

Supplementary Materials

Article

Evaluation of MOD16 Algorithm over Irrigated Rice Paddy Using Flux Tower Measurements in Southern Brazil

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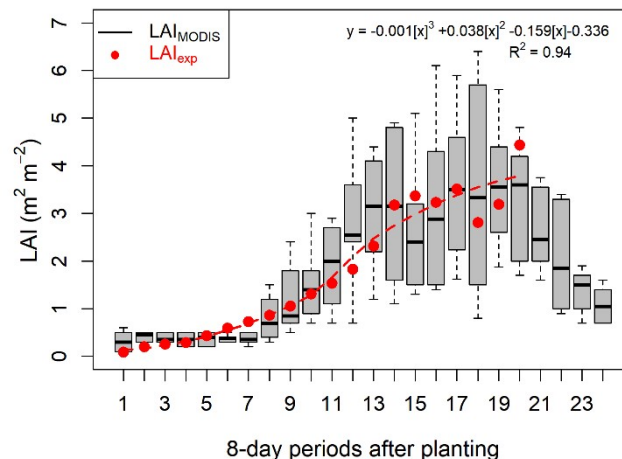


Figure S1. Comparison of measured and estimated LAI from 2009 to 2014 over irrigated cropland (rice cultivated in a flooding system). The gray boxes represent the average LAI MODIS inter-quartile range (IQR), the black tick lines represent the median and the whiskers indicate variability outside the upper and lower quartiles. Experimental LAI measurements for each growing season were interpolated to obtain values in the same time interval of MODIS. The red dots represent the mean of three LAI growing season measurements and the red line represents the fitted curve of measured LAI after planting.

Table S1. Validation of MERRA reanalysis data against measured environmental variables: net radiation (R_n), global radiation (R_g), air temperature (Temp) and vapor pressure deficit (VPD), used as MOD16 algorithm inputs for 2004–2005 at PRS site.

	<i>Temp</i> (°C)	<i>R_g</i> (W m ⁻²)	<i>VPD</i> (hPa)
RMSE	2.02	57.43	6.60
PBIAS	6.70	16.20	69.40
<i>r</i>	0.96	0.88	0.78
R ²	0.93	0.78	0.61

Table S2. Validation of MERRA reanalysis data against measured environmental variables: net radiation (R_n), global radiation (R_g), air temperature (Temp) and vapor pressure deficit (VPD), used as MOD16 algorithm inputs for 2011–2014 at CAS site.

	<i>Temp</i> (°C)	<i>R_g</i> (W m ⁻²)	<i>VPD</i> (hPa)
RMSE	1.94	55.65	7.37
PBIAS	3.20	12.00	86.70
<i>r</i>	0.95	0.87	0.52
R ²	0.90	0.75	0.27