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Table 1: Calibrated coefficients of the TETIS-VEG model. RD is the roots distribution (%). LEC is the light extinction coefficient. OT is the optimal temperature(°C). LUE is the Light use efficiency (kg m^2 MJ). SLA is the leaf speciphic area (m^2 kg^{-1}).

Land use	Water availability	Water stress	Max. interception	RD	LEC	OT	LUE	SLA	LAI max.
Shrub	1	1	1.11	1	0.512	18	0	1	0.55225
Abandoned crops	1	1	1.11	1	0.512	18	0	1	0.45
Conifer	2	2	1.2	0.1	0.512	18	1.803	6	2
Grass	3	1	0.3	0.8	0.512	18	1.14	24	0.8
Broad-leaf	3	1	0.9	0.8	0.512	18	1.14	24	3
River bank	1	1	0	1	0.512	18	0	1	0.2
Rock	2	2	0.1	0.1	0.512	18	1.803	6	0
Orange orchards	1	1	1.841	1	0.512	18	0	1	0.543
Bare soil	1	1	0	1	0.512	18	0	1	0.2
No orange crop	1	1	1.669	1	0.512	18	0	1	0.59925
Urban	1	1	0	1	0.512	18	0	1	0.2
Broad-leaf and Conifer	2	2	0.7	0.1	0.512	18	1.803	6	2
Shrub and conifer	1	1	2	0.2	0.512	18	1.71	30	1.8
Management	3	1	0.8	0.8	0.512	18	1.14	24	1.8
Unmanagement	2	1	1.3	0.3	0.512	18	1.803	6	2.5

Table 2: Sensitivity analysis of the Marginal Water Value (MWV) over the Benefit/Cost ratio of the three different climatic scenarios, with and without forest management and under wildfire duration of 0.5, 1, 1.5 and 2 days. $*$ indicates significant differences ($p \leq 0.05$) between the three climatic scenarios of the Managed and Unmanaged situations.

MWV (€ m^{-3})	Climatic scenario	Water + Biomass + Fire							
		Unmanaged				Managed			
		0.5 d.	1 d.	1.5 d.	2 d.	0.5 d.	1 d.	1.5 d.	2 d.
0.00	1	0.0	0.0	0.0	0.0	0.2*	0.2*	0.1*	0.03*
	2	0.0	0.0	0.0	0.0	0.2*	0.1*	0.1*	0.03*
	3	0.0	0.0	0.0	0.0	0.2*	0.1*	0.1*	0.03*
0.03	1	0.3	0.1	0.1	0.0	0.4*	0.3	0.1*	0.1*
	2	0.2	0.1	0.0	0.0	0.3*	0.2	0.1*	0.1*
	3	0.3	0.1	0.0	0.0	0.4*	0.2	0.1*	0.1*
0.06	1	0.6	0.2	0.1	0.1	0.6*	0.5	0.2*	0.1*
	2	0.4	0.2	0.1	0.0	0.4*	0.3	0.1*	0.1*
	3	0.5	0.2	0.1	0.1	0.6*	0.3	0.2*	0.1*
0.09	1	0.6	0.2	0.1	0.1	0.6*	0.5	0.2*	0.1*
	2	0.4	0.2	0.1	0.0	0.4*	0.3	0.1*	0.1*
	3	0.5	0.2	0.1	0.1	0.6*	0.3	0.2*	0.1*
0.12	1	1.2	0.5	0.2	0.1	1.0*	0.9	0.3*	0.1*
	2	0.8	0.3	0.1	0.1	0.7*	0.6	0.2*	0.1*
	3	1.1	0.4	0.2	0.1	0.9*	0.5	0.3*	0.2*
0.15	1	1.4	0.6	0.3	0.1	1.2*	1.0	0.4*	0.2*
	2	1.0	0.4	0.2	0.1	0.8*	0.7	0.3*	0.1*
	3	1.3	0.5	0.2	0.1	1.6*	0.6	0.3*	0.2*
0.175	1	1.7	0.7	0.3	0.2	1.3*	1.2	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	0.9*	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.3*	0.7	0.4*	0.2*
0.21	1	2.0	0.8	0.4	0.2	1.6*	1.4	0.5*	0.2*
	2	1.3	0.5	0.2	0.1	1.1*	0.9	0.3*	0.2*
	3	1.9	0.8	0.3	0.2	1.5*	0.8	0.4*	0.2*
0.24	1	2.3	0.9	0.4	0.2	1.8*	1.6	0.5*	0.2*
	2	1.5	0.6	0.3	0.1	1.2*	1.0	0.4*	0.2*
	3	2.2	0.9	0.4	0.2	1.7*	0.9	0.5*	0.3*
0.27	1	2.6	1.0	0.5	0.2	2.0*	1.7	0.6*	0.3*
	2	1.7	0.7	0.3	0.2	1.3*	1.1	0.4*	0.2*
	3	2.4	1.0	0.4	0.2	1.9*	1.1	0.6*	0.3*
0.30	1	2.9	1.2	0.5	0.3	2.2*	1.9	0.7*	0.3*
	2	1.9	0.8	0.3	0.2	1.5*	1.2	0.4*	0.2*
	3	2.7	1.1	0.5	0.3	2.0*	1.2	0.6*	0.3*
0.33	1	3.2	1.3	0.6	0.3	2.4*	2.2	0.7*	0.3*
	2	2.1	0.8	0.4	0.2	1.6*	1.3	0.5*	0.3*
	3	3.0	1.2	0.5	0.3	2.2*	1.3	0.7*	0.4*
0.36	1	3.5	1.4	0.6	0.3	2.6*	2.3	0.8*	0.4*
	2	2.3	0.9	0.4	0.2	1.7*	1.5	0.5*	0.3*
	3	3.2	1.3	0.6	0.3	2.4*	1.4	0.7*	0.4*

