

[Help](#)

```
#include "
href../../mod/timehes1d/timehes1d_h_src.pdftimehes1d.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"
#include "premia_obj.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 = 5.;
    }
}
```

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

pt->Sigma0.Vname = "Current Variance";
pt->Sigma0.Vtype = DOUBLE;
pt->Sigma0.Val.V_DOUBLE = 0.04;
pt->Sigma0.Viter = ALLOW;
model->nvar++;

pt->MeanReversion.Vname = "Mean Reversion";
pt->MeanReversion.Vtype = DOUBLE;
pt->MeanReversion.Val.V_DOUBLE = 3.;
pt->MeanReversion.Viter = ALLOW;
model->nvar++;

pt->TimeDepParameters.Vname = "Piecewise Constant Parameters";
pt->TimeDepParameters.Vtype = FILENAME;
pt->TimeDepParameters.Val.V_FILENAME = NULL;
pt->TimeDepParameters.Viter = FORBID;
pt->TimeDepParameters.Vsetable = SETABLE;
model->nvar++;

if ((pt->TimeDepParameters.Val.V_FILENAME = malloc(sizeof(char) * MAX_PATH))
    return MEMORY_ALLOCATION_FAILURE;
sprintf(pt->TimeDepParameters.Val.V_FILENAME, "%s%sHeston_TimeDepParameter

pt->TimeStep.Vname = "Interval of constance";
pt->TimeStep.Vtype = PDOUBLE;
pt->TimeStep.Val.V_PDOUBLE = 0.25;
pt->TimeStep.Viter = FORBID;
pt->TimeStep.Vsetable = SETABLE;
model->nvar++;
}

return OK;
}

TYPEMOD TimeHeston1dim;
MAKEMOD(TimeHeston1dim);

```