Black Sea Checkpoint
Annex 4 to the Second DAR:
Statistics of Appropriateness indicators

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Author(s):	Vladyslav Lyubartsev	CMCC
	Nadia Pinardi	CMCC
	All the partners	

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1. Introduction

Annex 4 is presenting the details of the 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 the 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
1. Administrative units	22	22	22	22	22	22	22	22

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
2. Bathymetry and elevation	6 4	2 6 2	4 6	2 4 4	8 2	4 4 2 N/A	6 4 N/A	2 6 2
3. Bird taxonomy-related counts	1	1	1	1	1	1	1	1
4. Cetacean abundance	1	1	1	1	1	1	1	1
5. Chlorophyll pigment concentrations in the water column	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A
6. Chlorophyll pigment concentrations in water bodies	1 5 N/A	1 5 N/A	1 5 N/A	1 5 N/A	6 N/A	1 5 N/A	1 5 N/A	1 5 N/A
7. Coastal geomorphology	1 6 N/A	1 6 N/A	1 6 N/A	1 6 N/A	7 N/A	1 6 N/A	7 N/A	1 6 N/A
8. Dissolved total and organic nitrogen concentrations in the water column	1 1 N/A	2 N/A	1 1 N/A	1 1 N/A	1 1 N/A	1 1 N/A	1 1 N/A	1 1 N/A
9. Fauna abundance per unit area of the bed	1	1	1	1	1	1	1	1
10. Fish and shellfish catch statistics	7	7	7	7	7	7	7	7
11. Fishery characterisation	8	8	8	8	8	8	8	8
12. Geological sample density	2 N/A	2 N/A	2 N/A	2 N/A	2 N/A	2 N/A	2	2
13. Habitat extent	9	8 1	9	9	9	9	8 1 N/A	9
14. Horizontal velocity of the water column (currents	8	4 4 N/A	5 3	8	4 4 N/A	8	4 4N/A	8
15. Nitrate concentration parameters in the water column	2 0 2 2 N/A	24 N/A	2 3 1 N/A	2 3 1 N/A	1 1 1 2 1N/A	2 3 1 N/A	2 3 1 N/A	2 3 1 N/A
16. Phosphate concentration parameters in the water column	1 5	15 N/A	1 5	1 5	2 1 3	1 5	1 5	1 5

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
17. Phytoplankton generic abundance in water bodies	2	2	1 / 1 N/A	2 N/A	2 N/A	2	2	2
18. River flow and discharge	29	29 N/A	29	29	27 / 2 N/A	27 / 2 N/A	29	29
19. Sea level	1 / 1 / 24 N/A	26 N/A	4 / 2 / 13 / 7 N/A	1 / 1 / 24 N/A	26 N/A	26 N/A	1 / 19 / 6 N/A	10 / 10 / 6 N/A
20. Skin temperature of the water column	2 / 11 N/A	13 N/A	1 / 2 / 10 N/A	3 / 10 N/A	13 N/A	13 N/A	3 / 10 N/A	3 / 10 N/A
21. Snow and ice mass, thickness and extent	2	2 N/A	1 / 1	2	2 N/A	2	2	2
22. Temperature of the water column	13 / 2 N/A	2 / 13 N/A	13 / 2 N/A	13 / 2 N/A	9 / 4 / 2 N/A	13 / 2 N/A	11 / 4 N/A	13 / 2 N/A
23. Terrestrial mapping	1	1	1	1	1	1	1 N/A	1
24. Wave height and period statistics	6	6	6	6	6	6	6	6
25. Wind strength and direction	3	3	3	3	3	3	3	3
26. Zooplankton taxonomy-related abundance per unit volume of the water column	7	4 / 3	7	3 / 3 / 1 N/A	3 / 4	7	7	7
27. Zooplankton wet weight biomass	7	4 / 3	7	2 / 4 / 1 N/A	3 / 4	7	7	7

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
1. Bathymetry and elevation	6 / 4	2 / 6 / 2	4 / 6	2 / 4 / 4	8 / 2	4 / 4 / 2 N/A	6 / 4 N/A	2 / 6 / 2
2. Terrestrial mapping	1	1	1	1	1	1	1 N/A	1

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
3. Coastal geomorphology	1 6 N/A	1 6 N/A	1 6 N/A	1 6 N/A	7 N/A	1 6 N/A	7 N/A	1 6 N/A
4. Geological sample density	2 N/A	2 N/A	2 N/A	2 N/A	2 N/A	2 N/A	2	2

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
5. Horizontal velocity of the water column (currents	8	4 4 N/A	5 3	8	4 4 N/A	8	4 4N/A	8
6. River flow and discharge	29	29 N/A	29	29	27 2 N/A	27 2 N/A	29	29
7. Sea level	1 1 24 N/A	26 N/A	4 2 13 7 N/A	1 1 24 N/A	26 N/A	26 N/A	1 19 6 N/A	10 10 6 N/A
8. Temperature of the water column	13 2 N/A	2 13 N/A	13 2 N/A	13 2 N/A	9 4 2 N/A	13 2 N/A	11 4 N/A	13 2 N/A
9. Skin temperature of the water column	2 11 N/A	13 N/A	1 2 10 N/A	3 10 N/A	13 N/A	13 N/A	3 10 N/A	3 10 N/A
10. Wave height and period statistics	6	6	6	6	6	6	6	6
11. Wind strength and direction	3	3	3	3	3	3	3	3

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
12. Dissolved total and organic nitrogen concentrations in the water column	1 1 N/A	2 N/A	1 1 N/A	1 1 N/A	1 1 N/A	1 1 N/A	1 1 N/A	1 1 N/A
13. Nitrate concentration parameters in the water column	20 2 2 N/A	24 N/A	23 1 N/A	23 1 N/A	11 12 1N/A	23 1 N/A	23 1 N/A	23 1 N/A
14. Phosphate concentration parameters in the water column	15	15 N/A	15	15	2 13	15	15	15

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
15. Bird taxonomy-related counts	1	1	1	1	1	1	1	1
16. Cetacean abundance	1	1	1	1	1	1	1	1

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
17. Chlorophyll pigment concentrations in the water column	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A	3 N/A
18. Chlorophyll pigment concentrations in water bodies	1 5 N/A	1 5 N/A	1 5 N/A	1 5 N/A	6 N/A	1 5 N/A	1 5 N/A	1 5 N/A
19. Fauna abundance per unit area of the bed	1	1	1	1	1	1	1	1

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
20. Habitat extent	9	8 1	9	9	9	9	8 1 N/A	9
21. Phytoplankton generic abundance in water bodies	2	2	1 1 N/A	2 N/A	2 N/A	2	2	2
22. Zooplankton taxonomy-related abundance per unit volume of the water column	7	4 3	7	3 3 1 N/A	3 4	7	7	7
23. Zooplankton wet weight biomass	7	4 3	7	2 4 1 N/A	3 4	7	7	7

