

Supplementary material E: History of the models discovery for solar plant in Eureqa

3:08:56PM> Search started: ActiveenergykWh = f(m, d, y, h, Temper, maxtemper, mintemper, Irradiation, DirectIrrad, Cloudiness, Highcloudcover, Mediumcloudcover, Lowcloudcover, Precipitation)

3:08:57PM> New solution: Fit: 4.59062 Size: 3 Solution: ActiveenergykWh = 1.955e-5*Irradiation

3:08:57PM> New solution: Fit: 4.58321 Size: 3 Solution: ActiveenergykWh = 1.977e-5*Irradiation

3:08:58PM> New solution: Fit: 13.8796 Size: 1 Solution: ActiveenergykWh = 10.56

3:08:58PM> New solution: Fit: 4.4335 Size: 9 Solution: ActiveenergykWh = 1.382e-6*Irradiation*log(Irradiation)

3:08:59PM> New solution: Fit: 4.39183 Size: 13 Solution: ActiveenergykWh = 2.541e-6*Irradiation*log(Irradiation) - 1.696e-5*Irradiation

3:08:59PM> New solution: Fit: 4.37254 Size: 13 Solution: ActiveenergykWh = 2.723e-6*Irradiation*log(Irradiation) - 1.915e-5*Irradiation

3:09:00PM> New solution: Fit: 4.51681 Size: 8 Solution: ActiveenergykWh = 2.035e-5*Irradiation*cos(Mediumcloudcover)

3:09:00PM> New solution: Fit: 4.55847 Size: 5 Solution: ActiveenergykWh = 2.082e-5*Irradiation - 1

3:09:01PM> New solution: Fit: 4.55452 Size: 5 Solution: ActiveenergykWh = 2.033e-5*Irradiation - 0.899

3:09:02PM> New solution: Fit: 4.55178 Size: 5 Solution: ActiveenergykWh = 2.033e-5*Irradiation - 0.8518

3:09:02PM> New solution: Fit: 4.54691 Size: 5 Solution: ActiveenergykWh = 2.033e-5*Irradiation - 0.7028

3:09:03PM> New solution: Fit: 4.48216 Size: 7 Solution: ActiveenergykWh = 5.339e-5*Irradiation - 2.831e-5*DirectIrrad

3:09:03PM> New solution: Fit: 4.48144 Size: 7 Solution: ActiveenergykWh = 5.347e-5*Irradiation - 2.834e-5*DirectIrrad

3:09:06PM> New solution: Fit: 4.36569 Size: 15 Solution: ActiveenergykWh = 0.08824 + 2.923e-6*Irradiation*log(Irradiation) - 2.214e-5*Irradiation

3:09:06PM> New solution: Fit: 4.42897 Size: 9 Solution: ActiveenergykWh = 1.598e-5*Irradiation + 2.056e-12*Irradiation^2

3:09:09PM> New solution: Fit: 4.36459 Size: 15 Solution: ActiveenergykWh = 0.1543 + 3.033e-6*Irradiation*log(Irradiation) - 2.382e-5*Irradiation

3:09:13PM> New solution: Fit: 4.36216 Size: 19 Solution: ActiveenergykWh = 0.251 + 3.035e-6*Irradiation*log(Irradiation) - 2.388e-5*Irradiation - 0.1984*Cloudiness

3:09:13PM> New solution: Fit: 4.36211 Size: 19 Solution: ActiveenergykWh = 0.251 + 3.035e-6*Irradiation*log(Irradiation) - 2.388e-5*Irradiation - 0.1612*Cloudiness

3:09:14PM> New solution: Fit: 4.36208 Size: 19 Solution: ActiveenergykWh = 0.251 + 3.035e-6*Irradiation*log(Irradiation) - 2.388e-5*Irradiation - 0.18*Cloudiness

3:09:15PM> New solution: Fit: 4.50655 Size: 5 Solution: ActiveenergykWh = 6.783e-8*Temper*Irradiation

3:09:16PM> New solution: Fit: 4.36085 Size: 19 Solution: ActiveenergykWh = 0.251 + 3.035e-6*Irradiation*log(Irradiation) - 2.388e-5*Irradiation - 0.2894*Lowcloudcover

3:09:16PM> New solution: Fit: 4.34375 Size: 20 Solution: ActiveenergykWh = 3.04e-6*Irradiation*log(Irradiation) - sin(3.04e-6*Irradiation) - 2.374e-5*Irradiation

3:09:16PM> New solution: Fit: 4.30623 Size: 22 Solution: ActiveenergykWh = 0.2964 + 2.97e-6*Irradiation*log(Irradiation) - sin(2.97e-6*Irradiation) - 2.272e-5*Irradiation

3:09:18PM> New solution: Fit: 4.33838 Size: 20 Solution: ActiveenergykWh = 2.97e-6*Irradiation*log(Irradiation) - sin(2.97e-6*Irradiation) - 2.272e-5*Irradiation

3:09:18PM> New solution: Fit: 4.36451 Size: 15 Solution: ActiveenergykWh = 0.189 + 3.298e-6*Irradiation*log(Irradiation) - 2.765e-5*Irradiation

