For your interest, this is what I have come up with for adding industrial heat to the atmosphere using WRF.  I have included all the code that I have changed, along with a new module that I added to the physics section.  I modified 5 files, in which I documented all my changes by adding "begin edits by dmbrown1" to the start of my modifications, and "end edits by dmbrown1" to the end of my modifications.  I included a Word document describing what I did.  Hopefully someone finds this useful.

As far as I know it seems to work.  I've done quite a bit of testing and I can confirm that when I add heat, the temperature is higher than the model without the added heat.

I have not been able to get this to work with multiple cpus and multiple nests.  It works with multiple cpus and one nest, or multiple nests and once cpu, but not both.  I seem to be getting some kind of memory error that originates in my code when I try to work with the rthindten array, but I have no idea how to deal with it.

All relevant files are in the attached zip file.

Danny