

Supplement

Table S1 : COASTPROS-EU database

Column description :

- NUTS2 NAME: Name of the administrative unit NUTS2 (Nomenclature of Territorial Units for Statistics).
- NUTS2 ID: Identification code of the NUTS2 administrative unit.
- GEOSPATIAL LAYER: Specify if georeferenced information on coastal defense was found, it also specifies the format of such information [Yes or No], [shapefile, geoportal or pfd].
- GEOSPATIAL RETURN PERIOD: Provides the return period for the georeferenced information on coastal defense. The column is empty if not found.
- POLICY LAYER: Specify if policy standards on coastal defense were found [Yes or No].
- POLICY RETURN PERIOD: Provides the return period of policy standards on coastal defense if found.
- MODELED LAYER: The column lists if the return period for the NUTS2 is available in Tiggeloven et al. (2020) (Yes or No)
- MODELED RETURN PERIOD: The column provides the value of the return period for the NUTS2 in Tiggeloven et al. (2020) If not modeled, the value is "NA".
- SUMMARY RETURN PERIOD: Provides the most detailed information collected on the coastal defense for each NUTS2 based on the previous columns. If available, it will list the georeferenced defense standards. If not, it will provide policy guidelines. If not, available we finally resort to the values modeled by Tiggeloven et., al. (2020).
- RELEVANT INFORMATION* (available in the excel and shapefile of the COASTPROS-EU database): Provides link to relevant information such as downloadable geospatial data, pdf and sources for the policy design standards.

NUTS2 NAME	NUTS2 ID	GEOSPATIAL LAYER	GEOSPATIAL RETURN PERIOD	POLICY LAYER	POLICY RETURN PERIOD	MODELED LAYER	MODELED RETURN PERIOD	SUMMARY RETURN PERIOD
Jug	AL03	N		N		Y	27	27
Qender	AL02	N		N		Y	34	34
Veri	AL01	N		N		Y	56	56

Prov. West-Vlaanderen	BE25	Y:pdf		Y	1000	Y	150	1000
Bremen	DE50	Y:shapefile		Y		Y	300	300
Hamburg	DE60	N		N		N	NA	NA
Mecklenburg-Vorpommern	DE80	Y:shapefile		Y	100 (or DL: protection height = height(1:200,2010) + SLR(2010-2020, observed) + SLR(2020-2030, computed))	Y	76	100 (or DL: protection height = height(1:200,2010) + SLR(2010-2020, observed) + SLR(2020-2030, computed))
Lüneburg	DE93	N		N		N	NA	NA
Weser-Ems	DE94	N		N		N	NA	NA
Schleswig-Holstein	DEF0	Y:shapefile		Y	100 (or DL: 1/200 + 0,5 m)	Y	60	100 (or DL: 1/200 + 0,5 m)
Hovedstaden	DK01	N		N		Y	175	175
Sjælland	DK02	N		N		Y	49	49
Syddanmark	DK03	Y:pdf		Y	50-200	Y	51	50-200
Midtjylland	DK04	N		N		Y	45	45
Nordjylland	DK05	N		N		Y	44	44
Eesti	EE00	Y:shapefile		N		Y	41	41
Attiki	EL30	N		N		N	NA	NA
Voreio Aigaio	EL41	N		N		Y	41	41
Notio Aigaio	EL42	N		N		Y	41	41
Kriti	EL43	N		N		Y	39	39
Anatoliki Makedonia, Thraki	EL51	N		N		Y	50	50
Kentriki Makedonia	EL52	N		N		Y	50	50
Dytiki Makedonia	EL53	N		N		Y	41	41

Ipeiros	EL54	N		N		Y	41	41
Thessalia	EL61	N		N		Y	40	40
Ionia Nisia	EL62	N		N		N	NA	NA
Dytiki Elláda	EL63	N		N		Y	41	41
Stereia Elláda	EL64	N		N		Y	40	40
Peloponnisos	EL65	N		N		Y	41	41
Galicia	ES11	N		Y	100-500	Y	64	100-500
Principado de Asturias	ES12	N		Y	100-500	Y	158	100-500
Cantabria	ES13	N		Y	100-500	Y	99	100-500
País Vasco	ES21	N		Y	100-500	Y	257	100-500
Cataluña	ES51	N		Y	100-500	Y	41	100-500
Comunitat Valenciana	ES52	N		Y	100-500	Y	50	100-500
Illes Balears	ES53	N		Y	100-500	Y	42	100-500
Andalucía	ES61	N		Y	100-500	Y	64	100-500
Región de Murcia	ES62	N		Y	100-500	Y	40	100-500
Ciudad de Ceuta	ES63	N		Y	100-500	N	NA	100-500
Ciudad de Melilla	ES64	N		Y	100-500	N	NA	100-500
Canarias	ES70	N		Y	100-500	Y	49	100-500
Länsi-Suomi	FI19	N		Y	20	N	NA	20
Helsinki-Uusimaa	FI1B	N		Y	20	Y	48	20
Etelä-Suomi	FI1C	N		Y	20	N	NA	20
Pohjois- ja Itä-Suomi	FI1D	N		Y	20	N	NA	20
Åland	FI20	N		Y	20	N	NA	20
Basse-Normandie	FRD1	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	51	5-10: agricultural area, 20-100: populated areas