Table 3: Sensitivity analysis of the Biomass Value (BV) over the Benefit/Cost ratio of the three different climatic scenarios, with and without forest management and under wildfire duration of 0.5, 1, 1.5 and 2 days. $*$ indicates significant differences ($p \leq 0.05$) between the three climatic scenarios of the Managed and Unmanaged situations.

BV (€ Mg^{-1})	Climatic scenario	Water + Biomass + Fire							
		Unmanaged				Managed			
		0.5 d.	1 d.	1.5 d.	2 d.	0.5 d.	1 d.	1.5 d.	2 d.
0	1	1.7	0.7	0.3	0.2	1.2*	1.0	0.3*	0.2
	2	1.1	0.4	0.2	0.1	0.7*	0.7	0.2*	0.1
	3	1.6	0.6	0.3	0.1	1.1*	0.6	0.3*	0.2
10	1	1.7	0.7	0.3	0.2	1.2*	1.1	0.4*	0.2
	2	1.1	0.4	0.2	0.1	0.8*	0.7	0.2*	0.1
	3	1.6	0.6	0.3	0.1	1.1*	0.6	0.3*	0.2
20	1	1.7	0.7	0.3	0.2	1.2*	1.1	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	0.8*	0.7	0.3*	0.1*
	3	1.6	0.6	0.3	0.1	1.2*	0.7	0.4*	0.2*
30	1	1.7	0.7	0.3	0.2	1.3	1.1	0.4*	0.2*
	2	1.6	0.6	0.3	0.1	1.2	0.7	0.4*	0.2*
	3	1.7	0.7	0.3	0.2	1.3	1.2	0.4*	0.2*
40	1	1.1	0.4	0.2	0.1	0.9	0.7	0.3*	0.1*
	2	1.1	0.4	0.2	0.1	0.9	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.3	0.7	0.4*	0.2*
50	1	1.7	0.7	0.3	0.2	1.4	1.2	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	1.0	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.3	0.7	0.4*	0.2*
60	1	1.7	0.7	0.3	0.2	1.4	1.3	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	1.0	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.3	0.8	0.4*	0.2*
70	1	1.7	0.7	0.3	0.2	1.5	1.3	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	1.1	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.4	0.8	0.4*	0.2*
80	1	1.7	0.7	0.3	0.2	1.5	1.3	0.5*	0.2*
	2	1.1	0.4	0.2	0.1	1.1	0.9	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.4	0.8	0.4*	0.2*
100	1	1.7	0.7	0.3	0.2	1.6	1.4	0.5*	0.2*
	2	1.1	0.4	0.2	0.1	1.2	0.9	0.4*	0.2*
	3	1.6	0.6	0.3	0.1	1.5	0.9	0.5*	0.3*

Table 4: Sensitivity analysis of the Extinction Costs (EC) over the Benefit/Cost ratio of the three different climatic scenarios, with and without forest management and under wildfire duration of 0.5, 1, 1.5 and 2 days. $*$ indicates significant differences ($p \leq 0.05$) between the three climatic scenarios of the Managed and Unmanaged situations.

