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Applied Time Series Analysis With R. Second Edition.

Wayne A. Woodward, Henry L. Gray, and Alan C. Elliott
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Make time for time series statistics

Many data include time or have longitudinal dimensionalilty. When these data include an index of time, i.e. measures at regular or periodically successive intervals, statistics that use time sequencing in some capacity are appropriate. There are at least two major categories of statistics - 'time series analysis' to examine trends and address potential periodicity in the data and 'time series foresting' that incorporates time into models with the intent of predicting future outcomes. Most major disciplines of data inquiry now use either or both of these categories of statistics to examine patterns and infer causality.

Content

This is first and foremost a statistics book (Woodward, Gray, and Elliott 2017). However, the general context of time series is not well developed,and it is assumed that a. the reader is already familiar with time series to some extent and b. the reader is competent and able to parse the maths and proofs associated with relevant axioms to particular aspects of time series. This is unfortunate because the general framing of time series is important. The purpose, class, method, and different forms of data all shape subsequent analyses and without a guide for the reader in making these decisions, it is challenging to know what specific chapters are relevant to the task at hand.

References

Woodward W, Gray H, Elliott A (2017). *Applied times series analysis with R. Second Edition.* Second edition. CRC Press, Boca Raton, FL.

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