MKMOD

8 messages

Bryce Contor <bcontor.uidaho@gmail.com>   **Sat, May 29, 2010 at 7:00 PM**
To: Allan Wylie <allan.wylie@idwr.idaho.gov>, Willem Schreuder <willem.schreuder@prinmath.com>
Cc: Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

Allan, Willem -

I'm sure Allan sent me instructions once on how to use MKMOD, but I can't remember. As I recall one had to go to the command line and type "MKMODX.exe," followed by some pointers to data files or something. But I can't recall what the pointers are.

If I put the executable in the directory with the data and just type "MKMOD4.exe," I get an error "cannot open combo4.mdl," which invites me to think there is a hardwired pointer to an old modeling run. Based on that assumption I type "MKMOD4.exe <current run name>.mdl." After about 2 seconds I get the message "Usage: <directory>mkmod4.exe," then a return to the command prompt. If it has run, it has been extremely secretive about where it has hidden the well file and any summary files.

Guidance?

Thanks,

Bryce

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Willem.Schreuder@prinmath.com <Willem.Schreuder@prinmath.com>   **Sat, May 29, 2010 at 8:12 PM**
To: Bryce Contor <bcontor.uidaho@gmail.com>
Cc: Allan Wylie <allan.wylie@idwr.idaho.gov>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

On Sat, 29 May 2010, Bryce Contor wrote:

> If I put the executable in the directory with the data and just type
> "MKMOD4.exe," I get an error "cannot open combo4.mdl," which invites me to
> think there is a hardwired pointer to an old modeling run.

This is kinda a stupid default - I should just have it tell you how to run it rather than do defaults.

Assuming all your file are called foo.mdl, foo.ent, foo....., you run it as
 mkmod4 -i foo -o bar
The -i is to set the input files, the output goes to bar.*

You probably want to run it using the -ss flag (super single), so
 mkmod4 -ss -i foo -o bar
which give you minimal output. If you do -s then it does a single well file and a few more files, but it also requires more memory.

Give it a try and let me know if it works.

-Willem

==
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Bryce Contor <bcontor.uidaho@gmail.com>   **Sat, May 29, 2010 at 10:12 PM**
To: Willem.Schreuder@prinmath.com
Cc: Stacey Taylor <taylsl@if.uidaho.edu>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>, Allan Wylie
<allan.wylie@idwr.idaho.gov>

Thanks.

Allan had given me these instructions before, I believe, but I just plain couldn't find them.

This gets me in the door and started. I will have some cleanup/tuneup on input files to get out the back door. For
instance READINP wanted the NIR multipliers in the *.mdl comma-delimited, MKMOD wants space delimited.
READINP wanted the values in the *.red file space delimited and wrapped to multiple lines. MKMOD claims the
count is wrong, inviting me to think MKMOD wants them all on one line or wants them comma delimited. I'll get it
figured out.

These kinda things are expected.

Just so I can be pondering, can you give me a brief description of what is in the *.html summary output? Eventually
I'll get this to run and can see for myself, but if you tell me it can tickle around in my head as I do other things.

B

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Willem.Schreuder@prinmath.com <Willem.Schreuder@prinmath.com>   **Sun, May 30, 2010 at 9:27 AM**
To: Bryce Contor <bcontor.uidaho@gmail.com>
Cc: Stacey Taylor <taylsl@if.uidaho.edu>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>, Allan Wylie
<allan.wylie@idwr.idaho.gov>

> On Sat, 29 May 2010, Bryce Contor wrote:
>
>> Just so I can be pondering, can you give me a brief description of what is
>> in the *.html summary output?

At the top of the file there is a description of the various fields.

There are five groups of output. The first (after the header) is a summary table of all entities across and periods
down.

The next is a summary of al groundwater entities.

The next is a bunch of tables, one for each groundwater entitity.

The next is a summar of all surface water entities.

The next is a bunch of tables, one for each surface water entity.

Each of the tables tries to track the water as it is calculated from diversions to ET to GW and SW returns.