EC (€ ha^{-1})	Climatic scenario	Water + Biomass + Fire							
		Unmanaged				Managed			
		0.5 d.	1 d.	1.5 d.	2 d.	0.5 d.	1 d.	1.5 d.	2 d.
0	1	2.1	0.8	0.4	0.2	1.5*	1.5	0.5*	0.2*
	2	1.4	0.5	0.2	0.1	1.0*	0.9	0.3*	0.2*
	3	1.9	0.8	0.4	0.2	1.4*	0.8	0.5*	0.3*
50	1	2.0	0.8	0.4	0.2	1.5*	1.4	0.5*	0.2*
	2	1.3	0.5	0.2	0.1	1.0*	0.9	0.3*	0.2*
	3	1.9	0.8	0.3	0.2	1.4*	0.8	0.4*	0.2*
100	1	1.9	0.8	0.4	0.2	1.4*	1.4	0.5*	0.2*
	2	1.3	0.5	0.2	0.1	1.0*	0.8	0.3*	0.2*
	3	1.8	0.7	0.3	0.2	1.4*	0.8	0.4*	0.2*
150	1	1.9	0.8	0.3	0.2	1.4*	1.4	0.5*	0.2*
	2	1.3	0.5	0.2	0.1	1.0*	0.8	0.3*	0.2*
	3	1.8	0.7	0.3	0.2	1.3*	0.8	0.4*	0.2*
200	1	1.8	0.7	0.3	0.2	1.4*	1.3	0.4*	0.2*
	2	1.2	0.5	0.2	0.1	1.0*	0.8	0.3*	0.2*
	3	1.7	0.7	0.3	0.2	1.3*	0.8	0.4*	0.2*
250	1	1.8	0.7	0.3	0.2	1.4*	1.3	0.4*	0.2*
	2	1.2	0.5	0.2	0.1	1.0*	0.8	0.3*	0.2*
	3	1.7	0.7	0.3	0.2	1.3*	0.8	0.4*	0.2*
300	1	1.7	0.7	0.3	0.2	1.4*	1.2	0.4*	0.2*
	2	1.2	0.5	0.2	0.1	1.0*	0.8	0.3*	0.2*
	3	1.6	0.7	0.3	0.2	1.3*	0.7	0.4*	0.2*
350	1	1.7	0.7	0.3	0.2	1.4*	1.2	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	0.9*	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.3*	0.7	0.4*	0.2*
400	1	1.7	0.7	0.3	0.2	1.3*	1.2	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	0.9*	0.8	0.3*	0.2*
	3	1.6	0.6	0.3	0.1	1.3*	0.7	0.4*	0.2*
450	1	1.6	0.7	0.3	0.2	1.3*	1.1	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	0.9*	0.7	0.3*	0.2*
	3	1.5	0.6	0.3	0.1	1.2*	0.7	0.4*	0.2*
500	1	1.6	0.6	0.3	0.1	1.3*	1.1	0.4*	0.2*
	2	1.1	0.4	0.2	0.1	0.9*	0.7	0.3*	0.1*
	3	1.5	0.6	0.3	0.1	1.2*	0.7	0.4*	0.2*
550	1	1.5	0.6	0.3	0.1	1.3*	1.1	0.4*	0.2*
	2	1.0	0.4	0.2	0.1	0.9*	0.7	0.3*	0.1*
	3	1.4	0.6	0.3	0.1	1.2*	0.7	0.4*	0.2*
600	1	1.5	0.6	0.3	0.1	1.3*	1.1	0.4*	0.2*
	2	1.0	0.4	0.2	0.1	0.9*	0.7	0.3*	0.1*
	3	1.4	0.6	0.3	0.1	1.2*	0.7	0.4*	0.2*
650	1	1.5	0.6	0.3	0.1	1.3*	1.0	0.4*	0.2*
	2	1.0	0.4	0.2	0.1	0.9*	0.7	0.3*	0.1*
	3	1.4	0.6	0.3	0.1	1.2*	0.7	0.3*	0.2*
700	1	1.4	0.6	0.3	0.1	1.2*	1.0	0.4*	0.2*
	2	1.0	0.4	0.2	0.1	0.9*	0.7	0.2*	0.1*
	3	1.4	0.5	0.2	0.1	1.2*	0.6	0.3*	0.2*
750	1	1.4	0.6	0.3	0.1	1.2*	1.0	0.4*	0.2*
	2	0.9	0.4	0.2	0.1	0.9*	0.7	0.2*	0.1*
	3	1.3	0.5	0.2	0.1	1.2*	0.6	0.3*	0.2*
800	1	1.4	0.6	0.3	0.1	1.2*	1.0	0.3*	0.2*
	2	0.9	0.4	0.2	0.1	0.8*	0.7	0.2*	0.1*
	3	1.3	0.5	0.2	0.1	1.1*	0.6	0.3*	0.2*
850	1	1.4	0.5	0.2	0.1	1.2*	0.9	0.3*	0.2*
	2	0.9	0.4	0.2	0.1	0.8*	0.7	0.2*	0.1*
	3	1.3	0.5	0.2	0.1	1.1*	0.6	0.3*	0.2*
900	1	1.3	0.5	0.2	0.1	1.2*	0.9	0.3*	0.2*
	2	0.9	0.3	0.2	0.1	0.8*	0.6	0.2*	0.1*
	3	1.2	0.5	0.2	0.1	1.1*	0.6	0.3*	0.2*
950	1	1.3	0.5	0.2	0.1	1.2*	0.9	0.3*	0.2*
	2	0.9	0.3	0.2	0.1	0.8*	0.6	0.2*	0.1*
	3	1.2	0.5	0.2	0.1	1.1*	0.6	0.3*	0.2*
1000	1	1.3	0.5	0.2	0.1	1.2*	0.9	0.3*	0.1*
	2	0.9	0.3	0.2	0.1	0.8*	0.6	0.2*	0.1*
	3	1.2	0.5	0.2	0.1	1.1*	0.6	0.3*	0.2*

