



INFLUENCE OF METEOROLOGICAL DATA ON THE HEALTH RISK ASSOCIATED WITH PMIO SANTA CATARINA - BRAZIL

Clarissa May

supervisor: Dr. Leonardo Hoinaski

20th ANNUAL

CMAS Conference Nov 1-5 | Virtual

INTRODUCTION

AIR POLLUTION - THE SILENT KILLER

Every year, around **7 MILLION** DEATHS are due to exposure

from both outdoor and household air pollution.

Air pollution is a major environmental risk to health. By reducing air pollution levels, countries can reduce:



Stroke



Heart

disease

REGIONAL ESTIMATES ACCORDING TO WHO REGIONAL GROUPINGS:



CLEAN AIR FOR HEALTH

#AirPollution



respiratory diseases, including asthma

Over 2 million in South-East Asia Region

Over 2 million in Western Pacific Region

Nearly 1 million n Africa Region

About 500 000 leaths in Eastern Mediterranean Region

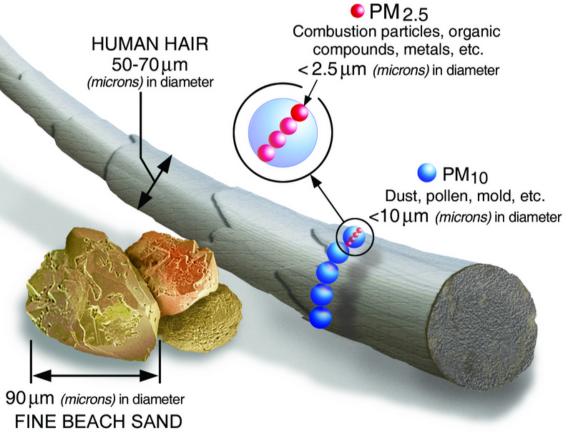
About 500 000 deaths in European Region

More than 300 000 in the Region of the Americas





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



STUDY LOCATION



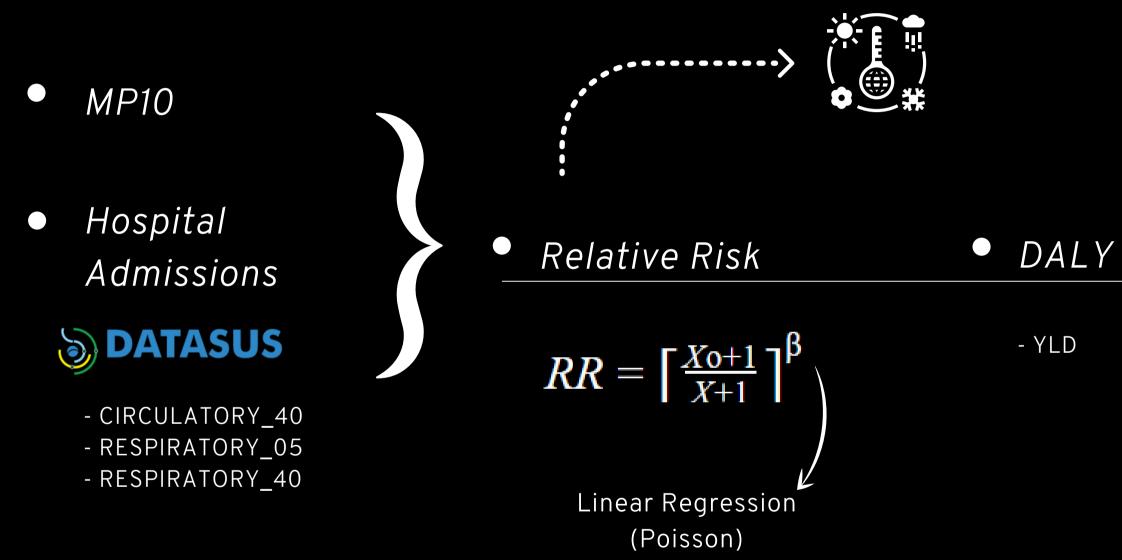


Camboriú



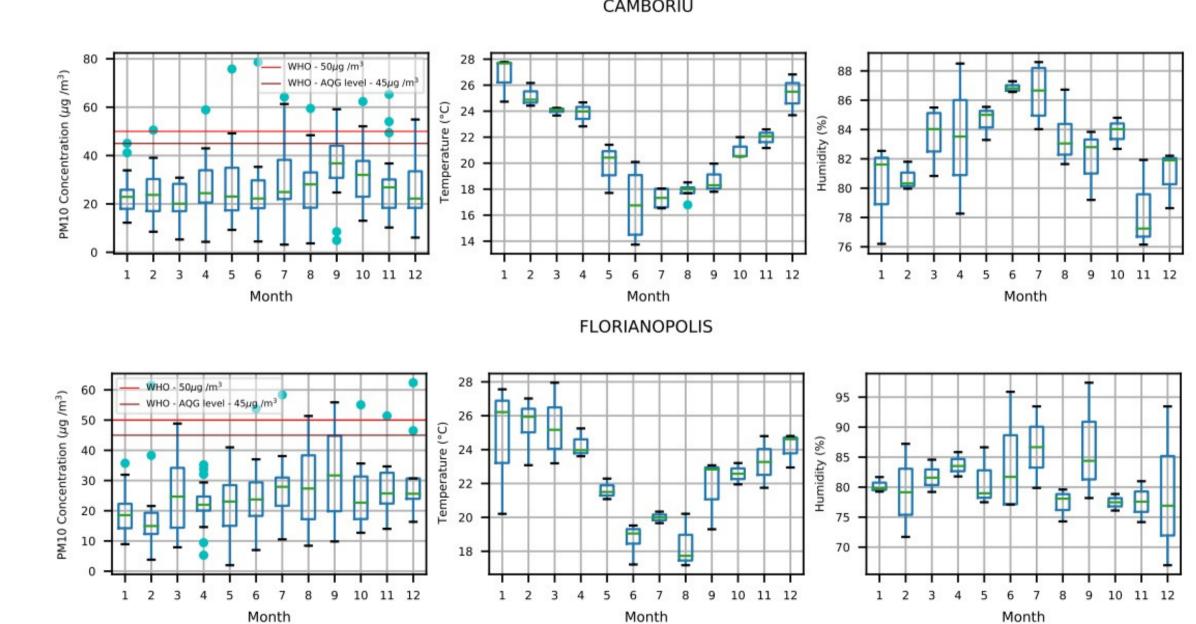
Florianópolis

MATERIALS AND METHODS



Health Cost

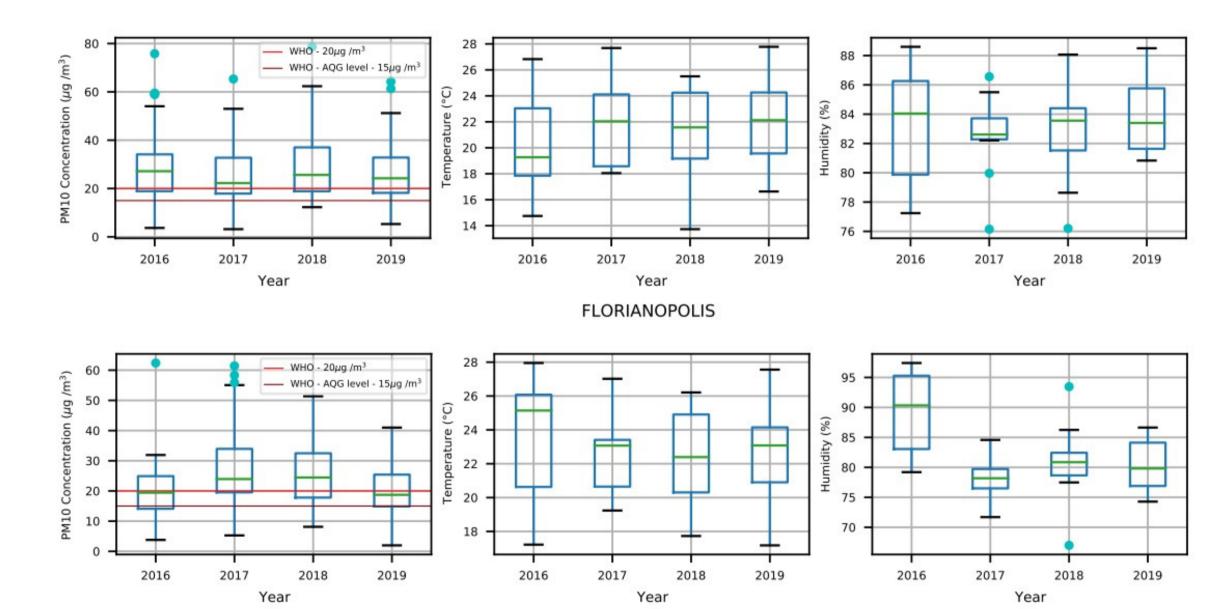
- Life Expectancy (76,3 years) - VSL (US\$ 6.819.641,00)



