Help

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#include "
href../../mod/doublehes1d/doublehes1d_h_src.pdfdoublehes1d.h"
#include "
href../../common/chk_h_src.pdfchk.h"
#include "
href../../common/error_msg_h_src.pdferror_msg.h"
#include "
href../../mod/hes1d/hes1d_pad/model_h_src.pdfmodel.h"
static int MOD(Init)(Model *model)
{
  TYPEMOD *pt = (TYPEMOD *)(model->TypeModel);

  if (model->init == 0)
    {
      model->init = 1;
      model->nvar = 0;
      pt->T.Vname = "Current Date";
      pt->T.Vtype = DATE;
      pt->T.Val.V_DATE = 0.;
      pt->T.Viter = ALLOW;
      model->nvar++;

      pt->S0.Vname = "Spot";
      pt->S0.Vtype = PDOUBLE;
      pt->S0.Val.V_PDOUBLE = 100.;
      pt->S0.Viter = ALLOW;
      model->nvar++;

      pt->Divid.Vname = "Annual Dividend Rate";
      pt->Divid.Vtype = DOUBLE;
      pt->Divid.Val.V_DOUBLE = 0.;
      pt->Divid.Viter = ALLOW;
      model->nvar++;

      pt->R.Vname = "Annual Interest Rate";
      pt->R.Vtype = DOUBLE;
      pt->R.Val.V_DOUBLE = 3.;
      pt->R.Viter = ALLOW;
      model->nvar++;
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pt->Sigma0.Vname = "Current Variance 1";
pt->Sigma0.Vtype = DOUBLE;
pt->Sigma0.Val.V_DOUBLE = 0.36;
pt->Sigma0.Viter = ALLOW;
model->nvar++;

pt->MeanReversion.Vname = "Mean Reversion of Variance 1";
pt->MeanReversion.Vtype = DOUBLE;
pt->MeanReversion.Val.V_DOUBLE = 0.9;
pt->MeanReversion.Viter = ALLOW;
model->nvar++;

pt->LongRunVariance.Vname = "Long-Run of Variance 1";
pt->LongRunVariance.Vtype = DOUBLE;
pt->LongRunVariance.Val.V_DOUBLE = 0.1;
pt->LongRunVariance.Viter = ALLOW;
model->nvar++;

pt->Sigma.Vname = "Volatility of Variance 1";
pt->Sigma.Vtype = DOUBLE;
pt->Sigma.Val.V_DOUBLE = 0.1;
pt->Sigma.Viter = ALLOW;
model->nvar++;

pt->Rho.Vname = "Rho Spot-Variance 1";
pt->Rho.Vtype = DOUBLE;
pt->Rho.Val.V_DOUBLE = -0.5;
pt->Rho.Viter = ALLOW;
model->nvar++;

pt->Sigma0V.Vname = "Current Variance 2";
pt->Sigma0V.Vtype = DOUBLE;
pt->Sigma0V.Val.V_DOUBLE = 0.49;
pt->Sigma0V.Viter = ALLOW;
model->nvar++;

pt->MeanReversionV.Vname = "Mean Reversion  of Variance 2";
pt->MeanReversionV.Vtype = DOUBLE;
pt->MeanReversionV.Val.V_DOUBLE = 1.2;
pt->MeanReversionV.Viter = ALLOW;
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      model->nvar++;

      pt->LongRunVarianceV.Vname = "Long-Run of Variance 2";
      pt->LongRunVarianceV.Vtype = DOUBLE;
      pt->LongRunVarianceV.Val.V_DOUBLE = 0.15;
      pt->LongRunVarianceV.Viter = ALLOW;
      model->nvar++;

      pt->SigmaV.Vname = "Volatility of Variance 2";
      pt->SigmaV.Vtype = DOUBLE;
      pt->SigmaV.Val.V_DOUBLE = 0.2;
      pt->SigmaV.Viter = ALLOW;
      model->nvar++;

      pt->RhoSV2.Vname = "Rho Spot-Variance 2";
      pt->RhoSV2.Vtype = DOUBLE;
      pt->RhoSV2.Val.V_DOUBLE = -0.5;
      pt->RhoSV2.Viter = ALLOW;
      model->nvar++;

      /* pt->RhoVV.Vname = "Rho Variance-Variance of Variance"; */
      /* pt->RhoVV.Vtype=DOUBLE; */
      /* pt->RhoVV.Val.V_DOUBLE=0.5; */
      /* pt->RhoVV.Viter=ALLOW; */
      //model->nvar++;
    }

  return OK;
}

TYPEMOD DoubleHeston1d;
MAKEMOD(DoubleHeston1d);
```