

Pelletier, Greg (ECY)

From: Robert Ambrose [bobambrosejr@gmail.com]
Sent: Tuesday, February 08, 2011 6:11 PM
To: Pelletier, Greg (ECY)
Cc: Ahmed, Anise (ECY); Sackmann, Brandon (ECY)
Subject: Re: base 11 insights
Attachments: base12.xls

Greg, I've looked quickly at the flagged sensitivity runs, comparing them both with base11 and also with base10 at the six main stations. At most of these stations, we have base10 better than base11, which is sometimes better than the sens11*. When anc is 0.12 or 0.14, productivity goes down, hurting chl and DO performance in four of the six stations (SS08, SS52, SS71, and NSEX01). Lower productivity helps some in stations SS66 and KSPB01.

I would still go with anc=0.10 to get the overall productivity about right at most stations, and work off of that for sensitivity. Given that as a start, I am inclined to stick with my base recommendations, but add to the sensitivity the following extra runs: GAM2 C:Chl=60, 50, GAM1 ktg1=0.03, GAM2 ktg1=0.03, and GAM2 ktg2=0.03. These are added to the attached spreadsheet.

Bob

On Tue, Feb 8, 2011 at 6:09 PM, Robert Ambrose <bobambrosejr@gmail.com> wrote:
Greg, I've been out for the afternoon, and just got this update. I have a few more obligations before sunset, and will spend more time on this, looking at these combinations to see if we can get a better base12 and set of sensitivity variations. I didn't want to burn too much time, not really knowing how the new light function will affect things.

Bob

On Tue, Feb 8, 2011 at 3:59 PM, Pelletier, Greg (ECY) <gpel461@ecy.wa.gov> wrote:

Bob,

Looking at the goodness of fit statistics for base 11 suggests that the following variations on base 11 significantly improved the predictions:

- GAM2 C:Chla ratio = 50 combined with GAM2 gmax=1.86 (XPB10)
- GAM2 ktg1=0.05 (XPJ16) and GAM1 ktg1=0.03 (XPC05)
- anc=0.14 combined with GAM1 Kd=0.03 (XPJ09), GAM2 Kd=0.05 (XPI15), GAM1 Kr=0.07 (XPJ12), GAM2 Kr=0.07 (XPB02), GAM1 Kn=24 (XPJ08), and GAM2 Kn=30 (XPI13),
- k71=0.01 (XPB05)

Greg

Greg Pelletier
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
voice: 360.407.6485
fax: 360.407.6884
email: greg.pelletier@ecy.wa.gov