GROWTH AND INNOVATION IN OCEAN ECONOMY – GAPS AND PRIORITIES IN SEA BASIN OBSERVATION AND DATA

EMODNET MedSea CheckPoint

Annex 4 to the Second DAR: Statistics of Appropriateness indicators

Total number of pages: 118

Workpackage	**11**	Annex 4 to DAR2	
Author(s):	G.M.R. Manzella		INGV
	Nadia Pinardi		INGV
	Vladyslav Lyubartsev		CMCC
	Simona Simoncelli		INGV

A project funded by:

EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES, MARITIME POLICY ATLANTIC, OUTERMOST REGIONS AND ARCTIC

Table of Contents

1 INTRODUCTION 3

2 OVERALL UPSTREAM DATA SET APPROPRIATENESS INDICATORS 3

3 INDICATORS FOR CHALLENGE 1: WIND FARM SITING 21

4 INDICATORS FOR CHALLENGE 2: MARINE PROTECTED AREAS 27

5 INDICATORS FOR CHALLENGE 3: OIL PLATFORM LEAKS 36

6 INDICATORS FOR CHALLENGE 4: CLIMATE AND COASTAL PROTECTION 47

7 INDICATORS FOR CHALLENGE 5: FISHERIES MANAGEMENT 83

8 INDICATORS FOR CHALLENGE 6: MARINE ENVIRONMENT 102

9 INDICATORS FOR CHALLENGE 7: RIVERS 123

1 Introduction

Annex 4 is presenting the details of the appropriateness appropriateness indicators described in Annex 2. The indicators will be analysed as a function of Challenges and P02 characteristic categories.

2 Overall upstream data set appropriateness indicators

In this section we analyse the statistics of the indicators for the Upstream data sets as illustrated in Annex 2. Eight indicators have been chosen which are synthetically described in Table A4.1 below.

Table A4.1 Upstream data sets appropriateness indicators

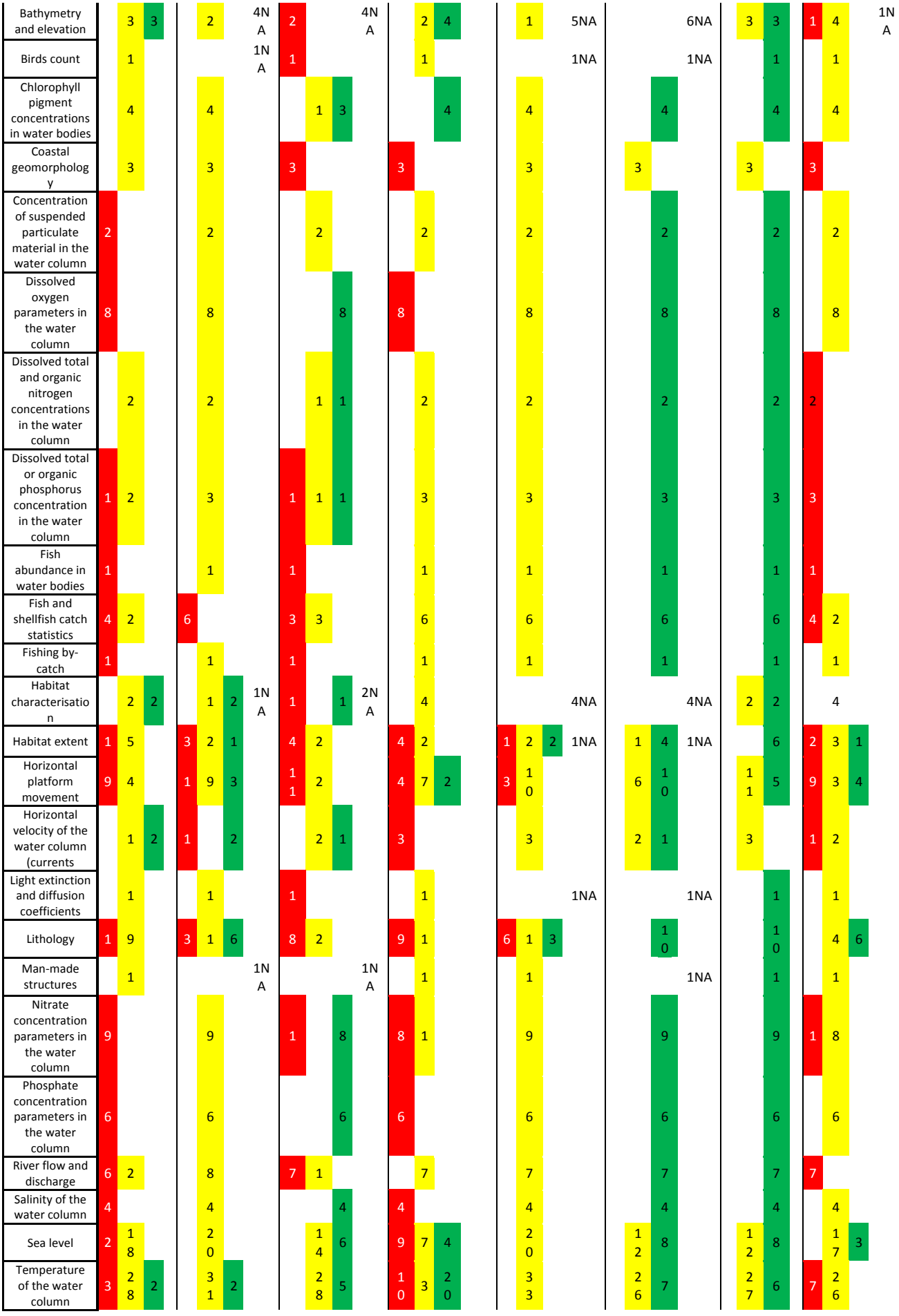
Name of indicator	Indicator meaning
UD.APE.1.1	**Completeness:** *Upstream data set horizontal spatial coverage error with respect to product specification (percentage)*
UD.APE.1.2	**Completeness:** *Upstream data set vertical spatial coverage error with respect to product specification (percentage)*
UD.APE.1.3	**Completeness:** *Upstream data set temporal coverage error with respect to product specification (percentage)*
UD.APE.3.1	**Accuracy:** *Upstream data set horizontal resolution or sampling error with respect to product specification (percentage)*
UD.APE.3.2	**Accuracy:** *Upstream data set vertical resolution or sampling error with respect to product specification (percentage)*
UD.APE.3.3	**Accuracy:** *Upstream data set temporal resolution or sampling error with respect to product specification (percentage)*
UD.APE.3.4	**Accuracy:** *Thematic compliance with the value domain of the accuracy defined in the product specification (percentage)*
UD.APE.4.1	**Temporal quality***: last time the product was upgraded or changed with respect to a value specified for product (percentage)*

Where the quality element was not applicable, the symbol NA is appearing in the Tables that follows. If the errors are greater than +100% or less than -100% the values are saturated at +100% and -100%.

Table A4.2 lists the Upstream Data appropriateness indicators for different P02.

Table A4.2 Upstream data sets appropriateness indicators as a function of P02 across all Challenges

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Administrative units	1 1 1	9 2 1 1NA	6 5 1NA	6 1 4 2NA	2 1 10NA	2 11NA	3 10	7 4 1 1NA
Air pressure	1	1	1	1	1	1	1	1


Bathymetry and elevation
Birds count
Chlorophyll pigment concentrations in water bodies
Coastal geomorphology
Concentration of suspended particulate material in the water column
Dissolved oxygen parameters in the water column
Dissolved total and organic nitrogen concentrations in the water column
Dissolved total or organic phosphorus concentration in the water column
Fish abundance in water bodies
Fish and shellfish catch statistics
Fishing by-catch
Habitat characterisation
Habitat extent
Horizontal platform movement
Horizontal velocity of the water column (currents
Light extinction and diffusion coefficients
Lithology
Man-made structures
Nitrate concentration parameters in the water column
Phosphate concentration parameters in the water column
River flow and discharge
Salinity of the water column
Sea level
Temperature of the water column
4NA
1NA
4NA
1NA
5NA
6NA
1NA
1NA
1

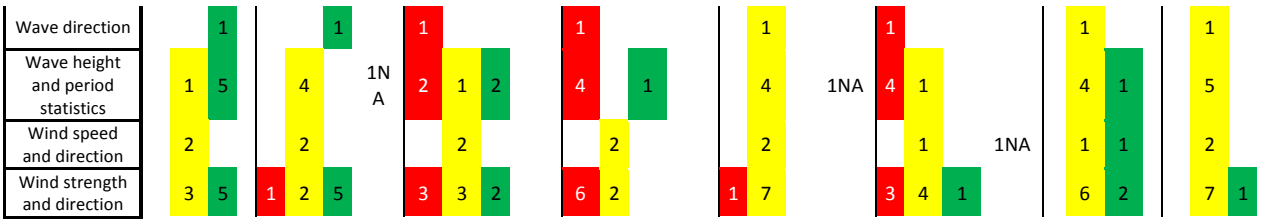


Table A4.3 Upstream data sets appropriateness indicators as a function of P02 across all Challenges and subdivided into "themes": bathymetry, geology, physics, chemistry, biology, habitats, human activities and others

Bathymetry

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Bathymetry and elevation	3 3	2 4NA	2 4NA	2 4	1 5NA	6NA	3 3	1 4 1NA

Geology

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Coastal geomorphology	3	3	3	3	3	3	3	3
Concentration of suspended particulate material in the water column	2	2	2	2	2	2	2	2
Lithology	1 9	3 1 6	8 2	9 1	6 1 3	10	10	4 6

Physics

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Horizontal velocity of the water column (currents	1 2	1 2	2 1	3	3	2 1	3	1 2
Light extinction and diffusion coefficients	1	1	1	1	1NA	1NA	1	1
River flow and discharge	6 2	8	7 1	7	7	7	7	7
Salinity of the water column	4	4	4	4	4	4	4	4
Sea level	2 18	20	14 6	9 7 4	20	12 8	12 8	17 3
Temperature of the water column	3 28 2	31 2	28 5	10 3 20	33	26 7	27 6	7 26
Wave direction	1	1	1	1	1	1	1	1
Wave height and period statistics	1 5	4 1NA	2 1 2	4 1	4 1NA	4 1	4 1	5
Wind speed and direction	2	2	2	2	2	1 1NA	1 1	2
Wind strength and direction	3 5	1 2 5	3 3 2	6 2	1 7	3 4 1	6 2	7 1

Chemistry

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1				Vertical Coverage UD.APE.1.2				Temporal Coverage UD.APE.1.3				Horizontal Resolution UD.APE.3.1				Vertical Resolution UD.APE.3.2				Temporal Resolution UD.APE.3.3				Thematic Accuracy UD.APE.3.4				Temporal Validity UD.APE.4.1			
Dissolved oxygen parameters in the water column	8				8						8		8				8						8				8				8			
Dissolved total and organic nitrogen concentrations in the water column		2			2					1	1			2			2						2				2		2				
Dissolved total or organic phosphorus concentration in the water column	1	2			3				1	1	1			3			3						3				3		3				
Nitrate concentration parameters in the water column	9				9				1		8		8	1			9						9				9		1	8			
Phosphate concentration parameters in the water column	6				6						6		6				6						6				6			6			

Biology

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Birds count	1	1NA	1	1	1NA	1NA	1	1
Chlorophyll pigment concentrations in water bodies	4	4	1 3	4	4	4	4	4

Habitats

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Habitat characterisation	2 2	1 2 1NA	1 1 2NA	4	4NA	4NA	2 2	4
Habitat extent	1 5	3 2 1	4 2	4 2	1 2 2 1NA	1 4 1NA	6	2 3 1

Human activity

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Administrative units	1 11 1	9 2 1 1NA	6 5 1NA	6 1 4 2NA	2 1 10NA	2 11NA	3 10	7 4 1 1NA
Fish and shellfish catch statistics	4 2	6	3 3	6	6	6	6	4 2
Fishing by-catch	1	1	1	1	1	1	1	1
Horizontal platform movement	9 4	1 9 3	11 2	4 7 2	3 10	6 10	11 5	9 3 4
Horizontal velocity of the water column (currents	1 2	1 2	2 1	3	3	2 1	3	1 2
Man-made structures	1	1NA	1NA	1	1	1NA	1	1

Other

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Air pressure	1	1	1	1	1	1	1	1

Table A4.4 Upstream data sets appropriateness indicators as a function of P02 across all Challenges. The score represents the most frequent colour among the different scores given by the different Challenges to different data sets. If two colours have the same number of input data sets then the "best" colour is chosen, i.e., the more "adequate" one. Please note that yellow has a positive meaning

List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
Administrative units								

Air pressure								
Bathymetry and elevation								
Birds count								
Chlorophyll pigment concentrations in water bodies								
Coastal geomorphology								
Concentration of suspended particulate material in the water column								
Dissolved oxygen parameters in the water column								
Dissolved total and organic nitrogen concentrations in the water column								
Dissolved total or organic phosphorus concentration in the water column								
Fish abundance in water bodies								
Fish and shellfish catch statistics								
Fishing by-catch								
Habitat characterisation								
Habitat extent								
Horizontal platform movement								
Horizontal velocity of the water column (currents								
Light extinction and diffusion coefficients								
Lithology								
Man-made structures								
Nitrate concentration parameters in the water column								
Phosphate concentration parameters in the water column					6			
River flow and discharge								
Salinity of the water column								
Sea level								
Temperature of the water column								
Wave direction								
Wave height and period statistics								
Wind speed and direction								

Wind strength and direction								

3 Targeted Data Products appropriateness indicators

In this section we analyse the statistics of the indicators for the Targeted Data Products as illustrated in Annex 2. Nine indicators have been chosen which are synthetically described in Table A4.5 below.

Table A4.5 Targeted Data Products appropriateness indicators

Name of indicator	Indicator meaning
TDP.APE.1.1	**Completeness:** *Upstream data set horizontal spatial coverage error with respect to product specification (percentage)*
TDP.APE.1.2	**Completeness:** *Upstream data set vertical spatial coverage error with respect to product specification (percentage)*
TDP.APE.1.3	**Completeness:** *Upstream data set temporal coverage error with respect to product specification (percentage)*
TDP.APE.2.1	**Consistency:** *measures the uniformity among the number of Upstream Data Sets in the Product Specification and in Targeted Product*
TDP.APE.3.1	**Accuracy:** *Upstream data set horizontal resolution or sampling error with respect to product specification (percentage)*
TDP.APE.3.2	**Accuracy:** *Upstream data set vertical resolution or sampling error with respect to product specification (percentage)*
TDP.APE.3.3	**Accuracy:** *Upstream data set temporal resolution or sampling error with respect to product specification (percentage)*
TDP.APE.3.4	**Accuracy:** *Thematic compliance with the value domain of the accuracy defined in the product specification (percentage)*
TDP.APE.4.1	**Temporal quality:** *last time the product was upgraded or changed with respect to a value specified for product (percentage)*

The value scales for all the appropriateness indicators are:

Red: the TDP or UD have errors between -100% and -10% and urgent actions are required to provide datasets fit for use by the Challenges – not adequate

Yellow: the TDP or UD have errors between -10% and +10% and can be considered quite appropriate and monitoring data are fit for use and should be maintained but also improved – partly adequate

Green: the TDP or UD have errors between +10% and +100% and there is an 'over – offer', no need for further development –totally adequate

Where the quality element was not applicable, the symbol NA is appearing in the Tables that follows. If the errors are greater than +100% or less than -100% the values are saturated at +100% and -100%.

Table A4.5 Targeted Data Products appropriateness indicators. Please note that yellow has a positive meaning

Product	Component	Horizontal Coverage TDP.APE.1.1	Vertical Coverage TDP.APE.1.2	Temporal Coverage TDP.APE.1.3	Number of P02 TDP.APE.2.1	Horizontal Resolution TDP.APE.3.1	Vertical Resolution TDP.APE.3.2	Temporal Resolution TDP.APE.3.3	Thematic Accuracy TDP.APE.3.4	Temporal Validity TDP.APE.4.1
MEDSEA_CH1_Product_1/Wind and wave data set from MARINA project	MEDSEA_CH1_Product_1_Wind Wave Database	0	0	0	0	0	0	0	10	0
MEDSEA_CH1_Product_2/Suitability index of a wind farm in the NWMed concerning the environmental resources	MEDSEA_CH1_Product_2_ A suitability index of a wind farm in the NWMed concerning the environment resources	0	NA	0	0	0	NA	NA	20	0
MEDSEA_CH1_Product_3_1 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries	Wind Impact	0	NA	0	0	0	NA	NA	20	0
MEDSEA_CH1_Product_3_2 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries.	Impact of the natural resources on the total suitability index for offshore wind farm siting	0	NA	0	0	0	NA	NA	20	0
MEDSEA_CH2_Product_1 / Med protection initiatives (management and conservation areas)	MEDSEA_CH_2_PRODUCT_1	0	0	-2.4	0	-100	NA	0	20	-100
MEDSEA_CH2_Product_2 / Med conservation areas and depth zones	MEDSEA_CH_2_PRODUCT_2	0	0	-2.4	0	-100	NA	0	20	-100
MEDSEA_CH2_Product_3 / Proposed regional conservation areas in the Mediterranean	MEDSEA_CH_2_PRODUCT_3	0	0	28.6	0	-100	NA	0	30	-100
MEDSEA_CH2_Product_4 / Qualitative analysis of connectivity between MPAs	MEDSEA_CH_2_PRODUCT_4	0	-99.25	0	0	-100	0	0	30	-100

MEDSEA_CH2_Product_5 / Representativity of habitats/species/other features	MEDSEA_CH_2_PRODUCT_5	0	0	-98.9	0	-100	100	NA	40	100
MEDSEA_CH2_Product_6 / The monitoring capacity of biodiversity in MPAs	MEDSEA_CH_2_PRODUCT_6	0	-98.8	-6.9	0	60	NA	0	5	0
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014 MEDSEA_CH03_Product_1_1	MEDSEA_CH03_PRODUCT_1_1	0	0	25	0	-100	0	0	10	-100
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014 MEDSEA_CH03_Product_1_2: Not covered	MEDSEA_CH03_PRODUCT_1_2	NA	NA	NA	NA	NA	NA	NA	NA	NA
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016 MEDSEA_CH3_Product_2_1	MEDSEA_CH03_PRODUCT_2_1	0	0	0	0	-100	0	0	10	0
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016 MEDSEA_CH3_Product_2_2	MEDSEA_CH03_PRODUCT_2_2	0	0	0	0	0	0	0	10	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_1	MEDSEA_CH4_PRODUCT_1_1	0	0	0	0	-100	0	0	5	0

MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_2	MEDSEA_CH4_PRODUCT_1_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_3	MEDSEA_CH4_PRODUCT_1_3	0	0	0	0	-100	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_4	MEDSEA_CH4_PRODUCT_1_4	-1	0	0	0	0	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_5	MEDSEA_CH4_PRODUCT_1_5	-1	0	0	0	0	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_6	MEDSEA_CH4_PRODUCT_1_6	-1	0	0	0	0	0	0	5	0
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid depth) MEDSEA_CH4_PRODUCT_2_1	MEDSEA_CH4_PRODUCT_2_1	0	0	0	0	-100	0	0	5	0

MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (bottom) MEDSEA_CH4_PRODUCT_2_2	MEDSEA_CH4_PRODUCT_2_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid-depth) MEDSEA_CH4_PRODUCT_2_3	MEDSEA_CH4_PRODUCT_2_3	-1	0	0	0	-100	0	0	5	0
MedSea_CH4_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (basin) MEDSEA_CH4_PRODUCT_3_1	MEDSEA_CH4_PRODUCT_3_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_4_1	MEDSEA_CH4_PRODUCT_4_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_4_2	MEDSEA_CH4_PRODUCT_4_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS 50 years) MEDSEA_CH4_PRODUCT_4_3	MEDSEA_CH4_PRODUCT_4_3	0	0	0	0	0	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_4_4	MEDSEA_CH4_PRODUCT_4_4	0	0	0	0	0	0	0	5	0
MedSea_CH4_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (basin) MEDSEA_CH4_PRODUCT_5_1	MEDSEA_CH4_PRODUCT_5_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_5 / Spatial layer of sea-level trend from AVISO reconstruction	MEDSEA_CH4_PRODUCT_5_2	-1	0	0	0	0	0	0	5	0

over period of 10 years (2003 - 2012) (NUTS) MEDSEA_CH4_PRODUCT_5_2										
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years basin) MEDSEA_CH4_PRODUCT_6_1	MEDSEA_CH4_PRODUCT_6_1	94.7	0	0	0	-100	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years basin) MEDSEA_CH4_PRODUCT_6_2	MEDSEA_CH4_PRODUCT_6_2	94.4	0	0	0	-100	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years NUTS3) MEDSEA_CH4_PRODUCT_6_3	MEDSEA_CH4_PRODUCT_6_3	94.7	0	0	0	-100	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years NUTS3) MEDSEA_CH4_PRODUCT_6_4	MEDSEA_CH4_PRODUCT_6_4	94.4	0	0	0	-100	0	0	5	0
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review MEDSEA_CH4_PRODUCT_7_1	MEDSEA_CH4_PRODUCT_7_1	Component not covered								
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (10 years) MEDSEA_CH4_PRODUCT_7_2	MEDSEA_CH4_PRODUCT_7_2	Component not covered								
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (50 years) MEDSEA_CH4_PRODUCT_7_3	MEDSEA_CH4_PRODUCT_7_3	Component not covered								
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (10 years) MEDSEA_CH4_PRODUCT_8_1	MEDSEA_CH4_PRODUCT_8_1	0	0	0	0	-100	0	0	5	0

MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (50 years) MEDSEA_CH4_PRODUCT_8_2	MEDSEA_CH4_PRODUCT_8_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (100 years) MEDSEA_CH4_PRODUCT_8_3	MEDSEA_CH4_PRODUCT_8_3	0	0	0	0	-100	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 10 years) MEDSEA_CH4_PRODUCT_8_4	MEDSEA_CH4_PRODUCT_8_4	-1	0	0	0	0	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_8_5	MEDSEA_CH4_PRODUCT_8_4	-1	0	0	0	0	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_8_6	MEDSEA_CH4_PRODUCT_8_4	-1	0	0	0	0	0	0	5	0
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (mid depth) MEDSEA_CH4_PRODUCT_9_1	MEDSEA_CH4_PRODUCT_9_1	0	0	0	0	-100	0	0	5	0

MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (bottom) MEDSEA_CH4_PRODUCT_9_2	MEDSEA_CH4_PRODUCT_9_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (NUTS3 bottom) MEDSEA_CH4_PRODUCT_9_3	MEDSEA_CH4_PRODUCT_9_3	0	0	0	0	0	0	0	5	0
MedSea_CH4_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (basin) MEDSEA_CH4_PRODUCT_10_1	MEDSEA_CH4_PRODUCT_10_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (NUTS3) MEDSEA_CH4_PRODUCT_10_2	MEDSEA_CH4_PRODUCT_10_2	-1	0	0	0	0	0	0	5	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_11_1	MEDSEA_CH4_PRODUCT_11_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_11_2	MEDSEA_CH4_PRODUCT_11_2	0	0	0	0	-100	0	0	15	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 50 years) MEDSEA_CH4_PRODUCT_11_3	MEDSEA_CH4_PRODUCT_11_3	0	0	0	0	0	0	0	5	0

MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 100 years) MEDSEA_CH4_PRODUCT_11_4	MEDSEA_CH4_PRODUCT_11_4	0	0	0	0	0	0	0	5	0
MedSea_CH4_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 50 years) MEDSEA_CH4_PRODUCT_12_1	MEDSEA_CH4_PRODUCT_12_1	-95	0	0	0	-100	0	0	5	0
MedSea_CH4_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 100 years) MEDSEA_CH4_PRODUCT_12_2	MEDSEA_CH4_PRODUCT_12_1	-99	0	-1	0	-100	0	0	5	0
MedSea_CH4_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (basin) MEDSEA_CH4_PRODUCT_13_1	MEDSEA_CH4_PRODUCT_13_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (NUTS3) MEDSEA_CH4_PRODUCT_13_2	MEDSEA_CH4_PRODUCT_13_2	0	0	0	0	0	0	0	0	0

MedSea_CH5_1 / Collated data set of fish landings by species and year, for mass and number MEDSEA_CH5_Product_1	MEDSEA_CH5_Product_1	0	0	-2	-33	0	0	0	20	-100
MedSea_CH5_2 / Collated data set of fish discards by species and year, for mass and number MEDSEA_CH5_Product_2	MEDSEA_CH5_Product_2	-42	0	0	-50	0	0	0	12	0
MedSea_CH5_3 / Collated data set of fish bycatch by species and year, for mass and number MEDSEA_CH5_Product_3	MEDSEA_CH5_Product_3	-98	0	-24	-75	0	0	0	12	0
MedSea_CH5_4 / Impact of fisheries on the bottom from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_4	MEDSEA_CH5_Product_4	-78	0	0	-27	0	0	0	20	0

MedSea_CH5_5 / Change level of disturbance from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_5	MEDSEA_CH5_Product_5	-62	0	-11	-27	0	0	0	20	-100
MedSea_CH5_6 / Impact of fisheries on the bottom from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_6	MEDSEA_CH5_Product_6	0	0	0	0	0	0	0	20	0
MedSea_CH5_7 / Change level of disturbance from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_7	MEDSEA_CH5_Product_7	0	0	0	0	0	0	-100	20	0
MedSea_CH5_8 / Impact of fisheries on the bottom from Data Logger combined with habitat vulnerability MEDSEA_CH5_Product_8	MEDSEA_CH5_Product_8	-100	-73	-8	0	0	73	0	90	100
MEDSEA_CH6_1 / Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009. MedSea_CH6_Product_1	MEDSEA_CH6_Product_1	0	0	0	0	0	0	0	30	0
MEDSEA_CH6 _2 / Map of Chlorophyll concentration trend over the Mediterranean Sea, relative to the period 1998-2009, expressed as percent of variation respect to the climatological field. MedSea_CH6_Product_2	MEDSEA_CH6_Product_2	0	0	0	0	0	0	0	30	-100
MEDSEA_CH6 _3 / Maps of average TRIX indices calculated from Mediterranean sea surface data for the periods 2008-2012, 1998-2002, and 1993-1997. MedSea_CH6_Product_3	MEDSEA_CH6_Product_3	-20	0	100	0	20	0	-100	50	0

MEDSEA_CH6 _4 / Maps showing differences between most recent TRIX estimates (2008-2012) and TRIX from the earlier periods 1998-2002 and 1993-1997. MedSea_CH6_Product_4	MEDSEA_CH6_Product_4	-20	0	100	0	20	0	-100	50	-100

MedSea_CH7_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_1	MEDSEA_CH7_Product_1.1	-52.2	0	-99.8	0	0	0	0	30	-100
MedSea_CH7_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_2	MEDSEA_CH7_Product_1.2	0	0	0	0	0	0	0	40	-100
MedSea_CH7_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_1	MEDSEA_CH7_Product_2.1	0	0	0	0	0	0	-100	30	-100
MedSea_CH7_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_2	MEDSEA_CH7_Product_2.2	-28	0	0	0	40	0	-100	40	-66.6
MedSea_CH7_3 / Annual time series of TSM from satellite data MEDSEA_CH_7_Product_3	MEDSEA_CH7_Product_3.1	-89	0	0	0	0	0	0	40	0
MedSea_CH7_4 / Monthly time series of TSM from satellite data MEDSEA_CH_7_Product_4	MEDSEA_CH7_Product_4.1	-89	0	0	0	0	100	0	40	0
MedSea_CH7_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_1	MEDSEA_CH7_Product_5.1	-62.6	0	-99.6	-100	0	0	0	30	-100
MedSea_CH7_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_2	MEDSEA_CH7_Product_5.2	0	0	0	0	0	0	0	40	-100
MedSea_CH7_6 / Monthly time series of Total Nitrogen from model data [mg/l] MEDSEA_ CH7_product_6	MEDSEA_CH7_Product_6.1	0	0	100	0	0	0	0	40	-100
MedSea_CH7_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_1	MEDSEA_CH7_Product_7.1	-63	0	-100	0	0	0	0	30	-100
MedSea_CH7_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_2	MEDSEA_CH7_Product_7.2	0	0	0	0	0	0	0	40	-100

MedSea_CH7_8 / Monthly time series of Total Phosphorous from model data [mg/l] MEDSEA_ CH7_product_8	MEDSEA_CH7_Product_8.1	0	0	100	0	0	0	0	40	-100
MedSea_CH7_9 / Annual time series of Eels MedSea_CH7ion[tons] MEDSEA_CH_7_Product_9	MEDSEA_CH7_Product_9.1	-100	0	-100	0	0	0	-100	40	-10

4 Indicators for Challenge 1: Wind Farm Siting

The DPS names and required quality elements.

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MEDSEA_CH1_Specification_1 / Wind and wave data set from MARINA project MEDSEA_CH1_Product_1	2001	2010	257526.36	180	3652	4	5000	40	Layers are 0, 10, 40, 80, 120, 180	0.042	10		1095
MEDSEA_CH1_Specification_2 / Suitability index of a wind farm in the NWMed concerning the environmental resources MEDSEA_CH1_Product_2	2001	2010	257526.36	0	3652	2	5000	0	Not applicable. One layer product.	0	20		1095
MEDSEA_CH1_Specification_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries MEDSEA_CH1_Product_3_1	2001	2010	257526.36	0	3652	4	1000	NA	Not applicable. One layer product.	0	20		1095
MEDSEA_CH1_Specification_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. MEDSEA_CH1_Product_3_2 - Impact of the natural resources on the total suitability index for offshore wind farm sitting	2001	2010	257526.36	0	3652	2	5000	NA	Not applicable. One layer product.	0	20		1095

The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	Component	List of Input data sets by product
MEDSEA_CH1_Product_1/Wind and wave data set from MARINA project	MEDSEA_CH1_Product_1_Wind Wave Database	Wind speed and direction | Eastward wind velocity in the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
		Air pressure | Pressure (measured variable) exerted by the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
		Wave height and period statistics | Mean (Energy) wave period model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
		Wind strength and direction | Northward wind velocity in the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
MEDSEA_CH1_Product_2/Suitability index of a wind farm in the NWMed concerning the environmental resources	MEDSEA_CH1_Product_2_ A suitability index of a wind farm in the NWMed concerning the environment resources	Wind speed and direction | Eastward wind velocity in the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
		Wind strength and direction | Northward wind velocity in the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
MEDSEA_CH1_Product_3_1 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries	Wind Impact	Wind strength and direction | Northward wind velocity in the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
MEDSEA_CH1_Product_3_2 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries.	Impact of the natural resources on the total suitability index for offshore wind farm siting	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | EMODnet | EMODnet Digital Terrain Model
		Man-made structures | Distance from grid/supply chain | SHOM (SERVICE HYDROGRAPHIQUE ET OCEANOGRAPHIQUE DE LA MARINE) | Trait de côte HISTOLITT
		Administrative units | Protected marine parcs | SHOM (SERVICE HYDROGRAPHIQUE ET OCEANOGRAPHIQUE DE LA MARINE) | Cartes des Aires Marines Protégées
		Habitat characterisation | Benthic Substrate (plus biocenosis Posidonia and Cymodocea) | IFREMER | Cartographie des habitats physiques Eunis
		Bird counts | Birds: species | French Marine Protected Areas Agency | Marine Protected Areas

The TDP quality elements

TDP	Initial Date	Final Date	Horizontal Coverage TDP.AP.1.1 (km**2)	Vertical Coverage TDP.AP.1.2 (m)	Temporal Coverage TDP.AP.1.3 (days)	Number of P02 TDP.AP.2.1	Horizontal Resolution TDP.AP.3.1 (m)	Vertical Resolution TDP.AP.3.2 (m)	Description	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description	Temporal Validity TDP.AP.4.1 (days)
MEDSEA_CH1_Product_1 / Wind and wave data set from MARINA project MEDSEA_CH1_Product_1	2001	2010	257526.36	180	3652	4	5000	40	Layers are 0, 10, 40, 80, 120, 180	0.042	10		1095
MEDSEA_CH1_Product_2 / Suitability index of a wind farm in the NWMed concerning the environmental resources MEDSEA_CH1_Product_2	2001	2010	257526.36	NA	3652	2	5000	NA	Not applicable. One layer product.	NA	20		1095
MEDSEA_CH1_Product_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. MEDSEA_CH1_Product_3_1	2001	2010	257526.36	NA	3652	4	1000	NA	Not applicable. One layer product.	NA	20		1095
MEDSEA_CH1_Product_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. MEDSEA_CH1_Product_3_2	2001	2010	257526.36	NA	3652	2	5000	NA	Not applicable. One layer product.	NA	20		1095

The TDP quality elements errors (%)

TDP	Horizontal Coverage TDP.APE.1.1	Vertical Coverage TDP.APE.1.2	Temporal Coverage TDP.APE.1.3	Number of P02 TDP.APE.2.1	Horizontal Resolution TDP.APE.3.1	Vertical Resolution TDP.APE.3.2	Temporal Resolution TDP.APE.3.3	Thematic Accuracy TDP.APE.3.4	Temporal Validity TDP.APE.4.1
MEDSEA_CH1_Product_1 / Wind and wave data set from MARINA project MEDSEA_CH1_Product_1	0	0	0	0	0	0	0	10	0
MEDSEA_CH1_Product_2 / Suitability index of a wind farm in the NWMed concerning the environmental resources MEDSEA_CH1_Product_2	0	NA	0	0	0	NA	NA	20	0
MEDSEA_CH1_Product_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. Wind impact MEDSEA_CH1_Product_3_1	0	NA	0	0	0	NA	NA	20	0
MEDSEA_CH1_Product_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. Impact on natural resources MEDSEA_CH1_Product_3_2	0	NA	0	0	0	NA	NA	20	0

The Input data set quality elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH1_Product_1 / Wind and wave data set from MARINA project MEDSEA_CH1_Product_1	Wind speed and direction | Eastward wind velocity in the atmosphere	2001	2010	257526.36	180	3652	5000	40	Mean resolution	0.042	10		1095
	Air pressure | Pressure (measured variable) exerted by the atmosphere	2001	2010	257526.36	180	3652	5000	40		0.042	20		1095
	Wave height and period statistics | Mean (Energy) wave period model output	2001	2010	257526.36	180	3652	1000	0	surface waves, obviously not coherent with DPS	0.042	20		1095
	Wind strength and direction | Northward wind velocity in the atmosphere	2001	2010	257526.36	180	3652	5000	0		0.042	20		1095
MEDSEA_CH1_Product_2 / A suitability index of a wind farm in the NWMed concerning the environment resources. MEDSEA_CH1_Product_2	Wind speed and direction | Eastward wind velocity in the atmosphere	2001	2010	257526.36	0	3652	5000	0		NA	20		1095
	Wind strength and direction | Northward wind velocity in the atmosphere	2001	2010	257526.36	0	3652	5000	0		NA	20		1095
MEDSEA_CH1_Product_3/ Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. Wind impact. MEDSEA_CH1_Product_3_1	Wind strength and direction | Northward wind velocity in the atmosphere	2001	2010	257526.36	0	365	10000	0		NA	5		1095
MEDSEA_CH1_Product_3 / Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. Impact on Natural Resources. MEDSEA_CH1_Product_3_1	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | EMODnet | EMODnet Digital Terrain Model			257526.36	0	1095	250			NA	10		
	Man-made structures | Distance from grid/supply chain			257526.36			1	0		NA	10		1095
	Administrative units | Protected marine parcs			257526.36			1			NA	20		1095
	Habitat characterisation | Benthic Substrate			257526.36	0		1000	0		NA	20		1095
	Bird counts | Birds: species			257526.36	0	1095	1	0		NA	30		1095

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH1_Product_1 / Wind and wave data set from MARINA project MEDSEA_CH1_Product_1	Wind speed and direction | Eastward wind velocity in the atmosphere	0	0	0	0	0	0	10	0
	Air pressure | Pressure (measured variable) exerted by the atmosphere	0	0	0	0	0	0	20	0
	Wave height and period statistics | Mean (Energy) wave period model output	0	NA	0	+100	NA	0	20	0
	Wind strength and direction | Northward wind velocity in the atmosphere	0	0	0	0	0	0	20	0
MEDSEA_CH1_Product_2 A suitability index of a wind farm in the NWMed concerning the environment resources	Wind speed and direction | Eastward wind velocity in the atmosphere	0	0	0	0	0	NA	20	0
	Wind strength and direction | Northward wind velocity in the atmosphere	0	0	0	0	0	0	20	0
MEDSEA_CH1_Product_3 _1 Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. Wind impact	Wind strength and direction | Northward wind velocity in the atmosphere	0	-50	-95	-100	-100	+100	5	95
MEDSEA_CH1_Product_3 _2 Suitability index of a wind farm in the NWMed concerning the environmental resources, the natural barriers, human activities, MPA and fisheries. Impact on Natural Resources	Bathymetry and Elevation | Sea-floor depth (below mean sea level)	0	NA	NA	+75	0	NA	20	0
	Man-made structures | Distance from grid/supply chain	0	NA	NA	0	0	NA	20	0
	Administrative units | Protected marine parcs	0	NA	NA	0	0	NA	20	0
	Habitat characterisation | Benthic Substrate	0	NA	NA	0	NA	NA	20	0
	Bird counts | Birds: species	0	NA	-70	0	NA	NA	30	0

5 Indicators for Challenge 2: Marine Protected Areas

The DPS names and required quality elements.