Table 5: Sensitivity analysis of the Restoration Costs (RC) over the Benefit/Cost ratio of the three different climatic scenarios, with and without forest management and under wildfire duration of 0.5, 1, 1.5 and 2 days. $*$ indicates significant differences ($p \leq 0.05$) between the three climatic scenarios of the Managed and Unmanaged situations.

RC (€ ha^{-1})	Climatic scenario	Water + Biomass + Fire							
		Unmanaged				Managed			
		0.5 d.	1 d.	1.5 d.	2 d.	0.5 d.	1 d.	1.5 d.	2 d.
0	1	9.0	3.6	1.6	0.8	2.3*	1.9	1.3	0.7
	2	6.0	2.3	1.1	0.6	1.6*	1.9	0.9	0.6
	3	8.4	3.4	1.5	0.8	2.2*	1.8	1.2	0.8
500	1	3.9	1.6	0.7	0.4	1.9*	1.6	0.8	0.4
	2	2.6	1.0	0.5	0.2	1.3*	1.3	0.5	0.
	3	3.6	1.4	0.7	0.3	1.8*	1.2	0.7	0.4
1000	1	2.5	1.0	0.4	0.2	1.6*	1.4	0.6*	0.3*
	2	1.6	0.6	0.3	0.2	1.1*	1.0	0.4*	0.2*
	3	2.3	0.9	0.4	0.2	1.5*	0.9	0.5*	0.3*
1500	1	1.8	0.7	0.3	0.2	1.4*	1.2	0.4*	0.2*
	2	1.2	0.5	0.2	0.1	1.0*	0.8	0.3*	0.2*
	3	1.7	0.7	0.3	0.2	1.3*	0.8	0.4*	0.2*
2000	1	1.4	0.6	0.3	0.1	1.2*	1.1	0.4*	0.2*
	2	0.9	0.4	0.2	0.1	0.9*	0.7	0.2*	0.1*
	3	1.3	0.5	0.2	0.1	1.2*	0.6	0.3*	0.2*
2500	1	1.2	0.5	0.2	0.1	1.1	1.0	0.3*	0.1*
	2	0.8	0.3	0.1	0.1	0.8	0.6	0.2*	0.1*
	3	1.1	0.4	0.2	0.1	1.0	0.5	0.3*	0.2*
3000	1	1.0	0.4	0.2	0.1	1.0	0.9	0.3*	0.1*
	2	0.7	0.3	0.1	0.1	0.7	0.5	0.2*	0.1*
	3	0.9	0.4	0.2	0.1	0.9	0.5	0.2*	0.1*
3500	1	0.9	0.4	0.2	0.1	0.9*	0.8	0.2*	0.1*
	2	0.6	0.2	0.1	0.1	0.6*	0.5	0.2 *	0.1*
	3	0.8	0.3	0.1	0.1	0.9*	0.4	0.2*	0.1*
4000	1	0.8	0.3	0.1	0.1	0.8*	0.8	0.2*	0.1*
	2	0.5	0.2	0.1	0.0	0.6*	0.4	0.1*	0.1*
