Group Meeting
Week 6, Spring 2019

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Multiresolution Flux Scheme

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$$R_i^L = F_{i+1/2}^L - F_{i-1/2}^L$$

4. replacing certain cells with interpolation, based on mask information

$$R_{2i+1}^{l+1} = \sum_l \gamma_l R_i^l$$

$$R_{2i}^{l+1} = 2R_i^l - R_{2i+1}^l$$

Preliminary Results

The following movies show active cells in the hierarchy (top) and detail coefficients of the density transform (black) and density flux transform(red) (bottom).

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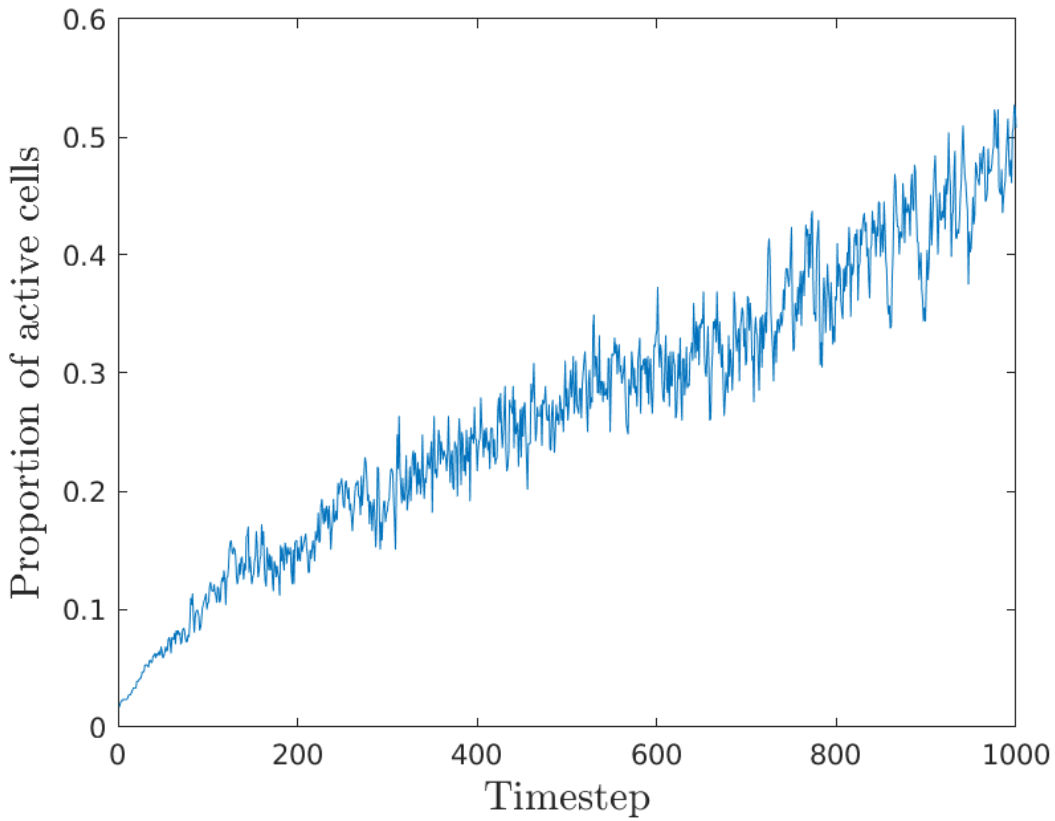
Proportion of active cells at the finest level during the simulation.



To-Do List

Several items needing attention are

- set wavelet threshold in `flash.par`
- set refinement variables there as well

Later on will need to...

- test a suite of problems
- run on parallel blocks
- compare solutions obtained via MR with non-MR
- pass a non-uniform array to `hydro_1d.F90`, test efficiency