

D14.2.2 Version: 1.0





















DATA ADEQUACY REPORT

Deliverable 14.2.2 Annexes 1 to 4

Lead contractor for this deliverable: Ifremer

Work Package 14 - Data adequacy report - Vol. 2							
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A project funded by: **EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND** FISHERIES, MARITIME POLICY ATLANTIC, OUTERMOST REGIONS AND ARCTIC



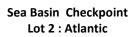


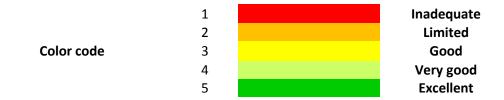


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Annex1 – List of components



	Challenge CH01_Windfarm Siting											
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score	P02	P01				
		CH01_Product_1_1	Seabed depth			5	Bathymetry and Elevation	Sea-floor depth (below Lowest Astronomical Tide datum) {bathymetric depth} in the water body				
	2	CH01_Product_1_2	Wave-induced water motion			3	Wave height and period statistics	Significant height of waves {Hs} on the water body				
CH01_Product_1 / Map of offshore windfarm siting suitability in the geographic		CH01_Product_1_3	Wind speed			2	Wind strength and direction	Wind speed (10m) in the atmosphere by model prediction				
area where waters of France, Ireland and UK meet		ea where waters of France,	CH01_Product_1_4	Essential Seabed habitats			3	Habitat extent	OSPAR Distribution and extent of threatened and/or declining habitats			
		CH01_Product_1_5	Essential Fish habitats			1	Habitat extent	Essencial Fish habitat extent				
		CH01_Product_1_6	Seabed substrate			2	Lithology	Spatial distribution of Seabed substrate types				
		CH01_Product_1_7	Coastline			4	Terrestrial mapping	coastline				



		CH01_Product_1_8	Fisheries spatial occupation	Inadequate		Administrative units	Fishing areas
		CH01_Product_1_9	MPA Network		3	Horizontal spatial co- ordinates	MPA Network - spatial extent
		CH01_Product_1_10	Vessel Traffic Density		2	Transport activity	Vessel Traffic Density
		CH01_Product_1_11	Submarine cables		3	Industrial activity	Submarine telecommunication cables
		CH01_Product_1_12	Offshore Installations		3	Industrial activity	Offshore Instalations
		CH01_Product_1_13	limits of IBA sites	Inadequat		Administrative units	Limits of IBA sites
		CH01_Product_1_14	Ports location		3	Terrestrial mapping	Ports geographic location
		CH01_Product_1_15	Dredging sites		2	Industrial activity	Dredging sites and locations.
		CH01_Product_1_16	Aggregate Extraction sites		2	Industrial activity	Aggregate Extraction locations
		CH01_Product_1_17	Munition sites		3	Administrative units	Munition dumping areas
		CH01_Product_1_18	Dredge spoil sites		3	Administrative units	Dredge spoil dumping areas
		CH01_Product_1_19	Cables and pipelines		2	Industrial activity	Cables and pipelines
		CH01_Product_1_20	Offshore activities sites		2	Industrial activity	Offshore activities
		CH01_Product_1_21	Natura2000 spatial extent		3	Administrative units	Natura2000 spatial extent
CH01_Product_2 / Map of		CH01_Product_2_1	Seabed depth		5	Horizontal spatial co- ordinates	MPA Network - spatial extent
windfarm siting suitability in the area where waters of	2	CH01_Product_2_2	Wave-induced water motion		3	Wave height and period statistics	Significant height of waves {Hs} on the water body
France and Spain meet in Bay of Biscay on 500 m contour		CH01_Product_2_3	Wind speed		2	Wind strength and direction	Wind speed in the atmosphere
		CH01_Product_2_4	Essential Seabed		4	Habitat extent	Threatened and/or



	habitats				declining habitats
CH01_Product_2_5	Essential Fish habitats		1	Habitat extent	Essencial Fish habitat extent
CH01_Product_2_6	Seabed substrate		2	Lithology	Spatial distribution of Seabed substrate types
CH01_Product_2_7	Coastline		4	Terrestrial mapping	coastline
CH01_Product_2_8	Fisheries spatial occupation	Inadequat		Administrative units	Fishing areas
CH01_Product_2_9	MPA Network		3	Horizontal spatial co- ordinates	MPA Network - spatial extent
CH01_Product_2_10	Vessel Traffic Density		2	Transport activity	Vessel Traffic Density
CH01_Product_2_11	Submarine cables		3	Industrial activity	Submarine telecommunication cables
CH01_Product_2_12	Offshore Installations		3	Industrial activity	Offshore Instalations
CH01_Product_2_13	limits of IBA sites	Inadequat		Administrative units	Limits of IBA sites
CH01_Product_2_14	Ports location		4	Terrestrial mapping	Ports geographic location
CH01_Product_2_15	Dredging sites		2	Industrial activity	Dredging sites and locations.
CH01_Product_2_16	Aggregate Extraction sites		2	Industrial activity	Aggregate Extraction locations
CH01_Product_2_17	Munition sites		3	Administrative units	Munition dumping areas
CH01_Product_2_18	Dredge spoil sites		3	Administrative units	Dredge spoil dumping areas
CH01_Product_2_19	Cables and pipelines		1	Industrial activity	Cables and pipelines
CH01_Product_2_20	Offshore activities sites		2	Industrial activity	Offshore activities
CH01_Product_2_21	Natura2000 spatial extent		3	Administrative units	Natura2000 spatial extent



		CH01_Product_3_1	Seabed depth			5	Bathymetry and Elevation	Sea-floor depth (below Lowest Astronomical Tide datum) {bathymetric depth} in the water body											
		CH01_Product_3_2	Wave-induced water motion			4	Wave height and period statistics	Significant height of waves {Hs} on the water body											
							CH01_Product_3_3	Wind speed			1	Wind strength and direction	Wind speed in the atmosphere						
		CH01_Product_3_4	Essential Seabed habitats			3	Habitat extent	Threatened and/or declining habitats											
														CH01_Product_3_5	Essential Fish habitats			1	Habitat extent
CH01_Product_3 / Map of		CH01_Product_3_6	Seabed substrate			3	Lithology	Spatial distribution of Seabed substrate types											
windfarm siting suitability in	2	CH01_Product_3_7	Coastline			4	Terrestrial mapping	coastline											
the area of Southern border of Portugal and Spain at 20 m		CH01_Product_3_8	Fisheries spatial occupation	Inadequate			Administrative units	Fishing areas											
depth		CH01_Product_3_9	MPA Network			3	Horizontal spatial co- ordinates	MPA Network - spatial extent											
		CH01_Product_3_10	Vessel Traffic Density			2	Transport activity	Vessel Traffic Density											
		CH01_Product_3_11	Submarine cables			3	Industrial activity	Submarine telecommunication cables											
		CH01_Product_3_12	Offshore Installations			3	Industrial activity	Offshore Instalations											
		CH01_Product_3_13	limits of IBA sites		Inadequate		Administrative units	Limits of IBA sites											
		CH01_Product_3_14	Ports location			4	Terrestrial mapping	Ports geographic location											
		CH01_Product_3_15	Dredging sites			2	Industrial activity	Dredging sites and locations.											
		CH01_Product_3_16	Aggregate Extraction sites			2	Industrial activity	Aggregate Extraction locations											



		CH01_Product_3_17	Munition sites		Ī	2	Administrative units	Munition dumping areas
		CH01_Product_3_18	Dredge spoil sites			3	Administrative units	Dredge spoil dumping areas
		CH01_Product_3_19	Cables and pipelines			1	Industrial activity	Cables and pipelines
		CH01_Product_3_20	Offshore activities sites			2	Industrial activity	Offshore activities
		CH01_Product_3_21	Natura2000 spatial extent			3	Administrative units	Natura2000 spatial extent
		CH01_Product_4_1	Seabed depth			5	Bathymetry and Elevation	Sea-floor depth (below Lowest Astronomical Tide datum) {bathymetric depth} in the water body
	2	CH01_Product_4_2	Wave-induced water motion			2	Wave height and period statistics	Significant height of waves {Hs} on the water body
		CH01_Product_4_3	Wind speed			2	Wind strength and direction	Wind speed in the atmosphere
CH01_Product_4 / Map of		CH01_Product_4_4	Essential Seabed habitats			4	Habitat extent	Threatened and/or declining habitats
offshore windfarm siting suitability in the area off S.		CH01_Product_4_5	Essential Fish habitats			1	Habitat extent	Essencial Fish habitat extent
Miguel Island (Azores archipelago)		CH01_Product_4_6	Seabed substrate			2	Lithology	Spatial distribution of Seabed substrate types
		CH01_Product_4_7	Coastline			4	Terrestrial mapping	coastline
		CH01_Product_4_8	Fisheries spatial occupation	Inadequate			Administrative units	Fishing areas
		CH01_Product_4_9	MPA Network			3	Horizontal spatial co- ordinates	MPA Network - spatial extent
		CH01_Product_4_10	Vessel Traffic Density			2	Transport activity	Vessel Traffic Density
		CH01_Product_4_11	Submarine cables			3	Industrial activity	Submarine telecommunication cables



		CH01_Product_4_12	Offshore Installations			3	Industrial activity	Offshore Instalations
		CH01_Product_4_13	limits of IBA sites	Inadequate			Administrative units	Limits of IBA sites
		CH01_Product_4_14	Ports location			4	Terrestrial mapping	Ports geographic location
		CH01_Product_4_15	Dredging sites			2	Industrial activity	Dredging sites and locations.
		CH01_Product_4_16	Aggregate Extraction sites			2	Industrial activity	Aggregate Extraction locations
		CH01_Product_4_17	Munition sites			3	Administrative units	Munition dumping areas
		CH01_Product_4_18	Dredge spoil sites			3	Administrative units	Dredge spoil dumping areas
		CH01_Product_4_19	Cables and pipelines			1	Industrial activity	Cables and pipelines
		CH01_Product_4_20	Offshore activities sites			2	Industrial activity	Offshore activities
		CH01_Product_4_21	Natura2000 spatial extent			3	Administrative units	Natura2000 spatial extent
	Ch	allenge CH02_Marine	Protected Areas					
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
		CH02_Product_1_1	Traditional fishing area	Inadequate			Administrative units	Fishing areas
		CH02_Product_1_2	MPA areas			5	Administrative units	Marine protected area location
CH02_Product_1 / MPA Atlantic network classified in	3	CH02_Product_1_3	Sustainable fishing area (industrial)	Inadequate			Administrative units	Fishing areas
IUCN classification		CH02_Product_1_4	Leisure fishing area	Inadequate			Administrative units	Fishing areas
		CH02_Product_1_5	Leisure activity area (diving, surfing, tourist beaches)	Inadequate			Marine environment leisure usage	Leisure Ativity (Diving, Snorkeling)



CH02_Product_1_6	Shipping area (shipping trajectory, aids navigation)		Inadequate		Man-made structures Transport activity	Aids to Navigation
CH02_Product_1_7	Scientific activity area	Inadequate			Administrative units	Scientific activity area
CH02_Product_1_8	Renewable energy generation facility area (ocean energy facilities, wind farms)			2	Industrial activity Man-made structures	Offshore Installations Renewable energy offshore facilitie
CH02_Product_1_9	Aquaculture area (finfish production, shellfish production)			2	Fishery characterisation	Aquaculture
CH02_Product_1_10	Shipping infrastructure area (harbours, dredging area)			2	Man-made structures	Aids to Navigation
CH02_Product_1_11	Waste discharge area			2	Administrative units Litter abundance and type Pollution events	Waste disposal area
CH02_Product_1_12	Mining area (aggregate extraction, hydrocarbon extraction)			2	Industrial activity	Aggregate Extraction
CH02_Product_1_13	Habitation area (urban area)			5	Man-made structures	Man-made structures
CH02_Product_1_14	MPA management	Inadequate			Administrative units	Marine protected area management



