

**MSc/PG Diploma in Statistical Science**  
**PRACTICAL FEEDBACK FORM**

**Student Name: P648**

**Practical Title:**

[Tick one box for each of 1-6. The middle box corresponds to satisfactory work (and boxes to the right/left indicate stronger/weaker work).]

<b>1. Writing Style</b>	Unclear, difficult to read					x			Clear, flowing, easy to read
<b>2. Statistical Analysis</b>	Weak, invalid					x			Strong, valid
<b>3. Answering the report question</b>	Aspects of the question ignored					x			Question answered in full
<b>4. Conclusions</b>	No observations					x			Limitations of current analysis clearly brought out
<b>5. Figures and Tables</b>	No statistical meaning, wrong size, missing labels or captions					x			Meaningful, correct size, good labels and captions
<b>6. R Code</b>	Missing R code, inconsistencies					x			Well presented and correct R code

**Overall Assessment: Pass**

**Individual Feedback:**

P648

Some exploratory plots are good, and it was a good idea to account for distance in Fig 1. However, the middle plot is misleading I think: for a given stroke, short course times are always less than long course times - so the mid top row plot isn't really a good thing to plot here.

Sec 2: I don't think you spot the increasing variance with distance, which is an important thing here.

Early Sec 3: I think you mean raising time (rather than dist) to some power less than 1?

I think you need to give some more details in your report:

I expected the parameter estimates for your preferred model to be in the report,

I expected standard errors of parameter estimates (or conf intervals) to be in the report,

Perhaps also at least some numerical details about the model fitting/selection process.

I like your discussion in 4.5.

Using notation like:  $\text{time} \sim (\text{dist} + \text{sex} + \text{course} + \text{stroke})^2$  would be fine, perhaps simpler/quicker to read than the math notation you use?

It seems very unusual to use both Box Cox to get to  $\text{time}^{0.9}$  and also then afterwards use weighted regression. If Box Cox is suggesting  $\lambda=0.9$ , taking  $\lambda=1$ , especially if you are wanting to then weight, seems ok to me.  $\lambda=1$  also leads to straightforward interpretations whereas 0.9 does not.

Interpretation: good to see you've been careful, but the reader needs your results for these sections or to be able to look at other interpretations.

The text in some figures is a bit too small, e.g. Fig 5.

Predictions: all of B,C,D involve extrapolation to some extent, and C & D are especially questionable.