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MEDSEA_CH2_Specification_1 / Med protection initiatives (management and conservation areas) MEDSEA_CH2_Product_1	1933	2016	2500000	1	30295	1	250	0		365	5		365
MEDSEA_CH2_Specification_2 / Med conservation areas and depth zones MEDSEA_CH2_Product_2	1933	2016	2500000	5200	30295	3	250	0	2d information	365	15		365
MEDSEA_CH2_Specification_3 / Proposed regional conservation areas in the Mediterranean MEDSEA_CH2_Product_3	1999	2020	2500000	1	7665	2	250	0		365	5		365
MEDSEA_CH2_Specification_4 / Qualitative analysis of connectivity between MPAs MEDSEA_CH2_Product_4	1987	2013	2500000	200	9855	3	500	1		90	20		90
MEDSEA_CH2_Specification_5 / Representativity of habitats/species/other features MEDSEA_CH2_Product_5	1933	2016	2500000	5200	30295	10	250	100		30	10		365
MEDSEA_CH2_Specification_6 / The monitoring capacity of biodiversity in MPAs MEDSEA_CH2_Product_6	1987	2016	2500000	5200	10585	2	5	5		30	20		365

The TDP names, components and selected input data sets with related P02 characteristics per product

TDP Name	Component	List of Input data sets by product
MEDSEA_CH_2_Product_1 / Med protection initiatives (management and conservation areas)	MEDSEA_CH_2_Product_1	Administrative units | Marine Protected Areas | COCONET | National and International protected sites
MEDSEA_CH_2_Product_2 / Med conservation areas and depth zones	MEDSEA_CH2_Product_2	Bathymetry and Elevation | Biological zones | EMODnet-Seabed Habitats | Biological zones
		Administrative units | Marine Protected Areas | COCONET | National and International protected sites
		Administrative units | Fisheries Restricted areas | Hellenic Centre for Marine Research, Institute of Marine Biological Resources and Inland Waters (IMBRIW). | Fisheries Restricted Areas
MEDSEA_CH_2_Product_3 / Proposed regional conservation areas in the Mediterranean	MEDSEA_CH2_Product_3	Administrative units | Proposed protected areas | Greenpeace | proposed Mediterranean marine reserves
		Administrative units | Proposed MPAs | COCONET | Proposed MPAs
MEDSEA_CH_2_Product_4 / Qualitative analysis of connectivity between MPAs	MEDSEA_CH_2_Product_4	Horizontal velocity of the water column (currents) | Current velocity in the water body | Copernicus Marine environment monitoring service | MEDSEA_REANALYSIS_PHYS_006_004
		Administrative units | Marine Protected Areas | COCONET | National and International protected sites
		Temperature of the water column | Temperature of the water body | Copernicus Marine environment monitoring service | MEDSEA_REANALYSIS_PHYS_006_004
MEDSEA_CH_2_Product_5 / Representativity of habitats/species/other features	MEDSEA_CH2_Product_5	Light extinction and diffusion coefficients | Fraction of surface PAR reaching the seabed | EMODnet-Seabed Habitats | Fraction of surface PAR reaching the seabed
		Habitat characterisation | seabed characteristics and habitats substrate | EMODnet-Seabed Habitats | Broad-scale habitat map (EUSeaMap)
		Administrative units | Marine Protected Areas | COCONET | National and International protected sites
		Bathymetry and Elevation | Bathymetry | European Marine Observation and Data Network - Bathymetry | Bathymetry
		Habitat extent | Posidonia oceanica | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity
		Light extinction and diffusion coefficients | Amount of photosynthetically active radiation (light) reaching the seabed (mol.phot.m^2.d^-1) | EMODnet-Seabed Habitats | PAR at seabed (Arctic, Atlantic, Mediterranean)
		Habitat extent | Coralligenous formations | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity
		Administrative units | Mediterranean Cetaceans | International Union for Conservation of Nature's Red List of Threatened Species | Mediterranean cetaceans
		Administrative units | sea cave areas (polygon) | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity
		Administrative units | Transitional water bodies | European Environment Agency | Waterbase - Transitional, coastal and marine waters
MEDSEA_CH_2_Product_6 / The monitoring capacity of biodiversity in MPAs	MEDSEA_CH2_Product_6	Administrative units | Biodiversity monitoring stations | Integrated Regional monitoring Implementation Strategy in the South European Seas | Biodiversity monitoring stations
		Administrative units | Marine Protected Areas | COCONET | National and International protected sites

The TDP quality elements

TDP	Initial Date	Final Date	Horizontal Coverage TDP.AP.1.1 (km**2)	Vertical Coverage TDP.AP.1.2 (m)	Temporal Coverage TDP.AP.1.3 (days)	Number of P02 TDP.AP.2.1	Horizontal Resolution TDP.AP.3.1 (m)	Vertical Resolution TDP.AP.3.2 (m)	Description	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description	Temporal Validity TDP.AP.4.1 (days)
MEDSEA_CH2_Product_1 / Med protection initiatives (management and conservation areas)	1933	2014	2500000	1	29565	1	500	NA		365	20		1460
MEDSEA_CH2_Product_2 / Med conservation areas and depth zones	1933	2014	2500000	5200	29565	3	500	NA	2d information	365	20		1460
MEDSEA_CH2_Product_3 / Proposed regional conservation areas in the Mediterranean	1999	2014	2500000	1	5475	2	500	NA		365	30		1460
MEDSEA_CH2_Product_4 / Qualitative analysis of connectivity between MPAs	1987	2013	2500000	1.5	9855	3	6500	1		90	30		365
MEDSEA_CH2_Product_5 / Representativity of habitats/species/other features	1933	2014	2500000	5200	365	10	255055	0		NA	40		0
MEDSEA_CH2_Product_6 / The monitoring capacity of biodiversity in MPAs	1987	2014	2500000	100	9855	2	2	NA	unknown depth measurements	30	5		365

The TDP quality elements errors (%)

TDP	Horizontal Coverage TDP.APE.1.1	Vertical Coverage TDP.APE.1.2	Temporal Coverage TDP.APE.1.3	Number of P02 TDP.APE.2.1	Horizontal Resolution TDP.APE.3.1	Vertical Resolution TDP.APE.3.2	Temporal Resolution TDP.APE.3.3	Thematic Accuracy TDP.APE.3.4	Temporal Validity TDP.APE.4.1
MEDSEA_CH2_Product_1 / Med protection initiatives (management and conservation areas)	0	0	-2.4	0	-100	NA	0	20	-100
MEDSEA_CH2_Product_2 / Med conservation areas and depth zones	0	0	-2.4	0	-100	NA	0	20	-100
MEDSEA_CH2_Product_3 / Proposed regional conservation areas in the Mediterranean	0	0	28.6	0	-100	NA	0	30	-100
MEDSEA_CH2_Product_4 / Qualitative analysis of connectivity between MPAs	0	-99.25	0	0	-100	0	0	30	-100
MEDSEA_CH2_Product_5 / Representativity of habitats/species/other features	0	0	-98.9	0	-100	100	NA	40	100
MEDSEA_CH2_Product_6 / The monitoring capacity of biodiversity in MPAs	0	-98.8	-6.9	0	60	NA	0	5	0

The Input data set quality elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH_2_PRODUCT_1	Administrative units | Marine Protected Areas | COCONET | National and International protected sites			2500000	1	29565	500	NA		365	20		1460
MEDSEA_CH_2_PRODUCT_2	Bathymetry and Elevation | Biological zones | EMODnet-Seabed Habitats | Biological zones			2500000	5200	2555	250	1	2d information	NA	30	Guesstimate of model uncertainty. Real error value currently unavailable.	1095
	Administrative units | Marine Protected Areas | COCONET | National and International protected sites			2500000	1	29565	500	NA		365	20		1460
	Administrative units | Fisheries Restricted areas | Hellenic Centre for Marine Research, Institute of Marine Biological Resources and Inland Waters (IMBRIW). | Fisheries Restricted Areas			2500000	1	27010	1	NA		365	20		365
MEDSEA_CH_2_PRODUCT_3	Administrative units | Proposed protected areas | Greenpeace | proposed Mediterranean marine reserves		2008	250000	1	365	NA	NA		365	30		1460
	Administrative units | Proposed MPAs | COCONET | Proposed MPAs			2500000	1	5475	500	NA		365	20		1460

MEDSEA_CH_2_PRODUCT_4	Horizontal velocity of the water column (currents) | Current velocity in the water body | Copernicus Marine environment monitoring service MEDSEA_REANALYSIS_PHYS_006_004	1987	2014	2500000	1.5	9855	6500	1		90	10		365
	Administrative units | Proposed MPAs | COCONET | Proposed MPAs			2500000	1	5475	500	NA		365	20		1460
	Temperature of the water column | Temperature of the water body | Copernicus Marine environment monitoring service | MEDSEA_REANALYSIS_PHYS_006_004	1987	2014	2500000	200	9855	6500	1		90	10		365
	Administrative units | Marine Protected Areas | COCONET | National and International protected sites			2500000	1	29565	500	NA		365	20		1460
MEDSEA_CH_2_PRODUCT_5	Light extinction and diffusion coefficients | Amount of photosynthetically active radiation (light) reaching the seabed(mol.phot.m^2.d^-1) EMODnet-Seabed Habitats | PAR at seabed (Arctic, Atlantic, Mediterranean)	2005	2009	2500000	5200	1460	250	No Info		No Info	15		365
	Habitat characterisation | seabed characteristics and habitats substrate | EMODnet-Seabed Habitats | Broad-scale habitat map (EUSeaMap)	2009	2016	2500000	5200	2555	250	NA		NA	15		365
	Bathymetry and Elevation | Bathymetry | European Marine Observation and Data Network - Bathymetry | Bathymetry	2014	2016	2500000	5200	1095	230	NA		NA	15		365
	Habitat extent | Posidonia oceanica | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity	2013	2013	2500000	50	365	10000	0		NA	30		730
	Administrative units | Mediterranean Cetaceans | International Union for Conservation of Nature Red List of Threatened Species | Mediterranean cetaceans	1996		2500000	1	365	255055	0		NA	40		0

	Administrative units | sea cave areas (polygon) | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity	2013-06-24	2013-10-14	2500000	50	365	10000	0		NA	40		
	Administrative units | Transitional water bodies | European Environment Agency | Waterbase - Transitional, coastal and marine waters			2500000	1	12775	117	0		NA	10		730
MEDSEA_CH_2_PRODUCT_6	Administrative units | Biodiversity monitoring stations | Integrated Regional monitoring Implementation Strategy in the South European Seas | Biodiversity monitoring stations	1959-01-01	2012-01-01	1	100	9855	2	NA		30	5		365
	Administrative units | Marine Protected Areas | COCONET | National and International protected sites			2500000	1	29565	500	0		NA	20		1460

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.APE.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH_2_PRODUCT_1	Administrative units | Marine Protected Areas | COCONET | National and International protected sites	0	-99.98	-2.4	-100	NA	NA	20	-100
MEDSEA_CH_2_PRODUCT_2	Bathymetry and Elevation | Biological zones | EMODnet-Seabed Habitats | Biological zones	0	0	-91.6	0	NA	NA	30	-100
	Administrative units | Marine Protected Areas | COCONET | National and International protected sites	0	-99.98	-2.4	-100	NA	NA	20	-100
	Administrative units | Fisheries Restricted areas | Hellenic Centre for Marine Research, Institute of Marine Biological Resources and Inland Waters (IMBRIW). | Fisheries Restricted Areas	0	-99.98	-10.8	99.6	NA	NA	20	0
MEDSEA_CH_2_PRODUCT_3	Administrative units | Proposed protected areas | Greenpeace | proposed Mediterranean marine reserves	0	0	-95.2	NA	NA	NA	30	-100
	Administrative units | Proposed MPAs | COCONET | Proposed MPAs	0	0	-11.8	99.98	NA	NA	20	-100
MEDSEA_CH_2_PRODUCT_4	Horizontal velocity of the water column (currents) | Current velocity in the water body | Copernicus Marine environment monitoring service MEDSEA_REANALYSIS_PHYS_006_004	0	-99.25	0	-100	0	100	10	-100
	Administrative units | Proposed MPAs | COCONET | Proposed MPAs	0	0	-11.8	99.98	NA	NA	20	-100
	Temperature of the water column | Temperature of the water body | Copernicus Marine environment monitoring service | MEDSEA_REANALYSIS_PHYS_006_004	0	0	0	-100	0	100	10	-100
	Administrative units | Marine Protected Areas | COCONET | National and International protected sites	0	-99.98	-2.4	-100	NA	NA	20	-100
MEDSEA_CH_2_PRODUCT_5	Light extinction and diffusion coefficients | Amount of photosynthetically active radiation (light) reaching the seabed(mol.phot.m^2.d^-1) EMODnet-Seabed Habitats | PAR at seabed (Arctic, Atlantic, Mediterranean)	0	0	-95.2	0	No info	No info	15	0

	Habitat characterisation | seabed characteristics and habitats substrate | EMODnet-Seabed Habitats | Broad-scale habitat map (EUSeaMap)	0	0	-91.6	0	NA	NA	15	0
	Bathymetry and Elevation | Bathymetry | European Marine Observation and Data Network - Bathymetry | Bathymetry	0	0	-96.4	8	NA	NA	15	0
	Habitat extent | Posidonia oceanica | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity	0	-99	-98.8	-100	NA	NA	30	-100
	Administrative units | Mediterranean Cetaceans | International Union for Conservation of Nature Red List of Threatened Species | Mediterranean cetaceans	0	-99.98	-98.8	-100	NA	NA	40	100
	Administrative units | sea cave areas (polygon) | PLOS ONE | Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity	0	-99	-98.8	-100	100	NA	40	0
	Administrative units | Transitional water bodies | European Environment Agency | Waterbase - Transitional, coastal and marine waters	0	-99.98	-57.83	53.2	100	NA	10	-100
MEDSEA_CH_2_PRODUCT_6	Administrative units | Biodiversity monitoring stations | Integrated Regional monitoring Implementation Strategy in the South European Seas | Biodiversity monitoring stations	-100	-98.1	-6.9	60	NA	100	5	0
	Administrative units | Marine Protected Areas | COCONET | National and International protected sites	0	-99.98	-2.4	-100	NA	100	20	-100

6 Indicators for Challenge 3: Oil Platform Leaks

The DPS names and required quality elements

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MEDSEA_CH3_Specification_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014. MEDSEA_CH3_PRODUCT_1_1	2014-07-27	2014-07-31	100	5	4	4	500	1	This is the approximate resolution of the product	0.041667	10	This is the approximate accuracy of the trajectory forecast	1
MEDSEA_CH3_Specification_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014. MEDSEA_CH3_PRODUCT_1_2	2014-07-27	2014-07-31	100	100	10	4	500	1		0.041667	10		1
MEDSEA_CH3_Specification_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016. MEDSEA_CH1_PRODUCT_2_1	2013-08-13	2013-08-16	100	5	3	7	500	1		0.041667	10		1
MEDSEA_CH3_Specification_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016. MEDSEA_CH3_PRODUCT_2_2	2013-08-13	2013-08-16	100	100	3	5	500	1		1	10		365

The TDP names, components and selected input data sets with related P02 characteristics per product

TDP Name	Component	List of Input data sets by product
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014	MEDSEA_CH03_PRODUCT_1_1	Wave height and period statistics | Significant height of waves {Hs} on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean
		Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Hellenic Centre for Marine Research | POSEIDON meteorological model - Mediterranean
		Temperature of the water column | Temperature of the water body | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna |
		Wave direction | Direction of waves on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean
		Wind strength and direction | Wind velocity in the atmosphere (E and N components) | European Centre for Medium-Range Weather Forecasts | Set I - Atmospheric Model high resolution 10-day forecast (HRES)
	MEDSEA_CH03_PRODUCT_1_2	Horizontal velocity of the water column (currents) | Current velocity in the water body (E and N components) | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna | Mediterranean Sea Physics Analysis and Forecast
		Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Cyprus Oceanography Center (OC-UCY) | CYCOFOS WAM4 wave model Mediterranean
		Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | British Oceanographic Data Centre | The GEBCO_2014 Grid, version 20150318
		Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Cyprus Oceanography Center | SKIRON meteorological model – Mediterranean
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016	MEDSEA_CH03_PRODUCT_2_1	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Cyprus Oceanography Center | SKIRON meteorological model - Mediterranean
		Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | EMODNet Bathymetry | EMODnet bathymetry
		Administrative units | Marine protected areas (polygon) | COGEA | Natura 2000 and Nationally Designated Areas
		Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | British Oceanographic Data Centre | The GEBCO_2014 Grid, version 20150318
		Habitat characterisation | Posidonia oceanica | Regional Activity Centre for Specially Protected Areas (RAC/SPA) | Modelled Spatial Distributions of Posidonia oceanica
		Wave height and period statistics | Significant height of waves {Hs} on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean
	MEDSEA_CH03_PRODUCT_2_2	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | European Centre for Medium-Range Weather Forecasts | Set I - Atmospheric Model high resolution 10-day forecast (HRES)
		Wave direction | Direction of waves on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean
		Habitat characterisation | Coralligenous and Mäerl Habitats | EMODnet Seabed Habitat | Modelled Spatial Distributions of Coralligenous and Mäerl Habitats
		Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Cyprus Oceanography Center (OC-UCY) | CYCOFOS WAM4 wave model Mediterranean
		Temperature of the water column | Temperature of the water body | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna |

		Horizontal velocity of the water column (currents) | Current velocity in the water body (E and N components) | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna | Mediterranean Sea Physics Analysis and Forecast

The TDP quality elements

TDP	Initial Date	Final Date	Horizontal Coverage TDP.AP.1.1 (km**2)	Vertical Coverage TDP.AP.1.2 (m)	Temporal Coverage TDP.AP.1.3 (days)	Number of P02 TDP.AP.2.1	Horizontal Resolution TDP.AP.3.1 (m)	Vertical Resolution TDP.AP.3.2 (m)	Description	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description	Temporal Validity TDP.AP.4.1 (days)
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014 MEDSEA_CH03_Product_1_1	2014-07-27T05:05:00	2014-07-31T10:20:00	100	5	5	4	6500	1	approximate resolution of data used in the model to forecast	0.041667	10		2
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014 MEDSEA_CH03_Product_1_2: Not covered	2014-07-27T05:05:00	2014-07-31T10:20:00											
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016 MEDSEA_CH3_Product_2_1	2013-08-13T08:15:00	2013-08-16T08:15:00	100	5	3	7	6500	1		0.041667	10		1
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016 MEDSEA_CH3_Product_2_2	2013-08-13T08:15:00	2013-08-16T08:15:00	100	100	3	5	500	1	It varies depending on the layer of information but for our assessment we could say that it matches the one expected	1	10	It varies depending on the layer of information but for our assessment we could say thet it matches the one expected	365

The TDP quality elements errors (%)

TDP	Horizontal Coverage TDP.APE.1.1	Vertical Coverage TDP.APE.1.2	Temporal Coverage TDP.APE.1.3	Number of P02 TDP.APE.2.1	Horizontal Resolution TDP.APE.3.1	Vertical Resolution TDP.APE.3.2	Temporal Resolution TDP.APE.3.3	Thematic Accuracy TDP.APE.3.4	Temporal Validity TDP.APE.4.1
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014 MEDSEA_CH03_Product_1_1	0	0	25	0	-100	0	0	10	-100
MEDSEA_CH3_Product_1 / Oil Platform Leak Bulletin released after a DG MARE request received by email on the 28th of July 2014 MEDSEA_CH03_Product_1_2: Not covered	NA	NA	NA	NA	NA	NA	NA	NA	NA
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016 MEDSEA_CH3_Product_2_1	0	0	0	0	-100	0	0	10	0
MEDSEA_CH3_Product_2 / Oil Platform Leak Bulletin released after the DG MARE alert received by email on the 10th of May 2016 MEDSEA_CH3_Product_2_2	0	0	0	0	0	0	0	10	0

The Input data set quality elements elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH03_PRODUCT_1_1	Wave height and period statistics | Significant height of waves {Hs} on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean			2500000	0	5	5000	1	Surface information required	0.17	10		1
	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Hellenic Centre for Marine Research | POSEIDON meteorological model - Mediterranean			2500000	0	5	5000	1	Surface information required	1	10		1
	Temperature of the water column | Temperature of the water body | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna |			2500000	4000	5	6500	1	Vertical resolution is varying in the model	0.042	10		1
	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | European Centre for Medium-Range Weather Forecasts | Set I - Atmospheric Model high resolution 10-day forecast (HRES)			2500000		10	14000		Surface information required	1	10		1
MEDSEA_CH03_PRODUCT_1_2	Horizontal velocity of the water column (currents) | Current velocity in the water body (E and N components) | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna | Mediterranean Sea Physics Analysis and Forecast			2500000	4000	10	6500		Model resolution is varying. Surface information required	0.042	10		1
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Cyprus Oceanography Center (OC-UCY) | CYCOFOS WAM4 wave model Mediterranean			2500000		5	5000		Surface information required	0.167	10		1

