Interactive comment on “Assessing temporal clear-sky errors in assimilation of satellite CO₂ retrievals using a global transport model” by K. D. Corbin et al.

K. D. Corbin et al.

Received and published: 27 October 2008

Thank you for your comments Peter! This paper does indeed just extend our previous work investigating the magnitudes of satellite sampling biases to the global scale, since our previous studies only focused on two regions; and we felt it was significant enough to include as separate paper. As you pointed out, knowing the causes of these biases is also very interesting, and is actually being published in a separate paper by N. Parazoo et al. [Mechanisms for Synoptic Transport of Atmospheric CO₂ in the Mid-Latitudes and Tropics, Atmos. Chem. Phys. Discuss., 8, 12197-12225, 2008, SRef-ID: 1680-7375/acpd/2008-8-12197]. I also think it would be interesting to extend this study and examine the impact on inversions, but felt it is beyond the scope of this paper. Colleagues at Colorado State University, being led by Ravi Lokupitiya and Scott Denning,
are currently conducting inversions using simulated satellite data, and will likely publish these results at a later date.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 12887, 2008.