Reviewer's report

Title: Using a Generalized Additive Model with Autoregressive Terms to Study the Effects of Daily Temperature on Mortality

Version: 8 Date: 4 October 2012

Reviewer: Xiangming Fang

Reviewer's report:

Again, thanks for the efforts for the revision, especially the addition of the comparison between GAMAR and GAMM. However, there may still be a few things to be clarified or modified before publication.

1) I'm glad to see in Table 1 that GAMAR and GAMM are about equivalent in terms of mean structure estimation. But the authors did not report the estimates of the AR parameters for GAMM. It would be interesting to compare the estimated AR parameters from GAMM to the AR parameters from GAMAR.

2) Page 7, Line -8 (8th line from the bottom): There should be k-1 (instead of k) interior knots. Otherwise, the number of subintervals would not be k.

3) Page 8, Line -4: The parameter vector should be $\theta=(\beta_1, \ldots, \beta_m, c_1, \ldots, c_p)'$. The current "L" in the expression should be corrected as "...".

4) Page 16, Line -8: Please change "we only calculated 50 samples for GAMM" to "we only fitted GAMM to 50 samples".

5) Page 19, Line -3: "i=1, 2, L, mp" should be "i=1, 2, ..., mp".

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.