Annex1: ENVI-met inputs

***Table A1.*** *Settings of the Area Input Files*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **B1C1** | **B1C2** | **B1C3** | **B1C4** | **B1C5** |
| Domain (m) - *(x)(y)(z)* | 201x201x36 | 201x201x72 | 201x201x30 | 201x201x30 | 216x216x119 |
| Grid Size - *(x)(y)(z)* | 67x67x12 | 67x67x24 | 67x67x10 | 67x67x10 | 72x72x28 **T\*** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **B2C1** | **B2C2** | **B2C3** | **B2C4** | **B2C5** |
| Domain (m) - *(x)(y)(z)* | 222x222x30 | 207x207x39 | 213x213x30 | 222x222x19 | 231x231x202  |
| Grid Size – *(x)(y)(z)* | 74x74x10 | 69x69x13 | 71x71x10 | 74x74x10 | 77x77x32 **T\*** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **B3C1** | **B3C2** | **B3C3** | **B3C4** | **B3C5** |
| Domain (m) - *(x)(y)(z)* | 201x201x30 | 204x204x30 | 204x204x30 | 207x207x30 | 201x201x156 |
| Grid Size - *(x)(y)(z)* | 67x67x10 | 68x68x10 | 68x68x10 | 69x69x10 | 67x67x36 **T\*** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **B4C1** | **B4C2** | **B4C3** | **B4C4** | **B4C5** |
| Domain (m) - *(x)(y)(z)* | 225x225x69 | 231x231x84 | 210x210x63 | 222x222x131 | 231x231x103 |
| Grid Size - *(x)(y)(z)* | 75x75x19 **T\*** | 77x77x22 **T\*** | 70x70x17 **T\*** | 74x74x32 **T\*** | 77x77x26 **T\*** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **B5C1** | **B5C2** | **B5C3** | **B5C4** | **B5C5** |
| Domain (m) - *(x)(y)(z)* | 282x282x63 | 270x270x24 | 312x312x24 | 282x282x30 | 303x303x277 |
| Grid Size – *(x)(y)(z)* | 94x94x17 **T\*** | 90x90x8 | 104x104x8 | 94x94x10 | 101x101x57 **T\*** |

**T\*- telescopic height**

***Table A2.*** *Rotterdam Material Database*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **User Defined Wall** Medium insulation |  |  | **Dark** **Asphalt** | **Grey** **Concrete** |
| Thickness (m) | 0.30 |  | Roughness | 0.01 | 0.01 |
| Absorption | 0.6 |  | Albedo | 0.2 | 0.5 |
| Transmission | 0 |  | Emissivity  | 0.9 | 0.9 |
| Reflection  | 0.4 |  |  |  |  |
| Emissivity  | 0.95 |  |  |  |  |
| Specific Heat (J/kg⋅K) | 840 |  |  |  |  |
| Thermal Conductivity (W/m⋅K) | 0.140 |  |  |  |  |

***Table A3.*** *Settings of the Configuration Files*

|  |  |
| --- | --- |
| Simulation days | 28.06.2020 /29.06.2020/30.06.2020 |
| Simulation time | 72h |
| Location  | Rotterdam (lat. 51.96, long. 4.41) |
| Output interval  | 60min |
| KNMI Rotterdam (Full forcing) | <https://www.knmi.nl/nederland-nu/klimatologie/uurgegevens>  |