

Carbon and water fluxes over a urban park area in Naples

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Why Measure Fluxes in Urban Park?

NBS and in particular urban green areas have a positive impact in saving carbon with the direct sequestration into biomass and soil, to the ambitious goal of moving towards carbon neutral cities.

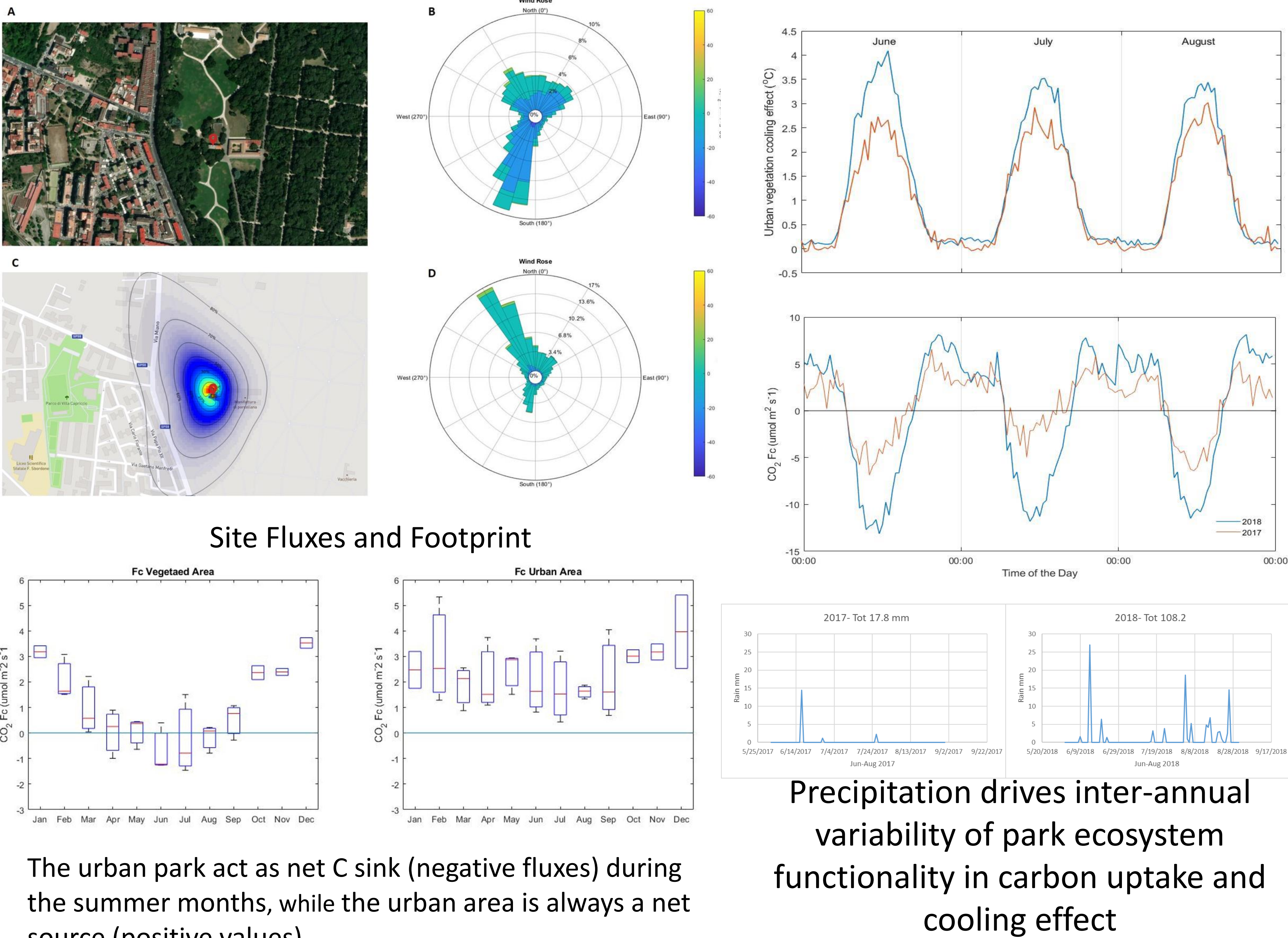
This is even more relevant after the publication of the “*European Green Deal*” that supports the plantation of at least 3 billion of additional trees by 2030 in urban and peri-urban areas.

Materials and Methods

- The Real Bosco di Capodimonte, a green area of **125 ha** located inside the urban area of Naples
- Mediterranean Climate
- EC Tower measuring CO₂, H₂O concentrations and fluxes



Results



Site Fluxes and Footprint

Precipitation drives inter-annual variability of park ecosystem functionality in carbon uptake and cooling effect

The urban park act as net C sink (negative fluxes) during the summer months, while the urban area is always a net source (positive values).