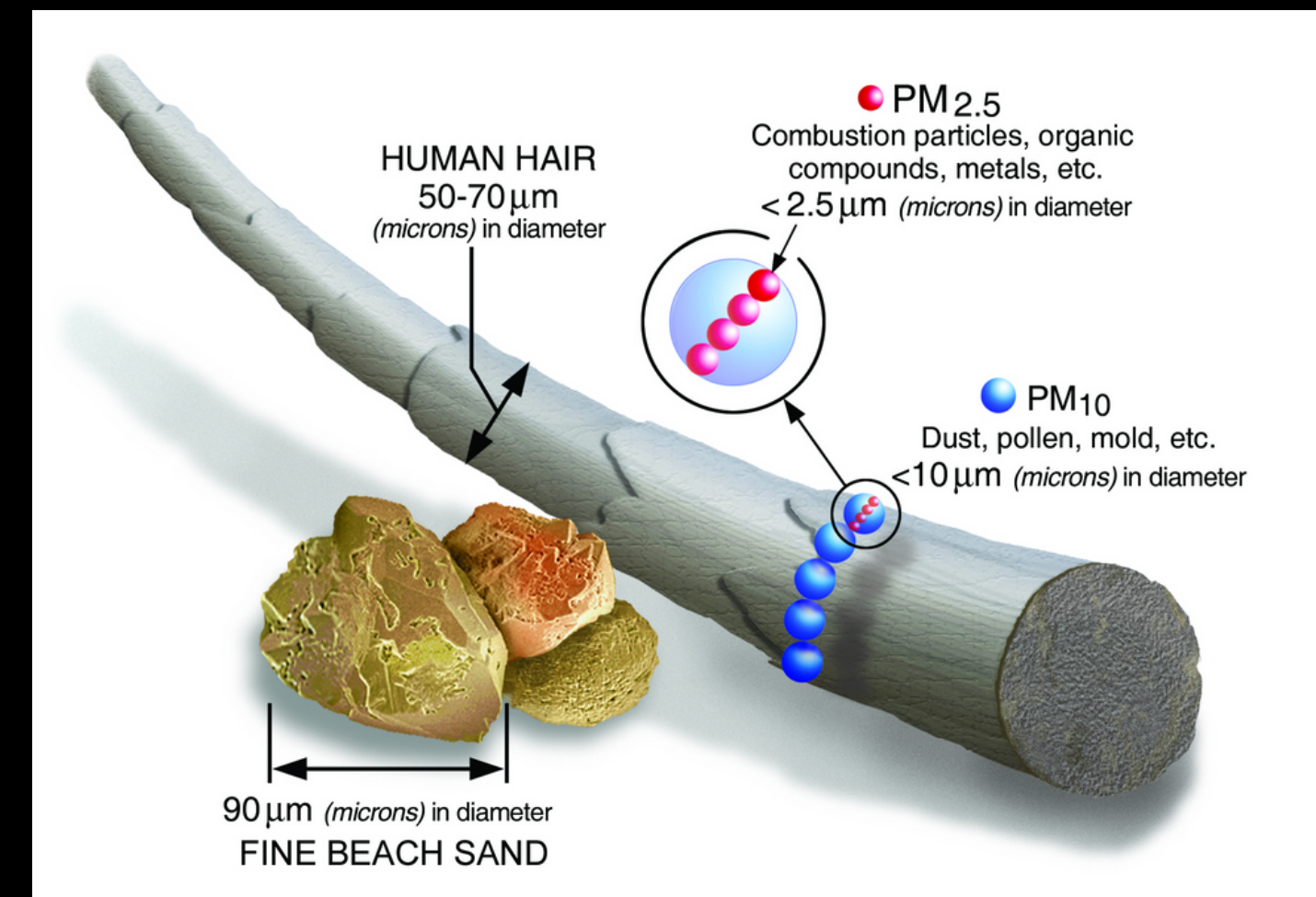
