

**Ben Foster** <foster@ucar.edu>

gather/scatter for tiegcm

2 messages

Ben Foster <foster@ucar.edu>

Tue, Jan 13, 2015 at 9:06 PM

To: Jing Liu <jingliu@ucar.edu>

Jing,

I have made a small new module with a single subroutine that takes a 3d field on subdomains as input (intent(inout)), and gathers it to the global domain on the root task. At this point you can make any adjustments you need to the global array on the root task. Then the routine scatters the adjusted array back out to the subdomains. The new file is called global_adjust.F90 - you can copy it from yellowstone:

```
/glade/u/home/foster/tiegcm/tiegcm_gatherf3d/tiegcm_trunk/src
```

You also need to copy mpi.F from the above directory, to get the gather and scatter routines. Finally, copy dynamics.F from the above directory (you may want to save your copy of dynamics.F if you already have changes to it). See "call adjust_f3d" after the call to elden in dynamics.F, where I call it for NE. Also note the calls to addfld before and after the call to adjust_f3d. If you add 'NE_ORIG' and 'NE_ADJUST' to SECFLDS in your namelist input file, it will save NE before and after the adjustment to your secondary histories.

Good luck, and I'll see you tomorrow morning.

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Jing Liu <jingliu@ucar.edu>

Tue, Jan 13, 2015 at 9:11 PM

To: Ben Foster <foster@ucar.edu>

Hi, Ben

Thank you very much for your code. I am sorry that it occupied your free time. I will include these subroutines in the model. See you tomorrow.

Kind regards

Jing

[Quoted text hidden]