

Title : Supervised ML methods in Weather Forecasting

Objective:

To understand the various real-world applications of using ML methods in Weather Forecasting

New Proposed Methods:

Application	Presenter	Dataset	Methods
Severe weather alerts and advisories	Balaji Gavhane (PB27)	NOAA Severe Weather Data Inventory https://www.kaggle.com/noaa/noaa-severe-weather-data-inventory/	Decision Tree, Logistic Regression, KNN
Air Traffic	Shivank Ratnaparkhi (PB57)	METAR dataset https://catalog.data.gov/dataset/kcqb-metar	K-Means Clustering, CNN
Marine travel risk analysis	Shonil Bhide (PB16)	NOAA GFS AVN Grid datasets https://rda.ucar.edu/datasets/ds084.1/	Standard Regression (SR), Support Vector Regression (SVR), and Random Forest (RF)
Agriculture	Devesh Bhogre (PB47)	Weather Station Dataset https://www.kaggle.com/huntermcgushion/weather-station-location-eda	EDA and K-Means Clustering
Energy Generation	Aditi Chavan (PB54)	Turbine Data https://www.kaggle.com/theforcecoder/wind-power-forecasting	Linear Regression & Decision Tree Regressor
Transportation	Rutuja Bhandigani (PB55)	Uber pickup data Weather data from National Centres for Environmental Information . https://www.kaggle.com/yannisp/uber-pickups-enriched	Linear Regression, & KNN
Military applications	Sneha Bagade (PB33)	Weather conditions for calendar days during World War Two. https://www.ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets/world-war-ii-era-data	Linear regression
Forecasting of Solar irradiance	Devashish Bote (PB13)	National solar radiation data set https://openei.org/datasets/dataset/national-solar-radiation-data-base	Clustering and decision tree