3:09:19PM> New solution: Fit: 4.3329 Size: 20 Solution: ActiveenergykWh = 2.977e-6*Irradiation*log(Irradiation) - sin(2.857e-6*Irradiation) - 2.265e-5*Irradiation

3:09:22PM> New solution: Fit: 4.36451 Size: 17 Solution: ActiveenergykWh = 0.189 + 3.298e-6*Irradiation*log(0.378 + Irradiation) - 2.765e-5*Irradiation

3:09:23PM> New solution: Fit: 4.30465 Size: 22 Solution: ActiveenergykWh = 0.2491 + 2.811e-6*Irradiation*log(Irradiation) - sin(2.811e-6*Irradiation) - 2.049e-5*Irradiation

3:09:23PM> New solution: Fit: 4.36447 Size: 17 Solution: ActiveenergykWh = 0.189 + 3.298e-6*Irradiation*log(mintemper + Irradiation) - 2.765e-5*Irradiation

3:09:24PM> New solution: Fit: 4.36428 Size: 17 Solution: ActiveenergykWh = 0.189 + 3.298e-6*Irradiation*log(Irradiation + y) - 2.765e-5*Irradiation

3:09:24PM> New solution: Fit: 4.32855 Size: 20 Solution: ActiveenergykWh = 2.817e-6*Irradiation*log(Irradiation) - sin(2.817e-6*Irradiation) - 2.045e-5*Irradiation

3:09:25PM> New solution: Fit: 4.32526 Size: 20 Solution: ActiveenergykWh = 2.756e-6*Irradiation*log(Irradiation) - sin(2.756e-6*Irradiation) - 1.944e-5*Irradiation

3:09:25PM> New solution: Fit: 4.36428 Size: 17 Solution: ActiveenergykWh = 0.189 + 3.298e-6*Irradiation*log(2023 + Irradiation) - 2.765e-5*Irradiation

3:09:26PM> New solution: Fit: 4.36428 Size: 17 Solution: ActiveenergykWh = 0.189 + 3.298e-6*Irradiation*log(2023 + Irradiation) - 2.765e-5*Irradiation

3:09:26PM> New solution: Fit: 4.37381 Size: 12 Solution: ActiveenergykWh = 1.952e-5*Irradiation - 1.684*sin(2.756e-6*Irradiation)

3:09:27PM> New solution: Fit: 4.3168 Size: 12 Solution: ActiveenergykWh = 1.98e-5*Irradiation - 2.696*sin(1.889e-6*DirectIrrad)

3:09:27PM> New solution: Fit: 4.31614 Size: 12 Solution: ActiveenergykWh = 1.98e-5*Irradiation - 2.896*sin(2.176e-6*Irradiation)

3:09:28PM> New solution: Fit: 4.31609 Size: 12 Solution: ActiveenergykWh = 1.98e-5*Irradiation - 2.894*sin(2.176e-6*Irradiation)

3:09:28PM> New solution: Fit: 4.30685 Size: 12 Solution: ActiveenergykWh = 2.006e-5*Irradiation - 2.923*sin(2.256e-6*Irradiation)

3:09:29PM> New solution: Fit: 4.30622 Size: 12 Solution: ActiveenergykWh = 1.993e-5*Irradiation - 2.921*sin(2.256e-6*Irradiation)

3:09:35PM> New solution: Fit: 4.30246 Size: 14 Solution: ActiveenergykWh = 0.04926 + 1.993e-5*Irradiation - 2.929*sin(2.256e-6*Irradiation)

3:09:37PM> New solution: Fit: 4.3024 Size: 14 Solution: ActiveenergykWh = 0.1179 + 1.989e-5*Irradiation - 3.081*sin(2.256e-6*Irradiation)

3:09:37PM> New solution: Fit: 4.47536 Size: 7 Solution: ActiveenergykWh = 2.277e-10*Temper^2*Irradiation

3:09:38PM> New solution: Fit: 4.47316 Size: 7 Solution: ActiveenergykWh = 2.289e-10*Temper^2*Irradiation

3:09:41PM> New solution: Fit: 4.30213 Size: 14 Solution: ActiveenergykWh = 0.1158 + 1.982e-5*Irradiation - 3.054*sin(2.256e-6*Irradiation)

3:09:41PM> New solution: Fit: 4.30196 Size: 14 Solution: ActiveenergykWh = 0.1223 + 1.982e-5*Irradiation - 3.054*sin(2.256e-6*Irradiation)

3:09:45PM> New solution: Fit: 4.30193 Size: 14 Solution: ActiveenergykWh = 0.1254 + 1.982e-5*Irradiation - 3.056*sin(2.256e-6*Irradiation)

3:09:49PM> New solution: Fit: 4.30182 Size: 14 Solution: ActiveenergykWh = 0.1254 + 1.982e-5*Irradiation - 3.062*sin(2.258e-6*Irradiation)

3:09:53PM> New solution: Fit: 4.30169 Size: 14 Solution: ActiveenergykWh = 0.1254 + 1.984e-5*Irradiation - 3.062*sin(2.258e-6*Irradiation)