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
24. Administrative units	22	22	22	22	22	22	22	22
25. Fish and shellfish catch statistics	7	7	7	7	7	7	7	7
26. Fishery characterisation	8	8	8	8	8	8	8	8

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
27. Snow and ice mass, thickness and extent	2	2 N/A	1 1	2	2 N/A	2	2	2

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
1. Administrative units								
2. Bathymetry and elevation								
3. Bird taxonomy-related counts								
4. Cetacean abundance								
5. Chlorophyll pigment concentrations in the water column								
6. Chlorophyll pigment concentrations in water bodies								
7. Coastal geomorphology								
8. Dissolved total and organic nitrogen concentrations in the water column								
9. Fauna abundance per unit area of the bed								
10. Fish and shellfish catch statistics								
11. Fishery characterisation								
12. Geological sample density								
13. Habitat extent								
14. Horizontal velocity of the water column (currents)								
15. Nitrate concentration parameters in the water column								
16. Phosphate concentration parameters in the water column								
17. Phytoplankton generic abundance in water bodies								
18. River flow and discharge								
19. Sea level								
20. Skin temperature of the water column								
21. Snow and ice mass, thickness and extent								
22. Temperature of the water column								
23. Terrestrial mapping								

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
24. Wave height and period statistics								
25. Wind strength and direction								
26. Zooplankton taxonomy-related abundance per unit volume of the water column								
27. Zooplankton wet weight biomass								

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 Product 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 A4.6 Targeted Data Products appropriateness indicators. Please note that yellow cells have a positive meaning

Product	Component if applicable	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
BLACKSEA_CH01_Product_01/A high resolution wind-wave-tides database for the Black Sea area		0	0	0	0/4	0	0	0	0	0
BLACKSEA_CH01_Product_02/ Assessment of the available database		0	0	0	0/4	0	0	N/A	0	0
BLACKSEA_CH01_Product_03/ Assessment of the confidence limits of the data sets for the test regions		0	0	0	0/4	0	0	N/A	0	0
BLACKSEA_CH02_Product_1/ List, position and boundaries of Black Sea network of marine protected areas using IUCN classification	Black Sea network of marine protected areas BOUNDARIES GEORGIA	0	0	0	0/1	0	0	0	0	0
	Black Sea network of marine protected areas BOUNDARIES international protected sites	0	0	0	0/1	0	0	0	0	0
	Black Sea network of marine protected areas BOUNDARIES national protected sites	0	0	0	0/1	0	0	0	0	0
	Black Sea network of marine protected areas BOUNDARIES Natura 2000 sites	0	0	0	0/1	0	0	0	0	0
	Black Sea network of marine protected areas ECOREGION_Black Sea	0	0	0	0/1	0	0	0	0	0
BLACKSEA_CH02_Product_2/ Habitat types and mapping of Black Sea network of marine protected areas	Coastal lagoons	0	0	0	0/2	90	0	0	0	0
	Estuaries	0	0	0	0/2	0	0	0	0	0
	Large shallow inlets and bays	0	0	0	0/2	0	0	N/A	0	0

Product	Component if applicable	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
	Mudflats and sandflats not covered by seawater all low tide	0	0	0	0/2	0	0	0	0	0
	Sandbanks slightly covered by seawater all the time	0	0	0	0/2	0	0	0	0	0
	Reefs	0	0	0	0/2	0	0	0	0	
	Submerged or partially submerged sea caves	0	0	0	0/2	0	0	0	0	0
	Habitat types and mapping EU Sea Map – the whole BS	0	0	0	0/2	0	0	0	0	0
BLACKSEA_CH02_Product_3/ Biodiversity of Black Sea network of marine protected areas	Marine mammals	0	0	0	0/3	0	0	0	0	0
	Fish and Invertebrates	0	0	0	0/3	0	0	N/A	0	0
	Seabirds	0	0	0	0/3	0	0	0	0	0
BLACKSEA_CH02_Product_4/ Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface currents [m/s]	Winter season	0	0	9.98	0/1	0	0	0	0	0
	Spring	0	0	10	0/1	0	0	0	0	0
	Summer	0	0	10	0/1	0	0	0	0	0
	Autumn	0	0	10	0/1	0	0	0	0	0
BLACKSEA_CH02_Product_5/ Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface temperature [deg C]	Winter season	0	0	9.98	0/1	0	0	0	0	0
	Spring	0	0	10	0/1	0	0	0	0	0
	Summer	0	0	10	0/1	0	0	0	0	0
	Autumn	0	0	10	0/1	0	0	0	0	0
BLACKSEA_CH3_Product_1/ Oil Platform Leak Bulletin released on 11 May 2016, fast release, 24h after the incident declared on 10th May 2016 by DG MARE		0	0	0	0/7	0	0	0	0	0
BLACKSEA_CH3_Product_2/ Oil Platform Leak Bulletin released on 11 May 2016, fast release, 72h after the		0	0	0	0/9	0	0	0	0	0

Product	Component if applicable	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
incident declared on 10th May 2016 by DG MARE										
BLACKSEA_CH04_Product_1/ Map of the change of the average temperature over 2006-2015 period (10 years) - At surface		N/A	N/A	0	0/1	20	0	0	0	-100
BLACKSEA_CH04_Product_2/ Map of the change of the average temperature over 2006-2015 period (10 years) - At mid water column (500m)		0	0	0	0/1	40	0	0	0	-100
BLACKSEA_CH04_Product_3/ Map of the change of the average temperature over 2006-2015 period (10 years) - At sea bottom (1500m)		0	0	0	0/1	40	0	0	0	-100
BLACKSEA_CH04_Product_4/ Map of the change of the average temperature over 50 years - At surface		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_5/ Map of the change of the average temperature over 50 years - At mid water column (500m)		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_6/ Map of the change of the average temperature over 50 years - At sea bottom (1500m)		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_7/ Map of the change of the annual mean temperature: over 100 years - At surface		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_8/ Map of the change of the average temperature over 100 years - At mid water column (500m)		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_9/ Map of the change of the average temperature over 100 years - At sea bottom (1500m)		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_10/ Map of the average extent of sea ice coverage over 2006-2015 period (10 years)		0	0	0	0/1	20	0	0	0	96.67

