

fix_RES_file

The purpose of this code is to fix the following problems:

- In some versions of the Intell compiler, the values for NMAX[0] and NMAX[1] are not written correctly in the RES file. They are very large numbers, causing many post-processing codes to hang. The first option in this code outputs the current value in the files and prompts for a new value.
- In some cases when interpolating a grid with post_mfix, the cell FLAGS all get set to zero. This causes some post processing routines that look for fluid cells to not work. The second option does a fix to this by setting all interior cells to fluid, and all exterior cells to wall. Obviously this will not be appropriate for all runs.
- Modify the date stored in the header record of the RES file. The m2e translator (MFX to Enight case file) will not run if there is a mismatch in the header times in the RES files and SPx files. The mismatch sometimes occurs when doing restart_2 runs.

Build Instructions

To build using g++

```
g++ fix_RES_file.cpp MfixData.cpp -o fix_RES_file.exe
```

Usage

After prompting for the RUN_NAME, the following menu is displayed:

```
1)  modify NMAX array
2)  set all FLAGS equal to FLUID (one)
3)  modify the dates in the second record

Enter choice >  1 or 2 or 3
```

Option: 1 [modify NMAX array]

The code outputs the current values for NMAX[i] , i=0,MMAX and prompts for new values.

Option: 2 [set all FLAGS equal to FLUID (one)]

The code sets all the cell flags equal to FLUID (1) except for the boundary cells, which are set to WALL.

Option: 3 [modify the dates in the second record]

The code outputs the current values and prompts for new ones for the following time data:

month , day , year , hour , minute , sec