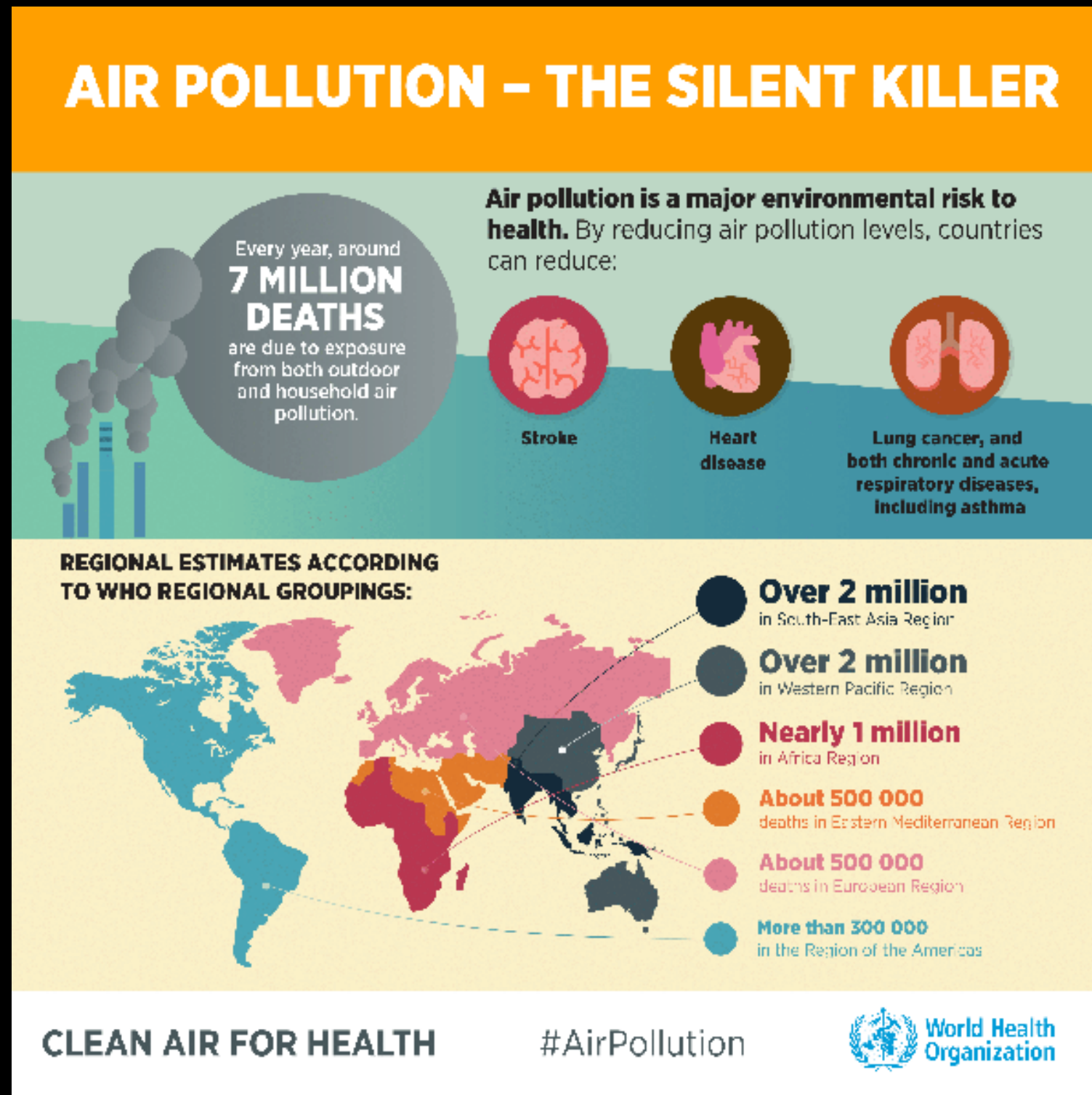


