

Andy Ridgwell

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Tue, 24 Sep 2019 15:09:29 -0700 (PDT)  
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 To: Andy Ridgwell Seao2 <andy@seao2.org>  
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Attached is a Word file with a very simplistic explanation of how to set  
 up  
 time-varying astronomical forcing. This should be sufficient to get  
 things  
 running, but (later) I would like to add some info for clarification.  
 But  
 for this, I need to figure out some things first (that I must have  
 written  
 down two years ago and of course can't find anymore.

- I think the astronomical solution is read in from bottom to top, so  
 that you start with the oldest solution and continue to more recent  
 solutions. Very counter intuitive so needs to be specified (but need  
 to  
 double check first)  
 - I've been trying to backtrack how to go from La2004 (3 columns)  
 to orbits\_La2004\_1Myr.dat  
 (4 columns). Eccentricity and obliquity are the same, but the  
 climatic  
 precession described by Laskar is split up in two values in  
 orbits\_La2004\_1Myr.dat.  
 Two years ago, Sandy has sent me the code to calculate this, but if I  
 remember correctly, I found a small error in this so that a tiny  
 difference  
 arises between the outcome of La2004 and orbits\_La2004\_1Myr.dat. I  
 should have notes about this... somewhere...

Andy, is the attached text sufficient for now or do you need additional  
 info?  
 Also, I agree that ea\_41 parameter could be automatically calculated if

you  
know the timesteps in the orbital forcing file.

\*Pam Vervoort\*

Ph.D. student Global Climate & Environmental Change  
University of California, Riverside  
Geology Building 1324  
[pverv001@ucr.edu](mailto:pverv001@ucr.edu)

On Tue, Sep 24, 2019 at 1:18 PM Andy Ridgwell <[andy@seao2.org](mailto:andy@seao2.org)> wrote:

```
>  
> > # Interval between data points in goldstein time steps  
> > ea_41=96000  
>  
> I think ... we can make a simpler way fo doing things here.  
> You should only have to specify the duration represented by the  
orbital  
> parameter file and let  
> GENIE calculate the stupid timesteps!  
>  
>  
> /andy  
>
```