**1) Global control:**

**reflex** **main\_reflex**

**action** **getCoordinates**

**action** **dumpLighttrap**

**2) Initialization**

**action** **loadLighttrapData**

**action** **loadCurrentTrapCoordinates**

**action** **loadCellsCoordinates**

**action** **loadOptimalTrapCoordinates**

**action** **loadGeneralWeatherData**

**# Load data for the Heuristic Cellular Automata**

**action** **loadStandardDeviation**

**action** **loadStandardDeviationR**

**3. EEMs:**

**3.1. Estimation**

**action** **estimate\_Kriging\_by\_day\_R\_current\_network**

**action** **estimate\_Kriging\_by\_day\_R**

**action** **estimate\_IDW\_Density**

**action** **estimate\_IDW\_by\_Day**

**action** **estimate\_IDW\_Correlation**

**action** **estimate\_IDW\_Variance**

**3.2. Migration**

**action** **dispatchByWind**

**action** **propagateInSemiRound**

**action** **assign\_cell\_to\_node**

**4) SNM:**

**action** **add\_nodes\_to\_network**

**action** **getCorrelationTwoDays**

**action** **getsCorrelationByEdges**

**5) Interaction:**

**action** **update\_curent\_density**

**action** **get\_number\_of\_BPH\_by\_Day**

**6) Optimization:**

**action** **optimizeByMicroAlgorithm**

**action** **optimizeByPSOAlgorithm**

**action** **optimizeByCDGAlgorithm**

**action** **optimize\_network\_by\_CDG**

**7) Assessment:**

**action** **MSE\_variogram\_node\_list\_R**

**action** **MSE\_variogram\_R**