

An overview of the Singular Spectrum Analysis

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Abstract

According to a simple definition, time series is a sequence of data points that occur in successive order over some period of time. There are several questions in this definition that must be cleared: (1) what we mean by “data point” (2) is there a fixed definition for the “successive order” and (3) which type of time period can be imagined. Obviously, using any approach for analyzing time series without considering such points may be misleading.

Singular Spectrum Analysis (SSA) is an interesting approach for analyzing time series. Because, on one hand the main idea on behalf of this method is very simple and on the other hand its result is acceptable when it is compared with other methods in the area of time series analysis.

In this talk, I try to provide some realizations of the above mentioned questions at first and then discuss about the way that SSA deal with such situations.