Product	Component if applicable	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
BLACKSEA_CH04_Product_11/ Map of the average extent of sea ice coverage over 50 years		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_12/ Map of the average extent of sea ice coverage over 100 years		N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_13/ Time series of annual mean temperature - At surface		0	0	-66	0/1	20	0	0	0	-100
BLACKSEA_CH04_Product_14/ Time series of annual mean temperature - At mid water column (500 m)		0	0	-77	0/1	40	0	0	0	-100
BLACKSEA_CH04_Product_15/ Time series of annual mean temperature - At sea bottom (1500 m)		0	0	-77	0/1	40	0	0	0	-100
BLACKSEA_CH04_Product_16/ Time series of average annual internal energy		0	0	-77	0/1	40	0	0	0	-100
BLACKSEA_CH04_Product_17/ Time series of total ice cover in sea over past 100 years		0	0	-88	0/1	20	0	0	0	96.67
BLACKSEA_CH04_Product_18/ Time series of abundance of three most abundant species of phytoplankton		0	-86.67	-4	0/1	N/A	N/A	0	0	-100
BLACKSEA_CH05_Product_1/ Sea level rise (trend) from altimetry for the last 10 years (2006-2015)		0	N/A	0	0/1	-100	N/A	0	0	-100
BLACKSEA_CH05_Product_2/ Regional sea level time series and trend for 11 sub-regions for the past 10 years (2006-2015)		-50	N/A	0	0/1	-100	N/A	0	0	-100
BLACKSEA_CH05_Product_3/ Regional sea level time series and trend for 5 coastal sub-regions for the past 50 years (1966-2015)		-50	N/A	0	0/1	-100	N/A	0	0	-100
BLACKSEA_CH05_Product_4/ Regional sea level time series and trend for 5 coastal sub-regions for the past 100 years (1916-2015)		-50	N/A	0	0/1	-100	N/A	0	0	-100
BLACKSEA_CH05_Product_5/ Sea level time series and trend for the		-83.33	N/A	0	0	-74.36	N/A	0	0	0

Product	Component if applicable	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
past 10 years for each 4 NUTS3 in Turkey										
BLACKSEA_CH05_Product_6/ Sea level time series and trend for the past 50 years for each NUTS3 from selected coastal stations		N/A	N/A	N/A	0/1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_7/ Sea level time series and trend for the past 100 years for each NUTS3 from selected coastal stations		N/A	N/A	N/A	0/1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_8/ Sediment mass balance trend for the last 10 years (2006-2015)		N/A	N/A	N/A	0/1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_9/ Sediment mass balance trend for the last 50 years (1966-2015)		N/A	N/A	N/A	0/1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_10/ Sediment mass balance trend for the last 100 years (1916-2015)		N/A	N/A	N/A	0/1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH06_Product_1/ Collated data set of landings, fish and shellfish, by species and year	Collated data set of LANDINGS by species MASS WHOLE BLACK SEA 2008-2014	0	0	0	0/1	0	0	0	0	0
	Collated data set of LANDINGS by species MASS ROMANIA 2010-2016	0	0	0	0/1	0	0	0	0	0
	Collated data set of LANDINGS by species NUMBER ROMANIA 2010-2016	0	0	0	0/1	0	0	0	0	0
	Collated data set of LANDINGS by species MASS BULGARIA 2009-2015	0	0	0	0/1	0	0	0	0	0
BLACKSEA_CH06_Product_2/ Collated data set of discards, by species and year	Collated data set of DISCARDS by species MASS ROMANIA 2010-2016	0	0	0	0/1	0	0	0	0	0
	Collated data set of DISCARDS by species NUMBER ROMANIA 2010-2016	0	0	0	0/1	0	0	0	0	0
BLACKSEA_CH06_Product_3/ Collated data set of by-catch, by species and year		0	0	0	0/1	0	0	0	0	0

Product	Component if applicable	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
BLACKSEA_CH07_Product_1/ Extent of fisheries trawlers (bottom trawling) computed from Vessel Monitoring System Dataset (2012-2015)	Extent of fisheries trawlers (bottom trawling): computed from Vessel Monitoring System Dataset for 2012,Romanian waters	0	0	0	0/1	0	0	0	0	0
	Dataset for 2013,Romanian waters	0	0	0	0/1	0	0	0	0	0
	Dataset for 2014,Romanian waters	0	0	0	0/1	0	0	0	0	0
	Dataset for 2015,Romanian waters	0	0	0	0/1	0	0	0	0	0
BLACKSEA_CH07_Product_2 Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed	Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed_ Childproductcomponent 2.1. Beam trawling areas_Romania 2016	0	0	0	0/1	0	0	0	0	0
	Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed_ Childproductcomponent 2.2. Pelagic trawling areas_Romania 2016	0	0	0	0/1	0	0	0	0	0
	Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed_ Childproductcomponent 2.3. Trawling areas_Turkey 2014	0	0	0	0/1	0	0	0	0	0
	Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed_ Childproductcomponent 2.4. Trawling areas_Turkey_Rapana 2014	0	0	0	0/1	0	0	0	0	0
BLACKSEA_CH08_Product_1/ Mapping of seasonal Chlorophyll over 10 years (2005-2014)	Winter concentration of Chlorophyll	0	0	0	0/1	0	0	0	0	-100
	the same for Spring	0	0	0	0/1	0	0	0	0	-100
	the same for Summer	0	0	0	0/1	0	0	0	0	-100
	the same for Autumn	0	0	0	0/1	0	0	0	0	-100
BLACKSEA_CH08_Product_2/		0	0	0	0/1	0	0	0	0	-100

Product	Component if applicable	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
Mapping of mean Chlorophyll trend over 10 years (2005-2014)										

BLACKSEA_CH09_Product_1/ Monthly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	Monthly mean time series of Danube Discharge	0	N/A	0	0/1	0	0	0	0	0
	the same for Kamtehiya Discharge	0	N/A	0	0/1	0	0	0	0	0
	the same for Kizilirmak Discharge	0	N/A	0	0/1	0	N/A	0	0	0
	the same for Sakarya Discharge	0	N/A	0	0/1	0	0	0	0	0
	the same for Dniester	0	N/A	0	0/1	0	0	0	0	0
	the same for Dnieper	0	N/A	0	0/1	0	0	0	0	0
BLACKSEA_CH09_Product_2/ Yearly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	Yearly mean time series of Danube Discharge	0	N/A	0	0/1	0	0	0	0	0
	the same for Kamtehiya	0	N/A	0	0/1	0	0	0	0	0
	the same for Sakarya	0	N/A	0	0/1	0	0	0	0	0
	the same for Kizilirmak	0	N/A	0	0/1	0	0	0	0	0
	the same for Dniester	0	N/A	0	0/1	0	0	0	0	0
	the same for Dnieper	0	N/A	0	0/1	0	0	0	0	0
BLACKSEA_CH09_Product_3/ Time series of daily river discharge at the discharge point into the Black Sea (1981 - 2010) (computed with Hype model)	Danube River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Sakarya River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Veleka River monthly daily discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Dnister River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	South Bug River daily river	0	N/A	0	0/1	0	0	0	0	0

