

```

# 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: 25.09.2019, 13:11
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 1.08058572E+00 # TanBeta
Block EXTPAR # Input parameters
  65 1.09677851E+03 # vR1Input
  66 1.09677851E+03 # vR2Input
  67 1.09677851E+03 # 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 -1.08495549E+04 # mHd2
  22 6.00179733E+04 # mHu2
  1 9.00000000E+02 # M1
  2 1.80000000E+03 # M2
  3 2.70000000E+03 # M3
Block HMX # (SUSY Scale)
  102 1.62221932E+02 # vd
  103 1.75294703E+02 # vu
Block PHASES # (SUSY Scale)
  1 1.00000000E+00 # pG
Block Yd # (SUSY Scale)
  1 1 2.07698788E-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 3.93911493E-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 2.04117768E-02 # Real(Yd(3,3),dp)
Block Ye # (SUSY Scale)
  1 1 4.20685284E-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 8.89152106E-04 # 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      1.51155860E-02 # Real(Ye(3,3),dp)
Block {NMSSMRUN, 1} # (SUSY Scale)
  1      2.31518594E-01 # Real(lam(1),dp)
  2      2.31518594E-01 # Real(lam(2),dp)
  3      2.31518594E-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      8.11102302E-06 # Real(Yu(1,1),dp)
  1 2      1.87607569E-06 # Real(Yu(1,2),dp)
  1 3      2.85138010E-08 # Real(Yu(1,3),dp)
  2 1     -9.14189456E-04 # Real(Yu(2,1),dp)
  2 2      3.94986549E-03 # Real(Yu(2,2),dp)
  2 3      1.67115108E-04 # Real(Yu(2,3),dp)
  3 1      6.77505162E-03 # Real(Yu(3,1),dp)
  3 2     -4.65915979E-02 # Real(Yu(3,2),dp)
  3 3      1.13828264E+00 # Real(Yu(3,3),dp)
Block {NMSSMRUN, 2} # (SUSY Scale)
  1 1 1      4.00489384E-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      4.08499164E-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      4.16508944E-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      5.10061062E+01 # Real(Tlam(1) ,dp)
  2      5.10061062E+01 # Real(Tlam(2) ,dp)
  3      5.10061062E+01 # 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     -1.96152549E+03 # Real(Tu(3,3),dp)
Block {NMSSMRUN, 4} # (SUSY Scale)
  1 1 1     -3.19395978E+01 # 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     -3.19395978E+01 # 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     -3.19395978E+01 # 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      2.71225809E+06 # Real(mq2(3,3),dp)
Block MSL2 # (SUSY Scale)
  1 1      9.29461906E+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      3.41142243E+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 5.34214126E+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 2.71225809E+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 -1.68906378E+05 # 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 -1.76674863E+05 # 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 -1.84600619E+05 # 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 1.09677851E+03 # vR(1)
2 1.09677851E+03 # vR(2)
3 1.09677851E+03 # 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 9.99996268E+02 # Sd_1
1000003 1.00002179E+03 # Sd_2
1000005 1.00002335E+03 # Sd_3
2000001 1.00013224E+03 # Sd_4
2000003 1.00013380E+03 # Sd_5
2000005 1.64699354E+03 # Sd_6
1000002 9.99802022E+02 # Su_1
1000004 9.99891214E+02 # Su_2
1000006 9.99953286E+02 # Su_3
2000002 1.00005706E+03 # Su_4
2000004 1.55517219E+03 # Su_5
2000006 1.74513542E+03 # Su_6
25 1.25106092E+02 # hh_1
35 2.80486022E+02 # hh_2
1000012 5.98581422E+02 # hh_3
1000014 6.09233143E+02 # hh_4
1000016 6.13254203E+02 # hh_5

```

```

2000012      6.93167654E+02 # hh_6
2000014      7.48880730E+02 # hh_7
2000016      9.83077859E+02 # hh_8
   36      2.79070851E+02 # Ah_2
1000017      2.79377304E+02 # Ah_3
1000018      2.80486022E+02 # Ah_4
1000019      2.83952682E+02 # Ah_5
2000018      6.09233143E+02 # Ah_6
2000019      7.44605110E+02 # Ah_7
2000020      9.83077859E+02 # Ah_8
   37      2.82954182E+02 # Hpm_2
1000011      6.14147184E+02 # Hpm_3
2000011      7.46123975E+02 # Hpm_4
1000013      9.81981690E+02 # Hpm_5
2000013      1.00336891E+03 # Hpm_6
1000015      1.00340069E+03 # Hpm_7
2000015      1.00340070E+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      4.42587901E-13 # Chi_1
   14      2.03897928E-12 # Chi_2
   16      5.84474763E-11 # Chi_3
1000022      5.33771571E+02 # Chi_4
1000023      5.48802738E+02 # Chi_5
1000025      6.19309380E+02 # Chi_6
1000039      6.31644467E+02 # Chi_7
1000045      6.43975815E+02 # Chi_8
1000055      8.88929374E+02 # Chi_9
1000065      1.77432493E+03 # Chi_10
   11      5.10998930E-04 # Cha_1
   13      1.05658372E-01 # Cha_2
   15      1.77669000E+00 # Cha_3
1000024      5.39860648E+02 # Cha_4
1000037      1.77446742E+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  5.90224503E-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 -9.99982582E-01 # Real(ZD(1,6),dp)
 2 1 -2.56360505E-13 # Real(ZD(2,1),dp)
 2 2  1.18224890E-01 # Real(ZD(2,2),dp)
 2 3  0.00000000E+00 # Real(ZD(2,3),dp)
 2 4 -4.08363166E-11 # Real(ZD(2,4),dp)
 2 5  9.92986846E-01 # Real(ZD(2,5),dp)
 2 6  0.00000000E+00 # Real(ZD(2,6),dp)
 3 1  6.36758285E-03 # Real(ZD(3,1),dp)
 3 2  4.44299414E-12 # Real(ZD(3,2),dp)
 3 3  0.00000000E+00 # Real(ZD(3,3),dp)
 3 4  9.99979727E-01 # Real(ZD(3,4),dp)
 3 5  4.05965409E-11 # Real(ZD(3,5),dp)
 3 6  0.00000000E+00 # Real(ZD(3,6),dp)
 4 1 -9.99979727E-01 # Real(ZD(4,1),dp)
 4 2 -1.72881045E-13 # Real(ZD(4,2),dp)
 4 3 -0.00000000E+00 # Real(ZD(4,3),dp)
 4 4  6.36758285E-03 # Real(ZD(4,4),dp)
 4 5  2.42823804E-14 # Real(ZD(4,5),dp)
 4 6 -0.00000000E+00 # Real(ZD(4,6),dp)
 5 1  1.72067485E-13 # Real(ZD(5,1),dp)
 5 2 -9.92986846E-01 # Real(ZD(5,2),dp)
 5 3 -0.00000000E+00 # Real(ZD(5,3),dp)
 5 4 -3.88643030E-13 # Real(ZD(5,4),dp)
 5 5  1.18224890E-01 # 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      9.99982582E-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      5.90224503E-03 # Real(ZD(6,6),dp)
Block USQMIX # ( )
1 1     -1.83844655E-01 # Real(ZU(1,1),dp)
1 2      7.48213007E-01 # Real(ZU(1,2),dp)
1 3      1.39871576E-04 # Real(ZU(1,3),dp)
1 4     -1.78650749E-05 # Real(ZU(1,4),dp)
1 5      6.37476922E-01 # Real(ZU(1,5),dp)
1 6     -1.26238247E-03 # Real(ZU(1,6),dp)
2 1      9.73033514E-01 # Real(ZU(2,1),dp)
2 2      2.30401159E-01 # Real(ZU(2,2),dp)
2 3      1.56588457E-05 # Real(ZU(2,3),dp)
2 4      4.14364665E-03 # Real(ZU(2,4),dp)
2 5      1.01929270E-02 # Real(ZU(2,5),dp)
2 6     -1.44917123E-04 # Real(ZU(2,6),dp)
3 1      4.03679185E-03 # Real(ZU(3,1),dp)
3 2      9.34346474E-04 # Real(ZU(3,2),dp)
3 3      6.01182403E-08 # Real(ZU(3,3),dp)
3 4     -9.99991415E-01 # Real(ZU(3,4),dp)
3 5      3.95101002E-05 # Real(ZU(3,5),dp)
3 6     -5.66382456E-07 # Real(ZU(3,6),dp)
4 1      1.39250031E-01 # Real(ZU(4,1),dp)
4 2     -6.22164802E-01 # Real(ZU(4,2),dp)
4 3     -1.07921624E-04 # Real(ZU(4,3),dp)
4 4      1.12440596E-05 # Real(ZU(4,4),dp)
4 5      7.70402023E-01 # Real(ZU(4,5),dp)
4 6      1.04824865E-03 # Real(ZU(4,6),dp)
5 1      1.49552848E-04 # Real(ZU(5,1),dp)
5 2     -1.02846176E-03 # Real(ZU(5,2),dp)
5 3     -7.07198815E-01 # Real(ZU(5,3),dp)
5 4      9.09469607E-10 # Real(ZU(5,4),dp)
5 5      5.33026691E-06 # Real(ZU(5,5),dp)
5 6     -7.07013972E-01 # Real(ZU(5,6),dp)
6 1     -1.85667287E-04 # Real(ZU(6,1),dp)
6 2      1.27682431E-03 # Real(ZU(6,2),dp)
6 3     -7.07014714E-01 # Real(ZU(6,3),dp)
6 4      5.82067374E-10 # Real(ZU(6,4),dp)
6 5      3.41141040E-06 # Real(ZU(6,5),dp)
6 6      7.07197660E-01 # Real(ZU(6,6),dp)
Block SCALARMIX # ( )
1 1      6.83127757E-01 # ZH(1,1)
1 2      7.23455931E-01 # ZH(1,2)
1 3     -6.31791685E-02 # ZH(1,3)
1 4     -5.72447465E-02 # ZH(1,4)
1 5     -5.17630586E-02 # ZH(1,5)
1 6      6.22036216E-07 # ZH(1,6)
1 7      1.74921280E-06 # ZH(1,7)
1 8      2.86231100E-06 # ZH(1,8)
2 1      2.17650239E-06 # ZH(2,1)
2 2      1.84932566E-06 # ZH(2,2)
2 3     -2.02948708E-07 # ZH(2,3)
2 4     -1.77716924E-07 # ZH(2,4)
2 5     -2.81681511E-07 # ZH(2,5)
2 6      1.69049696E-12 # ZH(2,6)
2 7      7.17101112E-12 # ZH(2,7)
2 8     -1.00000000E+00 # ZH(2,8)
3 1      6.93753862E-03 # ZH(3,1)
3 2      7.44145511E-03 # ZH(3,2)
3 3      8.13543677E-01 # ZH(3,3)
3 4     -5.49648743E-01 # ZH(3,4)
3 5     -1.89550625E-01 # ZH(3,5)
3 6      1.79052384E-07 # ZH(3,6)
3 7     -1.24494886E-05 # ZH(3,7)
3 8      1.48283954E-08 # ZH(3,8)
4 1      2.21233370E-06 # ZH(4,1)
4 2     -1.31455554E-07 # ZH(4,2)
4 3     -1.22409610E-05 # ZH(4,3)
4 4      2.62549470E-06 # ZH(4,4)
4 5      5.60379205E-06 # ZH(4,5)
4 6     -1.86330545E-12 # ZH(4,6)

```

4	7	-1.00000000E+00	# ZH(4,7)
4	8	-2.15975789E-12	# ZH(4,8)
5	1	-7.30489116E-03	# ZH(5,1)
5	2	-7.71239611E-03	# ZH(5,2)
5	3	-2.35275266E-01	# ZH(5,3)
5	4	-6.09489847E-01	# ZH(5,4)
5	5	7.57003853E-01	# ZH(5,5)
5	6	-6.24296532E-08	# ZH(5,6)
5	7	5.50672814E-06	# ZH(5,7)
5	8	-8.73303617E-08	# ZH(5,8)
6	1	8.40996121E-02	# ZH(6,1)
6	2	5.62321186E-02	# ZH(6,2)
6	3	5.27882685E-01	# ZH(6,3)
6	4	5.68301041E-01	# ZH(6,4)
6	5	6.23008027E-01	# ZH(6,5)
6	6	2.69437102E-07	# ZH(6,6)
6	7	-1.29984818E-06	# ZH(6,7)
6	8	-9.65851577E-08	# ZH(6,8)
7	1	7.25370410E-01	# ZH(7,1)
7	2	-6.87993174E-01	# ZH(7,2)
7	3	-1.18531665E-02	# ZH(7,3)
7	4	-1.28589054E-02	# ZH(7,4)
7	5	-1.40467623E-02	# ZH(7,5)
7	6	-1.20728704E-06	# ZH(7,6)
7	7	1.72781995E-06	# ZH(7,7)
7	8	3.15094544E-07	# ZH(7,8)
8	1	4.26442310E-07	# ZH(8,1)
8	2	-1.29758595E-06	# ZH(8,2)
8	3	-2.77596713E-07	# ZH(8,3)
8	4	-7.26717921E-08	# ZH(8,4)
8	5	-7.14224751E-08	# ZH(8,5)
8	6	1.00000000E+00	# ZH(8,6)
8	7	2.05782645E-12	# ZH(8,7)
8	8	3.08361981E-13	# ZH(8,8)
Block PSEUDOSCALARMIX # ()			
1	1	-6.78560553E-01	# ZA(1,1)
1	2	7.34544398E-01	# ZA(1,2)
1	3	-1.80470490E-04	# ZA(1,3)
1	4	-1.86445897E-04	# ZA(1,4)
1	5	-1.91944175E-04	# ZA(1,5)
1	6	-6.25220438E-07	# ZA(1,6)
1	7	-1.69375320E-06	# ZA(1,7)
1	8	-2.28237759E-06	# ZA(1,8)
2	1	-2.07524555E-06	# ZA(2,1)
2	2	1.19347104E-06	# ZA(2,2)
2	3	-9.07108520E-06	# ZA(2,3)
2	4	-9.49125384E-06	# ZA(2,4)
2	5	3.05626096E-05	# ZA(2,5)
2	6	-2.82297979E-12	# ZA(2,6)
2	7	-1.02732075E-11	# ZA(2,7)
2	8	9.99999999E-01	# ZA(2,8)
3	1	-1.54658989E-04	# ZA(3,1)
3	2	-1.40699316E-04	# ZA(3,2)
3	3	-7.97871810E-01	# ZA(3,3)
3	4	5.65292716E-01	# ZA(3,4)
3	5	2.09391205E-01	# ZA(3,5)
3	6	-1.38421548E-07	# ZA(3,6)
3	7	3.57086270E-07	# ZA(3,7)
3	8	-8.27192120E-06	# ZA(3,8)
4	1	1.17564118E-04	# ZA(4,1)
4	2	1.07190643E-04	# ZA(4,2)
4	3	2.13410365E-01	# ZA(4,3)
4	4	5.89726473E-01	# ZA(4,4)
4	5	-7.78895807E-01	# ZA(4,5)
4	6	3.68904203E-08	# ZA(4,6)
4	7	3.70734136E-07	# ZA(4,7)
4	8	3.13383118E-05	# ZA(4,8)
5	1	-4.29569359E-02	# ZA(5,1)
5	2	-3.92442913E-02	# ZA(5,2)
5	3	5.62844228E-01	# ZA(5,3)
5	4	5.75794221E-01	# ZA(5,4)
5	5	5.90154198E-01	# ZA(5,5)
5	6	1.17904744E-07	# ZA(5,6)

5	7	3.82733226E-07	# ZA(5,7)
5	8	-7.50834455E-06	# ZA(5,8)
6	1	-2.32673011E-06	# ZA(6,1)
6	2	1.56248788E-07	# ZA(6,2)
6	3	-6.30148518E-08	# ZA(6,3)
6	4	-6.95857916E-07	# ZA(6,4)
6	5	-6.84770822E-08	# ZA(6,5)
6	6	-5.98884673E-13	# ZA(6,6)
6	7	1.00000000E+00	# ZA(6,7)
6	8	1.74911733E-13	# ZA(6,8)
7	1	-7.33287284E-01	# ZA(7,1)
7	2	-6.77424817E-01	# ZA(7,2)
7	3	-3.26026598E-02	# ZA(7,3)
7	4	-3.35829328E-02	# ZA(7,4)
7	5	-3.45634315E-02	# ZA(7,5)
7	6	1.12852559E-06	# ZA(7,6)
7	7	-1.62810500E-06	# ZA(7,7)
7	8	-2.71401259E-07	# ZA(7,8)
8	1	-4.08322623E-07	# ZA(8,1)
8	2	-1.22834707E-06	# ZA(8,2)
8	3	1.47997351E-07	# ZA(8,3)
8	4	-2.63871943E-08	# ZA(8,4)
8	5	-2.70217787E-08	# ZA(8,5)
8	6	-1.00000000E+00	# ZA(8,6)
8	7	-1.36788937E-12	# ZA(8,7)
8	8	-2.86446277E-13	# ZA(8,8)

Block CHARGEMIX # ()

