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SEMCPRA-Sar-Esembled Model for Climate Prediction in Remote Area

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Abstract : Climate prediction is an essential component of climate research, which helps evaluate possible effects on economies, communities, and ecosystems. Climate prediction involves short-term weather prediction, seasonal prediction, and long-term climate change prediction. Climate prediction can use the information gathered from satellites, ground-based stations, and ocean buoys, among other sources. The paper's four architectures, such as ResNet50, VGG19, Inception-v3, and Xception, have been combined using an ensemble approach for overall performance and robustness. An ensemble of different models makes a prediction, and the majority vote determines the final prediction. The various architectures such as ResNet50, VGG19, Inception-v3, and Xception efficiently classify the dataset RSI-CB256, which contains satellite images into cloudy and non-cloudy. The generated ensembled S-E model (Sar-ensembled model) provides an accuracy of 99.25%.

Keywords : climate, satellite images, prediction, classification
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