	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | British Oceanographic Data Centre | The GEBCO_2014 Grid, version 20150318			510000000	NA	NA	31	NA		NA	10		NA
	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Cyprus Oceanography Center | SKIRON meteorological model – Mediterranean			2500000		3	5000		Surface information required	0.042	10		1
MEDSEA_CH03_PRODUCT_2_1	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Cyprus Oceanography Center | SKIRON meteorological model - Mediterranean			2500000		3	5000		Surface information required	0.042	10		1
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | EMODNet Bathymetry | EMODnet bathymetry			2500000		NA	230				10		NA
	Administrative units | Marine protected areas (polygon) | COGEA | Natura 2000 and Nationally Designated Areas			2500000	4000	365	500				10		NA
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | British Oceanographic Data Centre | The GEBCO_2014 Grid, version 20150318			510000000	NA	NA	31	NA		NA	10		NA
	Habitat characterisation | Posidonia oceanica | Regional Activity Centre for Specially Protected Areas (RAC/SPA) | Modelled Spatial Distributions of Posidonia oceanica			2500000	4000	NA	500				10		NA
	Wave height and period statistics | Significant height of waves {Hs} on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean			2500000	0	5	5000			0.17	10		1
MEDSEA_CH03_PRODUCT_2_2	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | European Centre for Medium-Range Weather Forecasts Set I - Atmospheric Model high resolution 10-day forecast (HRES)			2500000		10	14000		Surface information required	1	10		1

	Wave direction | Direction of waves on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean			2500000	0	5	5000		Surface information required	0.166666	10		1
	Habitat characterisation | Coralligenous and Mäerl Habitats | EMODnet Seabed Habitat | Modelled Spatial Distributions of Coralligenous and Mäerl Habitats			2500000	4000	365				NA	10		365
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Cyprus Oceanography Center (OC-UCY) | CYCOFOS WAM4 wave model Mediterranean			2500000		5	5000		surface waves	0.17	10		1
	Temperature of the water column | Temperature of the water body | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna			2500000	4000	365	6500		Vertical resolution is varying in the model	0.042	10		1
	Horizontal velocity of the water column (currents) | Current velocity in the water body (E and N components) | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna | Mediterranean Sea Physics Analysis and Forecast			2500000	4000	10	6500		Model resolution is varying	0.042	10		1

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH03_PRODUCT_1_1	Wave height and period statistics | Significant height of waves {Hs} on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean	100	100	25	-100	0	-100	10	0
	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Hellenic Centre for Marine Research | POSEIDON meteorological model - Mediterranean	100	100	25	-100	0	-100	10	0
	Temperature of the water column | Temperature of the water body | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna |	100	100	25	-100	0	0	10	0
	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | European Centre for Medium-Range Weather Forecasts | Set I - Atmospheric Model high resolution 10-day forecast (HRES)	100	100	150	-100	0	-100	10	0
MEDSEA_CH03_PRODUCT_1_2	Horizontal velocity of the water column (currents) | Current velocity in the water body (E and N components) | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna | Mediterranean Sea Physics Analysis and Forecast	100	100	150	-100	0	0	10	0
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Cyprus Oceanography Center (OC-UCY) | CYCOFOS WAM4 wave model Mediterranean	100	100	25	-100	0	-100	10	0
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | British Oceanographic Data Centre | The GEBCO_2014 Grid, version 20150318	100	NA	NA	93.8	NA	NA	10	

	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Cyprus Oceanography Center | SKIRON meteorological model – Mediterranean	100	100	-25	-100	0	0	10	0
MEDSEA_CH03_PRODUCT_2_1	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | Cyprus Oceanography Center | SKIRON meteorological model - Mediterranean	100	100	-70	-100	0	0	10	0
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | EMODNet Bathymetry | EMODnet bathymetry	100	NA	NA	54	NA	NA	10	
	Administrative units | Marine protected areas (polygon) | COGEA | Natura 2000 and Nationally Designated Areas	100	100	100	NA	NA	NA	10	
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | British Oceanographic Data Centre | The GEBCO_2014 Grid, version 20150318	100	NA	NA	93.8	NA	NA	10	
	Habitat characterisation | Posidonia oceanica | Regional Activity Centre for Specially Protected Areas (RAC/SPA) | Modelled Spatial Distributions of Posidonia oceanica	100	100	NA	0	NA	NA	10	
	Wave height and period statistics | Significant height of waves {Hs} on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean	100	100	-50	-100	0	-100	10	0
MEDSEA_CH03_PRODUCT_2_2	Wind strength and direction | Wind velocity in the atmosphere (E and N components) | European Centre for Medium-Range Weather Forecasts Set I - Atmospheric Model high resolution 10-day forecast (HRES)	100	100	0	-100	0	-100	10	0

	Wave direction | Direction of waves on the water body | Cyprus Oceanography Center | CYCOFOS WAM4 wave model Mediterranean	100	100	-50	-100	0	-100	10	0
	Habitat characterisation | Coralligenous and Mäerl Habitats | EMODnet Seabed Habitat | Modelled Spatial Distributions of Coralligenous and Mäerl Habitats	100	100	3550		NA	NA	10	0
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Cyprus Oceanography Center (OC-UCY) | CYCOFOS WAM4 wave model Mediterranean	100	100	-50	-100	0	-100	10	0
	Temperature of the water column | Temperature of the water body | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna	100	100	3550	-100	0	0	10	0
	Horizontal velocity of the water column (currents) | Current velocity in the water body (E and N components) | Istituto Nazionale di Geofisica e Vulcanologia – INGV, Sede di Bologna | Mediterranean Sea Physics Analysis and Forecast	100	100	0	-100	0	0	10	0

7 Indicators for Challenge 4: Climate and Coastal Protection

The DPS names and required appropriateness indicators.

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MEDSEA_CH4_Specification_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_1	2003	2012	2500000	0	3650	1	3000	0	This product just deals with sea surface	From daily to monthly	5	Confidence limit of trend	365
MEDSEA_CH4_Specification_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_2	1963	2012	2500000	0	18250	1	3000	0	This product just deals with sea surface	From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_3	1913	2012	2500000	0	36500	1	3000	0	This product just deals with sea surface	From daily to monthly	5	Confidence limit of trend	3650
MEDSEA_CH4_Specification_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_4	2003	2012	553209	0	3650	1	0	0		From daily to monthly	5	Confidence limit of trend	365

MEDSEA_CH4_Specification_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_5	1963	2012	553209	0	18250	1	0	0		From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_6	1913	2012	553209	0	36500	1	0	0		From daily to monthly	5	Confidence limit of trend	3650
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid depth) MEDSEA_CH4_PRODUCT_2_1	2003	2012	2500000	5500	3650	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	365
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (bottom) MEDSEA_CH4_PRODUCT_2_2	2003	2012	2500000	5500	3650	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	365
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid-depth) MEDSEA_CH4_PRODUCT_2_3	1963	2012	2500000	5500	18250	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (bottom) MEDSEA_CH4_PRODUCT_2_4	1963	2012	2500000	5500	18250	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid-depth) MEDSEA_CH4_PRODUCT_2_5	1913	2012	2500000	5500	36500	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	3650

MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (bottom) MEDSEA_CH4_PRODUCT_2_6	1913	2012	2500000	5500	36500	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	3650
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (NUTS bottom) MEDSEA_CH4_PRODUCT_2_7	2003	2012	553209	5500	18250	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (NUTS bottom) MEDSEA_CH4_PRODUCT_2_8	1963	2012	553209	5500	18250	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (NUTS bottom) MEDSEA_CH4_PRODUCT_2_9	1913	2012	553209	5500	36500	1	3000	0	Deals with 200 m depth layer of the sea	From daily to monthly	5	Confidence limit of trend	3650
MEDSEA_CH4_Specification_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (basin) MEDSEA_CH4_PRODUCT_3_1	1993	2012	2500000	5500	7300	1	3000	0		From daily to monthly	5		365
MEDSEA_CH4_Specification_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (NUTS3) MEDSEA_CH4_PRODUCT_3_2	1993	2012	553209	5500	7300	1	3000			From daily to monthly	5	Confidence limit of trend	365
MEDSEA_CH4_Specification_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_4_1	1963	2012	2500000	0	18250	1	3000			From daily to monthly	5	Confidence limit of trend	1825

MEDSEA_CH4_Specification_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_4_2	1913	2012	2500000	0	36500	1	3000			From daily to monthly	5	Confidence limit of trend	3650
MEDSEA_CH4_Specification_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_4_3	1963	2012	553209	0	18250	1	3000			From daily to monthly	5	Confidence limit of trend	1825
MEDSEA_CH4_Specification_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_4_4	1913	2012	553209	0	36500	1	3000			From daily to monthly	5	Confidence limit of trend	3650
MEDSEA_CH4_Specification_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (basin) MEDSEA_CH4_PRODUCT_5_1	1992	2012	2500000	0	3653	1	3000	0	Product deals with sea surface	From daily to monthly	5	Confidence limit of trend	365
MEDSEA_CH4_Specification_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (NUTS3) MEDSEA_CH4_PRODUCT_5_2	1992	2012	553209.31	0	3653	1	0	0	Product deals with values for each NUTS3 region	From daily to monthly	5	confidence limit on the trend	365
MEDSEA_CH4_Specification_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years basin) MEDSEA_CH4_PRODUCT_6_1	1963	2013	553209.31	0	18260	1	20000	0	Product deals with surface	From daily to monthly	5	Trend confidence limit	1825
MEDSEA_CH4_Specification_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years basin) MEDSEA_CH4_PRODUCT_6_2	1913	2013	553209.31	0	36520	1	20000	0	Product deals with surface	From daily to monthly	5	Trend confidence limit	1825
MEDSEA_CH4_Specification_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years NUTS3) MEDSEA_CH4_PRODUCT_6_3	1963	2013	553209.31	0	18260	1	20000	0	Product deals with surface	From daily to monthly	5	Trend confidence limit	1825

MEDSEA_CH4_Specification_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years NUTS3) MEDSEA_CH4_PRODUCT_6_4	1913	2013	553209.31	0	36520	1	20000	0	Product deals with surface	From daily to monthly	5	Trend confidence limit	1825
MEDSEA_CH4_Specification_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review MEDSEA_CH4_PRODUCT_7_1	1913	2012	2500000	0	3650	1	250	0	Product deal with a shoreline change trend	15	5	Confidence limit of the trend	365
MEDSEA_CH4_Specification_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (10 years) MEDSEA_CH4_PRODUCT_7_2	2003	2012	2500000	0	3650	1	250	0	Product deal with a shoreline change trend	15	5	Confidence limit of the trend	365
MEDSEA_CH4_Specification_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (50 years) MEDSEA_CH4_PRODUCT_7_3	1963	2012	2500000	0	18262	1	250	0	Product deal with a shoreline change trend	365	5	Confidence limits on the trend	1825
MEDSEA_CH4_Specification_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (10 years) MEDSEA_CH4_PRODUCT_8_1	2003	2012	2500000	0	3653	1	3000	0	This product just deals with sea surface	From daily to monthly	5		365
MEDSEA_CH4_Specification_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (50 years) MEDSEA_CH4_PRODUCT_8_2	1963	2012	2500000	0	18263	1	3000	0	This product just deals with sea surface	From daily to monthly	5		1825
MEDSEA_CH4_Specification_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (100 years) MEDSEA_CH4_PRODUCT_8_3	1913	2012	2500000	0	36520	1	3000	0	This product just deals with sea surface	From daily to monthly	5		3650

MEDSEA_CH4_Specification_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 10 years) MEDSEA_CH4_PRODUCT_8_4	2003	2012	553209	0	3653	1	0	0	This product just deals with sea surface	From daily to monthly	5		365
MEDSEA_CH4_Specification_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_8_5	1963	2012	553209	0	18263	1	0	0	This product just deals with sea surface	From daily to monthly	5		1825
MEDSEA_CH4_Specification_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_8_6	1913	2012	553209	0	36520	1	0	0	This product just deals with sea surface	From daily to monthly	5		3650
MEDSEA_CH4_Specification_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (mid depth) MEDSEA_CH4_PRODUCT_9_1	2003	2012	2500000	5500	3653	1	3000	0	Product deals with 200m depth layer of the sea	From daily to monthly	5		365
MEDSEA_CH4_Specification_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (bottom) MEDSEA_CH4_PRODUCT_9_2	2003	2012	2500000	5500	3653	1	3000	0	Product deals with bottom depth layer of the sea	From daily to monthly	5		365
MEDSEA_CH4_Specification_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (NUTS3 bottom) MEDSEA_CH4_PRODUCT_9_3	2003	2012	553209	5000	3650	1	3000	0		From daily to monthly	5		365

MEDSEA_CH4_Specification_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (basin) MEDSEA_CH4_PRODUCT_10_1	1993	2012	2500000	5500	7305	1	3000	0		From daily to monthly	5		365
MEDSEA_CH4_Specification_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (NUTS3) MEDSEA_CH4_PRODUCT_10_2	1993	2012	553209	5500	7305	1	0	0		From daily to monthly	5		365
MEDSEA_CH4_Specification_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_11_1	1963	2012	2500000	0	18250	1	3000	0	it is a surface product	365	15	According to Bonaduce et al., 2016	365
MEDSEA_CH4_Specification_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_11_2	1913	2012	2500000	0	18250	1	3000	0	it is a surface product	365	15	According to Bonaduce et al., 2016	365
MEDSEA_CH4_Specification_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_11_3	1963	2012	553209	0	18250	1	0	0	it is a surface product	365	15	According to Bonaduce et al., 2016	365
MEDSEA_CH4_Specification_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_11_4	1913	2012	553209	0	18250	1	0	0	it is a surface product	365	15	According to Bonaduce et al., 2016	365
MEDSEA_CH4_Specification_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_12_1	1963	2012	553209.31	0	18260	1	20000	0	This product just deals with sea surface	365	5	Missing annual data	1825

MEDSEA_CH4_Specification_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_12_2	1963	2012	553209.31	0	36520	1	20000	0	This product just deals with sea surface	365	5	Missing annual data	1825
MEDSEA_CH4_Specification_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (Basin) MEDSEA_CH4_PRODUCT_13_1	1992	2012	2500000	0	3653	1	3000	0	This product just deals with sea surface	From daily to monthly	5	Confidence limit of trend	365
MEDSEA_CH4_Specification_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (NUTS3) MEDSEA_CH4_PRODUCT_13_3	1992	2012	553209.31	0	3653	1	3000	0	This product just deals with sea surface	From daily to monthly	5	Confidence limit of trend	365

The TDP names, components and selected input data sets with related P02 characteristics per product

TDP Name	Component	List of Input data sets by product
MEDSEA_CH4_Product_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 – 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered	MEDSEA_CH4_PRODUCT_1_1	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set
	MEDSEA_CH4_PRODUCT_1_2	
	MEDSEA_CH4_PRODUCT_1_3	
	MEDSEA_CH4_PRODUCT_1_4	
	MEDSEA_CH4_PRODUCT_1_5	
	MEDSEA_CH4_PRODUCT_1_6	
MEDSEA_CH4_Product_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 10 (2003 – 2012) years	MEDSEA_CH4_PRODUCT_2_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis
	MEDSEA_CH4_PRODUCT_2_2	
	MEDSEA_CH4_PRODUCT_2_3	
MEDSEA_CH4_Product_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 – 2012) years	MEDSEA_CH4_PRODUCT_3_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis
	MEDSEA_CH4_PRODUCT_3_2	
MEDSEA_CH4_Product_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012)	MEDSEA_CH4_PRODUCT_4_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA
	MEDSEA_CH4_PRODUCT_4_2	
	MEDSEA_CH4_PRODUCT_4_3	
	MEDSEA_CH4_PRODUCT_4_4	
MEDSEA_CH4_Product_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 – 2012)	MEDSEA_CH4_PRODUCT_5_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA
		Sea level | Surface elevation hourly mean (Normal Low Water datum) of the water body by inverted echo sounder and averaging of higher frequency data | University of Hawaii Sea Level Center | Tide Gauge Sea Level
	MEDSEA_CH4_PRODUCT_5_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level
		Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Sea-Level Anomaly DT-(M)SLA – along-track
MEDSEA_CH4_Product_6 / Spatial layers of sea–level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012)	MEDSEA_CH4_PRODUCT_6_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level
	MEDSEA_CH4_PRODUCT_6_2	
	MEDSEA_CH4_PRODUCT_6_3	
	MEDSEA_CH4_PRODUCT_6_4	
MEDSEA_CH4_Product_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review	MEDSEA_CH4_PRODUCT_7_1	Not Applicable
	MEDSEA_CH4_PRODUCT_7_2	
	MEDSEA_CH4_PRODUCT_7_3	
MEDSEA_CH4_Product_8 / Time series of annual average sea surface	MEDSEA_CH4_PRODUCT_8_1	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate

temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012)	MEDSEA_CH4_PRODUCT_8_2	Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set
	MEDSEA_CH4_PRODUCT_8_3	
	MEDSEA_CH4_PRODUCT_8_4	
	MEDSEA_CH4_PRODUCT_8_5	
	MEDSEA_CH4_PRODUCT_8_6	
MEDSEA_CH4_Product_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012)	MEDSEA_CH4_PRODUCT_9_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis
	MEDSEA_CH4_PRODUCT_9_2	
	MEDSEA_CH4_PRODUCT_9_3	
MEDSEA_CH4_Product_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012)	MEDSEA_CH4_PRODUCT_10_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis
	MEDSEA_CH4_PRODUCT_10_2	
MEDSEA_CH4_Product_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012)	MEDSEA_CH4_PRODUCT_11_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA
	MEDSEA_CH4_PRODUCT_11_2	
	MEDSEA_CH4_PRODUCT_11_3	
	MEDSEA_CH4_PRODUCT_11_4	
MEDSEA_CH4_Product_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012)	MEDSEA_CH4_PRODUCT_12_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level
	MEDSEA_CH4_PRODUCT_12_2	
MEDSEA_CH4_Product_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012)	MEDSEA_CH4_PRODUCT_13_1	Sea level | Surface elevation hourly mean (Normal Low Water datum) of the water body by inverted echo sounder and averaging of higher frequency data | University of Hawaii Sea Level Center | Tide Gauge Sea Level
	MEDSEA_CH4_PRODUCT_13_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level

The TDP quality elements

TDP	Initial Date	Final Date	Horizontal Coverage TDP.AP.1.1 (km**2)	Vertical Coverage TDP.AP.1.2 (m)	Temporal Coverage TDP.AP.1.3 (days)	Number of P02 TDP.AP.2.1	Horizontal Resolution TDP.AP.3.1 (m)	Vertical Resolution TDP.AP.3.2 (m)	Description	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description	Temporal Validity TDP.AP.4.1 (days)
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_1	2003	2012	2500000	0	3650	1	100000	0		From daily to monthly	5	Confidence limit of trend	365
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_2	1963	2012	2500000	0	18250	1	100000	0		From daily to monthly	5		1825
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_3	1913	2012	2500000	0	36500	1	100000	0		From daily to monthly	5		3650
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_4	2003	2012	548856	0	3650	1	0	0		From daily to monthly	5		365
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100	1963	2012	548856	0	18250	1	0	0		From daily to monthly	5		1825

