Interactive comment on “Analyzing influence of spatial resolution on the estimated evapotranspiration by using remote sensing data over an oasis area in Northwestern China” by H. Tian et al.

Anonymous Referee #2

Received and published: 17 April 2009

Review of HESS paper by Tian et al.

I found the paper to be poorly written and thus hard to read. As a result I could not fully assess the quality of the paper in its current form. I therefore recommend that the paper be rewritten and that the co-authors pay attention to the writing so that the reviewers do NOT have to do the editing.

Also I think the figures are too small to be easily read as currently presented.

Specific comments:

Page 1322 Abstract: Needs to be rewritten. Line 1: estimates of what Line 4 remove "by" Line 5 TM-based fluxes are compared with what?? daily ET estimates (From what source??) or with in situ measurements?? How were the latter made?? Line 10 "syncretized" is not used properly in this case, my dictionary gives the meaning:"To combine or reconcile differing beliefs" You need to find a more appropriate word, as it is the sentence does not make sense. Line 13 This last sentence needs re-writing. Line 19 What is the atmospheric cycle? Ln 25 "Over the last few ..

Page 1323 Ln 16 This sentence is too long, break it up Ln 28 & 29 switch few and little

Page 1324 Ln 11 What is ET fraction? Ln 15 types is the wrong word, both Landsat and MODIS produce the same type of data

Page 1325 Ln 10 A more complete description of ground stations is needed, e.g how was surface temperature measured? With an IR radiometer, thermistors, thermocouples .. What other measurements were made? Ln 18 Be more specific about the wavelengths of the bands discussed, I am sure that MODIS band 1 does NOT cover the entire visible wavelength range as implied in their statement. Ln 22 Not clear, is 12 AM noon or midnight?

Page 1327 Ln 13 Remove "It should be mentioned Ln 14 by is the wrong word try "with" Ln 20 What do you mean by "parameterization model"?

Page 1329 Ln 17 MODIS is misspelled, Improvement over what? Ln 18 Give wavelengths, again "syncretized" is not used properly as a result I do not know what they are trying to say here.

Page 1330 Ln 6-10 It is not clear how they get 250 m LST values? Why should that improve the performance of the LST algorithm?

Page 1331 Ln 15 They need to explain more fully how they get 250 m LST from the 1 km MODIS TIR data. Their Fig 2b shows considerable improvement of the 250 m LST versus the 1 km. For the reader to believe this result some physical basis must be
given to justify the improvement. Also this figure is poorly drawn, the symbols are too faint to be easily read!! How were the ground measurements made?

Pg 1339 & 1341 In the captions for Figure 2 & 4 replace "The discrepancy" with Comparisons

In the caption for Fig 5 Delete "Cases of"

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 1321, 2009.