1	1	-6.78672164E-01	# ZP(1,1)
1	2	7.34441348E-01	# ZP(1,2)
1	3	-6.28061880E-07	# ZP(1,3)
1	4	-1.67746771E-06	# ZP(1,4)
1	5	-2.28936402E-06	# ZP(1,5)
1	6	2.57487412E-16	# ZP(1,6)
1	7	1.90322497E-13	# ZP(1,7)
1	8	-3.73706386E-11	# ZP(1,8)
2	1	-1.77756591E-06	# ZP(2,1)
2	2	1.47453878E-06	# ZP(2,2)
2	3	-1.40307006E-12	# ZP(2,3)
2	4	-4.54286146E-12	# ZP(2,4)
2	5	9.99992521E-01	# ZP(2,5)
2	6	-7.78618841E-20	# ZP(2,6)
2	7	-3.83228289E-16	# ZP(2,7)
2	8	-3.86745676E-03	# ZP(2,8)
3	1	2.42661263E-06	# ZP(3,1)
3	2	-4.16551318E-08	# ZP(3,2)
3	3	4.77171002E-13	# ZP(3,3)
3	4	-9.99999995E-01	# ZP(3,4)
3	5	-1.67742181E-13	# ZP(3,5)
3	6	3.30252647E-19	# ZP(3,6)
3	7	-9.58896164E-05	# ZP(3,7)
3	8	6.06567821E-14	# ZP(3,8)
4	1	-7.34441348E-01	# ZP(4,1)
4	2	-6.78672164E-01	# ZP(4,2)
4	3	1.16623589E-06	# ZP(4,3)
4	4	-1.75393443E-06	# ZP(4,4)
4	5	-3.04904739E-07	# ZP(4,5)
4	6	1.54420969E-13	# ZP(4,6)
4	7	-5.62206205E-10	# ZP(4,7)
4	8	-2.92141559E-08	# ZP(4,8)
5	1	-4.30283747E-07	# ZP(5,1)
5	2	-1.25276645E-06	# ZP(5,2)
5	3	-1.00000000E+00	# ZP(5,3)
5	4	-1.46952863E-12	# ZP(5,4)
5	5	-3.21368138E-13	# ZP(5,5)
5	6	-5.31342512E-06	# ZP(5,6)
5	7	-5.73582567E-15	# ZP(5,7)
5	8	-1.78564696E-13	# ZP(5,8)
6	1	-2.83563179E-08	# ZP(6,1)
6	2	-1.40967782E-08	# ZP(6,2)
6	3	-1.49944998E-13	# ZP(6,3)
6	4	-8.20372873E-15	# ZP(6,4)
6	5	3.86745676E-03	# ZP(6,5)
6	6	-1.22723386E-15	# ZP(6,6)

6	7	-1.17888090E-13	# ZP(6,7)
6	8	9.99992521E-01	# ZP(6,8)
7	1	-2.17298893E-12	# ZP(7,1)
7	2	-6.55215477E-12	# ZP(7,2)
7	3	-5.31342512E-06	# ZP(7,3)
7	4	-4.04171475E-13	# ZP(7,4)
7	5	3.37661377E-18	# ZP(7,5)
7	6	1.00000000E+00	# ZP(7,6)
7	7	4.21489646E-09	# ZP(7,7)
7	8	1.22628060E-15	# ZP(7,8)
8	1	-1.80091324E-10	# ZP(8,1)
8	2	-3.85687823E-10	# ZP(8,2)
8	3	1.73613896E-14	# ZP(8,3)
8	4	-9.58896164E-05	# ZP(8,4)
8	5	8.24929788E-16	# ZP(8,5)
8	6	-4.21489676E-09	# ZP(8,6)
8	7	9.99999995E-01	# ZP(8,7)
8	8	1.17875118E-13	# 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	2.21243357E-07	# Real(UV(4,1), dp)
4	2	4.47956140E-07	# Real(UV(4,2), dp)
4	3	9.67902182E-08	# Real(UV(4,3), dp)
4	4	-1.19386029E-01	# Real(UV(4,4), dp)
4	5	6.34250353E-02	# Real(UV(4,5), dp)
4	6	-6.99645459E-01	# Real(UV(4,6), dp)
4	7	7.01002209E-01	# Real(UV(4,7), dp)
4	8	-1.85448614E-02	# Real(UV(4,8), dp)
4	9	-1.62406116E-02	# Real(UV(4,9), dp)
4	10	-1.44467007E-02	# Real(UV(4,10), dp)
5	1	0.00000000E+00	# Real(UV(5,1), dp)
5	2	0.00000000E+00	# Real(UV(5,2), dp)
5	3	0.00000000E+00	# Real(UV(5,3), dp)
5	4	0.00000000E+00	# Real(UV(5,4), dp)
5	5	-0.00000000E+00	# Real(UV(5,5), dp)
5	6	-0.00000000E+00	# Real(UV(5,6), dp)
5	7	-0.00000000E+00	# Real(UV(5,7), dp)
5	8	-0.00000000E+00	# Real(UV(5,8), dp)
5	9	-0.00000000E+00	# Real(UV(5,9), dp)
5	10	-0.00000000E+00	# Real(UV(5,10), dp)
6	1	-3.72229450E-08	# Real(UV(6,1), dp)
6	2	8.43432628E-09	# Real(UV(6,2), dp)
6	3	2.00624020E-10	# Real(UV(6,3), dp)
6	4	2.35786913E-03	# Real(UV(6,4), dp)

```

6 5 -1.07014144E-03 # Real(UV(6,5),dp)
6 6 3.37290264E-02 # Real(UV(6,6),dp)
6 7 9.45504211E-03 # Real(UV(6,7),dp)
6 8 -9.97774358E-01 # Real(UV(6,8),dp)
6 9 5.11221417E-02 # Real(UV(6,9),dp)
6 10 2.44766729E-02 # Real(UV(6,10),dp)
7 1 -8.90576559E-10 # Real(UV(7,1),dp)
7 2 7.19831729E-08 # Real(UV(7,2),dp)
7 3 -6.28939067E-10 # Real(UV(7,3),dp)
7 4 -2.28043998E-03 # Real(UV(7,4),dp)
7 5 1.00646870E-03 # Real(UV(7,5),dp)
7 6 -3.44666467E-02 # Real(UV(7,6),dp)
7 7 -1.15678098E-02 # Real(UV(7,7),dp)
7 8 4.85228890E-02 # Real(UV(7,8),dp)
7 9 9.96815850E-01 # Real(UV(7,9),dp)
7 10 -5.17272930E-02 # Real(UV(7,10),dp)
8 1 -2.25320382E-09 # Real(UV(8,1),dp)
8 2 -2.55847314E-09 # Real(UV(8,2),dp)
8 3 9.21893736E-09 # Real(UV(8,3),dp)
8 4 -2.24862913E-03 # Real(UV(8,4),dp)
8 5 9.63238016E-04 # Real(UV(8,5),dp)
8 6 -3.55728013E-02 # Real(UV(8,6),dp)
8 7 -1.35951538E-02 # Real(UV(8,7),dp)
8 8 2.56553199E-02 # Real(UV(8,8),dp)
8 9 4.91321744E-02 # Real(UV(8,9),dp)
8 10 9.97733230E-01 # Real(UV(8,10),dp)
9 1 1.34020330E-08 # Real(UV(9,1),dp)
9 2 4.63724268E-08 # Real(UV(9,2),dp)
9 3 1.01513962E-07 # Real(UV(9,3),dp)
9 4 -9.92834012E-01 # Real(UV(9,4),dp)
9 5 -1.07676181E-02 # Real(UV(9,5),dp)
9 6 8.32070066E-02 # Real(UV(9,6),dp)
9 7 -8.50932162E-02 # Real(UV(9,7),dp)
9 8 -3.57033705E-04 # Real(UV(9,8),dp)
9 9 -3.73903470E-04 # Real(UV(9,9),dp)
9 10 -3.92451848E-04 # Real(UV(9,10),dp)
10 1 2.35874438E-08 # Real(UV(10,1),dp)
10 2 6.58888228E-08 # Real(UV(10,2),dp)
10 3 1.00657749E-07 # Real(UV(10,3),dp)
10 4 -3.11535323E-03 # Real(UV(10,4),dp)
10 5 9.97925440E-01 # Real(UV(10,5),dp)
10 6 4.42344418E-02 # Real(UV(10,6),dp)
10 7 -4.66735861E-02 # Real(UV(10,7),dp)
10 8 -2.66899183E-05 # Real(UV(10,8),dp)
10 9 -2.69857575E-05 # Real(UV(10,9),dp)
10 10 -2.72878184E-05 # Real(UV(10,10),dp)

```

Block IMUVMIX # ()

```

1 1 -8.16913129E-01 # Aimag(UV(1,1))
1 2 -2.57433180E-01 # Aimag(UV(1,2))
1 3 5.16121205E-01 # Aimag(UV(1,3))
1 4 2.30304615E-10 # Aimag(UV(1,4))
1 5 -1.54007757E-10 # Aimag(UV(1,5))
1 6 -3.51938537E-07 # Aimag(UV(1,6))
1 7 -3.12980990E-11 # Aimag(UV(1,7))
1 8 1.62187740E-08 # Aimag(UV(1,8))
1 9 4.16690487E-09 # Aimag(UV(1,9))
1 10 -2.04437639E-08 # Aimag(UV(1,10))
2 1 5.21810645E-01 # Aimag(UV(2,1))
2 2 -7.11089606E-01 # Aimag(UV(2,2))
2 3 4.71237968E-01 # Aimag(UV(2,3))
2 4 3.12150765E-09 # Aimag(UV(2,4))
2 5 -2.89812105E-09 # Aimag(UV(2,5))
2 6 -2.26219973E-07 # Aimag(UV(2,6))
2 7 -4.17016497E-10 # Aimag(UV(2,7))
2 8 -3.10701447E-08 # Aimag(UV(2,8))
2 9 4.50577924E-08 # Aimag(UV(2,9))
2 10 -1.44805049E-08 # Aimag(UV(2,10))
3 1 -2.45696136E-01 # Aimag(UV(3,1))
3 2 -6.54278022E-01 # Aimag(UV(3,2))
3 3 -7.15229809E-01 # Aimag(UV(3,3))
3 4 -1.55203327E-07 # Aimag(UV(3,4))
3 5 1.45355447E-07 # Aimag(UV(3,5))
3 6 -5.33756966E-07 # Aimag(UV(3,6))

```

3 7 2.20391927E-08 # Aimag(UV(3,7))
3 8 -1.38340115E-08 # Aimag(UV(3,8))
3 9 2.77257429E-08 # Aimag(UV(3,9))
3 10 -1.58537551E-08 # 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 2.08050656E-07 # Aimag(UV(5,1))
5 2 4.13691570E-07 # Aimag(UV(5,2))
5 3 5.44039961E-08 # Aimag(UV(5,3))
5 4 1.44175396E-03 # Aimag(UV(5,4))
5 5 -1.74768062E-03 # Aimag(UV(5,5))
5 6 -7.05708948E-01 # Aimag(UV(5,6))
5 7 -7.06235502E-01 # Aimag(UV(5,7))
5 8 -3.30094593E-02 # Aimag(UV(5,8))
5 9 -3.26621955E-02 # Aimag(UV(5,9))
5 10 -3.23221330E-02 # 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 0.00000000E+00 # Aimag(UV(8,1))
8 2 0.00000000E+00 # Aimag(UV(8,2))
8 3 0.00000000E+00 # Aimag(UV(8,3))
8 4 0.00000000E+00 # Aimag(UV(8,4))
8 5 0.00000000E+00 # Aimag(UV(8,5))
8 6 0.00000000E+00 # Aimag(UV(8,6))
8 7 0.00000000E+00 # Aimag(UV(8,7))
8 8 0.00000000E+00 # Aimag(UV(8,8))
8 9 0.00000000E+00 # Aimag(UV(8,9))
8 10 0.00000000E+00 # 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      5.82488103E-06 # Real(ZER(1,2),dp)
 1 3      7.85139850E-09 # Real(ZER(1,3),dp)
 1 4     -5.22621777E-08 # Real(ZER(1,4),dp)
 1 5      3.02179850E-07 # Real(ZER(1,5),dp)
 2 1      5.82488122E-06 # Real(ZER(2,1),dp)
 2 2     -1.00000000E+00 # Real(ZER(2,2),dp)
 2 3     -1.95848203E-08 # Real(ZER(2,3),dp)
 2 4      1.31008696E-07 # Real(ZER(2,4),dp)
 2 5     -6.04680985E-07 # Real(ZER(2,5),dp)
 3 1     -7.85132177E-09 # Real(ZER(3,1),dp)
 3 2     -1.95849443E-08 # Real(ZER(3,2),dp)
 3 3      1.00000000E+00 # Real(ZER(3,3),dp)
 3 4     -1.48485168E-07 # Real(ZER(3,4),dp)
 3 5      9.80455261E-08 # Real(ZER(3,5),dp)
 4 1      3.04850514E-07 # Real(ZER(4,1),dp)
 4 2      6.11684759E-07 # Real(ZER(4,2),dp)
 4 3      1.07128268E-07 # Real(ZER(4,3),dp)
 4 4      6.24584576E-02 # Real(ZER(4,4),dp)
 4 5     -9.98047565E-01 # Real(ZER(4,5),dp)
 5 1      3.32859091E-08 # Real(ZER(5,1),dp)
 5 2      9.29856590E-08 # Real(ZER(5,2),dp)
 5 3      1.42071490E-07 # Real(ZER(5,3),dp)
 5 4      9.98047565E-01 # Real(ZER(5,4),dp)
 5 5      6.24584576E-02 # Real(ZER(5,5),dp)
Block UELMIX # ( )
 1 1      1.00000000E+00 # Real(ZEL(1,1),dp)
 1 2      1.70522029E-14 # Real(ZEL(1,2),dp)
 1 3      1.16399658E-15 # Real(ZEL(1,3),dp)
 1 4     -6.58932185E-14 # Real(ZEL(1,4),dp)
 1 5      1.09996172E-12 # Real(ZEL(1,5),dp)
 2 1      1.70532281E-14 # Real(ZEL(2,1),dp)
 2 2     -1.00000000E+00 # Real(ZEL(2,2),dp)
 2 3     -6.18657389E-13 # Real(ZEL(2,3),dp)
 2 4      3.45478836E-11 # Real(ZEL(2,4),dp)
 2 5     -5.82561734E-10 # Real(ZEL(2,5),dp)
 3 1     -1.16400594E-15 # Real(ZEL(3,1),dp)
 3 2     -6.18648552E-13 # Real(ZEL(3,2),dp)
 3 3      1.00000000E+00 # Real(ZEL(3,3),dp)
 3 4     -6.63505202E-10 # Real(ZEL(3,4),dp)
 3 5      1.12062961E-08 # Real(ZEL(3,5),dp)
 4 1      1.10191278E-12 # Real(ZEL(4,1),dp)
 4 2      5.83571948E-10 # Real(ZEL(4,2),dp)
 4 3      1.12256585E-08 # Real(ZEL(4,3),dp)
 4 4      6.59348975E-02 # Real(ZEL(4,4),dp)
 4 5     -9.97823927E-01 # Real(ZEL(4,5),dp)
 5 1     -6.77603314E-15 # Real(ZEL(5,1),dp)
 5 2     -3.93844331E-12 # Real(ZEL(5,2),dp)
 5 3     -7.68246183E-11 # Real(ZEL(5,3),dp)
 5 4      9.97823927E-01 # Real(ZEL(5,4),dp)
 5 5      6.59348975E-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 -8.13151629E-20 # Real(ZUR(1,2),dp)
 1 3 0.00000000E+00 # Real(ZUR(1,3),dp)
 2 1 8.13151629E-20 # 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 3.20386763E-03 # hh_1

```

```

# BR ID1 ID2
2.93286034E-03 2 22 22 # BR(hh_1 -> VP VP )
1.09382912E-01 2 21 21 # BR(hh_1 -> VG VG )
2.79616527E-02 2 23 23 # BR(hh_1 -> VZ VZ )
2.57269802E-01 2 24 -24 # BR(hh_1 -> Vwm^* Vwm_virt )
6.41582549E-09 2 -11 11 # BR(hh_1 -> Cha_1^* Cha_1 )
1.07745595E-30 2 -11 13 # BR(hh_1 -> Cha_1^* Cha_2 )
4.05406757E-27 2 -11 15 # BR(hh_1 -> Cha_1^* Cha_3 )
1.07745595E-30 2 -13 11 # BR(hh_1 -> Cha_2^* Cha_1 )
2.86607906E-04 2 -13 13 # BR(hh_1 -> Cha_2^* Cha_2 )
1.84479535E-26 2 -13 15 # BR(hh_1 -> Cha_2^* Cha_3 )
4.05406757E-27 2 -15 11 # BR(hh_1 -> Cha_3^* Cha_1 )
1.84479535E-26 2 -15 13 # BR(hh_1 -> Cha_3^* Cha_2 )
8.27298298E-02 2 -15 15 # BR(hh_1 -> Cha_3^* Cha_3 )
1.10337644E-26 2 12 12 # BR(hh_1 -> Chi_1 Chi_1 )
2.75680070E-28 2 12 14 # BR(hh_1 -> Chi_1 Chi_2 )
6.36632415E-25 2 12 16 # BR(hh_1 -> Chi_1 Chi_3 )
2.44675210E-25 2 14 14 # BR(hh_1 -> Chi_2 Chi_2 )
4.17031258E-25 2 14 16 # BR(hh_1 -> Chi_2 Chi_3 )
2.52890319E-22 2 16 16 # BR(hh_1 -> Chi_3 Chi_3 )
5.16536839E-07 2 -1 1 # BR(hh_1 -> Fd_1^* Fd_1 )
1.85793536E-04 2 -3 3 # BR(hh_1 -> Fd_2^* Fd_2 )
4.97143448E-01 2 -5 5 # BR(hh_1 -> Fd_3^* Fd_3 )
9.30774243E-08 2 -2 2 # BR(hh_1 -> Fu_1^* Fu_1 )
2.21064770E-02 2 -4 4 # BR(hh_1 -> Fu_2^* Fu_2 )

```

```

DECAY 35 2.49105332E-12 # hh_2

```

```

# BR ID1 ID2
2.29108462E-05 2 22 22 # BR(hh_2 -> VP VP )
1.98400525E-02 2 21 21 # BR(hh_2 -> VG VG )
1.87798138E-10 2 -11 11 # BR(hh_2 -> Cha_1^* Cha_1 )
2.24084759E-05 2 -11 15 # BR(hh_2 -> Cha_1^* Cha_3 )
8.38935156E-06 2 -13 13 # BR(hh_2 -> Cha_2^* Cha_2 )
9.08742551E-05 2 -13 15 # BR(hh_2 -> Cha_2^* Cha_3 )
2.24084759E-05 2 -15 11 # BR(hh_2 -> Cha_3^* Cha_1 )
9.08742551E-05 2 -15 13 # BR(hh_2 -> Cha_3^* Cha_2 )
2.70773296E-03 2 -15 15 # BR(hh_2 -> Cha_3^* Cha_3 )
2.01844916E-08 2 12 12 # BR(hh_2 -> Chi_1 Chi_1 )
3.04902974E-06 2 12 14 # BR(hh_2 -> Chi_1 Chi_2 )
6.86460282E-03 2 12 16 # BR(hh_2 -> Chi_1 Chi_3 )
4.56352437E-06 2 14 14 # BR(hh_2 -> Chi_2 Chi_2 )
6.05491769E-03 2 14 16 # BR(hh_2 -> Chi_2 Chi_3 )
2.62768028E-02 2 16 16 # BR(hh_2 -> Chi_3 Chi_3 )
1.51195908E-08 2 -1 1 # BR(hh_2 -> Fd_1^* Fd_1 )
5.43837850E-06 2 -3 3 # BR(hh_2 -> Fd_2^* Fd_2 )
1.45945635E-02 2 -5 5 # BR(hh_2 -> Fd_3^* Fd_3 )
1.75376454E-09 2 -2 2 # BR(hh_2 -> Fu_1^* Fu_1 )
4.16611078E-04 2 -4 4 # BR(hh_2 -> Fu_2^* Fu_2 )
7.47968830E-02 2 25 25 # BR(hh_2 -> hh_1 hh_1 )
5.89080625E-01 2 -24 24 # BR(hh_2 -> Vwm Vwm^* )
2.59096255E-01 2 23 23 # BR(hh_2 -> VZ VZ )

```

