

# Vegetation Greenness Sensitivity to Precipitation and Its Oceanic and Terrestrial Component in Selected Biomes and Ecoregions of the World

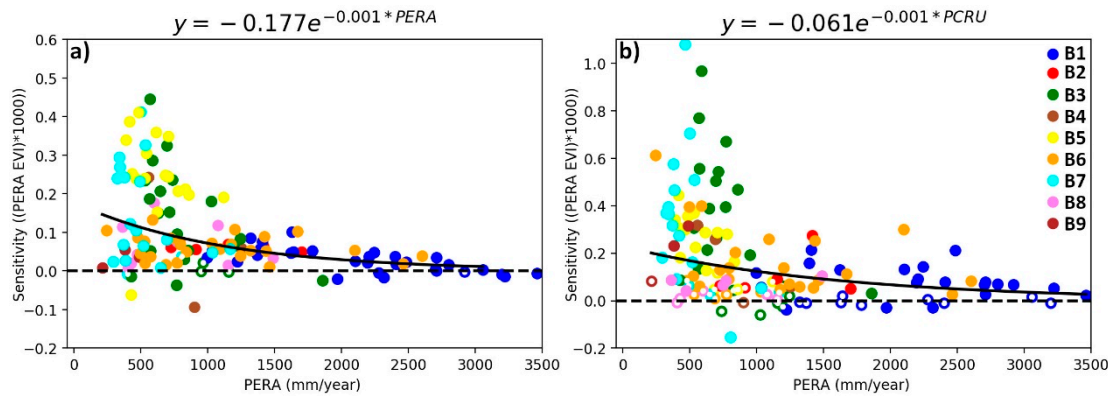
Milica Stojanovic <sup>1,2,\*</sup>, Rogert Sorí <sup>1</sup>, Guergana Guerova <sup>2</sup>, Marta Vázquez <sup>1</sup>, Raquel Nieto <sup>1</sup> and Luis Gimeno <sup>1</sup>

<sup>1</sup> Environmental Physics Laboratory (EPhysLab), Centro de Investigación Mariña, Universidade de Vigo, Campus As Lagoas s/n, 32004 Ourense, Spain; roget.sori@uvigo.es (R.S.); martavazquez@uvigo.es (M.V.); rnieto@uvigo.es (R.N.); l.gimeno@uvigo.es (L.G.)

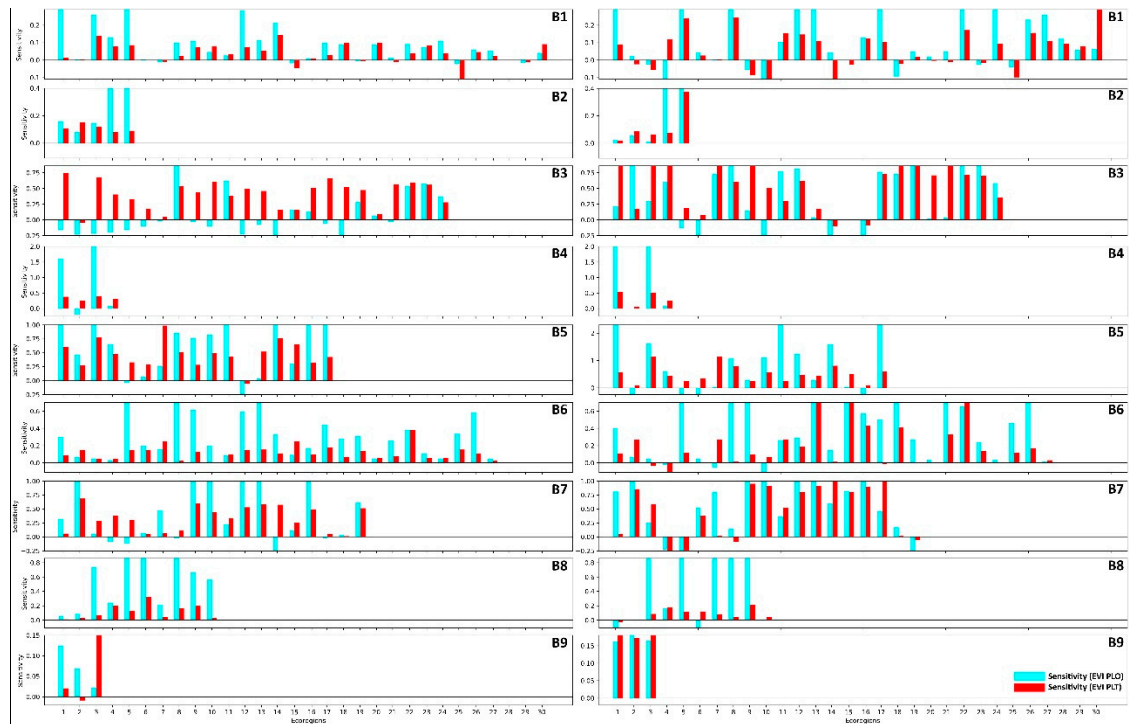
<sup>2</sup> Department Meteorology and Geophysics, Faculty of Physics, Sofia University "St. Kliment Ohridski", 1164 Sofia, Bulgaria; guerova@phys.uni-sofia.bg

