



Air Science TT was a grant recipient from the EU/ IDB Lab/GoRTT/ CARIRI Innovation initiative (2025) to advance our SME, to make air quality assessment services (air contaminants and green house gases) available to anyone- affordably, using sound science and the most advanced available technology! We can measure what is in your breathing air. If you have concerns, get in touch (airsciencett@gmail.com)

IS WHAT YOU'RE BREATHING IN AFFECTING YOU?

Air pollution is the root cause of climate change (via Greenhouse Gases)

- The dust - the stuff stuck on dust, the chemicals in the gases inhaled all introduce foreign substances into the lungs and body.

EPIDEMIOLOGICAL STUDIES HAVE FOUND THAT AIR POLLUTION CAUSES

- . Lung Cancer (in non smokers)
- . Cardio-vascular morbidity and mortality
- . Allergic rhinitis
- . Respiratory disease
- . Metabolic diseases like diabetes have been linked

Pollution in ambient air comprises **dust (PM₁₀, PM_{2.5}, PM₁)**, **fumes/ gases**, and **odours** which are a nuisance and can impact public health or the environment

Greenhouse gases—warm the earth by affecting the global heat balance as these gases absorb long wave and IR radiation. Warmer planet means more water vapour stays in the air, less freshwater on the ground, sea level rises. Ocean currents and weather patterns change. Ecosystems too respond to the stress of change.

In Trinidad & Tobago— air quality impacts include high PM loading from **local sources and imported** Saharan dust. A lot of air contaminants also come from **our industries**, energy generation, **agriculture, waste disposal** practices / facilities and **transport** sectors.

Fine PM are biologically active (PM_{2.5}) and consist of incineration products, with adsorbed organic and inorganic chemicals that hitch a ride into human bodies via inhalation.

Many GHGs also happen to be air toxics.