```

DECAY 1000012 9.28510174E-01 # hh_3

```

```

# BR ID1 ID2

```

1.01164051E-09	2	22	22	# BR(hh_3 -> VP VP)
6.38631902E-06	2	21	21	# BR(hh_3 -> VG VG)
4.24995652E-09	2	36	36	# BR(hh_3 -> Ah_2 Ah_2)
1.20018432E-10	2	36	1000017	# BR(hh_3 -> Ah_2 Ah_3)
8.28998004E-11	2	36	1000018	# BR(hh_3 -> Ah_2 Ah_4)
4.17916239E-11	2	36	1000019	# BR(hh_3 -> Ah_2 Ah_5)
1.08620006E-01	2	1000017	1000017	# BR(hh_3 -> Ah_3 Ah_3)
1.73916844E-01	2	1000017	1000018	# BR(hh_3 -> Ah_3 Ah_4)
6.25070724E-01	2	1000017	1000019	# BR(hh_3 -> Ah_3 Ah_5)
7.91871519E-02	2	1000018	1000018	# BR(hh_3 -> Ah_4 Ah_4)
8.68618024E-06	2	1000018	1000019	# BR(hh_3 -> Ah_4 Ah_5)
2.48905958E-07	2	1000019	1000019	# BR(hh_3 -> Ah_5 Ah_5)
2.31098918E-15	2	36	23	# BR(hh_3 -> Ah_2 VZ)
2.17500721E-14	2	1000017	23	# BR(hh_3 -> Ah_3 VZ)
1.03254967E-14	2	1000018	23	# BR(hh_3 -> Ah_4 VZ)
1.11956544E-09	2	1000019	23	# BR(hh_3 -> Ah_5 VZ)
1.09242638E-14	2	-11	11	# BR(hh_3 -> Cha_1^* Cha_1)
6.49831202E-29	2	-11	13	# BR(hh_3 -> Cha_1^* Cha_2)
2.14593950E-29	2	-11	15	# BR(hh_3 -> Cha_1^* Cha_3)
6.09642059E-15	2	-11	-1000024	# BR(hh_3 -> Cha_1^* Cha_4)
6.49831202E-29	2	-13	11	# BR(hh_3 -> Cha_2^* Cha_1)
4.88010966E-10	2	-13	13	# BR(hh_3 -> Cha_2^* Cha_2)
4.34082147E-28	2	-13	15	# BR(hh_3 -> Cha_2^* Cha_3)
1.28723999E-13	2	-13	-1000024	# BR(hh_3 -> Cha_2^* Cha_4)
2.14593950E-29	2	-15	11	# BR(hh_3 -> Cha_3^* Cha_1)
4.34082147E-28	2	-15	13	# BR(hh_3 -> Cha_3^* Cha_2)
1.41027744E-07	2	-15	15	# BR(hh_3 -> Cha_3^* Cha_3)
2.10092432E-17	2	-15	-1000024	# BR(hh_3 -> Cha_3^* Cha_4)
6.09642059E-15	2	1000024	11	# BR(hh_3 -> Cha_4^* Cha_1)
1.28723999E-13	2	1000024	13	# BR(hh_3 -> Cha_4^* Cha_2)
2.10092432E-17	2	1000024	15	# BR(hh_3 -> Cha_4^* Cha_3)
3.59110749E-30	2	12	12	# BR(hh_3 -> Chi_1 Chi_1)
8.54271424E-28	2	12	14	# BR(hh_3 -> Chi_1 Chi_2)
1.35542049E-24	2	12	16	# BR(hh_3 -> Chi_1 Chi_3)
9.11457201E-15	2	12	1000022	# BR(hh_3 -> Chi_1 Chi_4)
7.84592591E-16	2	12	1000023	# BR(hh_3 -> Chi_1 Chi_5)
9.80603592E-27	2	14	14	# BR(hh_3 -> Chi_2 Chi_2)
1.14769925E-23	2	14	16	# BR(hh_3 -> Chi_2 Chi_3)
2.66812738E-13	2	14	1000022	# BR(hh_3 -> Chi_2 Chi_4)
1.04758105E-14	2	14	1000023	# BR(hh_3 -> Chi_2 Chi_5)
1.93432345E-23	2	16	16	# BR(hh_3 -> Chi_3 Chi_3)
1.72775345E-13	2	16	1000022	# BR(hh_3 -> Chi_3 Chi_4)
2.83432500E-15	2	16	1000023	# BR(hh_3 -> Chi_3 Chi_5)
8.79510337E-13	2	-1	1	# BR(hh_3 -> Fd_1^* Fd_1)
3.16351810E-10	2	-3	3	# BR(hh_3 -> Fd_2^* Fd_2)
8.49362888E-07	2	-5	5	# BR(hh_3 -> Fd_3^* Fd_3)
1.62580550E-13	2	-2	2	# BR(hh_3 -> Fu_1^* Fu_1)
3.86225029E-08	2	-4	4	# BR(hh_3 -> Fu_2^* Fu_2)
1.89188951E-03	2	-6	6	# BR(hh_3 -> Fu_3^* Fu_3)
6.03282890E-04	2	25	25	# BR(hh_3 -> hh_1 hh_1)
3.72259581E-15	2	25	35	# BR(hh_3 -> hh_1 hh_2)
4.10352276E-09	2	35	35	# BR(hh_3 -> hh_2 hh_2)
2.07727661E-09	2	-37	37	# BR(hh_3 -> Hpm_2^* Hpm_2)
2.33774372E-15	2	37	24	# BR(hh_3 -> Hpm_2 Vwm^*)
2.33774372E-15	2	-37	-24	# BR(hh_3 -> Hpm_2^* Vwm)
7.19299472E-03	2	-24	24	# BR(hh_3 -> Vwm Vwm^*)
3.50074366E-03	2	23	23	# BR(hh_3 -> VZ VZ)

DECAY 1000014 3.35229746E-03 # hh_4

#	BR	NDA	ID1	ID2	
1.51393662E-15	2	22	22	# BR(hh_4 -> VP VP)	
5.60463930E-13	2	21	21	# BR(hh_4 -> VG VG)	
6.85538011E-15	2	36	36	# BR(hh_4 -> Ah_2 Ah_2)	
2.41847926E-18	2	36	1000017	# BR(hh_4 -> Ah_2 Ah_3)	
1.11396559E-17	2	36	1000018	# BR(hh_4 -> Ah_2 Ah_4)	
1.48225320E-17	2	36	1000019	# BR(hh_4 -> Ah_2 Ah_5)	
1.31262997E-08	2	1000017	1000017	# BR(hh_4 -> Ah_3 Ah_3)	
2.50818002E-09	2	1000017	1000018	# BR(hh_4 -> Ah_3 Ah_4)	
2.93440550E-08	2	1000017	1000019	# BR(hh_4 -> Ah_3 Ah_5)	
5.15597853E-09	2	1000018	1000018	# BR(hh_4 -> Ah_4 Ah_4)	
6.24220438E-09	2	1000018	1000019	# BR(hh_4 -> Ah_4 Ah_5)	
1.52733335E-10	2	1000019	1000019	# BR(hh_4 -> Ah_5 Ah_5)	
1.32843365E-19	2	36	23	# BR(hh_4 -> Ah_2 VZ)	
1.25141094E-09	2	1000017	23	# BR(hh_4 -> Ah_3 VZ)	

1.33459731E-09	2	1000018	23	# BR(hh_4 -> Ah_4 VZ)
2.21704576E-09	2	1000019	23	# BR(hh_4 -> Ah_5 VZ)
3.13174959E-19	2	-11	11	# BR(hh_4 -> Cha_1^* Cha_1)
1.25158998E-16	2	-11	13	# BR(hh_4 -> Cha_1^* Cha_2)
4.24284085E-22	2	-11	-1000024	# BR(hh_4 -> Cha_1^* Cha_4)
1.25158998E-16	2	-13	11	# BR(hh_4 -> Cha_2^* Cha_1)
2.29575287E-14	2	-13	13	# BR(hh_4 -> Cha_2^* Cha_2)
3.64224644E-16	2	-13	15	# BR(hh_4 -> Cha_2^* Cha_3)
1.51460744E-01	2	-13	-1000024	# BR(hh_4 -> Cha_2^* Cha_4)
3.64224644E-16	2	-15	13	# BR(hh_4 -> Cha_3^* Cha_2)
4.04296707E-12	2	-15	15	# BR(hh_4 -> Cha_3^* Cha_3)
1.08713324E-23	2	-15	-1000024	# BR(hh_4 -> Cha_3^* Cha_4)
4.24284085E-22	2	1000024	11	# BR(hh_4 -> Cha_4^* Cha_1)
1.51460744E-01	2	1000024	13	# BR(hh_4 -> Cha_4^* Cha_2)
1.08713324E-23	2	1000024	15	# BR(hh_4 -> Cha_4^* Cha_3)
8.10505986E-18	2	12	12	# BR(hh_4 -> Chi_1 Chi_1)
1.49870265E-15	2	12	14	# BR(hh_4 -> Chi_1 Chi_2)
2.73028377E-12	2	12	16	# BR(hh_4 -> Chi_1 Chi_3)
4.61848029E-02	2	12	1000022	# BR(hh_4 -> Chi_1 Chi_4)
1.18699169E-05	2	12	1000023	# BR(hh_4 -> Chi_1 Chi_5)
1.67718612E-14	2	14	14	# BR(hh_4 -> Chi_2 Chi_2)
2.01966108E-11	2	14	16	# BR(hh_4 -> Chi_2 Chi_3)
3.52386055E-01	2	14	1000022	# BR(hh_4 -> Chi_2 Chi_4)
9.05664394E-05	2	14	1000023	# BR(hh_4 -> Chi_2 Chi_5)
3.54910419E-11	2	16	16	# BR(hh_4 -> Chi_3 Chi_3)
2.98328480E-01	2	16	1000022	# BR(hh_4 -> Chi_3 Chi_4)
7.66731485E-05	2	16	1000023	# BR(hh_4 -> Chi_3 Chi_5)
2.52136544E-17	2	-1	1	# BR(hh_4 -> Fd_1^* Fd_1)
9.06912051E-15	2	-3	3	# BR(hh_4 -> Fd_2^* Fd_2)
2.43494879E-11	2	-5	5	# BR(hh_4 -> Fd_3^* Fd_3)
1.43026048E-20	2	-2	2	# BR(hh_4 -> Fu_1^* Fu_1)
3.39771591E-15	2	-4	4	# BR(hh_4 -> Fu_2^* Fu_2)
1.70051461E-10	2	-6	6	# BR(hh_4 -> Fu_3^* Fu_3)
1.28112473E-10	2	25	25	# BR(hh_4 -> hh_1 hh_1)
8.72382963E-22	2	25	35	# BR(hh_4 -> hh_1 hh_2)
6.67087508E-15	2	35	35	# BR(hh_4 -> hh_2 hh_2)
1.35882318E-15	2	-37	37	# BR(hh_4 -> Hpm_2^* Hpm_2)
1.81145451E-20	2	37	24	# BR(hh_4 -> Hpm_2 Vwm^*)
1.81145451E-20	2	-37	-24	# BR(hh_4 -> Hpm_2^* Vwm)
1.25036235E-09	2	-24	24	# BR(hh_4 -> Vwm Vwm^*)
6.09186554E-10	2	23	23	# BR(hh_4 -> VZ VZ)
DECAY 1000016	1.13148662E+00	# hh_5		
# BR	NDA	ID1	ID2	
9.47750229E-10	2	22	22	# BR(hh_5 -> VP VP)
5.75367347E-06	2	21	21	# BR(hh_5 -> VG VG)
3.39373981E-09	2	36	36	# BR(hh_5 -> Ah_2 Ah_2)
8.82000766E-11	2	36	1000017	# BR(hh_5 -> Ah_2 Ah_3)
4.31163658E-10	2	36	1000018	# BR(hh_5 -> Ah_2 Ah_4)
6.57875743E-10	2	36	1000019	# BR(hh_5 -> Ah_2 Ah_5)
9.32905617E-02	2	1000017	1000017	# BR(hh_5 -> Ah_3 Ah_3)
1.69053469E-01	2	1000017	1000018	# BR(hh_5 -> Ah_3 Ah_4)
4.18532698E-07	2	1000017	1000019	# BR(hh_5 -> Ah_3 Ah_5)
6.24516039E-02	2	1000018	1000018	# BR(hh_5 -> Ah_4 Ah_4)
6.62527733E-01	2	1000018	1000019	# BR(hh_5 -> Ah_4 Ah_5)
5.15036296E-06	2	1000019	1000019	# BR(hh_5 -> Ah_5 Ah_5)
1.19172684E-13	2	36	23	# BR(hh_5 -> Ah_2 VZ)
5.97841317E-14	2	1000017	23	# BR(hh_5 -> Ah_3 VZ)
3.06902813E-14	2	1000018	23	# BR(hh_5 -> Ah_4 VZ)
3.60789150E-09	2	1000019	23	# BR(hh_5 -> Ah_5 VZ)
1.01827105E-14	2	-11	11	# BR(hh_5 -> Cha_1^* Cha_1)
1.09924900E-29	2	-11	13	# BR(hh_5 -> Cha_1^* Cha_2)
3.25894134E-30	2	-11	15	# BR(hh_5 -> Cha_1^* Cha_3)
5.27888582E-16	2	-11	-1000024	# BR(hh_5 -> Cha_1^* Cha_4)
1.09924900E-29	2	-13	11	# BR(hh_5 -> Cha_2^* Cha_1)
4.54884145E-10	2	-13	13	# BR(hh_5 -> Cha_2^* Cha_2)
4.47639536E-30	2	-13	15	# BR(hh_5 -> Cha_2^* Cha_3)
8.37206564E-18	2	-13	-1000024	# BR(hh_5 -> Cha_2^* Cha_4)
3.25894134E-30	2	-15	11	# BR(hh_5 -> Cha_3^* Cha_1)
4.47639536E-30	2	-15	13	# BR(hh_5 -> Cha_3^* Cha_2)
1.31454924E-07	2	-15	15	# BR(hh_5 -> Cha_3^* Cha_3)
3.38837049E-16	2	-15	-1000024	# BR(hh_5 -> Cha_3^* Cha_4)
5.27888582E-16	2	1000024	11	# BR(hh_5 -> Cha_4^* Cha_1)
8.37206564E-18	2	1000024	13	# BR(hh_5 -> Cha_4^* Cha_2)

3.38837049E-16	2	1000024	15	# BR(hh_5 -> Cha_4^* Cha_3)
2.07538487E-30	2	12	12	# BR(hh_5 -> Chi_1 Chi_1)
1.45382867E-28	2	12	14	# BR(hh_5 -> Chi_1 Chi_2)
2.35288015E-25	2	12	16	# BR(hh_5 -> Chi_1 Chi_3)
1.16564791E-17	2	12	1000022	# BR(hh_5 -> Chi_1 Chi_4)
2.59964880E-15	2	12	1000023	# BR(hh_5 -> Chi_1 Chi_5)
1.40432669E-27	2	14	14	# BR(hh_5 -> Chi_2 Chi_2)
1.86919821E-24	2	14	16	# BR(hh_5 -> Chi_2 Chi_3)
9.78728244E-15	2	14	1000022	# BR(hh_5 -> Chi_2 Chi_4)
5.07080893E-15	2	14	1000023	# BR(hh_5 -> Chi_2 Chi_5)
3.01922048E-24	2	16	16	# BR(hh_5 -> Chi_3 Chi_3)
8.50951787E-15	2	16	1000022	# BR(hh_5 -> Chi_3 Chi_4)
3.42812845E-15	2	16	1000023	# BR(hh_5 -> Chi_3 Chi_5)
8.19808006E-13	2	-1	1	# BR(hh_5 -> Fd_1^* Fd_1)
2.94877433E-10	2	-3	3	# BR(hh_5 -> Fd_2^* Fd_2)
7.91711244E-07	2	-5	5	# BR(hh_5 -> Fd_3^* Fd_3)
1.46820279E-13	2	-2	2	# BR(hh_5 -> Fu_1^* Fu_1)
3.48785169E-08	2	-4	4	# BR(hh_5 -> Fu_2^* Fu_2)
1.75916251E-03	2	-6	6	# BR(hh_5 -> Fu_3^* Fu_3)
5.60891335E-04	2	25	25	# BR(hh_5 -> hh_1 hh_1)
2.14693651E-13	2	25	35	# BR(hh_5 -> hh_1 hh_2)
3.30936371E-09	2	35	35	# BR(hh_5 -> hh_2 hh_2)
1.69046117E-09	2	-37	37	# BR(hh_5 -> Hpm_2^* Hpm_2)
1.19691380E-13	2	37	24	# BR(hh_5 -> Hpm_2 Vwm^*)
1.19691380E-13	2	37	-24	# BR(hh_5 -> Hpm_2^* Vwm)
6.95461875E-03	2	-24	24	# BR(hh_5 -> Vwm Vwm^*)
3.38966427E-03	2	23	23	# BR(hh_5 -> VZ VZ)
DECAY 2000012	3.13234082E+00	# hh_6		
# BR	NDA	ID1	ID2	
2.29126501E-07	2	22	22	# BR(hh_6 -> VP VP)
1.22105547E-04	2	21	21	# BR(hh_6 -> VG VG)
7.98321866E-07	2	36	36	# BR(hh_6 -> Ah_2 Ah_2)
2.10575935E-11	2	36	1000017	# BR(hh_6 -> Ah_2 Ah_3)
3.51952319E-10	2	36	1000018	# BR(hh_6 -> Ah_2 Ah_4)
3.20522897E-11	2	36	1000019	# BR(hh_6 -> Ah_2 Ah_5)
1.33597809E-01	2	1000017	1000017	# BR(hh_6 -> Ah_3 Ah_3)
5.77816568E-06	2	1000017	1000018	# BR(hh_6 -> Ah_3 Ah_4)
