Group Meeting Week 5, Spring 2019

Brandon Gusto

Dept. of Scientific Computing Florida State University

February 4, 2019

Multiresolution Scheme Implementation

The following items are functional, but not ready for general case. Currently hardcoded for working on density variable only, only in one spatial dimension.

- created a folder source/flashUtilities/Wavelet/
- written several programs...
 - ▶ Wavelet_data.F90
 - Wavelet_blockInit.F90
 - Wavelet_forwardTransform.F90
 - Wavelet_inverseTransform.F90
 - ▶ Wavelet_blockClear.F90
- implemented such functions inside hy_ppm_block.F90

Am successfully computing detail coefficients, but want to also plot them soon...

Multiresolution Scheme Implementation

To-do list:

- need to pass a non-uniform array to hydro_1d.F90
- inverse transform requires cell width info
- write output file for detail coefficients