

**Defining environmentally heterogeneous sites when faced with conservation urgency and scarce *in situ* data**

Tania Garrido-Garduño, Ella Vázquez-Domínguez, Patricia Dávila-Aranda, Rafael Lira-Saade,  
Maribel Arenas-Navarro, Oswaldo Téllez-Valdés

**Supplementary material: Tables S1 – S5**

**Table S1.** Climatic and terrain variables used for the evaluation of environmental domains for Mexico at the national, regional, and local scale.

<b>Climatic variable</b>	<b>Code</b>
1. Annual Mean Temperature (°C)	Amt
2. Mean Diurnal Range (°C)	Mdr
3. Isothermality (°C)	Iso
4. Temperature seasonality (C of V) (%)	Ts
5. Max Temperature of warmest Period °C)	Mtwap
6. Min Temperature of coldest Period (°C)	Mtcp
7. Temperature Annual Range (°C)	Tar
8. Mean Temperature of wettest Quarter °C)	Mtweq
9. Mean Temperature of driest Quarter (°C)	Mtdq
10. Mean Temperature of warmest Quarter (°C)	Mtwaq
11. Mean Temperature of coldest Quarter (°C)	Mtcq
12. Annual Precipitation (mm)	Ap
13. Precipitation of wettest Period (mm)	Pwp
14. Precipitation Seasonality (C of V) (%)	Ps
15. Precipitation of wettest Quarter (mm)	Pweq
16. Precipitation of warmest Quarter (mm)	Pwaq
17. Precipitation of coldest Quarter (mm)	Pcq
18. Elevation (m)	Elev
19. Aspect (°)	Asp
20. Slope (°)	Slop

**Table S2.** Mean and standard deviation values of each climatic variable for five domains at local scale for the Estación Biológica Chamela (EBC), Mexico.

	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>
<b>Amt (°C)</b>	24.98	24.81	24.59	24.38	24.01
	0.03	0.09	0.07	0.09	0.16
<b>Mdr(°C)</b>	13.26	13.42	13.59	13.77	13.99
	0.07	0.05	0.07	0.06	0.08
<b>Iso (°C)</b>	0.62	0.64	0.65	0.64	0.64
	0.00	0.00	0.00	0.00	0.00
<b>Ts (°C)</b>	0.77	0.76	0.74	0.73	0.70
	0.00	0.00	0.00	0.01	0.01
<b>Mtwap (°C)</b>	33.70	33.47	33.23	33.27	33.32
	0.04	0.10	0.10	0.12	0.11
<b>Mtcp (°C)</b>	12.63	12.41	12.16	11.92	11.55
	0.05	0.09	0.07	0.08	0.15
<b>Tar (°C)</b>	21.07	21.06	21.07	21.35	21.76
	0.01	0.02	0.09	0.14	0.15
<b>Mtweq (°C)</b>	27.46	27.21	26.90	26.58	26.07
	0.05	0.10	0.10	0.12	0.21
<b>Mtdq (°C)</b>	23.15	23.05	22.98	23.20	23.04
	0.05	0.08	0.11	0.14	0.12
<b>Mtwaq (°C)</b>	27.51	27.28	26.98	26.68	26.20
	0.04	0.10	0.09	0.12	0.20
<b>Mtcq (°C)</b>	22.02	21.88	21.71	21.55	21.27
	0.03	0.08	0.06	0.08	0.13
<b>Ap (mm)</b>	836.16	871.08	915.42	964.30	1036.98
	12.71	11.34	15.73	15.90	28.24
<b>Pwp (mm)</b>	56.63	58.60	61.15	63.97	68.18
	0.65	0.65	0.86	0.92	1.61
<b>Ps (mm)</b>	110.15	110.66	111.42	112.37	113.69
	0.29	0.20	0.32	0.31	0.46
<b>Pweq (mm)</b>	560.94	587.48	621.82	660.40	718.29
	10.04	8.63	12.31	12.62	22.48
<b>Pwaq (mm)</b>	494.43	506.20	538.52	570.73	582.83