CH02_Product_2/	2	2					CH02_Product_2_1	Marine protected area location: list and positions of MPAs in the study area		5	Administrative units	Marine protected area location
			CH02_Product_2_2	Distribution of vulnerable marine habitats: Shape represent the distribution of different vulnérable habitats		2	Administrative units Bathymetry and Elevation Habitat characterisation Habitat extent	Habitat and species management Seabed habitat				
Quantitative analysis of MPA coherence			CH02_Product_2_3	Distribution biologically or ecologically significant areas (EBSAs)		3	Administrative units	Biodiversity critical areas				
		CH02_Product_2_4	Critical areas of vulnerable species	Inadequate		Administrative units Bird reproduction Fish behaviour Fish reproduction Reptile reproduction Seal reproduction	Biodiversity critical areas Migratory Patterns of Threatened and/or Declining Fish Species					



		CH02_Product_2_5	Distribution of indicator species			2	Bird counts Cetacean abundance Fish taxonomy- related abundance per unit area of the bed Reptile abundance Seal abundance	Threatened and/or declining seabird species Threatened and/or declining cetacean species Threatened and/or declining fish species Threatened and/or declining reptile species Threatened and/or declining sealspecies
		CH02_Product_3_1	Traditional fishing area	Inadequate			Administrative units	Fishing areas
	3	CH02_Product_3_2	MPA areas			5	Administrative units	Marine protected area location
		CH02_Product_3_3	Sustainable fishing area (industrial)	Inadequate			Administrative units	Fishing areas
		CH02_Product_3_4	Leisure fishing area	Inadequate			Administrative units	Fishing areas
CH02_Product_3 / Distribution of No-Take zones		CH02_Product_3_5	Leisure activity area (diving, surfing, tourist beaches)	Inadequate			Marine environment leisure usage	Leisure Ativity (Diving, Snorkeling)
2.32.1344011 01 NO TURE 2011C3		CH02_Product_3_6	Shipping area (shipping trajectory, aids navigation)		Inadequate		Man-made structures Transport activity	Aids to Navigation
		CH02_Product_3_7	Scientific activity area	Inadequate				
		CH02_Product_3_8	Renewable energy generation facility area (ocean energy facilities, wind farms)			2	Industrial activity Man-made structures	Offshore installations Renewable energy offshore facilities



		CH02_Product_3_9	Aquaculture area (finfish production, shellfish production)		2	Fishery characterisation	Aquaculture
		CH02_Product_3_10	Shipping infrastructure area (harbours, dredging area)		2	Man-made structures	Aids to Navigation
		CH02_Product_3_11	Waste discharge area		2	Administrative units Litter abundance and type Pollution events	Waste disposal area
		CH02_Product_3_12	Mining area (aggregate extraction, hydrocarbon extraction)		2	Industrial activity	Aggregate Extraction Hydrocarbons extraction
		CH02_Product_3_14	Military activity	Inadequat		Administrative units	Military activities
		CH02_Product_3_15	Pipe lines and cables	Inadequat		Hazards to navigation	Pipe lines and cables
		CH02_Product_3_16	MPA management	Inadequat		Administrative units	Marine protected area management
CH02_Product_4 / Qualitative analysis of MPA coherence	2	CH02_Product_4_1	MPA areas		3	Administrative units	Marine protected area location
		CH02_Product_5_1	MPA areas		3	Administrative units	Marine protected area location
CH02_Product_5 / Network of monitoring systems within MPAs	2	CH02_Product_5_2	Physical parameter monitoring		2	Air temperature Suspended material Water Salinity Water Temperature Waves Wind Sea level	Physical parameter monitoring



		CH02_Product_5_3	Chemical parameter monitoring			2	Chemical parameter monitoring	High level analyzed
		CH02_Product_5_4	Biological parameter monitoring	Inadequate			Biological parameter monitoring	Forecast/Hindcast
		Challenge CH3_Oil Pl	atform Leaks					
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
		CH_Product_1_1	Currents for oil spill drift model			2	Horizontal velocity of the water column (currents)	Eastward current velocity in the water body
CH03_Product_1 / Oil Platform Leak Bulletin 24h released after a DG MARE	3	CH_Product_1_2	Bathymetry for impact of drowned oil			5	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth} in the water body by derivation from GEBCO_08 30 arc- second global grid
request received by email on the 10th May 2016		CH_Product_1_3	Aerodynamics for oil spill drift model			2	Wind speed and direction	Wind velocity (10m along y- axis) in the atmosphere by model prediction
		CH_Product_1_4	Seabed habitats for drowned oil impact			2	Habitat characterisation	Predicted broad-scale EUNIS Habitats
		CH_Product_1_5	Temperature for water column density			2	Salinity of the water column, Temperature of the water column	Salinity of the water body Temperature of the water body



CH03_Product_2 / Oil Platform Leak Bulletin 72h released after the DG MARE alert received by email on the 10th of May 2016	2	CH_Product_2_1	Human activities for coastal impact assessment			2	Fishery characterisation, Industrial activity,Marine environment leisure usage, Transport activity	Mariculture sites Oil and Gas Offshore installations (localisation and characteristics) Wind Farms offshore installations (localisation) State of bathing waters Port Localisation
		CH_Product_2_2	Coastlines			5	Terrestrial mapping	Coastlines
		CH_Product_2_3	Environmental Sensitivity Index		Inadequate		Habitat extent	Environmental Sensitivity Index
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH04_Product_1 / Surface temperature time-series (1915-2014)	5	CH04_Product_1_1	Surface Temperature Time series			5	Temperature of the water column	Temperature of the water body
CH04_Product_2 / Bottom temperature time-series (1915-2014)	2	CH04_Product_2_1	Pentadal (5-year) resolution time- series of the bottomtemperature of the North Atlantic deeper than 500m			2	Temperature of the water column	Temperature of the water body
CH04_Product_3 / Internal Energy time-series (1915-	2	CH04_Product_3_1	Pentadal average Ocean Heat Content of the upper 700 m			3	Heat fluxes between the water column and the atmosphere	Heat content (CH4_012)
2014): Heat and Kinetic	2	CH04_Product_3_2	Kinetic energy			2	Horizontal velocity of the water column (currents)	Northward current velocity in the water body



CH04_Product_4 / Phytoplankton abundance (top 3 species) time-series (1915-2014)	1	CH04_Product_4_1	Phytoplankton count	Inadequate		Phytoplankton generic abundance in water bodies	Abundance of phytoplankton per unit volume of the water body by optical microscopy
CH04_Product_5 / Total ice cover (1915-2014)	2	CH04_Product_5_1	Coverage by ice		3	Snow and ice mass, thickness and extent	Coverage (by area) of ice on the water body by image analysis
		CH04_Product_6_1	Map of 10 year (2005-2014) change in surface temperature		5	Temperature of the water column	Temperature of the water body
CH04_Product_6 / 10 year (2005-2014) change in temperature	3	CH04_Product_6_2	Map of 10 year (2005-2014) change in temperature at 500m		3	Temperature of the water column	Temperature of the water body
		CH04_Product_6_3	10 year (2005-2014) change in bottom temperature (deeper than 500m)		3	Temperature of the water column	Temperature of the water body
		CH04_Product_7_1	50 year (1965-2014) change in temperature: surface		5	Temperature of the water column	Temperature of the water body
CH04_Product_7 / 50 year (1965-2014) change in	3	CH04_Product_7_2	50 year (1965-2014) change in temperature: 500m		3	Temperature of the water column	Temperature of the water body
temperature		CH04_Product_7_3	50 year (1965-2014) change in temperature: bottom (deeper than 500m)		3	Temperature of the water column	erature of the column Temperature of the water body erature of the column Temperature of the water body erature of the column Temperature of the water body



		CH04_Product_8_1	Ice Occurence (1915-2014)			3	Snow and ice mass, thickness and extent	Coverage (by area) of ice on the water body by image analysis
CH04_Product_8 / Ice	3	CH04_Product_8_2	Map of Ice Occurence 1965- 2014			3	Snow and ice mass, thickness and extent	Coverage (by area) of ice on the water body by image analysis
Occurence (1915-2014)	3	CH04_Product_8_3	Map of Ice Occurence 2005- 2014			3	Snow and ice mass, thickness and extent	Coverage (by area) of ice on the water body by image analysis
		CH04_Product_8_4	Map of Ice Occurence (2009- 2014)			3	Snow and ice mass, thickness and extent	Coverage (by area) of ice on the water body by image analysis
	Challenge CH05_Coasts							
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH05_Product_1 / Spatial layer of absolute annually averaged sea level trend (in			Absolute annually averaged sea level					
mm/year) for period of 10 years by stretch of coast	4	CH05_Product_1	trend for 10 years period by stretch of coast			4	Sea level	Height above sea level
mm/year) for period of 10	4	CH05_Product_1 CH05_Product_2	period by stretch of			3	Sea level Sea level	Surface elevation annual mean (unspecified datum) of the water body



CH05_Product_4 / Spatial layer of relative annually averaged sea level trend (in mm/year) for period of 10 years	2	CH05_Product_4	Relative sea level trend for 10 years		3	Sea level	Surface elevation annual mean (unspecified datum) of the water body
CH05_Product_5 / Spatial layer of relative annually averaged sea level trend (in mm/year) for period of 50 years	2	CH05_Product_5	Relative sea level trend for 50 years		2	Sea level	Height above sea level
CH05_Product_6 / Spatial layer of relative annually averaged sea level trend (in mm/year) for period of 100 years	1	CH05_Product_6	Relative sea level trend for 100 years		1	Sea level	Height above sea level
CH05_Product_7 / Spatial layer of annually averaged sediment balance trend (as shoreline retreat/advance in mm/yr) for period of 10 years by stretch of coast	1	CH05_Product_7	Calculation of the average annual sediment balance per stretch of coast for the past 10 years.	Inadequate		Bathymetry and Elevation	Sea-floor height (above NAP datum) {bathymetric height} in the water body by multibeam echo sounder
CH05_Product_8 / Spatial layer of annually averaged sediment balance trend (as shoreline retreat/advance in mm/yr) for period of 50 years by stretch of coast	2	CH05_Product_8	Sediment mass balance for coastline bordering north Atlantic Ocean annually over the last 10 years.		3	Bathymetry and Elevation	Sea-floor height (above NAP datum) {bathymetric height} in the water body by multibeam echo sounder
CH05_Product_9 / Spatial layer of annually averaged sediment balance trend (as shoreline retreat/advance in mm/yr) for period of 100	2	CH05_Product_9_1	The average annual sediment balance per stretch of coast bordering the North Atlantic for the past		3	Bathymetry and Elevation	Sea-floor height (above NAP datum) {bathymetric height} in the water body by multibeam echo sounder



years by stretch of coast			100 years.					
	Ch	allenge CH06_Fisheri	es Management					
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH06_Product_1 / Collated data set of landings by species and	3	CH06_Product_1_1	Atlantic seabasin - landings in mass 1950- 2014			3	Fish and shellfish catch statistics	Fish and shellfish catch statistics
year, for mass and number	3	CH06_Product_1_2	Atlantic seabasin - landings in number	Inadequate			Fish and shellfish catch statistics	Fish and shellfish catch statistics
		CH06_Product_2_1	EU Member States - discards in mass 2003- 2015			1	Fishing by-catch	Weight and number of fish and by-catch by species and year discarded
CH06_Product_2 / Collated data set of discards by species and year, in mass and number	1	CH06_Product_2_2	Non-European countries in the Atlantic - discards in mass 2003-2015	Inadequat			Fishing by-catch	Weight and number of fish and by-catch by species and year discarded
		CH06_Product_2_3	Discards at seabasin level (Atlantic, north of equator line) in number	Inadequat			Fishing by-catch	Weight and number of fish and by-catch by species and year discarded
CH06_Product_3 / Collated data set of bycatch by species and year, for mass and number	2	CH06_Product_3_1	EU Member States - bycatch in number 2003-2015		Inadequat		Fishing by-catch	Weight and number of fish and by-catch by species and year discarded
	2	CH06_Product_3_2	Non-EU countries in the Atlantic - bycatch in number 2003-2015			2	Fishing by-catch	Weight and number of fish and by-catch by species and year discarded