Monthly boxplot of PM10, temperature and humidity

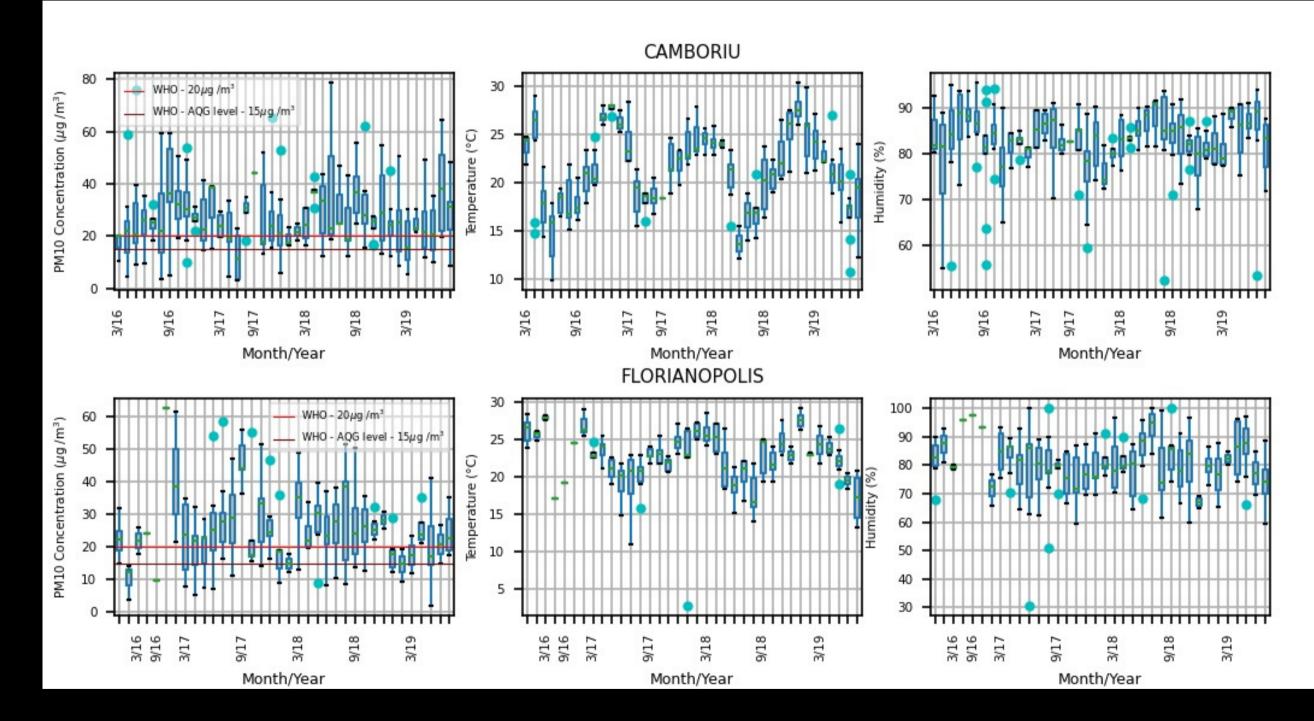
CAMBORIU



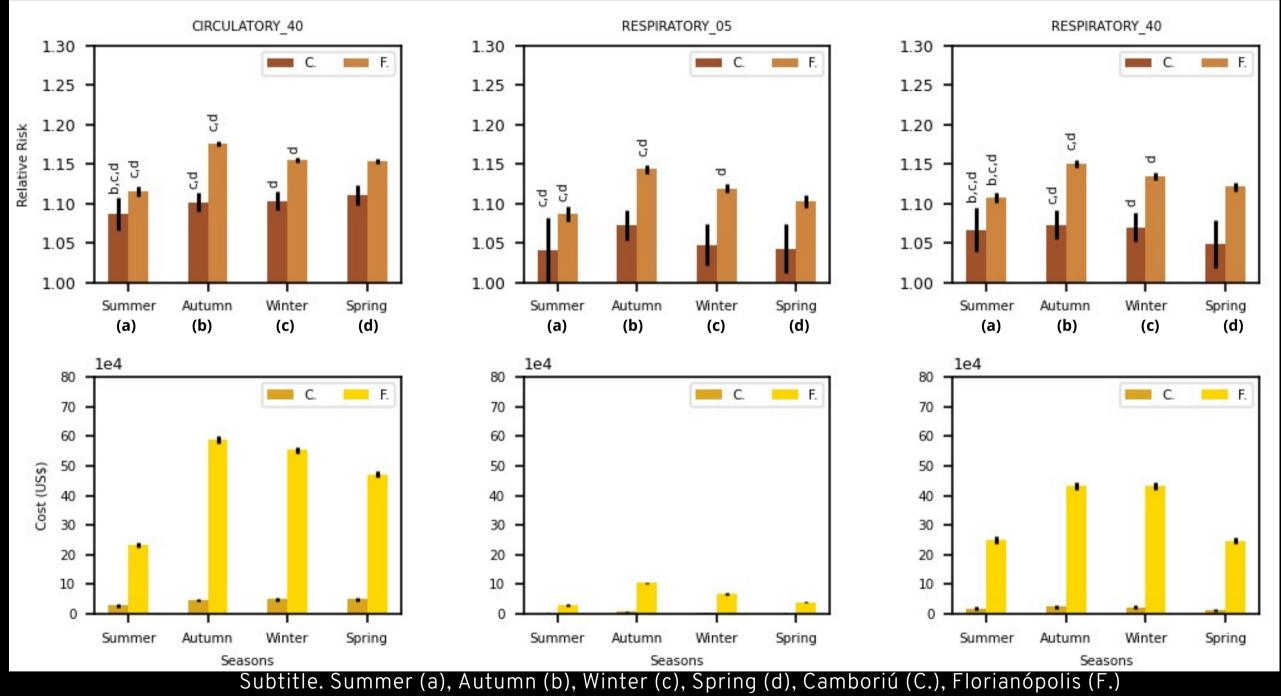


Annual PM10 boxplot, temperature and humidity

CAMBORIU

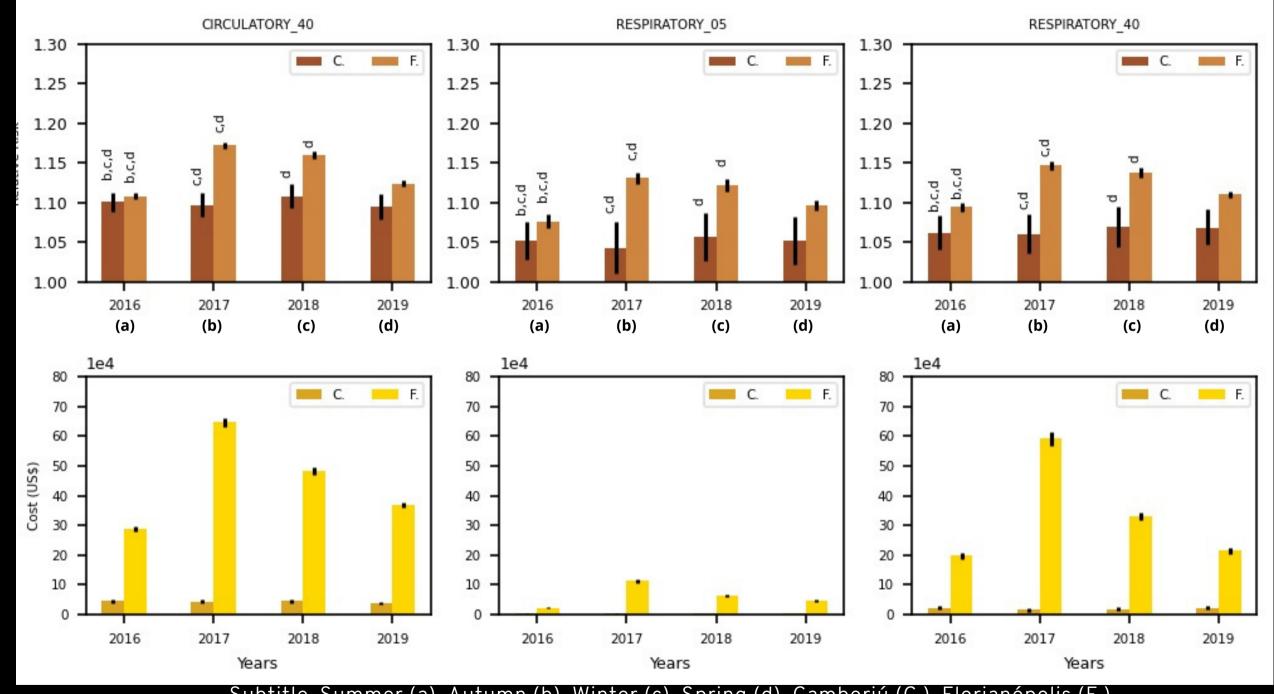