Product	Component if applicable	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
	discharge at the discharge point into the Black Sea (1981 - 2010)									
	Sf.Gheorghe River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Dniper River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Rioni River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Kamchia River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Kizilirmak River monthly mean river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
	Chorokhi River daily river discharge at the discharge point into the Black Sea (1981 - 2010)	0	N/A	0	0/1	0	0	0	0	0
BLACKSEA_CH09_Product_4/ Time series of monthly mean river temperature at the discharge point into the Black Sea (2000-2010)	Sakarya monthly mean river temperature at the discharge point into the Black Sea	0	N/A	0	0/1	0	0	0	0	0
	the same for Danube	0	N/A	0	0/1	0	0	0	0	0
	the same for Veleka	0	N/A	0	0/1	0	0	0	0	0
	the same for Chorokhi	0	N/A	0	0/1	0	0	0	0	0
	the same for Dnister	0	N/A	0	0/1	0	0	0	0	0
	Kamchia	0	N/A	0	0/1	0	0	0	0	0
	Kizilirmak	0	N/A	0	0/1	0	0	0	0	0
	Rioni	0	N/A	0	0/1	0	0	0	0	0
	Sf.Gheorghe	0	N/A	0	0/1	0	0	0	0	0
	Dniper	0	N/A	0	0/1	0	0	0	0	0
	South Bug	0	N/A	0	0/1	0	0	0	0	0
BLACKSEA_CH09_Product_5/ Time	Time series of Veleka River	0	N/A	0	0/1	0	0	0	0	0

Product	Component if applicable	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
series of River nutrients (nitrate) monthly mean at surface (2000-2010)	nutrients (nitrate) monthly mean at surface (2000-2010)									
	the same for Chorokhi	0	N/A	0	0/1	0	0	0	0	0
	Dniper	0	N/A	0	0/1	0	0	0	0	0
	Sakarya	0	N/A	0	0/1	0	0	0	0	0
	South Bug	0	N/A	0	0/1	0	0	0	0	0
	Rioni	0	N/A	0	0/1	0	0	0	0	0
	Dnister	0	N/A	0	0/1	0	0	0	0	0
	Sf.Gheorghe	0	N/A	0	0/1	0	0	0	0	0
	Kizilirmak	0	N/A	0	0/1	0	0	0	0	0
	Danube	0	N/A	0	0/1	0	0	0	0	0
	Kamchia	0	N/A	0	0/1	0	0	0	0	0
BLACKSEA_CH09_Product_6/ Monthly mean of the phosphorus at river discharge into the Black Sea at surface	Veleka monthly mean of the phosphorus at the discharge point into the Black Sea	0	N/A	0	0/1	0	0	0	0	0
	the same for Dniper	0	N/A	0	0/1	0	0	0	0	0
	Danube	0	N/A	0	0/1	0	0	0	0	0
	Chorokhi	0	N/A	0	0/1	0	0	0	0	0
	Dnister	0	N/A	0	0/1	0	0	0	0	0
	Kizilirmak	0	N/A	0	0/1	0	0	0	0	0
	Sf.Gheorghe	0	N/A	0	0/1	0	0	0	0	0
	South Bug	0	N/A	0	0/1	0	0	0	0	0
	Rioni	0	N/A	0	0/1	0	0	0	0	0
	Sakarya	0	N/A	0	0/1	0	0	0	0	0
	Kamchia	0	N/A	0	0/1	0	0	0	0	0
BLACKSEA_CH09_Product_7 / Eel/salmon recruitment and escapement		N/A	N/A	N/A	0/1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH10_Product_1/ Black Sea and Azov sea coastlines by digitalization of 14.25 m panchromatic LandSat 7 ETM+ satellite images		0	N/A	100	0/1	-100	N/A	-100	0	-100
BLACKSEA_CH10_Product_2/ Water depth (bathymetric map)		0	0	0	0/1	-100	-100	0	0	0
BLACKSEA_CH10_Product_3/ Priority areas for surveying for safer navigation (wrt to heavy maritime traffic)		0	0	0	0/1	80	80	0	0	0

Product	Component if applicable	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
BLACKSEA_CH10_Product_4/ Priority areas for surveying for safer navigation (wrt to heavy maritime traffic)		-95.18	0	100	0/1	-100	-100	-100	0	-16.71
BLACKSEA_CH11_Product_1/ Table of Mnemiopsis leidyi alien species abundance and biomass distribution in the Black Sea		-32.24	-30	-74.29	0/1	-85	-38.67	95.48	0	-100
BLACKSEA_CH11_Product_2/ Digital map of Mnemiopsis leidyi alien species abundance distribution in the Black Sea		-4.5	-100	-74.29	0/1	32	-38.67	96.38	0	-100
BLACKSEA_CH11_Product_3/ Digital map of Mnemiopsis leidyi alien species biomass distribution in the Black Sea		-4.5	-100	-74.29	0/1	32	-38.67	95.48	0	-100
BLACKSEA_CH11_Product_4/ Table of Beroe ovata alien species abundance and biomass distribution in the Black Sea		-96.65	0	-80	0/1	25	58.67	97.13	0	-100
BLACKSEA_CH11_Product_5/ Table of Mnemiopsis leidyi alien species abundance and biomass distribution in the Black sea as indicators for impact on the ecosystem and economy		-32.24	60	-45	0/1	-85	-18.67	92.08	0	-100

4. Indicators for Challenge 1: Wind Farm Siting

Table A4.7 CH01 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 if applicable	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Description if applicable	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH01_Specification_1 / A high resolution wind-wave-tides database for the Black Sea area	2001	2010	5920	170	3652	49	5000	40	the average of the vertical resolution of the numerical models	0.04	10	An average estimation of the numerical models error	1095
BLACKSEA_CH01_Specification_02 / Assessment of the available database	2001	2010	5920	170	3652	1	5000	70		0	20		1095
BLACKSEA_CH01_Specification_03 / Assessment of the confidence limits of the data sets for the test regions	2001	2010	25420000	10	3652	2	5000	10		0	10		1095

Table A4.8 CH01 Wind Farm Siting: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH01_Product_01/A high resolution wind-wave-tides database for the Black Sea area	Salinity of the water column | Salinity of the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	Spectral wave data parameters | 2-dimensional Wave spectra over frequencies and directions model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	Spectral wave data parameters | 2-dimensional Wave spectra over frequencies and directions model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	Air temperature | Dew point temperature of the atmosphere by computation from air temperature and relative humidity data | 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 | Maximum expected wave height model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	Wind speed 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
	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base

