Above is the P­mean of three different populations shown. Responsiveness is introduced in model 1.0 in a Boolean way. Interestingly two populations go to the equilibrium straight away. The blue graph shows the population which started at 95% cooperativeness. Its cooperativeness drops very quickly before reaching the equilibrium around 0.67.

Above shows the responsiveness of the same populations. It can be seen that high responsiveness doesn’t hold up very long. After some time, the three population get to an equilibrium around 0.1 responsiveness. Initially all populations have 0 responsiveness, so it is interesting to see that the population who starts at 95% cooperativeness has a large fraction responsiveness (around 95%).

Above shows the P0 or the intrinsic tendency to cooperate for three different initial conditions. Three populations with three different initial conditions show an equilibrium around 0.67 after 100000 generations. The 95% initial cooperativeness population holds a high cooperativeness quiet long. When the responsiveness goes down (see figure ‘Responsiveness’), the P0 drops to the equilibrium as well.

Thus the 95% population has high cooperativeness and high responsiveness, which results in high defect tendencies. Until, the responsiveness drops, then the cooperation and the P0 go to the equilibrium like the 5% and the 67% populations. They either go quickly to the equilibrium or start at is and stay at the equilibrium.

Above shows the standard deviation of the P0. In all three cases, it is low with some small peaks not larger than 0.2.