3:11:37PM> New solution: Fit: 4.29776 Size: 14 Solution: ActiveenergykWh = 6.791e-8*Temper*Irradiation - 2.784*sin(2.254e-6*Irradiation)

3:11:37PM> New solution: Fit: 4.2924 Size: 14 Solution: ActiveenergykWh = 6.755e-8*Temper*Irradiation - 2.833*sin(2.321e-6*Irradiation)

3:11:38PM> New solution: Fit: 4.28946 Size: 14 Solution: ActiveenergykWh = 6.791e-8*Temper*Irradiation - 2.786*sin(2.321e-6*Irradiation)

3:11:38PM> New solution: Fit: 4.28241 Size: 14 Solution: ActiveenergykWh = 6.781e-8*Temper*Irradiation - 2.626*sin(2.347e-6*Irradiation)

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3:11:39PM> New solution: Fit: 4.28138 Size: 14 Solution: ActiveenergykWh = 6.781e-8*Temper*Irradiation - 2.57*sin(2.347e-6*Irradiation)
3:11:44PM> New solution: Fit: 4.28118 Size: 14 Solution: ActiveenergykWh = 6.771e-8*Temper*Irradiation - 2.586*sin(2.354e-6*Irradiation)
3:11:45PM> New solution: Fit: 4.28109 Size: 14 Solution: ActiveenergykWh = 6.775e-8*Temper*Irradiation - 2.586*sin(2.354e-6*Irradiation)
3:11:45PM> New solution: Fit: 4.28093 Size: 23 Solution: ActiveenergykWh = 6.779e-8*Temper*Irradiation + 6.779e-8*Irradiation*cos(Temper) - 2.586*sin(2.354e-6*Irradiation)
3:11:46PM> New solution: Fit: 4.28024 Size: 16 Solution: ActiveenergykWh = 0.001761 + 6.779e-8*Temper*Irradiation - 2.586*sin(2.36e-6*Irradiation)
3:11:46PM> New solution: Fit: 4.28064 Size: 14 Solution: ActiveenergykWh = 6.771e-8*Temper*Irradiation - 2.586*sin(2.36e-6*Irradiation)
3:11:47PM> New solution: Fit: 4.27536 Size: 16 Solution: ActiveenergykWh = 0.09925 + 6.779e-8*Temper*Irradiation - 2.699*sin(2.36e-6*Irradiation)
3:11:48PM> New solution: Fit: 4.27498 Size: 16 Solution: ActiveenergykWh = 0.1001 + 6.741e-8*Temper*Irradiation - 2.633*sin(2.36e-6*Irradiation)
3:11:49PM> New solution: Fit: 4.27421 Size: 16 Solution: ActiveenergykWh = 0.1244 + 6.741e-8*Temper*Irradiation - 2.633*sin(2.36e-6*Irradiation)
3:11:56PM> New solution: Fit: 4.41537 Size: 11 Solution: ActiveenergykWh = 1.055e-6*Temper*Irradiation - 9.893e-7*maxtemper*Irradiation
3:12:22PM> New solution: Fit: 4.28064 Size: 14 Solution: ActiveenergykWh = 6.771e-8*Temper*Irradiation - 2.586*sin(2.36e-6*Irradiation)
3:13:24PM> New solution: Fit: 4.40867 Size: 11 Solution: ActiveenergykWh = 1.06e-6*Temper*Irradiation - 9.936e-7*maxtemper*Irradiation
3:13:36PM> New solution: Fit: 4.40816 Size: 11 Solution: ActiveenergykWh = 1.03e-6*Temper*Irradiation - 9.635e-7*maxtemper*Irradiation
3:13:37PM> New solution: Fit: 4.40727 Size: 11 Solution: ActiveenergykWh = 1.036e-6*Temper*Irradiation - 9.692e-7*maxtemper*Irradiation
3:14:02PM> New solution: Fit: 4.26933 Size: 48 Solution: ActiveenergykWh = 0.1264 + 6.738e-8*Temper*Irradiation - exp(cos(Highcloudcover))*sin(2.36e-6*Irradiation)
3:14:13PM> New solution: Fit: 4.27374 Size: 18 Solution: ActiveenergykWh = 0.0123*h + 6.738e-8*Temper*Irradiation - 2.711*sin(2.358e-6*Irradiation)
3:14:26PM> New solution: Fit: 4.26779 Size: 52 Solution: ActiveenergykWh = 0.01135*h + 6.738e-8*Temper*Irradiation - exp(cos(Highcloudcover))*sin(2.36e-6*Irradiation)
3:14:28PM> New solution: Fit: 4.26591 Size: 52 Solution: ActiveenergykWh = 0.01135*h + 6.738e-8*Temper*Irradiation - exp(cos(Highcloudcover))*sin(2.378e-6*Irradiation)
3:14:28PM> New solution: Fit: 4.26908 Size: 48 Solution: ActiveenergykWh = 0.1065 + 6.737e-8*Temper*Irradiation - exp(cos(Highcloudcover))*sin(2.365e-6*Irradiation)
3:14:32PM> New solution: Fit: 4.27344 Size: 18 Solution: ActiveenergykWh = 0.01017*h + 6.738e-8*Temper*Irradiation - 2.674*sin(2.358e-6*Irradiation)
3:14:34PM> New solution: Fit: 4.26586 Size: 52 Solution: ActiveenergykWh = 0.01017*h + 6.738e-8*Temper*Irradiation - exp(cos(Highcloudcover))*sin(2.378e-6*Irradiation)
3:14:39PM> New solution: Fit: 4.27053 Size: 21 Solution: ActiveenergykWh = 0.1561 + 6.74e-8*Temper*Irradiation - 2.775*cos(Highcloudcover)*sin(2.36e-6*Irradiation)
