POLLUTION SPIKES—

from sklearn.ensemble import IsolationForest

# Use the same data as above

X = data[['temperature', 'traffic\_flow', 'pollution\_level']]

# Initialize Isolation Forest model for anomaly detection

model = IsolationForest(contamination=0.05) # Adjust contamination according to expected anomaly ratio

# Train the model

model.fit(X)

# Detect anomalies (1 = normal, -1 = anomaly)

anomalies = model.predict(X)

# Add anomaly results to your dataset

data['anomaly'] = anomalies

# Print the anomalies

print(data[data['anomaly'] == -1])