

### Part 4.4: Appropriateness of the Model

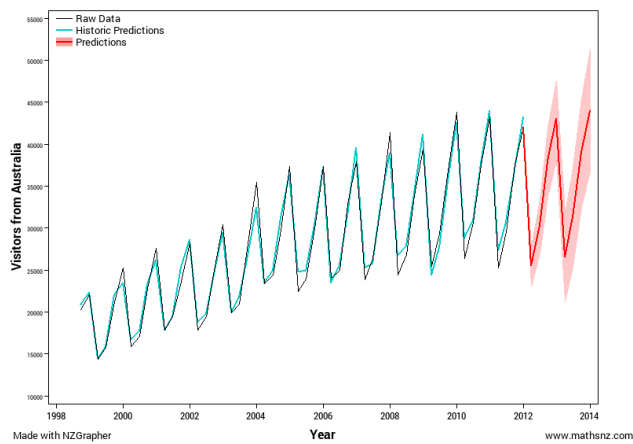
At this point in your report you should include the forecast graph we produced earlier.

You need to make a comment around how well the forecast model fits the data by looking at how the historic predictions fits with the raw data, particularly commenting on any time periods where it does not fit particularly well. Try and link these to how accurate you think the predictions will be.

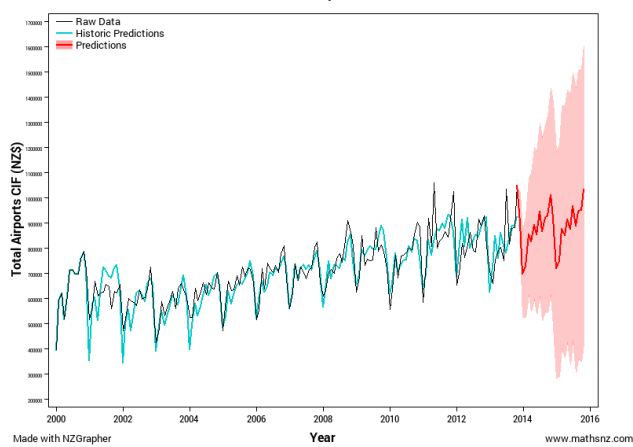
For each of the graphs comment on how well the model fits the data.  
The first two have been done for you.

<p><b>1. Sea Ice</b></p> <p>Made with NZGrapher <span style="float: right;">www.mathsnz.com</span></p>	<p>Overall the model seems to fit the data very well. Most of the fitted values match up with the raw data, however there does appear to be an increase in the difference since 2008 which may be due to an increase in climate change altering the pattern.</p>
<p><b>2. Births and Deaths</b></p> <p>Made with NZGrapher <span style="float: right;">www.mathsnz.com</span></p>	<p>Due to the highly variable nature of the seasonal effects the model doesn't fit the data particularly well. It is not too bad before 2006 and appears to have settled down after 2011. Provided the pattern remains settled the predictions should be reasonably accurate</p>
<p><b>3. Penguin</b></p> <p>Made with NZGrapher <span style="float: right;">www.mathsnz.com</span></p>	

4. Visitors



5. Imports



6. Forestry

