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Reply to: "Tropical cirrus and water vapor: an effective Earth infrared iris feedback?"

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Abstract. In assessing the iris effect suggested by Lindzen et al. (2001), Fu et al. (2002) found that the response of high-level clouds to the sea surface temperature had an effect of reducing the climate sensitivity to external radiative forcing, but the effect was not as strong as LCH found. The approach of FBH to specifying longwave emission and cloud albedos appears to be inappropriate, and the derived cloud optical properties may not have real physical meaning. The cloud albedo calculated by FBH is too large for cirrus clouds and too small for boundary layer clouds, which underestimates the iris effect.

■ Final Revised Paper (PDF, 60 KB)
■ Discussion Paper (ACPD)

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