

Supplemental Materials for

Introducing spatially distributed Fire Danger from Earth Observations (FDEO) Using satellite-based data in the Contiguous United States

Alireza Farahmand ¹, E. Natasha Stavros ¹, John T. Reager ¹ and Ali Behrangi ²

¹Jet Propulsion Laboratory, California Institute of Technology, Pasadena, 91109, CA USA

²Department of hydrology and atmospheric sciences, The University of Arizona, Tucson, AZ, 85721 USA

Table S1. Confusion Matrix for Deciduous Land Cover type during 2004-2013 period. Orange indicates correctly classified pixels. Green indicates underestimated pixels by the model and Red indicates overestimated pixels detected by the model.

		Observation			
Prediction	<i>Deciduous</i>	Below Normal	Normal	Above Normal	Total
	Below Normal	54812	7961	14239	77012
	Normal	20245	32920	24338	77503
	Above Normal	2437	36133	38690	77260
	Total	77494	77014	77267	231775

Table S2. Confusion Matrix for Evergreen Land Cover type during 2004-2013 period. Orange indicates correctly classified pixels. Green indicates underestimated pixels by the model and Red indicates overestimated pixels detected by the model.

		Observation			
Prediction	<i>Evergreen</i>	Below Normal	Normal	Above Normal	Total
	Below Normal	52095	12401	14184	78680
	Normal	14672	34287	31109	80068
	Above Normal	12466	28250	38407	79123
	Total	79233	74938	83700	237871

Table S3. Confusion Matrix for Shrubland Land Cover type during 2004–2013 period. Orange indicates correctly classified pixels. Green indicates underestimated pixels by the model and Red indicates overestimated pixels detected by the model.

		Observation			
Prediction	<i>Shrubland</i>	Below Normal	Normal	Above Normal	Total
	Below Normal	79924	19188	23294	122406
	Normal	22323	51586	51581	125490
	Above Normal	21425	40586	61822	123833
	Total	123672	111360	136697	371729

Table S4. Confusion Matrix for Herbaceous Land Cover type during 2004-2013 period. Orange indicates correctly classified pixels. Green indicates underestimated pixels by the model and Red indicates overestimated pixels detected by the model.

		Observation			
Prediction	<i>Herbaceous</i>	Below Normal	Normal	Above Normal	Total
	Below Normal	54027	12254	11090	77371
	Normal	13144	34545	31124	78813
	Above Normal	10785	28711	38381	77877
	Total	77956	75510	80595	234061

Table S5. Confusion Matrix for Wetland Land Cover type during 2004-2013 period. Orange indicates correctly classified pixels. Green indicates underestimated pixels by the model and Red indicates overestimated pixels detected by the model.

		Observation			
Prediction	<i>Wetland</i>	Below Normal	Normal	Above Normal	Total
	Below Normal	9583	3539	3811	16933
	Normal	4481	6472	6267	17220
	Above Normal	3188	6662	7305	17155
	Total	17252	16673	17383	51308

Table S6. Confusion Matrix for Entire CONUS during 2004–2013 period. Orange indicates correctly classified pixels. Green indicates underestimated pixels by the model and Red indicates overestimated pixels detected by the model.

		Observation			
Prediction	<i>Wetland</i>	Below Normal	Normal	Above Normal	Total
	Below Normal	250441	55343	66618	372402
	Normal	74865	159810	144419	379094
	Above Normal	50301	140342	184605	375248
	Total	375607	355495	395642	1126744