(1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_5													
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_6	1913	2012	548856	0	36500	1	0	0		From daily to monthly	5		3650
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid depth) MEDSEA_CH4_PRODUCT_2_1	2003	2012	2500000	5500	3650	1	6250	0		From daily to monthly	5		365
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (NUTS bottom) MEDSEA_CH4_PRODUCT_2_2	2003	2012	2500000	5500	3650	1	6250	0		From daily to monthly	5		365
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (bottom) MEDSEA_CH4_PRODUCT_2_3	2003	2012	549786	5500	3650	1	6250	0		From daily to monthly	5		365
MedSea_CH4_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (basin) MEDSEA_CH4_PRODUCT_3_1	1993	2012	2500000	5500	7305	1	6250	0		1	5		365
MedSea_CH4_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (NUTS3) MEDSEA_CH4_PRODUCT_3_2	1993	2012	549786	5500	7305	1	6250	0		1	5		365
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 50 years)	1963	2012	2500000	0	18250	1	62500	0		From daily to monthly	5		1825

MEDSEA_CH4_PRODUCT_4_1													
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_4_2	1913	2012	2500000	0	36500	1	62500	0		From daily to monthly	5		3650
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_4_3	1963	2012	551066	0	18250	1	0	0		From daily to monthly	5		1825
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_4_4	1913	2012	551066	0	18250	1	0	0		From daily to monthly	5		1825
MedSea_CH4_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (basin) MEDSEA_CH4_PRODUCT_5_1	1992	2012	2500000	0	3653	1	9000	0		From daily to monthly	5		365
MedSea_CH4_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (NUTS3) MEDSEA_CH4_PRODUCT_5_2	2003	2012	549785.74	0	3653	1	0	0		From daily to monthly	5		365
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years basin) MEDSEA_CH4_PRODUCT_6_1	1913	2012	29536.06	0	18260	1	200000	0		From daily to monthly	5		1825
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years basin) MEDSEA_CH4_PRODUCT_6_2	1913	2012	3172.53	0	36520	1	500000	0		From daily to monthly	5		1825
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-	1913	2012	29536.06	0	18260	1	200000	0		From daily to monthly	5		1825

gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years NUTS3) MEDSEA_CH4_PRODUCT_6_3													
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years NUTS3) MEDSEA_CH4_PRODUCT_6_4	1913	2012	3172.53	0	36520	1	500000	0		From daily to monthly	5		1825
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review MEDSEA_CH4_PRODUCT_7_1	2002	2012							Component not covered				
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (10 years) MEDSEA_CH4_PRODUCT_7_2	1963	2012							Component not covered				
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (50 years) MEDSEA_CH4_PRODUCT_7_3	1963	2012							Component not covered				
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (10 years) MEDSEA_CH4_PRODUCT_8_1	2003	2012	2500000	0	3653	1	100000	0		From daily to monthly	5		365
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (50 years) MEDSEA_CH4_PRODUCT_8_2	1963	2012	2500000	0	18263	1	100000	0		From daily to monthly	5		1825
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (100 years)	1913	2012	2500000	0	36500	1	100000	0		From daily to monthly	5		3650

MEDSEA_CH4_PRODUCT_8_3													
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 10 years) MEDSEA_CH4_PRODUCT_8_4	2003	2012	548856	0	3650	1	0	0		From daily to monthly	5		365
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_8_5	1963	2012	548856	0	18250	1	0	0		From daily to monthly	5		1825
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_8_6	1913	2012	548856	0	36500	1	0	0		From daily to monthly	5		3650
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (mid depth) MEDSEA_CH4_PRODUCT_9_1	2003	2012	2500000	5500	3653	1	6250	0		365	5		365
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (bottom) MEDSEA_CH4_PRODUCT_9_2	2003	2012	2500000	5500	3653	1	6250	0		365	5		365
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012)	2003	2012	549786	5000	3653	1	0	0		365	5		365

(NUTS3 bottom) MEDSEA_CH4_PRODUCT_9_3													
MedSea_CH4_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (basin) MEDSEA_CH4_PRODUCT_10_1	1993	2013	2500000	5500	7305	1	6250	0		From daily to monthly	5		365
MedSea_CH4_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (NUTS3) MEDSEA_CH4_PRODUCT_10_2	1993	2013	549786	5500	7300	1	0	0		From daily to monthly	5		365
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_11_1	1963	2012	2500000	0	18250	1	6250	0		365	5		365
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_11_2	1913	2012	2500000	0	36500	1	6250	0		365	15	Bonaduce et al., 2016	1825
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_11_3	1963	2012	551065	0	18250	1	0	0		365	5	Variance between averaged grid values	365
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_11_4	1913	2012	551065	0	36500	1	0	0		365	5	Variance between averaged grid values	1825
MedSea_CH4_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100	1963	2012	29536.06	0	18250	1	200000	0		365	5		365

years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_12_1													
MedSea_CH4_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_12_2	1913	2012	3172.53	0	36520	1	500000	0		365	5		1825
MedSea_CH4_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (basin) MEDSEA_CH4_PRODUCT_13_1	1992	2012	250000	0	3653	1	9000	0		From daily to monthly	5		365
MedSea_CH4_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (NUTS3) MEDSEA_CH4_PRODUCT_13_2	1963	2012	553209	0	3650	1	0	0		From daily to monthly	0		365

The TDP quality elements errors (%)

TDP	Horizontal Coverage P.APE.1.1	Vertical Coverage P.APE.1.2	Temporal Coverage P.APE.1.3	Number of P02 P.APE.2.1	Horizontal Resolution P.APE.3.1	Vertical Resolution P.APE.3.2	Temporal Resolution P.APE.3.3	Thematic Accuracy P.APE.3.4	Temporal Validity P.APE.4.1
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (Basin) MEDSEA_CH4_PRODUCT_1_3	0	0	0	0	-100	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_4	-1	0	0	0	0	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_5	-1	0	0	0	0	0	0	5	0
MedSea_CH4_1 / Spatial layers of Sea surface temperature trend from observations (HadISST dataset) over periods of 10 (2003 - 2012), 50 (1963-2012) and 100 (1913-2012) years. Basin maps and NUTS3 region are considered (NUTS3) MEDSEA_CH4_PRODUCT_1_6	-1	0	0	0	0	0	0	5	0
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid depth) MEDSEA_CH4_PRODUCT_2_1	0	0	0	0	-100	0	0	5	0

MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (bottom) MEDSEA_CH4_PRODUCT_2_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_2 / Spatial layer of Sea temperature trend at mid-depth and at sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis) (mid-depth) MEDSEA_CH4_PRODUCT_2_3	-1	0	0	0	-100	0	0	5	0
MedSea_CH4_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (basin) MEDSEA_CH4_PRODUCT_3_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_3 / Spatial layer of Sea internal energy trend from reanalysis (CMEMS Mediterranean Physics Reanalysis) over period of 20 (1993 - 2012) years (NUTS) MEDSEA_CH4_PRODUCT_3_2	-1	0	0	0	-100	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_4_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_4_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS 50 years) MEDSEA_CH4_PRODUCT_4_3	0	0	0	0	0	0	0	5	0
MedSea_CH4_4 / Spatial layers of sea level trend from MyOcean-CMCC reconstruction over periods of 50 years (1963 – 2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_4_4	0	0	0	0	0	0	0	5	0

MedSea_CH4_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (basin) MEDSEA_CH4_PRODUCT_5_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_5 / Spatial layer of sea-level trend from AVISO reconstruction over period of 10 years (2003 - 2012) (NUTS) MEDSEA_CH4_PRODUCT_5_2	-1	0	0	0	0	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years basin) MEDSEA_CH4_PRODUCT_6_1	94.7	0	0	0	-100	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years basin) MEDSEA_CH4_PRODUCT_6_2	94.4	0	0	0	-100	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (50 years NUTS3) MEDSEA_CH4_PRODUCT_6_3	94.7	0	0	0	-100	0	0	5	0
MedSea_CH4_6 / Spatial layers of sea-level trend from PSMSL tide-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (100 years NUTS3) MEDSEA_CH4_PRODUCT_6_4	94.4	0	0	0	-100	0	0	5	0
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review MEDSEA_CH4_PRODUCT_7_1	This component is not covered because there is not available desk-based database for calculating parameters such as sediment mass balance at the coast over the Mediterranean basin for the last 10 years. Consult the report on Sediment Mass Balance Data Assessment in the Mediterranean.								
MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (10 years) MEDSEA_CH4_PRODUCT_7_2	This component is not covered because there is not available desk-based database for calculating parameters such as sediment mass balance at the coast over the Mediterranean basin for the last 10 years. Consult the report on Sediment Mass Balance Data Assessment in the Mediterranean.								

MedSea_CH4_7 / Sediment Mass Balance at the Coast from Experts Survey and Scientific Literature Review (50 years) MEDSEA_CH4_PRODUCT_7_3	This component is not covered because there is not available desk-based database for calculating parameters such as sediment mass balance at the coast over the Mediterranean basin for the last 10 years. Consult the report on Sediment Mass Balance Data Assessment in the Mediterranean.								
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (10 years) MEDSEA_CH4_PRODUCT_8_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (50 years) MEDSEA_CH4_PRODUCT_8_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (100 years) MEDSEA_CH4_PRODUCT_8_3	0	0	0	0	-100	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 10 years) MEDSEA_CH4_PRODUCT_8_4	-1	0	0	0	0	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 50 years) MEDSEA_CH4_PRODUCT_8_5	-1	0	0	0	0	0	0	5	0
MedSea_CH4_8 / Time series of annual average sea surface temperature from observations (HadISST dataset) over periods of 10 years (2003-2012), 50 years (1963-2012) and 100 years (1913-2012) (NUTS3 100 years) MEDSEA_CH4_PRODUCT_8_6	-1	0	0	0	0	0	0	5	0
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (mid depth) MEDSEA_CH4_PRODUCT_9_1	0	0	0	0	-100	0	0	5	0

MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (bottom) MEDSEA_CH4_PRODUCT_9_2	0	0	0	0	-100	0	0	5	0
MedSea_CH4_9 / Time series of annual average sea temperature at mid-depth and sea-bottom from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 10 years (2003-2012) (NUTS3 bottom) MEDSEA_CH4_PRODUCT_9_3	0	0	0	0	0	0	0	5	0
MedSea_CH4_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (basin) MEDSEA_CH4_PRODUCT_10_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_10 / Time series of annual average sea internal energy from reanalysis (CMEMS Mediterranean Physics Reanalysis dataset) over period of 20 years (1993-2012) (NUTS3) MEDSEA_CH4_PRODUCT_10_2	-1	0	0	0	0	0	0	5	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 50 years) MEDSEA_CH4_PRODUCT_11_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (basin 100 years) MEDSEA_CH4_PRODUCT_11_2	0	0	0	0	-100	0	0	15	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 50 years) MEDSEA_CH4_PRODUCT_11_3	0	0	0	0	0	0	0	5	0
MedSea_CH4_11 / Time series of annual average sea level from MyOcean-CMCC reconstruction over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 100 years) MEDSEA_CH4_PRODUCT_11_4	0	0	0	0	0	0	0	5	0

MedSea_CH4_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 50 years) MEDSEA_CH4_PRODUCT_12_1	-95	0	0	0	-100	0	0	5	0
MedSea_CH4_12 / Time series of annual average sea level from PSMSL time-gauges over periods of 50 years (1963-2012) and 100 years (1913-2012) (NUTS 100 years) MEDSEA_CH4_PRODUCT_12_2	-99	0	-1	0	-100	0	0	5	0
MedSea_CH4_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (basin) MEDSEA_CH4_PRODUCT_13_1	0	0	0	0	-100	0	0	5	0
MedSea_CH4_13 / Time series of annual average sea-level from AVISO satellite altimetry over period of 10 years (2003-2012) (NUTS3) MEDSEA_CH4_PRODUCT_13_2	0	0	0	0	0	0	0	0	0

The Input data set quality elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH4_PRODUCT_1_1	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	2003	20012	2500000	0	3650	100000	0		30	5		30
MEDSEA_CH4_PRODUCT_1_2	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1963	2012	2500000	0	18250	100000	0		30	5		30
MEDSEA_CH4_PRODUCT_1_3	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1913	2012	2500000	0	36500	100000	0		30	5		30
MEDSEA_CH4_PRODUCT_1_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	2003	2012	548856	0	3650	100000	0		30	5		30
MEDSEA_CH4_PRODUCT_1_5	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1963	2012	548856	0	18250	100000	0		30	5		30
MEDSEA_CH4_PRODUCT_1_6	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1913	2012	548856	0	36500	100000	0		30	5		30

MEDSEA_CH4_PRODUCT_2_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	2003	2012	2500000	5500	3650	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_2	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	2003	2012	2500000	5500	3650	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_3	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1963	2012	2500000	5500	18250	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_4	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1963	2012	2500000	5500	18250	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_5	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1913	2012	2500000	5500	36500	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_6	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1913	2012	2500000	5500	36500	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_7	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	2003	2012	553209	5500	3650	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_8	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1963	2012	553209	5500	18250	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_2_9	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1913	2012	553209	5500	36500	6250	0		0	5		365

MEDSEA_CH4_PRODUCT_3_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1993	2012	2500000	5500	7305	6250	0		1	5		365
MEDSEA_CH4_PRODUCT_4_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1963	2014	2500000	0	18250	6250	0		0	5		1825
MEDSEA_CH4_PRODUCT_4_2	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1993	2012	553209	0	18250	6250	0		0	5		1825
MEDSEA_CH4_PRODUCT_4_3	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1963	2012	553209	0	18250	6250	0		0	5		1625
MEDSEA_CH4_PRODUCT_4_4	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1913	2012	553209	0	36500	6250	0		0	5		1625
MEDSEA_CH4_PRODUCT_5_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1992	2012	2500000	0	3653	9000	1		0	5		365
	Sea level | Surface elevation hourly mean (Normal Low Water datum) of the water body by inverted echo sounder and averaging of higher frequency data | University of Hawaii Sea Level Center | Tide Gauge Sea Level	1950	2013	46000	0	3653	3000			0.04	5		365
MEDSEA_CH4_PRODUCT_5_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	3653	3000	0		30	5		365
	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Sea-Level Anomaly DT-(M)SLA – along-track	1993	2016	549785.74	0	3653	1	0		0	5		365

MEDSEA_CH4_PRODUCT_6_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	51861	50000	0		30	5	Missing annual data (highly approximate because the data set consists of individual time series)	365
MEDSEA_CH4_PRODUCT_6_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	51861	50000	0		30	5	Missing annual data (highly approximate because the data set consists of individual time series)	365
MEDSEA_CH4_PRODUCT_6_3	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	51861	50000	0		30	5	Missing annual data (highly approximate because the data set consists of individual time series)	365
MEDSEA_CH4_PRODUCT_6_4	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	51861	50000	0		30	5	Missing annual data (highly approximate because the data set consists of individual time series)	365
MEDSEA_CH4_PRODUCT_7_1	Coastal geomorphology | shoreline erosion trend | EUROPEAN ENVIRONMENT AGENCY | Geology_Geomorphology_ErosionTrend			2500000	0	0	100000	0		0	5		365
MEDSEA_CH4_PRODUCT_7_2	Coastal geomorphology | shoreline erosion trend | EUROPEAN ENVIRONMENT AGENCY | Geology_Geomorphology_ErosionTrend			2500000	0	5470	100000	0		0	5	Erosion trend at Eurosion is a qualitative dataset	365
MEDSEA_CH4_PRODUCT_7_3	Coastal geomorphology | shoreline erosion trend EUROPEAN ENVIRONMENT AGENCY Geology_Geomorphology_ErosionTrend			2500000	0	5470	100000	0		0	5	Erosion trend at Eurosion is a qualitative dataset	365

MEDSEA_CH4_PRODUCT_8_1	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1870	2016	2500000	0	3653	100000	0		0	15	according to Chelton et al. 2016 related to a 100% correlation.	365
MEDSEA_CH4_PRODUCT_8_2	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1870	2016	2500000	0	18263	100000	0		0	15	according to Chelton et al. 2016 related to a 100% correlation.	365
MEDSEA_CH4_PRODUCT_8_3	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1870	2016	2500000	0	365250	100000	0		0	5		365
MEDSEA_CH4_PRODUCT_8_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1870	2016	548856	0	3650	0	0		0	5		365
MEDSEA_CH4_PRODUCT_8_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1870	2016	548856	0	18250	0	0		0	5		365
MEDSEA_CH4_PRODUCT_8_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	1870	2016	548856	0	36500	0	0		0	5		365
MEDSEA_CH4_PRODUCT_9_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1987	2014	2500000	5500	3653	1	6250		365	5		365
MEDSEA_CH4_PRODUCT_9_2	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1987	2014	2500000	5500	3653	1	6250		365	5		365
MEDSEA_CH4_PRODUCT_9_3	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1987	2014	549786	5500	3653	0	0		365	5		365

MEDSEA_CH4_PRODUCT_10_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1987	2014	2500000	5500	7305	6250	0		0	5		365
MEDSEA_CH4_PRODUCT_10_2	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	1987	2014	549786	5500	7300	0	0		0	5		365
MEDSEA_CH4_PRODUCT_11_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1993	2016	2499999	0	18250	6250	0	it is a surface product	365	15		365
MEDSEA_CH4_PRODUCT_11_2	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1993	2016	2500000	0	36500	6250	0		365	15		1825
MEDSEA_CH4_PRODUCT_11_3	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1993	2016	551065	0	18250	0	0		365	15		365
MEDSEA_CH4_PRODUCT_11_4	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	1993	2016	551065	0	36500	0	0		365	15		1825
MEDSEA_CH4_PRODUCT_12_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	51861	50000	0	This data just deal with surface	30	5	Missing annual data (highly approximate because the data set consists of individual time series)	365
MEDSEA_CH4_PRODUCT_12_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1872	2013	553209.31	0	51861	50000	0	This data just deal with surface	30	5	Missing annual data (highly approximate because the data set consists of individual time series)	365

MEDSEA_CH4_PRODUCT_13_1	Sea level | Surface elevation hourly mean (Normal Low Water datum) of the water body by inverted echo sounder and averaging of higher frequency data | University of Hawaii Sea Level Center | Tide Gauge Sea Level	1993	2016	2500000	0	3653	9000	0		0	5		365
MEDSEA_CH4_PRODUCT_13_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	1950	2013	46000	0	3653	3000	0	This product just deals with sea surface	0.04	5	Confidence limit of trend	365

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH4_PRODUCT_1_1	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0	0	0	100	0	0	5	-91.8
MEDSEA_CH4_PRODUCT_1_2	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0	0	0	100	0	0	5	-91.8
MEDSEA_CH4_PRODUCT_1_3	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0	0	0	100	0	0	5	-91.8
MEDSEA_CH4_PRODUCT_1_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	-0.8	0	0	100	0	0	5	-91.8
MEDSEA_CH4_PRODUCT_1_5	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	-0.8	0	0	100	0	0	5	-91.8
MEDSEA_CH4_PRODUCT_1_6	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	-0.78686355	0	0	100	0	0	5	-91.8
MEDSEA_CH4_PRODUCT_2_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0		100		0		0