1.14468111E-03	2	1000017	1000019	# BR(hh_6 -> Ah_3 Ah_5)
1.73671748E-01	2	1000018	1000018	# BR(hh_6 -> Ah_4 Ah_4)
1.59024037E-03	2	1000018	1000019	# BR(hh_6 -> Ah_4 Ah_5)
1.51559720E-01	2	1000019	1000019	# BR(hh_6 -> Ah_5 Ah_5)
2.21188212E-12	2	36	23	# BR(hh_6 -> Ah_2 VZ)
5.01224204E-10	2	1000017	23	# BR(hh_6 -> Ah_3 VZ)
2.86185190E-10	2	1000018	23	# BR(hh_6 -> Ah_4 VZ)
3.73748816E-05	2	1000019	23	# BR(hh_6 -> Ah_5 VZ)
5.51064012E-13	2	-11	11	# BR(hh_6 -> Cha_1^* Cha_1)
6.17676204E-30	2	-11	15	# BR(hh_6 -> Cha_1^* Cha_3)
1.75943477E-18	2	-11	-1000024	# BR(hh_6 -> Cha_1^* Cha_4)
2.46172463E-08	2	-13	13	# BR(hh_6 -> Cha_2^* Cha_2)
3.54079320E-29	2	-13	15	# BR(hh_6 -> Cha_2^* Cha_3)
1.15850098E-15	2	-13	-1000024	# BR(hh_6 -> Cha_2^* Cha_4)
6.17676204E-30	2	-15	11	# BR(hh_6 -> Cha_3^* Cha_1)
3.54079320E-29	2	-15	13	# BR(hh_6 -> Cha_3^* Cha_2)
7.11410492E-06	2	-15	15	# BR(hh_6 -> Cha_3^* Cha_3)
1.91072254E-17	2	-15	-1000024	# BR(hh_6 -> Cha_3^* Cha_4)
1.75943477E-18	2	1000024	11	# BR(hh_6 -> Cha_4^* Cha_1)
1.15850098E-15	2	1000024	13	# BR(hh_6 -> Cha_4^* Cha_2)
1.91072254E-17	2	1000024	15	# BR(hh_6 -> Cha_4^* Cha_3)
6.68616016E-29	2	12	16	# BR(hh_6 -> Chi_1 Chi_3)
7.43628752E-17	2	12	1000022	# BR(hh_6 -> Chi_1 Chi_4)
3.96663981E-17	2	12	1000023	# BR(hh_6 -> Chi_1 Chi_5)
9.09692658E-19	2	12	1000025	# BR(hh_6 -> Chi_1 Chi_6)
1.20467436E-19	2	12	1000039	# BR(hh_6 -> Chi_1 Chi_7)
1.73962281E-18	2	12	1000045	# BR(hh_6 -> Chi_1 Chi_8)
4.80331605E-29	2	14	14	# BR(hh_6 -> Chi_2 Chi_2)
4.86494850E-26	2	14	16	# BR(hh_6 -> Chi_2 Chi_3)
2.50264388E-15	2	14	1000022	# BR(hh_6 -> Chi_2 Chi_4)
1.87381378E-22	2	14	1000023	# BR(hh_6 -> Chi_2 Chi_5)
2.21778396E-18	2	14	1000025	# BR(hh_6 -> Chi_2 Chi_6)
9.98495741E-18	2	14	1000039	# BR(hh_6 -> Chi_2 Chi_7)
3.01689454E-19	2	14	1000045	# BR(hh_6 -> Chi_2 Chi_8)
6.62002886E-26	2	16	16	# BR(hh_6 -> Chi_3 Chi_3)
2.18489941E-15	2	16	1000022	# BR(hh_6 -> Chi_3 Chi_4)

3.74786948E-17	2		16	1000023	# BR(hh_6 -> Chi_3 Chi_5)
3.77419009E-19	2		16	1000025	# BR(hh_6 -> Chi_3 Chi_6)
3.80032013E-18	2		16	1000039	# BR(hh_6 -> Chi_3 Chi_7)
6.71090456E-19	2		16	1000045	# BR(hh_6 -> Chi_3 Chi_8)
4.43660545E-11	2		-1	1	# BR(hh_6 -> Fd_1^* Fd_1)
1.59580636E-08	2		-3	3	# BR(hh_6 -> Fd_2^* Fd_2)
4.28465032E-05	2		-5	5	# BR(hh_6 -> Fd_3^* Fd_3)
3.18679795E-12	2		-2	2	# BR(hh_6 -> Fu_1^* Fu_1)
7.57054190E-07	2		-4	4	# BR(hh_6 -> Fu_2^* Fu_2)
4.30255468E-02	2		-6	6	# BR(hh_6 -> Fu_3^* Fu_3)
2.07350346E-02	2		25	25	# BR(hh_6 -> hh_1 hh_1)
6.3345942E-13	2		25	35	# BR(hh_6 -> hh_1 hh_2)
7.90802565E-07	2		35	35	# BR(hh_6 -> hh_2 hh_2)
4.97251514E-07	2		-37	37	# BR(hh_6 -> Hpm_2^* Hpm_2)
2.09407368E-12	2		37	24	# BR(hh_6 -> Hpm_2 Vwm^*)
2.09407368E-12	2		-37	-24	# BR(hh_6 -> Hpm_2^* Vwm)
3.18315339E-01	2		-24	24	# BR(hh_6 -> Vwm Vwm^*)
1.56141548E-01	2		23	23	# BR(hh_6 -> VZ VZ)
DECAY	2000014	2.34752998E+01	#	hh_7	
#	BR	NDA	ID1	ID2	
5.17253886E-06	2		22	22	# BR(hh_7 -> VP VP)
2.57106293E-03	2		21	21	# BR(hh_7 -> VG VG)
4.39170869E-04	2		36	36	# BR(hh_7 -> Ah_2 Ah_2)
5.98858026E-14	2		36	1000017	# BR(hh_7 -> Ah_2 Ah_3)
8.88390842E-13	2		36	1000018	# BR(hh_7 -> Ah_2 Ah_4)
3.07621480E-15	2		36	1000019	# BR(hh_7 -> Ah_2 Ah_5)
4.54250608E-06	2		1000017	1000017	# BR(hh_7 -> Ah_3 Ah_3)
1.48419387E-10	2		1000017	1000018	# BR(hh_7 -> Ah_3 Ah_4)
7.70112118E-08	2		1000017	1000019	# BR(hh_7 -> Ah_3 Ah_5)
6.52503755E-06	2		1000018	1000018	# BR(hh_7 -> Ah_4 Ah_4)
9.75340826E-08	2		1000018	1000019	# BR(hh_7 -> Ah_4 Ah_5)
6.01440773E-06	2		1000019	1000019	# BR(hh_7 -> Ah_5 Ah_5)
4.90089759E-13	2		36	23	# BR(hh_7 -> Ah_2 VZ)
1.56914321E-07	2		1000017	23	# BR(hh_7 -> Ah_3 VZ)
9.04837100E-08	2		1000018	23	# BR(hh_7 -> Ah_4 VZ)
1.19464386E-02	2		1000019	23	# BR(hh_7 -> Ah_5 VZ)
2.19442159E-15	2		2000018	23	# BR(hh_7 -> Ah_6 VZ)
5.90970720E-12	2		-11	11	# BR(hh_7 -> Cha_1^* Cha_1)
3.25449175E-29	2		-11	15	# BR(hh_7 -> Cha_1^* Cha_3)
3.13565109E-16	2		-11	-1000024	# BR(hh_7 -> Cha_1^* Cha_4)
2.63999676E-07	2		-13	13	# BR(hh_7 -> Cha_2^* Cha_2)
1.10953626E-28	2		-13	15	# BR(hh_7 -> Cha_2^* Cha_3)
8.18994688E-17	2		-13	-1000024	# BR(hh_7 -> Cha_2^* Cha_4)
3.25449175E-29	2		-15	11	# BR(hh_7 -> Cha_3^* Cha_1)
1.10953626E-28	2		-15	13	# BR(hh_7 -> Cha_3^* Cha_2)
7.62933408E-05	2		-15	15	# BR(hh_7 -> Cha_3^* Cha_3)
1.86439545E-16	2		-15	-1000024	# BR(hh_7 -> Cha_3^* Cha_4)
3.13565109E-16	2		1000024	11	# BR(hh_7 -> Cha_4^* Cha_1)
8.18994688E-17	2		1000024	13	# BR(hh_7 -> Cha_4^* Cha_2)
1.86439545E-16	2		1000024	15	# BR(hh_7 -> Cha_4^* Cha_3)
7.44808834E-30	2		12	12	# BR(hh_7 -> Chi_1 Chi_1)
1.57596672E-27	2		12	16	# BR(hh_7 -> Chi_1 Chi_3)
1.07277845E-16	2		12	1000022	# BR(hh_7 -> Chi_1 Chi_4)
4.19525911E-21	2		12	1000023	# BR(hh_7 -> Chi_1 Chi_5)
2.10535171E-16	2		12	1000025	# BR(hh_7 -> Chi_1 Chi_6)
2.49135821E-17	2		12	1000039	# BR(hh_7 -> Chi_1 Chi_7)
2.15765604E-16	2		12	1000045	# BR(hh_7 -> Chi_1 Chi_8)
2.97084414E-28	2		14	14	# BR(hh_7 -> Chi_2 Chi_2)
2.15270667E-26	2		14	16	# BR(hh_7 -> Chi_2 Chi_3)
1.91384605E-15	2		14	1000022	# BR(hh_7 -> Chi_2 Chi_4)
2.55517234E-18	2		14	1000023	# BR(hh_7 -> Chi_2 Chi_5)
8.54516882E-16	2		14	1000025	# BR(hh_7 -> Chi_2 Chi_6)
1.25897614E-15	2		14	1000039	# BR(hh_7 -> Chi_2 Chi_7)
1.01961012E-16	2		14	1000045	# BR(hh_7 -> Chi_2 Chi_8)
2.81631184E-26	2		16	16	# BR(hh_7 -> Chi_3 Chi_3)
1.18071599E-15	2		16	1000022	# BR(hh_7 -> Chi_3 Chi_4)
1.47581182E-15	2		16	1000023	# BR(hh_7 -> Chi_3 Chi_5)
2.48726772E-16	2		16	1000025	# BR(hh_7 -> Chi_3 Chi_6)
3.94404898E-16	2		16	1000039	# BR(hh_7 -> Chi_3 Chi_7)
1.87284424E-16	2		16	1000045	# BR(hh_7 -> Chi_3 Chi_8)
4.75789354E-10	2		-1	1	# BR(hh_7 -> Fd_1^* Fd_1)
1.71137075E-07	2		-3	3	# BR(hh_7 -> Fd_2^* Fd_2)
4.59498655E-04	2		-5	5	# BR(hh_7 -> Fd_3^* Fd_3)

6.87679533E-11	2	-2	2	# BR(hh_7 -> Fu_1^* Fu_1)
1.63364931E-05	2	-4	4	# BR(hh_7 -> Fu_2^* Fu_2)
9.82507323E-01	2	-6	6	# BR(hh_7 -> Fu_3^* Fu_3)
1.78891829E-06	2	25	25	# BR(hh_7 -> hh_1 hh_1)
2.93445898E-14	2	25	35	# BR(hh_7 -> hh_1 hh_2)
5.84099361E-08	2	25	1000012	# BR(hh_7 -> hh_1 hh_3)
1.81804003E-15	2	25	1000014	# BR(hh_7 -> hh_1 hh_4)
5.43255011E-08	2	25	1000016	# BR(hh_7 -> hh_1 hh_5)
4.36372016E-04	2	35	35	# BR(hh_7 -> hh_2 hh_2)
2.65217700E-04	2	-37	37	# BR(hh_7 -> Hpm_2^* Hpm_2)
5.80103363E-15	2	37	24	# BR(hh_7 -> Hpm_2 VWm^*)
5.80103363E-15	2	-37	-24	# BR(hh_7 -> Hpm_2^* VWm)
1.50214602E-18	2	1000011	24	# BR(hh_7 -> Hpm_3 VWm^*)
1.50214602E-18	2	-1000011	-24	# BR(hh_7 -> Hpm_3^* VWm)
8.42590501E-04	2	-24	24	# BR(hh_7 -> VWm VWm^*)
4.14681470E-04	2	23	23	# BR(hh_7 -> VZ VZ)

DECAY 2000016

9.11790839E-02 # hh_8

#	BR	NDA	ID1	ID2	
5.38148302E-15	2	22	22	# BR(hh_8 -> VP VP)	
2.75217219E-12	2	21	21	# BR(hh_8 -> VG VG)	
3.69941628E-13	2	36	36	# BR(hh_8 -> Ah_2 Ah_2)	
6.21026853E-23	2	36	1000017	# BR(hh_8 -> Ah_2 Ah_3)	
1.70526244E-21	2	36	1000018	# BR(hh_8 -> Ah_2 Ah_4)	
7.79392375E-23	2	36	1000019	# BR(hh_8 -> Ah_2 Ah_5)	
9.74323322E-13	2	1000017	1000017	# BR(hh_8 -> Ah_3 Ah_3)	
4.88736963E-14	2	1000017	1000018	# BR(hh_8 -> Ah_3 Ah_4)	
1.18203909E-13	2	1000017	1000019	# BR(hh_8 -> Ah_3 Ah_5)	
7.91961210E-23	2	1000017	2000018	# BR(hh_8 -> Ah_3 Ah_6)	
2.07877560E-13	2	1000018	1000018	# BR(hh_8 -> Ah_4 Ah_4)	
8.45713701E-15	2	1000018	1000019	# BR(hh_8 -> Ah_4 Ah_5)	
3.63550993E-23	2	1000018	2000018	# BR(hh_8 -> Ah_4 Ah_6)	
3.43754642E-13	2	1000019	1000019	# BR(hh_8 -> Ah_5 Ah_5)	
9.01891569E-23	2	1000019	2000018	# BR(hh_8 -> Ah_5 Ah_6)	
9.05767557E-21	2	36	23	# BR(hh_8 -> Ah_2 VZ)	
5.08077092E-11	2	1000017	23	# BR(hh_8 -> Ah_3 VZ)	
3.62489506E-12	2	1000018	23	# BR(hh_8 -> Ah_4 VZ)	
6.20096600E-12	2	1000019	23	# BR(hh_8 -> Ah_5 VZ)	
3.34282905E-22	2	2000018	23	# BR(hh_8 -> Ah_6 VZ)	
8.54835932E-13	2	2000019	23	# BR(hh_8 -> Ah_7 VZ)	
5.49070150E-23	2	-11	11	# BR(hh_8 -> Cha_1^* Cha_1)	
5.68552209E-20	2	-11	13	# BR(hh_8 -> Cha_1^* Cha_2)	
2.08479016E-17	2	-11	15	# BR(hh_8 -> Cha_1^* Cha_3)	
9.49914954E-02	2	-11	-1000024	# BR(hh_8 -> Cha_1^* Cha_4)	
5.68552209E-20	2	-13	11	# BR(hh_8 -> Cha_2^* Cha_1)	
3.08386602E-17	2	-13	13	# BR(hh_8 -> Cha_2^* Cha_2)	
2.58391126E-26	2	-13	-1000024	# BR(hh_8 -> Cha_2^* Cha_4)	
2.08479016E-17	2	-15	11	# BR(hh_8 -> Cha_3^* Cha_1)	
8.91219899E-15	2	-15	15	# BR(hh_8 -> Cha_3^* Cha_3)	
1.16077433E-24	2	-15	-1000024	# BR(hh_8 -> Cha_3^* Cha_4)	
9.49914954E-02	2	1000024	11	# BR(hh_8 -> Cha_4^* Cha_1)	
2.58391126E-26	2	1000024	13	# BR(hh_8 -> Cha_4^* Cha_2)	
1.16077433E-24	2	1000024	15	# BR(hh_8 -> Cha_4^* Cha_3)	
4.84206542E-18	2	12	12	# BR(hh_8 -> Chi_1 Chi_1)	
6.06660183E-16	2	12	14	# BR(hh_8 -> Chi_1 Chi_2)	
1.64002403E-12	2	12	16	# BR(hh_8 -> Chi_1 Chi_3)	
2.54084485E-01	2	12	1000022	# BR(hh_8 -> Chi_1 Chi_4)	
9.45211990E-05	2	12	1000023	# BR(hh_8 -> Chi_1 Chi_5)	
6.23917373E-05	2	12	1000025	# BR(hh_8 -> Chi_1 Chi_6)	
5.39271829E-05	2	12	1000039	# BR(hh_8 -> Chi_1 Chi_7)	
4.82626488E-05	2	12	1000045	# BR(hh_8 -> Chi_1 Chi_8)	
2.86218881E-01	2	12	1000055	# BR(hh_8 -> Chi_1 Chi_9)	
5.35809223E-16	2	14	14	# BR(hh_8 -> Chi_2 Chi_2)	
6.82313067E-13	2	14	16	# BR(hh_8 -> Chi_2 Chi_3)	
1.03669801E-01	2	14	1000022	# BR(hh_8 -> Chi_2 Chi_4)	
3.85658884E-05	2	14	1000023	# BR(hh_8 -> Chi_2 Chi_5)	
2.54566468E-05	2	14	1000025	# BR(hh_8 -> Chi_2 Chi_6)	
2.20029976E-05	2	14	1000039	# BR(hh_8 -> Chi_2 Chi_7)	
1.96917934E-05	2	14	1000045	# BR(hh_8 -> Chi_2 Chi_8)	
1.16781056E-01	2	14	1000055	# BR(hh_8 -> Chi_2 Chi_9)	
2.96922052E-13	2	16	16	# BR(hh_8 -> Chi_3 Chi_3)	