Haute-Normandie	FRD2	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	80	5-10: agricultural area, 20-100: populated areas
Nord-Pas de Calais	FRE1	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	76	5-10: agricultural area, 20-100: populated areas
Picardie	FRE2	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	53	5-10: agricultural area, 20-100: populated areas
Pays de la Loire	FRG0	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	50	5-10: agricultural area, 20-100: populated areas
Bretagne	FRH0	Y:shapefile	The decree divides the structures into 4 classes: A,B,C,D, depending on the height of the structure and the protected population: A: protected population greater than 50,000 and height of the structure greater than 1m; B: protected population between 1,000 and 50,000 and height of the structure greater than 1m; C:	Y	5-10: agricultural area, 20-100: populated areas	Y	60	The decree divides the structures into 4 classes: A,B,C,D, depending on the height of the structure and the protected population: A: protected population greater than 50,000 and height of the structure greater than 1m; B: protected population between 1,000 and 50,000 and height of the structure greater than 1m; C: protected population of between 10 and 1,000 and height of the structure greater than 1m; D: protected population less than 10 or/and height of the structure less than 1 m.

			protected population of between 10 and 1,000 and height of the structure greater than 1m; D: protected population less than 10 or/and height of the structure less than 1 m.					
Aquitaine	FR11	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	55	5-10: agricultural area, 20-100: populated areas
Poitou-Charentes	FR13	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	51	5-10: agricultural area, 20-100: populated areas
Languedoc-Roussillon	FRJ1	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	68	5-10: agricultural area, 20-100: populated areas
Provence-Alpes-Côte d'Azur	FRL0	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	41	5-10: agricultural area, 20-100: populated areas
Corse	FRM0	Y:shapefile		Y	5-10: agricultural area, 20-100: populated areas	Y	51	5-10: agricultural area, 20-100: populated areas
Panonska Hrvatska	HR02	N		N		Y	46	46
Jadranska Hrvatska	HR03	N		N		Y	46	46
Grad Zagreb	HR05	N		N		Y	46	46
Sjeverna Hrvatska	HR06	N		N		Y	46	46

Northern and Western	IE04	Y:webportal		Y	100	Y	46	100
Southern	IE05	Y:webportal		Y	100	Y	46	100
Eastern and Midland	IE06	Y:webportal		Y	200	Y	46	200
Liguria	ITC3	N		Y	100-50	N	NA	100-50
Abruzzo	ITF1	N		Y	100-50	Y	66	100-50
Molise	ITF2	N		Y	100-50	Y	45	100-50
Campania	ITF3	N		Y	100-50	Y	63	100-50
Puglia	ITF4	N		Y	100-50	N	NA	100-50
Basilicata	ITF5	N		Y	100-50	N	NA	100-50
Calabria	ITF6	N		Y	100-50	Y	44	100-50
Sicilia	ITG1	N		Y	100-50	Y	52	100-50
Sardegna	ITG2	N		Y	100-50	Y	81	100-50
Veneto	ITH3	N		Y	100-50	Y	47	100-50
Friuli-Venezia Giulia	ITH4	N		Y	100-50	Y	54	100-50
Emilia-Romagna	ITH5	N		Y	100-50	Y	63	100-50
Toscana	ITI1	N		Y	100-50	Y	63	100-50
Marche	ITI3	N		Y	100-50	Y	57	100-50
Lazio	ITI4	N		Y	100-50	Y	65	100-50
Sostinės regionas	LT01	N		N		Y	41	41
Vidurio ir vakarų Lietuvos regionas	LT02	N		N		Y	41	41
Latvija	LV00	N		N		Y	41	41
Црна Гора	ME00	N		N		N	NA	NA
Severna Makedonija	MK00	N		N		N	NA	NA
Malta	MT00	N		M		N	NA	NA
Groningen	NL11	Y:webportal		Y	1000-3000	Y	1000	1000-3000

