Supplementary materials

Table S1. Annual means (°C) of the mean (**Tmean**), minimum (**Tmin**), maximum (**Tmax**) temperature and total rainfall (**Rainfal**l, mm) from 1953 to 2021.

years	Tmean	Tmin	Tmax	Rainfall
1951	15.51	10.23	20.78	867.80
1952	15.75	10.19	21.33	395.70
1953	15.65	10.66	20.63	834.60
1954	15.66	10.84	20.50	539.50
1955	15.47	11.30	19.60	826.00
1956	14.24	8.98	19.49	1014.20
1957	15.56	10.40	20.73	573.60
1958	15.26	9.99	20.53	897.40
1959	15.65	10.63	20.68	1118.80
1960	16.11	11.08	21.13	1164.70
1961	16.11	10.66	21.54	711.30
1962	15.56	10.38	20.72	1012.40
1963	15.67	10.76	20.57	880.40
1964	16.30	10.89	21.69	715.40
1965	15.53	10.05	21.01	1035.90
1966	15.93	10.50	21.38	918.30
1967	15.87	10.06	21.68	654.10
1968	15.39	9.81	20.96	743.80
1969	15.72	10.37	21.06	901.60
1970	15.82	9.83	21.80	649.10
1971	15.84	10.13	21.54	823.60
1972	15.35	9.95	20.73	1005.50
1973	15.66	10.40	20.93	665.70
1974	15.31	10.22	20.40	982.80
1975	15.15	9.99	20.32	849.10
1976	15.13	9.98	20.30	1011.40
1977	15.28	10.43	20.13	595.70
1978	14.57	9.85	19.29	851.40
1979	15.22	10.84	19.59	980.00
1980	14.80	10.03	19.58	771.70
1981	15.99	9.57	22.42	598.20
1982	16.90	9.66	24.13	548.10
1983	15.58	10.36	20.83	597.60
1984	16.36	11.28	21.45	1024.60
1985	17.25	11.78	22.73	627.60
1986	16.70	11.11	22.29	821.40
1987	17.15	11.78	22.51	778.80
1988	15.50	9.81	21.22	639.50
1989	15.37	9.35	21.38	681.80
1990	15.35	9.79	20.90	776.30
1991	14.73	9.03	20.38	799.00
1992	15.45	9.83	21.13	792.60
1993	15.06	9.16	20.98	461.20
1994	17.75	12.60	22.95	509.70

1995	15.08	9.65	20.50	504.10
1996	16.79	12.17	21.33	996.70
1997	17.69	13.13	22.27	777.50
1998	17.63	13.30	21.92	830.70
1999	17.33	13.46	21.20	784.60
2000	15.90	10.33	21.47	564.30
2001	15.89	10.36	21.42	491.80
2002	15.71	10.67	20.75	656.50
2003	18.56	15.01	22.12	406.80
2004	17.35	14.25	20.45	658.30
2005	17.65	14.37	20.93	780.90
2006	17.55	13.93	21.18	368.90
2007	18.22	14.44	22.00	293.20
2008	16.63	10.60	23.18	908.60
2009	16.95	11.11	23.07	670.20
2010	16.02	10.32	21.82	906.80
2011	15.59	9.63	21.99	575.60
2012	15.65	9.40	22.18	608.40
2013	15.64	9.82	21.97	747.00
2014	16.28	10.49	22.49	1093.80
2015	16.19	10.28	22.73	696.80
2016	15.99	10.14	22.06	689.50
2017	15.58	9.00	21.93	916.50
2018	16.61	11.52	21.86	1328.15
2019	15.97	11.09	20.89	791.40
2020	16.31	11.13	20.90	540.70
2021	15.87	10.83	20.30	638.40

