

## Comparative Study of Three Artificial Intelligence Techniques for Rain Domain in Precipitation Forecast

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**Abstract :** Precipitation forecast is important to avoid natural disaster incident which can cause losses in the involved area. This paper reviews three techniques logistic regression, decision tree, and random forest which are used in making precipitation forecast. These combination techniques through the vector auto-regression (VAR) model help in finding the advantages and strengths of each technique in the forecast process. The data-set contains variables of the rain's domain. Adaptation of artificial intelligence techniques involved in rain domain enables the forecast process to be easier and systematic for precipitation forecast.

**Keywords :** logistic regression, decisions tree, random forest, VAR model

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