Hydrol. Earth Syst. Sci. Discuss., 6, C3310-C3312, 2010

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Interactive comment on "Estimating surface fluxes over middle and upper streams of the Heihe River Basin with ASTER imagery" by W. Ma et al.

X. Li (Editor)

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Dear Dr. Ma,

The referee does not satisfy with your revision. His/her comments on 12 November 2009 were not replied. I need to emphasize here, you need to carefully consider the referees' recommendations for revisions, make the necessary changes, and respond to the referee and editor with a point-by-point response of how you have addressed each concern.

The referee's comments are enclosed as below:

General comments:

C3310

Most of my comments in the last two rounds of reviews were neither taken into account nor addressed by the authors. I would really like to see a revised version that takes into account the comments, assuming this is what the editors expect from a reviewer. In my own view, the manuscript cannot be accepted for publication as it is.

I did not see any reply by the author to my 2nd round of comments, published on 12 November 2009. If the authors do not deem my comments relevant, they should say so and justify such point of view.

The following is a summary of the major problems: - All the comments in my previous review still hold since the author did not really address them; - the current version of the manuscript is not clearly organized; - No evaluation on the quality / accuracy calculations of turbulent heat fluxes based on gradient measurements of windspeed, air temperature and humidity was done. - In section 2, the description on ground measurements is mixed with information on satellite measurements. - The structure of section 3 is not well organized though the authors have partially addressed some of my comments. Descriptions of data and methodologies are mixed together. The authors did not describe how land surface parameters other than NDVI and vegetation fractional cover are determined, for instance LST, roughness length for momentum and heat transfer. All informations on land surface parameters should be included in the same section. - The results part still lacks a deeper and thoughtful analysis.

Specific comments: - see also specific comments in my previous reviews. - Figure numbers are not correct. - What is 'EC' and 'LAS' in Table 1, and how were they set up (height, fetch, path length etc.). Have the authors used the LAS measurements? Give precise description on the data actually used in the study described in this paper; - In Figure 4, number of sites is not consistent between the four energy balance components. Sites Guantan and Huazhaizi are missing for G0, H and LE comparisons. Please explain; use systematically the symbols for different sites and dates. - Magnitude of the soil heat flux density shown in Fig 2 is not consistent with the value in Fig 4 at Yingke site on June 4th . Please check it and give an explanation. - Reference

citations (I have mentioned this in my previous review!): o Li, X., 2009 ==> Li, 2009 o JIMENEZ-MUNOZ Juan C. (2006) ==> Jimenez-Munoz et al, 2006 - Section 3.2.2: the authors indicated 'ASTER observation time is 12:19 using Beijing time'. Are all the four overpasses at the same local time at 12:19? This seems not very reasonable.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 4619, 2009.