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Version: 1.0 Date: 26/05/2018

		CH06_Product_3_3	Bycatch at seabasin level (Atlantic, north of equator line) in mass	Inadequat			Fishing by-catch	Weight and number of fish and by-catch by species and year discarded
		Challenge CH07_Fish	neries Impact					
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
		CH07_Product_1_1	Fishing Effort (Vessels >15m) from VMS/Logbook data to map activity of bottom fishing (towed gears) in NE Atlantic			1	Fishing effort	Fishing_Effort_NE_Atlantic
CH07_Product_1 / Area where bottom habitat has been disturbed by bottom trawling (number of disturbances per	2	CH07_Product_1_2	Area of West African Continent ending at the NE Atlantic extent at the equator	Inadequat			Fishing effort	High Resolution VMS & ERS (Logbook) Fishing Intensity Data
month)		CH07_Product_1_3	Area covering the Americas from Canada through the US and central America ending at the NE Atlantic extent at the equator.	Inadequat			Fishing effort	High Resolution VMS & ERS (Logbook) Fishing Intensity Data
CH07_Product_2 / Damage to seafloor to both living and non-	2	CH07_Product_2_1	Benthic habitat spatial extent with sensitivity matrix assigned to distribution of seabed habitats in EU waters			5	Habitat characterisation	EUNIS habitat map
living components		CH07_Product_2_2	Fishing Intensity from bottom contacting towed fishing gear to map activity in the NE			2	Fishing effort	High Resolution VMS & ERS (Logbook) Fishing Intensity Data



			Atlantic					
		CH07_Product_2_3	Area of West African Continent ending at the NE Atlantic extent at the equator	Inadequat			Fishing effort	High Resolution VMS & ERS (Logbook) Fishing Intensity Data
		CH07_Product_2_4	Area covering the Americas from Canada through the US and central America ending at the NE Atlantic extent at the equator.	Inadequat			Fishing effort	High Resolution VMS & ERS (Logbook) Fishing Intensity Data
		Challenge CH08_Eu	trophication					
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH08_Product_1 / Map of seasonal averages and changes of dissolved oxygen indicator for eutrophication in the past 10 years (2005-2014) for the Atlantic basin	1	CH08_Product_1	Map of seasonal averages of dissolved oxygen indicator for eutrophication in the past 10 years for the Atlantic basin	Inadequate			Dissolved oxygen parameters in the water column, Salinity of the water column, Temperature of the water column	Concentration of Oxygen per unit mass of the water body Salinity of the water body Temperature of the water body
CH08_Product_2 / Map of seasonal averages and changes of Chlorophyll indicator for			Map of seasonal averages of	Inadequate			Chlorophyll pigment concentrations in	Concentration of chlorophyll



CH08_Product_3 / Map of seasonal averages and changes of Dissolved inorganic nitrogen indicator for eutrophication for the past 10 years (2005-2014) in the Atlantic basin	1	CH08_Product_3	Map of seasonal averages of Dissolved inorganic nitrogen indicator for eutrophication for the past 10 years	Inadequate			
CH08_Product_4 / Map of Seasonal p90 chlorophyll-a concentration in the Norh Atlantic basin (2005-2014)	4	CH08_Product_4_1	Chlorophyll-a		4	Chlorophyll pigment concentrations in water bodies	Concentration of chlorophyll per unit volume of the water body
CH08_Product_5 / Maps of Seasonal p90 chlorophyll-a concentration at local scale Loire-Vilaine estuary at different spatial resolutions in the past 10 years (2005-2014)	4	CH08_Product_5_1	Chlorophyll-a		4	Chlorophyll pigment concentrations in water bodies	Concentration of chlorophyll per unit volume of the water body
CH08_Product_6 / Maps of Nitrogen and Phosphorus inputs from rivers correlation with Chl a at local scale (Loire-Vilaine estuary) (2005-2014) inherited Product from Challenge 09	3	CH08_Product_6_1	Chlorophyll-a		4	Chlorophyll pigment concentrations in water bodies	Concentration of chlorophyll per unit volume of the water body



CH08_Product_7 / Spatial layer of potential for eutrophication due to commercial activities in a coastal area	1	CH08_Product_7_1	Ten year seasonal eutrophication for aquaculture site: eutrophication assessment for an area where there are commercial activities in a coastal area which may be impacted or may impact eutrophication which takes place. Seasonal eutrophication over the last 10 years for a location suitable for aquaculture.	Inadequate			Chlorophyll pigment concentrations in water bodies Dissolved inorganic nitrogen concentration in the water column Dissolved oxygen parameters in the water column Phosphate concentration parameters in the water Salinity of the water column Temperature of the water column	Concentration of chlorophyll per unit volume of the water body Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase Concentration of Oxygen per unit mass of the water body Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] Salinity of the water body Temperature of the water body
		Challenge CH09_R	liver Inputs					
Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH09_Product_1 / Annual temporal series and long term average of water discharge [m3/s] from in situ data (2005-2014)	3	CH09_Product_1_1	River flow			3	River flow and discharge	Flow rate [1000m3/d] Mean long term river discharge [m3/s] Riverine discharge (Flow rate [1000m3/d])
CH09_Product_2 / Annual temporal series and long term average of sediments loads [ton] from in situ data (2005-2014)	3	CH09_Product_2_1	Suspended Particulate Material Concentration			2	Concentration of suspended particulate material in the water column	Suspended particle matter [kt/a]



		CH09_Product_2_2	River flow		2	River flow and discharge	Flow rate [1000m3/d] Mean long term river discharge [m3/s] Riverine discharge (Flow rate [1000m3/d])
CH09_Product_3 / Annual		CH09_Product_3_1	Total nitrogen concentration		2	Particulate total and organic nitrogen concentrations in the water column	Concentration of total nitrogen [mg/l N]
temporal series and long term average with errors of total nitrogen loads [ton] from in situ data (2005-2014)	3	CH09_Product_3_2	Rivers flow		2	River flow and discharge	Flow rate [1000m3/d] Mean long term river discharge [m3/s] Riverine discharge (Flow rate [1000m3/d])
CH09_Product_4 / Annual temporal series and long term		CH09_Product_4_1	Total phosphate concentration		2	Phosphate concentration parameters in the water column	Concentration of total phosphorus
average with errors of total phosphates loads [ton] from in situ data (2005-2014)	2	CH09_Product_4_2	Rivers flow		2	River flow and discharge	Flow rate [1000m3/d] Mean long term river discharge [m3/s] Riverine discharge (Flow rate [1000m3/d])
CH09_Product_5 / Annual temporal series and long term average of temperature [°C] from in situ data (2005-2014)	2	CH09_Product_5_1	Temperature		2	Temperature of the water column	Temperature of the water column Temperature of the water body (mean over one year) [°C]
CH09_Product_6 / Annual temporal series of eel recruitment [ton] (2009-2014)	4	CH09_Product_6_1	Annual time series of eel recruitement		2	Fish abundance in water bodies	Eel recruitment, abundance and escapement



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CH09_Product_7 / Annual temporal series of eel escapement [ton] (2009-2014)	3	CH09_Product_7_1	Eel escapment		2	Fish abundance in water bodies	Eel escapement
CH09_Product_8 / Annual temporal series and long term average of salmon recruitment biomass [ton] (2005-2014)	1	CH09_Product_8_1	Salmon recruitment	Inadequat		Fish biomass in water bodies	Salmon biomass
CH09_Product_9 / Annual temporal series and long term average of salmon escapement biomass [ton] (2005-2014)	1	CH09_Product_9_1	Salmon escapment	Inadequat		Fish abundance in water bodies	Salmon abundance

Challenge CH10_Bathymetry

Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH10_Product_1 / Sample areas		CH10_Product_1_1	Gibraltar: A representative sample area to test data sources against GEBCO sited in an area of interest for European shipping			3	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}
of digital bathymetry covering representative areas of the North Atlantic.	3	CH10_Product_1_2	A representative sample area to test data sources against GEBCO sited in an area which could be explored for a possible wind farm with multijurisdiction.			3	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}



		Challenge CH11_A	lien Species			
CH10_Product_3 / North Atlantic area divided into regions showing priority areas for surveying	4	CH10_Product_3_1	Port location and characteristic Information	4	Industrial activity Transport activity	Location, facilities and services offered
CH10_Product_2 / Digital bathymetry uncertainty covering the North Atlantic, and a representative sample area within the North Atlantic.	3	CH10_Product_2_1	Bathymetry uncertainty	3	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}
		CH10_Product_1_5	Halifax: A representative sample area to test data sources against GEBCO sited in an area of interest for future shipping requirements.	3	Bathymetry and Elevation	Depth below surface of the water body by unknown instrument and correction to zero at sea level and conversion to depth using unspecified algorithm
		CH10_Product_1_4	Azores: A representative sample area to test data sources against GEBCO sited in an area of interest in the mid-Atlantic.	3	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}
		CH10_Product_1_3	New York: A representative sample area to test data sources against GEBCO sited in an area of interest for future shipping requirements.	3	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}



Product name	Product score	Identifiant + component name	CPT description	No data exist	No data available	Usability score		
CH11_Product_1/ Alien species citations table		CH11_Product_1_1	Alien species citation date for the Northeast Atlantic			4	Invasive species monitoring parameters	Alien species citation date
	w	CH11_Product_1_2	Alien species Vector of introduction for the North-East Atlantic			4	Invasive species monitoring parameters	Pathway/Vector of Non- Indigenous Species Introduction
		CH11_Product_1_3	Alien species geographic distribution for the Northeast Atlantic			4	Invasive species monitoring parameters	Alien species geographic distribution
		CH11_Product_1_4	Established invasive species for Northeast Atlantic			2	Invasive species monitoring parameters	Alien species status
		CH11_Product_1_5	Impact of non- indigeneous species in Northeast Atlantic citations			3	Invasive species monitoring parameters	Alien species introduction impact



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Annex 2 – List of products

Challenge 1: OWF

CH01 Product 1	Map of offshore windfarm siting suitability (France, Ireland and UK)
CH01_Product_2	Map of windfarm siting suitability Bay of Biscay)
CH01_Product_3	Map of windfarm siting suitability (Portugal and Spain)
CH01_Product_4	Map of offshore windfarm siting suitability in the Azores archipelago

