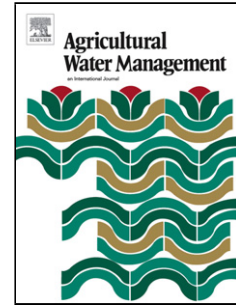


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## Evaluation of Variable Rate Irrigation Using a Remote-Sensing-Based Model

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### Highlights

- Variable rate irrigation (VRI) strategies were field tested at two locations.
- One strategy utilized a remote-sensing-based spatial ET and soil water balance model (VRI-RS).
- The VRI-RS treatment resulted in more irrigation due to water balance drift.
- Available water capacity was the variable with the greatest spatial variability.

### Abstract

Improvements in soil water balance modeling can be beneficial for optimizing irrigation management to account for spatial variability in soil properties and evapotranspiration (ET). A remote-sensing-based ET and water balance model was tested for irrigation management in an experiment at two University of Nebraska-Lincoln research sites located near Mead and Brule, Nebraska. Both fields included a center pivot equipped with variable rate irrigation

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