TDP Name	List of Input data sets by product
	Atmospheric humidity | Specific humidity of the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	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
	Temperature of the water column | Temperature of the water body | 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
	Horizontal velocity of the water column (currents) | Eastward current velocity in the water body | 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 | Swell wave height model output | 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 | peak wave period model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	Spectral wave data parameters | 2-dimensional Wave spectra over frequencies and directions model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base
	Sea level | Surface elevation (unspecified datum) of the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base

Table A4.9 CH01 Wind Farm Siting: The TDP quality elements

TDP/Component if applicable	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 if applicable	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Description if applicable	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH01_Product_01/A high resolution wind-wave-tides database for the Black Sea area	2001	2010	5920	170	3652	20	5000	40	the average of the vertical resolution of the numerical models	0.04	10	An average estimation of the numerical models error	1095
BLACKSEA_CH01_Product_02/ Assessment of the available database	2001	2010	5920	170	3652	4	5000	70		0	20		1095
BLACKSEA_CH01_Product_03/ Assessment of the confidence limits of the data sets for the test regions	2001	2010	25420000	10	3652	6	5000	10		0	10		1095

Table A4.10 CH01 Wind Farm Siting: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH01_Product_01/A high resolution wind-wave-tides database for the Black Sea area	0	0	0	-59.18	0	0	0	N/A	0
BLACKSEA_CH01_Product_02/ Assessment of the available database	0	0	0	0	0	0	0	N/A	0
BLACKSEA_CH01_Product_03/ Assessment of the confidence limits of the data sets for the test regions	0	0	0	0	0	0	0	N/A	0

Table A4.11 CH01 Wind Farm Siting: the Upstream Data set quality elements

TDP	UD	P02	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH01_Product_01/A high resolution wind-wave-tides database for the Black Sea area	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	Air pressure	2001-01-01	2010-12-31	27.2-42E, 41-47N	180-(-10)	3650	3''	Horizons: -10, -40, -80, -120, -180	1 hour	N/A	N/A
	Atmospheric humidity | Specific humidity of the atmosphere | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	Atmospheric humidity	2001-01-01	2010-12-31	27.2-42E, 41-47N	180-(-10)	3650	3''	Horizons: -10, -40, -80, -120, -180	1 hour	N/A	N/A
	Air temperature | Dew point temperature of the atmosphere by computation from air temperature and relative humidity data | National	Air temperature	2001-01-01	2010-12-31	27.2-42E, 41-47N	180-(-10)	3650	3''	Horizons: -10, -40, -80, -120, -180	1 hour	N/A	N/A

TDP	UD	P02	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base											
	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 speed and direction	2001-01-01	2010-12-31	27.2-42E, 41-47N	180-(-10)	3650	3''	Horizons: -10, -40, -80, -120, -180	1 hour	N/A	N/A
	Wind speed 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 (	Wind speed and direction	2001-01-01	2010-12-31	27.2-42E, 41-47N	180-(-10)	3650	3''	Horizons: -10, -40, -80, -120, -180	1 hour	N/A	N/A
	Wave height and period statistics | Swell wave height model output | 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	2001-01-01	2010-12-31	27.2-42E, 41-45N	N/A	3650	3''	N/A	1 hour	N/A	N/A

TDP	UD	P02	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Wave height and period statistics | Significant Wave Height model output | 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	2001-01-01	2010-12-31	27.2-42E, 41-47N	N/A	3650	3''	N/A	1 hour	N/A	N/A
	Wave height and period statistics | Maximum expected wave height model output | 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	2001-01-01	2010-12-31	27.2-42E, 41-47N	N/A	3650	3''	N/A	1 hour	N/A	N/A
	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	Wave height and period statistics	2001-01-01	2010-12-31	27.2-42E, 41-47N	N/A	3650	3''	N/A	1 hour	N/A	N/A
	Wave height and period statistics | peak wave period model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric	Wave height and period statistics	2001-01-01	2010-12-31	27.2-42E, 41-47N	N/A	3650	3''	N/A	1 hour	N/A	N/A

TDP	UD	P02	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Modeling and Weather Forecasting Group | Marina Platform Project Data Base											
	Spectral wave data parameters | 2-dimensional Wave spectra over frequencies and directions model output | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	Spectral wave data parameters	2001-01-01	2010-12-31	27.2-42E, 41-47N	N/A	3650	3''	N/A	1 hour	N/A	N/A
	Temperature of the water column | Temperature of the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	Temperature of the water column	2001-01-01	2010-12-31	27.2-42E, 41-47N	0-300	3650	3''	Horizons: 0, 10, 50, 100, 200, 300	1 hour	N/A	N/A
	Salinity of the water column | Salinity of the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	Salinity of the water column	2001-01-01	2010-12-31	27.2-42E, 41-47N	0-300	3650	3''	Horizons: 0, 10, 50, 100, 200, 300	1 hour	N/A	N/A
	Horizontal velocity of the water column (currents)	Horizontal velocity	2001-01-01	2010-12-31	27.2-42E, 41-47N	0-300	3650	3''	Horizons: 0, 10, 50,	1 hour	N/A	N/A

TDP	UD	P02	Initial Date	Final Date	Horizontal Coverage UD.AP.1.1	Vertical Coverage UD.AP.1.2 (m)	Temporal Coverage UD.AP.1.3 (days)	Horizontal Resolution UD.AP.3.1	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	| Eastward current velocity in the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	of the water column (currents)							100, 200, 300			
	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	Horizontal velocity of the water column (currents)	2001-01-01	2010-12-31	27.2-42E, 41-47N	0-300	3650	3''	Horizons: 0, 10, 50, 100, 200, 300	1 hour	N/A	N/A
	Sea level | Surface elevation (unspecified datum) of the water body | National and Kapodistrian University of Athens, Department of Physics, Atmospheric Modeling and Weather Forecasting Group | Marina Platform Project Data Base	Sea level	2001-01-01	2010-12-31	27.2-42E, 41-47N	N/A	3650	3''	N/A	1 hour	N/A	N/A

5. Indicators for Challenge 2: Marine protected areas

Table A4.12 CH02 Marine protected areas: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH02_Specification_1 / List, position and boundaries of Black Sea network of marine protected areas using IUCN classification	Black Sea network of marine protected areas BOUNDARIES GEORGIA	Jan2017	Dec2017	153	500	365	1	1	1	365	50	365
	Black Sea network of marine protected areas BOUNDARIES international protected sites	Jan2017	Dec2017	27547	20	365	1	1	1	365	50	365
	Black Sea network of marine protected areas BOUNDARIES national protected sites	Jan2017	Dec2017	29857	50	365	1	1	1	365	50	365
	Black Sea network of marine protected areas BOUNDARIES Natura	2011	2016	24000	70	365	1	1	1	365	50	365

