

Climate Analysis Report

Clustering, Anomaly Detection, and Trend Forecasting

Conclusion:

This report provides an analysis of climate data, including K-Means clustering to group similar regions, anomaly detection to identify unusual patterns, and trend forecasting for temperature over time.

Cluster Summary:

Cluster

0	357
1	324
2	319

Anomaly Summary:

Anomaly

1	950
-1	50

Temperature Forecast (First 5 rows):

ds	yhat	yhat_lower	yhat_upper
2000-01-01	19.543502	8.556098	29.852152
2001-01-01	20.038043	9.083824	30.525086
2002-01-01	19.877981	8.863347	31.506526
2003-01-01	19.718411	9.276644	31.471870
2004-01-01	19.559551	7.811740	29.784896

K-Means Cluster Distribution