Challenge 2: MPA

CH_2_Product_1	MPA Atlantic network classified in IUCN classification
CH_2_Product_2	Quantitative analysis of MPA coherence
CH_2_Product_3	Distribution of No-Take zones
CH_2_Product_4	Qualitative analysis of MPA coherence
CH_2_Product_5	Network of monitoring systems within MPAs

Challenge 3: Oil leak

CH_Product_1	Oil Platform Leak Bulletin 24h after a DG MARE alert
CH Product 2	Oil Platform Leak Bulletin 72h after the DG MARE alert

Challenge 4 : Climate

CH_04_Product_1	Surface temperature time-series (1915-2014)
CH_04_Product_2	Bottom temperature time-series (1915-2014)
CH_04_Product_3	Internal Energy time-series (1915-2014): Heat and Kinetic
CH_04_Product_4	Phytoplankton abundance (top 3 species) time-series (1915-2014)
CH_04_Product_5	Total ice cover (1915-2014)
CH_04_Product_6	10 year (2005-2014) change in temperature
CH_04_Product_7	50 year (1965-2014) change in temperature
CH_04_Product_8	Ice Occurrence (1915-2014)

Challenge 5: Coasts

CH05_Product_1	Spatial layer of absolute annually averaged sea level trend for period of 10 years by stretch of coast
CH05_Product_2	Spatial layer of absolute annually averaged sea level trend for period of 50 years
CH05_Product_3	Spatial layer of absolute annually averaged sea level trend for period of 100 years



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CH05_Product_4	Spatial layer of relative annually averaged sea level trend for period of 10 years
CH05_Product_5	Spatial layer of relative annually averaged sea level trend for period of 50 years
CH05_Product_6	Spatial layer of relative annually averaged sea level trend for period of 100 years
CH05_Product_7	Spatial layer of annually averaged sediment balance trend (as shoreline retreat/advance in mm/yr) for period of 10 years by stretch of
coast	
CH05_Product_8	Spatial layer of annually averaged sediment balance trend for period of 50 years by stretch of coast
CH05_Product_9	Spatial layer of annually averaged sediment balance trend for period of 100 years by stretch of coast

Challenge 6: Fisheries management

CH_6_Product_1	Data set of landings by species and year, for mass and number
CH_6_Product_2	Data set of discards by species and year, for mass and number
CH_6_Product_3	Data set of bycatch by species and year, for mass and number

Challenge 7: Fisheries impact

CH07_Product_1	Area where bottom habitat has been disturbed by bottom trawling (number of disturbances per month) over the past ten years
CH07_Product_3	Damage to seafloor to both living and non-living components

Challenge 8: Eutrophication

CH08_Product_1	Map of seasonal averages and changes of dissolved oxygen indicator for eutrophication in the past 10 years for the Atlantic basin
CH08_Product_2	Map of seasonal averages and changes of Chlorophyll indicator for eutrophication in the past 10 years in the Atlantic basin
CH08_Product_3	Map of seasonal averages and changes of Dissolved inorganic nitrogen indicator for eutrophication for the past 10 years in the Atlantic
basin	
CH08_Product_4	Map of Seasonal p90 chlorophyll-a concentration in the NE Atlantic (2005-2014)
CH08_Product_5	Map of Seasonal p90 chlorophyll-a concentration at local scale Loire-Vilaine estuary at different spatial resolutions in the past 10 years
(2005-2014)	
CH08_Product_6	Map of Nitrogen and Phosphorus inputs from rivers correlation with ChI a at local scale (Loire-Vilaine estuary; 2005-2014)
CH10_Product_7	Spatial layer of potential for eutrophication due to commercial activities in a coastal area

Challenge 9: River inputs

CH09_Product_1	Annual temporal series and long term average of water discharge [m3/s] from in situ data (2005-2014)
CH09_Product_2	Annual temporal series and long term average of sediments loads [ton] from in situ data (2005-2014)
CH09_Product_3	Annual temporal series and long term average with errors of total nitrogen loads [ton] from in situ data (2005-2014)
CH09_Product_4	Annual temporal series and long term average with errors of total phosphates loads [ton] from in situ data (2005-2014)
CH09_Product_5	Annual temporal series and long term average of temperature [°C] from in situ data (2005-2014)



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CH09_Product_6	Annual temporal series of eel recruitment [ton] (2009-2014)
CH09_Product_7	Annual temporal series of eel escapement [ton] (2009-2014)
CH09_Product_8	Annual temporal series and long term average of salmon recruitment biomass [ton] (2005-2014)
CH09_Product_9	Annual temporal series and long term average of salmon escapement biomass [ton] (2005-2014)

Challenge 10: Bathymetry

CH10_Product_1	Sample areas of digital bathymetry covering representative areas of the North Atlantic
CH10_Product_2	Digital bathymetry uncertainty covering the North Atlantic and a representative sample area within the North Atlantic.
CH10_Product_3	North Atlantic area divided into regions showing priority areas for surveying.

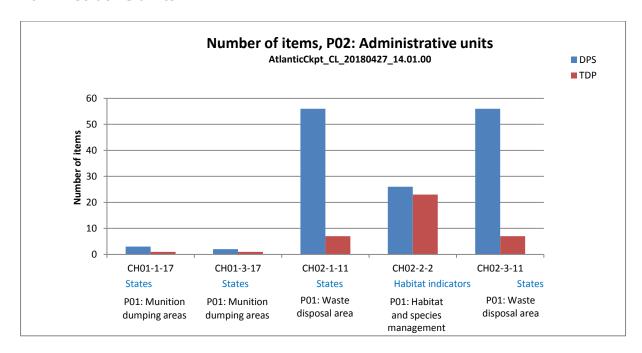
Challenge 11: Alien species

CH11_Product_1 Characterisation of abundance and state of non-indigenous species (NIS), in particular invasive ones



Annex 3 – Bar charts of P02 quality measures

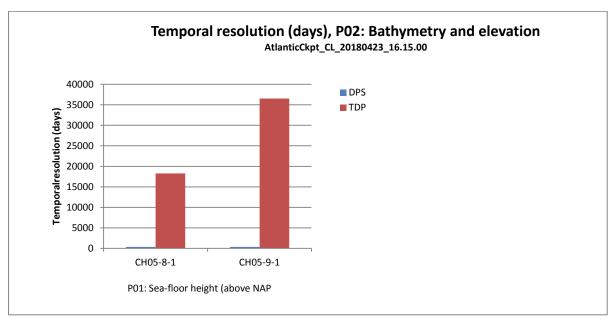
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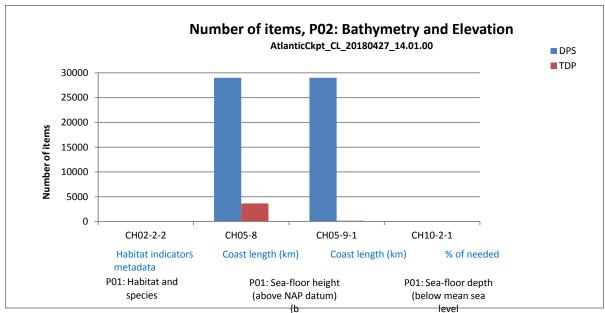


CH01	Windfarm
CH02	MPA
CH03	Oil leak
CH04	Climate
CH05	Coasts
CH06	Fish. manag.
CH07	Fish. Impact
CH08	Eutrophication
CH09	River inputs
CH10	Bathymetry
CH11	Alien species



Bathymetry and elevation

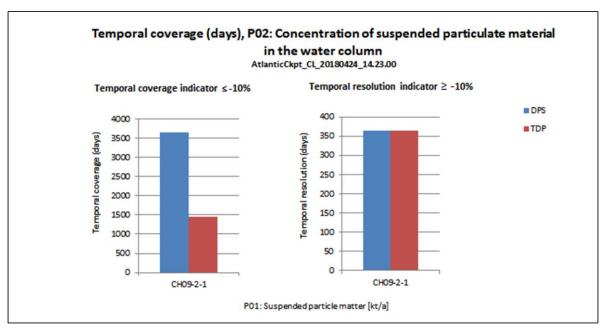


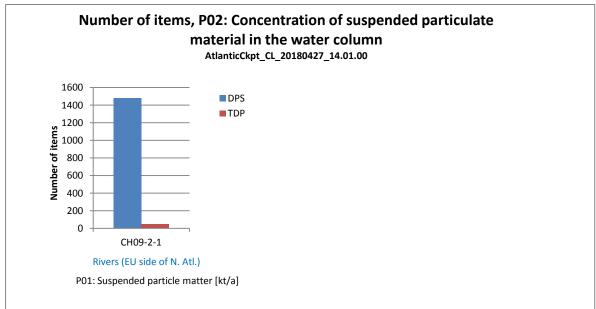


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Concentration of suspended particulate material in the water column

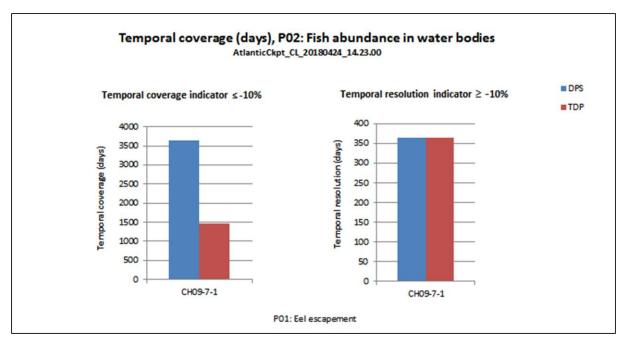


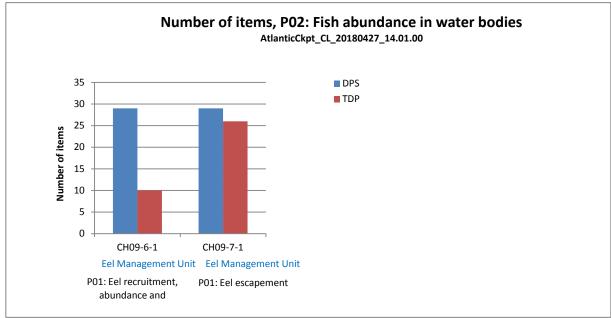


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Fish abundance in water bodies

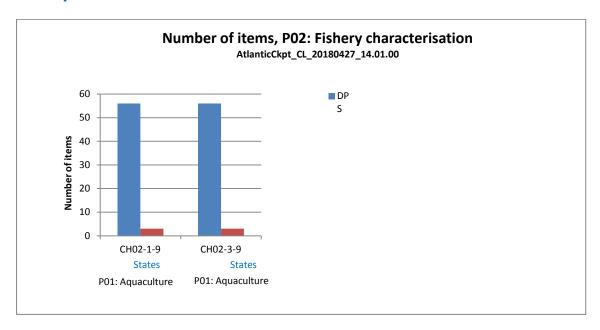




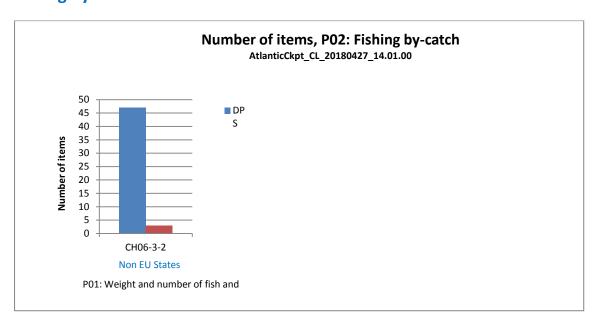
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Fishery characterisation