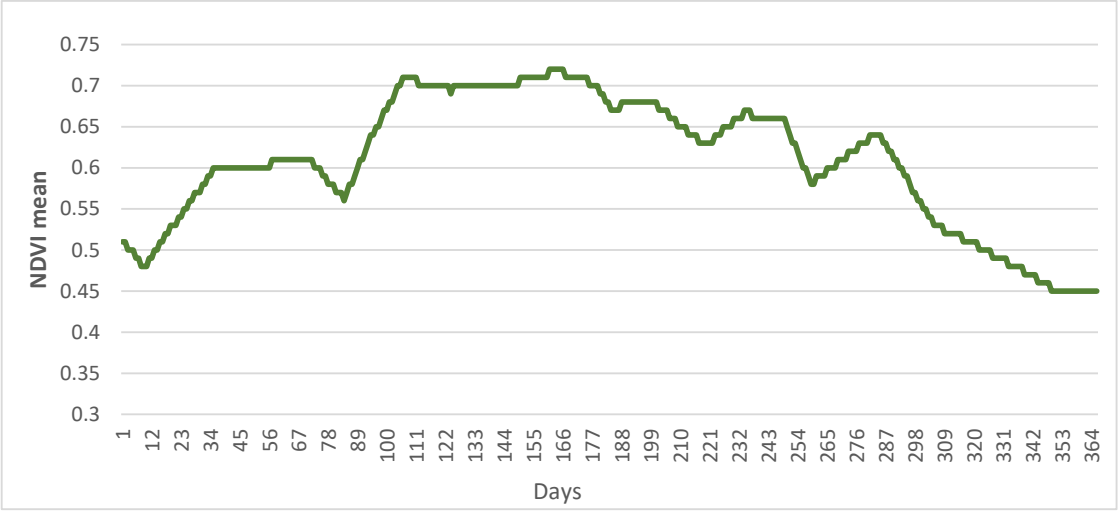

Figure S1. Average NDVI (NDVI mean) trend of Palo Laziale Forest extrapolated from Sentinel-2 using Google Earth Engine for 2020.

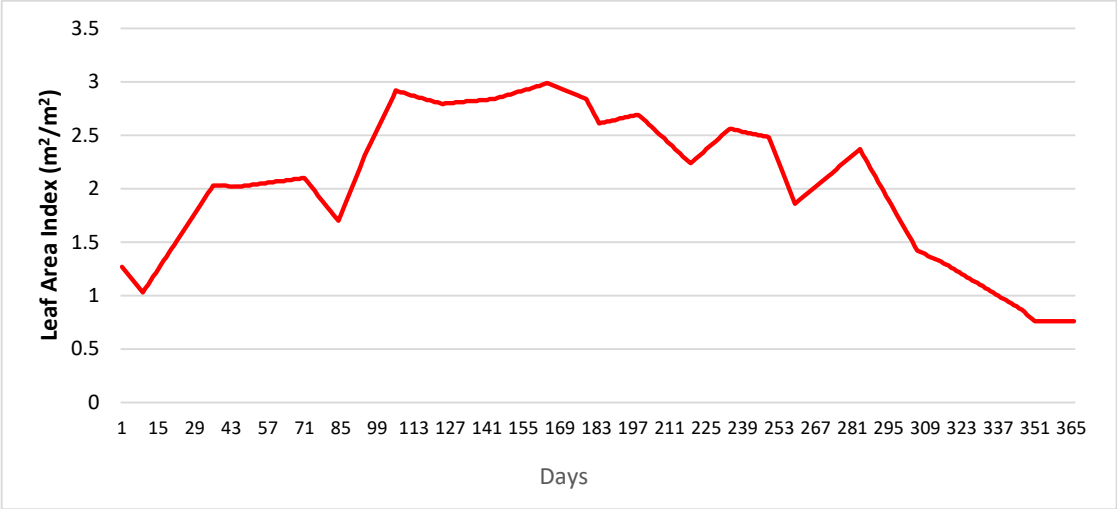

Figure S2. Leaf Area Index (LAI) for Palo Laziale wood in 2020. LAI derived from NDVI following the methods reported in Caraux Garson et. al. (2003)[50]

Table S2. M_1 and M_2 values (g) for the three functions simulation *f (T)*

DOY	M1 arctg	M1 linear	M1 TLT	M2 arctg	M2 linear	M2 TLT
153	1.852778	1.850411	1.850367	0.643113	0.642461	0.642449
161	1.843714	1.835208	1.834618	0.640643	0.638318	0.638157
184	1.815294	1.786607	1.785074	0.633271	0.625713	0.625306
204	1.785461	1.735475	1.733028	0.626349	0.613852	0.613231
275	1.583509	1.3847	1.380015	0.598679	0.565952	0.564888
297	1.407568	1.078153	1.072378	0.588932	0.549067	0.547862

50 Caraux Garson, D.; Lacaze, B. Monitoring Leaf Area Index of Mediterranean Oak Woodlands: Comparison of Remotely-Sensed Estimates with Simulations from an Ecological Process-Based Model. *Int. J. Remote Sens.* **2003**, *24*, 3441–3456, doi:10.1080/0143116021000024267.