Friesland (NL)	NL12	Y:webportal		Y	1000-3000	Y	1000	1000-3000
Noord-Holland	NL32	Y:webportal		Y	1000-3000	Y	1000	1000-3000
Zuid-Holland	NL33	Y:webportal		Y	10000-30000	Y	1000	10000-30000
Zeeland	NL34	Y:webportal		Y	10000-30000	Y	1000	10000-30000
Agder og Sør-Østlandet	NO09	N		N		Y	39	39
Innlandet	NO02	N		N		Y	40	40
Jan Mayen and Svalbard	NO0B	N		N		N	NA	NA
Nord-Norge	NO07	N		N		N	NA	NA
Oslo og Viken	NO08	N		N		N	NA	NA
Trøndelag	NO06	N		N		N	NA	NA
Vestlandet	NO0A	N		N		Y	39	39
Zachodniopomorskie	PL42	N		Y	20,50,100,200,500 Based on economic value of land cover, or ecological value	Y	48	20,50,100,200,500 Based on economic value of land cover, or ecological value
Warmińsko-mazurskie	PL62	N		Y	20,50,100,200,500 Based on economic value of land cover, or ecological value	Y	112	20,50,100,200,500 Based on economic value of land cover, or ecological value
Pomorskie	PL63	N		Y	20,50,100,200,500 Based on economic value of land cover, or ecological value	Y	44	20,50,100,200,500 Based on economic value of land cover, or ecological value
Norte	PT11	N		Y	20, 100 , 1000	Y	152	20, 100 , 1000
Algarve	PT15	N		Y	20, 100 , 1000	Y	58	20, 100 , 1000
Centro (PT)	PT16	Y:pdf		Y	20, 100 , 1000	Y	104	20, 100 , 1000
Área Metropolitana de Lisboa	PT17	N		Y	20, 100 , 1000	Y	275	20, 100 , 1000

Alentejo	PT18	N		Y	20, 100 , 1000	N	NA	20, 100 , 1000
Região Autónoma dos Açores	PT20	N		Y	20, 100 , 1000	N	NA	20, 100 , 1000
Região Autónoma da Madeira	PT30	N		Y	20, 100 , 1000	N	NA	20, 100 , 1000
Stockholm	SE11	N		N		Y	39	39
Östra Mellansverige	SE12	N		N		N	NA	NA
Småland med öarna	SE21	N		N		Y	40	40
Sydsverige	SE22	N		N		Y	58	58
Västsvrige	SE23	N		N		Y	40	40
Mellersta Norrland	SE32	N		N		N	NA	NA
Norra Mellansverige	SE31	N		N		N	NA	NA
Övre Norrland	SE33	N		N		N	NA	NA
Zahodna Slovenija	SI04	N		N		Y	78	78
Tees Valley and Durham	UKC1	N		Y	50	Y	74	50
Northumberland and Tyne and Wear	UKC2	N		Y	50	Y	74	50
Cumbria	UKD1	N		Y	50	Y	74	50
Lancashire	UKD4	N		Y	50	Y	74	50
Cheshire	UKD6	N		Y	100	Y	74	100
Merseyside	UKD7	N		Y	150	Y	74	150
East Yorkshire and Northern Lincolnshire	UKE1	N		Y	50	Y	74	50
North Yorkshire	UKE2	N		Y	50	Y	74	50
South Yorkshire	UKE3	N		Y	100	Y	74	100
Derbyshire and Nottinghamshire	UKF1	N		Y	100	Y	74	100

Lincolnshire	UKF3	N		Y	200	Y	74	200
East Anglia	UKH1	N		Y	150	Y	74	150
Essex	UKH3	N		Y	500	Y	74	500
Inner London — West	UKI3	N		Y	1000	Y	74	1000
Inner London — East	UKI4	N		Y	1000	Y	74	1000
Outer London — East and North East	UKI5	N		Y	1000	Y	74	1000
Outer London — West and North West	UKI7	N		Y	1000	Y	74	1000
Surrey, East and West Sussex	UKJ2	N		Y	100	Y	74	100
Hampshire and Isle of Wight	UKJ3	N		Y	30	Y	74	30
Kent	UKJ4	N		Y	300	Y	74	300
Gloucestershire, Wiltshire and Bristol/Bath area	UKK1	N		Y	100	Y	74	100
Dorset and Somerset	UKK2	N		Y	100	Y	74	100
Cornwall and Isles of Scilly	UKK3	N		Y	50	Y	74	50
Devon	UKK4	N		Y	125	Y	74	125
West Wales and The Valleys	UKL1	N		Y	150	Y	74	150
East Wales	UKL2	N		Y	200	Y	74	200
North Eastern Scotland	UKM5	N		Y	50	Y	45	50
Highlands and Islands	UKM6	N		Y	25	Y	45	25

Eastern Scotland	UKM7	N		Y	50	Y	45	50
West Central Scotland	UKM8	N		Y	50	Y	45	50
Southern Scotland	UKM9	N		Y	50	Y	45	50
Northern Ireland	UKN0	N		Y	100	Y	65	100

Table S2: Datapoints included in the FLOPROS coastal design layer per country.

Country	Datapoints
Argentina	1
Belgium	1
Canada	1
China	30
Germany	1
United Kingdom	1
Ireland	1
Italy	1
Japan	1
Mozambique	1
Nigeria	1
Netherlands	12
Singapore	1
Thailand	1