Fishing by-catch

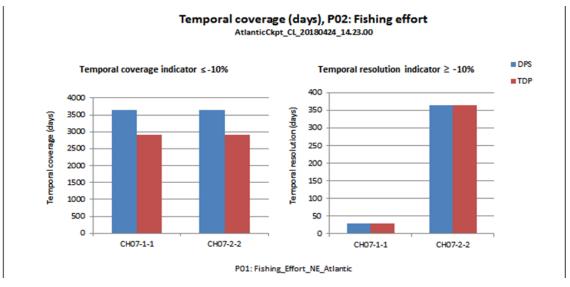


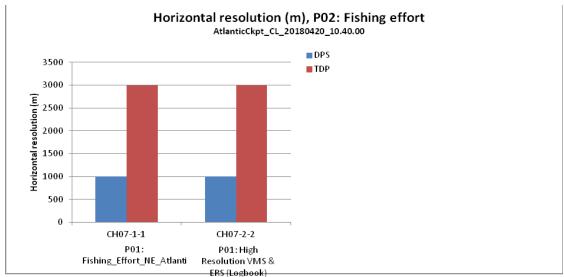
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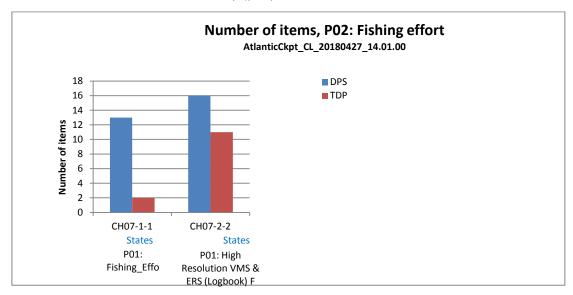


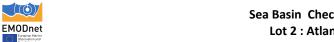
D14.2.2 Version: 1.0 Date: 26/05/2018

Fishing effort



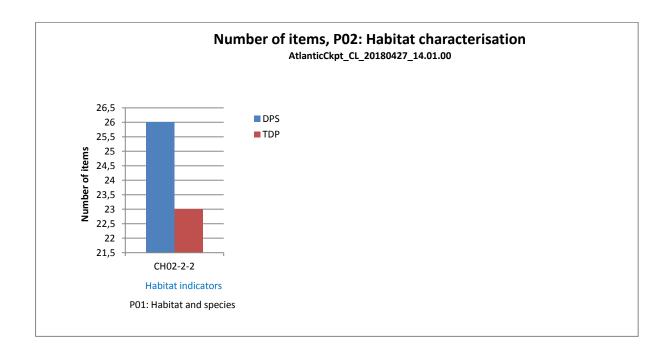








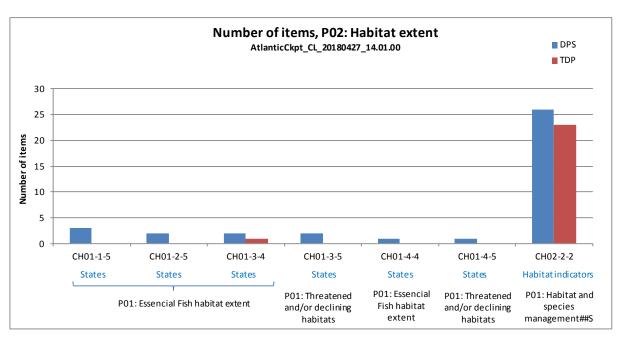
Habitat characterisation

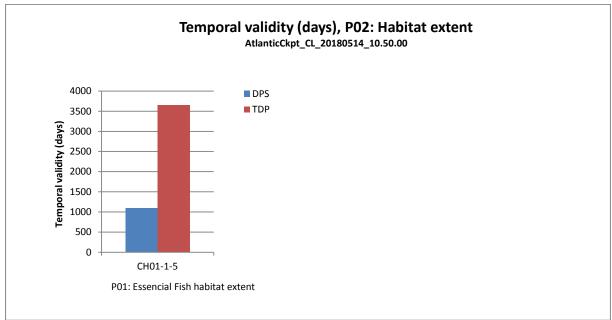


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Habitat extent

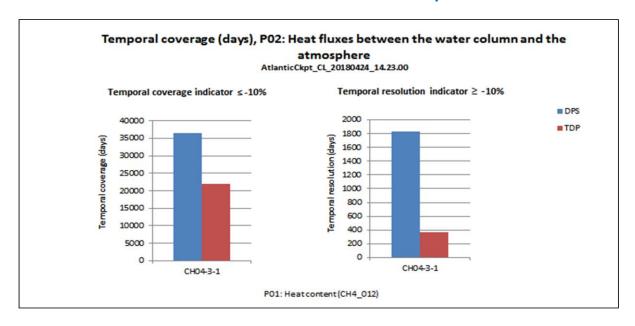




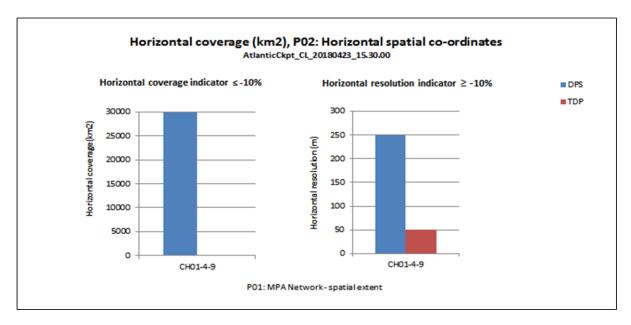
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Heat fluxes between the water column and the atmosphere



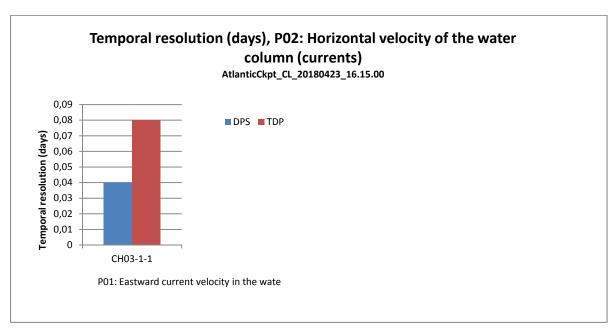
Horizontal spatial coordinates

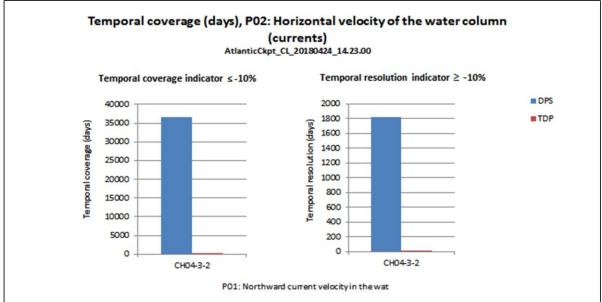


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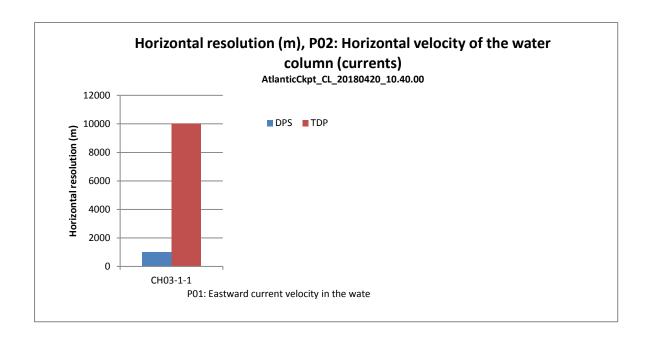


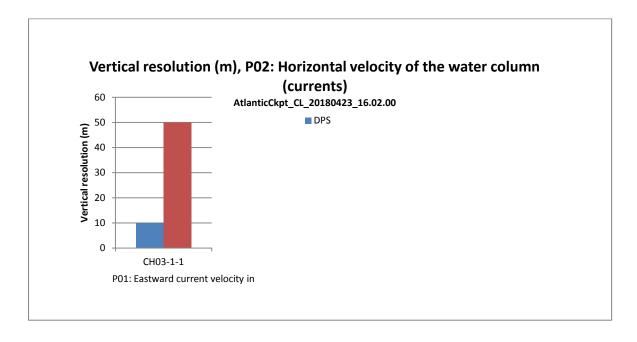
Horizontal velocity of the water column (currents)





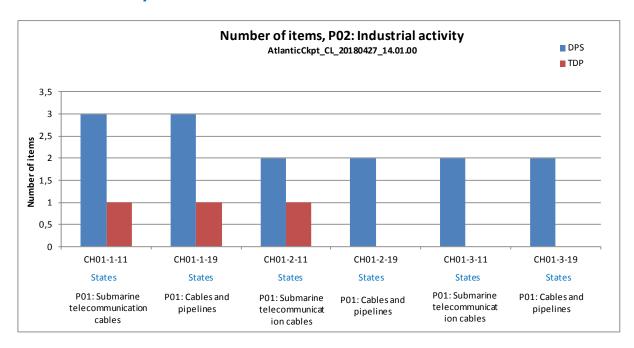
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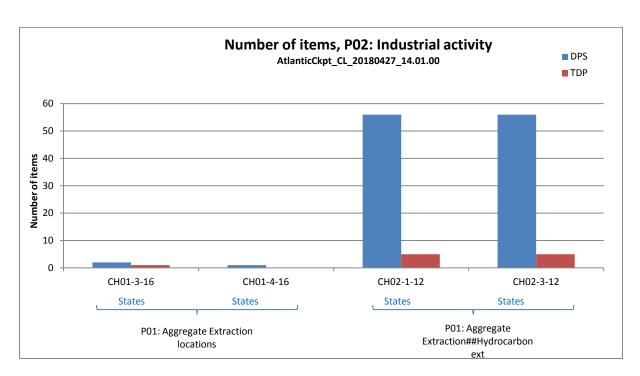




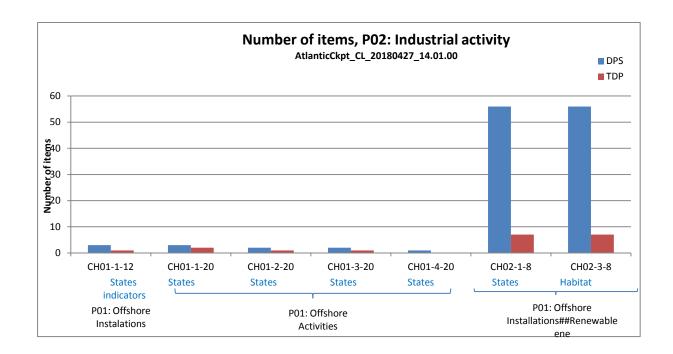


Industrial activity





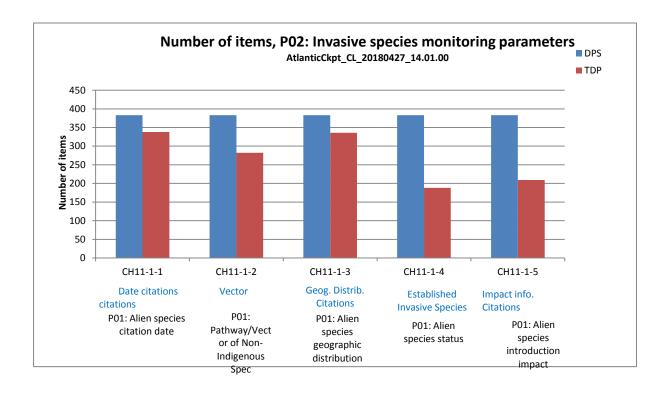




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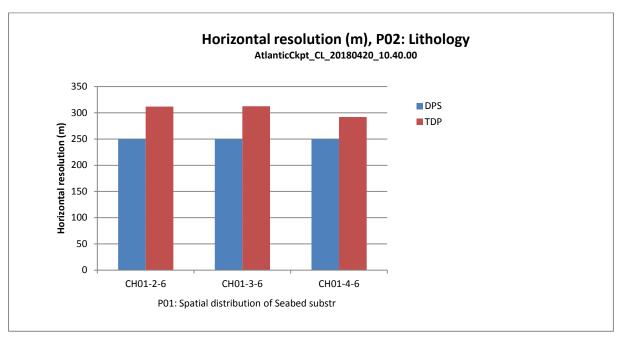
Invasive species monitoring parameters

