

From: Dave Schimel <schimel@cgd.ucar.edu>
To: Shrikant Jagtap <sjagtap@agen.ufl.edu>
Subject: RE: CO2
Date: Mon, 17 May 1999 09:21:35 -0600 (MDT)
Cc: franci <franci@giss.nasa.gov>, Benjamin Felzer <felzer@ucar.edu>, Mike Hulme <m.hulme@uea.ac.uk>, schimel@ucar.edu, wigley@ucar.edu, kittel@ucar.edu, nanr@ucar.edu, Mike MacCracken <mmaccrac@usgcrp.gov>

I want to make one thing really clear. We ARE NOT supposed to be working with the assumption that these scenarios are realistic. They are scenarios-internally consistent (or so we thought) what-if storylines. You are in fact out of line to assume that these are in some sense realistic-this is in direct contradiction to the guidance on scenarios provided by the synthesis team.

If you want to do 'realistic CO2 effects studies, you must do sensitivity analyses bracketing possible trajectories. We do not and cannot not and must not prejudge what realistic CO2 trajectories are, as they are ultimately a political decision (except in the sense that reserves and resources provide an upper bound).

'Advice' will be based on a mix of different approaches that must reflect the fact that we do not have high confidence in GHG projections nor full confidence in climate system model projections of consequences.

Dave

On Sun, 16
May 1999, Shrikant Jagtap wrote:

> Friends,
>
> I'm enjoying the current debate about CO2 levels. I feel that we are using
> the GCM scenarios, and we MUST use exactly those CO2 levels for crop model
> runs, so all data is consistent. So if we are wrong, we are uniformly wrong
> and adjust our explanations accordingly whenever we agree on things. Now to
> use different data will be hard to explain.

>
>
> Shrikant
>
> Dr. Shrikant Jagtap
> 104 Rogers Hall, Ag & Biol. Engineering
> University Of Florida
> Gainesville, FL 32611
> Tel: 352 392 7719 (Work) & Fax: 352 392 4092 (Work)
> <http://www.agen.ufl.edu/~sjagtap/ssj/>
>
> Tel: 352 379 0698 (Home)

> -----Original Message-----

> From: franci [mailto:franci@giss.nasa.gov]
> Sent: Saturday, May 15, 1999 3:58 PM
> To: Benjamin Felzer
> Cc: Mike Hulme; schimel@ucar.edu; wigley@ucar.edu; kittel@ucar.edu;
> sjagtap@agen.ufl.edu; nanr@ucar.edu; Mike MacCracken
> Subject: Re: CO2

> dear ben,

> You just showed that the Hadley transient run we are supposed to use for the
> national assessment is too high, forcing-wise, because it assumes an overall

> Cc: Mike Hulme <m.hulme@uea.ac.uk>; schimel@ucar.edu <schimel@ucar.edu>;
> wigley@ucar.edu <wigley@ucar.edu>; kittel@ucar.edu <kittel@ucar.edu>;
> sjagtap@agen.ufl.edu <sjagtap@agen.ufl.edu>; nanr@ucar.edu <nanr@ucar.edu>;
> Mike MacCracken <mmaccrac@usgcrp.gov>
> Date: Friday, May 14, 1999 8:12 PM
> Subject: Re: CO2

>
>
> >Please disregard the previous message and replace with this message (1st
> >paragraph is unchanged).
> >
> >On Fri, 14 May 1999, Benjamin Felzer wrote:
> >
> >> Going back to some of the original radiative forcing values, it would
> >> appear that the 1% increase is true of RADIATIVE FORCING, whether of CO2,
> >> CH4, etc, or the total (to an approximation). However, once we convert
> >> back to CO2 concentration (using the exponential relationship), the
> > actual
> >> increase in concentration is more along the order of 0.7% (all
> >> compounded). Is it possible that the original 1% assumption was
> >> mistakenly applied to CO2 concentrations for the modelers when it was
> >> actually meant for radiative forcing??
> >>
> >>Therefore for the ecological models we should use Dave's original
> >>suggestion, because the models really did use a 1% increase in equivalent
> >>CO2, which approximates a 1% increase in CO2 alone. The point here is
> >>that this 1% increase is much higher than IS92a, but that might be because
> >>of the confusion between radiative forcing increase and concentration
> >>increase discussed above. In fact a 0.7% increase in equivalent CO2 might
> >>have been a more realistic assumption for IS92a, but the 1% increase in
> >>concentration is what was actually used in these earlier models. The CO2
> >>concentrations used in the ecological model should correspond to those
> >>used in the GCMs, not to what we think they should be.
> >
> >
> >> Any other thoughts?
> >>
> >> Ben
> >>
> >>
> >>
> >
> >
>
>