3:14:41PM> New solution: Fit: 4.26957 Size: 23 Solution: ActiveenergykWh = 0.01017*h + 6.74e-8*Temper*Irradiation - 2.896*cos(Highcloudcover)*sin(2.36e-6*Irradiation)
3:14:43PM> New solution: Fit: 4.26905 Size: 21 Solution: ActiveenergykWh = 0.1228 + 6.74e-8*Temper*Irradiation - 2.896*cos(Highcloudcover)*sin(2.376e-6*Irradiation)
3:14:52PM> New solution: Fit: 4.27334 Size: 18 Solution: ActiveenergykWh = 0.01017*h + 6.74e-8*Temper*Irradiation - 2.685*sin(2.36e-6*Irradiation)
3:14:54PM> New solution: Fit: 4.26763 Size: 23 Solution: ActiveenergykWh = 0.01017*h + 6.74e-8*Temper*Irradiation - 2.886*cos(Highcloudcover)*sin(2.376e-6*Irradiation)
3:14:56PM> New solution: Fit: 4.27332 Size: 18 Solution: ActiveenergykWh = 0.01026*h + 6.74e-8*Temper*Irradiation - 2.685*sin(2.36e-6*Irradiation)
3:15:04PM> New solution: Fit: 4.35578 Size: 9 Solution: ActiveenergykWh = 1.848e-7*Temper*Irradiation - 2.904e-5*DirectIrrad
3:15:09PM> New solution: Fit: 4.26016 Size: 60 Solution: ActiveenergykWh = 0.12 + 6.74e-8*Temper*Irradiation - 2.94*cos(Highcloudcover)*sin(sin(2.376e-6*Irradiation*cos(Highcloudcover)))
3:15:12PM> New solution: Fit: 4.23278 Size: 50 Solution: ActiveenergykWh = 0.09371 + 6.761e-8*Temper*Irradiation - 3.058*sin(sin(2.567e-6*Irradiation*cos(Highcloudcover)))
3:15:12PM> New solution: Fit: 4.25918 Size: 40 Solution: ActiveenergykWh = 6.761e-8*Temper*Irradiation - 2.94*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:12PM> New solution: Fit: 4.24904 Size: 44 Solution: ActiveenergykWh = 0.09371 + 6.761e-8*Temper*Irradiation - 2.927*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:13PM> New solution: Fit: 4.2529 Size: 40 Solution: ActiveenergykWh = 6.772e-8*Temper*Irradiation - 2.693*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:13PM> New solution: Fit: 4.24904 Size: 44 Solution: ActiveenergykWh = 0.09371 + 6.761e-8*Temper*Irradiation - 2.927*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:13PM> New solution: Fit: 4.24734 Size: 44 Solution: ActiveenergykWh = 0.1308 + 6.761e-8*Temper*Irradiation - 2.927*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:15PM> New solution: Fit: 4.24715 Size: 48 Solution: ActiveenergykWh = 0.01017*h + 6.74e-8*Temper*Irradiation - 2.85*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:16PM> New solution: Fit: 4.24701 Size: 44 Solution: ActiveenergykWh = 0.1308 + 6.761e-8*Temper*Irradiation - 2.904*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:23PM> New solution: Fit: 4.35341 Size: 9 Solution: ActiveenergykWh = 1.808e-7*Temper*Irradiation - 2.805e-5*DirectIrrad
3:15:24PM> New solution: Fit: 4.2526 Size: 40 Solution: ActiveenergykWh = 6.815e-8*Temper*Irradiation - 2.863*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:24PM> New solution: Fit: 4.25174 Size: 40 Solution: ActiveenergykWh = 6.815e-8*Temper*Irradiation - 2.82*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:27PM> New solution: Fit: 4.2509 Size: 40 Solution: ActiveenergykWh = 6.815e-8*Temper*Irradiation - 2.767*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:36PM> New solution: Fit: 4.35001 Size: 9 Solution: ActiveenergykWh = 1.674e-7*Temper*Irradiation - 2.474e-5*DirectIrrad
3:15:42PM> New solution: Fit: 4.27331 Size: 18 Solution: ActiveenergykWh = 0.01042*h + 6.74e-8*Temper*Irradiation - 2.688*sin(2.36e-6*Irradiation)
3:15:45PM> New solution: Fit: 4.24633 Size: 44 Solution: ActiveenergykWh = 0.1312 + 6.785e-8*Temper*Irradiation - 2.933*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:50PM> New solution: Fit: 4.24974 Size: 40 Solution: ActiveenergykWh = 6.815e-8*Temper*Irradiation - 2.784*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:15:50PM> New solution: Fit: 4.24613 Size: 44 Solution: ActiveenergykWh = 0.1211 + 6.785e-8*Temper*Irradiation - 2.904*sin(2.376e-6*Irradiation*cos(Highcloudcover))