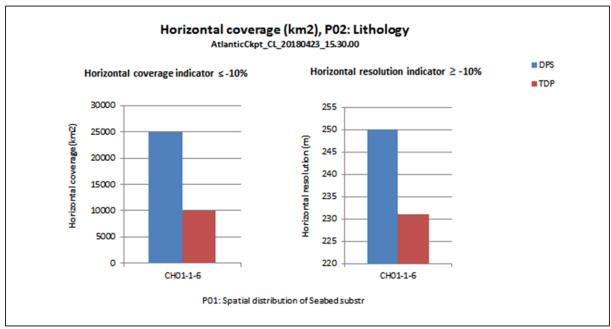


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Lithology

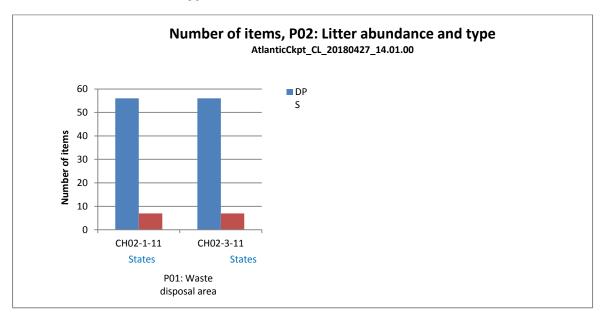




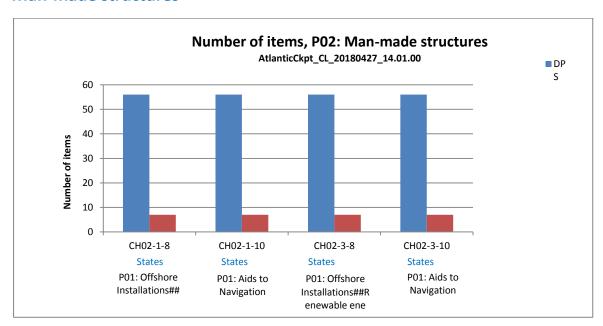
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Litter abundance and type



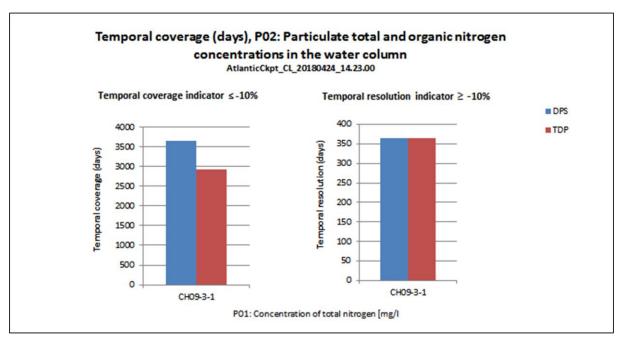
Man-made structures

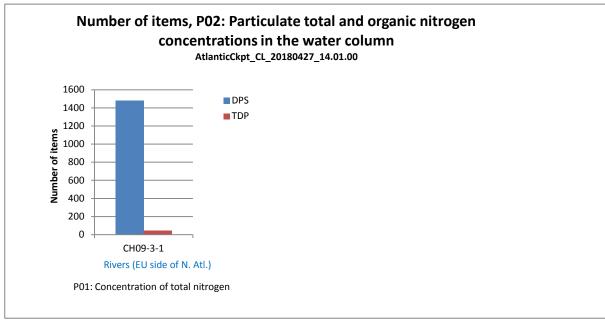


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Particulate total and organic nitrogen concentrations in the water column

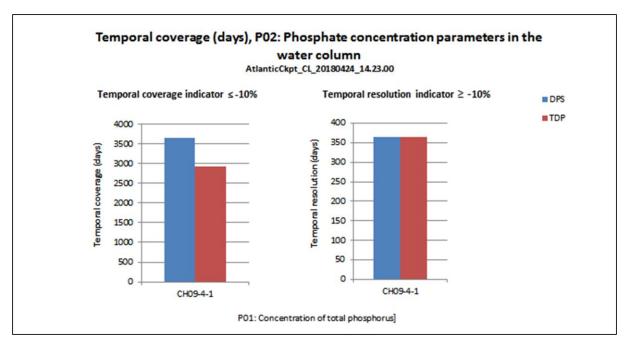


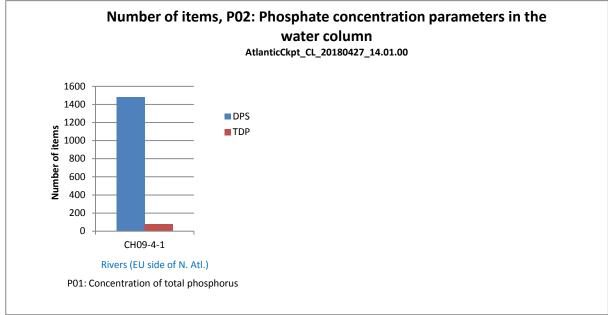


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Phosphate concentration parameters in the water column

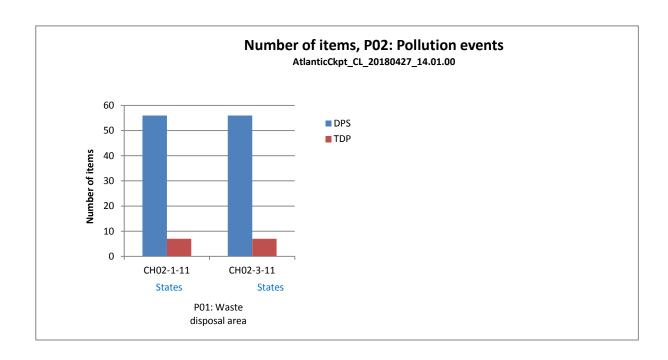




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CH10	Bathymetry
CH11	Alien species



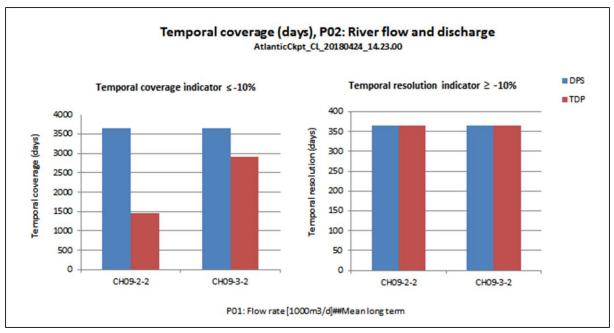
Pollution events

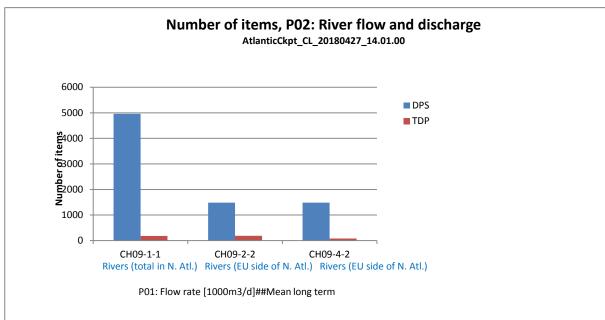


CH01	Windfarm
CH02	MPA
CH03	Oil leak
CH04	Climate
CH05	Coasts
CH06	Fish. manag.
CH07	Fish. Impact
CH08	Eutrophication
CH09	River inputs
CH10	Bathymetry
CH11	Alien species



River flow and discharge

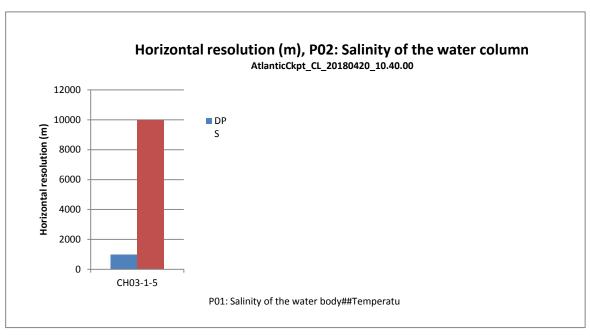


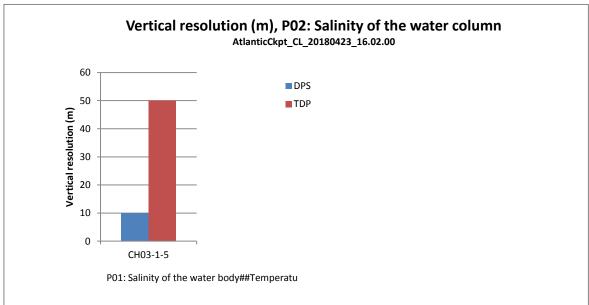


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Salinity of the water column

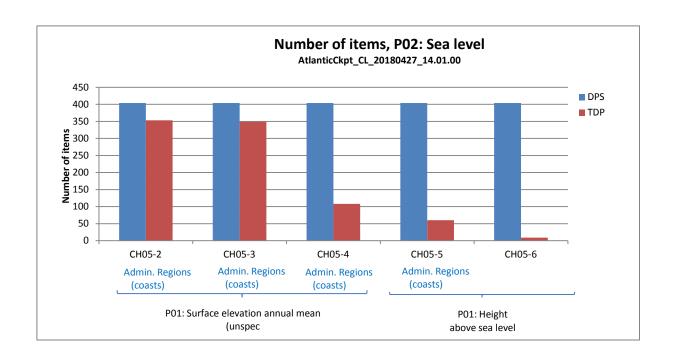




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Sea level

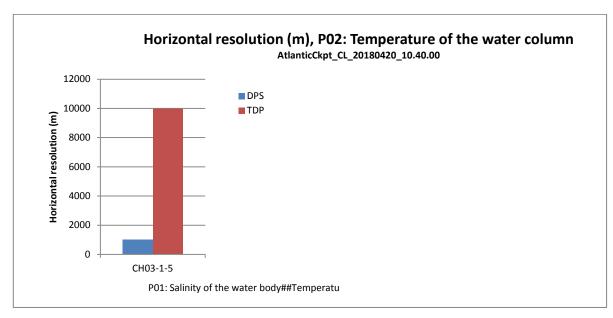


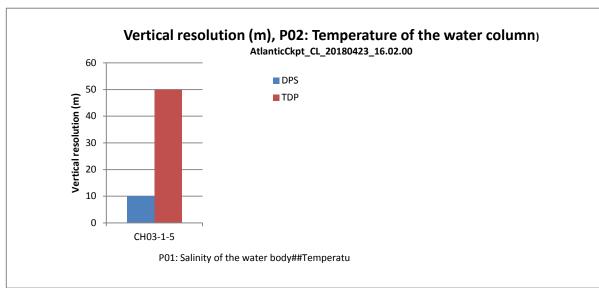
CH01	Windfarm
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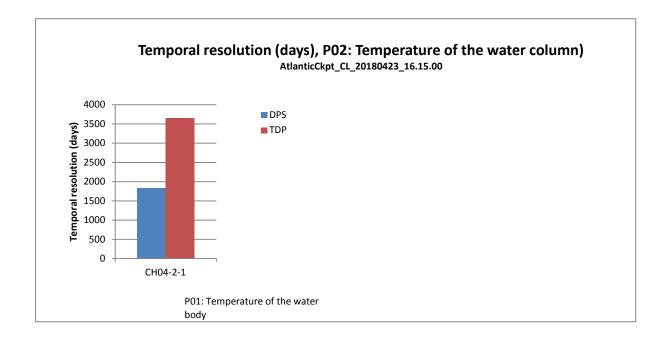