Boxplot of the entire monthly series of MP10, temperature and humidity



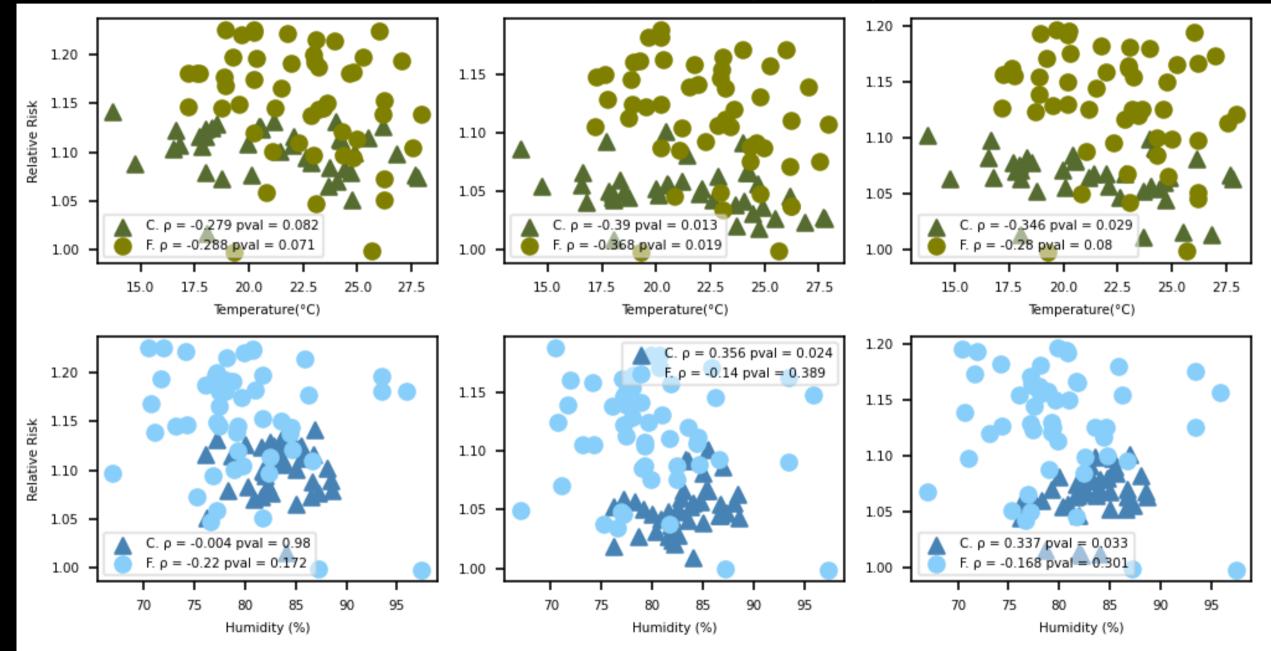
Seasonal data of calculated relative risks and health costs



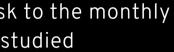


Annual data of calculated relative risks and health costs

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



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















Email

clarissasmay@gmail.com Leonardo.Hoinaski@ufsc.br

Thank you