I really really don't like the outliers missed in this ARIMA(x) model.

Posted on Feb 22, Posted by Tom Reilly Category Forecasting
Modeling ARIMA(x) or otherwise known as a Transfer Function models aren't easy to model especially with outliers. A new book Data Quality for Analytics Using SAS by Gerhard Svolba from SAS shows this to be true. Click on the link and you will see the graph and the explanation of which outliers were identified.
I am going to make this post short and to the point.
The January 2007 value is an outlier and should have been flagged as one although the author tries to ignore it, but we do not.
December 2006, January 2008, November 2008, December 2008 are also missed as they are clear outliers.
I will also point out the data seems to be trending up and the forecast is flat, but we don't know what the future values of the causals used so its tough to give a complete view here.
If you have the book and perhaps the data, post it here or send it to us and we will gladly analyze it or any data!
Follow up

We downloaded the data and SAS' Universal Viewer. The 4 data sets that they let you download only has transaction level data and it doesn't overlap the time frame for the example. So if the data is not listed in the book, the only way to get it would be to contact the author himself. Here is the author's contact page if anyone wants to do that.

http://support.sas.com/publishing/bbu/companion_site/info.html

Tags: Tagged in: <u>arimax level shift</u> <u>outliers sas</u>