

Article

## Supplementary Materials: A critical comparison of remote sensing leaf area index estimates over rice cultivated area: from Sentinel-2 and Landsat-7/8 to MODIS, GEOV1 and EUMETSAT Polar System

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**Table S1.** Dates of the field campaigns in 2014 over the three study areas.

ERMES 2014 LAI Field Campaigns			
Spain		Italy	
Date	DOY	Date	DOY
17/06/14	168	04/06/14	155
24/06/14	175	12/06/14	163
29/06/14	180	19/06/14	170
06/07/14	187	24/06/14	175
15/07/14	196	09/07/14	190
22/07/14	203	15/07/14	196
31/07/14	212	25/07/14	206
07/08/14	219	31/07/14	212
22/08/14	234	11/08/14	223
08/09/14	251	21/08/14	233
		02/09/14	245
		24/09/14	267

**Table S2.** Dates of the field campaigns in 2015 over the three study areas.

ERMES 2015 LAI Field Campaigns					
Spain		Italy		Greece	
Date	DOY	Date	DOY	Date	DOY
02/06/15	153	26/05/15	146	16/06/15	167
09/06/15	160	04/06/15	155	25/06/15	176
17/06/15	168	15/06/15	166	02/07/15	183
24/06/15	175	24/06/15	175	09/07/15	190
02/07/15	183	06/07/15	187	15/07/15	196
09/07/15	190	21/07/15	202	22/07/15	203
17/07/15	198	07/08/15	219	29/07/15	210
23/07/15	204			05/08/15	217
03/08/15	215			11/08/15	223
				19/08/15	231

**Table S3.** Dates of the field campaigns in 2016 over the three study areas.

ERMES 2016 LAI Field Campaigns					
Spain		Italy		Greece	
Date	DOY	Date	DOY	Date	DOY
01/06/16	153	21/05/16	142	15/06/16	167
09/06/16	161	01/06/16	153	28/06/16	180
16/06/16	168	10/06/16	162	08/07/16	190
22/06/16	174	22/06/16	174	20/07/16	202
29/06/16	181	05/07/16	187	29/07/16	211
05/07/16	187	14/07/16	196	02/08/16	215
12/07/16	194	26/07/16	208	10/08/16	223
20/07/16	202	05/08/16	218		
28/07/16	210				

**Table S4.** Statistical indicators where  $y_i$  and  $y_i^*$  are the ground measurements and the Sentinel-2 estimates respectively, whereas  $\bar{y}_i$  and  $\bar{y}_i^*$  are their mean values.

Metrics	
Root Mean Squared Error	$RMSE = \sqrt{\frac{1}{N} \sum_{i=1}^N (y_i - y_i^*)^2}$
Mean Error	$ME = \frac{1}{N} \sum_{i=1}^N (y_i - y_i^*)$
Mean Absolute Error	$ME = \frac{1}{N} \sum_{i=1}^N  y_i - y_i^* $
Coefficient of correlation	$r = \frac{\sum_{i=1}^N (y_i - \bar{y}_i)(y_i^* - \bar{y}_i^*)}{\sqrt{\sum_{i=1}^N (y_i - \bar{y}_i)^2} \sqrt{\sum_{i=1}^N (y_i^* - \bar{y}_i^*)^2}}$