	9.92	8.27	12.03	11.62	19.28
<b>Pcq (mm)</b>	21.20	21.64	22.07	23.01	29.60
	0.10	0.17	0.13	1.85	1.06
<b>Elev (m)</b>	9.11	51.92	103.89	155.89	241.03
	8.64	16.50	15.44	19.15	36.66
<b>Asp (°)</b>	103.65	186.64	191.11	203.33	201.23
	120.09	107.65	105.66	105.65	110.82
<b>Slo (°)</b>	52.54	88.58	88.09	89.38	90.00
	44.36	11.19	12.93	7.43	0.00

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**Amt**= Annual Mean Temperature (°C); **Mdr**= Mean Diurnal Range (°C); **Iso**= Isothermality (°C); **Ts**= Temperature seasonality (°C); **Mtwap**= Max Temperature of warmest Period (°C); **Mtcp**= Min Temperature of coldest Period (°C); **Tar**= Temperature Annual Range (°C); **Mtweq**= Mean Temperature of wettest Quarter (°C); **Mtdq**= Mean Temperature of driest Quarter (°C); **Mtwaq**= Mean Temperature of warmest Quarter (°C); **Mtcq**= Mean Temperature of coldest Quarter (°C); **Ap**= Annual Precipitation (mm); **Pwp**= Precipitation of wettest Period (mm); **Ps**= Precipitation Seasonality (mm); **Pweq**= Precipitation of wettest Quarter (mm); **Pwaq**= Precipitation of warmest Quarter (mm); **Pcq**= Precipitation of coldest Quarter (mm); **Elev**= Elevation (m); **Asp**= Aspect (°); **Slo**= Slope (°).

**Table S3.** Mean and standard deviation values of each climatic variable for 10 domains at local scale for the Estación Biológica Chamela (EBC), Mexico.

	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>	<b>D6</b>	<b>D7</b>	<b>D8</b>	<b>D9</b>	<b>D10</b>
<b>Amt (°C)</b>	25.00	24.97	24.71	24.24	24.39	24.53	24.62	24.84	24.05	23.78
	0.01	0.05	0.05	0.07	0.07	0.06	0.06	0.06	0.08	0.10
<b>Mdr(°C)</b>	13.21	13.31	13.47	13.87	13.76	13.66	13.55	13.40	13.97	14.09
	0.06	0.05	0.04	0.05	0.04	0.05	0.05	0.04	0.06	0.05
<b>Iso (°C)</b>	0.63	0.63	0.64	0.64	0.64	0.65	0.64	0.64	0.64	0.64
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Ts (°C)</b>	0.77	0.76	0.75	0.72	0.73	0.74	0.74	0.76	0.71	0.69
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mtwap (°C)</b>	33.74	33.67	33.35	33.32	33.27	33.22	33.21	33.51	33.32	33.27
	0.02	0.05	0.06	0.13	0.11	0.13	0.07	0.06	0.11	0.08
<b>Mtcp (°C)</b>	12.67	12.60	12.30	11.77	11.93	12.08	12.19	12.44	11.59	11.34
	0.02	0.05	0.04	0.05	0.06	0.05	0.04	0.05	0.06	0.09
<b>Tar (°C)</b>	21.06	21.07	21.04	21.55	21.34	21.15	21.02	21.07	21.74	21.93
	0.01	0.02	0.02	0.11	0.11	0.12	0.04	0.02	0.12	0.08
<b>Mtweq (°C)</b>	27.50	27.42	27.09	26.37	26.59	26.79	26.94	27.25	26.11	25.77
	0.02	0.05	0.05	0.08	0.08	0.06	0.06	0.06	0.09	0.12
<b>Mtdq (°C)</b>	23.14	23.15	22.99	23.19	23.24	22.98	22.98	23.08	23.07	22.88
	0.04	0.05	0.07	0.08	0.11	0.12	0.12	0.07	0.07	0.08
<b>Mtwaq (°C)</b>	27.54	27.47	27.16	26.49	26.70	26.89	27.02	27.32	26.24	25.91
	0.02	0.05	0.05	0.08	0.08	0.07	0.06	0.06	0.09	0.12
<b>Mtcq (°C)</b>	22.03	22.01	21.80	21.45	21.56	21.67	21.73	21.91	21.30	21.08
	0.02	0.04	0.05	0.06	0.06	0.06	0.06	0.05	0.06	0.08
<b>Ap (mm)</b>	826.19	845.90	885.02	994.47	961.87	933.58	907.07	867.26	1030.87	1077.5
	10.70	9.08	6.64	9.77	9.43	8.44	7.68	6.99	13.46	15.83
<b>Pwp (mm)</b>	56.11	57.14	59.43	65.72	63.83	62.17	60.69	58.36	67.84	70.52
	0.54	0.47	0.34	0.54	0.55	0.45	0.40	0.36	0.74	0.88
<b>Ps (mm)</b>	109.96	110.32	110.85	112.95	112.32	111.77	111.26	110.61	113.60	114.3
	0.26	0.20	0.17	0.20	0.19	0.19	0.18	0.16	0.24	0.23
<b>Pweq (mm)</b>	553.14	568.47	598.08	684.41	658.46	636.05	615.26	584.60	713.44	750.5
	8.58	7.07	5.14	7.81	7.46	6.66	6.01	5.36	10.75	12.54
<b>Pwaq (mm)</b>	501.86	490.34	515.90	569.29	572.93	552.17	532.19	503.60	578.04	609.4