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Bryce Contor <bcontor.uidaho@gmail.com>　　　　　　　　**Mon, May 31, 2010 at 8:46 AM**
To: Willem.Schreuder@prinmath.com

Thanks.

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Wylie, Allan <Allan.Wylie@idwr.idaho.gov>　　　　　　　　**Tue, Jun 1, 2010 at 8:40 AM**
To: Bryce Contor <bcontor.uidaho@gmail.com>, Willem Schreuder <willem.schreuder@prinmath.com>
Cc: "Raymondi, Rick" <Rick.Raymondi@idwr.idaho.gov>

Bryce

To run mkmod4.exe with P091202B type:

'mkmod4 –ss –m FER –o test –I P091202B' I explained the codes in the below e-mail.

Allan

On Fri, May 28, 2010 at 5:04 PM, Wylie, Allan <Allan.Wylie@idwr.idaho.gov> wrote:

Bryce

The attached file 'mkmod4.zzz' is a zipped MKMOD4.EXE. It will run from the command line without installing perl on your computer.

Type: 'mkmod4 -ss -m FER -o test -i P091202B'

-ss = no steady state (you can also use a –s or a –sss but I haven't explored them completely yet)

-m = turns on the on-farm and FER = Maximum Farm Efficiency using Runoff for Returns – the technique the ESHMC is exploring

-o = output file (in my case 'test')

-i = input file (in my case 'P091202B')

I have prepared all the files necessary to run it with PEST. The attached file 'mkmod_P09.zzz' is a zip containing the raw perl code and some input files that you need to add or replace in the old P091202B data set. I hope this helps you.

From: Bryce Contor [mailto:bcontor.uidaho@gmail.com]
Sent: Saturday, May 29, 2010 7:00 PM

To: Wylie, Allan; Willem Schreuder
Cc: Raymondi, Rick
Subject: MKMOD

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Bryce Contor <bcontor.uidaho@gmail.com>   **Tue, Jun 1, 2010 at 8:49 AM**
To: "Wylie, Allan" <Allan.Wylie@idwr.idaho.gov>
Cc: Willem Schreuder <willem.schreuder@prinmath.com>, Rick Raymondi <Rick.Raymondi@idwr.idaho.gov>

Thanks. I knew you had explained it before, I just couldn't find the e-mail. On Saturday Willem gave me the same instructions and (finally) I got it working yesterday. Only Willem didn't tell me about the -m or FER flags so I suppose I ran without the On-Farm algorithm. I guess my results will be goofy, since I had zeroed out returns. But at least the water budget can be swallowed whole, and I posted it on the *.ftp so you can play with it. On this end we will try to decipher the *.html output and do some sense checking of results and input data. At a first glance it looks like we can assess temporal trends but we won't be able (handily) to display them spatially.

Willem had invited me to think the -ss flag was optional, but without the -ss flag I ran out of memory about 5 minutes into the run. That was a huge surprise; I had supposed the new code would be cleverer, faster, more efficient, etc., than the old code.

I hope there is a streamlined version that runs faster, for PEST purposes. This takes much longer to run than I remember READINP taking (of course, there are many more stress periods in this data set.)

B
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Wylie, Allan <Allan.Wylie@idwr.idaho.gov>   **Tue, Jun 1, 2010 at 10:36 AM**
To: Bryce Contor <bcontor.uidaho@gmail.com>

Bryce

Calculating the steady state and adding it to the beginning of the well file worked well with the 6 mo stress periods, but does not work for 1 mo. I have a new and improved computer and I can't do it. Willem recoded it to dump the memory after it calculates the steady state, but I suppose storing 12 data points for 11,000 cells becomes onerous.

Allan

From: Bryce Contor [mailto:bcontor.uidaho@gmail.com]
Sent: Tuesday, June 01, 2010 8:49 AM
To: Wylie, Allan
Cc: Willem Schreuder; Raymondi, Rick
Subject: Re: MKMOD

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