

Interactive comment on “Crop water stress maps for entire growing seasons from visible and thermal UAV imagery” by Helene Hoffmann et al.

Anonymous Referee #2

Received and published: 1 November 2016

Hoffman and others investigate early and late-season vegetation indices from a UAV platform from a barley field in Denmark. The challenge of partial canopy cover is described nicely and the manuscript is in my opinion publishable following a few minor considerations.

Where are the data from Fig. 2 from? The figures could be created in higher quality in almost all cases. Are the temperatures on the x axis representative of only a certain case? Please use standard symbols (i.e. not curly braces) in the equations.

What is most lacking in my opinion is a quantification of what, for example, "It was found that the UAV-based WDI index determines accurate crop water status" means. Was crop water status measured in the field? I noted no leaf or plant-level measurements, so such statements are not able to be validated. With respect to the conclu-

C1

sions, how much water should be added to stressed areas? At the moment it is a nice remote sensing-based application that struggles to be fully applicable in the field. It is publishable after the authors take more care to not over-extrapolate results to actual plant-level conditions.

Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2016-316, 2016.

C2