	7.53	7.43	5.32	18.31	7.19	6.68	6.15	5.47	9.95	10.90
<b>Pcq (mm)</b>	21.12	21.29	21.85	26.73	22.44	22.18	22.03	21.58	29.40	30.50
	0.05	0.10	0.09	3.02	0.42	0.12	0.11	0.11	0.17	1.76
<b>Elev (m)</b>	2.11	17.36	72.89	188.75	153.15	120.98	96.69	45.56	232.95	294.1
	4.84	8.85	8.17	13.07	12.85	10.28	9.02	9.10	15.72	21.92
<b>Asp (°)</b>	-0.69	187.55	181.80	208.81	201.95	196.02	188.02	184.94	199.84	197.6
	4.56	104.72	109.77	106.52	106.44	105.65	105.15	107.56	110.18	113.7
<b>Slo (°)</b>	0.54	89.99	86.87	89.90	89.18	87.88	88.15	89.71	90.00	90.00
	6.94	0.02	16.46	2.94	8.52	13.62	12.75	5.09	0.01	0.00

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**Amt**= Annual Mean Temperature (°C); **Mdr**= Mean Diurnal Range (°C); **Iso**= Isothermality (°C); **Ts**= Temperature seasonality (°C); **Mtwap**= Max Temperature of warmest Period (°C); **Mtcp**= Min Temperature of coldest Period (°C); **Tar**= Temperature Annual Range (°C); **Mtweq**= Mean Temperature of wettest Quarter (°C); **Mtdq**= Mean Temperature of driest Quarter (°C); **Mtwaq**= Mean Temperature of warmest Quarter (°C); **Mtcq**= Mean Temperature of coldest Quarter (°C); **Ap**= Annual Precipitation (mm); **Pwp**= Precipitation of wettest Period (mm); **Ps**= Precipitation Seasonality (mm); **Pweq**= Precipitation of wettest Quarter (mm); **Pwaq**= Precipitation of warmest Quarter (mm); **Pcq**= Precipitation of coldest Quarter (mm); **Elev**= Elevation (m); **Asp**= Aspect (°); **Slo**= Slope (°).

**Table S4.** Mean and standard deviation values of each climatic variable for five domains at local scale for Parque Nacional Huatulco (PNH), México.

	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>
<b>Amt (°C)</b>	26.76	26.55	26.81	26.59	26.91
	0.07	0.09	0.07	0.07	0.02
<b>Mdr(°C)</b>	13.02	13.09	12.86	12.96	12.83
	0.05	0.05	0.06	0.05	0.05
<b>Iso (°C)</b>	0.70	0.70	0.70	0.70	0.70
	0.00	0.00	0.00	0.00	0.00
<b>Ts (°C)</b>	0.38	0.37	0.38	0.37	0.37
	0.00	0.00	0.00	0.00	0.00
<b>Mtwap</b>					
<b>(°C)</b>	35.32	35.20	35.24	35.11	35.26
	0.07	0.09	0.08	0.08	0.05
<b>Mtcp (°C)</b>	16.62	16.39	16.76	16.52	16.88
	0.06	0.08	0.06	0.06	0.01
<b>Tar (°C)</b>	18.70	18.81	18.48	18.59	18.39
	0.07	0.08	0.08	0.08	0.06
<b>Mtweq</b>					
<b>(°C)</b>	27.41	27.17	27.45	27.21	27.56
	0.07	0.11	0.08	0.08	0.03
<b>Mtdq (°C)</b>	25.67	25.34	25.73	25.46	25.82
	0.07	0.08	0.07	0.11	0.02
<b>Mtwaq</b>					
<b>(°C)</b>	27.71	27.50	27.75	27.52	27.83
	0.07	0.10	0.07	0.07	0.02
<b>Mtcq (°C)</b>	25.54	25.34	25.58	25.39	25.69
	0.06	0.08	0.07	0.06	0.03
<b>Ap (mm)</b>	1052.40	1097.61	1022.87	1067.65	1002.07
	11.76	15.39	11.14	12.02	3.69
<b>Pwp (mm)</b>	61.79	64.00	60.15	62.48	59.08
	0.60	0.74	0.57	0.66	0.27
<b>Ps (mm)</b>	108.71	108.43	109.47	108.99	109.66
	0.22	0.23	0.29	0.25	0.24