3:15:54PM> New solution: Fit: 4.24488 Size: 44 Solution: ActiveenergykWh = 0.1211 + 6.785e-8*Temper*Irradiation - 2.919*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:15:57PM> New solution: Fit: 4.24336 Size: 48 Solution: ActiveenergykWh = 0.01017*h + 6.785e-8*Temper*Irradiation - 2.919*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:15:58PM> New solution: Fit: 4.24479 Size: 44 Solution: ActiveenergykWh = 0.1211 + 6.785e-8*Temper*Irradiation - 2.912*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:16:04PM> New solution: Fit: 4.24478 Size: 44 Solution: ActiveenergykWh = 0.1211 + 6.785e-8*Temper*Irradiation - 2.912*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:16:06PM> New solution: Fit: 4.24324 Size: 48 Solution: ActiveenergykWh = 0.010
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3:16:14PM> New solution: Fit: 4.24478 Size: 44 Solution: ActiveenergykWh = 0.1212 + 6.785e-8*Temper*Irradiation - 2.912*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:16:15PM> New solution: Fit: 4.24477 Size: 44 Solution: ActiveenergykWh = 0.1213 + 6.785e-8*Temper*Irradiation - 2.912*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:16:22PM> New solution: Fit: 4.3495 Size: 9 Solution: ActiveenergykWh = 1.663e-7*Temper*Irradiation - 2.444e-5*DirectIrrad
3:16:24PM> New solution: Fit: 4.23708 Size: 48 Solution: ActiveenergykWh = 0.1213 + 6.785e-8*Temper*Irradiation - 2.912*sin(8.229e-9*Temper*Irradiation*cos(Highcloudcover))
3:16:28PM> New solution: Fit: 4.26492 Size: 18 Solution: ActiveenergykWh = 0.1213 + 6.785e-8*Temper*Irradiation - 2.795*sin(8.229e-9*Temper*Irradiation)
3:16:39PM> New solution: Fit: 4.24475 Size: 44 Solution: ActiveenergykWh = 0.1213 + 6.785e-8*Temper*Irradiation - 2.91*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:16:54PM> New solution: Fit: 4.20201 Size: 52 Solution: ActiveenergykWh = 1.264e-7*Temper*Irradiation - 1.461e-5*DirectIrrad - 1.681*sin(8.229e-9*Temper*Irradiation*cos(Highcloudcover))
3:16:57PM> New solution: Fit: 4.20896 Size: 48 Solution: ActiveenergykWh = 1.268e-7*Temper*Irradiation - 1.474e-5*DirectIrrad - 1.627*sin(2.387e-6*Irradiation*cos(Highcloudcover))
3:16:57PM> New solution: Fit: 4.23688 Size: 18 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.91*sin(2.387e-6*Irradiation)
3:16:58PM> New solution: Fit: 4.22615 Size: 20 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.604*sin(7.765e-9*Temper*Irradiation)
3:16:58PM> New solution: Fit: 4.22804 Size: 18 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.769*sin(2.387e-6*Irradiation)
3:16:58PM> New solution: Fit: 4.22192 Size: 18 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.651*sin(2.387e-6*Irradiation)
3:16:58PM> New solution: Fit: 4.22094 Size: 20 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.459*sin(7.765e-9*Temper*Irradiation)
3:16:58PM> New solution: Fit: 4.18745 Size: 48 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.666*sin(2.19e-6*DirectIrrad*cos(Highcloudcover))
3:16:59PM> New solution: Fit: 4.19525 Size: 20 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.349*sin(8.505e-9*Temper*Irradiation)
3:16:59PM> New solution: Fit: 4.21732 Size: 18 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.544*sin(2.387e-6*Irradiation)
3:16:59PM> New solution: Fit: 4.18642 Size: 48 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.666*sin(2.19e-6*DirectIrrad*cos(Highcloudcover))
3:17:00PM> New solution: Fit: 4.21212 Size: 18 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.368*sin(2.387e-6*Irradiation)
3:17:01PM> New solution: Fit: 4.24431 Size: 16 Solution: ActiveenergykWh = 3.806e-5*Irradiation - 1.552e-5*DirectIrrad - 2.856*sin(2.246e-6*Irradiation)
3:17:01PM> New solution: Fit: 4.20954 Size: 18 Solution: ActiveenergykWh = 1.257e-7*Temper*Irradiation - 1.42e-5*DirectIrrad - 2.231*sin(2.387e-6*Irradiation)