2.29838642E-02	2	16	1000022	# BR(hh_8 -> Chi_3 Chi_4)	
8.55015765E-06	2	16	1000023	# BR(hh_8 -> Chi_3 Chi_5)	
5.64380474E-06	2	16	1000025	# BR(hh_8 -> Chi_3 Chi_6)	

4.87812173E-06	2	16	1000039	# BR(hh_8 -> Chi_3 Chi_7)
4.36572177E-06	2	16	1000045	# BR(hh_8 -> Chi_3 Chi_8)
2.58906635E-02	2	16	1000055	# BR(hh_8 -> Chi_3 Chi_9)
5.55784989E-20	2	-1	1	# BR(hh_8 -> Fd_1^* Fd_1)
1.99910769E-17	2	-3	3	# BR(hh_8 -> Fd_2^* Fd_2)
5.36769782E-14	2	-5	5	# BR(hh_8 -> Fd_3^* Fd_3)
8.26763652E-20	2	-2	2	# BR(hh_8 -> Fu_1^* Fu_1)
1.96405947E-14	2	-4	4	# BR(hh_8 -> Fu_2^* Fu_2)
1.34308134E-09	2	-6	6	# BR(hh_8 -> Fu_3^* Fu_3)
4.33947100E-15	2	25	25	# BR(hh_8 -> hh_1 hh_1)
1.60431756E-23	2	25	35	# BR(hh_8 -> hh_1 hh_2)
2.08562630E-11	2	25	1000012	# BR(hh_8 -> hh_1 hh_3)
4.42952167E-21	2	25	1000014	# BR(hh_8 -> hh_1 hh_4)
1.80937604E-12	2	25	1000016	# BR(hh_8 -> hh_1 hh_5)
1.17765107E-11	2	25	2000012	# BR(hh_8 -> hh_1 hh_6)
8.61200017E-14	2	25	2000014	# BR(hh_8 -> hh_1 hh_7)
3.69045946E-13	2	35	35	# BR(hh_8 -> hh_2 hh_2)
9.44388735E-23	2	35	1000012	# BR(hh_8 -> hh_2 hh_3)
1.59919240E-24	2	35	1000016	# BR(hh_8 -> hh_2 hh_5)
2.13868735E-23	2	35	2000012	# BR(hh_8 -> hh_2 hh_6)
2.23781317E-13	2	-37	37	# BR(hh_8 -> Hpm_2^* Hpm_2)
9.68875392E-24	2	37	24	# BR(hh_8 -> Hpm_2 Vwm^*)
9.68875392E-24	2	-37	-24	# BR(hh_8 -> Hpm_2^* Vwm)
2.65150582E-22	2	1000011	24	# BR(hh_8 -> Hpm_3 Vwm^*)
2.65150582E-22	2	-1000011	-24	# BR(hh_8 -> Hpm_3^* Vwm)
1.69031356E-13	2	2000011	24	# BR(hh_8 -> Hpm_4 Vwm^*)
1.69031356E-13	2	-2000011	-24	# BR(hh_8 -> Hpm_4^* Vwm)
6.50876122E-12	2	-24	24	# BR(hh_8 -> Vwm Vwm^*)
3.23007236E-12	2	23	23	# BR(hh_8 -> VZ VZ)

DECAY 36 8.33588153E-13 # Ah_2

#	BR	NDA	ID1	ID2	
1.17560226E-04	2	22	22	22	# BR(Ah_2 -> VP VP)
1.02183850E-01	2	21	21	21	# BR(Ah_2 -> VG VG)
5.07629337E-10	2	-11	11	11	# BR(Ah_2 -> Cha_1^* Cha_1)
2.25260505E-30	2	-11	13	13	# BR(Ah_2 -> Cha_1^* Cha_2)
6.66264554E-05	2	-11	15	15	# BR(Ah_2 -> Cha_1^* Cha_3)
2.25260505E-30	2	-13	11	11	# BR(Ah_2 -> Cha_2^* Cha_1)
2.26769201E-05	2	-13	13	13	# BR(Ah_2 -> Cha_2^* Cha_2)
2.70193721E-04	2	-13	15	15	# BR(Ah_2 -> Cha_2^* Cha_3)
6.66264554E-05	2	-15	11	11	# BR(Ah_2 -> Cha_3^* Cha_1)
2.70193721E-04	2	-15	13	13	# BR(Ah_2 -> Cha_3^* Cha_2)
6.97361113E-03	2	-15	15	15	# BR(Ah_2 -> Cha_3^* Cha_3)
6.00139978E-08	2	12	12	12	# BR(Ah_2 -> Chi_1 Chi_1)
9.06559690E-06	2	12	14	14	# BR(Ah_2 -> Chi_1 Chi_2)
2.04103362E-02	2	12	16	16	# BR(Ah_2 -> Chi_1 Chi_3)
1.35686024E-05	2	14	14	14	# BR(Ah_2 -> Chi_2 Chi_2)
1.80029215E-02	2	14	16	16	# BR(Ah_2 -> Chi_2 Chi_3)
7.81281006E-02	2	16	16	16	# BR(Ah_2 -> Chi_3 Chi_3)
4.08691371E-08	2	-1	1	1	# BR(Ah_2 -> Fd_1^* Fd_1)
1.47002549E-05	2	-3	3	3	# BR(Ah_2 -> Fd_2^* Fd_2)
3.94671251E-02	2	-5	5	5	# BR(Ah_2 -> Fd_3^* Fd_3)
2.17171593E-09	2	-2	2	2	# BR(Ah_2 -> Fu_1^* Fu_1)
5.15910791E-04	2	-4	4	4	# BR(Ah_2 -> Fu_2^* Fu_2)
8.50743118E-30	2	25	25	25	# BR(Ah_2 -> hh_1 hh_1)
7.33466829E-01	2	25	23	23	# BR(Ah_2 -> hh_1 VZ)

DECAY 1000017 5.92237378E-10 # Ah_3

#	BR	NDA	ID1	ID2	
2.64064217E-02	2	22	22	22	# BR(Ah_3 -> VP VP)
5.57078791E-01	2	21	21	21	# BR(Ah_3 -> VG VG)
3.97274262E-09	2	-11	11	11	# BR(Ah_3 -> Cha_1^* Cha_1)
1.69493374E-22	2	-11	13	13	# BR(Ah_3 -> Cha_1^* Cha_2)
5.79699134E-18	2	-11	15	15	# BR(Ah_3 -> Cha_1^* Cha_3)
1.69493374E-22	2	-13	11	11	# BR(Ah_3 -> Cha_2^* Cha_1)
1.77471160E-04	2	-13	13	13	# BR(Ah_3 -> Cha_2^* Cha_2)
2.80077688E-17	2	-13	15	15	# BR(Ah_3 -> Cha_2^* Cha_3)
5.79699134E-18	2	-15	11	11	# BR(Ah_3 -> Cha_3^* Cha_1)
2.80077688E-17	2	-15	13	13	# BR(Ah_3 -> Cha_3^* Cha_2)
5.12850321E-02	2	-15	15	15	# BR(Ah_3 -> Cha_3^* Cha_3)
4.80568434E-21	2	12	12	12	# BR(Ah_3 -> Chi_1 Chi_1)
9.54321820E-19	2	12	14	14	# BR(Ah_3 -> Chi_1 Chi_2)
1.93175359E-15	2	12	16	16	# BR(Ah_3 -> Chi_1 Chi_3)
1.63162664E-18	2	14	14	14	# BR(Ah_3 -> Chi_2 Chi_2)
2.06836109E-15	2	14	16	16	# BR(Ah_3 -> Chi_2 Chi_3)

6.97615078E-15	2		16	16	# BR(Ah_3 -> Chi_3 Chi_3)
3.19844721E-07	2		-1	1	# BR(Ah_3 -> Fd_1^* Fd_1)
1.15045221E-04	2		-3	3	# BR(Ah_3 -> Fd_2^* Fd_2)
3.08872578E-01	2		-5	5	# BR(Ah_3 -> Fd_3^* Fd_3)
4.25300196E-08	2		-2	2	# BR(Ah_3 -> Fu_1^* Fu_1)
1.01033916E-02	2		-4	4	# BR(Ah_3 -> Fu_2^* Fu_2)
1.97912117E-24	2		25	25	# BR(Ah_3 -> hh_1 hh_1)
4.59609029E-02	2		25	23	# BR(Ah_3 -> hh_1 VZ)
DECAY 1000018		3.49058790E-10	# Ah_4		
# BR	NDA	ID1	ID2		
5.98483551E-02	2	22	22	# BR(Ah_4 -> VP VP)	
5.34246182E-01	2	21	21	# BR(Ah_4 -> VG VG)	
3.91027240E-09	2	-11	11	# BR(Ah_4 -> Cha_1^* Cha_1)	
4.20416244E-23	2	-11	13	# BR(Ah_4 -> Cha_1^* Cha_2)	
1.55974620E-16	2	-11	15	# BR(Ah_4 -> Cha_1^* Cha_3)	
4.20416244E-23	2	-13	11	# BR(Ah_4 -> Cha_2^* Cha_1)	
1.74680478E-04	2	-13	13	# BR(Ah_4 -> Cha_2^* Cha_2)	
6.24338931E-16	2	-13	15	# BR(Ah_4 -> Cha_2^* Cha_3)	
1.55974620E-16	2	-15	11	# BR(Ah_4 -> Cha_3^* Cha_1)	
6.24338931E-16	2	-15	13	# BR(Ah_4 -> Cha_3^* Cha_2)	
5.04786206E-02	2	-15	15	# BR(Ah_4 -> Cha_3^* Cha_3)	
1.53640482E-19	2	12	12	# BR(Ah_4 -> Chi_1 Chi_1)	
2.11765370E-17	2	12	14	# BR(Ah_4 -> Chi_1 Chi_2)	
4.72221782E-14	2	12	16	# BR(Ah_4 -> Chi_1 Chi_3)	
2.98049217E-17	2	14	14	# BR(Ah_4 -> Chi_2 Chi_2)	
4.09586823E-14	2	14	16	# BR(Ah_4 -> Chi_2 Chi_3)	
1.88764496E-13	2	16	16	# BR(Ah_4 -> Chi_3 Chi_3)	
3.14815255E-07	2	-1	1	# BR(Ah_4 -> Fd_1^* Fd_1)	
1.13236168E-04	2	-3	3	# BR(Ah_4 -> Fd_2^* Fd_2)	
3.04016008E-01	2	-5	5	# BR(Ah_4 -> Fd_3^* Fd_3)	
4.20477429E-08	2	-2	2	# BR(Ah_4 -> Fu_1^* Fu_1)	
9.98882327E-03	2	-4	4	# BR(Ah_4 -> Fu_2^* Fu_2)	
4.55219623E-26	2	25	25	# BR(Ah_4 -> hh_1 hh_1)	
4.11337336E-02	2	25	23	# BR(Ah_4 -> hh_1 VZ)	
DECAY 1000019		4.53821180E-05	# Ah_5		
# BR	NDA	ID1	ID2		
1.76172098E-02	2	22	22	# BR(Ah_5 -> VP VP)	
5.61918606E-01	2	21	21	# BR(Ah_5 -> VG VG)	
4.06511272E-09	2	-11	11	# BR(Ah_5 -> Cha_1^* Cha_1)	
1.05566232E-27	2	-11	13	# BR(Ah_5 -> Cha_1^* Cha_2)	
6.73979211E-23	2	-11	15	# BR(Ah_5 -> Cha_1^* Cha_3)	
1.05566232E-27	2	-13	11	# BR(Ah_5 -> Cha_2^* Cha_1)	
1.81597537E-04	2	-13	13	# BR(Ah_5 -> Cha_2^* Cha_2)	
2.74127969E-22	2	-13	15	# BR(Ah_5 -> Cha_2^* Cha_3)	
6.73979211E-23	2	-15	11	# BR(Ah_5 -> Cha_3^* Cha_1)	
2.74127969E-22	2	-15	13	# BR(Ah_5 -> Cha_3^* Cha_2)	
5.24775946E-02	2	-15	15	# BR(Ah_5 -> Cha_3^* Cha_3)	
7.57445542E-26	2	12	12	# BR(Ah_5 -> Chi_1 Chi_1)	
1.04839842E-23	2	12	14	# BR(Ah_5 -> Chi_1 Chi_2)	
2.35249783E-20	2	12	16	# BR(Ah_5 -> Chi_1 Chi_3)	
1.63766204E-23	2	14	14	# BR(Ah_5 -> Chi_2 Chi_2)	
2.10499678E-20	2	14	16	# BR(Ah_5 -> Chi_2 Chi_3)	
7.47650011E-20	2	16	16	# BR(Ah_5 -> Chi_3 Chi_3)	
3.27281418E-07	2	-1	1	# BR(Ah_5 -> Fd_1^* Fd_1)	
1.17720133E-04	2	-3	3	# BR(Ah_5 -> Fd_2^* Fd_2)	
3.16055683E-01	2	-5	5	# BR(Ah_5 -> Fd_3^* Fd_3)	
4.38864551E-08	2	-2	2	# BR(Ah_5 -> Fu_1^* Fu_1)	
1.04256277E-02	2	-4	4	# BR(Ah_5 -> Fu_2^* Fu_2)	
5.92506040E-27	2	25	25	# BR(Ah_5 -> hh_1 hh_1)	
4.12055866E-02	2	25	23	# BR(Ah_5 -> hh_1 VZ)	
DECAY 2000018		3.35229726E-03	# Ah_6		
# BR	NDA	ID1	ID2		
2.32611604E-15	2	22	22	# BR(Ah_6 -> VP VP)	
1.09460532E-12	2	21	21	# BR(Ah_6 -> VG VG)	
2.50801041E-19	2	25	36	# BR(Ah_6 -> hh_1 Ah_2)	
1.25383629E-09	2	25	1000017	# BR(Ah_6 -> hh_1 Ah_3)	
1.34102181E-09	2	25	1000018	# BR(Ah_6 -> hh_1 Ah_4)	
2.24139164E-09	2	25	1000019	# BR(Ah_6 -> hh_1 Ah_5)	
1.42184532E-30	2	35	36	# BR(Ah_6 -> hh_2 Ah_2)	
4.83596276E-21	2	35	1000017	# BR(Ah_6 -> hh_2 Ah_3)	
6.03142213E-21	2	35	1000018	# BR(Ah_6 -> hh_2 Ah_4)	
7.73474130E-21	2	35	1000019	# BR(Ah_6 -> hh_2 Ah_5)	
3.46399938E-19	2	-11	11	# BR(Ah_6 -> Cha_1^* Cha_1)	

1.25159005E-16	2		-11	13	# BR(Ah_6 -> Cha_1^* Cha_2)
5.36038337E-26	2		-11	-1000024	# BR(Ah_6 -> Cha_1^* Cha_4)
1.25159005E-16	2		-13	11	# BR(Ah_6 -> Cha_2^* Cha_1)
2.39881575E-14	2		-13	13	# BR(Ah_6 -> Cha_2^* Cha_2)
3.64224665E-16	2		-13	15	# BR(Ah_6 -> Cha_2^* Cha_3)
1.51460753E-01	2		-13	-1000024	# BR(Ah_6 -> Cha_2^* Cha_4)
3.64224665E-16	2		-15	13	# BR(Ah_6 -> Cha_3^* Cha_2)
4.47204077E-12	2		-15	15	# BR(Ah_6 -> Cha_3^* Cha_3)
3.00739281E-25	2		-15	-1000024	# BR(Ah_6 -> Cha_3^* Cha_4)
5.36038337E-26	2	1000024		11	# BR(Ah_6 -> Cha_4^* Cha_1)
1.51460753E-01	2	1000024		13	# BR(Ah_6 -> Cha_4^* Cha_2)
3.00739281E-25	2	1000024		15	# BR(Ah_6 -> Cha_4^* Cha_3)
8.10506033E-18	2		12	12	# BR(Ah_6 -> Chi_1 Chi_1)
1.49870273E-15	2		12	14	# BR(Ah_6 -> Chi_1 Chi_2)
2.73028393E-12	2		12	16	# BR(Ah_6 -> Chi_1 Chi_3)
4.61848056E-02	2		12	1000022	# BR(Ah_6 -> Chi_1 Chi_4)
1.18699175E-05	2		12	1000023	# BR(Ah_6 -> Chi_1 Chi_5)
1.67718622E-14	2		14	14	# BR(Ah_6 -> Chi_2 Chi_2)
2.01966120E-11	2		14	16	# BR(Ah_6 -> Chi_2 Chi_3)
3.52386075E-01	2		14	1000022	# BR(Ah_6 -> Chi_2 Chi_4)
9.05664450E-05	2		14	1000023	# BR(Ah_6 -> Chi_2 Chi_5)
3.54910439E-11	2		16	16	# BR(Ah_6 -> Chi_3 Chi_3)
2.98328498E-01	2		16	1000022	# BR(Ah_6 -> Chi_3 Chi_4)
7.66731531E-05	2		16	1000023	# BR(Ah_6 -> Chi_3 Chi_5)
2.78885909E-17	2		-1	1	# BR(Ah_6 -> Fd_1^* Fd_1)
1.00312706E-14	2		-3	3	# BR(Ah_6 -> Fd_2^* Fd_2)
2.69347490E-11	2		-5	5	# BR(Ah_6 -> Fd_3^* Fd_3)
2.02064770E-20	2		-2	2	# BR(Ah_6 -> Fu_1^* Fu_1)
4.80025575E-15	2		-4	4	# BR(Ah_6 -> Fu_2^* Fu_2)
3.36153731E-10	2		-6	6	# BR(Ah_6 -> Fu_3^* Fu_3)
4.04084417E-11	2		25	23	# BR(Ah_6 -> hh_1 VZ)
2.62511657E-20	2		35	23	# BR(Ah_6 -> hh_2 VZ)
2.65127037E-26	2		37	24	# BR(Ah_6 -> Hpm_2 VWm^*)
2.65127037E-26	2		-37	-24	# BR(Ah_6 -> Hpm_2^* VWm)
DECAY	2000019	2.75383092E+01	#	Ah_7	
#	BR	NDA	ID1	ID2	
5.64987234E-06	2		22	22	# BR(Ah_7 -> VP VP)
2.79585192E-03	2		21	21	# BR(Ah_7 -> VG VG)
6.43545116E-13	2		25	36	# BR(Ah_7 -> hh_1 Ah_2)