<b>Pweq</b>					
<b>(mm)</b>	615.06	637.55	599.14	621.92	588.80
	5.85	7.63	5.74	6.19	2.36
<b>Pwaq</b>					
<b>(mm)</b>	466.57	483.25	451.91	470.45	450.52
	4.71	5.83	5.13	5.20	12.93
<b>Pcq (mm)</b>	12.99	13.11	12.42	12.55	12.22
	0.20	0.30	0.23	0.20	0.18
<b>Elev (m)</b>	44.04	92.66	22.69	75.63	0.01
	13.89	17.90	14.35	13.74	0.28
<b>Asp (°)</b>	174.99	165.27	173.06	171.28	NA
	100.64	97.18	96.12	98.51	NA
<b>Slo (°)</b>	89.90	89.94	89.93	89.98	1.15
	2.92	2.11	2.45	1.31	10.12

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**Amt**= Annual Mean Temperature (°C); **Mdr**= Mean Diurnal Range (°C); **Iso**= Isothermality (°C); **Ts**= Temperature seasonality (°C); **Mtwap**= Max Temperature of warmest Period (°C); **Mtcp**= Min Temperature of coldest Period (°C); **Tar**= Temperature Annual Range (°C); **Mtweq**= Mean Temperature of wettest Quarter (°C); **Mtdq**= Mean Temperature of driest Quarter (°C); **Mtwaq**= Mean Temperature of warmest Quarter (°C); **Mtcq**= Mean Temperature of coldest Quarter (°C); **Ap**= Annual Precipitation (mm); **Pwp**= Precipitation of wettest Period (mm); **Ps**= Precipitation Seasonality (mm); **Pweq**= Precipitation of wettest Quarter (mm); **Pwaq**= Precipitation of warmest Quarter (mm); **Pcq**= Precipitation of coldest Quarter (mm); **Elev**= Elevation (m); **Asp**= Aspect (°); **Slo**= Slope (°).

**Table S5.** Mean and standard deviation values of each climatic variable for 10 domains at local scale for Parque Nacional Huatulco (PNH), México.