	3	0.7	0.3	0.1	0.1	0.8*	0.4	0.2*	0.1*
4500	1	0.7	0.3	0.1	0.1	0.8*	0.7	0.2*	0.1*
	2	0.5	0.2	0.1	0.0	0.5*	0.4	0.1*	0.1*
	3	0.6	0.3	0.1	0.1	0.7*	0.4	0.2*	0.1*
5000	1	0.6	0.3	0.1	0.1	0.7*	0.7	0.2*	0.1*
	2	0.4	0.2	0.1	0.0	0.5*	0.3	0.1*	0.1*
	3	0.6	0.2	0.1	0.1	0.7*	0.3	0.2*	0.1*
5500	1	0.6	0.2	0.1	0.1	0.7*	0.6	0.2*	0.1*
	2	0.4	0.1	0.1	0.0	0.5*	0.3	0.1*	0.1*
	3	0.5	0.2	0.1	0.1	0.6*	0.3	0.1*	0.1*
6000	1	0.5	0.2	0.1	0.0	0.6*	0.6	0.1*	0.1*
	2	0.4	0.1	0.1	0.0	0.4*	0.3	0.1*	0.1*
	3	0.5	0.2	0.1	0.0	0.6*	0.3	0.1*	0.1*
6500	1	0.5	0.2	0.1	0.0	0.6*	0.6	0.1*	0.1*
	2	0.3	0.1	0.1	0.0	0.4*	0.3	0.1*	0.0*
	3	0.5	0.2	0.1	0.0	0.6*	0.3	0.1*	0.1*
7000	1	0.5	0.2	0.1	0.0	0.6*	0.5	0.1*	0.1*
	2	0.3	0.1	0.1	0.0	0.4*	0.3	0.1*	0.0*
	3	0.4	0.2	0.1	0.0	0.5*	0.2	0.1*	0.1*
7500	1	0.4	0.2	0.1	0.0	0.5	0.5	0.1	0.1
	2	0.3	0.1	0.1	0.0	0.4*	0.2	0.1*	0.0*
	3	0.4	0.2	0.1	0.0	0.5*	0.2	0.1*	0.1*
8000	1	0.4	0.2	0.1	0.0	0.5*	0.5	0.1*	0.0*
	2	0.3	0.1	0.0	0.0	0.4 *	0.2	0.1*	0.0*
	3	0.4	0.2	0.1	0.0	0.5*	0.2	0.1*	0.1*
8500	1	0.4	0.2	0.1	0.0	0.5*	0.5	0.1*	0.0*
	2	0.3	0.1	0.0	0.0	0.3*	0.2	0.1*	0.0*
	3	0.4	0.1	0.1	0.0	0.5*	0.2	0.1*	0.1*
9000	1	0.4	0.1	0.1	0.03	0.5*	0.4	0.1*	0.04*
	2	0.2	0.1	0.0	0.02	0.3*	0.2	0.1*	0.04*
	3	0.3	0.1	0.1	0.03	0.4*	0.2	0.1*	0.05*
9500	1	0.3	0.1	0.1	0.03	0.4*	0.4	0.1*	0.04*
	2	0.2	0.1	0.0	0.02	0.3*	0.2	0.1*	0.03*
	3	0.3	0.1	0.1	0.03	0.4*	0.2	0.1*	0.05*
10000	1	0.3	0.1	0.1	0.03	0.4*	0.4	0.1*	0.04*
	2	0.2	0.1	0.0	0.02	0.3*	0.2	0.1*	0.03*
	3	0.3	0.1	0.1	0.03	0.4*	0.2	0.1*	0.04*