\* Correspondence: mstojanovic@uvigo.es

## Supplementary material



**Figure S1. All biomes.** Sensitivity of the enhanced vegetation index (EVI) to precipitation from ERA Interim data ( $P_{ERA}$ ) (a) and sensitivity of the enhanced vegetation index (EVI excluding temperature and radiation) to precipitation from ERA Interim data ( $P_{ERA}$ ) (b). Empty circles represent non-significant values. Sensitivity is estimated for each site as the slope ( $\times 1000$ ) of the linear regression of EVI against annual precipitation. Period of study: 2001-2018.



**Figure S2.** Vegetation sensitivity to precipitation of oceanic (PLO) and terrestrial (PLT) origin according to the enhanced vegetation index (EVI) (a) and enhanced vegetation index (EVI (excluding temperature and precipitation)) (b) for nine biomes: **(B1)** tropical and subtropical moist broadleaf forests eco-regions; **(B2)** tropical and subtropical dry broadleaf forests; **(B3)** temperate broadleaf and mixed forests; **(B4)** temperate coniferous forests; **(B5)** boreal forest/taiga; **(B6)** tropical and subtropical grasslands, savannas, and shrublands; **(B7)** temperate grasslands, savannas, and shrublands; **(B8)** montane grasslands and shrublands; and **(B9)** Mediterranean forest woodlands and scrub.

**Table S1.** The total number of ecoregions and area with positive and negative sensitivity values, expressed as a percentage.

					Excluding temperature and radiation		
		Sensitivity (PCRU EVI)	Sensitivity (PLO EVI)	Sensitivity (PLT EVI)	Sensitivity (PCRU EVI)	Sensitivity (PLO EVI)	Sensitivity (PLT EVI)
	(%)	Ecoregions /Area	Ecoregions /Area	Ecoregions /Area	Ecoregions /Area	Ecoregions /Area	Ecoregions /Area
B1	+	73.3/53.5	80/53.8	73.3/53.5	77/48.7	77/48.5	63.4/51
	-	26.7/46.5	20/46.2	26.7/46.5	23/51.3	23/51.5	36.6/49
B2	+	100/100	100/100	100/100	100/100	100/100	100/100
	-						
B3	+	83.4/55.3	37.5/49.6	95.8/90.4	91.6/61.2	75/57	87.5/55
	-	16.6/44.7	62.5/50.4	4.2/9.6	8.3/39.8	25/43	12.5/45
B4	+	75/53.3	75/53.3	100/100	100/100	75/53.3	100/100
	-	25/46.7	25/46.7			25/47.7	
B5	+	94.2/58.3	88.2/61.7	94.2/58.3	100/100	76.5/64.61	100/100
	-	5.8/41.7	11.8/38.3	5.8/41.7		23.5/35.39	
B6	+	100/100	100/100	100/100	100/100	88.9/60.4	81.5/70.1
	-					11.1/39.6	18.5/29.9
B7	+	94.7/42.9	73.7/45	100/100	95/64.5	79/56.4	79/56
	-	5.3/57.1	26.3/55		5/35.5	21/43.6	21/44
B8	+	100/100	100/100	100/100	90/55.8	70/57.9	90/55.7
	-				10/44.2	30/42.1	10/44.3
B9	+	100/100	100/100	66.6/53	100/100	100/100	100/100
	-			33.4/47			

**Table S2.** Percentage of the no significant values of sensitivity according to Figure 5.

	PLO/EVI	PLT/EVI
< 0	33.5	27.3
0 - 1	11.3	9.6
Excluding temperature and radiation	PLO/EVI	PLT/EVI
< 0	38.6	69.4
0 - 1	33.4	28