



BGD

5, S1292-S1293, 2008

Interactive Comment

## Interactive comment on "Importance of long-term monitoring for detecting environmental change: lessons from a lowland river in south east England" by T. P. Burt et al.

## Anonymous Referee #1

Received and published: 31 July 2008

This is a very well written paper on the analysis of long-term trends of nitrate. I have a number of small points to help clarification and possible weaknesses:

- Introduction. o L 16. Include a short sentence here that identify that you're referring to "memory" o Provide some final sentences that help the reader to understand which the singularity of your study is. The sentence used in the abstract (L.5) could be helpful. o Some consideration about potential errors linked to the different methods of analysis that could affect the data, at least for nitrate analysis

- Analysis o Methods (hydrological, chemical) should be indicated. o Why the moving averages were chosen? Provide a rationale for that o Do you think that with this



windows are able to detect seasonal trends? Specify

- Results o The seasonal cycle you describe (L. 23-4) is not that obvious from figure 1. In general, I have a problem with the figures: they are too small to allow detailed observation. This should be corrected. o L. 3-4. p. 2373. Can you offer a correlation about this relationship between wetter years- higher concentrations? Would help to classify the years categorically (e.g. wet vs dry years)?

- Conclusions. I agree with most of them, of course. Long-term series should be a must for ecological management. However, point 4 leaves most of us, and spcially the managers in a very poor state!, since a very short number of long-term series are available. I think that risking yourself a bit and giving a range of years where prediction could be reliable (at least in this type of rivers) would be very helpful.

Finally, I convey my appreciation for such a nice piece of work.

BGD

5, S1292–S1293, 2008

Interactive Comment

Full Screen / Esc

**Printer-friendly Version** 

**Interactive Discussion** 

**Discussion Paper** 



Interactive comment on Biogeosciences Discuss., 5, 2369, 2008.