



Bryce Contor <bcontor.uidaho@gmail.com>

mkmod changes

8 messages

Willem Schreuder <willem@prinmath.com>**Wed, May 5, 2010 at 10:18 AM**

To: "Wylie, Allan" <Allan.Wylie@idwr.idaho.gov>

Cc: "Bowling, Jon" <JBowling@idahopower.com>, bcontor@if.uidaho.edu, "Raymondi, Rick" <Rick.Raymondi@idwr.idaho.gov>

Howdy!

I've posted the attachments to
<http://www.prinmath.com/misc/allen.zip>
to avoid mail filter issues.

Mostly I cleaned up the mkmod code to deal with a few "hardwired" issues and clean out old crud.

- 1) I have removed the .per file and instead read the new version of the .mdl file. The changes to the .mdl file is that the stress period length and label are read one period to a line. Also the number of soil types are read right before the adjustment factors.
- 2) I have changed the .eff file so that you specify the field capacity, wilting point and rooting depth by entity.
- 3) I added some entity names to the entity file instead of being hardwired. The entity names in the .ent file are used in the output tables.
- 4) I added a check on the .cnl file that an entity is specified and that the entity referenced exists. Names for canals, tribs, etc. are read but right now not used anywhere in the output.
- 5) In mkmod, I changed the Read() function to return a valid value or else print the error message to get more consistent error messages. I also added a ReadLine() function which reads a set of values or else die with the appropriate error message. I modified the output tables to be display the parameters by entity (wilting point, etc) if the appropriate option is invoked. Also in 'single mode', -s means output goes to a single net stress file, -ss (super simple) the steady state is not computed, and -sss (super, super simple) it JUST calculates the stress fill and produces NO other output, which would be useful for PEST.
- 6) I tested this on the P091202B data set just for kicks. The output is called foo*.htm for the different options. I think everything works but I was mostly just trying to get it to run without spitting out errors.

I think that was all my assignments. Let me know if I forgot something.

-Willem

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Bryce Contor <bcontor.uidaho@gmail.com>**Wed, May 5, 2010 at 10:33 AM**

To: Willem Schreuder <willem@prinmath.com>

Cc: "Wylie, Allan" <Allan.Wylie@idwr.idaho.gov>, "Bowling, Jon" <JBowling@idahopower.com>, bcontor@if.uidaho.edu, "Raymondi, Rick" <Rick.Raymondi@idwr.idaho.gov>, Stacey Taylor <taylsl@if.uidaho.edu>

Thanks. I'll download these & look at them.

It will become more clear I'm sure after I look at the files, but it appears that you have modified the format of the *.mdl file, and we will have to do the same as we create future *.mdl files? Perhaps the same is true of the *.ent file?

Also, I assume MKMOD cares not whether files are space or comma delimited? I had supposed READINP*.exe had a preference, but it is nearly always more straightforward for me to create comma-delimited.

Thanks,

Bryce

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Willem.Schreuder@prinmath.com <Willem.Schreuder@prinmath.com>

Wed, May 5, 2010 at 10:51 AM

To: Bryce Contor <bcontor.uidaho@gmail.com>

Cc: "Wylie, Allan" <Allan.Wylie@idwr.idaho.gov>, "Bowling, Jon" <JBowling@idahopower.com>, bcontor@if.uidaho.edu, "Raymondi, Rick" <Rick.Raymondi@idwr.idaho.gov>, Stacey Taylor <taylsl@if.uidaho.edu>

On Wed, 5 May 2010, Bryce Contor wrote:

It will become more clear I'm sure after I look at the files, but it appears that you have modified the format of the *.mdl file, and we will have to do the same as we create future *.mdl files? Perhaps the same is true of the *.ent file?

Yes, but the changes to the MDL file are pretty trivial.