MEDSEA_CH4_PRODUCT_2_2	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0		100		0	5	0
MEDSEA_CH4_PRODUCT_2_3	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0		100		0	5	0
MEDSEA_CH4_PRODUCT_3_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0		100		0	5	0
MEDSEA_CH4_PRODUCT_4_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	#DIV/0!		100		0	5	0
MEDSEA_CH4_PRODUCT_4_2	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	#DIV/0!	0	100		0	5	0
MEDSEA_CH4_PRODUCT_4_3	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	0	0	100		0	5	0
MEDSEA_CH4_PRODUCT_4_4	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	0	0	100		0	5	0
MEDSEA_CH4_PRODUCT_5_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	0	0	-100	0	0	5	0

	Sea level | Surface elevation hourly mean (Normal Low Water datum) of the water body by inverted echo sounder and averaging of higher frequency data | University of Hawaii Sea Level Center | Tide Gauge Sea Level	-98.2	0	0	0		0	5	0
MEDSEA_CH4_PRODUCT_5_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	0	0		0	5	0
	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Sea-Level Anomaly DT-(M)SLA – along-track	-0.62	0	0	0		0	5	0
MEDSEA_CH4_PRODUCT_6_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	184	-100		0	5	80
MEDSEA_CH4_PRODUCT_6_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	42	-100		0	5	0
MEDSEA_CH4_PRODUCT_6_3	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	42	-100		0	5	0
MEDSEA_CH4_PRODUCT_6_4	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	42	-100		0	5	0
MEDSEA_CH4_PRODUCT_7_1	Coastal geomorphology | shoreline erosion trend | EUROPEAN ENVIRONMENT AGENCY | Geology_Geomorphology_ErosionTrend	0	0	-100	-100		0	5	-2501.4

MEDSEA_CH4_PRODUCT_7_2	Coastal geomorphology | shoreline erosion trend | EUROPEAN ENVIRONMENT AGENCY | Geology_Geomorphology_ErosionTrend	0	0	-70	-100		0	5	-2501.4
MEDSEA_CH4_PRODUCT_7_3	Coastal geomorphology | shoreline erosion trend EUROPEAN ENVIRONMENT AGENCY Geology_Geomorphology_ErosionTrend	0	0	-85	-100		0	5	-2501.4
MEDSEA_CH4_PRODUCT_8_1	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0	0	0	-100	0	0	15	0
MEDSEA_CH4_PRODUCT_8_2	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0	0	0	-100	0	0	15	0
MEDSEA_CH4_PRODUCT_8_3	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0	0	0	-100	0	0	5	0
MEDSEA_CH4_PRODUCT_8_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0.8	0	0	0	0	0	5	0
MEDSEA_CH4_PRODUCT_8_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0.8	0	0	0	0	0	5	0
MEDSEA_CH4_PRODUCT_8_4	Temperature of the water column | Temperature of the water body | Hadley Centre for Climate Prediction and Research (HCCPR) | Hadley Centre Sea Ice and Sea Surface Temperature data set	0.8	0	0	0	0	0	5	0

MEDSEA_CH4_PRODUCT_9_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0	0	100	0	100	5	0
MEDSEA_CH4_PRODUCT_9_2	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0	0	100	0	100	5	0
MEDSEA_CH4_PRODUCT_9_3	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0	0	100	0	100	5	0
MEDSEA_CH4_PRODUCT_10_1	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	0	0	0	-100	0	0	5	0
MEDSEA_CH4_PRODUCT_10_2	Temperature of the water column | Temperature of the water body | Mercator Ocean | Mediterranean Sea Physics Reanalysis	-0.6	0	0	0	0	0	5	0
MEDSEA_CH4_PRODUCT_11_1	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	0	0	-100	0	100	15	0
MEDSEA_CH4_PRODUCT_11_2	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	0	0	0	-100	0	100	15	0
MEDSEA_CH4_PRODUCT_11_3	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	-0.4	0	0	0	0	100	15	0

MEDSEA_CH4_PRODUCT_11_4	Sea level | Surface elevation daily mean (unspecified datum) of the water body | Copernicus Marine environment monitoring service | Mediterranean Sea L4 gridded MAPS REP SLA	-0.4	0	0	0	0	100	15	0
MEDSEA_CH4_PRODUCT_12_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	100	-100	0	8.2	5	80
MEDSEA_CH4_PRODUCT_12_1	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	0	0	42.	-100	0	8.2	5	80
MEDSEA_CH4_PRODUCT_13_1	Sea level | Surface elevation hourly mean (Normal Low Water datum) of the water body by inverted echo sounder and averaging of higher frequency data | University of Hawaii Sea Level Center | Tide Gauge Sea Level	0	0	0	-100	0	0	5	0
MEDSEA_CH4_PRODUCT_13_2	Sea level | Surface elevation monthly mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level | Permanent Service for Mean Sea Level_tide gauge sea level	-98.16	0	0	0	0	0	5	0

8 Indicators for Challenge 5: Fisheries Management

The DPS names and required quality elements.

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MEDSEA_CH5_Specification_1 / Collated data set of fish landings by species and year, for mass and number MEDSEA_CH5_Product_1	2003	2014	2571633	1000	4383	4	200000	1000	Total discard data over the Mediterranean Sea collected by each country.	365	20	Data are retrieved from different sources with different accuracy.	365
MEDSEA_CH5_Specification_2 / Collated data set of fish discards by species and year, for mass and number MEDSEA_CH5_Product_2	2003	2014	2571633	1000	4383	4	200000	1000	Total discard data over the Mediterranean Sea collected by each country.	365	20	Data are retrieved from different sources with different accuracy.	365
MEDSEA_CH5_Specification_3 / Collated data set of fish bycatch by species and year, for mass and number MEDSEA_CH5_Product_3	2006	2014	2571633	1000	2387	4	200000	1000	Total by-catch data over the Mediterranean Sea collected by each Mediterranean country.	365	20	Data are retrieved from different sources with different accuracy.	365
MEDSEA_CH5_Specification_4 / Impact of fisheries on the bottom from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_4	2006	2014	2571633	1000	3287	11	5000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account data processing by third parts and spatial and temporal accuracy of VMS raw data.	365
MEDSEA_CH5_Specification_5 / Change level of disturbance from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_5	2006	2014	2571633	1000	3287	11	5000	1000	It is requested the maximum depth of fisheries impact.	730	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	365

MEDSEA_CH5_Specification_6 / Impact of fisheries on the bottom from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_6	2012	2014	2571633	1000	1096	4	1000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account fleet and spatial coverage accuracy of AIS raw data.	365
MEDSEA_CH5_Specification_7 / Change level of disturbance from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_7	2012	2014	2571633	1000	1096	4	1000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account fleet and spatial coverage accuracy of AIS raw data.	365
MEDSEA_CH5_Specification_8 / Impact of fisheries on the bottom from Data Logger combined with habitat vulnerability MEDSEA_CH5_Product_8	2012	2014	2571633	1000	1096	4	1000	1000	requested data on the bottom	30	20	Taking into account fleet and spatial coverage accuracy of EISF raw data.	365

The TDP names, components and selected input data sets with related P02 characteristics per product

TDP Name	Component	List of Input data sets by product
MEDSEA_CH5_Product_1 / Collated data set of fish landings by species and year, for mass and number	MEDSEA_CH5_Product_1	Fish and shellfish catch statistics | Number of landings of fish by species, country, year (excluding shellfish) | European Commission
		Fish and shellfish catch statistics | Mass of landings of fish by species, country and year (excluding shellfish) | ICCAT | ICCAT Statistical Bulletin
		Fish and shellfish catch statistics | Mass of landings of fish by species, country, year (excluding shellfish) | European Commission
		Fish and shellfish catch statistics | Mass of landings of fish by species, country and year (excluding shellfish) | FAO / FAO - Food and Agriculture Organization of the United Nations | FishStat - Capture Production 1970-2010
MEDSEA_CH5_Product_2 / Collated data set of fish discards by species and year, for mass and number	MEDSEA_CH5_Product_2	Fish and shellfish catch statistics | Number of discards of fish by species, country, year (escluding shellfish) | European Commission
		Fish and shellfish catch statistics | Mass of discards of fish by species, country, year (excluding shellfish) | European Commission
MEDSEA_CH5_Product_3 / Collated data set of fish bycatch by species and year, for mass and number	MEDSEA_CH5_Product_3	Fishing by-catch | Number of bycatch of reptiles by species, country and year | Food and Agriculture Organization of the United Nations, Fisheries and Aquaculture Department
MEDSEA_CH5_Product_4 / Impact of fisheries on the bottom from VMS data combined with habitat vulnerability	MEDSEA_CH5_Product_4	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds
		Horizontal platform movement | Map of Malta VMS data | Ministry for Sustainable Development, the Environment and Climate change - Department of Fisheries and Aquaculture
		Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural Resources and Environment - Department of Fisheries and Marine Research
		Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainable Development and Energy (MEDDE)

		Horizontal platform movement | Slovenia VMS raw data | Ministry of Agriculture, Forestry and Food
		Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)
		Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)
		Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies
MEDSEA_CH5_Product_5 / Change level of disturbance from VMS data combined with habitat vulnerability	MEDSEA_CH5_Product_5	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)
		Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds
		Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural Resources and Environment - Department of Fisheries and Marine Research
		Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainable Development and Energy (MEDDE)
		Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies
		Horizontal platform movement | Map of Italy VMS data | Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) - Directorate-General of Fisheries and Aquaculture
		Horizontal platform movement | Slovenia VMS raw data | Ministry of Agriculture, Forestry and Food
		Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)
MEDSEA_CH5_Product_6 / Impact of fisheries on the bottom from AIS data combined with habitat vulnerability	MEDSEA_CH5_Product_6	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds

		Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic
		Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)
		Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)
MEDSEA_CH5_Product_7 / Change level of disturbance from AIS data combined with habitat vulnerability	MEDSEA_CH5_Product_7	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)
		Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds
		Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic
		Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)
		Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)
MEDSEA_CH5_Product_8 / Impact of fisheries on the bottom from Data Logger combined with habitat vulnerability	MEDSEA_CH5_Product_8	Horizontal platform movement | ESIF raw data by fishing vessels | National Research Council - Institute of Marine Science (CNR-ISMAR) - Ancona | ESIF data
		Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds
		Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)
		Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)

The TDP quality elements

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MedSea_CH5_1 / Collated data set of fish landings by species and year, for mass and number MEDSEA_CH5_Product_1	1950	2013	2571633	1000	23376	4	200000	1000	Total landing data over the Mediterranean Sea collected by each country.	365	20	Data are retrieved from different sources with different accuracy.	730
MedSea_CH5_2 / Collated data set of fish discards by species and year, for mass and number MEDSEA_CH5_Product_2	2003	2014	1491200	1000	4383	2	200000	1000	Total discard data over the Mediterranean Sea collected by each European Mediterranean country.	365	12	required by EU to the member states in the DCF	365
MedSea_CH5_3 / Collated data set of fish bycatch by species and year, for mass and number MEDSEA_CH5_Product_3	2006	2014	48200	1000	1826	1	200000	1000	Total by-catch data in Cyprus .	365	12	required by EU to the member states in the DCF	365
MedSea_CH5_4 / Impact of fisheries on the bottom from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_4	2006	2014	578444	1000	3287	8	5000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account data processing by third parts and spatial and temporal accuracy of VMS raw data.	365
MedSea_CH5_5 / Change level of disturbance from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_5	2006	2013	982602	1000	2922	8	5000	1000	It is requested the maximum depth of fisheries impact.	730	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	730
MedSea_CH5_6 / Impact of	2012	2014	2571633	1000	1096	4	1000	1000	It is requested	30	20	Taking into	365

fisheries on the bottom from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_6									the maximum depth of fisheries impact.			account fleet and spatial coverage accuracy of AIS raw data.	
MedSea_CH5_7 / Change level of disturbance from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_7	2012	2014	2571633	1000	1096	4	1000	1000	It is requested the maximum depth of fisheries impact.	730	20	Taking into account fleet and spatial coverage accuracy of AIS raw data.	365
MedSea_CH5_8 / Impact of fisheries on the bottom from Data Logger combined with habitat vulnerability MEDSEA_CH5_Product_8	2012	2015	1800	270	1008	4	1000	270	It is requested the maximum depth of fisheries impact.	30	90	Due to the availability of data only for a few vessels and for limited time periods.	0

The TDP quality elements errors (%)

TDP	Horizontal Coverage P.APE.1.1	Vertical Coverage P.APE.1.2	Temporal Coverage P.APE.1.3	Number of P02 P.APE.2.1	Horizontal Resolution P.APE.3.1	Vertical Resolution P.APE.3.2	Temporal Resolution P.APE.3.3	Thematic Accuracy P.APE.3.4	Temporal Validity P.APE.4.1
MedSea_CH5_1 / Collated data set of fish landings by species and year, for mass and number MEDSEA_CH5_Product_1	0	0	-2	-33	0	0	0	20	-100
MedSea_CH5_2 / Collated data set of fish discards by species and year, for mass and number MEDSEA_CH5_Product_2	-42	0	0	-50	0	0	0	12	0
MedSea_CH5_3 / Collated data set of fish bycatch by species and year, for mass and number MEDSEA_CH5_Product_3	-98	0	-24	-75	0	0	0	12	0
MedSea_CH5_4 / Impact of fisheries on the bottom from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_4	-78	0	0	-27	0	0	0	20	0
MedSea_CH5_5 / Change level of disturbance from VMS data combined with habitat vulnerability MEDSEA_CH5_Product_5	-62	0	-11	-27	0	0	0	20	-100
MedSea_CH5_6 / Impact of fisheries on the bottom from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_6	0	0	0	0	0	0	0	20	0
MedSea_CH5_7 / Change level of disturbance from AIS data combined with habitat vulnerability MEDSEA_CH5_Product_7	0	0	0	0	0	0	-100	20	0
MedSea_CH5_8 / Impact of fisheries on the bottom from Data Logger combined with habitat vulnerability MEDSEA_CH5_Product_8	-100	-73	-8	0	0	73	0	90	100

The Input data set quality elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH5_Product_1	Fish and shellfish catch statistics | Number of landings of fish by species, country, year (excluding shellfish) | European Commission	2002	2013	1491200	1000	4383	200000	1000	Total landing data over the Mediterranean Sea collected by each European Mediterranean country within its territorial waters. Therefore it is not characterized by unique Horizontal/Vertical resolution values	365	12	required by EU to the member states in the DCF	730
	Fish and shellfish catch statistics | Mass of landings of fish by species, country and year (excluding shellfish) | ICCAT | ICCAT Statistical Bulletin	2002	2013	1491200	1000	4383	200000	1000	Total landing data over the Mediterranean Sea collected by each European Mediterranean country within its territorial waters.	365	12	required by EU to the member states in the DCF	730
	Fish and shellfish catch statistics | Mass of landings of fish by species, country, year (excluding shellfish) | European Commission	1950	2012	2571633	1000	23011	200000	1000	Total tuna landing data catch in the Mediterranean sea.	365	20		1095

	Fish and shellfish catch statistics | Mass of landings of fish by species, country and year (excluding shellfish) | FAO / FAO - Food and Agriculture Organization of the United Nations | FishStat - Capture Production 1970-2010	1970	2010	2571633	1000	14975	200000	1000	Total landing data catch in the Mediterranean Sea.	365	20		1825
MEDSEA_CH5_Product_2	Fish and shellfish catch statistics | Number of discards of fish by species, country, year (escluding shellfish) | European Commission	2002	2013	1491200	1000	4383	200000	1000	Total discard data over the Mediterranean Sea collected by each European Mediterranean country.	365	12	required by EU to the member states in the DCF	365
	Fish and shellfish catch statistics | Mass of discards of fish by species, country, year (excluding shellfish) | European Commission	2002	2013	1491200	1000	4383	200000	1000	Total discard data over the Mediterranean Sea collected by each European Mediterranean country.	365	12	required by EU to the member states in the DCF	365
MEDSEA_CH5_Product_3	Fishing by-catch | Number of bycatch of reptiles by species, country and year | Food and Agriculture Organization of the United Nations, Fisheries and Aquaculture Department	2010	2014	48200	1000	1826	200000	1000	Total by-catch data in Cyprus.	365	12	required by EU to the member states in the DCF	365
MEDSEA_CH5_Product_4	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	2011		2571633	150	1096	200000	150	Collected Seabed habitats can be found up to 150m.	1096	20	Taking into account data processing by third parties.	395
	Horizontal platform movement | Map of Malta VMS data | Ministry for Sustainable Development, the Environment and Climate change - Department of Fisheries and Aquaculture	2007	2013	48200	1000	1396	5000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	730
	Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural Resources and Environment - Department of Fisheries and Marine Research	2009	2013	600	1000	1645	2500	1000	It is requested the maximum depth of fisheries impact.	0.0138	10	Taking into account spatial and temporal accuracy of VMS raw data.	730

	Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainable Development and Energy (MEDDE)	2010	2011	413998	1000	486	5000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account data processing by third parts and spatial and temporal accuracy of VMS raw data.	1461
	Horizontal platform movement | Slovenia VMS raw data | Ministry of Agriculture, Forestry and Food	2006	2013	88893	1000	2922	5000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	730
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)	2014	2014	26751	1000	334	5000	1000	It is requested the maximum depth of fisheries impact.	30	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	365
	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)			2571633	5000	730	250000	5000	This characteristic just deals with sea bottom	730	20	Taking into account data processing by third parts.	61
	Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies			2571633	5000	730	1000000	5000	this characteristic just deals with sea bottom	730	20	Taking into account data processing by third parties	61
MEDSEA_CH5_Product_5	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)	2011		2571633	150	1096	200000	150	Collected Seabed habitats can be found up to 150m.	1096	20	Taking into account data processing by third parties.	395
	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	2007	2013	48200	1000	2557	5000	1000	It is requested the maximum depth of fisheries impact.	365	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	730

	Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural Resources and Environment - Department of Fisheries and Marine Research	2009	2013	600	1000	1645	2500	1000	It is requested the maximum depth of fisheries impact.	0.0138	10	Taking into account spatial and temporal accuracy of VMS raw data.	730
	Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainable Development and Energy (MEDDE)	2010	2011	413998	1000	486	5000	1000	It is requested the maximum depth of fisheries impact.	365	20	Taking into account data processing by third parts and spatial and temporal accuracy of VMS raw data.	1461
	Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies	2006	2013	88893.639941	1000	2922	5000	1000	It is requested the maximum depth of fisheries impact.	365	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	730
	Horizontal platform movement | Map of Italy VMS data | Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) - Directorate-General of Fisheries and Aquaculture	2011	2013	431510	1000	1096	20000	1000	It is requested the maximum depth of fisheries impact.	365	20	Taking into account data processing by third parties and spatial and temporal accuracy of VMS raw data.	730
	Horizontal platform movement | Slovenia VMS raw data | Ministry of Agriculture, Forestry and Food			2571633	5000	730	250000	5000	This characteristic just deals with sea bottom	730	20	Taking into account data processing by third parts.	61
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)			2571633	5000	730	1000000	5000	this characteristic just deals with sea bottom	730	20	Taking into account data processing by third parties	61
MEDSEA_CH5_Product_6	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	2011		2571633	150	1096	200000	150	Collected Seabed habitats can be found up to 150m.	1096	20	Taking into account data processing by third parties.	395

	Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic	2012	2014	2571633	1000	1096	1000	1000	It is requested the maximum depth of fisheries impact.	0.00347222222222222222222222222	20	Taking into account fleet and spatial coverage accuracy of AIS raw data.	365
	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)			2571633	5000	730	250000	5000	This characteristic just deals with sea bottom	730	20	Taking into account data processing by third parts.	61
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)			2571633	5000	730	1000000	5000	this characteristic just deals with sea bottom	730	20	Taking into account data processing by third parties	61
MEDSEA_CH5_Product_7	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)			2571633	150	1096	200000	150	Collected Seabed habitats can be found up to 150m.	1096	20	Taking into account data processing by third parties.	395
	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds			2571633	1000	1096	1000	1000	It is requested the maximum depth of fisheries impact.	0.0035	20	Taking into account fleet and spatial coverage accuracy of AIS raw data.	365
	Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic			2571633	5000	730	250000	5000	This characteristic just deals with sea bottom	730	20	Taking into account data processing by third parts	61
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)			2571633	5000	730	1000000	5000	this characteristic just deals with sea bottom	730	20	Taking into account data processing by third parties	61
	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)			2571633	150	1096	200000	150	Collected Seabed habitats can be found up to 150m.	1096	20	Taking into account data processing by third parties.	395

MEDSEA_CH5_Product_8	Horizontal platform movement | ESIF raw data by fishing vessels | National Research Council - Institute of Marine Science (CNR-ISMAR) - Ancona | ESIF data			1800	270	1008	1000	270	It is requested the maximum depth of fisheries impact.	0.000694	90	Taking into account the few quantity of vessels equipped with EIFS system.	0
	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds			2571633	5000	730	250000	5000	This characteristic just deals with sea bottom	730	20	Taking into account data processing by third parts	61
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)			2571633	5000	730	1000000	5000	this characteristic just deals with sea bottom	730	20	Taking into account data processing by third parties	61

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH5_Product_1	Fish and shellfish catch statistics | Number of landings of fish by species, country, year (excluding shellfish) | European Commission	-42.	0	-81.5	0	0	100	12	-100
	Fish and shellfish catch statistics | Mass of landings of fish by species, country and year (excluding shellfish) | ICCAT | ICCAT Statistical Bulletin	-42.	0	-81.5	0	0	100	12	-100
	Fish and shellfish catch statistics | Mass of landings of fish by species, country, year (excluding shellfish) | European Commission	0	0	-3.1	0	0	100	20	-200
	Fish and shellfish catch statistics | Mass of landings of fish by species, country and year (excluding shellfish) | FAO / FAO - Food and Agriculture Organization of the United Nations | FishStat - Capture Production 1970-2010	0	0	-36.9	0	0	100	20	-400
MEDSEA_CH5_Product_2	Fish and shellfish catch statistics | Number of discards of fish by species, country, year (escluding shellfish) | European Commission	-42.	0	0	0	0	100	12	0
	Fish and shellfish catch statistics | Mass of discards of fish by species, country, year (excluding shellfish) | European Commission	-42.	0	0	0	0	100	12	0
MEDSEA_CH5_Product_3	Fishing by-catch | Number of bycatch of reptiles by species, country and year | Food and Agriculture Organization of the United Nations, Fisheries and Aquaculture Department	-98.1	0	-23.5	0	0	100	12	0

MEDSEA_CH5_Product_4	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	0	-85	-66.6	-100	85	100	20	-8.2
	Horizontal platform movement | Map of Malta VMS data | Ministry for Sustainable Development, the Environment and Climate change - Department of Fisheries and Aquaculture	-98.1	0	-57.5	0	0	100	20	-100
	Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural Resources and Environment - Department of Fisheries and Marine Research	-99.9	0	-49.9	50	0	0.0	10	-100
	Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainable Development and Energy (MEDDE)	-83.9	0	-85.2	0	0	100	20	-100
	Horizontal platform movement | Slovenia VMS raw data | Ministry of Agriculture, Forestry and Food	-96.5	0	-11.1	0	0	100	20	-100
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)	-98.9	0	-89.8	0	0	100	20	0
	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)	0	400	-77.8	-100	-100	100	20	83.3
	Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies	0	400	-77.8	-100	-100	100	20	83.3

MEDSEA_CH5_Product_5	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)	0	-85	-66.6	-100	85	100	20	-8.2
	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	-98.1	0	-22.2	0	0	50	20	-100
	Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural Resources and Environment - Department of Fisheries and Marine Research	-99.9	0	-49.9	50	0	0.	10	-100
	Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainable Development and Energy (MEDDE)	-83.9	0	-85.2	0	0	50	20	-100
	Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies	-96.5	0	-11.1	0		50	20	-100
	Horizontal platform movement | Map of Italy VMS data | Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) - Directorate-General of Fisheries and Aquaculture	-83.2	0	-66.6	-100	0	50	20	-100
	Horizontal platform movement | Slovenia VMS raw data | Ministry of Agriculture, Forestry and Food	0	400	-77.8	-100	-400	100	20	83.3
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)	0	400	-77.8	-100	-400	100	20	83.3

MEDSEA_CH5_Product_6	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	0	-85	0	-100	85	100	20	-8.2
	Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic	0	0	0	0	0	0.0	20	0
	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)	0	100	-33.4	-100	-100	100	20	83.3
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)	0	100	-33.4	-100	-100	100	20	83.3
MEDSEA_CH5_Product_7	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)	0	-85	0	-100	85	100	20	-8.2
	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	0	0	0	0	0	0.0	20	0
	Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic	0	100	-33.4	-100	-100	100	20	83.3
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)	0	100	-33.4	-100	-100	100	20	83.3

	Lithology | EMODnet Seabed substrate (1M) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (1M)	0	-85	0	-100	85	100	20	-8.2
MEDSEA_CH5_Product_8	Horizontal platform movement | ESIF raw data by fishing vessels | National Research Council - Institute of Marine Science (CNR-ISMAR) - Ancona | ESIF data	-99.9	-73	-8.	0	73	0.0	90	100
	Habitat extent | Seabed sensible habitats | Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre (HCMR / HNODC) | Mediterranean Sensitive Habitats (MEDISEH) coralligenous and maerl beds	0	100	-33.4	-100	-100	100	20	83.3
	Lithology | EMODnet Seabed substrate (250k) | Geological Survey of Finland - GTK | EMODnet Seabed substrate (250k)	0	100	-33.4	-100	-100	100	20	83.3

9 Indicators for Challenge 6: Marine environment

The DPS names and required quality elements.

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MedSea_CH6_Specification_1 / Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009. MedSea_CH6_Product_1	2005	2014	2500000	10	3650	1	4000	1		1	20		365
MedSea_CH6_Specification _2 / Map of Chlorophyll concentration trend over the Mediterranean Sea, relative to the period 1998-2009, expressed as percent of variation respect to the climatological field MedSea_CH6_Product_2	2005	2014	2500000	10	3650	1	4000	1		1	20		180
MedSea_CH6_Specification _3 / Maps of average TRIX indices calculated from Mediterranean sea surface data for the periods 2008-2012, 1998-2002, and 1993-1997 MedSea_CH6_Product_3	2003	2012	2500000	5	3650	6	10000	1		90	30		365
MedSea_CH6_Specification _4 / Maps showing differences between most recent TRIX estimates (2008-2012) and TRIX from the earlier periods 1998-2002 and 1993-1997 MedSea_CH6_Product_4	1993	2002	250000	5	3650	6	10000	1		90	30		365

The TDP names, components and selected input data sets with related P02 characteristics per product

TDP Name	Component	List of Input data sets by product
MedSea_CH6_Product_1 / Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009.	MEDSEA_CH6_Product_1	Chlorophyll pigment concentrations in water bodies. Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors
MedSea_CH6_Product_2 / Map of Chlorophyll concentration trend over the Mediterranean Sea, relative to the period 1998-2009, expressed as percent of variation respect to the climatological field	MEDSEA_CH6_Product_2	Chlorophyll pigment concentrations in water bodies. Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors
MedSea_CH6_Product_3 / Maps of average TRIX indices calculated from Mediterranean sea surface data for the periods 2008-2012, 1998-2002, and 1993-1997	MEDSEA_CH6_Product_3	Nitrate concentration parameters in the water column | Concentration of NO3-N [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | Ocean Data View | Nitrate concentration parameters in the water column
		Salinity of the water column | Sea surface salinity [PSU] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data
		Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column
		Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Phosphate concentration parameters in the water column
		Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | Ocean Data View | Surface data
		Nitrate concentration parameters in the water column | Concentration of NO3-N [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column

		Temperature of the water column | Sea surface temperature [° C] for calculating Trophic State Index (TRIX) values | Ocean Data View | Cast Data Base with vertical profiles of physical, chemical and biological data
		Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data
		Temperature of the water column | Sea surface temperature [° C] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data
		Chlorophyll pigment concentrations in water bodies | concentration of chlorophyll in sea water | Copernicus Marine environment monitoring service | concentration_of_chlorophyll_in_sea_water
		Dissolved oxygen parameters in the water column | Concentration of dissolved oxygen [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Dissolved oxygen concentration in the water column
		Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | Ocean Data View | Nitrate concentration parameters in the water column
		Temperature of the water column | Surface water temperature [°C] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data
		Nitrate concentration parameters in the water column | Concentration of NO3-N [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column
MedSea_CH6_Product_4 / Maps showing differences between most recent TRIX estimates (2008-2012) and TRIX from the earlier periods 1998-2002 and 1993-1997	MEDSEA_CH6_Product_4	Salinity of the water column | Sea surface salinity [PSU] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data
		Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | Ocean Data View | Surface data
		Temperature of the water column | Sea surface temperature [° C] for calculating Trophic State Index (TRIX) values | Ocean Data View | Cast Data Base with vertical profiles of physical, chemical and biological data
		Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column

		Nitrate concentration parameters in the water column | Concentration of NO3-N [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column
		Temperature of the water column | Sea surface temperature [° C] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column
		Nitrate concentration parameters in the water column | Concentration of NO3-N [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column
		Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data
		Temperature of the water column | Surface water temperature [°C] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data
		Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Phosphate concentration parameters in the water column
		Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | Ocean Data View | Nitrate concentration parameters in the water column
		Nitrate concentration parameters in the water column | Concentration of NO3-N [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column
		Chlorophyll pigment concentrations in the water column | Concentration of chlorophyll-a {chl-a} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | EUR_OC_INDEX_002
		Phosphate concentration parameters in the water column | Concentration of PO4-P [µg/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column

The TDP quality elements

TDP	Initial Date	Final Date	Horizontal Coverage TDP.AP.1.1 (km**2)	Vertical Coverage TDP.AP.1.2 (m)	Temporal Coverage TDP.AP.1.3 (days)	Number of P02 TDP.AP.2.1	Horizontal Resolution TDP.AP.3.1 (m)	Vertical Resolution TDP.AP.3.2 (m)	Description	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description	Temporal Validity TDP.AP.4.1 (days)
MEDSEA_CH6_1 / Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009. MedSea_CH6_Product_1	2005	2015	2500000	10	3650	1	4000	1		1	30		365
MEDSEA_CH6 _2 / Map of Chlorophyll concentration trend over the Mediterranean Sea, relative to the period 1998-2009, expressed as percent of variation respect to the climatological field MedSea_CH6_Product_2	2005	2014	2500000	10	1	1	4000	1		1	30		365
MEDSEA_CH6 _3 / Maps of average TRIX indices calculated from Mediterranean sea surface data for the periods 2008-2012, 1998-2002, and 1993-1997 MedSea_CH6_Product_3	2003	2012	200000	5	7300	6	8000	1		1825	50		365
MEDSEA_CH6 _4 / Maps showing differences between most recent TRIX estimates (2008-2012) and TRIX from the earlier periods 1998-2002 and 1993-1997 MedSea_CH6_Product_4	1993	2002	200000	5	7300	6	8000	1		1825	50	Huge gaps in time and space of simultaneous data collections of the six variables required for TRIX calculation, prevented reaching a higher accuracy.	1825

The TDP quality elements errors (%)

TDP	Horizontal Coverage P.APE.1.1	Vertical Coverage P.APE.1.2	Temporal Coverage P.APE.1.3	Number of P02 P.APE.2.1	Horizontal Resolution P.APE.3.1	Vertical Resolution P.APE.3.2	Temporal Resolution P.APE.3.3	Thematic Accuracy P.APE.3.4	Temporal Validity P.APE.4.1
MEDSEA_CH6_1 / Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009. MedSea_CH6_Product_1	0	0	0	0	0	0	0	30	0
MEDSEA_CH6 _2 / Map of Chlorophyll concentration trend over the Mediterranean Sea, relative to the period 1998-2009, expressed as percent of variation respect to the climatological field. MedSea_CH6_Product_2	0	0	0	0	0	0	0	30	-100
MEDSEA_CH6 _3 / Maps of average TRIX indices calculated from Mediterranean sea surface data for the periods 2008-2012, 1998-2002, and 1993-1997. MedSea_CH6_Product_3	-20	0	100	0	20	0	-100	50	0
MEDSEA_CH6 _4 / Maps showing differences between most recent TRIX estimates (2008-2012) and TRIX from the earlier periods 1998-2002 and 1993-1997. MedSea_CH6_Product_4	-20	0	100	0	20	0	-100	50	-100

The Input data set quality elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH6_Product_1	Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009.	1997	2015	2500000	5	6935	4000	1		90	100		365
MEDSEA_CH6_Product_2	Chlorophyll pigment concentrations in water bodies. Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors	1997	2015	2500000	5	6935	4000	1		90	100		365
MEDSEA_CH6_Product_3	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | Mediterranean Sea Surface Chlorophyll Concentration from Multi Satellite observations Reprocessed (ESA-CCI) (1997-2012)	1997	2015	2500000	5	6935	4000	1		90	100		365
	Dissolved oxygen parameters in the water column | Concentration of dissolved oxygen [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Dissolved oxygen concentration in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	60	50	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	Surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Phosphate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Phosphate concentration parameters in the water column	1993	2012	2000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

Salinity of the water column | Sea surface salinity [PSU] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Surface data	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Temperature of the water column | Sea surface temperature C] for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Cast Data Base with vertical profiles of physical, chemical and biological data	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Temperature of the water column | Sea surface temperature C] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data	1993	2012	1000000	5	5475	20000	1	surface data	90	70	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

	Temperature of the water column | Surface water temperature C] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data	1993	2012	1000000	5	5475	20000	1	surface values	90	70	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | Mediterranean Sea Surface Chlorophyll Concentration from Multi Satellite observations Reprocessed (ESA-CCI) (1997-2012)	1997	2015	2500000	5	6935	4000	1		90	100		365
MEDSEA_CH6_Product_4	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | Mediterranean Sea Surface Chlorophyll Concentration from Multi Satellite observations Reprocessed (ESA-CCI) (1997-2012)	1997	2015	2500000	5	3650	4000	1		90	100		365
	Dissolved oxygen parameters in the water column | Concentration of dissolved oxygen [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Dissolved oxygen concentration in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	50	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012										
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365

	Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
	Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Phosphate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface data	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
	Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Phosphate concentration parameters in the water column	1993	2012	1000000	5	5475	20000	1	surface values	90	60	Not good because seasonal data were not available for all the years and where not covering the whole Mediterranean	365
	Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data	1993	2012	1000000	5	5475	20000	1	surface values	90	60	scattered and scarce data in time and space	365

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH6_Product_1	Maps of Chlorophyll concentration seasonal climatologies (i.e., Winter, Spring, Summer, and Fall) over the Mediterranean Sea relative to the period 1998-2009.	0	0	90	60	0	100	100	0
MEDSEA_CH6_Product_2	Chlorophyll pigment concentrations in water bodies. Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors	0	0	90	60	0	100	100	0
MEDSEA_CH6_Product_3	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | Mediterranean Sea Surface Chlorophyll Concentration from Multi Satellite observations Reprocessed (ESA-CCI) (1997-2012)	0	0	90	60	0	100	100	0
	Dissolved oxygen parameters in the water column | Concentration of dissolved oxygen [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Dissolved oxygen concentration in the water column	-60	0	50	-100	0	100	60	0
	Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	-60	0	50	-100	0	66.6	50	0
	Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0

Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Phosphate concentration parameters in the water column	-60	0	50	-100	0	100	60	0

Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Phosphate concentration parameters in the water column	-20	0	50	-100	0	100	60	0
Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data	-60	0	50	-100	0	100	60	0
Salinity of the water column | Sea surface salinity [PSU] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data	-60	0	50	-100	0	100	60	0
Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Surface data	-60	0	50	-100	0	100	60	0
Temperature of the water column | Sea surface temperature C] for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Cast Data Base with vertical profiles of physical, chemical and biological data	-60	0	50	-100	0	100	60	0
Temperature of the water column | Sea surface temperature C] for calculating Trophic State Index (TRIX) values | ISRAMAR | Cast Data Base with vertical profiles of physical, chemical and biological data	-60	0	50	-100	0	100	70	0
Temperature of the water column | Surface water temperature C] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data	-60	0	50	-100	0	100	70	0

	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | Mediterranean Sea Surface Chlorophyll Concentration from Multi Satellite observations Reprocessed (ESA-CCI) (1997-2012)	0	0	90	60	0	100	100	0
MEDSEA_CH6_Product_4	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll-a {chl-a CAS 479-61-8} per unit volume of the water body by synthesis from multiple satellite sensors | Copernicus Marine Environment Monitoring Service | Mediterranean Sea Surface Chlorophyll Concentration from Multi Satellite observations Reprocessed (ESA-CCI) (1997-2012)	0	0	0	60	0	100	100	0
	Dissolved oxygen parameters in the water column | Concentration of dissolved oxygen [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Dissolved oxygen concentration in the water column	-60	0	50	-100	0	100	60	0
	Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	50	0
	Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
	Dissolved oxygen parameters in the water column | Concentration of O2 [ml/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0

Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Nitrate concentration parameters in the water column | Concentration of NO3-N g/l] in the water surface for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | Alfred Wegener Institute - AWI | Nitrate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | EMODnet Chemistry | Phosphate concentration parameters in the water column	-60	0	50	-100	0	100	60	0
Phosphate concentration parameters in the water column | Concentration of PO4-P g/l] in the water surface for calculating Trophic State Index (TRIX) values | ISRAMAR | Phosphate concentration parameters in the water column	-60	0	50	-100	0	100	60	0

	Salinity of the water column | Surface water salinity [PSU] for calculating Trophic State Index (TRIX) values | National Centers for Environmental Information. National Oceanographic and Atmospheric Administration | Surface data	-60	0	50	-100	0	100	60	0

10 Indicators for Challenge 7: Rivers

The DPS names and required quality elements

DPS	Initial Date	Final Date	Horizontal Coverage DPS.AP.1.1 (km**2)	Vertical Coverage DPS.AP.1.2 (m)	Temporal Coverage DPS.AP.1.3 (days)	Number of P02 DPS.AP.2.1	Horizontal Resolution DPS.AP.3.1 (m)	Vertical Resolution DPS.AP.3.2 (m)	Description	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description	Temporal Validity DPS.AP.4.1 (days)
MEDSEA_CH_7_Specification_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_1	1913-01-01T00:00:00	2010-12-31T00:00:00	2500000	10	31755	1	400000	1	Flow discharge data are provided as a single layer measurement	30	20	The percentage is chosen by considering the sampling error	365
MEDSEA_CH_7_Specification_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_2	1913-01-01T00:00:00	2010-12-31T00:00:00	2500000	10	10585	1	400000	1	Flow discharge data are provided as a single layer measurement	1	20	The percentage is chosen by considering the sampling error	365
MEDSEA_CH_7_Specification_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_1	2003-01-01T00:00:00	2012-12-31T00:00:00	2500000	10	3650	1	400000	1	Flow discharge data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	187
MEDSEA_CH_7_Specification_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_2	2003-01-01T00:00:00	2012-12-31T00:00:00	2500000	10	3650	1	400000	1	Flow discharge data are provided as a single level output	1	20	The percentage is chosen by considering the sampling error	90

