

Supplementary Materials

Contribution of Different Forest Strata on Energy and Carbon Fluxes over an Araucaria Forest in Southern Brazil

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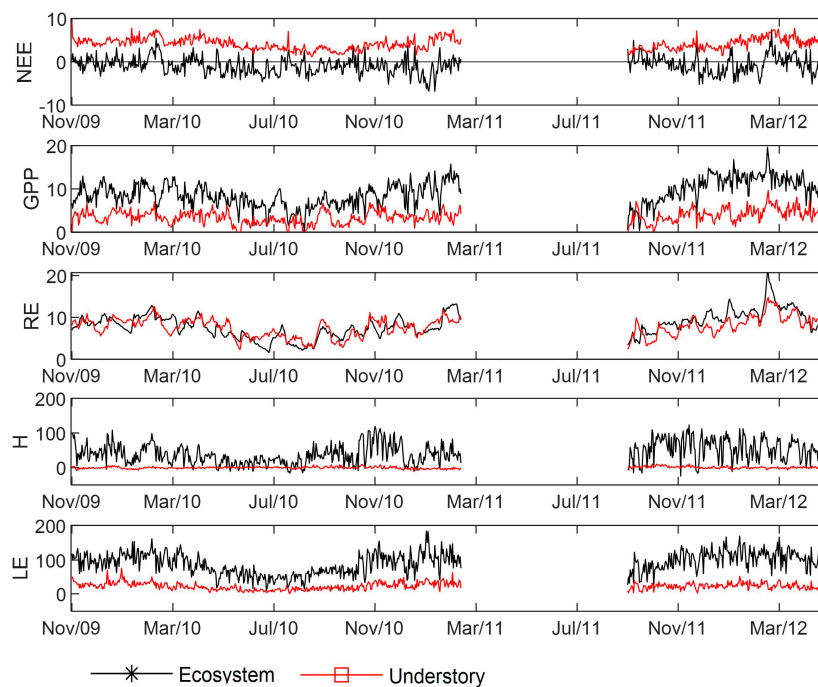


Figure S1. Daily integrated values of (a) NEE, (b) GPP, and (c) RE in ($\text{g C m}^{-2} \text{d}^{-1}$), (d) LE, (e) H in ($\text{MJ m}^{-2} \text{d}^{-1}$) for the Understory and Ecosystem and (f) LAI ($\text{m}^2 \text{m}^{-2}$) and EVI. The non-shaded and shaded areas represent the spring-summer (SS) and autumn-winter (AW) periods, respectively.

Table S1. Seasonality of atmospheric variables and fluxes. Daily mean for Tair (°C) and VPD (hPa). Accumulated in the period for Rg (MJ m⁻² Season⁻¹ for AW and SS and MJ m⁻² yr⁻¹ for Annual), Prec (mm Season⁻¹ for AW and SS and mm yr⁻¹ for Annual), NEE, RE, and GPP in (g C m⁻² Season⁻¹ for AW and SS and g C m⁻² yr⁻¹ for Annual), H and LE in (MJ m⁻² Season⁻¹ for AW and SS and MJ m⁻² yr⁻¹ for Annual), and WUE (GPP/ET) (gC (kg H₂O)⁻¹).

	Autumn-Winter (AW)			Spring-Summer (SS)			Annual		
Tair	15.24			20.30			17.76		
Rg	1972.20			3275.95			5258.94		
VPD	3.73			5.79			4.76		
Prec	768			906			1674		
	Eco	Over	Under	Eco	Over	Under	Eco	Over	Under
NEE	-94.35	-715.16	620.82	-200.02	-981.23	779.32	-298.96	-1699.16	1403.98
GPP	1235.97	779.32	456.65	1656.76	1056.71	598.17	2898.78	1839.18	1059.61
RE	1139.73	71.71	1069.92	1452.97	77.37	1375.61	2599.83	147.59	2452.24
RE/GPP	0.92	0.09	2.34	0.88	0.07	2.30	0.90	0.08	2.31
H	340.28	332.58	7.71	779.16	782.94	-3.30	1121.42	1126.15	4.73
LE	894.58	691.42	203.16	1572.48	1191.63	380.85	2472.11	1886.80	585.31
H/LE	0.38	0.48	0.04	0.50	0.66	-0.01	0.45	0.60	0.01
WUE	3.36	2.74	5.47	2.57	3.28	3.82	2.85	3.97	4.41

Table S2. Coefficient of determination (R^2) between the fluxes and meteorological variables for monthly averages.

Variable	Ecosystem			Understory		
	LE	GPP	RE	LE	GPP	RE
T _{air}	0.74	0.67	0.87	0.72	0.64	0.92
R _g	0.74	0.49	0.53	0.73	0.58	0.40
VPD	0.53	0.38	0.43	0.33	0.68	0.30
EVI	0.53	0.36	0.20	0.28	0.28	0.11
LAI	0.41	0.16	0.25	0.57	0.19	0.21