

Generic GPU memory index specification for TVB models

Flattened memory representation for:

state variables: state_pwi[(timestep%timebuffer) * n_nodes * gridsize + i_node*gridsize + threadid]

The grid represents 1 node, each thread represents a parameter combination. A kernel invocation steps through all nodes for every other node for every time step and stores results in the flattened representation of state_pwi.

Other memory representation:

sweep parameters: params_pwi[(gridsize * (par_index)) +threadid

observables: tavg_pwi[i_node * gridsize) + threadid]

weights[i_node * n_nodes + i_node];

lengths[i_node * n_nodes + j_node];