3:17:02PM> New solution: Fit: 4.17941 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.787*sin(8.412e-9*Temper*Irradiation*cos(Highcloudcover))
3:17:02PM> New solution: Fit: 4.23945 Size: 16 Solution: ActiveenergykWh = 3.846e-5*Irradiation - 1.539e-5*DirectIrrad - 2.942*sin(2.245e-6*Irradiation)
3:17:03PM> New solution: Fit: 4.23303 Size: 16 Solution: ActiveenergykWh = 3.846e-5*Irradiation - 1.552e-5*DirectIrrad - 2.856*sin(2.246e-6*Irradiation)
3:17:03PM> New solution: Fit: 4.19397 Size: 20 Solution: ActiveenergykWh = 1.286e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.349*sin(8.505e-9*Temper*Irradiation)
3:17:04PM> New solution: Fit: 4.19361 Size: 20 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.349*sin(8.505e-9*Temper*Irradiation)
3:17:04PM> New solution: Fit: 4.17763 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.711*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:05PM> New solution: Fit: 4.17337 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.491*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:05PM> New solution: Fit: 4.20608 Size: 18 Solution: ActiveenergykWh = 1.297e-7*Temper*Irradiation - 1.524e-5*DirectIrrad - 2.191*sin(2.387e-6*Irradiation)
3:17:06PM> New solution: Fit: 4.17335 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.488*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:07PM> New solution: Fit: 4.18601 Size: 48 Solution: ActiveenergykWh = 1.354e-7*Temper*Irradiation - 1.664e-5*DirectIrrad - 2.341*sin(2.374e-6*Irradiation*cos(Highcloudcover))
3:17:08PM> New solution: Fit: 4.18032 Size: 48 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.488*sin(2.451e-6*Irradiation*cos(Highcloudcover))
3:17:10PM> New solution: Fit: 4.17333 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.487*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:12PM> New solution: Fit: 4.17311 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.466*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:16PM> New solution: Fit: 4.17293 Size: 52 Solution: ActiveenergykWh = 1.284e-7*Temper*Irradiation - 1.485e-5*DirectIrrad - 2.466*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:18PM> New solution: Fit: 4.20373 Size: 18 Solution: ActiveenergykWh = 1.306e-7*Temper*Irradiation - 1.548e-5*DirectIrrad - 2.262*sin(2.423e-6*Irradiation)
3:17:18PM> New solution: Fit: 4.18008 Size: 48 Solution: ActiveenergykWh = 1.294e-7*Temper*Irradiation - 1.516e-5*DirectIrrad - 2.435*sin(2.451e-6*Irradiation*cos(Highcloudcover))
3:17:19PM> New solution: Fit: 4.20332 Size: 18 Solution: ActiveenergykWh = 1.306e-7*Temper*Irradiation - 1.548e-5*DirectIrrad - 2.24*sin(2.423e-6*Irradiation)
3:17:30PM> New solution: Fit: 4.1779 Size: 48 Solution: ActiveenergykWh = 1.317e-7*Temper*Irradiation - 1.566e-5*DirectIrrad - 2.412*sin(2.451e-6*Irradiation*cos(Highcloudcover))
3:17:32PM> New solution: Fit: 4.17622 Size: 48 Solution: ActiveenergykWh = 1.317e-7*Temper*Irradiation - 1.566e-5*DirectIrrad - 2.412*sin(2.466e-6*Irradiation*cos(Highcloudcover))
3:17:32PM> New solution: Fit: 4.17149 Size: 52 Solution: ActiveenergykWh = 1.317e-7*Temper*Irradiation - 1.566e-5*DirectIrrad - 2.472*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:35PM> New solution: Fit: 4.17148 Size: 52 Solution: ActiveenergykWh = 1.317e-7*Temper*Irradiation - 1.566e-5*DirectIrrad - 2.471*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:37PM> New solution: Fit: 4.17129 Size: 52 Solution: ActiveenergykWh = 1.317e-7*Temper*Irradiation - 1.566e-5*DirectIrrad - 2.471*sin(8.412e-9*mintemper*Irradiation*cos(Highcloudcover))
3:17:42PM> New solution: Fit: 4.19179 Size: 20 Solution: ActiveenergykWh = 1.388e-7*Temper*Irradiation - 1.755e-5*DirectIrrad - 2.296*sin(8.412e-9*Temper*Irradiation)
3:17:43PM> New solution: Fit: 4.19028 Size: 20 Solution: ActiveenergykWh = 1.388e-7*Temper*Irradiation - 1.755e-5*DirectIrrad - 2.209*sin(8.412e-9*Tem

