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# Basic Visualization

* Daily

# 

A map of singapore with blue dots

Description automatically generated

# Data Exploration

## Rainfall

* **A screenshot of a computer

  Description automatically generatedHourly by region**
* **A graph showing the number of trends

  Description automatically generatedHourly by total rainfall**
* **A graph of different colored rectangular shapes

  Description automatically generatedA graph showing different colored bars

  Description automatically generatedDaily, sorted by zone/regions**
* **A graph of blue rectangular bars

  Description automatically generated with medium confidenceWeekly**
* **A graph of blue bars

  Description automatically generated with medium confidenceMonthly**
* **Yearly**

**A graph of blue bars

Description automatically generated**

## Humidity

* **Hourly Average**
* **A graph of different colored bars

  Description automatically generated with medium confidenceDaily Average**
* A graph showing the average temperature

  Description automatically generated**Weekly Average**
* **A graph of a number of people

  Description automatically generated with medium confidenceMonthly Average**
* **Yearly Average**

## Wind Speeds

**A graph with a line

Description automatically generatedHourly Total**

A graph with blue line

Description automatically generated**Hourly Average**

**A graph of different colored bars

Description automatically generated**A graph of different colored bars

Description automatically generated**Daily Total by location**

**Daily Average by Location**

**Daily Total By Region**

**A graph with different colored rectangles

Description automatically generated**

**Daily Average by Region**

**A graph of different colored rectangles

Description automatically generated**

**Weekly TotalA graph of blue rectangular bars

Description automatically generated with medium confidence**

**Weekly AverageA graph of a wind speed

Description automatically generated**

**A green bar graph with black text

Description automatically generatedMonthly Total**

A graph of green bars

Description automatically generated**Monthly Average**

**Yearly Total**

**A graph of green bars

Description automatically generated with medium confidence**

**Yearly Average**

## Air Temperature (deg C)

* A graph with blue lines

  Description automatically generated**Hourly Average**
* **A graph of air temperature

  Description automatically generatedDaily Average By Location**
* **A graph of different colors

  Description automatically generatedDaily Average By Regions**
* **A graph showing the temperature of the day

  Description automatically generated with medium confidenceWeekly**

**A graph of the average air temperature

Description automatically generatedMonthly**

* **Yearly**

# Findings

## (24h, Region) Wind Speeds vs Total Rainfall

**Strong Positive Relationship**

**E.g The more rainfall in the West, the higher total wind speed in the West.**

1. Strong Positive – Total Wind Speeds vs Total Rainfall
2. Moderate Positive – Average Wind Speeds vs Total Rainfall

A screenshot of a computer screen

Description automatically generated

* Linear Regression GraphA screenshot of a computer

  Description automatically generated
* A screen shot of a computer

  Description automatically generated

## (1h, Region) Total Wind Speed Vs Total Rainfall

**Weak Positive Relationship**

A screenshot of a computer screen

Description automatically generatedA screen shot of white text

Description automatically generated

A screenshot of a graph

Description automatically generated

## (1h, Region) Humidity vs Rainfall

**Strong Positive Relationship**

**High Humidity = High Average Rainfall**

High Rainfall Days: 2025-01-11 / 2024-11-29

Average Rainfall is measured by:

1. Average Rainfall at each station (Total Rainfall / No of Readings)
   1. e.g Jurong West – 0.4mm
2. Average Rainfall at each region (Total station data / No of stations)
   1. e.g West – 0.25mm

A screen shot of a computer

Description automatically generated

## (1h, Region) Windspeeds vs Rainfall

* E.g 1-2am how much wind vs 1-2am how much rain
* Not a strong relationship

A screen shot of a computer

Description automatically generated

## (1h, Region) Air Temperature