MEDSEA_CH_7_Specification_3 / Annual time series of TSM from satellite data MEDSEA_CH_7_Product_3	2003-01-01	2012-12-31	2500000	10	3650	1	400000	1	TSM data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	90
MEDSEA_CH_7_Specification_4 / Monthly time series of TSM from satellite data MEDSEA_CH_7_Product_4	2003-01-01	2012-12-31	2500000	10	3650	1	400000	1	TSM data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	90
MEDSEA_CH_7_Specification_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_1	1960-01-01T00:00:00	2010-12-31T00:00:00	2500000	10	14600	1	400000	1	Nutrient data are collected from a single level measurement	30	20	The percentage is chosen by considering the sampling error	365
MEDSEA_CH_7_Specification_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_2	1960-01-01T00:00:00	2010-12-31T00:00:00	2500000	10	10585	1	400000	1	Nutrient data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	365
MEDSEA_CH_7_Specification_6 / Monthly time series of Total Nitrogen from model data [mg/l] MEDSEA_ CH7_product_6	2003-01-01T00:00:00	2012-12-31T00:00:00	2500000	10	3650	1	400000	1	Nutrient data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	187
MEDSEA_CH_7_Specification_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_1	1960-01-01T00:00:00	2010-12-31T00:00:00	2500000	10	14600	1	400000	1	Nutrient data are collected from a single level measurement	30	20	The percentage is chosen by considering the sampling error	365

MEDSEA_CH_7_Specification_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_2	1960-01-01T00:00:00	2010-12-31T00:00:00	2500000	10	10585	1	400000	1	Nutrient data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	365
MEDSEA_CH_7_Specification_8 / Monthly time series of Total Phosphorous from model data [mg/l] MEDSEA_ CH7_product_8	2003-01-01T00:00:00	2012-12-31T00:00:00	2500000	10	3650	1	400000	1	Nutrient data are collected from a single level measurement	1	20	The percentage is chosen by considering the sampling error	187
MEDSEA_CH_7_Specification_9 / Annual time series of Eels Specificationion[tons] MEDSEA_CH_7_Product_9	1950-01-01	2011-12-31	2500000	10	22265	1	400000	1	Production is based on capture in the river estuaries	30	20	The percentage is chosen by considering the sampling error	365

The TDP names, components and selected input data sets with related P02 characteristics per product

TDP Name	Component	List of Input data sets by product
MEDSEA_CH7_Product_1 / Annual time series of Water Discharge (Qw) [m3/s]	MEDSEA_CH7_Component_1.1	River flow and discharge | Riverine discharge of water | University of New Hampshire, Complex Systems Research Center (CSRC) | RivDIS
		River flow and discharge | Riverine discharge (daily mean) of water | | SESAME
		River flow and discharge | Riverine discharge of water | National Center for Atmospheric Research, Computational and Information Systems Laboratory, Data Support Section | CISL Research Data Archive
	MEDSEA_CH7_Component_1.2	River flow and discharge | Riverine discharge (daily mean) of water by model prediction | Swedish Meteorological and Hydrological Institute | E-HYPE
MEDSEA_CH7_Product_2 / Monthly time series of Water Discharge (Qw) [m3/s]	MEDSEA_CH7_Product_2.1	River flow and discharge | Riverine discharge of water | University of New Hampshire, Complex Systems Research Center (CSRC) | RivDIS
		River flow and discharge | Riverine discharge (daily mean) of water | | SESAME
		River flow and discharge | Riverine discharge of water | National Center for Atmospheric Research, Computational and Information Systems Laboratory, Data Support Section | CISL Research Data Archive
	MEDSEA_CH7_Product_2.2	River flow and discharge | Riverine discharge (daily mean) of water by model prediction | Swedish Meteorological and Hydrological Institute | E-HYPE
MEDSEA_CH7_Product_3 / Annual time series of TSM from satellite data	MEDSEA_CH7_Product_3.1	Concentration of suspended particulate material in the water column | Concentration of suspended particulate material {SPM} per unit volume of the water body | European Space Agency (ESA) | CoastColour
MEDSEA_CH7_Product_4 / Monthly time series of TSM from satellite data	MEDSEA_CH7_Product_4.1	Concentration of suspended particulate material in the water column | Concentration of suspended particulate material {SPM} per unit volume of the water body | European Space Agency (ESA) | CoastColour
MEDSEA_CH7_Product_5 / Annual time series of Total Nitrogen [mg/l]	MEDSEA_CH7_Product_5.1	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | | SESAME
	MEDSEA_CH7_Product_5.2	Dissolved total and organic nitrogen concentrations in the water column | Concentration of nitrogen (total) per unit volume of the water body [particulate &gt
MEDSEA_CH7_Product_6 / Monthly time series of Total Nitrogen from model data [mg/l]	MEDSEA_CH7_Product_6.1	Dissolved total and organic nitrogen concentrations in the water column | Concentration of nitrogen (total) per unit volume of the water body [particulate &gt
MEDSEA_CH7_Product_7 / Annual time series of Total Phosphorous/Phosphates [mg/l]	MEDSEA_CH7_Product_7.1	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphate {PO4} per unit mass of the water body [unknown phase] | Hellenic Centre for Marine Research, Institute of Oceanography (HCMR/IO) | SESAME
	MEDSEA_CH7_Product_7.2	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphorus (total) per unit mass of the water body [particulate
MEDSEA_CH7_Product_8 / Monthly time series of Total Phosphorous from model data [mg/l]	MEDSEA_CH7_Product_8.1	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphorus (total) per unit mass of the water body [particulate &gt
MEDSEA_CH7_Product_9 / Annual time series of Eels production[tons]	MEDSEA_CH7_Product_9.1	Fish abundance in water bodies | Eels abudance | FAO / FAO - Food and Agriculture Organization of the United Nations | FAO capture and aquaculture database

The TDP quality elements

TDP	Initial Date	Final Date	Horizontal Coverage TDP.AP.1.1 (km**2)	Vertical Coverage TDP.AP.1.2 (m)	Temporal Coverage TDP.AP.1.3 (days)	Number of P02 TDP.AP.2.1	Horizontal Resolution TDP.AP.3.1 (m)	Vertical Resolution TDP.AP.3.2 (m)	Description	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description	Temporal Validity TDP.AP.4.1 (days)
MedSea_CH7_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_1	1913	2010	1195000	10	6082	1	400000	1	Flow discharge data are provided as a single layer measurement	30	30	The percentage is chosen by considering the sampling error	5000
MedSea_CH7_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_2	1913	2010	2500000	10	10585	1	400000	1	Flow discharge data are provided as a single layer measurement	1	40	The percentage is chosen by considering the sampling error	1825
MedSea_CH7_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_1	1913	2010	0	10	0	1	400000	1	Flow discharge data are provided as a single layer measurement	30	30	Reasonable error due to the sampling technique	5000
MedSea_CH7_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_2	1913	2010	2500000	10	2920	1	400000	1	Flow discharge data are provided as a single layer ouput	1	40	Thematic accuracy higher than the one for in situ data	1460
MedSea_CH7_3 / Annual time series of TSM from satellite data MEDSEA_CH_7_Product_3	2003	2012	275000	10	3650	1	400000	1	TSM data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	90
MedSea_CH7_4 / Monthly time series of TSM from satellite data MEDSEA_CH_7_Product_4	2003	2012	275000	10	3650	1	400000	1	TSM data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	90
MedSea_CH7_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_1	1960	2010	950000	10	5350	0	400000	1	Nutrient data are collected from a single level measurement	30	30	The percentage is chosen by considering the sampling error	5100

MedSea_CH7_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_2	1960	2010	2500000	10	10585	1	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MedSea_CH7_6 / Monthly time series of Total Nitrogen from model data [mg/l] MEDSEA_ CH7_product_6	1981	2010	250000	10	2920	1	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MedSea_CH7_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_1	1960	2000	950000	10	5350	1	400000	1	Nutrient data are collected from a single level measurement	30	30	The percentage is chosen by considering the sampling error	5100
MedSea_CH7_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_2	1981	2010	2500000	10	10585	1	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MedSea_CH7_8 / Monthly time series of Total Phosphorous from model data [mg/l] MEDSEA_ CH7_product_8	1981	2010	2500000	10	2920	1	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MedSea_CH7_9 / Annual time series of Eels MedSea_CH7ion[tons] MEDSEA_CH_7_Product_9	1950	2011	0?	10	0?	1	400000	1	Production is based on capture in the river estuaries	365	40	The percentage is chosen by considering the sampling error	1100

The TDP quality elements errors (%)

TDP	Horizontal Coverage P.APE.1.1	Vertical Coverage P.APE.1.2	Temporal Coverage P.APE.1.3	Number of P02 P.APE.2.1	Horizontal Resolution P.APE.3.1	Vertical Resolution P.APE.3.2	Temporal Resolution P.APE.3.3	Thematic Accuracy P.APE.3.4	Temporal Validity P.APE.4.1
MedSea_CH7_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_1	-52.2	0	-99.8	0	0	0	0	30	-100
MedSea_CH7_1 / Annual time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_1_2	0	0	0	0	0	0	0	40	-100
MedSea_CH7_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_1	0	0	0	0	0	0	-100	30	-100
MedSea_CH7_2 / Monthly time series of Water Discharge (Qw) [m3/s] MEDSEA_CH_7_Product_2_2	-28	0	0	0	40	0	-100	40	-66.6
MedSea_CH7_3 / Annual time series of TSM from satellite data MEDSEA_CH_7_Product_3	-89	0	0	0	0	0	0	40	0
MedSea_CH7_4 / Monthly time series of TSM from satellite data MEDSEA_CH_7_Product_4	-89	0	0	0	0	100	0	40	0
MedSea_CH7_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_1	-62.6	0	-99.6	-100	0	0	0	30	-100
MedSea_CH7_5 / Annual time series of Total Nitrogen [mg/l] MEDSEA_CH_7_Product_5_2	0	0	0	0	0	0	0	40	-100
MedSea_CH7_6 / Monthly time series of Total Nitrogen from model data [mg/l] MEDSEA_ CH7_product_6	0	0	100	0	0	0	0	40	-100
MedSea_CH7_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_1	-63	0	-100	0	0	0	0	30	-100
MedSea_CH7_7 / Annual time series of Total Phosphorous [mg/l] MEDSEA_CH_7_Product_7_2	0	0	0	0	0	0	0	40	-100
MedSea_CH7_8 / Monthly time series of Total Phosphorous from model data [mg/l] MEDSEA_ CH7_product_8	0	0	100	0	0	0	0	40	-100
MedSea_CH7_9 / Annual time series of Eels MedSea_CH7ion[tons] MEDSEA_CH_7_Product_9	-100	0	-100	0	0	0	-100	40	-10

The Input data set quality elements

Component	List of P02 Characteristics by product	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1 (km**2)	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1 (m)	Vertical Resolution UD.AP.3.2 (m)	Description	Temporal Resolution UD.AP.3.3 (days)	Thematic Accuracy UD-AP3.4 (%)	Description	Temporal Validity UD.AP.4.1 (days)
MEDSEA_CH7_Product_1.1	River flow and discharge | Riverine discharge of water | University of New Hampshire, Complex Systems Research Center (CSRC) | RivDIS	1870	1991	250000	10	345	400000	1	Flow discharge data are provided as a single layer measurement	30	30	Reasonable error due to the sampling technique	11000
	River flow and discharge | Riverine discharge (daily mean) of water | | SESAME	1960	2000	875000	10	5000	400000	1	Flow discharge data are provided as a single layer measurement	30	30	The percentage is chosen by considering the sampling error	5100
	River flow and discharge | Riverine discharge of water | National Center for Atmospheric Research, Computational and Information Systems Laboratory, Data Support Section | CISL Research Data Archive	1812	1996	100000	10	844	400000	1	Flow discharge data are provided as a single layer measurement	30	30	The percentage is chosen by considering the sampling error	5500
MEDSEA_CH7_Product_1.2	River flow and discharge | Riverine discharge (daily mean) of water by model prediction | Swedish Meteorological and Hydrological Institute | E-HYPE	1980	2012	2500000	10	10585	400000	1	Flow discharge related to a single layer output	1	40	The percentage is chosen by considering the sampling error	1460
MEDSEA_CH7_Product_2.1	River flow and discharge | Riverine discharge of water | University of New Hampshire, Complex Systems Research Center (CSRC) | RivDIS	1870	1991	2500000	10	0	400000	1	Flow discharge data are provided as a single layer measurement	30	30	Reasonable error due to the sampling technique	11000
	River flow and discharge | Riverine discharge (daily mean) of water | | SESAME	1960	2000	2500000	10	0	400000	1	Flow discharge data are provided as a single layer measurement	30	30	The percentage is chosen by considering the sampling error	5100

	River flow and discharge | Riverine discharge of water | National Center for Atmospheric Research, Computational and Information Systems Laboratory, Data Support Section | CISL Research Data Archive	1812	1996	100000	10	0	400000	1	Flow discharge data are provided as a single layer measurement	30	30	The percentage is chosen by considering the sampling error	5500
MEDSEA_CH7_Product_2.2	River flow and discharge | Riverine discharge (daily mean) of water by model prediction | Swedish Meteorological and Hydrological Institute | E-HYPE	1980	2012	2500000	10	2920	400000	1	Flow discharge related to a single layer output	1	40	The percentage is chosen by considering the sampling error	1460
MEDSEA_CH7_Product_3.1	Concentration of suspended particulate material in the water column | Concentration of suspended particulate material {SPM} per unit volume of the water body | European Space Agency (ESA) | CoastColour	2002	2012	275000	10	3650	400000	1	TSM data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	90
MEDSEA_CH7_Product_4.1	Concentration of suspended particulate material in the water column | Concentration of suspended particulate material {SPM} per unit volume of the water body | European Space Agency (ESA) | CoastColour	2002	2012	275000	10	3650	400000	1	TSM data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	90
MEDSEA_CH7_Product_5.1	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | | SESAME			950000	10	5350	400000	1	Nutrient data are collected from a single level measurement	30	30	The percentage is chosen by considering the sampling error	5100
MEDSEA_CH7_Product_5.2	Dissolved total and organic nitrogen concentrations in the water column | Concentration of nitrogen (total) per unit volume of the water body [particulate &gt	1980	2012	2500000	10	10585	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MEDSEA_CH7_Product_6.1	Dissolved total and organic nitrogen concentrations in the water column | Concentration of nitrogen (total) per unit volume of the water body [particulate &gt	1980	2012	2500000	10	2919	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460

MEDSEA_CH7_Product_7.1	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphate {PO4} per unit mass of the water body [unknown phase] | Hellenic Centre for Marine Research, Institute of Oceanography (HCMR/IO) | SESAME			950000	10	5350	400000	1	Nutrient data are collected from a single level measurement	30	30	The percentage is chosen by considering the sampling error	5100
MEDSEA_CH7_Product_7.2	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphorus (total) per unit mass of the water body [particulate &gt	1980	2012	2500000	10	10585	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MEDSEA_CH7_Product_8.1	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphorus (total) per unit mass of the water body [particulate &gt	1980	2012	2500000	10	2920	400000	1	Nutrient data are collected from a single level measurement	1	40	The percentage is chosen by considering the sampling error	1460
MEDSEA_CH7_Product_9.1	Fish abundance in water bodies | Eels abudance | FAO / FAO - Food and Agriculture Organization of the United Nations | FAO capture and aquaculture database	1950	2012	2500000	10	0	400000	1	Production is based on capture in the river estuaries	365	40	The percentage is chosen by considering the sampling error	1100

The Input data set quality elements errors (%)

Component	List of P02 Characteristics related to input data sets	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.APE.1.2	Temporal Coverage UD.APE.1.3	Horizontal Resolution UD.APE.3.1	Vertical Resolution UD.APE.3.2	Temporal Resolution UD.APE.3.3	Thematic Accuracy UD.APE.3.4	Temporal Validity UD.APE.4.1
MEDSEA_CH7_Product_1.1	River flow and discharge | Riverine discharge of water | University of New Hampshire, Complex Systems Research Center (CSRC) | RivDIS	-90	0	-99.9	0	0	100	30	-100
	River flow and discharge | Riverine discharge (daily mean) of water | | SESAME	-65	0	-99.8	0	0	100	30	-100
	River flow and discharge | Riverine discharge of water | National Center for Atmospheric Research, Computational and Information Systems Laboratory, Data Support Section | CISL Research Data Archive	-96	0	-99.9	0	0	100	30	-100
MEDSEA_CH7_Product_1.2	River flow and discharge | Riverine discharge (daily mean) of water by model prediction | Swedish Meteorological and Hydrological Institute | E-HYPE	0	0	0	0	0	100	40	-100
MEDSEA_CH7_Product_2.1	River flow and discharge | Riverine discharge of water | University of New Hampshire, Complex Systems Research Center (CSRC) | RivDIS	-100	0	-100	0	0	100	30	-100
	River flow and discharge | Riverine discharge (daily mean) of water | | SESAME	-100	0	-100	0	0	100	30	-100
	River flow and discharge | Riverine discharge of water | National Center for Atmospheric Research, Computational and Information Systems Laboratory, Data Support Section | CISL Research Data Archive	-100	0	-100	0	0	100	30	-100

MEDSEA_CH7_Product_2.2	River flow and discharge | Riverine discharge (daily mean) of water by model prediction | Swedish Meteorological and Hydrological Institute | E-HYPE	0	0	-20	0	0	3.3	40	-100
MEDSEA_CH7_Product_3.1	Concentration of suspended particulate material in the water column | Concentration of suspended particulate material {SPM} per unit volume of the water body | European Space Agency (ESA) | CoastColour	-89	0	0	0	0	100	40	0
MEDSEA_CH7_Product_4.1	Concentration of suspended particulate material in the water column | Concentration of suspended particulate material {SPM} per unit volume of the water body | European Space Agency (ESA) | CoastColour	-89	0	0	0	0	100	40	0
MEDSEA_CH7_Product_5.1	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | | SESAME	-62	0	-99.6	0	0	100	30	-100
MEDSEA_CH7_Product_5.2	Dissolved total and organic nitrogen concentrations in the water column | Concentration of nitrogen (total) per unit volume of the water body [particulate &gt	0	0	0	0	0	100	40	-100
MEDSEA_CH7_Product_6.1	Dissolved total and organic nitrogen concentrations in the water column | Concentration of nitrogen (total) per unit volume of the water body [particulate &gt	0	0	100	0	0	100	40	-100
MEDSEA_CH7_Product_7.1	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphate {PO4} per unit mass of the water body [unknown phase] | Hellenic Centre for Marine Research, Institute of Oceanography (HCMR/IO) | SESAME	-62	0	-99.6	0	0	100	30	-100
MEDSEA_CH7_Product_7.2	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphorus (total) per unit mass of the water body [particulate &gt	0	0	0	0	0	100	40	-100

MEDSEA_CH7_Product_8.1	Dissolved total or organic phosphorus concentration in the water column | Concentration of phosphorus (total) per unit mass of the water body [particulate &gt	0	0	220	0	0	100	40	-100
MEDSEA_CH7_Product_9.1	Fish abundance in water bodies | Eels abudance | FAO / FAO - Food and Agriculture Organization of the United Nations | FAO capture and aquaculture database	-100	0	-100	0	0	100	40	-100