

## [Help](#)

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#include "
href../../mod/merhes1d_default/merhes1d_default_h_src.pdfmerhes1d_default.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"

extern char *path_sep;

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;
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pt->R.Val.V_DOUBLE = 10.;
pt->R.Viter = ALLOW;
model->nvar++;

pt->Sigma0.Vname = "Current Variance";
pt->Sigma0.Vtype = DOUBLE;
pt->Sigma0.Val.V_DOUBLE = 0.01;
pt->Sigma0.Viter = ALLOW;
model->nvar++;

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

pt->LongRunVariance.Vname = "Long-Run Variance";
pt->LongRunVariance.Vtype = DOUBLE;
pt->LongRunVariance.Val.V_DOUBLE = 0.01;
pt->LongRunVariance.Viter = ALLOW;
model->nvar++;

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

pt->Lambda.Vname = "Lambda";
pt->Lambda.Vtype = DOUBLE;
pt->Lambda.Val.V_DOUBLE = 0.1;
pt->Lambda.Viter = ALLOW;
model->nvar++;

pt->Mean.Vname = "Mean of Jumps";
pt->Mean.Vtype = DOUBLE;
pt->Mean.Val.V_DOUBLE = 0;
pt->Mean.Viter = ALLOW;
model->nvar++;

pt->Variance.Vname = "Variance of Jumps";

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    pt->Variance.Vtype = DOUBLE;
    pt->Variance.Val.V_DOUBLE = 0.16;
    pt->Variance.Viter = ALLOW;
    model->nvar++;

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

    pt->Intensity.Vname = "Default Intensity";
    pt->Intensity.Vtype = PDOUBLE;
    pt->Intensity.Val.V_PDOUBLE = 0.03;
    pt->Intensity.Viter = ALLOW;
    model->nvar++;

    pt->Recovery.Vname = "Recovery Rate";
    pt->Recovery.Vtype = PDOUBLE;
    pt->Recovery.Val.V_PDOUBLE = 0.4;
    pt->Recovery.Viter = ALLOW;
    model->nvar++;

    model->HelpFilenameHint = "MERHES1D_DEFAULT";

}

return OK;
}

TYPEMOD Merheston1dim_default;

MAKEMOD(Merheston1dim_default);

```