# INFLUENCE OF METEOROLOGICAL DATA ON THE HEALTH RISK ASSOCIATED WITH PM<sub>10</sub> SANTA CATARINA - BRAZIL

Clarissa May

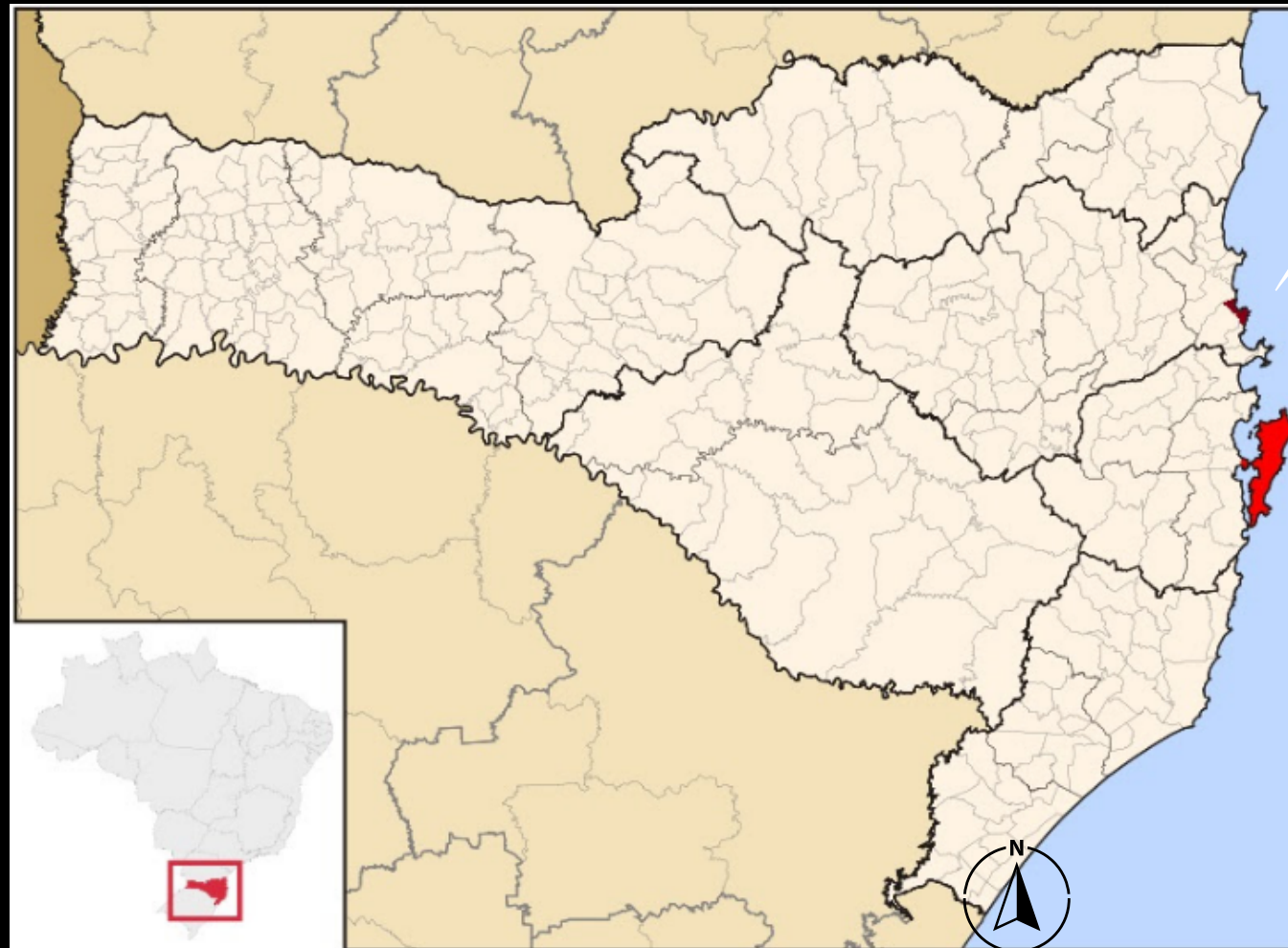
supervisor: Dr. Leonardo Hoinaski



<https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#PM> (accessed in october/2021)



## STUDY LOCATION



Camboriú

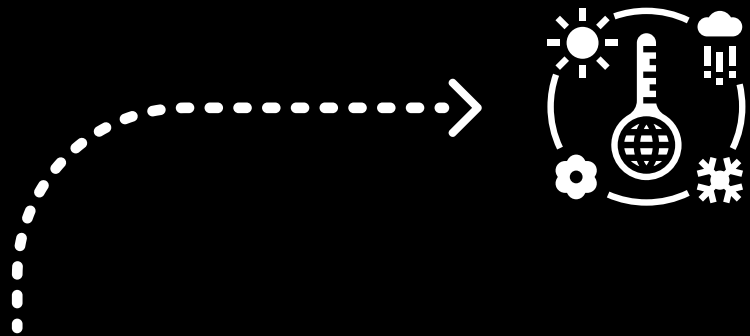
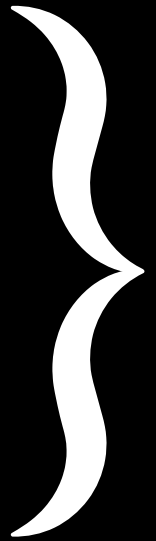


Florianópolis

- *MP10*
- *Hospital Admissions*



- CIRCULATORY\_40
- RESPIRATORY\_05
- RESPIRATORY\_40



- *Relative Risk*

$$RR = \left[ \frac{X_0 + 1}{X + 1} \right]^\beta$$

Linear Regression  
(Poisson)

