

Earthquake Prediction Model using Python

Development part-2

Certainly! Continuing from the dataset loading and preprocessing steps:

1. Visualizing Data on a World Map:

❖ Use a visualization library like Matplotlib or Plotly to plot earthquake locations on a world map. Assuming you have latitude and longitude columns:

python

```
import matplotlib.pyplot as plt

plt.scatter(data['longitude'], data['latitude'], c=data['label'], cmap='viridis', alpha=0.5)

plt.title('Earthquake Occurrence')

plt.xlabel('Longitude')

plt.ylabel('Latitude')

plt.colorbar(label='Label')

plt.show()
```

❖ This scatter plot can help you visualize the distribution of earthquakes in your dataset.

2. Splitting Data into Training and Testing Sets:

❖ Ensure you have scikit-learn installed (`pip install scikit-learn`). Split your data into training and testing sets:

Python

```
from sklearn.model_selection

import train_test_split

# Assuming 'features' are your input variables and 'labels' are your output variable (e.g.,
earthquake occurrence)

X_train, X_test, y_train, y_test = train_test_split(features, labels, test_size=0.2, random_state=42)

# Now, you have your training and testing sets ready for model development.
```

❖ These steps set the foundation for further development of your earthquake prediction model. If you have additional details or specific requirements, feel free to let me know!