013	1000012	# BR(Hpm_7 -> Hpm_5 hh_3)	
9.68846751E-18	2	1000013	1000014	# BR(Hpm_7 -> Hpm_5 hh_4)	
3.65369289E-29	2	1000013	1000016	# BR(Hpm_7 -> Hpm_5 hh_5)	
1.85611336E-18	2	25	-24	# BR(Hpm_7 -> hh_1 Vwm)	
1.96617573E-18	2	35	-24	# BR(Hpm_7 -> hh_2 Vwm)	
2.43327318E-18	2	1000012	-24	# BR(Hpm_7 -> hh_3 Vwm)	
1.22396080E-18	2	1000014	-24	# BR(Hpm_7 -> hh_4 Vwm)	
1.21969829E-28	2	1000016	-24	# BR(Hpm_7 -> hh_5 Vwm)	
3.54157652E-06	2	2000012	-24	# BR(Hpm_7 -> hh_6 Vwm)	
9.05535551E-25	2	2000014	-24	# BR(Hpm_7 -> hh_7 Vwm)	
5.06345178E-18	2	2000016	-24	# BR(Hpm_7 -> hh_8 Vwm)	
7.15337586E-29	2	37	23	# BR(Hpm_7 -> Hpm_2 VZ)	
3.48473977E-06	2	1000011	23	# BR(Hpm_7 -> Hpm_3 VZ)	
8.78230646E-25	2	2000011	23	# BR(Hpm_7 -> Hpm_4 VZ)	
4.91779078E-18	2	1000013	23	# BR(Hpm_7 -> Hpm_5 VZ)	
2.08161030E-22	2	-24	23	# BR(Hpm_7 -> Vwm VZ)	
DECAY	2000015	2.50908918E-01	# Hpm_8		
#	BR	NDA	ID1	ID2	
3.53750595E-26	2		37	1000019	# BR(Hpm_8 -> Hpm_2 Ah_5)
2.26998062E-22	2		37	2000019	# BR(Hpm_8 -> Hpm_2 Ah_7)
1.43480617E-20	2	1000011		36	# BR(Hpm_8 -> Hpm_3 Ah_2)
1.36898171E-24	2	1000011		1000017	# BR(Hpm_8 -> Hpm_3 Ah_3)
1.36603900E-24	2	1000011		1000018	# BR(Hpm_8 -> Hpm_3 Ah_4)
2.13082635E-26	2	1000011		2000018	# BR(Hpm_8 -> Hpm_3 Ah_6)
1.17145447E-11	2	2000011		36	# BR(Hpm_8 -> Hpm_4 Ah_2)
1.10771519E-15	2	2000011		1000017	# BR(Hpm_8 -> Hpm_4 Ah_3)
1.10510659E-15	2	2000011		1000018	# BR(Hpm_8 -> Hpm_4 Ah_4)
2.51263948E-22	2	2000011		1000019	# BR(Hpm_8 -> Hpm_4 Ah_5)
5.08724825E-23	2	1000013		36	# BR(Hpm_8 -> Hpm_5 Ah_2)
5.82270595E-24	2	1000013		1000017	# BR(Hpm_8 -> Hpm_5 Ah_3)
3.86383303E-25	2	1000013		1000018	# BR(Hpm_8 -> Hpm_5 Ah_4)
2.18582568E-23	2	36		-24	# BR(Hpm_8 -> Ah_2 Vwm)
2.29461806E-23	2	1000017		-24	# BR(Hpm_8 -> Ah_3 Vwm)
1.65684532E-24	2	1000018		-24	# BR(Hpm_8 -> Ah_4 Vwm)
6.43950740E-20	2	2000018		-24	# BR(Hpm_8 -> Ah_6 Vwm)
4.99422840E-11	2	2000019		-24	# BR(Hpm_8 -> Ah_7 Vwm)

1.30614759E-22	2	2000020	-24	# BR(Hpm_8 -> Ah_8 Vwm)
5.49311519E-16	2	12	11	# BR(Hpm_8 -> Chi_1 Cha_1)
2.56258516E-22	2	12	13	# BR(Hpm_8 -> Chi_1 Cha_2)
1.08004479E-23	2	12	15	# BR(Hpm_8 -> Chi_1 Cha_3)
1.32572040E-09	2	12	-1000024	# BR(Hpm_8 -> Chi_1 Cha_4)
6.31089186E-14	2	14	11	# BR(Hpm_8 -> Chi_2 Cha_1)
1.21578706E-22	2	14	13	# BR(Hpm_8 -> Chi_2 Cha_2)
5.12491143E-24	2	14	15	# BR(Hpm_8 -> Chi_2 Cha_3)
6.28992496E-10	2	14	-1000024	# BR(Hpm_8 -> Chi_2 Cha_4)
3.77539737E-13	2	16	11	# BR(Hpm_8 -> Chi_3 Cha_1)
1.12410184E-24	2	16	13	# BR(Hpm_8 -> Chi_3 Cha_2)
4.75071880E-26	2	16	15	# BR(Hpm_8 -> Chi_3 Cha_3)
5.77588816E-12	2	16	-1000024	# BR(Hpm_8 -> Chi_3 Cha_4)
1.26055346E-06	2	1000022	11	# BR(Hpm_8 -> Chi_4 Cha_1)
2.29345911E-20	2	1000022	13	# BR(Hpm_8 -> Chi_4 Cha_2)