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	2000 sites											
	Black Sea network of marine protected areas ECOREGION _Black Sea	Jan2017	Dec2017	420150	2245	365	1	1	1	365	50	365
BLACKSEA_CH02_Specification_2 / Habitat types and mapping of Black Sea network of marine protected areas	Coastal lagoons	Jan2017	Dec2017	100	3	365	2	1000	1	365	50	365
	Estuaries	Jan2017	Dec2017	2100	60	365	2	1000	1	365	50	365
	Large shallow inlets and bays	Jan2017	Dec2017	3500	70	365	2	1000	1	365	50	365
	Mudflats and sandflats not covered by seawater all low tide	Jan2017	Dec2017	300	10	365	2	1000	1	365	50	365
	Sandbanks slightly covered by seawater all the time	Jan2017	Dec2017	9400	70	365	2	1000	1	365	50	365
	Reefs	Jan2017	Dec2017	9400	70	365	2	1000	1	365	50	365
	Submerged or partially submerged sea caves	Jan2017	Dec2017	700	20	365	2	1000	1	365	50	365
	Habitat types and mapping EU Sea Map – the whole BS	Jan2017	Dec2017	420150	2245	365	2	1000	1	365	50	365

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH02_Specification_3 / Biodiversity of Black Sea network of marine protected areas	Marine mammals	Jan2013	Dec2013	370	40	365	3	10	1	365	50	365
	Fish and Invertebrates	Jan2013	Dec2013	500	50	365	3	10	1	365	50	365
	Seabirds	Jan2013	Dec2013	420	40	365	3	10	1	365	50	365
BLACKSEA_CH02_Specification_4 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface currents [m/s]	Winter season	2006	2015	440000	N/A	902	1	3000	N/A	90	100	730
	Spring	2006	2015	440000	N/A	920	1	3000	N/A	92	100	730
	Summer	2006	2015	440000	N/A	920	1	3000	N/A	92	100	730
	Autumn	2006	2015	440000	N/A	910	1	3000	N/A	91	100	730
BLACKSEA_CH02_Specification_5 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface temperature [deg C]	Winter season	2006	2015	440000	N/A	902	1	3000	N/A	90	100	730
	Spring	2006	2015	440000	N/A	920	1	3000	N/A	92	100	730
	Summer	2006	2015	440000	N/A	920	1	3000	N/A	92	100	730
	Autumn	2006	2015	440000	N/A	910	1	3000	N/A	91	100	730

Table A4.13 CH02 Marine protected areas: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH02_Product_1/ List, position and boundaries of Black Sea network of marine protected areas using IUCN classification	Administrative units| Natura 2000 areas | National Environmental Protection Agency (ANPM) (Roumania) | Limitele siturilor Natura 2000 aferente proiectului SINCRON in format INSPIRE/Natura 2000 sites limits in the frame of the SINCRON project INSPIRE format
	| Natura 2000 areas | Bulgarian Government | Информационна система на защитени зони от екологична мрежа Натура 2000 Регистър на защитените територии и защитените зони в България

TDP Name	List of Input data sets by product
	Administrative units | Natura 2000 areas | Bern Convention Convention on the Conservation of European Wildlife and Natural Habitats | Spatial limits of MPAs; Map of Proteted Area (Kolkheti National Park)
BLACKSEA_CH02_Product_2/ Habitat types and mapping of Black Sea network of marine protected areas	Habitat extent | Habitat extent | Institute of Biology Bucharest IBB | SIMSHAB - Information Monitoring System of Species and Habitats in Romania
	Administrative units | Natura 2000 areas | Bulgarian Government | Информационна система на защитени зони от екологична мрежа Натура 2000 Регистър на защитените територии и защитените зони в България
BLACKSEA_CH02_Product_3/ Biodiversity of Black Sea network of marine protected areas	Cetacean abundance | Marine mammals | DG MARE | Adverse Fisheries Impacts on Cetacean Populations in the Black Sea FINAL REPORT
	Cetacean abundance | Marine mammals | DG MARE | Adverse Fisheries Impacts on Cetacean Populations in the Black Sea FINAL REPORT
	Cetacean abundance | Marine mammals | DG MARE | Adverse Fisheries Impacts on Cetacean Populations in the Black Sea FINAL REPORT
BLACKSEA_CH02_Product_4/ Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface currents [m/s]	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | Copernicus Marine Environment Monitoring Service | Black Sea Forecasting System - daily reanalysis
	Horizontal velocity of the water column (currents) | Eastward current velocity in the water body | Copernicus Marine Environment Monitoring Service | Black Sea Forecasting System - daily reanalysis
BLACKSEA_CH02_Product_5/ Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface temperature [deg C]	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | Black Sea Forecasting System - daily reanalysis

Table A4.14 CH02 Marine protected areas: The TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH02_Product_1/ List, position and boundaries of Black Sea network of marine protected areas using IUCN classification											
Black Sea network of marine protected areas BOUNDARIES GEORGIA	Jan2017	Dec2017	153	500	365	1	1	1	365	50	365
Black Sea network of marine protected areas BOUNDARIES international protected sites	Jan2017	Dec2017	27547	20	365	1	1	1	365	50	365
Black Sea network of marine protected areas BOUNDARIES national protected sites	Jan2017	Dec2017	29857	50	365	1	1	1	365	50	365

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
Black Sea network of marine protected areas BOUNDARIES Natura 2000 sites	2011	2016	24000	70	365	1	1	1	365	50	365
Black Sea network of marine protected areas ECOREGION_Black Sea	Jan2017	Dec2017	420150	2245	365	1	1	1	365	50	365
BLACKSEA_CH02_Product_2 / Habitat types and mapping of Black Sea network of marine protected areas											
Coastal lagoons	Jan2017	Dec2017	100	3	365	2	1000	1	365	50	365
Estuaries	Jan2017	Dec2017	2100	60	365	2	1000	1	365	50	365
Large shallow inlets and bays	Jan2017	Dec2017	3500	70	365	2	1000	1	365	50	365
Mudflats and sandflats not covered by seawater all low tide	Jan2017	Dec2017	300	10	365	2	1000	1	365	50	365
Sandbanks slightly covered by seawater all the time	Jan2017	Dec2017	9400	70	365	2	1000	1	365	50	365
Reefs	Jan2017	Dec2017	9400	70	365	2	1000	1	365	50	365
Submerged or partially submerged sea caves	Jan2017	Dec2017	700	20	365	2	1000	1	365	50	365
Habitat types and mapping EU Sea Map – the whole BS	Jan2017	Dec2017	420150	2245	365	2	1000	1	365	50	365
BLACKSEA_CH02_Product_3 / Biodiversity of Black Sea network of marine protected areas											
Marine mammals	Jan2013	Dec2013	370	40	365	3	10	1	365	50	365
Fish and Invertebrates	Jan2013	Dec2013	500	50	365	3	10	1	365	50	365
Seabirds	Jan2013	Dec2013	420	40	365	3	10	1	365	50	365
BLACKSEA_CH02_Product_4 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface											

