**Biogeosciences
Discussions**

Interactive comment on "Volatile diterpene emission from dominant conifers in Japan" by S. N. Matsunaga et al.

Anonymous Referee #2

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A major problem of this manuscript is that the authors do not know the right way to measure and calculate the emission rate using a enclosure method. The authors better consult related papers or textbooks for the right method. The equation (1) in the manuscript is completely wrong. If measuring the emission rate by dynamic enclosure method, the emission rate should be as $E=F \times (C_{eq} - C_0)/W$, where F is the flow rate of air supply, W is the dry weight of leaves, and C_{eq} and C_0 are equilibrium-state concentration and blank concentration, respectively. Typically C_0 is negligible. If we have F and W, we need just to measure C_{eq} for the emission rate. Since the authors are wrong with their emission rate measurement, their discussion and conclusions are therefore also wrong. I can not agree to the publication of this manuscript at its present state.

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Interactive comment on Biogeosciences Discuss., 8, 6681, 2011.