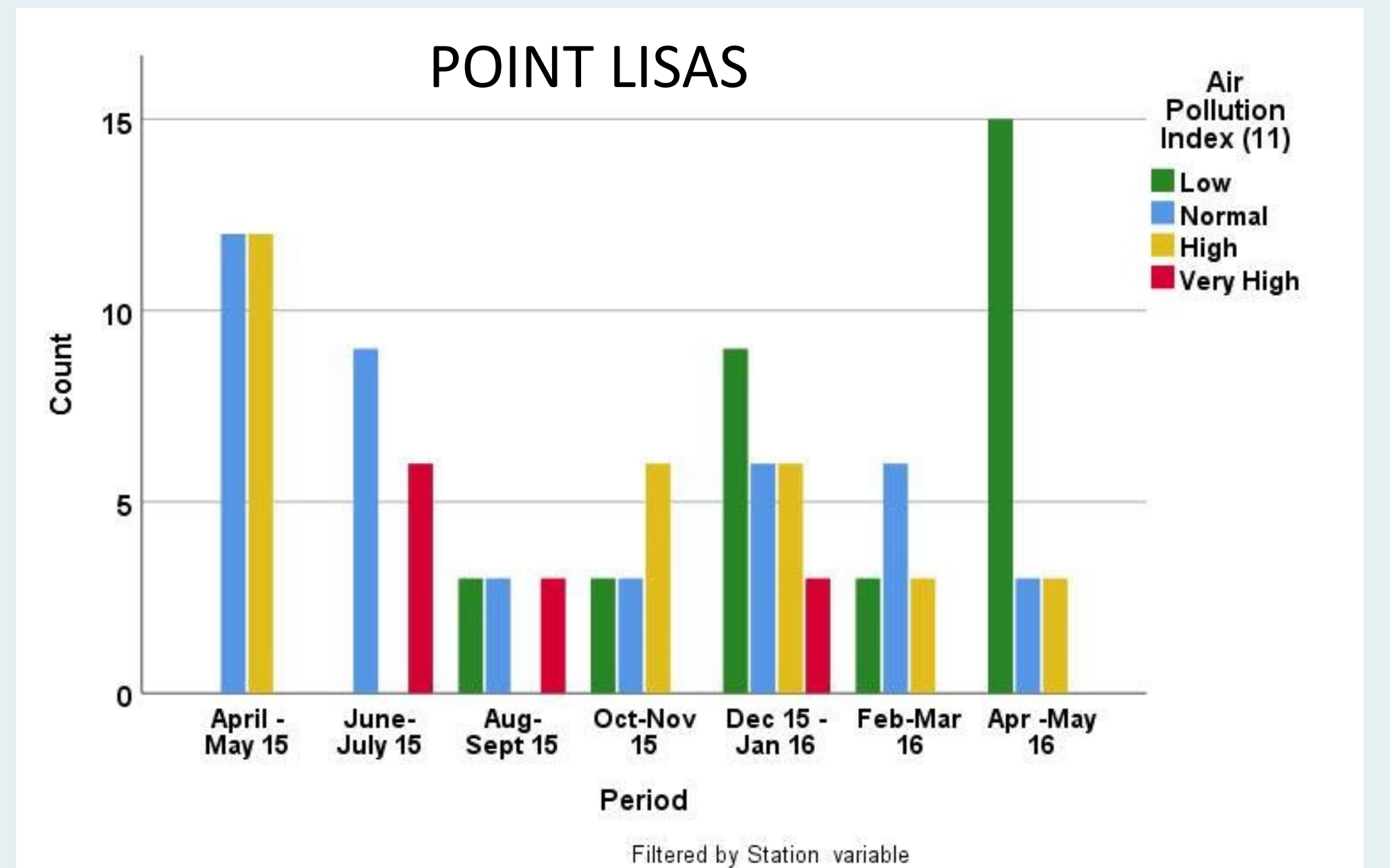
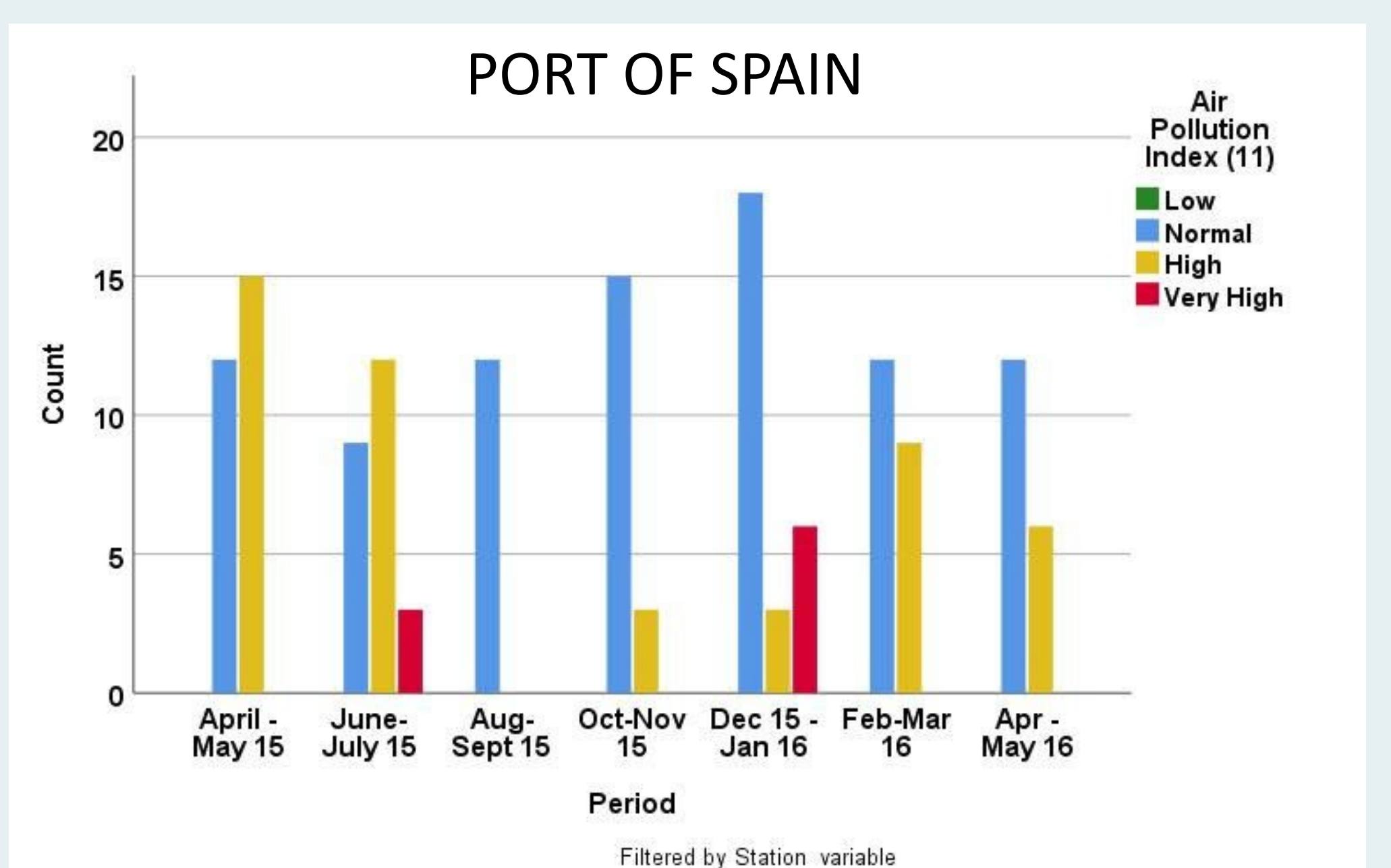
- Do you know what green house gases result from your process or facility?
- Are your emission mitigation strategies effective?

