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Biogeosciences Discussions

Interactive comment on "Effect of land use on carbon dioxide, water vapour and energy exchange over terrestrial ecosystems in Southwestern France during the CERES campaign" *by* N. Jarosz et al.

Anonymous Referee #1

Received and published: 30 March 2009

My major concern with this manuscript is the significance. These kind of data have been published many times before. New is that measurements from 10 more or less nearby sites have been compared, but unfortunately only a 6 week measurement campaign was used. Significance would have been good for a full year period and excellent for a multi-year period.

Measurements at all sites were taken using a very similar and well accepted method.

The manuscript is well structured with a very long section on Material and Method

becaused of the large number of sites. The information is needed to understand the results, but boring to read.

Details: Abstract line 6: which ecosystems??? line 14: what is meant with: plant growth behaved as sources of CO2? line 19: cleacut should be clearcut.

head of section 2.3 should be 'Meteorological and soil measurements'

p2765: In three following sentences is written: 'the weather was particularly hot'. please less repetitions.

p2767, line 24: I do not understand how a 6 week measurement period can result in a conclusion 'at a yearly scale'.

p2770 last sentence 'the slopes between CO2 fluxes and evaporation show a strong linkage between carbon gain and water loss'. Of course! CO2 flux informs about carbon gain and evaporation informs about water loss. I guess that the authors want to say something else, but it is not clear from their formulation what is meant.

p2771 second sentence is poor english. could be improved by starting with 'Energy and mass flux....'.

Table 3. Please explain a negative soil heat flux at site COU during a period with increasing temperatures when the soil should warm up from above.

Figure 1. The explanation of the symbols in the figure is too small.

I like figure 4 where similar ecosystems were combined much better than figure 3.

All in all I doubted between rejection for the fair significance and minor revisions. I selected 'minor revisions thanks to the excellent quality.

Interactive comment on Biogeosciences Discuss., 6, 2755, 2009.