

Above are monthly injuries from motor vehicle collisions in New York City. An augmented Dickey-Fuller test, tseries::adf.test(injuries), gives a p-value of 0.01. Which is the best way to proceed:

A: The time plot indicates a non-constant mean function describing a major dip due to the COVID-19 pandemic and an increasing trend at other times. The ADF test does not support or refute that model.

B: The ADF test indicates that the series is stationary, supporting a decision to fit a SARMA model.

C: The ADF test shows the series is non-stationary, so it should be differenced before fitting a SARMA.

D: The ADF test indicates that the series is non-stationary, supporting the use of a non-constant mean function to describe a major dip due to the COVID-19 pandemic and an increasing trend at other times.