

HPC Repast Challenge

SC15 Student Cluster Competition

The HPC Repast Challenge contains two data sets `landscan_sc_xxx_5000.h5` and `landscan_sc_xxx_10000.h5`, where `xxx` represent the two input files, human and zombie. The 5000 data set represents 1/5000 of the total population, while the 10000 data set represents 1/10000. Your challenge is to run the modified zombie simulation for 100 timesteps producing output at every 10 timesteps. The 5000 data set is worth 50 points, the 10000 data set is worth 30 points, with 20 points for the application interview.

You have two options for producing this output. You may either use the code that has been provided to you that outputs a single HDF5 file per run. However, this code is an all or nothing proposition on points, as any run that does not complete will result in a corrupted HDF5 file. If a team is willing, they may use the code found at https://github.com/scamicha/SCC15HPCRepast/tree/periodic_output to produce several HDF5 output files which will allow for partial credit. In either case, please use the included `hzombie_model.props` file as the `model.props`. You will need to provide `proc.per.x`, `proc.per.y`, `human.input.file`, `human.output.file`, `zombie.input.file`, and `zombie.output.file` based on your system.