Atmos. Meas. Tech. Discuss., 5, C2111-C2112, 2012

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AMTD

5, C2111-C2112, 2012

Interactive Comment

## *Interactive comment on* "Direct measurement of the oceanic carbon monoxide flux by eddy correlation" *by* B. W. Blomquist et al.

## Anonymous Referee #2

Received and published: 7 September 2012

The authors have made the first measurements of the vertical flux of carbon monoxide in the lower marine boundary layer by the eddy correlation method. As such, this is a significant paper.

The main drawbacks in this study is the short time period, two days, of the measurements. This paper would be much improved if the time-series were at least two to four times longer. Even so, the authors make due with what they have. They fairly describe their method and its limitations. They also describe in detail why horizontal gradients in CO can introduce noise and spurious signals in their data, and suggest that only very remote areas, are suitable for eddy correlation CO flux measurements. The main deficiency in the presentation of the data is that they do not give a time series of the





flux data. To really judge the variability and noise in the data one should see a time series of the flux. Although they average there two days into one "diel cycle" they do not show a time series plot. Even if noise is more apparent in a two day time series it would be a helpful addition to this paper.

On a minor note, in line 126, it should state: +/- 60 deg from the bow.

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 4809, 2012.

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Interactive Comment

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**Discussion Paper** 

