



REVIEWER’S REPORT

Manuscript No.: IJAR-58161

Title: FORECASTING TOURIST ARRIVALS IN MATI CITY USING SEASONAL AUTOREGRESSIVE INTEGRATED MOVING AVERAGE (SARIMA).

Recommendation:

- Accept as it is
- Accept after minor revision Yes**
- Accept after major revision
- Do not accept (*Reasons below*).....

Rating	Excel.	Good	Fair	Poor
Originality		yes		
Techn. Quality		yes		
Clarity		yes		
Significance		yes		

Reviewer’sID: JPR- Dr. Himanshu Gaur

Detailed Reviewer’s Report

“Forecasting Tourist Arrivals in Mati City Using Seasonal Autoregressive Integrated Moving Average (SARIMA)”, addresses a relevant and practical issue in tourism management by employing a well-established quantitative time-series forecasting approach to predict monthly tourist arrivals in Mati City, Davao Oriental. The study demonstrates methodological rigor through the application of the Box–Jenkins methodology and the selection of the SARIMA (1,1,3)(0,0,2)[12] model, which appears statistically appropriate based on satisfactory diagnostic tests, white-noise residuals, and favorable information criteria values. The use of an eleven-year dataset (January 2013–December 2023) strengthens the reliability of the analysis and enables the identification of consistent seasonal patterns, with tourism peaks during April, May, and December and lower arrivals in August and September. The abstract effectively highlights the practical significance of forecasting for evidence-based tourism planning, resource allocation, and sustainable destination management, making the research valuable for policymakers and tourism stakeholders. However, several areas require further improvement. The abstract states that the selected model is the “best-fit” model but does not specify the model selection criteria, such as comparisons with alternative SARIMA specifications or forecasting accuracy measures like RMSE, MAE, MAPE, or Theil’s U statistic, which are essential to justify model superiority. The conclusion that tourist arrivals will stabilize at approximately 35,000 visitors per month should be interpreted more cautiously, as SARIMA models rely primarily on historical trends and assume that future conditions remain relatively unchanged. External factors such as natural disasters, pandemics, policy changes, infrastructure development, economic conditions, and promotional campaigns can substantially alter tourism demand but are not considered in the forecasting model. Furthermore, the study appears to rely solely on univariate time-series analysis, limiting its ability to explain the underlying drivers of tourist arrivals. Incorporating explanatory variables through multivariate forecasting techniques or comparing SARIMA with advanced machine learning and hybrid forecasting models could provide greater predictive accuracy and richer managerial insights. The abstract would also benefit from briefly mentioning the forecast horizon and confidence intervals to enhance the interpretation of the projected values. Despite these limitations, the research makes a meaningful contribution to tourism forecasting literature by providing an empirically validated seasonal forecasting model that can support strategic planning and operational decision-making. Overall, the thesis is well-structured,

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methodologically sound, and practically relevant, but it would be strengthened by providing a more comprehensive justification for model selection, acknowledging forecasting assumptions and limitations, incorporating comparative forecasting approaches, and discussing external determinants that may influence future tourism demand.