- *DALY*

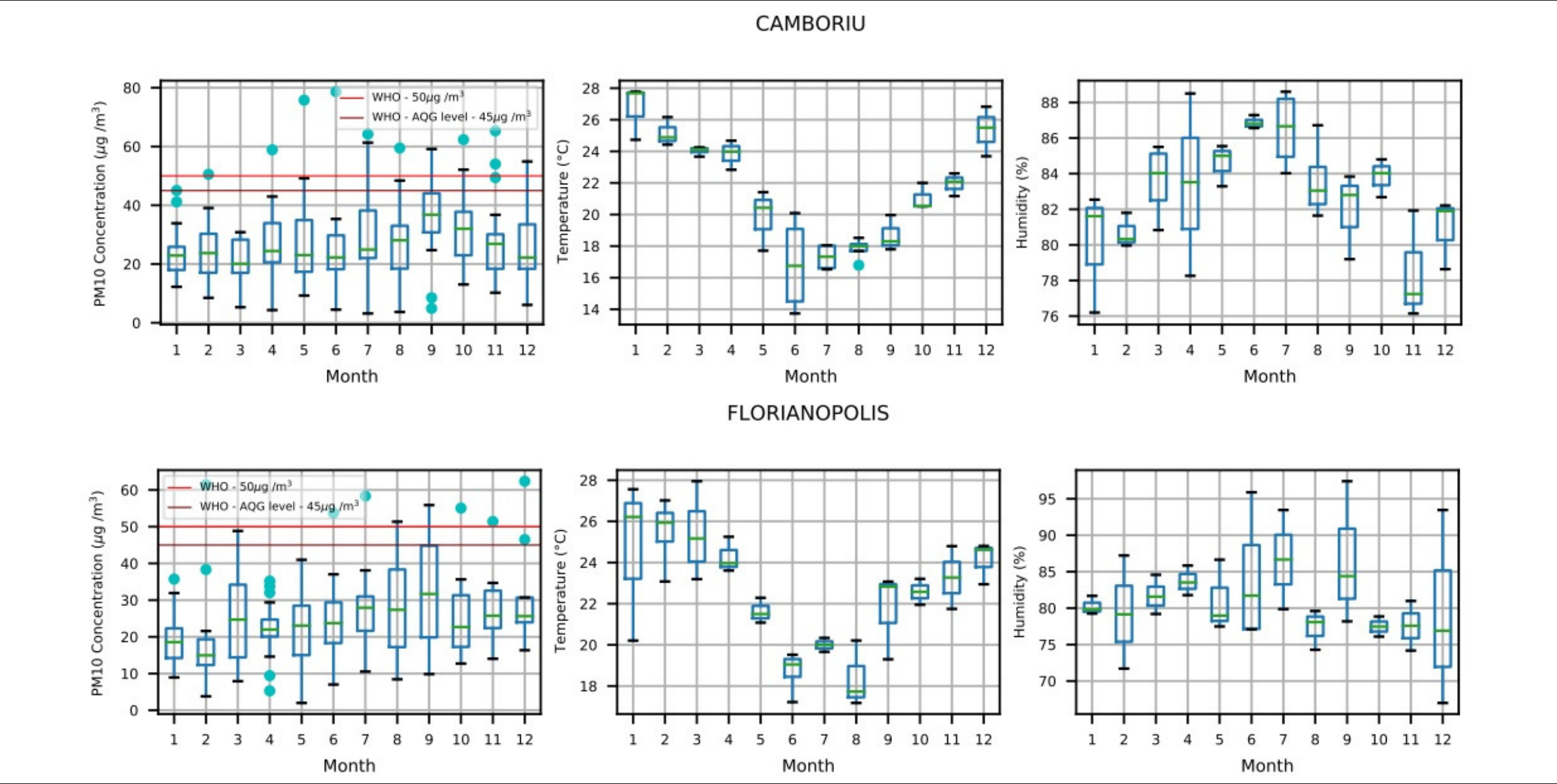
- YLD

- *Health Cost*

- Life Expectancy  
(76,3 years)
- VSL  
(US\$ 6.819.641,00)

