Help

```
#include "cirpp2d.h"
#include "chk.h"
#include "model.h"
#include "enums.h"

extern char *path_sep;

static PremiaEnumMember flatint_members[] =
{
  { "to Initial Yields and Intensity in data/ directory", 0 },
  { "to Initial Yields and Spread in data/ directory", 1 },
  { NULL, NULLINT }
};

DEFINE_ENUM(flatint, flatint_members);

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 = 0.0;
      pt->T.Viter = ALLOW;
      model->nvar++;

      pt->flat_flag.Vname = "Calibration";
      pt->flat_flag.Vtype = ENUM;
      pt->flat_flag.Val.V_ENUM.value = 0;
      pt->flat_flag.Val.V_ENUM.members = &flatint;
      pt->flat_flag.Viter = ALLOW;
      model->nvar++;

      pt->InitialYieldsR.Vname = "Initial R0";
      pt->InitialYieldsR.Vtype = PDOUBLE;
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pt->InitialYieldsR.Val.V_PDOUBLE = 0.05;
pt->InitialYieldsR.Viter = ALLOW;
model->nvar++;

pt->aR.Vname = "Speed of Mean Reversion Interest Rate";
pt->aR.Vtype = PDOUBLE;
pt->aR.Val.V_PDOUBLE = 0.15;
pt->aR.Viter = ALLOW;
model->nvar++;

pt->bR.Vname = "Long Term Mean Interest Rate";
pt->bR.Vtype = PDOUBLE;
pt->bR.Val.V_PDOUBLE = 0.05;
pt->bR.Viter = ALLOW;
model->nvar++;

pt->SigmaR.Vname = "Volatility Interest Rate";
pt->SigmaR.Vtype = PDOUBLE;
pt->SigmaR.Val.V_PDOUBLE = 0.1;
pt->SigmaR.Viter = ALLOW;
model->nvar++;

pt->InitialYieldsI.Vname = "Initial I0";
pt->InitialYieldsI.Vtype = PDOUBLE;
pt->InitialYieldsI.Val.V_PDOUBLE = 0.05;
pt->InitialYieldsI.Viter = ALLOW;
model->nvar++;

pt->aI.Vname = "Speed of Mean Reversion Intensity";
pt->aI.Vtype = PDOUBLE;
pt->aI.Val.V_PDOUBLE = 0.15;
pt->aI.Viter = ALLOW;
model->nvar++;

pt->bI.Vname = "Long Term Mean Interest Intensity";
pt->bI.Vtype = PDOUBLE;
pt->bI.Val.V_PDOUBLE = 0.05;
pt->bI.Viter = ALLOW;
model->nvar++;

pt->SigmaI.Vname = "Volatility Intensity";
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      pt->SigmaI.Vtype = PDOUBLE;
      pt->SigmaI.Val.V_PDOUBLE = 0.1;
      pt->SigmaI.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++;

    }
  return OK;
}
TYPEMOD CirPlus2d;
MAKEMOD(CirPlus2d);
```