

Grid Size Impact in Runtime

45°/15°/5° grid, buffer of 10, Simulation step 1 minute, 10 days of simulation time

Median Values

Initiative & Threads	45° Grid size	15° Grid size	5° Grid size
GUI - All in the same thread	22,673,987,308	26,765,559,894	55,334,521,525
GUI - All in separate threads	22,665,173,139	27,227,622,437	55,445,600,928
Presentation - Presentation in own thread	22,929,457,356	26,515,824,938	57,895,080,049
Simulation - Simulation in own thread	22,475,565,389	26,177,029,594	59,474,749,577
Simulation - Presentation in own thread	22,917,818,124	26,603,644,407	45,249,798,761

Expressed as percentage of minimum

Initiative & Threads	45° Grid size	15° Grid size	5° Grid size
GUI - All in the same thread	100.88%	119.09%	246.20%
GUI - All in separate threads	100.84%	121.14%	246.69%
Presentation - Presentation in own thread	102.02%	117.98%	257.59%
Simulation - Simulation in own thread	100.00%	116.47%	264.62%
Simulation - Presentation in own thread	101.97%	118.37%	201.33%

Expressed as percentage of maximum

Initiative & Threads	45° Grid size	15° Grid size	5° Grid size
GUI - All in the same thread	38.12%	45.00%	93.04%
GUI - All in separate threads	38.11%	45.78%	93.23%
Presentation - Presentation in own thread	38.55%	44.58%	97.34%
Simulation - Simulation in own thread	37.79%	44.01%	100.00%
Simulation - Presentation in own thread	38.53%	44.73%	76.08%

Runtime vs Grid Cell Size - Variants by Initiative and Threads