Supplementary material E: History of the models discovery for solar plant in Eureka

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Supplementary material E: History of the models discovery for solar plant in Eureqa

7*Irradiation*Highcloudcover*Mediumcloudcover)
3:26:11PM> New solution: Fit: 4.16513 Size: 40 Solution: ActiveenergykWh = 1.393e-7*Temper*Irradiation - 1.75e-5*DirectIrrad - 2.509*sin(6.236 + 8.566e-9*Temper*Irradiation - 8.684e-7*Irradiation*Highcloudcover*Mediumcloudcover - 7.541e-13*Irradiation^2*Highcloudcover^2)
3:26:16PM> New solution: Fit: 4.16344 Size: 32 Solution: ActiveenergykWh = 1.393e-7*Temper*Irradiation - 1.75e-5*DirectIrrad - 2.509*sin(6.236 + 8.566e-9*Temper*Irradiation - 7.541e-13*Irradiation^2*Highcloudcover^2)
3:26:24PM> New solution: Fit: 4.1635 Size: 30 Solution: ActiveenergykWh = 1.393e-7*Temper*Irradiation - 1.75e-5*DirectIrrad - 2.509*sin(6.236 + 8.566e-9*Temper*Irradiation - 1.182e-6*DirectIrrad*Cloudiness*Highcloudcover)
3:26:56PM> New solution: Fit: 4.16611 Size: 28 Solution: ActiveenergykWh = 1.381e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.52*sin(6.235 + 2.529e-6*Irradiation - 1.182e-6*DirectIrrad*Cloudiness*Highcloudcover)
3:27:39PM> New solution: Fit: 4.22415 Size: 16 Solution: ActiveenergykWh = 4.581e-5*Irradiation - 2.172e-5*DirectIrrad - 2.849*sin(2.158e-6*Irradiation)
3:27:52PM> New solution: Fit: 4.22413 Size: 16 Solution: ActiveenergykWh = 4.581e-5*Irradiation - 2.172e-5*DirectIrrad - 2.848*sin(2.158e-6*Irradiation)
3:28:00PM> New solution: Fit: 4.22404 Size: 16 Solution: ActiveenergykWh = 4.581e-5*Irradiation - 2.172e-5*DirectIrrad - 2.843*sin(2.158e-6*Irradiation)
3:28:05PM> New solution: Fit: 4.16342 Size: 32 Solution: ActiveenergykWh = 1.402e-7*Temper*Irradiation - 1.769e-5*DirectIrrad - 2.446*sin(6.229 + 8.566e-9*Temper*Irradiation - 7.541e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:28:07PM> New solution: Fit: 4.16346 Size: 28 Solution: ActiveenergykWh = 1.382e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.537*sin(6.236 + 2.582e-6*Irradiation - 1.645e-6*Irradiation*Cloudiness*Highcloudcover)
3:28:12PM> New solution: Fit: 4.16342 Size: 36 Solution: ActiveenergykWh = 1.402e-7*Temper*Irradiation - 1.769e-5*DirectIrrad - 2.446*sin(6.229 + 8.566e-9*Temper*Irradiation - 4.697e-12*Highcloudcover - 7.541e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:28:13PM> New solution: Fit: 4.16342 Size: 36 Solution: ActiveenergykWh = 1.402e-7*Temper*Irradiation - 1.769e-5*DirectIrrad - 2.446*sin(6.229 + 8.566e-9*Temper*Irradiation - 8.566e-9*Highcloudcover - 7.541e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:28:14PM> New solution: Fit: 4.16342 Size: 36 Solution: ActiveenergykWh = 1.402e-7*Temper*Irradiation - 1.769e-5*DirectIrrad - 2.446*sin(6.229 + 8.566e-9*Temper*Irradiation - 2.404e-6*Highcloudcover - 7.541e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:28:19PM> New solution: Fit: 4.16342 Size: 36 Solution: ActiveenergykWh = 1.402e-7*Temper*Irradiation - 1.769e-5*DirectIrrad - 2.446*sin(6.229 + 8.566e-9*Temper*Irradiation - 0.0003744*Highcloudcover - 7.541e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:28:43PM> New solution: Fit: 4.16988 Size: 26 Solution: ActiveenergykWh = 1.382e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.54*sin(6.236 + 2.582e-6*Irradiation - 1.522e-6*Irradiation*Highcloudcover)
3:29:04PM> New solution: Fit: 4.18603 Size: 22 Solution: ActiveenergykWh = 1.392e-7*Temper*Irradiation - 1.757e-5*DirectIrrad - 2.356*sin(6.229 + 8.448e-9*Temper*Irradiation)
3:29:58PM> New solution: Fit: 4.22402 Size: 16 Solution: ActiveenergykWh = 4.581e-5*Irradiation - 2.172e-5*DirectIrrad - 2.842*sin(2.158e-6*Irradiation)
3:30:11PM> New solution: Fit: 4.18602 Size: 22 Solution: ActiveenergykWh = 1.392e-7*Temper*Irradiation - 1.757e-5*DirectIrrad - 2.354*sin(6.228 + 8.448e-9*Temper*Irradiation)
