Environment spaces

Based on the GreenLight model and the state variables.

Table 1. Action space description for the greenhouse environment

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Range** | **Unit** |
| Time | Time since the beginning of the data | [0, 86400] | milliseconds |
| Ventilation | Average roof ventilation aperture | 0-1 (1 is fully open) | - |
| Lamps | Toplights on/off | 0/1 (1 is on) | - |
| Heater | Heater on/off | 0-1 (1 is fully open) | - |
|  |  |  |  |

Table 2. Observation space description for the greenhouse environment

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Range** | **Unit** |
| Time | Time since the beginning of the data | [0, 86400] | milliseconds |
| Indoor temperature | Air temperature inside the greenhouse | [22.25, 24.51] |  |
| Indoor humidity | Air humidity inside the greenhouse | [] |  |
| PAR inside | The PAR light level above the canopy | [] |  |
| Fruit dry weight |  |  |  |