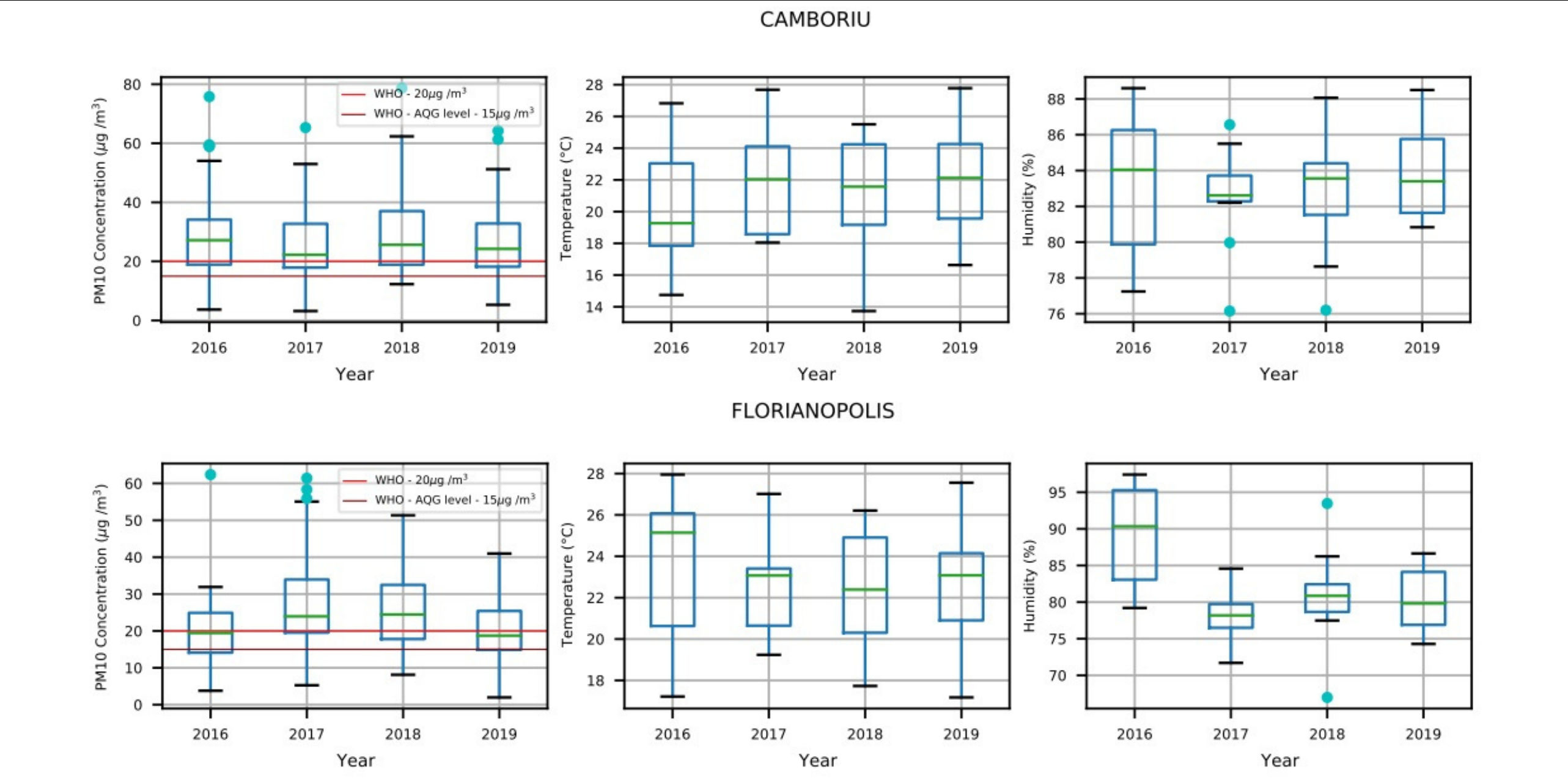
RESULTS

Monthly boxplot of PM10, temperature and humidity



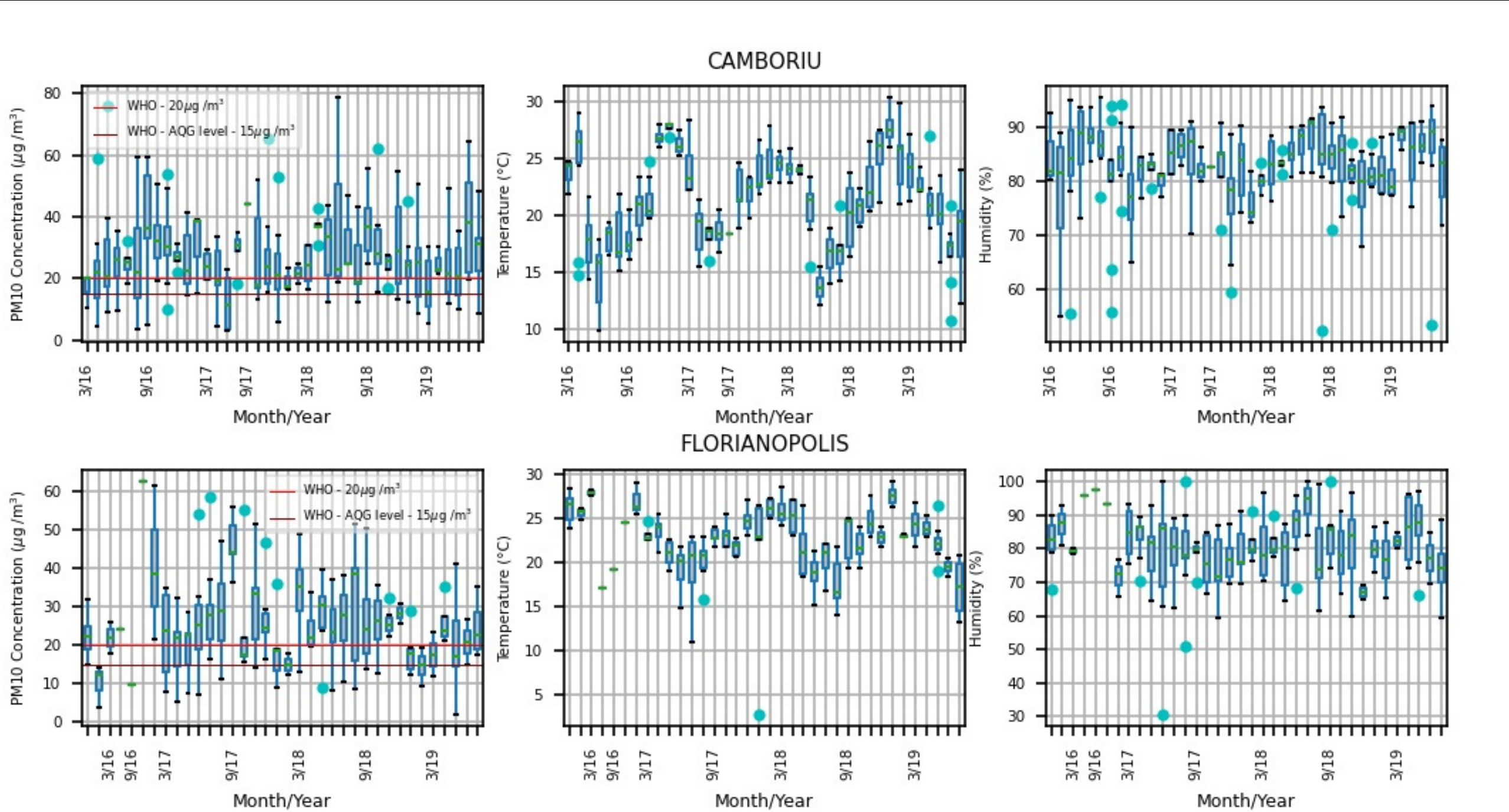


Annual PM10 boxplot, temperature and humidity

