Location-Based Trend Analysis

December 01, 2025 to December 15, 2025

Location Analysis

Latitude	31.5204
Longitude	74.3587
Analysis Radius	5.0 km

Air Quality Trends

Ground Station Measurements

Pollutant	Mean (µg/m³)	Max (µg/m³)	95th Percentile (µg/m
PM25	159.5	362.0	294.0

Satellite Measurements (GEE)

Data from Google Earth Engine Sentinel-5P satellite observations

Pollutant	Mean	Max	Unit
NO2	2.20e-04	2.92e-04	mol/m²
SO2	4.03e-04	9.74e-04	mol/m²
CO	4.69e-02	4.96e-02	mol/m²
O3	1.18e-01	1.18e-01	mol/m²

Note: Satellite data provides broader spatial coverage but may differ from ground measurements due to different measurement methods and altitudes.

Satellite Pollution Maps

Interactive pollution maps showing satellite-derived measurements around your location:

Map tiles are being processed. Check the web dashboard for interactive pollution maps.

■ AI-Powered Health Insights

AI Summary

1. Overall Air Quality Assessment: The average PM2.5 concentration of 159.5 µg/m³ over the past 30 days indicates poor air quality, exceeding the World Health Organization's guideline of 12 µg/m³ for...

Personalized Health Recommendations

• Overall Air Quality Assessment: The average PM2.5 concentration of 159.5 µg/m³ over the past 30 days indicates poor air quality, exceeding the World Health Organization's guideline of 12 µg/m³ for a 24-hour period.

• Specific Health Risks: Exposure to these levels may cause shortness of breath, irritation of eyes, nose, and throat in sensitive individuals. Long-term exposure can lead to serious health issues such as heart disease and lung cancer.

• Recommended Protective Actions: Use masks (N95 or above) when outdoors, reduce outdoor activities during peak pollution hours (early morning and evening), and avoid prolonged exposure to smoggy conditions.

• Advice for Sensitive Groups: Children, the elderly, and people with asthma or heart disease should limit their time spent outside during periods of high pollution and consider using air purifiers indoors.

• Best Times for Outdoor Activities: Engage in outdoor activities during mid-day when pollution levels tend to be lower. Monitor local air quality index regularly to stay informed about conditions.

Overall Risk Level: VERY_HIGH

Particularly Vulnerable Groups:

children, elderly, people with respiratory conditions, people with heart disease

Analysis generated by mistralai/mistral-7b-instruct-v0.3