

Table S1.ILTER-CMS site name, location, year of establishment and habitat type. Site name, geographic coordinates and establishment obtained from DEIMS (<https://deims.org/site/list>) on 2nd September 2019. Habitat type was obtained with a survey conducted with ILTER-CMS site managers for this study. Negative longitudes refer to West, negative latitudes to South.

Site Name	Country	Longitude	Latitude	Established	Habitat
LTSER Dutch Wadden Sea Area	Netherlands	5.25	53.25	1872	Estuary, Salt marsh, Coastal wetland, Sandy beach, Marine coastal
Western Gulf of Finland LTER site WelFin	Finland	23.30	59.91	1902	Estuary, Marine coastal, Shelf and regional sea
Mar Piccolo of Taranto	Italy	17.28	40.48	1914	Marine coastal/transitional waters
Shirahama	Japan	135.34	33.69	1922	Marine coastal
LTSER Engure	Latvia	23.25	57.22	1951	Sandy beach
Westhoek Coastal Dunes	Belgium	4.25	51.24	1953	
NagauraTidalflats; Kumamoto University	Japan	130.41	32.54	1956	
Boknis Eck Time Series Station (SW Baltic Sea)	Germany	10.04	54.52	1957	Shelf and regional seas
Asko Laboratory, Himmerfjarden, Stockholm University Baltic Sea Centre (LTER)	Sweden	17.60	58.84	1961	
Helgoland Roads	Germany	7.90	54.18	1962	Marine coastal, Shelf and regional sea
Bothnian Bay LTSER Platform	Finland	24.08	64.27	1962	
Archipelago Research Institute	Finland	21.96	60.24	1964	
Tsitsikamma National Park Marine Protected Area	South Africa	23.91	-34.05	1964	
Laguna di Venezia	Italy	12.34	45.43	1966	Coastal lagoon
Brazilian Oceanic Islands - PELD/ILOC	Brazil	-32.42	-3.86	1970	Oceanic Island
Golfo di Venezia	Italy	12.40	45.40	1970	Marine coastal
Sesoko Island Area	Japan	127.87	26.64	1971	Coral reef
Eastern Ligurian Sea	Italy	10.00	44.00	1973	

Darss-Zingst Bodden	Germany	12.70	54.43	1976	Estuary, Coastal lagoon
LTER Lacco Ameno	Italy	13.90	40.76	1976	Marine coastal
Patos Lagoon Estuary and Adjacent Coast	Brazil	-52.07	-32.00	1978	
North Sea Benthos Observatory	Germany	3.00	57.00	1978	Marine coastal, Shelf and regional sea
Sanya Tropical Marine Boplogical Research Station	China	109.47	18.22	1979	
Lithuanian Coastal Site (LT-04 Nagliai, Curonian Spit NP)	Lithuania	21.28	55.57	1980	
Ecosistemas Costeros de la Peninsula de Yucatan Mex-LTER	Mexico	-90.00	21.05	1980	
Jiaozhou Bay Marine Ecosystem Research Station	China	120.25	36.10	1981	
Estaci3pn Costera de Investigaciones Marinas, Las Cruces	Chile	-71.63	-33.50	1982	
Delta del Ebro	Spain	0.71	40.67	1983	River Delta, Salt marsh, Coastal lagoon, Coastal wetland, Sandy beach
Sozopol - Black Sea	Bulgaria	27.70	42.42	1983	Marine coastal
Gulf of Trieste	Slovenia	13.55	45.55	1984	Marine coastal
LTER Marechiarra	Italy	14.25	40.82	1984	Marine coastal
Ore estuary (Orefjarden), Umea Marine Sciences Centre (LTER)	Sweden	19.84	63.56	1985	
Golfo di Trieste	Italy	13.71	45.70	1986	Marine coastal
Macrosito Baia Terranova (MBT)	Italy	164.13	-74.72	1987	
Virginia Coast Reserve LTER	United States of America	-75.17	37.50	1987	Salt marsh, Coastal lagoon, Coastal wetland, Sandy beach
Transetto Senigallia-Susak	Italy	13.20	43.70	1988	Marine coastal
National Park Lower Saxony Wadden Sea	Germany	7.68	53.74	1989	
Delta del Po e Costa Romagnola	Italy	12.47	44.75	1989	River Delta, Marine

					coastal
La Mancha Mex-LTER	Mexico	-96.38	19.59	1990	
Acquatina	Italy	18.24	40.44	1990	
Arrecifes del Pacifico Mex-LTER	Mexico	-107.00	20.30	1990	
Palmer Station LTER	United States of America	-64.05	-64.77	1990	
Curonian Spit National Park	Lithuania	21.10	55.52	1991	
Black Sea	Bulgaria	27.93	43.19	1991	Marine coastal
Scheldt Estuary and its alluvial plains	Belgium	3.75	51.05	1991	
Lake Shinji and Lake Nakaumi	Japan	132.95	35.45	1992	
Ecosistemas Costeros Mex-LTER	Mexico	-104.65	19.10	1992	
Plum Island Ecosystems	United States of America	-71.22	42.83	1992	Estuary, Salt marsh, Coastal wetland
Mooring A: Southwestern Ross Sea, Ross Island	Antarctica	169.09	-76.70	1992	
Finokalia Atmospheric Observatory	Greece	25.67	35.34	1993	
National Park Schleswig-Holstein Wadden Sea	Germany	8.93	54.32	1994	
Mooring B: North Central Ross Sea, Joides Basin	Antarctica	175.09	-74.01	1994	
Mooring D: Western Ross Sea, TerraNova Bay Polynya	Italy	164.54	-75.13	1994	
Mooring H: Central Ross Sea	Italy	-177.33	-75.95	1994	
Engure marine site	Latvia	23.14	57.35	1995	
Alimini	Italy	18.44	40.20	1997	Coastal lagoon
Tamandare Coastal-Marine Complex, APA Costa dos Corais.	Brazil	-35.09	-8.77	1997	
Restingas and coastal lagoons of the northern Rio de Janeiro	Brazil	-41.53	-22.18	1999	

