Relation of M to increasing time step sizes
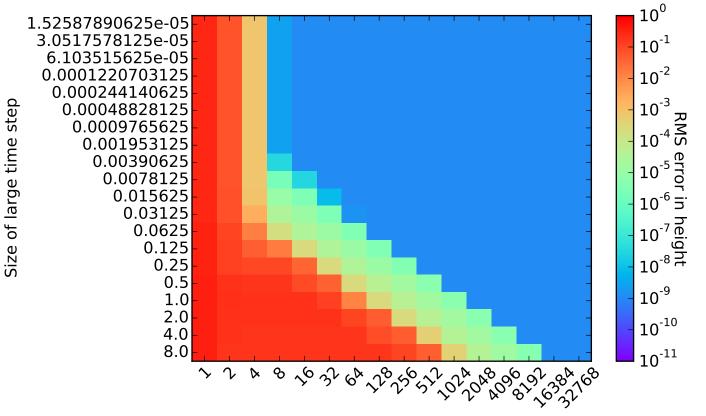resolution = 128x128