3.42365988E-07	2		25	1000017	# BR(Ah_7 -> hh_1 Ah_3)
2.39829761E-07	2		25	1000018	# BR(Ah_7 -> hh_1 Ah_4)
1.09968045E-02	2		25	1000019	# BR(Ah_7 -> hh_1 Ah_5)
3.45889257E-16	2		25	2000018	# BR(Ah_7 -> hh_1 Ah_6)
3.23427023E-23	2		35	36	# BR(Ah_7 -> hh_2 Ah_2)
6.34646182E-16	2		35	1000017	# BR(Ah_7 -> hh_2 Ah_3)
7.89632261E-15	2		35	1000018	# BR(Ah_7 -> hh_2 Ah_4)
1.16528295E-13	2		35	1000019	# BR(Ah_7 -> hh_2 Ah_5)
5.11896114E-12	2		-11	11	# BR(Ah_7 -> Cha_1^* Cha_1)
2.47679791E-29	2		-11	15	# BR(Ah_7 -> Cha_1^* Cha_3)
1.57813340E-17	2		-11	-1000024	# BR(Ah_7 -> Cha_1^* Cha_4)
2.28675321E-07	2		-13	13	# BR(Ah_7 -> Cha_2^* Cha_2)
1.20659692E-28	2		-13	15	# BR(Ah_7 -> Cha_2^* Cha_3)
1.28093693E-15	2		-13	-1000024	# BR(Ah_7 -> Cha_2^* Cha_4)
2.47679791E-29	2		-15	11	# BR(Ah_7 -> Cha_3^* Cha_1)
1.20659692E-28	2		-15	13	# BR(Ah_7 -> Cha_3^* Cha_2)
6.60864195E-05	2		-15	15	# BR(Ah_7 -> Cha_3^* Cha_3)
3.84365909E-16	2		-15	-1000024	# BR(Ah_7 -> Cha_3^* Cha_4)
1.57813340E-17	2	1000024		11	# BR(Ah_7 -> Cha_4^* Cha_1)
1.28093693E-15	2	1000024		13	# BR(Ah_7 -> Cha_4^* Cha_2)
3.84365909E-16	2	1000024		15	# BR(Ah_7 -> Cha_4^* Cha_3)
6.22781279E-30	2		12	12	# BR(Ah_7 -> Chi_1 Chi_1)
9.93425947E-28	2		12	16	# BR(Ah_7 -> Chi_1 Chi_3)
6.79635160E-17	2		12	1000022	# BR(Ah_7 -> Chi_1 Chi_4)
4.25373209E-20	2		12	1000023	# BR(Ah_7 -> Chi_1 Chi_5)
1.67446555E-16	2		12	1000025	# BR(Ah_7 -> Chi_1 Chi_6)
1.95971798E-17	2		12	1000039	# BR(Ah_7 -> Chi_1 Chi_7)
1.70115658E-16	2		12	1000045	# BR(Ah_7 -> Chi_1 Chi_8)
2.41811914E-28	2		14	14	# BR(Ah_7 -> Chi_2 Chi_2)
1.64266458E-26	2		14	16	# BR(Ah_7 -> Chi_2 Chi_3)
1.38484726E-15	2		14	1000022	# BR(Ah_7 -> Chi_2 Chi_4)
6.34647238E-19	2		14	1000023	# BR(Ah_7 -> Chi_2 Chi_5)
6.82415941E-16	2		14	1000025	# BR(Ah_7 -> Chi_2 Chi_6)
9.96935366E-16	2		14	1000039	# BR(Ah_7 -> Chi_2 Chi_7)

8.05378910E-17	2		14	1000045	# BR(Ah_7 -> Chi_2 Chi_8)
2.24337906E-26	2		16	16	# BR(Ah_7 -> Chi_3 Chi_3)
4.47962079E-15	2		16	1000022	# BR(Ah_7 -> Chi_3 Chi_4)
5.15940324E-19	2		16	1000023	# BR(Ah_7 -> Chi_3 Chi_5)
1.49225655E-16	2		16	1000025	# BR(Ah_7 -> Chi_3 Chi_6)
3.82459638E-16	2		16	1000039	# BR(Ah_7 -> Chi_3 Chi_7)
1.05846229E-16	2		16	1000045	# BR(Ah_7 -> Chi_3 Chi_8)
4.12126554E-10	2		-1	1	# BR(Ah_7 -> Fd_1^* Fd_1)
1.48238145E-07	2		-3	3	# BR(Ah_7 -> Fd_2^* Fd_2)
3.98033897E-04	2		-5	5	# BR(Ah_7 -> Fd_3^* Fd_3)
5.65102530E-11	2		-2	2	# BR(Ah_7 -> Fu_1^* Fu_1)
1.34245923E-05	2		-4	4	# BR(Ah_7 -> Fu_2^* Fu_2)
9.85203764E-01	2		-6	6	# BR(Ah_7 -> Fu_3^* Fu_3)
5.19424274E-04	2		25	23	# BR(Ah_7 -> hh_1 VZ)
1.53601368E-14	2		35	23	# BR(Ah_7 -> hh_2 VZ)
2.26038464E-10	2	1000012		23	# BR(Ah_7 -> hh_3 VZ)
5.07479278E-16	2	1000014		23	# BR(Ah_7 -> hh_4 VZ)
1.08702932E-09	2	1000016		23	# BR(Ah_7 -> hh_5 VZ)
3.29373312E-15	2	37		24	# BR(Ah_7 -> Hpm_2 VWm^*)
3.29373312E-15	2	-37		-24	# BR(Ah_7 -> Hpm_2^* VWm)
1.21582764E-15	2	1000011		24	# BR(Ah_7 -> Hpm_3 VWm^*)
1.21582764E-15	2	-1000011		-24	# BR(Ah_7 -> Hpm_3^* VWm)
DECAY	2000020	9.11790839E-02	# Ah_8		
#	BR	NDA	ID1	ID2	
6.10886547E-15	2		22	22	# BR(Ah_8 -> VP VP)
3.31511949E-12	2		21	21	# BR(Ah_8 -> VG VG)
9.36555359E-21	2		25	36	# BR(Ah_8 -> hh_1 Ah_2)
4.98417658E-11	2		25	1000017	# BR(Ah_8 -> hh_1 Ah_3)
3.57131506E-12	2		25	1000018	# BR(Ah_8 -> hh_1 Ah_4)
7.22092785E-12	2		25	1000019	# BR(Ah_8 -> hh_1 Ah_5)
1.03792683E-25	2		25	2000018	# BR(Ah_8 -> hh_1 Ah_6)
4.99013247E-13	2		25	2000019	# BR(Ah_8 -> hh_1 Ah_7)
3.44162662E-22	2		35	1000017	# BR(Ah_8 -> hh_2 Ah_3)
5.95102641E-23	2		35	1000018	# BR(Ah_8 -> hh_2 Ah_4)
1.25813440E-23	2		35	1000019	# BR(Ah_8 -> hh_2 Ah_5)
1.18954604E-22	2	1000012		36	# BR(Ah_8 -> hh_3 Ah_2)
5.06151021E-14	2	1000012		1000017	# BR(Ah_8 -> hh_3 Ah_3)
2.37768275E-14	2	1000012		1000018	# BR(Ah_8 -> hh_3 Ah_4)
2.57905375E-13	2	1000012		1000019	# BR(Ah_8 -> hh_3 Ah_5)
9.21927782E-24	2	1000014		1000017	# BR(Ah_8 -> hh_4 Ah_3)
3.46605232E-23	2	1000014		1000018	# BR(Ah_8 -> hh_4 Ah_4)
2.71568411E-22	2	1000014		1000019	# BR(Ah_8 -> hh_4 Ah_5)
6.65250453E-23	2	1000016		36	# BR(Ah_8 -> hh_5 Ah_2)
3.92645426E-14	2	1000016		1000017	# BR(Ah_8 -> hh_5 Ah_3)
8.80028415E-14	2	1000016		1000018	# BR(Ah_8 -> hh_5 Ah_4)
2.63950647E-14	2	1000016		1000019	# BR(Ah_8 -> hh_5 Ah_5)
1.00831253E-22	2	2000012		36	# BR(Ah_8 -> hh_6 Ah_2)
2.01798708E-13	2	2000012		1000017	# BR(Ah_8 -> hh_6 Ah_3)
1.55569407E-14	2	2000012		1000018	# BR(Ah_8 -> hh_6 Ah_4)
4.40476615E-14	2	2000012		1000019	# BR(Ah_8 -> hh_6 Ah_5)
5.70996946E-23	2		-11	11	# BR(Ah_8 -> Cha_1^* Cha_1)
5.68552209E-20	2		-11	13	# BR(Ah_8 -> Cha_1^* Cha_2)
2.08479016E-17	2		-11	15	# BR(Ah_8 -> Cha_1^* Cha_3)
9.49914954E-02	2		-11	-1000024	# BR(Ah_8 -> Cha_1^* Cha_4)
5.68552209E-20	2		-13	11	# BR(Ah_8 -> Cha_2^* Cha_1)
2.82736471E-17	2		-13	13	# BR(Ah_8 -> Cha_2^* Cha_2)
1.31613194E-24	2		-13	-1000024	# BR(Ah_8 -> Cha_2^* Cha_4)
2.08479016E-17	2		-15	11	# BR(Ah_8 -> Cha_3^* Cha_1)
8.17103103E-15	2		-15	15	# BR(Ah_8 -> Cha_3^* Cha_3)
4.49730730E-25	2		-15	-1000024	# BR(Ah_8 -> Cha_3^* Cha_4)
9.49914954E-02	2	1000024		11	# BR(Ah_8 -> Cha_4^* Cha_1)
1.31613194E-24	2	1000024		13	# BR(Ah_8 -> Cha_4^* Cha_2)
4.49730730E-25	2	1000024		15	# BR(Ah_8 -> Cha_4^* Cha_3)
4.84206542E-18	2		12	12	# BR(Ah_8 -> Chi_1 Chi_1)
6.06660183E-16	2		12	14	# BR(Ah_8 -> Chi_1 Chi_2)
1.64002403E-12	2		12	16	# BR(Ah_8 -> Chi_1 Chi_3)
2.54084485E-01	2		12	1000022	# BR(Ah_8 -> Chi_1 Chi_4)
9.45211990E-05	2		12	1000023	# BR(Ah_8 -> Chi_1 Chi_5)
6.23917373E-05	2		12	1000025	# BR(Ah_8 -> Chi_1 Chi_6)
5.39271829E-05	2		12	1000039	# BR(Ah_8 -> Chi_1 Chi_7)
4.82626488E-05	2		12	1000045	# BR(Ah_8 -> Chi_1 Chi_8)
2.86218881E-01	2		12	1000055	# BR(Ah_8 -> Chi_1 Chi_9)
5.35809223E-16	2		14	14	# BR(Ah_8 -> Chi_2 Chi_2)

6.82313067E-13	2		14	16	# BR(Ah_8 -> Chi_2 Chi_3)
1.03669801E-01	2		14	1000022	# BR(Ah_8 -> Chi_2 Chi_4)
3.85658884E-05	2		14	1000023	# BR(Ah_8 -> Chi_2 Chi_5)
2.54566468E-05	2		14	1000025	# BR(Ah_8 -> Chi_2 Chi_6)
2.20029976E-05	2		14	1000039	# BR(Ah_8 -> Chi_2 Chi_7)
1.96917934E-05	2		14	1000045	# BR(Ah_8 -> Chi_2 Chi_8)
1.16781056E-01	2		14	1000055	# BR(Ah_8 -> Chi_2 Chi_9)
2.96922052E-13	2		16	16	# BR(Ah_8 -> Chi_3 Chi_3)
2.29838642E-02	2		16	1000022	# BR(Ah_8 -> Chi_3 Chi_4)
8.55015766E-06	2		16	1000023	# BR(Ah_8 -> Chi_3 Chi_5)
5.64380474E-06	2		16	1000025	# BR(Ah_8 -> Chi_3 Chi_6)
4.87812173E-06	2		16	1000039	# BR(Ah_8 -> Chi_3 Chi_7)
4.36572177E-06	2		16	1000045	# BR(Ah_8 -> Chi_3 Chi_8)
2.58906635E-02	2		16	1000055	# BR(Ah_8 -> Chi_3 Chi_9)
5.09557413E-20	2		-1	1	# BR(Ah_8 -> Fd_1^* Fd_1)
1.83283132E-17	2		-3	3	# BR(Ah_8 -> Fd_2^* Fd_2)
4.92135764E-14	2		-5	5	# BR(Ah_8 -> Fd_3^* Fd_3)
7.40885848E-20	2		-2	2	# BR(Ah_8 -> Fu_1^* Fu_1)
1.76005038E-14	2		-4	4	# BR(Ah_8 -> Fu_2^* Fu_2)
1.33705414E-09	2		-6	6	# BR(Ah_8 -> Fu_3^* Fu_3)
4.94405734E-13	2		25	23	# BR(Ah_8 -> hh_1 VZ)
1.17959010E-24	2		35	23	# BR(Ah_8 -> hh_2 VZ)
2.38525571E-11	2	1000012		23	# BR(Ah_8 -> hh_3 VZ)
3.50039586E-21	2	1000014		23	# BR(Ah_8 -> hh_4 VZ)
2.27186721E-12	2	1000016		23	# BR(Ah_8 -> hh_5 VZ)
2.09720272E-11	2	2000012		23	# BR(Ah_8 -> hh_6 VZ)
8.81501961E-13	2	2000014		23	# BR(Ah_8 -> hh_7 VZ)
2.56827425E-24	2		37	24	# BR(Ah_8 -> Hpm_2 Vwm^*)
2.56827425E-24	2		-37	-24	# BR(Ah_8 -> Hpm_2^* Vwm)
1.76580813E-24	2	1000011		24	# BR(Ah_8 -> Hpm_3 Vwm^*)
1.76580813E-24	2	-1000011		-24	# BR(Ah_8 -> Hpm_3^* Vwm)
2.37360063E-13	2	2000011		24	# BR(Ah_8 -> Hpm_4 Vwm^*)
2.37360063E-13	2	-2000011		-24	# BR(Ah_8 -> Hpm_4^* Vwm)
DECAY	37	1.96958302E-11	# Hpm_2		
#	BR	NDA	ID1	ID2	
8.86008129E-05	2		12	11	# BR(Hpm_2 -> Chi_1 Cha_1)
5.59065404E-04	2		12	13	# BR(Hpm_2 -> Chi_1 Cha_2)
7.38138243E-04	2		12	15	# BR(Hpm_2 -> Chi_1 Cha_3)
7.38609390E-05	2		14	11	# BR(Hpm_2 -> Chi_2 Cha_1)
4.66379351E-04	2		14	13	# BR(Hpm_2 -> Chi_2 Cha_2)
6.08021763E-04	2		14	15	# BR(Hpm_2 -> Chi_2 Cha_3)
1.70147458E-04	2		16	11	# BR(Hpm_2 -> Chi_3 Cha_1)
1.07383435E-03	2		16	13	# BR(Hpm_2 -> Chi_3 Cha_2)
6.80567103E-04	2		16	15	# BR(Hpm_2 -> Chi_3 Cha_3)
1.23200867E-09	2		-2	1	# BR(Hpm_2 -> Fu_1^* Fd_1)
2.13543006E-08	2		-2	3	# BR(Hpm_2 -> Fu_1^* Fd_2)
1.32353208E-08	2		-2	5	# BR(Hpm_2 -> Fu_1^* Fd_3)
1.55803452E-06	2		-4	1	# BR(Hpm_2 -> Fu_2^* Fd_1)
2.94822333E-05	2		-4	3	# BR(Hpm_2 -> Fu_2^* Fd_2)
1.96578061E-06	2		-4	5	# BR(Hpm_2 -> Fu_2^* Fd_3)
3.37383656E-05	2		-6	1	# BR(Hpm_2 -> Fu_3^* Fd_1)
1.59556352E-03	2		-6	3	# BR(Hpm_2 -> Fu_3^* Fd_2)
9.52920359E-01	2		-6	5	# BR(Hpm_2 -> Fu_3^* Fd_3)
4.09535932E-02	2		25	-24	# BR(Hpm_2 -> hh_1 Vwm)
5.08848752E-06	2		-24	23	# BR(Hpm_2 -> Vwm VZ)
DECAY	1000011	1.05452176E-03	# Hpm_3		
#	BR	NDA	ID1	ID2	
6.83933929E-15	2		37	36	# BR(Hpm_3 -> Hpm_2 Ah_2)
1.03145531E-20	2		37	1000017	# BR(Hpm_3 -> Hpm_2 Ah_3)
1.18268732E-20	2		37	1000018	# BR(Hpm_3 -> Hpm_2 Ah_4)
1.65698916E-20	2		37	1000019	# BR(Hpm_3 -> Hpm_2 Ah_5)
8.42032028E-19	2		36	-24	# BR(Hpm_3 -> Ah_2 Vwm)
4.26150210E-09	2	1000017		-24	# BR(Hpm_3 -> Ah_3 Vwm)
4.54597181E-09	2	1000018		-24	# BR(Hpm_3 -> Ah_4 Vwm)
7.63614442E-09	2	1000019		-24	# BR(Hpm_3 -> Ah_5 Vwm)
8.94512206E-13	2		12	11	# BR(Hpm_3 -> Chi_1 Cha_1)
5.65855963E-12	2		12	13	# BR(Hpm_3 -> Chi_1 Cha_2)
1.13976847E-11	2		12	15	# BR(Hpm_3 -> Chi_1 Cha_3)
6.62263097E-02	2		12	-1000024	# BR(Hpm_3 -> Chi_1 Cha_4)
6.82504501E-12	2		14	11	# BR(Hpm_3 -> Chi_2 Cha_1)
4.38945896E-11	2		14	13	# BR(Hpm_3 -> Chi_2 Cha_2)
5.87428232E-11	2		14	15	# BR(Hpm_3 -> Chi_2 Cha_3)
5.05301020E-01	2		14	-1000024	# BR(Hpm_3 -> Chi_2 Cha_4)

