

From: Mike Hulme <m.hulme@uea.ac.uk>  
To: wigley  
Subject: MAGICC/SCENGEN  
Date: Fri Nov 12 18:19:52 1999  
Cc: s.raper,m.salmon,m.hulme,barrow

Tom,

Sorry I couldn't say goodbye - I was actually on the phone to Bo Lim at the time. I also wanted to ask you about your views on the UK national climate change centre, but this can wait until later.

Anyway, about MAGICC/SCENGEN Workbook I think we agreed the following things for this UNDP version .....

- a select number of emissions scenarios, IS92, SRES98, 550 and 750 stabilisation cases, some Kyoto variants (perhaps from IS92a,e,d reference), and 1-2 others you may recommend. I would be keen to use your \*.gas files if that's OK, even though I have some of my own. You may have done the SO2 into regions, which I haven't. Could you send me a selection?
- you would think about how to handle the CH4 adjustment to ensure SAR replicability across the emissions scenarios. This may require a tweak in the MAGICC code which Mike will have to recompile.
- we should aim to reproduce the SAR results as closely as possible in this version, e.g. use 6.37Wm<sup>-2</sup> rather than 5.5, and not use Prather's methane concentrations (an Annex in the Workbook will explain this).
- the variable upwelling rate will be hard-wired. Choices will remain for the Dn80s, climate sensitivity and aerosol forcing.
- SCENGEN will have the new DDC patterns included and we will switch off the buttons for the older 2xCO2 patterns.
- SCENGEN will output values over land and ocean.
- the Help Screens will need updating. I will attempt this and then check them all with you to make sure you agree.

The only problem I can foresee is that the 2.32 version that Mike and you produced in the summer corrected the aerosol calculations and also used Prather's methane concentrations. If we now want a version with correct aerosol concentrations and IPCC SAR Chapter 6 CH4 concentrations, \*plus\* a CH4 tweak to handle the ad hoc adjustment, then Mike Salmon will need a new and unique FORTRAN version of MAGICC. Am I right?

I have agreed with Bo Lim to get a first draft of the Workbook by 17 December, but the final version and all the CDs will not be agreed until February 2000.

Have I missed anything?

Regards,

Mike