2.60944608E-22	2	1000022	-1000024	# BR(Hpm_8 -> Chi_4 Cha_4)
1.35535808E-06	2	1000023	11	# BR(Hpm_8 -> Chi_5 Cha_1)
2.46589595E-20	2	1000023	13	# BR(Hpm_8 -> Chi_5 Cha_2)
1.61600050E-23	2	1000023	-1000024	# BR(Hpm_8 -> Chi_5 Cha_4)
1.72216655E-03	2	1000025	11	# BR(Hpm_8 -> Chi_6 Cha_1)
3.13235109E-17	2	1000025	13	# BR(Hpm_8 -> Chi_6 Cha_2)
2.17315223E-24	2	1000025	-1000024	# BR(Hpm_8 -> Chi_6 Cha_4)
8.41994862E-02	2	1000039	11	# BR(Hpm_8 -> Chi_7 Cha_1)
1.53148465E-15	2	1000039	13	# BR(Hpm_8 -> Chi_7 Cha_2)
7.76519164E-25	2	1000039	-1000024	# BR(Hpm_8 -> Chi_7 Cha_4)
9.82272049E-04	2	1000045	11	# BR(Hpm_8 -> Chi_8 Cha_1)
1.85926613E-17	2	1000045	13	# BR(Hpm_8 -> Chi_8 Cha_2)
4.02082630E-25	2	1000045	-1000024	# BR(Hpm_8 -> Chi_8 Cha_4)
9.13093457E-01	2	1000055	11	# BR(Hpm_8 -> Chi_9 Cha_1)
1.65992922E-14	2	1000055	13	# BR(Hpm_8 -> Chi_9 Cha_2)
3.50727617E-29	2	-4	1	# BR(Hpm_8 -> Fu_2^* Fd_1)
6.58059038E-28	2	-4	3	# BR(Hpm_8 -> Fu_2^* Fd_2)
1.72177422E-29	2	-4	5	# BR(Hpm_8 -> Fu_2^* Fd_3)
1.81388779E-27	2	-6	1	# BR(Hpm_8 -> Fu_3^* Fd_1)
8.57828407E-26	2	-6	3	# BR(Hpm_8 -> Fu_3^* Fd_2)
5.12068051E-23	2	-6	5	# BR(Hpm_8 -> Fu_3^* Fd_3)
3.53750596E-26	2	37	1000016	# BR(Hpm_8 -> Hpm_2 hh_5)
2.26998067E-22	2	37	2000014	# BR(Hpm_8 -> Hpm_2 hh_7)
3.42898656E-24	2	1000011	25	# BR(Hpm_8 -> Hpm_3 hh_1)
3.47247592E-24	2	1000011	35	# BR(Hpm_8 -> Hpm_3 hh_2)
6.51548515E-23	2	1000011	1000012	# BR(Hpm_8 -> Hpm_3 hh_3)
6.98873253E-20	2	1000011	1000014	# BR(Hpm_8 -> Hpm_3 hh_4)
1.52780802E-30	2	1000011	1000016	# BR(Hpm_8 -> Hpm_3 hh_5)
2.13357746E-26	2	1000011	2000012	# BR(Hpm_8 -> Hpm_3 hh_6)
2.78745727E-15	2	2000011	25	# BR(Hpm_8 -> Hpm_4 hh_1)
2.82121537E-15	2	2000011	35	# BR(Hpm_8 -> Hpm_4 hh_2)
5.21849659E-14	2	2000011	1000012	# BR(Hpm_8 -> Hpm_4 hh_3)
5.56206189E-11	2	2000011	1000014	# BR(Hpm_8 -> Hpm_4 hh_4)
1.12034324E-21	2	2000011	1000016	# BR(Hpm_8 -> Hpm_4 hh_5)
5.82719356E-24	2	1000013	25	# BR(Hpm_8 -> Hpm_5 hh_1)
3.44650429E-25	2	1000013	35	# BR(Hpm_8 -> Hpm_5 hh_2)
6.18588708E-24	2	1000013	1000012	# BR(Hpm_8 -> Hpm_5 hh_3)
2.04915527E-22	2	1000013	1000014	# BR(Hpm_8 -> Hpm_5 hh_4)
2.34310998E-23	2	25	-24	# BR(Hpm_8 -> hh_1 Vwm)
1.68137627E-24	2	35	-24	# BR(Hpm_8 -> hh_2 Vwm)
1.48105530E-23	2	1000012	-24	# BR(Hpm_8 -> hh_3 Vwm)
3.58288346E-24	2	1000014	-24	# BR(Hpm_8 -> hh_4 Vwm)
6.43950764E-20	2	2000012	-24	# BR(Hpm_8 -> hh_6 Vwm)
4.99422862E-11	2	2000014	-24	# BR(Hpm_8 -> hh_7 Vwm)
1.50673117E-22	2	2000016	-24	# BR(Hpm_8 -> hh_8 Vwm)
6.33616407E-20	2	1000011	23	# BR(Hpm_8 -> Hpm_3 VZ)
4.84373946E-11	2	2000011	23	# BR(Hpm_8 -> Hpm_4 VZ)
1.48294204E-22	2	1000013	23	# BR(Hpm_8 -> Hpm_5 VZ)
1.43502652E-27	2	-24	23	# BR(Hpm_8 -> Vwm VZ)