Linearized Free Surface 3D Wave Resistance Code Documentation

Release 1.0

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Apr 09, 2019

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1.1 Features

- Linearized free surface boundary condition
- Fortran 90 implementation

1.2 Build

Build the executable:

- make file set up to use gfortran
- assumes you have make tools.
- might work with g95 but not tested
- cd into the main directory for this project and run:

$ make

1.3 Run

Run the included wigley hull example with

$ ./flowsolve fifi.dat test1.out .2

- ./flowsolve runs the executable
- fifi.dat selects the included panel input file of the wigely hull
- test1.out sets an output file
- .2 sets the Froude number to 0.2

1.4 Results

- Hydrodynamic results are viewable in .vtp files
- VTK Paraview is the recommended viewing engine.

1.5 Notes

This version tested on:

- OSX
- Linux