- 1) For the stress periods, the values are specified one period per line. The first value is the period length (say 31 days) and the second value is a string used in the output to label the corresponding time period (say May 1980). To adapt to this in READINP is trivial.
- 2) The number of adjustable zones used to be hard wired to 4 and now 30. That's kinda silly, so I added right before the adjustment factors the number of zones, currently 11. This takes a bit more work in READINP, but it seems silly to make the grid dimensions adjustable but hard wire the number of zones, so Allen though that would be worth while doing.

The change to the .ent file is what we discussed before, an optional "Short Common Name" for the entities to be used to tag tyhe entities in the output. It is ignored by READINP.

Also, I assume MKMOD cares not whether files are space or comma delimited? I had supposed READINP*.exe had a preference, but it is nearly always more straightforward for me to create comma-delimited.

Actually READINP doesn't care whether you use spaces or commas since FORTRAN list input can deal with either. mkmod is a bit more particular, but the short answer is that for everything other than the .mdl file to stick to whatever you did in the past since that's what it was coded to deal with.

Regards

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Bryce Contor <bcontor.uidaho@gmail.com>

Wed, May 5, 2010 at 10:56 AM

To: Willem.Schreuder@prinmath.com

Cc: Allan Wylie <allan.wylie@idwr.idaho.gov>, Stacey Taylor <taylsl@if.uidaho.edu>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

Thanks.

We won't be planning on adapting READINP any more, to my understanding. We just need to know how to create input data for MKMOD.

I was disappointed in the last response; we have in the past been creating some space-delimited files that would be easier as comma. I think I'll rebel & try it, if MKMOD pukes I'll repent.

Bryce

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Willem.Schreuder@prinmath.com <Willem.Schreuder@prinmath.com>

Wed, May 5, 2010 at 11:17 AM

To: Bryce Contor <bcontor.uidaho@gmail.com>

Cc: Allan Wylie <allan.wylie@idwr.idaho.gov>, Stacey Taylor <taylsl@if.uidaho.edu>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

On Wed, 5 May 2010, Bryce Contor wrote:

We won't be planning on adapting READINP any more, to my understanding. We just need to know how to create input data for MKMOD.

I think Allan was going to do that - I sent him some code snippets yesterday.

I was disappointed in the last response; we have in the past been creating some space-delimited files that would be easier as comma. I think I'll rebel & try it, if MKMOD pukes I'll repent.

Don't sweat it. If there are other reasons to do space and/or comma delimited that's fine. The intent of my answer was to indicate that you should not put any effort into dealing with mkmod's peculiarities. As long as READINP is happy with the input files, I can make MKMOD live with the same files. At this time, it expects commas in some places and spaces in others because that is how the files used to look, but adapting to either or both is not hard, it just hasn't been necessary.

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Bryce Contor <bcontor.uidaho@gmail.com>

Wed, May 5, 2010 at 11:31 AM

To: Willem.Schreuder@prinmath.com

Cc: Allan Wylie <allan.wylie@idwr.idaho.gov>, Stacey Taylor <taylsl@if.uidaho.edu>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

OK, Thanks.

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Bryce Contor <bcontor.uidaho@gmail.com>

Wed, May 5, 2010 at 11:33 AM

To: Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

Rick -

Now that the fox is in the hen house, so to speak, what are our transparency requirements? Might it be well for all the other foxes to be in on these nitty-gritty detail conversations?

I'm reminded of five years ago when Koreny's firm sent us a data request that was essentially; "Describe the world. Give two examples. Send us everything."

Bryce

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Wylie, Allan <Allan.Wylie@idwr.idaho.gov>

Thu, May 27, 2010 at 4:20 PM

To: Willem Schreuder <willem@prinmath.com>

Cc: "Bowling, Jon" <JBowling@idahopower.com>, bcontor@if.uidaho.edu, "Raymondi, Rick"

<Rick.Raymondi@idwr.idaho.gov>, "Vincent, Sean" <Sean.Vincent@idwr.idaho.gov>

Willem

I was able to get MKMOD4 to run using P091202B. Barring unforeseen complications I will attempt a calibration run with it and PEST12 next week just to make sure everything works.

Allan

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