Weather Conditions Dashboard

Slide 1: Title Slide

- **Title**: Weather Conditions Dashboard

- **Subtitle**: Analyzing Global Weather Data by Key Metrics

- **Introduction**:

  o This dashboard provides a comprehensive visualization of weather data, including temperature, humidity, pressure, wind speed, and rainfall distribution.

Slide 2: Overview

- **Purpose**:

  o To analyze weather trends across various locations using aggregated metrics.

- **Key Metrics**:

  o **Sum of Max Temperature**: 3.35M

  o **Sum of Min Temperature**: 1.76M

  o **Pressure (3 PM & 9 AM)**: 132.42M and 132.70M

  o **Wind Gusts**: Peaks at 100 km/h.

Slide 3: Visualizations

1. **Location and Rainfall Map**

   o **Global Perspective**:

     ▪ Rainfall distribution is color-coded and mapped to highlight regional differences.

     ▪ Dots indicate data points worldwide, with detailed focus on **Australia**.

2. **Pie Chart: Humidity at 3 PM by Location**

   o Visualizes location-wise contributions to overall humidity.

   o Locations like **Sydney**, **Gold Coast**, and **Norfolk Island** dominate.

3. **Bar Chart: Pressure at 3 PM by Location**

   o Displays pressure data for various cities, with **Woomera** and **Sydney** at the top.

   o Total pressure across all locations: **13.24M hPa**.

Slide 4: Temperature Trends

- **Line Chart: Sum of Max and Min Temperature by Location**

    - **Key Observations**:

        - Max temperature (blue line) significantly exceeds min temperature (pink line) across all locations.

        - Cities like **Darwin**, **Cairns**, and **Sydney** exhibit consistent trends.

Slide 5: Wind Speed Distribution

- **Pie Chart: Wind Speed at 3 PM by Location**

    - Highlights wind speed variations among cities like **Canberra**, **Sydney**, and **Adelaide**.

    - Useful for wind-related studies or renewable energy planning.

Slide 6: Key Insights

1. **Temperature Trends**:

    - Max temperatures are consistently higher than min temperatures, with significant variations across cities.

2. **Humidity and Rainfall**:

    - Locations with high rainfall often correlate with higher humidity levels.

3. **Wind Gust Peaks**:

    - Extreme wind gusts reach speeds of up to **100 km/h**, influencing weather patterns and local activities.

Slide 7: Applications

1. **For Weather Forecasting**:

    - Utilize pressure, wind, and rainfall data for predictive models.

2. **For Policy Makers**:

    - Plan for climate adaptation and disaster preparedness in high-risk areas.

3. **For Businesses**:

    - Use weather trends for sectors like agriculture, energy, and logistics.

Slide 8: Closing

- **Summary**:

- This dashboard provides actionable insights into global weather patterns using key metrics.

- Combining temperature, pressure, humidity, and rainfall data allows for better decision-making across industries.