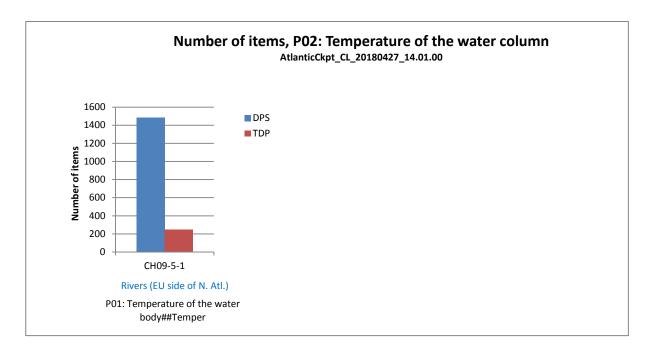
Temperature of the water column





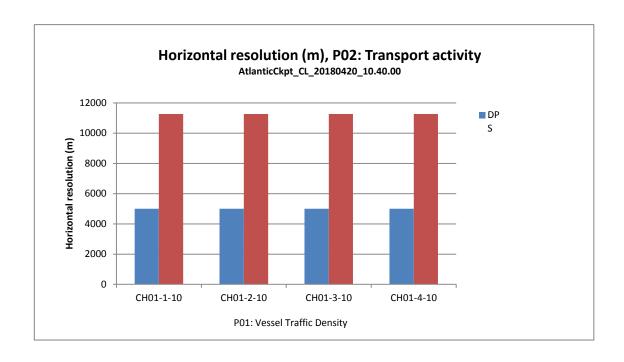
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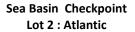




Transport activity

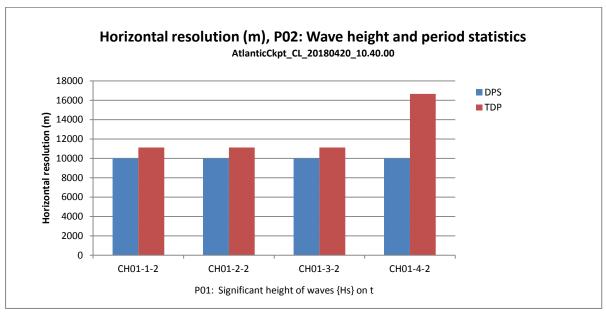


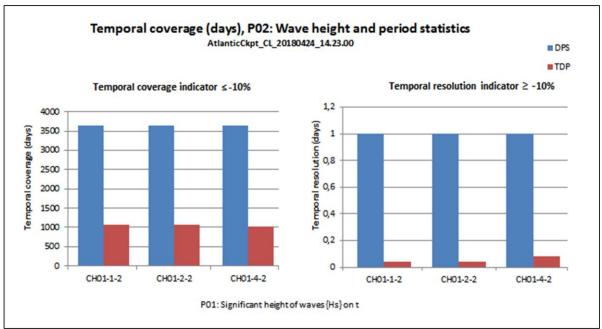
CH01	Windfarm
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CH10	Bathymetry
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Wave height and period statistics

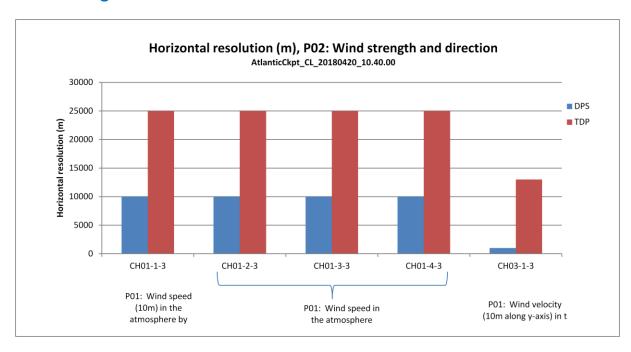


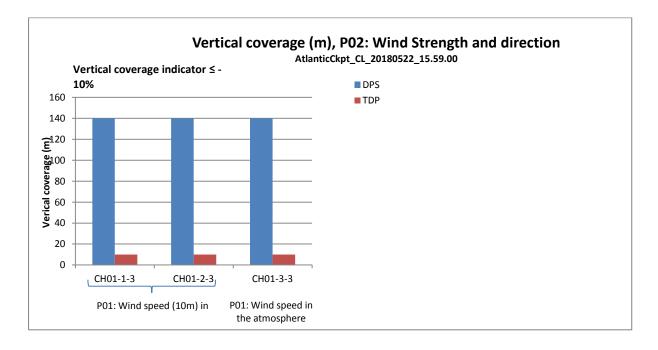


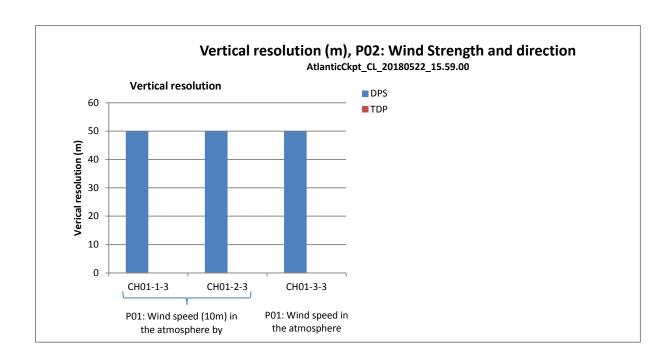
CH01	Windfarm
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CH04	Climate
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CH07	Fish. Impact
CH08	Eutrophication
CH09	River inputs
CH10	Bathymetry
CH11	Alien species



Wind strength and direction







CH01	Windfarm
CH02	MPA
CH03	Oil leak
CH04	Climate
CH05	Coasts
CH06	Fish. manag.
CH07	Fish. Impact
CH08	Eutrophication
CH09	River inputs
CH10	Bathymetry
CH 11	Alien species



D14.2 Version: 1.0 Date: 26/05/2018

Annex 4 - List of upstream data sets

Challenge	P02	P01	Data set description	Provider
CH10 - Bathymetry	Transport activity	Shipping routes	Anatec ShipRoutes database	Anatec Ltd
CH02 - Marine Protected Areas	Transport activity	Marine vessel traffic	Type (Vessel)	Automatic Identification System (AIS)
CH05 - Coasts	Sea level	Surface elevation daily mean (unspecified datum) of the water body	CNES altimetry products	AVISO
CH05 - Coasts	Sea level	Height above sea level	International Sea Level	British Oceanographic Data Centre
CH09 - River Inputs	River flow and discharge	Flow rate [1000m3/d]		British Oceanographic Data Centre
CH10 - Bathymetry	Bathymetry and Elevation	Depth below surface of the water body by unknown instrument and correction to zero at sea level and conversion to depth using unspecified algorithm		Canadian Hydrographic Service
CH08 - Eutrophication	Chlorophyll pigment concentrations in water bodies	Concentration of chlorophyll per unit volume of the water body	North Atlantic Chlorophyll (Copernicus-GlobColour) from Satellite Observations: Daily Interpolated (Reprocessed from 1997)	Copernicus Marine Environment Monitoring Service
CH01 - Windfarm Siting	Wave height and period statistics	Spectral significant height of waves {Hm0} on the water body	Global Ocean Waves Analysis and Forecast updated Daily	Copernicus Marine Environment Monitoring Service
CH01 - Windfarm Siting	Wave height and period statistics	Spectral significant height of waves {Hm0} on the water body	Atlantic-Iberian Biscay Irish- Ocean Wave Analysis and Forecast	Copernicus Marine Environment Monitoring Service
CH01 - Windfarm Siting	Wind strength and direction	Wind speed in the atmosphere		Copernicus Marine Environment Monitoring Service
CH02 - Marine Protected Areas	Administrative units	Biodiversity critical areas	EBSAs Regions	Ecologically or Biologically Significant Marine Areas



CH02 - Marine Protected Areas	Industrial activity	Hydrocarbon extraction	Offshore Installations	EMODnet
	Bird taxonomy-related	,		
	abundance per unit area of	Bird taxonomy-related abundance per	Bird taxonomy-related abundance	
CH02 - Marine Protected Areas	surface	unit area of surface	per unit area of surface	EMODnet
		EUNIS habitat broad map from	EMODnetSBH_BroadScale_SurveyM	
CH01 - Windfarm Siting	Habitat characterisation	surveys	aps EUNIS v20150827	EMODnet
		Sea-floor depth (below Lowest	· = =	
		Astronomical Tide datum)		
		{bathymetric depth} in the water		
CH01 - Windfarm Siting	Bathymetry and Elevation	body	250m Digital terrain model	EMODnet
			EUNIS habitat maps from surveys -	
CH01 - Windfarm Siting	Habitat characterisation	Medium scale habitat maps	Medium scale	EMODnet
			Predicted broad-scale EUNIS	
CU02 14 : D		5 . 6	habitats - Atlantic area (updated 9	ENACDmot
CH02 - Marine Protected Areas		Eunis Seabed Habitat	December 2013)	EMODnet
CH02 - Marine Protected Areas	Industrial activity	Dredging	Dredging	EMODnet
CH02 - Marine Protected Areas	Industrial activity	Hydrocarbon extraction	Active Licenses	EMODnet
CH02 - Marine Protected Areas	Man-made structures	Renewable energy offshore facilities	Wind Farms (Points)	EMODnet
CH02 - Marine Protected Areas	Fishery characterisation	Shellfish farming	Shellfish Production	EMODnet
		Spatial distribution of Seabed	1:250,000 Seabed substrate map of	
CH01 - Windfarm Siting	Lithology	substrate types	the European marine areas	EMODnet
CH02 - Marine Protected Areas	Fishery characterisation	Finfish farming	Finfish farming sites	EMODnet
	Fish taxonomy-related			
	abundance per unit area of	Fish taxonomy-related abundance per		
CH02 - Marine Protected Areas	the bed	unit area of the bed	Fish abundance	EMODnet
		Spatial distribution of Seabed	1:1,000,000 Seabed substrate map	
CH01 - Windfarm Siting	Lithology	substrate types	of the European marine areas	EMODnet
		7,600	·	
CLICA Mindform Cities	Habitat abaya ataylaati	Due distant huse disease FLINIC behitete	Predicted broad-scale EUNIS	EMODnet
CH01 - Windfarm Siting	Habitat characterisation	Predicted broad-scale EUNIS habitats	habitats - Atlantic area	
CH02 - Marine Protected Areas	Industrial activity	Aggregate extraction	Aggregate Extraction	EMODnet



