TITLE: Seasonal variations in carbon dioxide exchange in an alpine wetland meadow on the Qinghai-Tibetan Plateau
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I agree with Referee #1, that it is better to accept this paper after the editor's comments have been properly addressed and the English writing has been significantly improved.

My former comments:

1. Please do regression analysis at monthly time steps to highlight the seasonal variations.

The authors response:

The figure2 have shown the seasonal variations of R_{eco} on monthly steps, the figure4&5 have shown the seasonal variations of GPP on monthly steps, and the figure11 have shown the Seasonal pattern of daily total gross primary production (GPP), net ecosystem exchange (NEE), and ecosystem respiration (R_{eco}) over the course of the alpine wetland meadow from 1 January 2004 to the end of the year 2006.Thus we sorry for haven't added those figures.

I don't think this response addresses my question. This paper focuses on "seasonal variations in … " (see its title). Monthly analysis is important because of the pronounced spectral gap on the time scale of a month. Please read *Agricultural Forest Meteorology*, **107**, 1-27 and Global Change Biology, 15, 1962-1981.

2. Please figure out the major factor(s) control the seasonal variations of C fluxes (GPP, NEP and Reco).

The authors response:

The constraint of major factors have been plotted as fig6, 7, 8, et al, so to avoid the cumbersome, we sorry for haven't added those figures.

Fig.s 6-8 are almost nothing to do with this comment. Please do one single-factor regression analysis followed by residuals regression analysis with other factors or do multi-linear regression analysis to address this question.

My new comments:

1. In section 2.4, the definition of Fc is not clear and the authors didn't mention how to calculate NEE. For instance, the authors didn't consider the storage term. Please clarify. And the authors never mentioned how about the biases in monthly and annual C flux estimation…

2. Fig.1's caption: …1-day sunning means…please check it is 1-day? If so, it doesn't make sense that 1-day running average on daily values!

3. P9013L20:

The exponential function given in Eq. (2) described very well the relationship between R_{eco} and soil temperature at 5-cm depth.

I have comment on this in my first round review. I asked the authors to give a table to list the statistics analysis parameters, such as *p*, r2 and n (summer of samples), etc. instead of using words "very well". Unfortunately, the authors decline my request. Again, I still think it is worth to do.

Illustration of sentences with English problem or not clear:

P9006L15:

The sentence "Yearly average GPP, R_{eco}, and NEE (which were 575.7, 676.8 and 101.1gCm^{-2}, respectively, for 2004 year, and 682.9, 726.4 and 44.0gCm^{-2} for 2005 year, and 630.97, 808.2 and 173.2gCm^{-2} for 2006 year) values indicated that the alpine wetland meadow was a moderately important source of CO_2." reads oddly, at less not smoothly. It is not "yearly average" but "annual sums" or "annual total"?…Please re-state this sentence.

P9006Ls22-23:

"And the cumulative NEE data indicated that the alpine wetland meadow is a source of atmospheric CO_2 during the study years. CO_2 emissions are large on elevated microclimatology areas on the meadow floor regardless of temperature." You may change "is" to "was" and "are" to "were" as you used past tense in previous and after sentences (e.g. in L16 this page, which were…; in L25, "occurred"…etc.). Please keep a consistent style through the paper.

P9008Ls1-22:

"the aims of this study were to" →"are"…

Please check this kind errors other where. Similar to Referee #1, that I do not have time to modify your English, but I will illustrate some sentences with English problems.

P9009L3:

Measurements were conducted in an alpine wetland meadow at the Haibei Research Station, Chinese Academy of Sciences, in Qinghai, China (37_35^0 N, 101_20^0 E, 3250ma.s.l.) from October 2003 to December 2006.

P9009L6:

This wetland is characterized by nonpatterned, hummock-hollow terrain, with hummocks representing 40%, hollows 55%, and other features 5% of the landscape.

"Landscape" is not a rigorous ward in term of spatial scale…Please give a more certain scale, e.g. Flux footprint area (size) or how big area (how many km2), or ecosystem…

P9009L6:

This wetland is characterized by nonpatterned, hummock-hollow terrain, with hummocks representing 40%, hollows 55%, and other features 5% of the landscape. The catchment was flooded at an average water depth of 30cm during the growing season.

P9009L19:

The aboveground biomass increases from May to August and reaches a maximum in late July or August, becoming senescent in early October.

P9010L3:

Wind speed, sonic virtual temperature, and CO_2 and H_2O concentrations were sampled at a rate of 10 Hz.

P9010L13:

The regression line slopes showed small differences, within 1%, between corrected and uncorrected fluxes.--> analysis?

P9011L10:
There is a
good agreement between half-hourly values of turbulent ($H+LE$) and radiative (R_n+G) fluxes. G is not “radiative” energy.

P9011L13:
The slope of regression line is 0.74 with an intercept of 22.45Wm ^{2} and a correlation coefficient, r^2, of 0.94.
The r2 is not a correlation coefficient but r is. The r2 is called as the coefficient of determination.

P9011L17:
We were not trying to specify a particular cause for the imbalance because several possibilities may be involved in the lack of energy closure (for details see Wilson et al., 2002).

P9011L22:
Missing R_{eco} values were extrapolated by using exponential regression Eq. 2) between measured nighttime R_{eco} with strong turbulence ($u\_$>0.1 ms^{-1}, Aubinet et al., 2000; Lloyd, 2006), and soil temperature at 5-cm depth.
→under well-mixed conditions…with soil…

P9013L16:
Maximum Leaf Area Index (LAI) tracked green biomass and ranged about 3.9m^{2} m^{-2} in 2005.

P9013L19:
A specific response curve for every month of the growing period was developed (Fig. 2) for 2004, 2005, and 2006.

P9034, Caption of Fig.2:
Fig. 2. Response of ecosystem respiration (R_{eco}) to change in soil temperature at the depth of 5 cm during growing season. Data were from 2004 to 2006 season, and half-hourly during high turbulence conditions ($u\_$>0.1ms^{-1}).
under …conditions! So do for Fig.3.

P9014L1:
Those values were clearly lower than the R_{10} values observed during the growing season (Fig. 2),…

P9014L3:
The annual R_{10} was 3.05, 2.98, and 3.24 μmolCm^{-2} s^{-1} for 2004, 2005, and 2006, whereas the values for annual active energy (E_a) were 50 093.43, 61 084.73, and 44 743.5 J mol^{-1}, respectively. Thus, the temperature dependence was higher in 2004 and 2006 than in 2005.
→annual averaged…?

P9014L8:
Figure 4 shows the relationship between GPP and PPFD from May to September. The values of GPP responded exponentially to PPFD during July and August, but the light

response was linear in May, June, and September.
And please re-write caption of Fig. 4.

P9014L21:
Quantum yield values measured in the alpine wetland were higher than the values reported in Zhao et al. (2006). …that…

I stopped here for English checking…..Please ask for a native English speaker to help improve it!