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
currents [m/s]											
Winter season	2006	2015	440000	N/A	992	1	3000	N/A	90	100	730
Spring	2006	2015	440000	N/A	1012	1	3000	N/A	92	100	730
Summer	2006	2015	440000	N/A	1012	1	3000	N/A	92	100	730
Autumn	2006	2015	440000	N/A	1001	1	3000	N/A	91	100	730
BLACKSEA_CH02_Product_5 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface temperature [deg C]											
Winter season	2006	2015	440000	N/A	992	1	3000	N/A	90	100	730
Spring	2006	2015	440000	N/A	1012	1	3000	N/A	92	100	730
Summer	2006	2015	440000	N/A	1012	1	3000	N/A	92	100	730
Autumn	2006	2015	440000	N/A	1001	1	3000	N/A	91	100	730

Table A4.10 CH02 Marine protected areas: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH02_Product_1/ List, position and boundaries of Black Sea network of marine protected areas using IUCN classification									
Black Sea network of marine protected areas BOUNDARIES GEORGIA	0	0	0	1	0	0	0	N/A	0
Black Sea network of marine protected areas BOUNDARIES international protected sites	0	0	0	1	0	0	0	N/A	0
Black Sea network of marine protected areas BOUNDARIES national protected sites	0	0	0	1	0	0	0	N/A	0
Black Sea network of marine protected areas BOUNDARIES Natura 2000 sites	0	0	0	1	0	0	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
Black Sea network of marine protected areas ECOREGION_Black Sea	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH02_Product_2 / Habitat types and mapping of Black Sea network of marine protected areas									
Coastal lagoons	0	0	0	2	90	0	0	N/A	0
Estuaries	0	0	0	2	0	0	0	N/A	0
Large shallow inlets and bays	0	0	0	2	0	0	N/A	N/A	0
Mudflats and sandflats not covered by seawater all low tide	0	0	0	2	0	0	0	N/A	0
Sandbanks slightly covered by seawater all the time	0	0	0	2	0	0	0	N/A	0
Reefs	0	0	0	2	0	0	0	N/A	0
Submerged or partially submerged sea caves	0	0	0	2	0	0	0	N/A	0
Habitat types and mapping EU Sea Map – the whole BS	0	0	0	2	0	0	0	N/A	0
BLACKSEA_CH02_Product_3 / Biodiversity of Black Sea network of marine protected areas									
Marine mammals	0	0	0	3	0	0	0	N/A	0
Fish and Invertebrates	0	0	0	3	0	0	N/A	N/A	0
Seabirds	0	0	0	3	0	0	0	N/A	0
BLACKSEA_CH02_Product_4 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface currents [m/s]									
Winter season	0	0	9.98	1	0	0	0	N/A	0
Spring	0	0	10	1	0	0	0	N/A	0
Summer	0	0	10	1	0	0	0	N/A	0
Autumn	0	0	10	1	0	0	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH02_Product_5 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface temperature [deg C]									
Winter season	0	0	9.98	1	0	0	0	N/A	0
Spring	0	0	10	1	0	0	0	N/A	0
Summer	0	0	10	1	0	0	0	N/A	0
Autumn	0	0	10	1	0	0	0	N/A	0

Table A4.15 CH02 Marine protected areas: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH02_Product_1/ List, position and boundaries of Black Sea network of marine protected areas using IUCN classification	Administrative units | Natura 2000 areas | Bern Convention Convention on the Conservation of European Wildlife and Natural Habitats | Spatial limits of MPAs; Map of Proteted Area (Kolkheti National Park)	Administrative units	Jan2017	Dec2017	153	500	365	1	1	365	50	365
	Administrative units | Natura 2000 areas | Bulgarian Government | Информационна система на защитени зони от екологична мрежа Натура 2000 Регистър на защитените територии и защитените зони в България	Administrative units	Jan2017	Dec2017	27547	20 365	365	1	1	365	50	365
	Administrative units | Natura 2000 areas |	Administrative	Jan2017	Dec2017	100	3	365	1000	1	365	50	365

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	National Environmental Protection Agency (ANPM) (Roumania) | Limitele siturilor Natura 2000 aferente proiectului SINCRON in format INSPIRE/Natura 2000 sites limits in the frame of the SINCRON project INSPIRE format	units										
BLACKSEA_CH02_Product_2 / Habitat types and mapping of Black Sea network of marine protected areas	Administrative units | Natura 2000 areas | Bulgarian Government | Информационна система на защитени зони от екологична мрежа Натура 2000 Регистър на защитените територии и защитените зони в България	Administrative units	Jan2017	Dec2017	27547	20 365	365	1	1	365	50	365
	Administrative units | Institute of Biology Bucharest IBB | SIMSHAB - Information Monitoring System of Species and Habitats in Romania	Administrative units	Jan2017	Dec2017	100	3	365	1000	1	365	50	365
BLACKSEA_CH02_Product_3 / Biodiversity of Black Sea network of marine protected areas	Cetacean abundance | Marine mammals | DG MARE | Adverse Fisheries Impacts on Cetacean Populations in the Black Sea FINAL REPORT	Cetacean abundance	Jan2013	Dec2013	370	40	365	10	1	365	50	365
	Fauna abundance per unit area of the bed | Endangered species (invertebrates) | Institute of Biology	Fauna abundance per unit area of the bed	Jan2013	Dec2013	500	1	365	10	1	365	50	365

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Bucharest IBB | SIMSHAB - Information Monitoring System of Species and Habitats in Romania											
	Bird taxonomy-related counts | Seabirds | UNEP | Agreement on the Conservation of African-Eurasian Migratory Waterbirds	Bird taxonomy-related counts	Jan2013	Dec2013	420	40	365	10	1	365	50	365
BLACKSEA_CH02_Product_4 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface currents [m/s]	Horizontal velocity of the water column (currents) | Eastward current velocity in the water body | Copernicus Marine Environment Monitoring Service | Black Sea Forecasting System - daily reanalysis	Horizontal velocity of the water column (currents)	2005	2015	440000	N/A	992	3000	N/A	90	100	730
	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | Copernicus Marine Environment Monitoring Service | Black Sea Forecasting System - daily reanalysis	Horizontal velocity of the water column (currents)	2005	2015	440000	N/A	3650	3000	N/A	90	100	730
BLACKSEA_CH02_Product_5 / Qualitative analysis of connectivity between MPAs as seasonal maps of sea surface temperature [deg C]	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | Black Sea Forecasting System - daily reanalysis	Temperature of the water column	2005	2015	440000	N/A	3650	3000	N/A	90	100	730