LTER Observatory HAUSGARTEN	Germany	4.00	79.00	1999	Marine coastal, Shelf and regional sea, Polar sea, Deep Sea
Florida Coastal Everglades	United States of America	-80.89	25.29	2000	
LTSER Zone Atelier Antarctique	Antarctica	139.00	-67.00	2000	
Georgia Coastal Ecosystems LTER	United States of America	-81.34	31.41	2000	
Multi scale observatory of flood dYnamiCs and hYdrodynamicS in karSt- MEDYCYSS	France	3.85	43.72	2000	
Kenting Coral Reef	Taiwan	120.83	21.83	2000	
Santa Barbara Coastal LTER	United States of America	-119.84	34.41	2000	
Foce Saccione-Bonifica Ramitelli (Campobasso)	Italy	15.10	41.93	2001	Coastal dune
Foce Trigno-Marina di Petacciato (Campobasso)	Italy	14.83	42.04	2001	Coastal dune
Abrolhos Bank	Brazil	-38.51	-18.31	2001	
Centro Científico Huinay	Chile	-72.25	-42.22	2001	
Illas Atlánticas / Pontevedra (ES-SNE)	Spain	-8.88	42.55	2002	
Poitiers	France	0.41	46.56	2002	
TERN - LTERN - Jervis Bay Booderee National Park Plot Network	Australia	150.69	-35.15	2002	
Belgian coastal waters and sand bank systems	Belgium	2.70	51.46	2002	Marine coastal
Nizzanim (NIM)	Israel	34.60	31.73	2003	
Monumento Naturale Torre Flavia (Roma)	Italy	12.05	41.97	2003	Coastal dune
Ketenisse	Belgium	4.31	51.28	2003	
Marine research station "Zmiinyi island"	Ukraine	30.20	45.26	2003	Marine coastal, Shelf and regional sea

Cap Prud'Homme Site	Antarctica	139.91	-66.69	2004	
California Current Ecosystem	United States of America	-117.29	32.87	2004	
Moorea Coral Reef LTER	United States of America	-149.67	-17.38	2005	Coral reef
Akkeshi-ko estuary and Akkeshi Bay	Japan	144.84	43.02	2006	Estuary, Coastal wetland, Sandy beach, Marine coastal
Choshi Rocky Shore	Japan	140.86	35.70	2006	
Kominato Rocky Shore	Japan	140.18	35.12	2006	
Laguna di Cabras	Italy	8.48	39.88	2006	Coastal lagoon, Marine coastal
Laguna di S'Ena Arrubia	Italy	8.57	39.82	2006	Coastal lagoon, Marine coastal
Laguna di Santa Giusta	Italy	8.58	39.86	2006	Coastal lagoon, Marine coastal
Awajishima	Japan	135.02	34.58	2006	
Golfo dell'Asinara	Italy	8.29	41.06	2006	Marine coastal
Golfo di Olbia	Italy	9.59	40.92	2006	Marine coastal
Otsuchi Bay	Japan	141.93	39.33	2006	
Suou-nada and Aki-nada in Seto Inland Sea	Japan	132.27	34.27	2006	Coastal wetland, Marine coastal
Marine Area of Portofino Promontory	Italy	9.19	44.30	2007	
Algoa Bay Long Term Monitoring and Research Site	South Africa	25.99	-33.88	2008	
Sacca di Goro	Italy	12.34	44.81	2008	
Valli di Comacchio	Italy	12.18	44.61	2008	
Curonian lagoon biosphere polygon	Lithuania	21.15	55.38	2009	
Guanabara Bay, Rio de Janeiro,	Brazil	-43.03	-22.68	2009	
Navarino Environmental Observatory	Greece	21.66	36.99	2010	
Deep-sea in Sagami Bay	Japan	139.23	35.00	2010	

Kagoshima Bay	Japan	130.75	31.67	2010	
LTER Ria de Aveiro	Portugal	-8.70	40.67	2011	Estuary, Salt marsh, Coastal lagoon, Marine coastal
LTER MONDEGO ESTUARY	Portugal	-8.48	40.70	2011	
LTSER Zone Atelier Brest Iroise	France	-4.51	48.28	2012	
Simon Stevin Research Vessel	Belgium	2.70	51.46	2012	
Upwelling ecosystem of Cabo Frio (RJ)	Brazil	-42.00	-23.00	2012	
VLIZ Marine Observatory	Belgium	2.70	51.46	2012	
LTER Minho Estuary	Portugal	-8.46	41.55	2013	
LTER MIRA ESTUARY	Portugal	-8.43	37.39	2013	
Benthic Trawl Experiment	South Africa	15.34	-30.80	2014	
Agulhas System Climate Array	South Africa	28.40	-35.32	2015	
VLIZ Thornton Bouy	Belgium	3.00	51.58	2015	
Morris Kahn Marine Research Station	Israel	34.89	32.49	2015	
PELD Coral Coast Alagoas	Brazil	-35.62	-9.55	2016	
Eastern Brazil Marine Ecoregion Coastal Habitats - Espirito Santo	Brazil	-40.12	-19.95	2017	Estuary, Mangrove, Marine coastal
Northeast U.S. Shelf (NES) LTER	United States of America	-70.65	40.75	2017	