

# The Evaluation of CWA Seasonal Forecast Model

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## Abstract

Short-term climate models, which generate forecasts months in advance, have become essential tools in climate prediction. These models provide critical information for sectors such as agriculture, water resource management, energy planning, and disaster preparedness. Seasonal forecasts—long-range projections of climate conditions—aim to anticipate general trends in temperature variability and precipitation patterns by simulating key drivers such as atmospheric circulation and sea surface temperature. A key challenge in seasonal forecasting lies in the accurate prediction of extreme climate events, which often have significant socio-economic consequences. By systematically examining model performance in representing historically warm, cold, wet, and dry events, the study provides insights into the relative strengths and limitations of each model, offering guidance for improving operational seasonal forecasts and enhancing preparedness for future extremes.

Key Words : Seasonal Forecast