Tell me how you handle outliers in your time series analysis/forecasting process.

Posted on Sep 19, Posted by [Tom Reilly] Category [Forecasting]

15 Questions surrounding outliers and time series forecasting/modeling

Does your current forecasting process automatically adjust for outliers? (correct answer Yes)

Do you make a separate run for certain problems that SHOULD NOT get adjusted for outliers as the outliers are in fact real and shouldn't be adjusted? (correct answer Yes)

Do you know what standard deviations are used to identify an outlier? (correct answer "who cares" You shouldn't be having to tell the system)

Who knows that the standard deviation calculation is itself skewed by the outlier? (correct answer "who cares" You shouldn't be having to tell the system)

Does the system ask you how many times it should "iterate" when removing outliers? How many times do you "iterate"? (correct answer "who cares" You shouldn't be having to tell the system)

Does the system allow you to convert outliers to causals and flag future values when the event will happen again? (correct answer Yes)

Does the system identify inliers? ie. 1,9,1,9,1,9,1,5 (correct answer Yes)

Does the system recognize the difference between an outlier and a seasonal pulse? (correct answer Yes) (IE 1,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,1,0,etc)

Does the system recognize the difference between an outlier and a level shift? (correct answer Yes) (IE 0,0,0,0,0,0,0,0,0,0,1,1,1,1,1,1,1,1,1,1,etc)

Does the system recognize the difference between an outlier and a change in the trend? (correct answer Yes) (IE 0,0,0,0,0,0,0,1,2,3,4,5,6,7,8,etc)

Does the system allow you to force the outlier in the most recent period to be a "level shift" or a "seasonal pulse"? (correct answer Yes)

Does the system report a file adjusted for outliers for pure data cleansing purposes? (correct answer Yes)

Does the system adjust for outliers in a time series regresion (ie ARIMAX/Transfer Function)? (correct answer Yes)

Who tries to find the assignable cause why the outliers existed?   (correct answer I do)

Who then provides causals to explain the outliers to the system?   (correct answer I do)

Tags: Tagged in: arimax level shift outliers fox tiao tsay box box-jenkins