CH02 - Marine Protected Areas	Industrial activity	Hydrocarbon extraction	Boreholes	EMODnet
CH02 - Marine Protected Areas	Industrial activity	Renewable energy offshore facilities	Ocean Energy Facilities	EMODnet
CH02 - Marine Protected Areas	Bird taxonomy-related abundance per unit area of surface	Threatened and/or declining seabird species	Pagophila eburnea	EMODnet
CH02 - Marine Protected Areas	Cetacean abundance	Abundance of Threatened and/or Declining Cetacean Species	Abundance of Threatened and/or Declining Cetacean Species	EMODnet
CH02 - Marine Protected Areas	Reptile abundance	Threatened and/or declining reptile species	Reptile	EMODnet
CH10 - Bathymetry	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}	EMODNET Bathymetry	EMODnet
CH02 - Marine Protected Areas	Seal abundance	Abundance of Threatened and/or Declining Seal Species	Abundance of Threatened and/or Declining Seal Species	EMODnet
CH01 - Windfarm Siting	Administrative units	Munition dumping areas		EMODnet
CH01 - Windfarm Siting	Industrial activity	Dredging sites and locations.		EMODnet
CH01 - Windfarm Siting	Industrial activity	Offshore Instalations		EMODnet
CH01 - Windfarm Siting	Industrial activity	Aggregate Extraction locations		EMODnet
CH01 - Windfarm Siting	Administrative units	Dredge spoil dumping areas		EMODnet
CH10 - Bathymetry	Transport activity	Shipping routes	European Atlas of the Seas - Motorways of the sea	European Commission
CH10 - Bathymetry	Transport activity	Shipping routes	European Atlas of the Seas - Ferry Routes	European Commission
CH01 - Windfarm Siting	.Industrial activity	Telecommunication Cables	Telecommunication Cables (actual route locations)	European Commission. Directorate- General for Maritime Affairs and Fisheries
CH01 - Windfarm Siting	Administrative units	Nationally designated Areas	Nationally designated areas	European Commission. Directorate- General for Maritime Affairs and Fisheries



CH01 - Windfarm Siting	Fish reproduction	seawater finfish farms	Finfish farming sites	European Commission. Directorate- General for Maritime Affairs and Fisheries
CH09 - River Inputs	River flow and discharge	Mean long term river discharge [m3/s]	Water Data Centre	European Environment Agency
	Concentration of			
CH09 - River Inputs	suspended particulate material in the water column	Concentration of suspended matters mg/L	Water Data Centre	European Environment Agency
	Phosphate concentration			
CH09 - River Inputs	parameters in the water column	Concentration of total phosphorus [mg/I P]	Water Data Centre	European Environment Agency
CH01 - Windfarm Siting	Administrative units	Natura2000 spatial extent	Natura2000	European Environment Agency
CH09 - River Inputs	Particulate total and organic nitrogen concentrations in the water column	Concentration of total nitrogen [mg/l N]	Water Data Centre	European Environment Agency
CHOO Biver Inputs	Temperature of the water	Temperature of the water body	Water Data Centre	European Environment Agency
CH09 - River Inputs CH06 - Fisheries Management	column Fishing by-catch	(mean over one year) [°C] By-catch of species and year, in mass and number	Water Data Centre	FAO / FAO - Food and Agriculture Organization of the United Nations
CH09 - River Inputs	River flow and discharge	Riverine discharge of water		Federal Institute of Hydrology (BFG)
CH02 - Marine Protected Areas	Bathymetry and Elevation	Seabed habitat	Undersea feature names	Flanders Marine Institute
CH02 - Marine Protected Areas	Administrative units	Biodiversity critical areas	Large Marine Ecosystems of the World	Flanders Marine Institute
CH02 - Marine Protected Areas	Administrative units	Biodiversity critical areas	Longhurst Biogeographical Provinces	Flanders Marine Institute



CH02 - Marine Protected Areas	Administrative units	Biodiversity critical areas	Marine Ecoregions of the World, MEOW (Spalding et al., 2007)	Flanders Marine Institute
CH07 - Fisheries Impact	Fish and shellfish catch statistics	Regional Capture Fisheries Statistics FAO Major Fishing Area 34	Statistical Query Results	Food and Agriculture Organization of the United Nations
CH07 - Fisheries Impact	Fish and shellfish catch statistics	Regional Capture Fisheries Statistics FAO Major Fishing Areas 21&31	Statistical Query Results	Food and Agriculture Organization of the United Nations
CH05 - Coasts	Sediment accumulation rate	Sediment Mass Balance		Geolittoral
CH08 - Eutrophication CH01 - Windfarm Siting	Chlorophyll pigment concentrations in water bodies Industrial activity	Concentration of chlorophyll per unit volume of the water body Submarine telecommunication cables	Bay of Biscay Submarine telecommunication cables	GIS COuleur de l'OCéan (GISCOOC) Greg's Cable Map
CH04 - Climate	Temperature of the water column	Temperature of the water body	HADISST	Hadley Centre for Climate Prediction and Research
CH04 - Climate	Snow and ice mass, thickness and extent	Coverage (by area) of ice on the water body by image analysis	HADISST	Hadley Centre for Climate Prediction and Research
CH06 - Fisheries Management	Fishing by-catch	Weight and number of fish and by- catch by species and year discarded	WGHARP annual report	ICES Working Group on Harp and Hooded Seals (WGHARP)
CH09 - River Inputs	Temperature of the water column	Temperature of the water body		IFREMER-REPHY
CH06 - Fisheries Management	Fish and shellfish catch statistics	Weight and number of fish and by- catch by species and year discarded		International Commission for the Conservation of Atlantic Tunas (ICCAT)
CH06 - Fisheries Management	Fish and shellfish catch statistics	Fish and shellfish catch statistics	ICES Oficial Landings 2006-2013	International Council for the Exploration of the Sea (ICES)
CH06 - Fisheries Management	Fish and shellfish catch statistics	Fish and shellfish catch statistics	ICES Historical landings 1950 - 2010	International Council for the Exploration of the Sea (ICES)
CH09 - River Inputs	Fish abundance in water bodies	Eel recruitment, abundance and escapement	Report of the Working Group for Eels /WGEEL Country Reports	International Council for the Exploration of the Sea (ICES)



CH02 - Marine Protected Areas	Habitat characterisation	Distribution of Seabed Habitat	Vulnerable Marine Ecosystems	International Council for the Exploration of the Sea (ICES)
CH06 - Fisheries Management	Fishing by-catch	Weight and number of fish and by- catch by species and year discarded	STECF's DCF landings and discards by species	Joint Research Center (JRC)
CH04 - Climate	Temperature of the water column	Temperature of the water body	World Ocean Database 2013 - Hydrography	NOAA
CH01 - Windfarm Siting	Terrestrial mapping	coastline	NGA World Vector Shoreline	NOAA
CH02 - Marine Protected Areas	Administrative units	Marine vessel traffic	Shipping Fairways, Lanes, and Zones for US waters as of June 2013	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States
CH02 - Marine Protected Areas	Man-made structures	Aids to Navigation	Aids to Navigation	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States
CH02 - Marine Protected Areas	Transport activity	Marine traffic density and trajectory : All Traffic overview	2012 Vessel Density: All	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States
CH02 - Marine Protected Areas	Administrative units	Marine vessel traffic	Marine Mammal Seasonal Management Areas (Marine Cadastre)	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States
CH02 - Marine Protected Areas	Administrative units	Aids to navigation	Anchorage Areas	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States
CH02 - Marine Protected Areas	Transport activity	Marine vessel traffic	2011 Vessel Density: All	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States
CH02 - Marine Protected Areas	Administrative units	Marine vessel traffic	WhalesNorth Mandatory Ship Reporting System	Northeast Ocean Data : Map and Data for ocean planning in the Northeastern United States



	Temperature of the water			Oceanic and Continental Environments and
CH09 - River Inputs	column	Temperature of the water body		Paleoenvironments
CH09 - River Inputs	River flow and discharge	Riverine discharge (Flow rate [1000m3/d])	Comprehensive Study on Riverine Inputs and Direct Discharges	OSPAR Commission
CH01 - Windfarm Siting	Industrial activity	Offshore Wind-farms	Offshore Wind-farms	OSPAR Commission
CH01 - Windfarm Siting	Horizontal spatial co- ordinates	MPA Network - spatial extent	Marine Protected Areas Network(MPA) shapefile	OSPAR Commission
CH01 - Windfarm Siting	Habitat extent	OSPAR Distribution and extent of threatened and/or declining habitats	OSPAR threatened and/or declining habitats 2014	OSPAR Commission
CH02 - Marine Protected Areas	Industrial activity	Offshore Installations	Offshore Renewable Energy	OSPAR Commission
CH02 - Marine Protected Areas	Habitat extent	Distribution of Ospar Habitat	Habitats - Points	OSPAR Commission
CH02 - Marine Protected Areas	Habitat extent	Seabed habitat	Habitats ? Polygons	OSPAR Commission
CH01 - Windfarm Siting	Industrial activity	Inventory of Offshore Installations	Inventory of Offshore Installations	OSPAR Commission
CH07 - Fisheries Impact	Fishing effort	High Resolution VMS & ERS (Logbook) Fishing Intensity Data	OSPAR mapping fishing intensity and effort outputs 2016	OSPAR Commission
CH05 - Coasts	Sea level	Height above sea level	PSMSL sea level data	Permanent Service for Mean Sea Level
CH05 - Coasts	Sea level	Height above sea level	UHSLC real-time sea level data	School of Ocean and Earth Science and Technology, University of Hawai'i at Manoa
CH01 - Windfarm Siting	Industrial activity	Submarine telecommunication cables	Information about 15 submarine telecommunication cables in the Atlantic.	SIGCables
CH01 - Windfarm Siting	Habitat extent	Essencial Fish habitat extent	EFH for the SAFMC jurisdictional area	South Atlantic Fishery Management Council
CH01 - Windfarm Siting	Industrial activity	Landing stations and schematic routes of submarine telecommunication cables	GIS data on European telecommunication cable landing stations and schematic routes.	TeleGeography



CH01 - Windfarm Siting	Industrial activity	Cables and pipelines		The Crown State
CH07 - Fisheries Impact	Fishing effort	Fishing_Effort	26092017_ExtractionVMS_UK_AND _EST	The International Council for the Exploration of the Sea
CH02 - Marine Protected Areas	Administrative units	Marine protected area location	World Database on Protected Areas	UNEP-WCMC
CH10 - Bathymetry	Bathymetry and Elevation	Sea-floor depth (below mean sea level) {bathymetric depth}	NOAA ESRI Grid - depth uncertainty predictions in New York offshore planning area from Biogeography Branch bathymetry model	US Government Open Data Source
CH01 - Windfarm Siting	Transport activity	Vessel Traffic Density		Vessel Finder
CH01 - Windfarm Siting	Transport activity	Vessel Traffic Density	map of shipping routes	wikipedia
CH02 - Marine Protected Areas	Habitat extent	Distribution and evolution over time of habitats that function as potential carbon sinks (salt marshes, mangroves, seagrass, and kelp)	Global Distribution of Mangroves USGS	World Conservation Monitoring Centre
CH02 - Marine Protected Areas	Habitat characterisation	Distribution of Seabed Habitat	Reefs at Risk Revisited	World Conservation Monitoring Centre