



Time Series Checklist

Achievement

I can:

- Select a variable from the time series data to investigate
- Select and use appropriate display(s) to graph the data (e.g. line plot, time plot)
- Identify key features in the data such as trend and seasonality
- Find an appropriate model (e.g. additive, exponential smoothing) to describe the time series
- Use the model to make a forecast

Merit

I can

- Justify the selection of the variable to investigate based on the research and purpose
- Select appropriate and well-formatted displays to present the data
- Relate the identified features in the data (e.g. trend, seasonality) to the context
- Justify the appropriateness of the chosen model across the full range of data
- Provide a justified forecast, including a discussion on the precision and reliability

Excellence

I can:

- Develop a clear purpose for the investigation based on the research and select appropriate variables
- Create high-quality and informative data displays, demonstrating strong data visualization skills
- Integrate statistical and contextual knowledge to provide deep insights about the features in the data
- Evaluate the adequacy of the chosen model, potentially fitting alternative models and justifying the best approach
- Provide a forecast with a thorough statistical and contextual justification, including an evaluation of the model's validity