3:30:25PM> New solution: Fit: 4.18594 Size: 22 Solution: ActiveenergykWh = 1.392e-7*Temper*Irradiation - 1.757e-5*DirectIrrad - 2.35*sin(6.228 + 8.448e-9*Temper*Irradiation)
3:33:12PM> New solution: Fit: 4.16301 Size: 32 Solution: ActiveenergykWh = 1.393e-7*Temper*Irradiation - 1.75e-5*DirectIrrad - 2.462*sin(6.231 + 8.566e-9*Temper*Irradiation - 7.032e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:33:18PM> New solution: Fit: 4.16294 Size: 32 Solution: ActiveenergykWh = 1.382e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.462*sin(6.231 + 8.566e-9*Temper*Irradiation - 7.032e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
3:33:54PM> New solution: Fit: 4.15984 Size: 34 Solution: ActiveenergykWh = 1.382e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.469*sin(6.231 + 8.566e-9*Temper*Irradiation - 7.297e-13*Irradiation*DirectIrrad*Cloudiness^2*Highcloudcover)
3:33:56PM> New solution: Fit: 4.1598 Size: 34 Solution: ActiveenergykWh = 1.382e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.469*sin(6.231 + 8.566e-9*Temper*Irradiation - 7.297e-13*Irradiation*DirectIrrad*Cloudiness^2*Highcloudcover)
3:34:25PM> New solution: Fit: 4.18592 Size: 22 Solution: ActiveenergykWh = 1.394e-7*Temper*Irradiation - 1.761e-5*DirectIrrad - 2.351*sin(6.228 + 8.448e-9*Temper*Irradiation)
3:35:41PM> New solution: Fit: 4.22401 Size: 16 Solution: ActiveenergykWh = 4.581e-5*Irradiation - 2.172e-5*DirectIrrad - 2.842*sin(2.158e-6*Irradiation)
3:41:38PM> New solution: Fit: 4.18495 Size: 22 Solution: ActiveenergykWh = 1.394e-7*Temper*Irradiation - 1.761e-5*DirectIrrad - 2.353*sin(6.228 + 8.483e-9*Temper*Irradiation)
8:52:37AM> 2024-Sep-23
8:52:37AM> New solution: Fit: 4.15826 Size: 32 Solution: ActiveenergykWh = 1.383e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.481*sin(6.229 + 8.718e-9*Temper*Irradiation - 7.297e-13*Irradiation*DirectIrrad*Cloudiness*Highcloudcover)
8:55:37AM> New solution: Fit: 4.18493 Size: 22 Solution: ActiveenergykWh = 1.396e-7*Temper*Irradiation - 1.764e-5*DirectIrrad - 2.356*sin(6.227 + 8.483e-9*Temper*Irradiation)
8:57:06AM> New solution: Fit: 4.18488 Size: 22 Solution: ActiveenergykWh = 1.398e-7*Temper*Irradiation - 1.77e-5*DirectIrrad - 2.352*sin(6.227 + 8.483e-9*Temper*Irradiation)
8:59:11AM> New solution: Fit: 4.16272 Size: 30 Solution: ActiveenergykWh = 1.382e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.582*sin(6.241 + 8.613e-9*Temper*Irradiation - 1.462e-6*Irradiation*Cloudiness*Highcloudcover)
8:59:22AM> New solution: Fit: 4.16259 Size: 30 Solution: ActiveenergykWh = 1.383e-7*Temper*Irradiation - 1.723e-5*DirectIrrad - 2.582*sin(6.24 + 8.613e-9*Temper*Irradiation - 1.462e-6*Irradiation*Cloudiness*Highcloudcover)
9:01:32AM> New solution: Fit: 4.22394 Size: 16 Solution: ActiveenergykWh = 4.6e-5*Irradiation - 2.188e-5*DirectIrrad - 2.842*sin(2.158e-6*Irradiation)
9:02:00AM> New solution: Fit: 4.22394 Size: 16 Solution: ActiveenergykWh = 4.6e-5*Irradiation - 2.188e-5*DirectIrrad - 2.842*sin(2.158e-6*Irradiation)
9:02:51AM> New solution: Fit: 4.22391 Size: 16 Solution: ActiveenergykWh = 4.6e-5*Irradiation - 2.188e-5*DirectIrrad - 2.841*sin(2.158e-6*Irradiation)
9:02:59AM> New solution: Fit: 4.2239 Size: 16 Solution: ActiveenergykWh = 4.6e-5*Irradiation - 2.188e-5*DirectIrrad - 2.841*sin(2.158e-6*Irradiation)
9:03:24AM> New solution: Fit: 4.22371 Size: 16 Solution: ActiveenergykWh = 4.6e-5*Irradiation - 2.188e-5*DirectIrrad - 2.831*sin(2.158e-6*Irradiation)
9:04:17AM> New solution: Fit: 4.19872 Size: 18 Solution: ActiveenergykWh = 1.388e-7*Temper*Irradiation - 1.753e-5*DirectIrrad - 2.183*sin(2.435e-6*Irradiation)
9:04:38AM> New solution: Fit: 4.18487 Size: 22 Solution: ActiveenergykWh = 1.398e-7*Temper*Irradiation - 1.77e-5*DirectIrrad - 2.351*sin(6.227 + 8.483e-9*Temper*Irradiation)
9:04:40AM> New solution: Fit: 4.19868 Size: 18 Solution: ActiveenergykWh = 1.388e-7*Temper*Irradiation - 1.753e-5*DirectIrrad - 2.181*sin(2.435e-6*Irradiation)
9:05:58AM> Search stopped