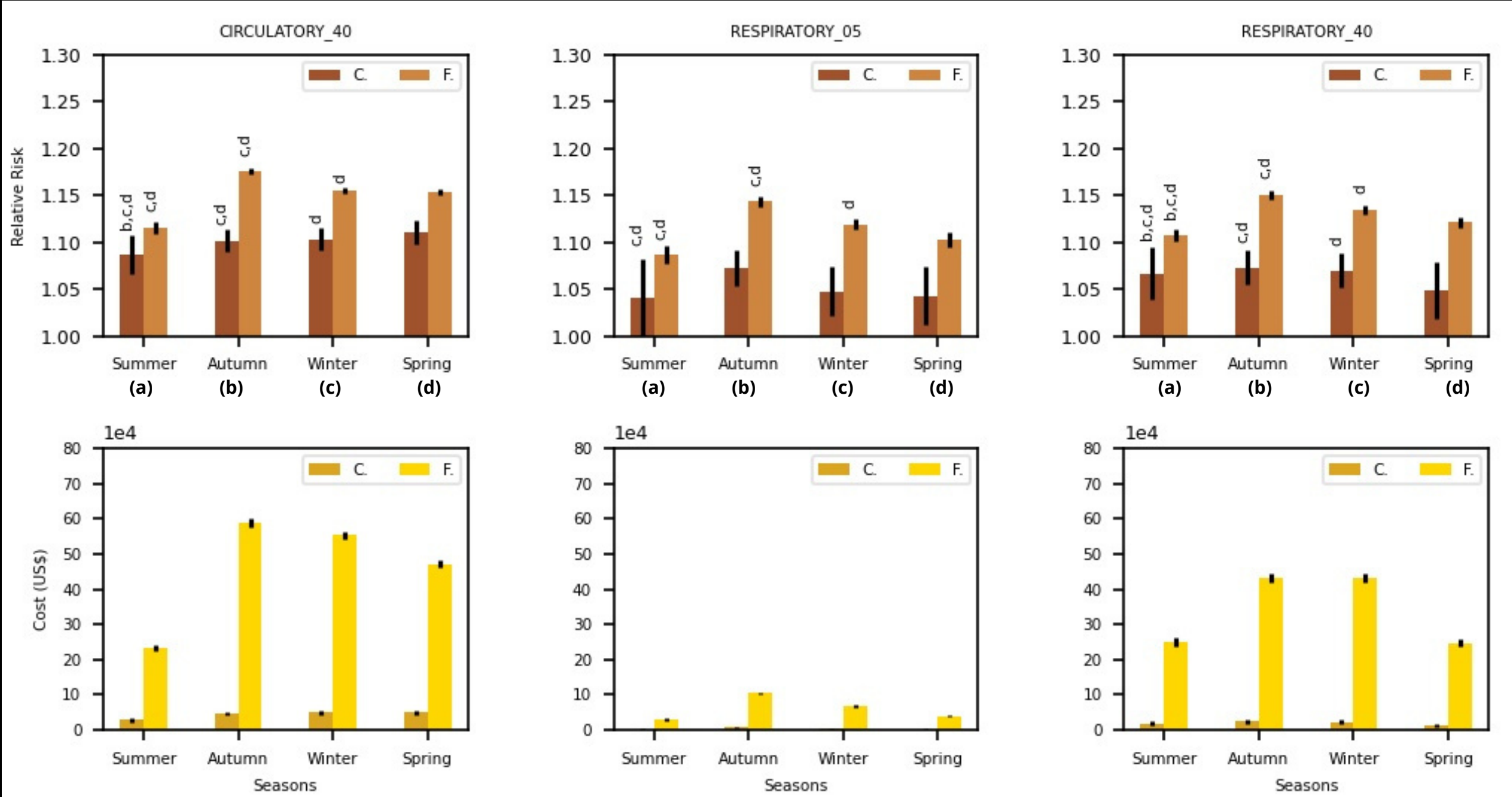


RESULTS

Boxplot of the entire monthly series of MP10, temperature and humidity



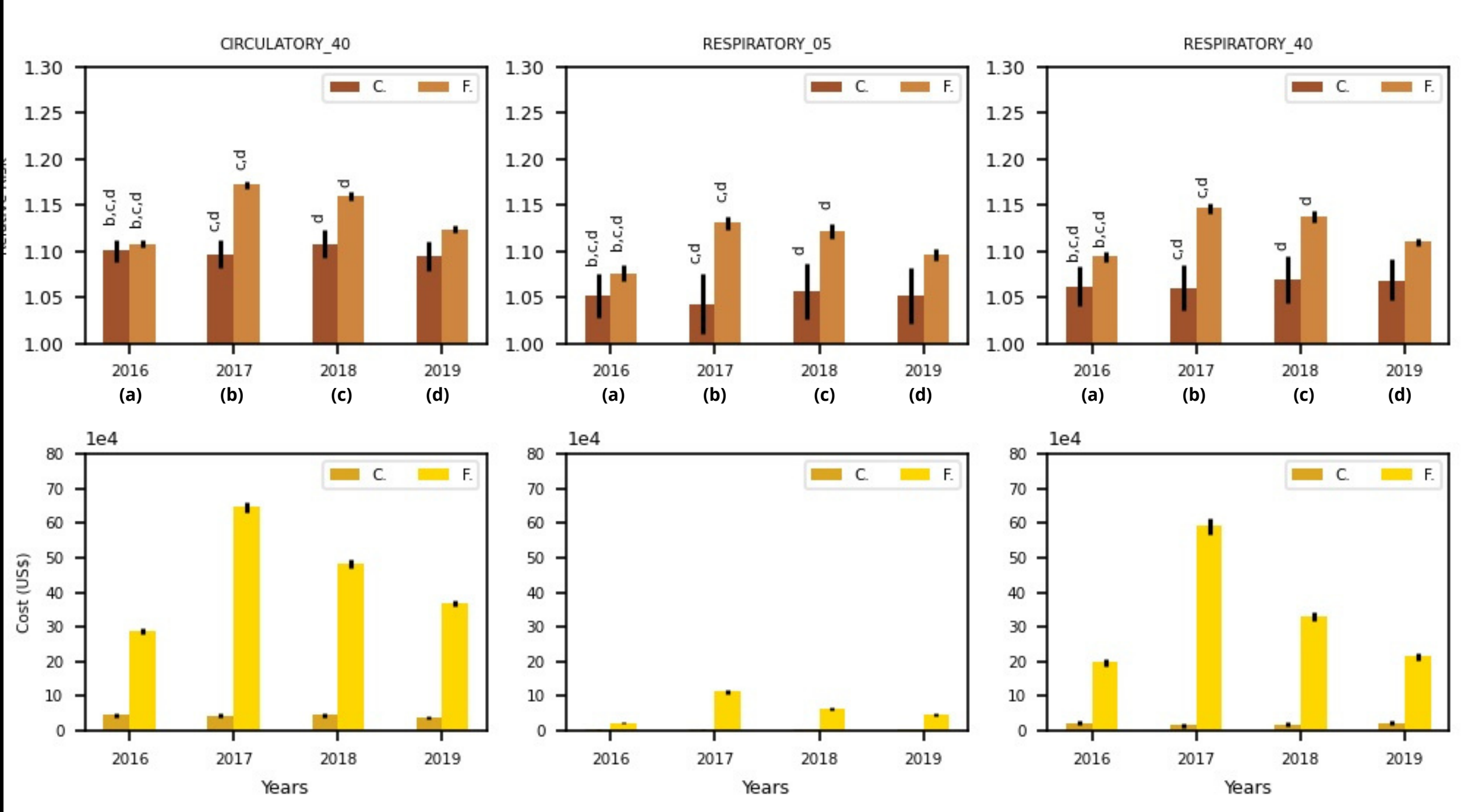
Seasonal data of calculated relative risks and health costs



Subtitle. Summer (a), Autumn (b), Winter (c), Spring (d), Camboriú (C.), Florianópolis (F.)



