

Instructions for simulation

1. Files

This a list of some files in the directory and their functions.

colour.pal: it indicates colours associated to four states.

s_grule.inc: it includes macros which are used to determine the parameters and some useful functions.

WormModelling.LOG: an outcome of an initial simulation with three infected-cells at first.

WormModelling.ma: it is the configuration of whole project, which includes rules, definitions, and initial values.

WormModelling.val: initial values. You can set a specific value to every cell.

2. Simulation guides

Simulate Project

Coupled Model file name (.ma)
WormModelling.ma

Event file name (.ev)
☐

Autogenerate the names for "out", "log" files:
☐ Out ☒ Log

Output file name (.out)
☐

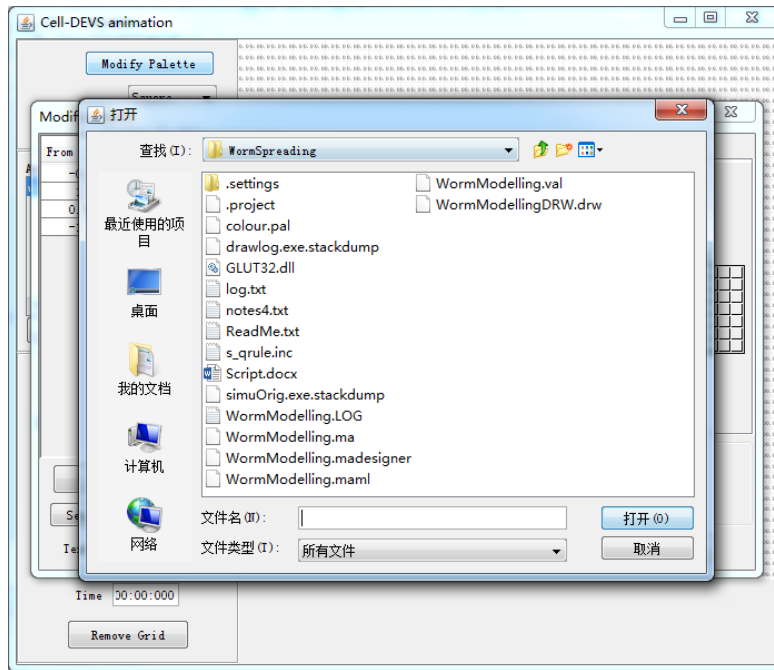
Log file name (.log)
☒ WormModelling.LOG

Simulation stop time (hh:mm:ss:ms)
(NOTE: unchecked time option means 'infinity' as stop time)
☐ : : :

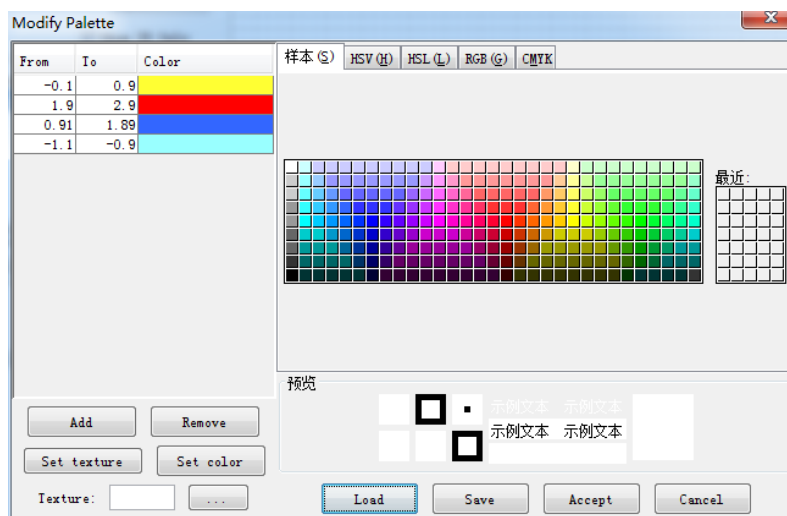
Advanced Users Only. Enter desired parameters:
☐

Comments
☐

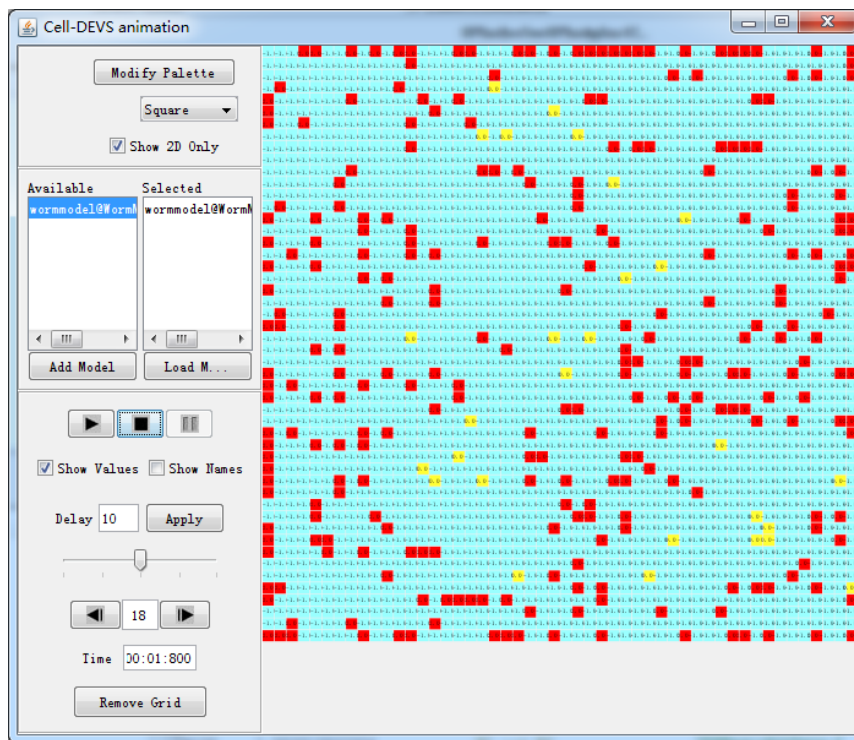
This graph shows the setting of the simulation. The stop time should be infinite to complete the entire process of simulation.



Open the CD++ modeler, and set the palette with the “colour.pal”. In this palette, a red one represents an infected cell, and a blue one represents a questionable cell, while the green one and yellow one represent immunized cell and susceptible cell.



3. Outcome



As you can see the left infected cells are isolated among those who are immunized. You can also simulate it step by step to make the process clearer.