Air Science TT can help you measure Air Contaminants and Quantify Emissions Reduction Strategies using
 -direct measurement for verification and
 -ex-ante/carbon accounting tools (for GHG Protocol/ISO 14064)

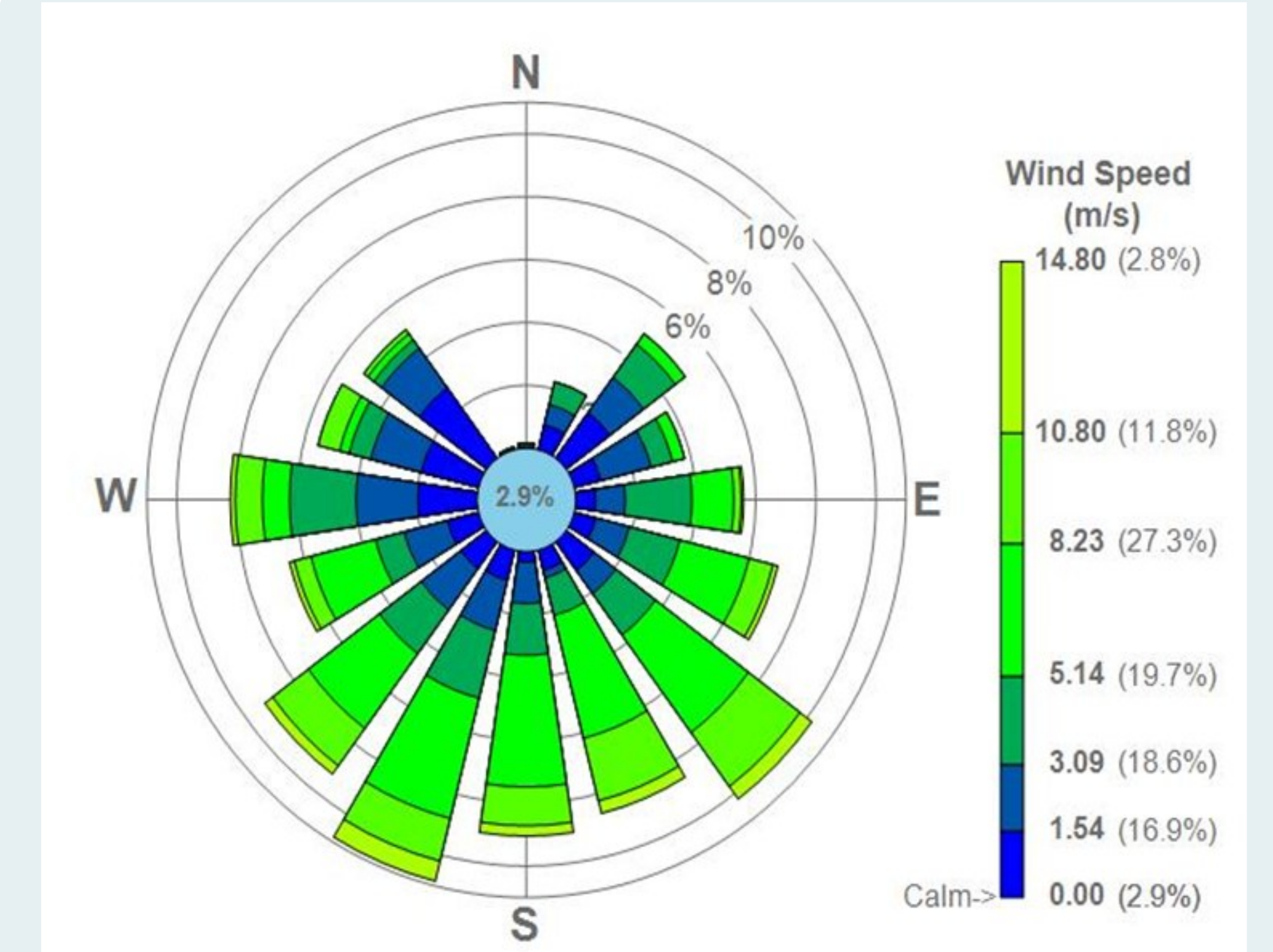
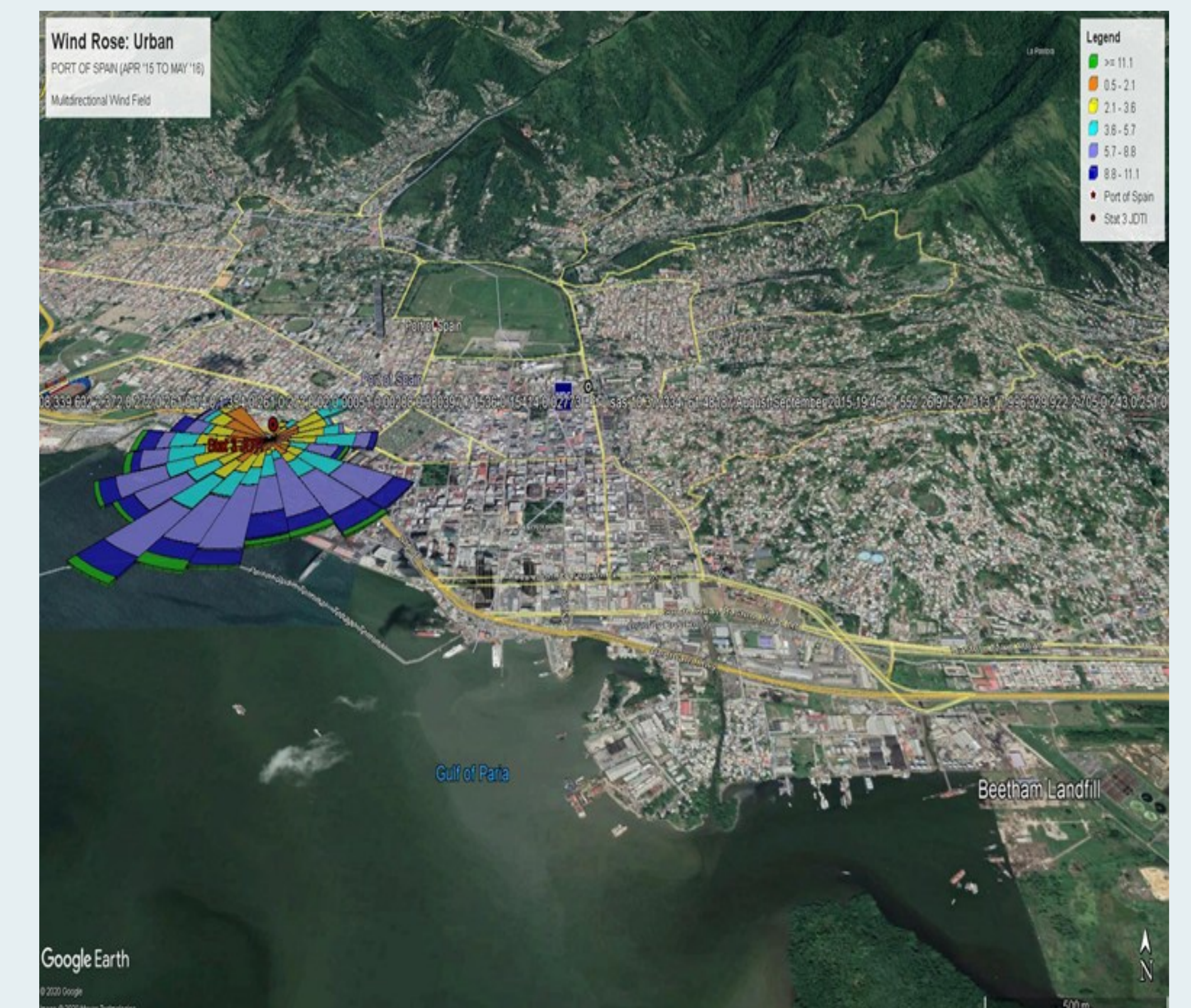
Ambient air pollutants measured in the ambient air Trinidad (Baboolal et al., 2019, 2020) that often exceed

- methane
- dioxins
- furans
- nitrous oxide, nitrogen dioxide
- benzene
- fine /respirable particulates (PM₁, PM_{2.5}, PM₁₀)

POLLUTION DAYS PER MONTH



PORT OF SPAIN- PREVALENT WIND



WHERE DO DUST AND AIR CONTAMINANTS COME FROM?

PM₁ (San Fernando- 24hrs)

PM₁ (Waterloo- 24hrs)

PM₁ (Port of Spain- 24hrs)

