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Subject: Status of our JGR paper
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Dear All,

I just wanted to keep you informed about the status of our draft JGR paper.
First, thanks to all of you for your comments - they were very helpful. I am now
in the process of revising the paper, and hope to have a new draft ready by Oct.
10th. After several discussions with Tom, I have decided to repeat the
volcano/ENSO signal separation for the observed data and for the GSOP
experiment.

The reason for this is that there was a conceptual flaw in what I had done
previously. The flaw related to the determination of the "pre-eruption"
reference temperature, used as a baseline for estimating the maximum
volcanically-induced cooling. Let's call this baseline temperature "TBASE".
Previously, I was estimating TBASE for Pinatubo and El Chichon from either the
raw or Gauss-filtered temperature data at time t=0 (the eruption month).
If I was calculating TBASE from the filtered data, the estimate of TBASE was
biased by "contamination" from post-eruption cooling. In other words, since I
was using a 13-term Gaussian filter, temperature values from t=0 + 6 months were
influencing TBASE, likely leading to an underestimate of the true TBASE value.
I've now modified the program so that TBASE is not computed from the filtered
data; instead, it is an average of the temperature anomalies in the MREF months
prior to the eruption. There is some sensitivity to the choice of MREF (I've
been experiment with values ranging from 6-18 months), which again underscores
the uncertainties inherent in separating ENSO and volcanic signals.

The maximum volcanically-induced cooling is still estimated using filtered data,
but now I'm using a 5-term binomial filter rather than the 13-term Gaussian.

These changes require repeating most of the analyses in the paper. Preliminary
results indicate that the revised estimation of TBASE increases the ratio of the
Chichon/Pinatubo maximum coolings, and brings this closer to the ratio of the
Chichon/Pinatubo radiative forcings.

Tom has also made a number of useful suggestions regarding reorganization and
shortening of various sections of the manuscript. Hopefully the next iteration
will be a little shorter than the current version of the paper!

I will be out of my office next week, but should be back by October 2nd.

With best regards, and thanks again for all your help,

Ben
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