5.77805281E-12	2		16	11	# BR(Hpm_3 -> Chi_3 Cha_1)
8.64197671E-12	2		16	13	# BR(Hpm_3 -> Chi_3 Cha_2)
5.47749819E-11	2		16	15	# BR(Hpm_3 -> Chi_3 Cha_3)
4.27785616E-01	2		16	-1000024	# BR(Hpm_3 -> Chi_3 Cha_4)
3.73806951E-24	2	1000022		11	# BR(Hpm_3 -> Chi_4 Cha_1)
4.05501659E-04	2	1000022		13	# BR(Hpm_3 -> Chi_4 Cha_2)
3.02593746E-23	2	1000022		15	# BR(Hpm_3 -> Chi_4 Cha_3)
2.49177406E-24	2	1000023		11	# BR(Hpm_3 -> Chi_5 Cha_1)
2.81536006E-04	2	1000023		13	# BR(Hpm_3 -> Chi_5 Cha_2)
2.01164243E-23	2	1000023		15	# BR(Hpm_3 -> Chi_5 Cha_3)
8.38143342E-17	2	-2		1	# BR(Hpm_3 -> Fu_1^* Fd_1)
1.61278546E-15	2	-2		3	# BR(Hpm_3 -> Fu_1^* Fd_2)
1.00025279E-15	2	-2		5	# BR(Hpm_3 -> Fu_1^* Fd_3)
5.48867352E-17	2	-4		1	# BR(Hpm_3 -> Fu_2^* Fd_1)
3.10337733E-14	2	-4		3	# BR(Hpm_3 -> Fu_2^* Fd_2)
1.44630043E-13	2	-4		5	# BR(Hpm_3 -> Fu_2^* Fd_3)
2.34836624E-15	2	-6		1	# BR(Hpm_3 -> Fu_3^* Fd_1)
1.11104876E-13	2	-6		3	# BR(Hpm_3 -> Fu_3^* Fd_2)
1.39065354E-10	2	-6		5	# BR(Hpm_3 -> Fu_3^* Fd_3)
2.30014722E-23	2	37		25	# BR(Hpm_3 -> Hpm_2 hh_1)
6.74998999E-15	2	37		35	# BR(Hpm_3 -> Hpm_2 hh_2)
2.31501088E-10	2	25		-24	# BR(Hpm_3 -> hh_1 Vwm)
8.96059278E-20	2	35		-24	# BR(Hpm_3 -> hh_2 Vwm)
1.74355971E-27	2	37		23	# BR(Hpm_3 -> Hpm_2 VZ)
2.05270943E-12	2	-24		23	# BR(Hpm_3 -> Vwm VZ)
DECAY	2000011	2.41741531E+01	# Hpm_4		
#	BR	NDA	ID1	ID2	
5.09464200E-04	2		37	36	# BR(Hpm_4 -> Hpm_2 Ah_2)
2.55546525E-14	2		37	1000017	# BR(Hpm_4 -> Hpm_2 Ah_3)
3.71100624E-13	2		37	1000018	# BR(Hpm_4 -> Hpm_2 Ah_4)
1.93096374E-14	2		37	1000019	# BR(Hpm_4 -> Hpm_2 Ah_5)
5.84162254E-13	2		36	-24	# BR(Hpm_4 -> Ah_2 Vwm)
1.52280468E-07	2	1000017		-24	# BR(Hpm_4 -> Ah_3 Vwm)
8.78109821E-08	2	1000018		-24	# BR(Hpm_4 -> Ah_4 Vwm)
1.15940600E-02	2	1000019		-24	# BR(Hpm_4 -> Ah_5 Vwm)
2.58293042E-15	2	2000018		-24	# BR(Hpm_4 -> Ah_6 Vwm)
3.91174469E-12	2		12	11	# BR(Hpm_4 -> Chi_1 Cha_1)
1.73534271E-08	2		12	13	# BR(Hpm_4 -> Chi_1 Cha_2)
2.01582378E-05	2		12	15	# BR(Hpm_4 -> Chi_1 Cha_3)
3.82917723E-17	2		12	-1000024	# BR(Hpm_4 -> Chi_1 Cha_4)
1.59604311E-12	2		14	11	# BR(Hpm_4 -> Chi_2 Cha_1)
1.32405149E-07	2		14	13	# BR(Hpm_4 -> Chi_2 Cha_2)
1.68046592E-05	2		14	15	# BR(Hpm_4 -> Chi_2 Cha_3)
8.23878591E-16	2		14	-1000024	# BR(Hpm_4 -> Chi_2 Cha_4)
3.53846905E-13	2		16	11	# BR(Hpm_4 -> Chi_3 Cha_1)
1.12093616E-07	2		16	13	# BR(Hpm_4 -> Chi_3 Cha_2)
3.87115332E-05	2		16	15	# BR(Hpm_4 -> Chi_3 Cha_3)
2.59330657E-16	2		16	-1000024	# BR(Hpm_4 -> Chi_3 Cha_4)
4.40701441E-17	2	1000022		11	# BR(Hpm_4 -> Chi_4 Cha_1)
2.94094747E-16	2	1000022		13	# BR(Hpm_4 -> Chi_4 Cha_2)
3.65550487E-16	2	1000022		15	# BR(Hpm_4 -> Chi_4 Cha_3)
3.81967616E-17	2	1000023		11	# BR(Hpm_4 -> Chi_5 Cha_1)
2.63534745E-16	2	1000023		13	# BR(Hpm_4 -> Chi_5 Cha_2)
3.22865826E-16	2	1000023		15	# BR(Hpm_4 -> Chi_5 Cha_3)
5.00590669E-16	2	1000025		11	# BR(Hpm_4 -> Chi_6 Cha_1)
6.24813766E-16	2	1000025		13	# BR(Hpm_4 -> Chi_6 Cha_2)
1.72378284E-17	2	1000025		15	# BR(Hpm_4 -> Chi_6 Cha_3)
8.03663351E-17	2	1000039		11	# BR(Hpm_4 -> Chi_7 Cha_1)
1.51239205E-15	2	1000039		13	# BR(Hpm_4 -> Chi_7 Cha_2)
1.79398264E-17	2	1000039		15	# BR(Hpm_4 -> Chi_7 Cha_3)
8.88801434E-17	2	1000045		11	# BR(Hpm_4 -> Chi_8 Cha_1)
3.20593243E-16	2	1000045		13	# BR(Hpm_4 -> Chi_8 Cha_2)
9.54534974E-18	2	1000045		15	# BR(Hpm_4 -> Chi_8 Cha_3)
4.62687372E-10	2	-2		1	# BR(Hpm_4 -> Fu_1^* Fd_1)
7.83246204E-09	2	-2		3	# BR(Hpm_4 -> Fu_1^* Fd_2)
4.85600438E-09	2	-2		5	# BR(Hpm_4 -> Fu_1^* Fd_3)
7.09111329E-07	2	-4		1	# BR(Hpm_4 -> Fu_2^* Fd_1)
1.33832019E-05	2	-4		3	# BR(Hpm_4 -> Fu_2^* Fd_2)
7.25828890E-07	2	-4		5	# BR(Hpm_4 -> Fu_2^* Fd_3)
3.48887725E-05	2	-6		1	# BR(Hpm_4 -> Fu_3^* Fd_1)
1.64996871E-03	2	-6		3	# BR(Hpm_4 -> Fu_3^* Fd_2)
9.85024158E-01	2	-6		5	# BR(Hpm_4 -> Fu_3^* Fd_3)
1.68544013E-14	2		37	25	# BR(Hpm_4 -> Hpm_2 hh_1)

5.07780830E-04	2		37	35	# BR(Hpm_4 -> Hpm_2 hh_2)
1.83036604E-15	2	1000011		25	# BR(Hpm_4 -> Hpm_3 hh_1)
5.88525448E-04	2		25	-24	# BR(Hpm_4 -> hh_1 Vwm)
5.14862216E-15	2		35	-24	# BR(Hpm_4 -> hh_2 Vwm)
3.09986642E-10	2	1000012		-24	# BR(Hpm_4 -> hh_3 Vwm)
1.79945163E-16	2	1000014		-24	# BR(Hpm_4 -> hh_4 Vwm)
1.69997940E-09	2	1000016		-24	# BR(Hpm_4 -> hh_5 Vwm)
4.32694792E-20	2		37	23	# BR(Hpm_4 -> Hpm_2 VZ)
2.12071128E-28	2	1000011		23	# BR(Hpm_4 -> Hpm_3 VZ)
1.44825615E-07	2		-24	23	# BR(Hpm_4 -> Vwm VZ)
DECAY	1000013	5.73762193E-02	# Hpm_5		
#	BR	NDA	ID1	ID2	
6.83092645E-13	2		37	36	# BR(Hpm_5 -> Hpm_2 Ah_2)
1.48023085E-22	2		37	1000017	# BR(Hpm_5 -> Hpm_2 Ah_3)
2.96602899E-22	2		37	1000018	# BR(Hpm_5 -> Hpm_2 Ah_4)
7.74977830E-23	2		37	1000019	# BR(Hpm_5 -> Hpm_2 Ah_5)
9.74559944E-23	2	1000011		1000017	# BR(Hpm_5 -> Hpm_3 Ah_3)
5.01077342E-23	2	1000011		1000018	# BR(Hpm_5 -> Hpm_3 Ah_4)
1.34727975E-22	2	1000011		1000019	# BR(Hpm_5 -> Hpm_3 Ah_5)
1.51793664E-20	2		36	-24	# BR(Hpm_5 -> Ah_2 Vwm)
8.08510241E-11	2	1000017		-24	# BR(Hpm_5 -> Ah_3 Vwm)
5.76752450E-12	2	1000018		-24	# BR(Hpm_5 -> Ah_4 Vwm)
1.05259739E-11	2	1000019		-24	# BR(Hpm_5 -> Ah_5 Vwm)
5.10554843E-24	2	2000018		-24	# BR(Hpm_5 -> Ah_6 Vwm)
4.50475307E-13	2	2000019		-24	# BR(Hpm_5 -> Ah_7 Vwm)
2.64970333E-13	2		12	11	# BR(Hpm_5 -> Chi_1 Cha_1)
1.66979967E-12	2		12	13	# BR(Hpm_5 -> Chi_1 Cha_2)
2.14791181E-12	2		12	15	# BR(Hpm_5 -> Chi_1 Cha_3)
1.84699731E-01	2		12	-1000024	# BR(Hpm_5 -> Chi_1 Cha_4)
1.01221184E-13	2		14	11	# BR(Hpm_5 -> Chi_2 Cha_1)
6.81324007E-13	2		14	13	# BR(Hpm_5 -> Chi_2 Cha_2)
8.78009185E-13	2		14	15	# BR(Hpm_5 -> Chi_2 Cha_3)
7.53599117E-02	2		14	-1000024	# BR(Hpm_5 -> Chi_2 Cha_4)
1.42486516E-13	2		16	11	# BR(Hpm_5 -> Chi_3 Cha_1)
1.51067050E-13	2		16	13	# BR(Hpm_5 -> Chi_3 Cha_2)
2.01315817E-13	2		16	15	# BR(Hpm_5 -> Chi_3 Cha_3)
1.67074882E-02	2		16	-1000024	# BR(Hpm_5 -> Chi_3 Cha_4)
3.21218387E-05	2	1000022		11	# BR(Hpm_5 -> Chi_4 Cha_1)
8.22447294E-27	2	1000022		13	# BR(Hpm_5 -> Chi_4 Cha_2)
4.34665516E-26	2	1000022		15	# BR(Hpm_5 -> Chi_4 Cha_3)
3.31497032E-05	2	1000023		11	# BR(Hpm_5 -> Chi_5 Cha_1)
1.04659660E-26	2	1000023		13	# BR(Hpm_5 -> Chi_5 Cha_2)
8.36234239E-27	2	1000023		15	# BR(Hpm_5 -> Chi_5 Cha_3)
1.08975456E-06	2	1000025		11	# BR(Hpm_5 -> Chi_6 Cha_1)
4.14211863E-24	2	1000025		13	# BR(Hpm_5 -> Chi_6 Cha_2)
7.45223312E-26	2	1000025		15	# BR(Hpm_5 -> Chi_6 Cha_3)
1.27036945E-06	2	1000039		11	# BR(Hpm_5 -> Chi_7 Cha_1)
1.24624665E-23	2	1000039		13	# BR(Hpm_5 -> Chi_7 Cha_2)
1.19119980E-25	2	1000039		15	# BR(Hpm_5 -> Chi_7 Cha_3)
1.49815403E-06	2	1000045		11	# BR(Hpm_5 -> Chi_8 Cha_1)
2.91543554E-24	2	1000045		13	# BR(Hpm_5 -> Chi_8 Cha_2)
1.09817792E-25	2	1000045		15	# BR(Hpm_5 -> Chi_8 Cha_3)
7.23163737E-01	2	1000055		11	# BR(Hpm_5 -> Chi_9 Cha_1)
4.64624048E-25	2	1000055		13	# BR(Hpm_5 -> Chi_9 Cha_2)
4.23995611E-25	2	1000055		15	# BR(Hpm_5 -> Chi_9 Cha_3)
1.82905729E-19	2		-2	1	# BR(Hpm_5 -> Fu_1^* Fd_1)
1.49582700E-18	2		-2	3	# BR(Hpm_5 -> Fu_1^* Fd_2)
9.24269528E-19	2		-2	5	# BR(Hpm_5 -> Fu_1^* Fd_3)
1.33978588E-15	2		-4	1	# BR(Hpm_5 -> Fu_2^* Fd_1)
2.50385278E-14	2		-4	3	# BR(Hpm_5 -> Fu_2^* Fd_2)
1.78409549E-16	2		-4	5	# BR(Hpm_5 -> Fu_2^* Fd_3)
6.91083988E-14	2		-6	1	# BR(Hpm_5 -> Fu_3^* Fd_1)
3.26829175E-12	2		-6	3	# BR(Hpm_5 -> Fu_3^* Fd_2)
1.95072959E-09	2		-6	5	# BR(Hpm_5 -> Fu_3^* Fd_3)
1.18791820E-23	2		37	25	# BR(Hpm_5 -> Hpm_2 hh_1)
6.82256357E-13	2		37	35	# BR(Hpm_5 -> Hpm_2 hh_2)
1.01241844E-22	2		37	1000012	# BR(Hpm_5 -> Hpm_2 hh_3)
9.48126856E-25	2		37	1000016	# BR(Hpm_5 -> Hpm_2 hh_5)
1.91343369E-23	2		37	2000012	# BR(Hpm_5 -> Hpm_2 hh_6)
3.07173684E-24	2	1000011		25	# BR(Hpm_5 -> Hpm_3 hh_1)
1.23498908E-14	2	2000011		25	# BR(Hpm_5 -> Hpm_4 hh_1)
4.82860809E-13	2		25	-24	# BR(Hpm_5 -> hh_1 Vwm)
5.19836022E-25	2		35	-24	# BR(Hpm_5 -> hh_2 Vwm)

3.83213380E-11	2	1000012	-24	# BR(Hpm_5 -> hh_3 Vwm)
5.89294995E-21	2	1000014	-24	# BR(Hpm_5 -> hh_4 Vwm)
3.65233338E-12	2	1000016	-24	# BR(Hpm_5 -> hh_5 Vwm)
3.42895487E-11	2	2000012	-24	# BR(Hpm_5 -> hh_6 Vwm)
3.71738842E-13	2	2000014	-24	# BR(Hpm_5 -> hh_7 Vwm)
1.98069958E-27	2	37	23	# BR(Hpm_5 -> Hpm_2 VZ)
5.75838541E-29	2	1000011	23	# BR(Hpm_5 -> Hpm_3 VZ)
1.95690144E-14	2	-24	23	# BR(Hpm_5 -> Vwm VZ)
DECAY 2000013	2.89000910E-01	# Hpm_6		
# BR	NDA	ID1	ID2	
9.60483004E-15	2	37	36	# BR(Hpm_6 -> Hpm_2 Ah_2)
2.35428938E-10	2	37	1000017	# BR(Hpm_6 -> Hpm_2 Ah_3)
7.38003019E-10	2	37	1000018	# BR(Hpm_6 -> Hpm_2 Ah_4)
2.21752483E-04	2	37	1000019	# BR(Hpm_6 -> Hpm_2 Ah_5)
1.24079011E-13	2	37	2000018	# BR(Hpm_6 -> Hpm_2 Ah_6)
1.37818200E-13	2	1000011	36	# BR(Hpm_6 -> Hpm_3 Ah_2)
9.25749516E-24	2	1000011	1000017	# BR(Hpm_6 -> Hpm_3 Ah_3)
1.35188756E-22	2	1000011	1000018	# BR(Hpm_6 -> Hpm_3 Ah_4)
7.28672316E-24	2	1000011	1000019	# BR(Hpm_6 -> Hpm_3 Ah_5)
1.34951475E-02	2	36	-24	# BR(Hpm_6 -> Ah_2 Vwm)
9.22511431E-13	2	1000017	-24	# BR(Hpm_6 -> Ah_3 Vwm)
1.32177264E-11	2	1000018	-24	# BR(Hpm_6 -> Ah_4 Vwm)
6.64730228E-13	2	1000019	-24	# BR(Hpm_6 -> Ah_5 Vwm)
8.76089306E-25	2	2000018	-24	# BR(Hpm_6 -> Ah_6 Vwm)
7.84358818E-14	2	2000019	-24	# BR(Hpm_6 -> Ah_7 Vwm)
3.90183332E-16	2	12	11	# BR(Hpm_6 -> Chi_1 Cha_1)
1.60482785E-15	2	12	13	# BR(Hpm_6 -> Chi_1 Cha_2)
2.70712059E-15	2	12	15	# BR(Hpm_6 -> Chi_1 Cha_3)
2.15854467E-03	2	12	-1000024	# BR(Hpm_6 -> Chi_1 Cha_4)
3.25271384E-16	2	14	11	# BR(Hpm_6 -> Chi_2 Cha_1)
1.33786415E-15	2	14	13	# BR(Hpm_6 -> Chi_2 Cha_2)
1.47320467E-15	2	14	15	# BR(Hpm_6 -> Chi_2 Cha_3)
1.79944338E-03	2	14	-1000024	# BR(Hpm_6 -> Chi_2 Cha_4)
