Interactive comment on “Effects of climate model radiation, humidity and wind estimates on hydrological simulations” by I. Haddeland et al.

I. Haddeland et al.
iha@nve.no

Received and published: 1 December 2011

Reviewer #1 comments
1. page 3, lines 10-14. P and T may be important in cold regions (ice/snow) but in warm regions, P and solar radiation would be the key variables.
Response: The reviewer is right, and the importance of solar radiation should have been mentioned here.
2. page 10, lines 28-29. Nice point about the dry places.
Response: Thank you.
3. Figures 4-5. I could not easily see the dotted lines (ECHAM-BC, IPSL-BC). Can you change the symbols or use an extra colour.

Response: We’ve now tested more line options, and representing ECHAM-BC and IPSL-BC with a thin line and symbols makes the figures easier to read. Included are revised figures.

4. Figure 7. Caption is wrong. (ab) for LPJ, (cd) for VIC, etc.

Response: Sorry about that. It should be "Mean annual projected changes in simulated runoff; bias corrected results compared to original results. (ab) LPJmL, (cd) VIC, and (ef) WaterGAP. BC denotes simulation results using bias corrected forcings. In the right panels, the areas where the differences in the relative runoff changes are both 1) significant at the 5 percent level and 2) more than 5 percentage points are shown."

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 7919, 2011.
**Fig. 1.** Figure 4: Global terrestrial mean monthly simulated evapotranspiration (mm day⁻¹), and results for the study basins (control period; 1971-2000). Original and bias corrected results when applicable.
Fig. 2. Figure 5: Global terrestrial mean monthly simulated runoff (mm day-1), and results for the study basins (control period; 1971-2000). Original and bias corrected results when applicable.