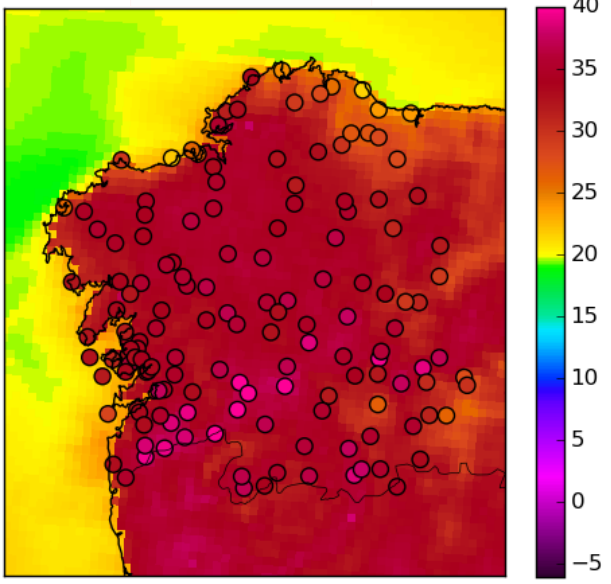
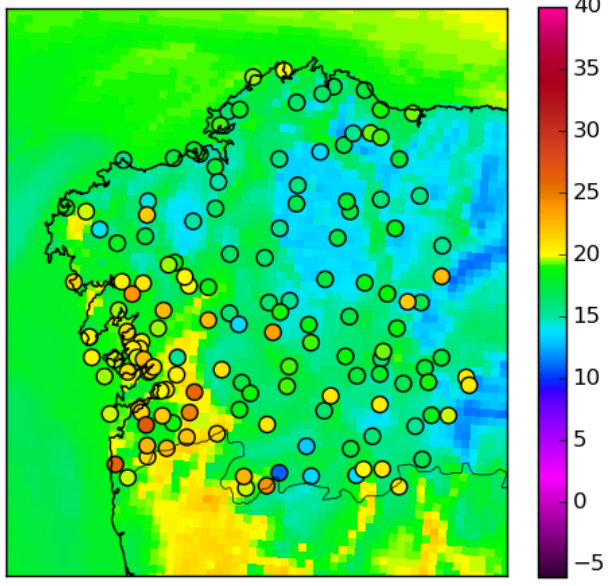
Supplementary Figure 1) Observed daily station values plotted upon the respective 4km WRF forecasts for a typical summertime heat day (05/08/2018), (a) maximum temperature, (b) minimum temperature, (c) maximum wind speed, (d) average wind speed.

Supplementary Figure 2) As Figure 4, but for background sides only.

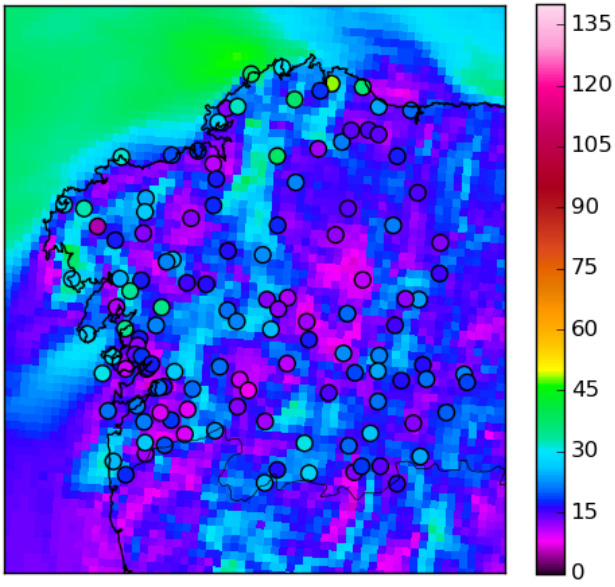
a) Maximum temperature (°C)



