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Review of: Regional estimation of Daily to Annual Regional Evapotranspiration with MODIS data in the Yellow River Delta wetland; L. Jia, G. Xi, S. Liu, C. Huang, Y. Yan, and G. Liu

General comments:

It is very interesting that the paper proposed a novel method to estimate the regional daily to annual evapotranspiration by combine the ET remote sensing model and HANTS algorithm, estimated the actual ET by RS model and fill the missed value due to the clouds contaminations by HANTS in Yellow River Delta, China. After evaluating the model, the paper analyzed the ET characteristics over different land-use covers and the interesting conclusions have been made from the view of the future wetland protection basing on the model calculation results—the total water requirements for Yellow river delta wetland in the principle of the water balance.

Totally, the paper is well organized and the idea of the work is innovative. It is recommend to be published after improving the points referred in the following specific comments and the Technical corrections

Specific comments:

- 1) Although the method for daily ET's estimation has been described detailed, it is necessary to brief introduction the method for monthly and annual ET accumulations from daily ET in Section 3 Methodology.
- 2) In 4.1.4, two paragraphs are describing the spatial variability and missing the daily ET temporal variability description. But in section 4.2, the seasonally variability of ET have being discussed actually. It is suggested to put 4.1.4 into 4.2 and rename the name to “Spatial and temporal variability of ET in the YRD wetland”.
- 3) In Fig.3. the ET_after_HANT results seems relative higher than ET_SEBS, ET_PAN and ETref systematically after day 340. It is recommended to explain the possible errors come from, and if the ET_pan are the weather station measurements, please state it clearly and give out the weather station's name and location, where the ET_PAN comes from.
- 4) Improvements of the language skill and expressions, it is suggested that a linguistic reversion is necessary.

Technical corrections

P2302 Line2 the Yellow River Delta → the Yellow River Delta (YRD)

P2303 Line 24 the latter has rather coarse spatial resolution ->> it has rather coarse spatial resolution

Line28 Different degrees of success →successfully

2304 Line6 Yellow River Delta wetland (YRDW) -> YRD wetland (and the followings are same.)

Line29 constants over a clear day (needs a reference).

P2310 Line 8 This leads to the equation for total daily ET, equation (5), needs a reference for the expressions coefficient (8.64×10^7)

P2311 Line24 images on different days → images in 2005

P2312 Line 17 It is apparent to see that some outliers remain still (outliers mean that estimated ET is far below the ET_{ref}) after the clouds-screening procedures. (Needs more clearly statements)

P2314 Line7 Spatial variability is significantly → ET Spatial variability is significantly

Line11 and fractional cover→ and vegetation fractional cover

Line 12 large spatial variability in daily. ET → large spatial variability in daily ET

P2315 Line1 The major contributor to the total ET in the drylands (including croplands, grasslands and trees) and Line4 shows smaller values in the drylands (croplands, Black Locust Forest, 5 and Chinese tamarisk) →the dryland has differentincludings(?)

Line 2 grasslands and trees → grasslands and forests

Line 4 shows smaller values in the drylands (croplands, Black Locust Forest, 5 and Chinese tamarisk), and Line 16 cropland vegetations and other wetland vegetations (Black Locust Forest, and Chinese tamarisk). → Black Locust Forest belongs both dryland and wetland?

P2316 P28 the Northern Nature Reserve (NNR) and the Southern Nature Reserve (SNR). → the NNR and the SNR.

P2317 Line8 In the current definition of the two natural reserve areas, the area of SNR is much larger than the NNR with many more land surface and vegetation types than the NNR (not clear)