**使用步骤：**

1. Add path:

将 ./ selfeutility 路径添加到matlab

（2）将matlab工作路径调整到./selfe\_matlab

（3）演示

slf=selfe(' D:\SCHISM\_Usages\Utility\SELFE\_MATLAB\Example');

figure;

trisurf(slf.elem,slf.x,slf.y,slf.elev(1,:)');

**selfe.m的帮助：**

% obj=selfe(DirIn) - A netcdf style data class to assist reading

% SELFE output data from "DirIn", for matlab 2008a (and later versions).

% The constructed object is a wrapper for the "sz\_readHeader" and

% "sz\_readTimeStep" scripts provided in m-elio and require data in a binary

% Data Format v5.00 (sz-levels) and offers simple alternative to indexing

% output files.

%

% Index references are strictly in this order:

% time, element, vertical layer, u/v

% e.g. selfeobj.hvel(2,1,1,1) would access u velocity for the 2nd timestep, 1st element and the bottom layer.

% Note the following important information:

% hgrid.gr3, vgrid.in and param.in\* files must be present in "DirIn", as well output data.

% \* in "param.in" start date needs to be at the start of the param file, 1st two lines of the

% param file may look like this for e.g.

% ! Note require start time at start of param file for selfe data object...

% ! 20/10/2010 10:00

%

% The directory "DirIn" the must be clean with only combined output files ,

% (and hgrid.gr3, vgrid.in, param.in) and no missing files (i.e. file 1,2,3,4... must all be present).

% Uncombined files should be moved to a separated directory within or outside of the "DirIn" directory.

% Note that filenames and date format ("dd/mm/yyyy HH:MM" format) are hardwired in "/selfeutility/initSELFEvar.m" as:

% result.param\_file='param.in';

% result.grid\_file='hgrid.gr3';

% result.vgrid\_file='vgrid.in';

% result.dateFormat='dd/mm/yyyy HH:MM'

%

% WARNING: as file access occurs in the background (i.e. calls to "sz\_readTimeStep") this object it may

% be slow to respond, particularly for a large number of files.

% Therefore be careful accessing the time dimension with a ":"

% e.g. selfeobj.hvel(:,:,:,:) may be slow to respond or run out of memory if there are a large number of files.

% Example of using provided example files, trisurf plot of surface elevations at time 1:

% %load SELFE object from Example directory provided

% dirin=which('selfe');

% [dirin file]=fileparts(dirin);

% cd(dirin)

% slf=selfe('..\Example\');

% plot elevations figure;

% trisurf(slf.elem,slf.x,slf.y,slf.elev(1,:)');

% view([0 90]);

% shading interp;