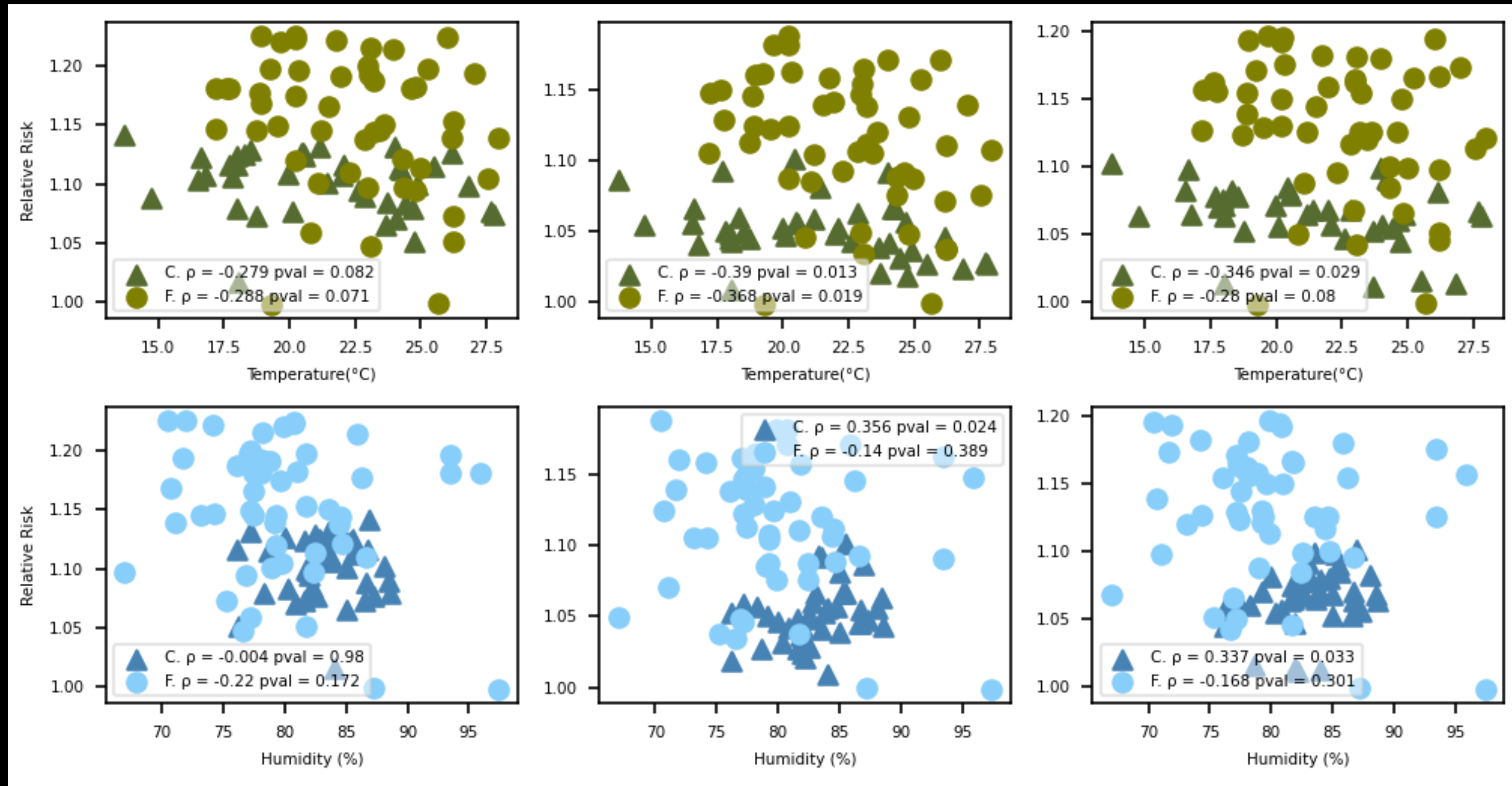
Annual data of calculated relative risks and health costs



Subtitle. Summer (a), Autumn (b), Winter (c), Spring (d), Camboriú (C.), Florianópolis (F.)

## RESULTS

Scatter plots relating the calculated monthly values of relative risk to the monthly temperature and humidity data separately in each city studied





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Thank  
you