

## [Help](#)

```
#ifndef GRIDSPARSE_FUNCTIONS_VARSWAP_H
#define GRIDSPARSE_FUNCTIONS_VARSWAP_H
#include "
href../../../../mod/varswap3d/varswap3d_std/varswap3d_std_h_src.pdfvarswap3d_std.h"
#include "
href../../../../common/math/equity_pricer/pde_tools_h_src.pdfmath/equity_pricer/pde
#include "
href../../../../common/math/equity_pricer/gridsparse_constructor_h_src.pdfmath/equi

typedef struct SVSSparseOp
{
    VARSWAP3D_MOD *Model;
    double theta_time_scheme;
    PremiaPDETimeGrid *TG;
    GridSparse *G;
    PnlVect *PC, * V_tmp0, * V_tmp1, * V_tmp2, * V_tmp3,
        * V_tmp4, * V_tmp5, * V_tmp6, * V_tmp7, *V_volatility;
} SVSSparseOp;

////////////////////////////////////
// Stochastic Variance Swap Model Operator on Sparse Grid
////////////////////////////////////

extern SVSSparseOp *svs_sparse_operator_create(int lev, int N_T, VARSWAP3D_MOD *
extern void svs_sparse_operator_free(SVSSparseOp **Op);
extern void GridSparse_Solve_svs(SVSSparseOp *Op, PnlVect *Vres);
#endif
```