

Interactive comment on “Use of satellite data to assess the impacts of irrigation withdrawals on Upper Klamath Lake, Oregon” by Q. Tang et al.

Q. Tang

qiu hong@hydro.washington.edu

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This comment is essentially an edited version of the previous one. We thank the anonymous referee for his or her comments.

1. Although the surface temperature can have large day-to-day variations, small day-to-day variations of evaporative fraction, defined as the ratio of ET to available energy, and energy conservation effectively constrain errors from this source. This is detailed in Tang et al (2009b) which we reference. We did not perform temporal interpolation of surface temperature. Because the evaporative fraction has relatively small day-to-day variations, we use an estimate of it based on the surface temperature of the closest available day when the surface temperature is unavailable.

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2. The performance of the remote sensing ET method is documented in Tang et al (2009b). The VI-Ts method works best over areas where there is substantial diversity in vegetation types within the remote sensing window (and hence diversity of VI-Ts combinations). This condition is well met by the substantial contrast in VI and Ts across the interface between irrigated cropland and surrounding areas. We now include the most relevant conclusions of this work in Section 3.

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