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| Description | Graph |
| We are starting the synthetic environment with no agents. The society starts to evolve. If an agent is lost, another neutral agent replaces its spot maintaining the society level constant. |  |
| We populate the environment with 4000 actors. At T1 the population would have a normal distribution. |  |
| We extract the geospatial information from three countries that are very different in the 9 features we are seeking. Religion, education, wealth. |  |
| Based on the distribution of terrorist crime we populate the initial weights to correspond geographical characteristics. We are noticing that in the in the synthetic societies corresponding to higher accounted weights favorable to what we know about terrorism the terrorist profiles are stronger for the same number of runs, as opposed to lower weights attributed to countries with less terrorism. |  |
| On the right hand side we are showing an example of the population evolution in two societies after 2000 ticks. On the horizontal axes we rank the positivity of the agent, from negatives, that would account for presence of terrorism to neutral and positive attitudes accounting for the civilians and police. In the first graph we used weights from France, where in the second one we used weights to simulate Pakistan. We are noticing that the results are showing more negative attitudes in Pakistan as opposed to France which is in line with gathered data. |  |
| At a subsequent 3000 ticks iteration we record the following bias for Pakistan. |  |
| At this tick the population starts shifting, from a Gaussian distribution to more of a long tail on the right. |  |
| At the 4000 ticks, we are noticing an even longer tail. This corresponds to the end of the runs and we are getting a comparable distribution to what is recorded for terrorist activities in some of the studied datasets, more exactly to RAND dataset. |  |
| We notice that if we let the society run past the 4000 ticks initially set at, the right hand tail becomes longer. So we need to sharply tune the model to simulate a given society. |  |
| We et a threshold for the bias for attack. If a connected cluster of the right profile exceeds a certain bias, an attack takes place. If the attack happens connections of civilians and police of the perpetrator are affected. If the power of the perpetuator is much higher than the police, casualties appear. As far as the interactions recorded in the synthetic environment, we have most of the interactions that do not result casualties, yet some do, yet this is a rare event. |  |
| Here we are showing the sample recorded, most interactions had no casualty, here we are showing the density distribution at the end of the run. |  |