

Supplement of Hydrol. Earth Syst. Sci., 22, 567–580, 2018
<https://doi.org/10.5194/hess-22-567-2018-supplement>
© Author(s) 2018. This work is distributed under
the Creative Commons Attribution 4.0 License.



Supplement of

Dominant effect of increasing forest biomass on evapotranspiration: interpretations of movement in Budyko space

Fernando Jaramillo et al.

Correspondence to: Fernando Jaramillo (fernando.jaramillo@natgeo.su.se)

The copyright of individual parts of the supplement might differ from the CC BY 4.0 License.

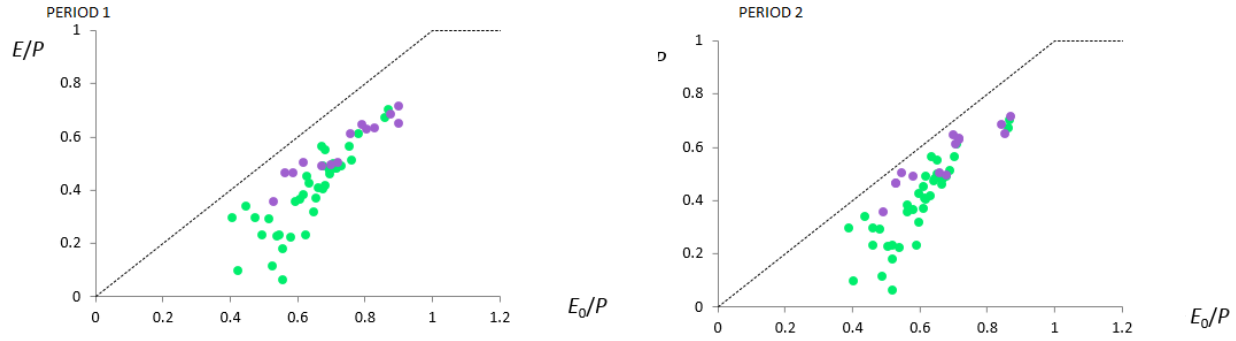


Figure S1- Mean hydroclimatic conditions of the 60 basins illustrated in Budyko space, in terms of the aridity index (E_0/P ; x-axis) and evaporative ratio (E/P ; y-axis) for temperate (purple) and boreal (green) basins during the periods (a) 1961-1986 and (b) 1987-2012.

Table S1- Statistical parameters of the linear regressions between the residual of the evaporative ratio, (E/P), and the forest attributes of forest biomass (V), forest cover (A), forest composition (Q_v) and fraction of precipitation falling as snow (f_s) in the boreal and temperate basin groups. Results are shown for the regressions using annual ($N=52$), three-year ($N=17$) and five-year means ($N=10$) during the period 1961-2012. Significant p-values are shown in bold font and shaded in grey, while nearly significant p-values ($0.05 < p < 0.10$) shown in red font.

Basin group	Time step	V			A			Q_v			f_s		
		R^2	p-value	m	R^2	p-value	m	R^2	p-value	m	R^2	p-value	m
Boreal	one-year	0.09	0.03	4.36E-04	0.02	0.50	-2.39E-01	0.02	0.54	-6.33E-02	0.03	0.29	-1.21E-01
	three-year	0.33	0.02	3.85E-04	0.06	0.48	-2.35E-01	0.05	0.52	-1.14E-01	0.27	0.06	-2.55E-01
	five-year	0.58	0.01	1.08E-03	0.08	0.55	-3.33E-01	0.10	0.52	4.49E-01	0.25	0.18	-3.57E-01
Temperate	one-year	0.09	0.03	6.18E-04	0.07	0.08	3.53E-01	0.04	0.30	3.49E-01	0.00	0.66	-4.64E-02
	three-year	0.21	0.07	5.05E-04	0.14	0.19	2.70E-01	0.12	0.30	3.30E-01	0.08	0.29	-1.37E-01
	five-year	0.20	0.21	8.56E-04	0.06	0.54	3.00E-01	0.10	0.51	3.65E-01	0.01	0.85	-4.90E-02