

Table S1 In-sample coefficient of determination (Pseudo-R²) and root mean square error (RMSE) for the relationship between measured and simulated NDVI by using Bayesian Additive regression Trees models. Models were performed for each site at different time since fire respectively (four periods: prior to fire event – from 1987 to the fire year (with TM-derived time series), first 1-5 years, 6-10 years and more than 10 years post-fire (with ETM+ -derived time series)) for sites that were dominated by grass (G), Scots pine (SP), a mixture of species (Mix) and mature scots pine (C) respectively.

LANDSAT derived NDVI	Site	Year of fire	Prior to fire (Since 1987)		Time post-fire					
			R ²	RMS E	1-5 yrs		6-10 yrs		11-15 yrs	
					R ²	RM SE	R ²	RMS E	R ²	RMSE
LANDSAT 5 TM (1987 - 2011)	G1	2002	0.18	0.14	0.82	0.04	0.91	0.02	-	-
	G2	2000	0.19	0.09	0.54	0.04	0.89	0.02	-	-
	G3	2000	0.29	0.09	0.79	0.04	0.86	0.03	-	-
	G4	1999	0.19	0.08	0.71	0.03	0.97	0.01	-	-
	G5	2000	0.60	0.07	0.80	0.04	0.89	0.04	-	-
	G6	2000	0.41	0.07	0.59	0.04	0.66	0.05	-	-
	G7	1997	0.52	0.10	0.81	0.06	-	-	-	-
	SP1	2000	0.28	0.08	0.87	0.03	0.91	0.03	-	-
	SP2	1996	0.25	0.09	0.89	0.04	0.49	0.10	0.58	0.07
	SP3	1994	0.44	0.11	0.86	0.04	0.83	0.04	0.96	0.02
	SP4	1994	0.33	0.11	0.91	0.02	0.88	0.04	0.93	0.03
	SP5	2000	0.36	0.08	0.86	0.04	0.94	0.03	-	-
	Mix1	2003	0.83	0.08	0.95	0.04	0.88	0.05	-	-
	Mix2	2003	0.66	0.10	0.87	0.06	0.95	0.03	-	-
	Mix3	1987	-	-	0.94	0.03	0.83	0.05	-	-
	Mix4	2003	0.44	0.10	0.81	0.04	0.93	0.03	-	-
	C1	-	0.27	0.09	0.22	0.06	0.23	0.09	-	-
	C2	-	0.30	0.05	0.32	0.05	0.39	0.05	-	-
	C3	-	0.44	0.09	0.36	0.08	0.40	0.09	-	-
LANDSAT 7 ETM+ (1999 - 2017)	G1	2002	-	-	0.76	0.05	0.91	0.03	0.94	0.01
	G2	2000	-	-	0.67	0.04	0.91	0.02	0.87	0.03
	G3	2000	-	-	0.81	0.05	0.81	0.05	0.89	0.03
	G4	1999	-	-	0.67	0.05	0.91	0.02	0.69	0.04
	G5	2000	-	-	0.88	0.04	0.91	0.03	0.66	0.06
	G6	2000	-	-	0.62	0.05	0.44	0.07	-	-
	G7	1997	-	-	0.91	0.05	-	-	-	-
	SP1	2000	-	-	0.88	0.04	0.93	0.03	0.79	0.06
	SP2	1996	-	-	-	-	0.95	0.03	0.80	0.05
	SP3	1994	-	-	-	-	0.88	0.04	0.86	0.05
	SP4	1994	-	-	-	-	0.78	0.05	0.76	0.06
	SP5	2000	-	-	0.92	0.04	0.94	0.03	0.88	0.05
	Mix1	2003	-	-	0.74	0.06	0.82	0.05	0.93	0.04

	Mix2	2003	-	-	0.92	0.05	0.96	0.03	0.91	0.05
	Mix3	1987	-	-	-	-	-	-	-	-
	Mix4	2003	-	-	0.74	0.05	0.92	0.03	-	-
	C1	-	-	-	0.17	0.12	0.44	0.08	0.51	0.10
	C2	-	-	-	0.59	0.05	0.52	0.06	0.46	0.06
	C3	-	-	-	0.68	0.07	0.59	0.08	0.64	0.07