	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>D5</b>	<b>D6</b>	<b>D7</b>	<b>D8</b>	<b>D9</b>	<b>D10</b>
<b>Amt (°C)</b>	26.76	26.55	26.81	26.59	26.91	26.76	26.55	26.81	26.59	26.91
	0.07	0.09	0.07	0.07	0.02	0.07	0.09	0.07	0.07	0.02
<b>Mdr(°C)</b>	13.02	13.09	12.86	12.96	12.83	13.02	13.09	12.86	12.96	12.83
	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.05	0.05
<b>Iso (°C)</b>	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Ts (°C)</b>	0.38	0.37	0.38	0.37	0.37	0.38	0.37	0.38	0.37	0.37
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mtwap (°C)</b>	35.32	35.20	35.24	35.11	35.26	35.32	35.20	35.24	35.11	35.26
	0.07	0.09	0.08	0.08	0.05	0.07	0.09	0.08	0.08	0.05
<b>Mtcp (°C)</b>	16.62	16.39	16.76	16.52	16.88	16.62	16.39	16.76	16.52	16.88
	0.06	0.08	0.06	0.06	0.01	0.06	0.08	0.06	0.06	0.01
<b>Tar (°C)</b>	18.70	18.81	18.48	18.59	18.39	18.70	18.81	18.48	18.59	18.39
	0.07	0.08	0.08	0.08	0.06	0.07	0.08	0.08	0.08	0.06
<b>Mtweq (°C)</b>	27.41	27.17	27.45	27.21	27.56	27.41	27.17	27.45	27.21	27.56
	0.07	0.11	0.08	0.08	0.03	0.07	0.11	0.08	0.08	0.03
<b>Mtdq (°C)</b>	25.67	25.34	25.73	25.46	25.82	25.67	25.34	25.73	25.46	25.82
	0.07	0.08	0.07	0.11	0.02	0.07	0.08	0.07	0.11	0.02
<b>Mtwaq (°C)</b>	27.71	27.50	27.75	27.52	27.83	27.71	27.50	27.75	27.52	27.83
	0.07	0.10	0.07	0.07	0.02	0.07	0.10	0.07	0.07	0.02
<b>Mtcq (°C)</b>	25.54	25.34	25.58	25.39	25.69	25.54	25.34	25.58	25.39	25.69
	0.06	0.08	0.07	0.06	0.03	0.06	0.08	0.07	0.06	0.03
<b>Ap (mm)</b>	1052.40	1097.6	1022.8	1067.6	1002.0	1052.4	1097.6	1022.8	1067.6	1002.0
	11.76	15.39	11.14	12.02	3.69	11.76	15.39	11.14	12.02	3.69
<b>Pwp (mm)</b>	61.79	64.00	60.15	62.48	59.08	61.79	64.00	60.15	62.48	59.08
	0.60	0.74	0.57	0.66	0.27	0.60	0.74	0.57	0.66	0.27
<b>Ps (mm)</b>	108.71	108.43	109.47	108.99	109.66	108.71	108.43	109.47	108.99	109.66
	0.22	0.23	0.29	0.25	0.24	0.22	0.23	0.29	0.25	0.24
<b>Pweq (mm)</b>	615.06	637.55	599.14	621.92	588.80	615.06	637.55	599.14	621.92	588.80
	5.85	7.63	5.74	6.19	2.36	5.85	7.63	5.74	6.19	2.36



<b>Pwaq (mm)</b>	466.57	483.25	451.91	470.45	450.52	466.57	483.25	451.91	470.45	450.52
	4.71	5.83	5.13	5.20	12.93	4.71	5.83	5.13	5.20	12.93
<b>Pcq (mm)</b>	12.99	13.11	12.42	12.55	12.22	12.99	13.11	12.42	12.55	12.22
	0.20	0.30	0.23	0.20	0.18	0.20	0.30	0.23	0.20	0.18
<b>Elev (m)</b>	44.04	92.66	22.69	75.63	0.01	44.04	92.66	22.69	75.63	0.01
	13.89	17.90	14.35	13.74	0.28	13.89	17.90	14.35	13.74	0.28
<b>Asp (°)</b>	174.99	165.27	173.06	171.28	NA	174.99	165.27	173.06	171.28	NA
	100.64	97.18	96.12	98.51	NA	100.64	97.18	96.12	98.51	NA
<b>Slo (°)</b>	89.90	89.94	89.93	89.98	1.15	89.90	89.94	89.93	89.98	1.15
	2.92	2.11	2.45	1.31	10.12	2.92	2.11	2.45	1.31	10.12

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**Amt**= Annual Mean Temperature (°C); **Mdr**= Mean Diurnal Range (°C); **Iso**= Isothermality (°C); **Ts**= Temperature seasonality (°C); **Mtwap**= Max Temperature of warmest Period (°C); **Mtcp**= Min Temperature of coldest Period (°C); **Tar**= Temperature Annual Range (°C); **Mtweq**= Mean Temperature of wettest Quarter (°C); **Mtdq**= Mean Temperature of driest Quarter (°C); **Mtwaq**= Mean Temperature of warmest Quarter (°C); **Mtcq**= Mean Temperature of coldest Quarter (°C); **Ap**= Annual Precipitation (mm); **Pwp**= Precipitation of wettest Period (mm); **Ps**= Precipitation Seasonality (mm); **Pweq**= Precipitation of wettest Quarter (mm); **Pwaq**= Precipitation of warmest Quarter (mm); **Pcq**= Precipitation of coldest Quarter (mm); **Elev**= Elevation (m); **Asp**= Aspect (°); **Slo**= Slope (°).