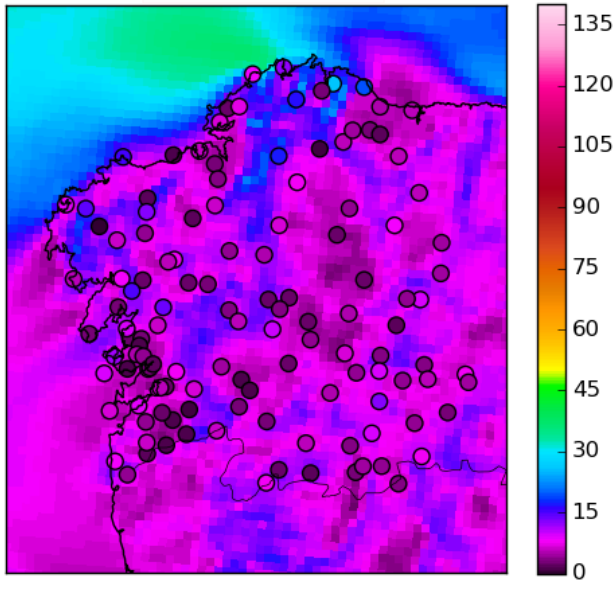
b) Minimum temperature (°C)

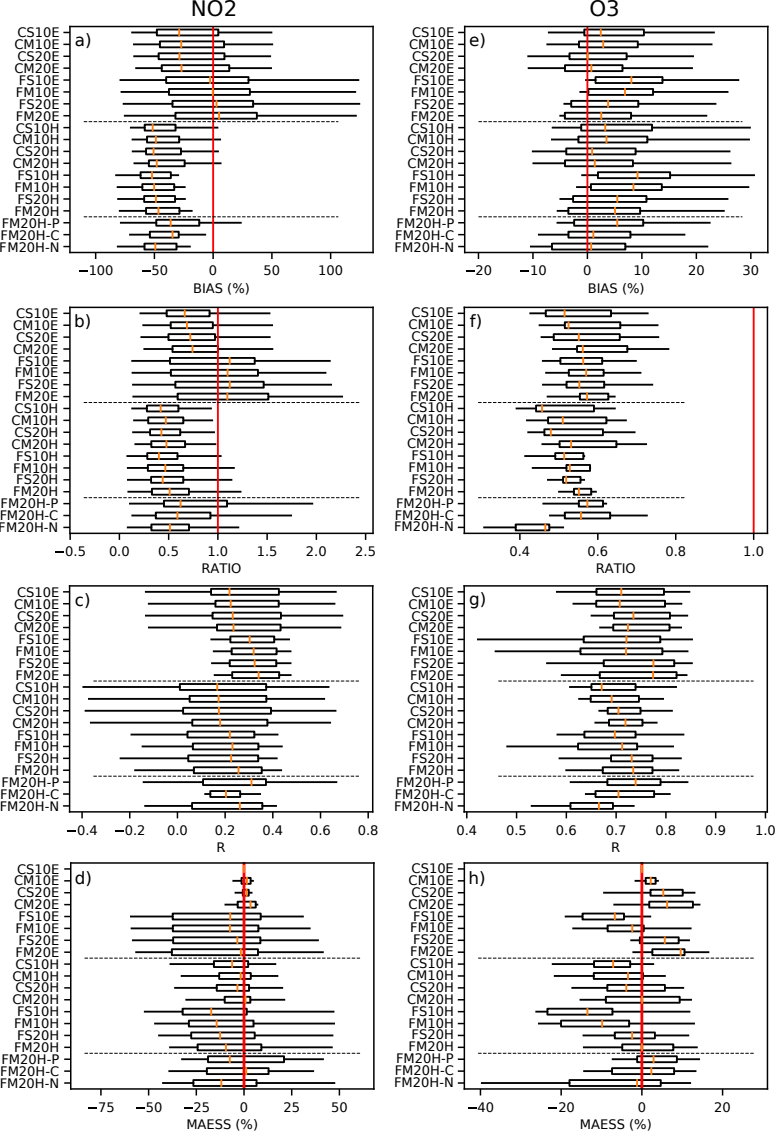


c) Maximum wind speed (km/h)



d) Average wind speed (km/h)




NO2
O3
a)
b)
c)
d)
e)
f)
g)
h)
CS10E
CM10E
CS20E
CM20E
FS10E
FM10E
FS20E
FM20E
CS10H
CM10H
CS20H
CM20H
FS10H
FM10H
FS20H
FM20H
FM20H-P
FM20H-C
FM20H-N
BIAS (%)
RATIO
R
MAESS (%)