



Smart Sprinkler

Worksheet No. 1 - Historical Data and Short Simulations

Objective: This worksheet explores the impact of different years of historical data on garden health. Your task is to develop a set of operating rules for a smart sprinkler that minimises the amount of water used and ensure at least 80% garden health.

1. Make sure you are familiar with the smart sprinkler app and have read the introduction on the 'About' page. Move to the 'Simulation' tab and select a scenario from the drop down menu (e.g. 2016 historical). Choose a scenario (rain, temperature and evaporation) to begin your investigation.

Scenario Selected:

Working out (use this space to record different rules you have tried):

Use this space to record your final best rules:



Garden Health:



Water Usage:

2. Try five to ten different years of data. Is the garden health always above 80%? Adjust your rules to make sure garden health is always above 80% but also using minimum water.

3. Compare your rules to others' in the class. Do you think your rules give the best possible performance?

5. List three additional pieces of information that might be useful in developing operating rules for your smart sprinkler.