7.49301358E-16	2	16	11	# BR(Hpm_6 -> Chi_3 Cha_1)
3.08189701E-15	2	16	13	# BR(Hpm_6 -> Chi_3 Cha_2)
4.29678335E-13	2	16	15	# BR(Hpm_6 -> Chi_3 Cha_3)
4.14523205E-03	2	16	-1000024	# BR(Hpm_6 -> Chi_3 Cha_4)
4.81697123E-27	2	1000022	11	# BR(Hpm_6 -> Chi_4 Cha_1)
1.99323458E-26	2	1000022	13	# BR(Hpm_6 -> Chi_4 Cha_2)
1.32618549E-01	2	1000022	15	# BR(Hpm_6 -> Chi_4 Cha_3)
4.52164409E-27	2	1000023	11	# BR(Hpm_6 -> Chi_5 Cha_1)
1.86858763E-26	2	1000023	13	# BR(Hpm_6 -> Chi_5 Cha_2)
3.87351911E-03	2	1000023	15	# BR(Hpm_6 -> Chi_5 Cha_3)
4.98448851E-29	2	1000025	11	# BR(Hpm_6 -> Chi_6 Cha_1)
2.67482632E-28	2	1000025	13	# BR(Hpm_6 -> Chi_6 Cha_2)
4.42682636E-05	2	1000025	15	# BR(Hpm_6 -> Chi_6 Cha_3)
4.82384786E-29	2	1000039	11	# BR(Hpm_6 -> Chi_7 Cha_1)
1.66405377E-28	2	1000039	13	# BR(Hpm_6 -> Chi_7 Cha_2)
4.00891705E-05	2	1000039	15	# BR(Hpm_6 -> Chi_7 Cha_3)
6.03738545E-29	2	1000045	11	# BR(Hpm_6 -> Chi_8 Cha_1)
2.22857915E-28	2	1000045	13	# BR(Hpm_6 -> Chi_8 Cha_2)
3.75827898E-05	2	1000045	15	# BR(Hpm_6 -> Chi_8 Cha_3)
4.75886792E-27	2	1000055	11	# BR(Hpm_6 -> Chi_9 Cha_1)
2.72352758E-28	2	1000055	13	# BR(Hpm_6 -> Chi_9 Cha_2)
8.00421504E-01	2	1000055	15	# BR(Hpm_6 -> Chi_9 Cha_3)
7.09335703E-23	2	-2	1	# BR(Hpm_6 -> Fu_1^* Fd_1)
1.31300920E-21	2	-2	3	# BR(Hpm_6 -> Fu_1^* Fd_2)
8.14288815E-22	2	-2	5	# BR(Hpm_6 -> Fu_1^* Fd_3)
3.44167315E-20	2	-4	1	# BR(Hpm_6 -> Fu_2^* Fd_1)
6.66911840E-19	2	-4	3	# BR(Hpm_6 -> Fu_2^* Fd_2)
1.18889766E-19	2	-4	5	# BR(Hpm_6 -> Fu_2^* Fd_3)
1.77986626E-18	2	-6	1	# BR(Hpm_6 -> Fu_3^* Fd_1)
8.41739183E-17	2	-6	3	# BR(Hpm_6 -> Fu_3^* Fd_2)
5.02994871E-14	2	-6	5	# BR(Hpm_6 -> Fu_3^* Fd_3)
1.43206669E-02	2	37	25	# BR(Hpm_6 -> Hpm_2 hh_1)
5.33555400E-15	2	37	35	# BR(Hpm_6 -> Hpm_2 hh_2)
5.27575311E-07	2	37	1000012	# BR(Hpm_6 -> Hpm_2 hh_3)
1.23796305E-13	2	37	1000014	# BR(Hpm_6 -> Hpm_2 hh_4)
5.30036666E-07	2	37	1000016	# BR(Hpm_6 -> Hpm_2 hh_5)
3.34556584E-05	2	37	2000012	# BR(Hpm_6 -> Hpm_2 hh_6)
1.54385150E-24	2	1000011	25	# BR(Hpm_6 -> Hpm_3 hh_1)
1.37053546E-13	2	1000011	35	# BR(Hpm_6 -> Hpm_3 hh_2)
1.13371137E-13	2	2000011	25	# BR(Hpm_6 -> Hpm_4 hh_1)

3.96201121E-15	2		25	-24	# BR(Hpm_6 -> hh_1 Vwm)
1.34598520E-02	2		35	-24	# BR(Hpm_6 -> hh_2 Vwm)
3.50658723E-19	2	1000012		-24	# BR(Hpm_6 -> hh_3 Vwm)
1.16045604E-24	2	1000014		-24	# BR(Hpm_6 -> hh_4 Vwm)
1.54749124E-17	2	1000016		-24	# BR(Hpm_6 -> hh_5 Vwm)
5.83443359E-16	2	2000012		-24	# BR(Hpm_6 -> hh_6 Vwm)
7.35117988E-14	2	2000014		-24	# BR(Hpm_6 -> hh_7 Vwm)
1.33293347E-02	2		37	23	# BR(Hpm_6 -> Hpm_2 VZ)
9.70892849E-25	2	1000011		23	# BR(Hpm_6 -> Hpm_3 VZ)
7.32280523E-14	2	2000011		23	# BR(Hpm_6 -> Hpm_4 VZ)
1.12414157E-18	2		-24	23	# BR(Hpm_6 -> Vwm VZ)

DECAY 1000015 2.68643087E-01 # Hpm_7

#	BR	NDA	ID1	ID2	
3.94508170E-24	2		37	36	# BR(Hpm_7 -> Hpm_2 Ah_2)
8.03871476E-29	2	1000011	1000017		# BR(Hpm_7 -> Hpm_3 Ah_3)
9.27219433E-29	2	1000011	1000018		# BR(Hpm_7 -> Hpm_3 Ah_4)
1.11580396E-24	2	1000011	1000019		# BR(Hpm_7 -> Hpm_3 Ah_5)
5.26616247E-22	2	1000017		-24	# BR(Hpm_7 -> Ah_3 Vwm)
3.75640911E-23	2	1000018		-24	# BR(Hpm_7 -> Ah_4 Vwm)
7.32758814E-23	2	1000019		-24	# BR(Hpm_7 -> Ah_5 Vwm)
4.86713464E-23	2	2000018		-24	# BR(Hpm_7 -> Ah_6 Vwm)
1.25244254E-25	2	2000019		-24	# BR(Hpm_7 -> Ah_7 Vwm)
1.00147363E-18	2		12	11	# BR(Hpm_7 -> Chi_1 Cha_1)
2.08702681E-22	2		12	13	# BR(Hpm_7 -> Chi_1 Cha_2)
7.08097543E-25	2		12	15	# BR(Hpm_7 -> Chi_1 Cha_3)
3.96894140E-10	2		12	-1000024	# BR(Hpm_7 -> Chi_1 Cha_4)
1.83971853E-16	2		14	11	# BR(Hpm_7 -> Chi_2 Cha_1)
8.51535241E-23	2		14	13	# BR(Hpm_7 -> Chi_2 Cha_2)
2.98004703E-25	2		14	15	# BR(Hpm_7 -> Chi_2 Cha_3)
1.61937504E-10	2		14	-1000024	# BR(Hpm_7 -> Chi_2 Cha_4)
4.54803947E-13	2		16	11	# BR(Hpm_7 -> Chi_3 Cha_1)
1.88788995E-23	2		16	13	# BR(Hpm_7 -> Chi_3 Cha_2)
1.03129600E-25	2		16	15	# BR(Hpm_7 -> Chi_3 Cha_3)
3.59022358E-11	2		16	-1000024	# BR(Hpm_7 -> Chi_3 Cha_4)
1.38352406E-01	2	1000022		11	# BR(Hpm_7 -> Chi_4 Cha_1)
2.45812093E-18	2	1000022		13	# BR(Hpm_7 -> Chi_4 Cha_2)
1.92781963E-05	2	1000023		11	# BR(Hpm_7 -> Chi_5 Cha_1)
5.97777368E-22	2	1000023		13	# BR(Hpm_7 -> Chi_5 Cha_2)
4.02267377E-05	2	1000025		11	# BR(Hpm_7 -> Chi_6 Cha_1)
7.15084025E-22	2	1000025		13	# BR(Hpm_7 -> Chi_6 Cha_2)
3.57880375E-05	2	1000039		11	# BR(Hpm_7 -> Chi_7 Cha_1)
6.36226435E-22	2	1000039		13	# BR(Hpm_7 -> Chi_7 Cha_2)
3.30188737E-05	2	1000045		11	# BR(Hpm_7 -> Chi_8 Cha_1)
5.87036382E-22	2	1000045		13	# BR(Hpm_7 -> Chi_8 Cha_2)
8.61519281E-01	2	1000055		11	# BR(Hpm_7 -> Chi_9 Cha_1)
1.53051392E-17	2	1000055		13	# BR(Hpm_7 -> Chi_9 Cha_2)
1.06062347E-30	2		-2	1	# BR(Hpm_7 -> Fu_1^* Fd_1)
8.32784493E-30	2		-2	3	# BR(Hpm_7 -> Fu_1^* Fd_2)
5.14436478E-30	2		-2	5	# BR(Hpm_7 -> Fu_1^* Fd_3)
7.99817118E-27	2		-4	1	# BR(Hpm_7 -> Fu_2^* Fd_1)
1.49462262E-25	2		-4	3	# BR(Hpm_7 -> Fu_2^* Fd_2)
1.01108581E-27	2		-4	5	# BR(Hpm_7 -> Fu_2^* Fd_3)
4.13670837E-25	2		-6	1	# BR(Hpm_7 -> Fu_3^* Fd_1)
1.95634251E-23	2		-6	3	# BR(Hpm_7 -> Fu_3^* Fd_2)
1.16767350E-20	2		-6	5	# BR(Hpm_7 -> Fu_3^* Fd_3)
3.94054966E-24	2		37	35	# BR(Hpm_7 -> Hpm_2 hh_2)
4.52907192E-23	2	1000011		25	# BR(Hpm_7 -> Hpm_3 hh_1)
1.99133743E-24	2	2000011		25	# BR(Hpm_7 -> Hpm_4 hh_1)
2.88721038E-24	2		25	-24	# BR(Hpm_7 -> hh_1 Vwm)
2.67364312E-22	2	1000012		-24	# BR(Hpm_7 -> hh_3 Vwm)
4.86741032E-23	2	1000014		-24	# BR(Hpm_7 -> hh_4 Vwm)
2.56528280E-23	2	1000016		-24	# BR(Hpm_7 -> hh_5 Vwm)
2.52261437E-22	2	2000012		-24	# BR(Hpm_7 -> hh_6 Vwm)
1.02574547E-23	2	2000014		-24	# BR(Hpm_7 -> hh_7 Vwm)
4.63653534E-23	2	1000011		23	# BR(Hpm_7 -> Hpm_3 VZ)
2.19541902E-24	2	2000011		23	# BR(Hpm_7 -> Hpm_4 VZ)
1.28247295E-25	2		-24	23	# BR(Hpm_7 -> Vwm VZ)

DECAY 2000015 2.68661473E-01 # Hpm_8

#	BR	NDA	ID1	ID2	
1.37203170E-20	2		37	36	# BR(Hpm_8 -> Hpm_2 Ah_2)
8.10614244E-30	2		37	1000017	# BR(Hpm_8 -> Hpm_2 Ah_3)
1.05118760E-30	2		37	1000018	# BR(Hpm_8 -> Hpm_2 Ah_4)
5.97798733E-30	2		37	1000019	# BR(Hpm_8 -> Hpm_2 Ah_5)

8.13883033E-18	2	37	2000018	# BR(Hpm_8 -> Hpm_2 Ah_6)
1.07754700E-18	2	1000011	36	# BR(Hpm_8 -> Hpm_3 Ah_2)
4.50028838E-12	2	1000011	1000017	# BR(Hpm_8 -> Hpm_3 Ah_3)
5.23842178E-12	2	1000011	1000018	# BR(Hpm_8 -> Hpm_3 Ah_4)
6.28072002E-08	2	1000011	1000019	# BR(Hpm_8 -> Hpm_3 Ah_5)
2.88314864E-27	2	36	-24	# BR(Hpm_8 -> Ah_2 Vwm)
1.13195124E-18	2	1000017	-24	# BR(Hpm_8 -> Ah_3 Vwm)
1.22779735E-18	2	1000018	-24	# BR(Hpm_8 -> Ah_4 Vwm)
1.83921186E-19	2	1000019	-24	# BR(Hpm_8 -> Ah_5 Vwm)
2.73949826E-06	2	2000018	-24	# BR(Hpm_8 -> Ah_6 Vwm)
2.96956821E-17	2	2000019	-24	# BR(Hpm_8 -> Ah_7 Vwm)
3.32489183E-19	2	12	11	# BR(Hpm_8 -> Chi_1 Cha_1)
3.37223933E-18	2	12	13	# BR(Hpm_8 -> Chi_1 Cha_2)
2.77731813E-20	2	12	15	# BR(Hpm_8 -> Chi_1 Cha_3)
1.94057858E-06	2	12	-1000024	# BR(Hpm_8 -> Chi_1 Cha_4)
2.53686373E-18	2	14	11	# BR(Hpm_8 -> Chi_2 Cha_1)
1.86077856E-16	2	14	13	# BR(Hpm_8 -> Chi_2 Cha_2)
2.10910177E-19	2	14	15	# BR(Hpm_8 -> Chi_2 Cha_3)
1.48064469E-05	2	14	-1000024	# BR(Hpm_8 -> Chi_2 Cha_4)
2.14769765E-18	2	16	11	# BR(Hpm_8 -> Chi_3 Cha_1)
4.54774769E-13	2	16	13	# BR(Hpm_8 -> Chi_3 Cha_2)
1.78733773E-19	2	16	15	# BR(Hpm_8 -> Chi_3 Cha_3)
1.25350727E-05	2	16	-1000024	# BR(Hpm_8 -> Chi_3 Cha_4)
2.45770341E-18	2	1000022	11	# BR(Hpm_8 -> Chi_4 Cha_1)
1.38356999E-01	2	1000022	13	# BR(Hpm_8 -> Chi_4 Cha_2)
4.27276797E-29	2	1000022	15	# BR(Hpm_8 -> Chi_4 Cha_3)
3.42458937E-22	2	1000023	11	# BR(Hpm_8 -> Chi_5 Cha_1)
3.36462798E-05	2	1000023	13	# BR(Hpm_8 -> Chi_5 Cha_2)
7.14591055E-22	2	1000025	11	# BR(Hpm_8 -> Chi_6 Cha_1)
4.02489881E-05	2	1000025	13	# BR(Hpm_8 -> Chi_6 Cha_2)
6.35741620E-22	2	1000039	11	# BR(Hpm_8 -> Chi_7 Cha_1)
3.58104364E-05	2	1000039	13	# BR(Hpm_8 -> Chi_7 Cha_2)
5.86549970E-22	2	1000045	11	# BR(Hpm_8 -> Chi_8 Cha_1)
3.30417401E-05	2	1000045	13	# BR(Hpm_8 -> Chi_8 Cha_2)
1.53041014E-17	2	1000055	11	# BR(Hpm_8 -> Chi_9 Cha_1)
8.61460270E-01	2	1000055	13	# BR(Hpm_8 -> Chi_9 Cha_2)
2.70376993E-28	2	1000055	15	# BR(Hpm_8 -> Chi_9 Cha_3)
5.14173296E-27	2	-2	1	# BR(Hpm_8 -> Fu_1^* Fd_1)
5.70823901E-26	2	-2	3	# BR(Hpm_8 -> Fu_1^* Fd_2)
3.53323295E-26	2	-2	5	# BR(Hpm_8 -> Fu_1^* Fd_3)
2.77118658E-23	2	-4	1	# BR(Hpm_8 -> Fu_2^* Fd_1)
5.18378394E-22	2	-4	3	# BR(Hpm_8 -> Fu_2^* Fd_2)
6.03473339E-24	2	-4	5	# BR(Hpm_8 -> Fu_2^* Fd_3)
1.43327243E-21	2	-6	1	# BR(Hpm_8 -> Fu_3^* Fd_1)
6.77826807E-20	2	-6	3	# BR(Hpm_8 -> Fu_3^* Fd_2)
4.04582604E-17	2	-6	5	# BR(Hpm_8 -> Fu_3^* Fd_3)
2.68702008E-28	2	37	25	# BR(Hpm_8 -> Hpm_2 hh_1)
1.37045553E-20	2	37	35	# BR(Hpm_8 -> Hpm_2 hh_2)
1.35999048E-27	2	37	1000012	# BR(Hpm_8 -> Hpm_2 hh_3)
8.13883033E-18	2	37	1000014	# BR(Hpm_8 -> Hpm_2 hh_4)
2.47095089E-28	2	37	1000016	# BR(Hpm_8 -> Hpm_2 hh_5)
1.18832265E-29	2	37	2000012	# BR(Hpm_8 -> Hpm_2 hh_6)
2.54921363E-06	2	1000011	25	# BR(Hpm_8 -> Hpm_3 hh_1)
1.19152219E-17	2	1000011	35	# BR(Hpm_8 -> Hpm_3 hh_2)
2.94962994E-17	2	2000011	25	# BR(Hpm_8 -> Hpm_4 hh_1)
1.62886009E-19	2	25	-24	# BR(Hpm_8 -> hh_1 Vwm)
1.37387413E-27	2	35	-24	# BR(Hpm_8 -> hh_2 Vwm)
4.53630802E-16	2	1000012	-24	# BR(Hpm_8 -> hh_3 Vwm)
2.73949825E-06	2	1000014	-24	# BR(Hpm_8 -> hh_4 Vwm)
8.15625516E-17	2	1000016	-24	# BR(Hpm_8 -> hh_5 Vwm)
2.79635072E-18	2	2000012	-24	# BR(Hpm_8 -> hh_6 Vwm)
2.95741890E-17	2	2000014	-24	# BR(Hpm_8 -> hh_7 Vwm)
8.36576835E-28	2	37	23	# BR(Hpm_8 -> Hpm_2 VZ)
2.60970498E-06	2	1000011	23	# BR(Hpm_8 -> Hpm_3 VZ)
2.91842796E-17	2	2000011	23	# BR(Hpm_8 -> Hpm_4 VZ)
2.86116398E-22	2	-24	23	# BR(Hpm_8 -> Vwm VZ)