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**ESDD**

2, C292–C294, 2011

Interactive  
Comment

## ***Interactive comment on “Jet stream wind power as a renewable energy resource: little power, big impacts” by L. M. Miller et al.***

**L. M. Miller et al.**

lmiller@bgc-jena.mpg.de

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## Response to reviewer V. Lucarini

L.M. Miller, F. Gans, & A. Kleidon

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We thank V. Lucarini for his supportive comments. He requested a figure quantifying the change in meridional heat transport between the control run and the peak extraction case and it appears below (Fig. 1b). We also think plotting this same simulation data as a meridional profile helps to show the reallocation of equatorial heat during jet stream energy extraction so it also appears below (Fig. 1a). As V. Lucarini also suggested, we will add some thoughts regarding changes in the Lorenz Energy Cycle from jet stream wind energy extraction in the Discussion of the final submitted manuscript.

Figure 1 description: Plot **a**) shows the meridional profile of the zonal mean net short-wave radiation at the top of the atmosphere ( $SW_{net,TOA}$ ) and zonal mean net longwave emission at the top of the atmosphere ( $LW_{net,TOA}$ ) for the control and peak extraction simulations. This same data can also be plotted to illustrate the implied mean transport of energy by the atmosphere and oceans, shown in **b**) for the control and peak extraction simulations

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Interactive comment on Earth Syst. Dynam. Discuss., 2, 435, 2011.

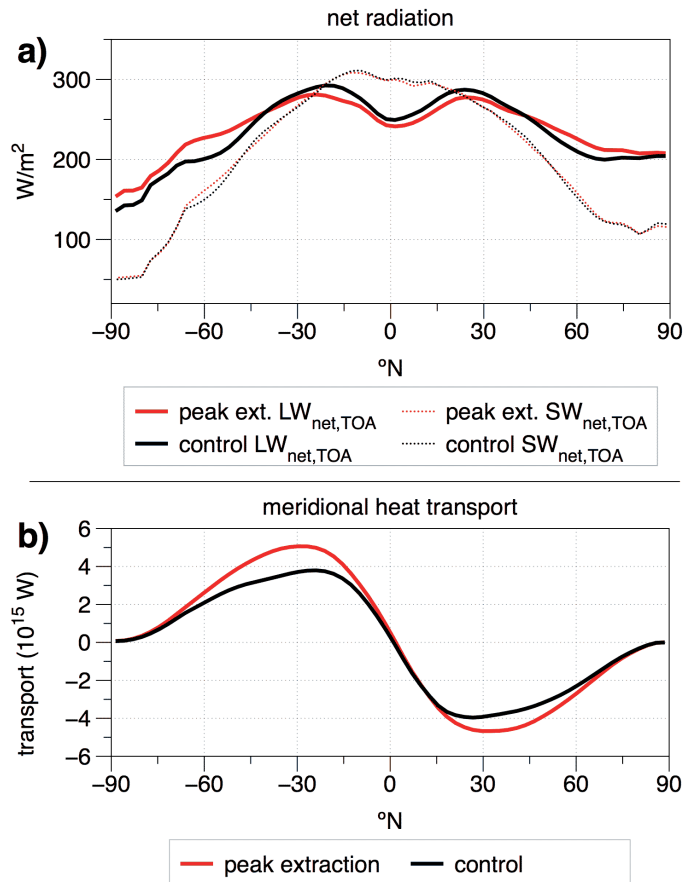
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**Fig. 1.** see the above paragraph for a full description