

Assessment of the National Park network of mainland Spain by the Insecurity Index of vertebrate species

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Plos One

S1 Table. Environmental variables considered. Variables are the average value in the 10 km x 10 km UTM cell. In the case of land use variables, the values correspond to the proportion of land covered by each land use. Sources and original resolutions are detailed under the table.

Variable	Code	Variable	Code
Climate		Climate	
Mean annual temperature (°C)	Tann ¹	Days with precipitation ≥ 0.1 mm	DP01
Mean temperature in spring	TSpr	Days with precipitation ≥ 0.1 mm in spring	DP01Spr
Mean temperature in summer	TSum	Days with precipitation ≥ 0.1 mm in summer	DP01Sum
Mean temperature in autumn	TAut	Days with precipitation ≥ 0.1 mm in autumn	DP01Aut
Mean temperature in winter	TWin	Days with precipitation ≥ 0.1 mm in winter	DP01Win
Mean temperature in January	TJan	Days with precipitation ≥ 1 mm	DP1
Mean temperature in July	TJul	Days with precipitation ≥ 1 mm in spring	DP1Spr
Annual temperature range (=TJul - TJan)	TRan	Days with precipitation ≥ 1 mm in summer	DP1Sum
Minimum annual temperature	TnAnn	Days with precipitation ≥ 1 mm in autumn	DP1Aut
Minimum temperature in spring	TnSpr	Days with precipitation ≥ 1 mm in winter	DP1Win
Minimum temperature in summer	TnSum	Days with precipitation ≥ 10 mm	DP10
Minimum temperature in autumn	TnAut	Days with precipitation ≥ 10 mm in spring	DP10Spr
Minimum temperature in winter	TnWin	Days with precipitation ≥ 10 mm in summer	DP10Sum
Minimum temperature in January	TnJan	Days with precipitation ≥ 10 mm in autumn	DP10Aut
Minimum temperature in July	TnJul	Days with precipitation ≥ 10 mm in winter	DP10Win
Maximum annual temperature	TxAnn	Days with precipitation ≥ 30 mm	DP30
Maximum temperature in spring	TxSpr	Days with precipitation ≥ 30 mm in spring	DP30Spr
Maximum temperature in summer	TxSum	Days with precipitation ≥ 30 mm in summer	DP30Sum
Maximum temperature in autumn	TxAut	Days with precipitation ≥ 30 mm in autumn	DP30Aut
Maximum temperature in winter	TxWin	Days with precipitation ≥ 30 mm in winter	DP30Win
Maximum temperature in January	TxJan	Mean annual runoff (mm)	ROff ³
Maximum temperature in July	TxJul	Mean annual potential evapotranspiration (mm)	PET ⁴
Direct Irradiance at Surface (kWh/m ² /d)	SID ²	Mean annual actual evapotranspiration (mm) (=min [PAnn, PET])	AET
Direct Irradiance at Surface in spring	SIDSpr	Topography	

Direct Irradiance at Surface in summer	SIDSum	Mean altitude (m)	Alt ⁵
Direct Irradiance at Surface in autumn	SIDAut	Altitude difference (calculated from Alt)	DAIt
Direct Irradiance at Surface in winter	SIDWin	Slope (°) (calculated from Alt)	Slop
Surface Incoming Radiation (kWh/m ² /d)	SIS	Southward exposition degree	SE ⁶
Surface Incoming Radiation in spring	SISSpr	Westward exposition degree	WE ⁶
Surface Incoming Radiation in summer	SISSum	Hydrologically conditioned compound topographic index	CTI ⁷
Surface Incoming Radiation in autumn	SISAut	Lithology	
Surface Incoming Radiation in winter	SISWin	Proportion of clay	Clay ⁸
Days with minimum temperature ≤0°C	DTn0	Proportion of silica	Sil
Days with minimum temperature ≤0°C in spring	DTn0Spr	Proportion of calcareous rock	Calc
Days with minimum temperature ≤0°C in summer	DTn0Sum	Proportion of gravels	Grav
Days with minimum temperature ≤0°C in autumn	DTn0Aut	Proportion of gypsum	Gyps
Days with minimum temperature ≤0°C in winter	DTn0Win	Human activity	
Days with minimum temperature ≥20°C	DTn20	Distance to the nearest highway (km)	DHi ⁹
Days with minimum temperature ≥20°C in autumn	DTn20Aut	Distance to the nearest urban centre with more than 100,000 inhabitants (km)	U100
Days with maximum temperature ≥25°C	DTx25	Distance to the nearest urban centre with more than 500,000 inhabitants (km)	U500
Days with maximum temperature ≥25°C in spring	DTx25Spr	Human population density (number of inhabitants/km ²)	HPd ¹⁰
Days with maximum temperature ≥25°C in summer	DTx25Sum	Land use	
Days with maximum temperature ≥25°C in autumn	DTx25Aut	Proportion of non-irrigated arable land	NIAL ¹¹
Total annual precipitation (mm)	PAnn	Proportion of pastures	Past
Total precipitation in spring	PSpr	Proportion of broad-leaved forest	BLF
Total precipitation in summer	PSum	Proportion of coniferous forest	CF
Total precipitation in autumn	PAut	Proportion of mixed forest	MF
Total precipitation in winter	PWin	Proportion of shrublands	Shrub

Sources and original resolutions:

¹ from *Tann* to *TxJul* and from *DTn0* to *DP30Win*: Agencia Estatal de Meteorología [1]. Original resolution: 1 km²

² from *SID* to *SISWin*: Sancho et al. [2]. Original resolution: 3x3 km²

³ IGME [3]. Original resolution: ~1 km²

⁴ from *PET* to *AET*: Font [4]. Original resolution: ~1 km²

⁵ US Geological Survey [5]. Original resolution: ~1 km²

⁶ Farr and Kobrick [6]. Original resolution: ~100x100 m²

⁷ <http://hydrosheds.cr.usgs.gov>. Original resolution: ~600x600 m²

⁸ from *Clay* to *Gyps*: OneGeology-Europe [7]. Original resolution: ~100x100 m²

⁹ from *DHi* to *U500*: IGN [8]. Original resolution: ~1 km²

¹⁰ ORNL [9]. Original resolution: ~1 km²

¹¹ from *NIAL* to *Shrub*: CLC [10]. Original data in vector format.

References

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