6. Indicators for Challenge 3: Oil platform leaks

Table A4.16 CH03 Oil platform leaks: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH03_Specification_1 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 24h after the incident declared on 10th May 2016 by DG MARE		2016-05-10	2016-05-13	15300	50	3	7	150	1	0.04	N/A	1
BLACKSEA_CH03_Specification_2 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 72h after the incident declared on 10th May 2016 by DG MARE		2016-05-10	2016-05-13	15300	50	3	9	150	1	0.04	N/A	1

Table A4.17 CH03 Oil platform leaks: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH3_Product_1 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 24h after the incident declared on 10th May 2016 by DG MARE	Wind strength and direction | Eastward wind velocity in the atmosphere | Institute of Accelerating Systems and Applications (IASA-UAT) | SKIRON meteorological model - Black Sea
	Wind strength and direction | Northward wind velocity in the atmosphere | Institute of Accelerating Systems and Applications (IASA-UAT) | SKIRON meteorological model - Black Sea
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} in the water body by derivation from GEBCO_08 30 arc-second global grid | British Oceanographic Data Centre | General Bathymetry Chart of the Oceans (GEBCO)
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | European Marine Observation and Data Network | EMODnet - Digital Terrain Model (DTM)
	Coastal geomorphology | Coast Type | European Marine Observation and Data Network (EMODNET) | EMODnet Seabed substrate (1M)
	Geological sample density | Oil API | Orion | oilbase.txt
	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | seamod | Forecasts for the Black Sea
	Horizontal velocity of the water column (currents) | Eastward current velocity in the water body | seamod | Forecasts for the Black Sea
	Temperature of the water column | Temperature of the water body | Seamod | SEAMOD.RO - Forecasts for the Black Sea
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Orion | WAM Cycle 4 wave model - Black Sea
	Wave height and period statistics | Significant height of waves {Hs} on the water body | Orion | WAM Cycle 4 wave model - Black Sea
	Wave height and period statistics | Direction of waves on the water body | Orion | WAM Cycle 4 wave model - Black Sea

TDP Name	List of Input data sets by product
BLACKSEA_CH3_Product_2 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 72h after the incident declared on 10th May 2016 by DG MARE	Wind strength and direction | Eastward wind velocity in the atmosphere | Institute of Accelerating Systems and Applications (IASA-UAT) | SKIRON meteorological model - Black Sea
	Wind strength and direction | Northward wind velocity in the atmosphere | Institute of Accelerating Systems and Applications (IASA-UAT) | SKIRON meteorological model - Black Sea
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} in the water body by derivation from GEBCO_08 30 arc-second global grid | British Oceanographic Data Centre | General Bathymetry Chart of the Oceans (GEBCO)
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | European Marine Observation and Data Network | EMODnet - Digital Terrain Model (DTM)
	Coastal geomorphology | Coast Type | European Marine Observation and Data Network (EMODNET) | EMODnet Seabed substrate (1M)
	Terrestrial mapping | Coastline | European Environment Agency | EEA coastline for analysis
	Geological sample density | Oil API | Orion | oilbase.txt
	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | seamod | Forecasts for the Black Sea
	Horizontal velocity of the water column (currents) | Eastward current velocity in the water body | seamod | Forecasts for the Black Sea
	Temperature of the water column | Temperature of the water body | Seamod | SEAMOD.RO - Forecasts for the Black Sea
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Orion | WAM Cycle 4 wave model - Black Sea
	Wave height and period statistics | Significant height of waves {Hs} on the water body | Orion | WAM Cycle 4 wave model - Black Sea
	Wave height and period statistics | Direction of waves on the water body | Orion | WAM Cycle 4 wave model - Black Sea
	Habitat extent | Marine Protected Areas | European Environment Agency (EEA) | Natura 2000 data - the European network of protected sites

Table A4.18 CH03 Oil platform leaks: The TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH3_Product_1 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 24h after the incident declared on 10th May 2016 by DG MARE	2016-05-10T08:15:00	2016-05-13T08:15:00	15300	50	3	7	150	1	0.04	N/A	1
BLACKSEA_CH3_Product_2 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 72h after the incident declared on 10th May 2016 by DG MARE	2016-05-10T08:15:00	2016-05-13T08:15:00	15300	50	3	9	150	1	0.04	N/A	1

Table A4.19 CH03 Oil platform leaks: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH3_Product_1 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 24h after the incident declared on 10th May 2016 by DG MARE	0	0	0	1	0	0	0	0	0
BLACKSEA_CH3_Product_2 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 72h after the incident declared on 10th May 2016 by DG MARE	0	0	0	1	0	0	0	0	0

Table A4.20 CH03 Oil platform leaks: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH3_Product_1 / Oil Platform Leak Bulletin released on 11 May 2016, fast release, 24h after the incident declared on 10th May 2016 by DG MARE	Wind strength and direction | Eastward wind velocity in the atmosphere | Institute of Accelerating Systems and Applications (IASA-UAT) | SKIRON meteorological model - Black Sea	Wind strength and direction	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Wind strength and direction | Northward wind velocity in the atmosphere | Institute of Accelerating Systems and Applications (IASA-UAT) | SKIRON meteorological model - Black Sea	Wind strength and direction	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} in the water body by derivation from GEBCO_08 30 arc-second global grid | British Oceanographic Data	Bathymetry and Elevation	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Centre | General Bathymetry Chart of the Oceans (GEBCO)											
	Bathymetry and Elevation | Sea-floor depth (below mean sea level) {bathymetric depth} | European Marine Observation and Data Network | EMODnet - Digital Terrain Model (DTM)	Bathymetry and Elevation	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Coastal geomorphology | Coast Type | European Marine Observation and Data Network (EMODNET) | EMODnet Seabed substrate (1M)	Coastal geomorphology	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Geological sample density | Oil API | Orion | oilbase.txt	Geological sample density	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Horizontal velocity of the water column (currents) | Northward current velocity in the water body | seamod | Forecasts for the Black Sea	Horizontal velocity of the water column (currents)	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Horizontal velocity of the water column (currents) | Eastward current velocity in the water body | seamod | Forecasts for the Black Sea	Horizontal velocity of the water column (currents)	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Temperature of the water column | Temperature of the water body | Seamod | SEAMOD.RO - Forecasts	Temperature of the water column	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	for the Black Sea											
	Wave height and period statistics | Average zero crossing period of waves {Tz} on the water body | Orion | WAM Cycle 4 wave model - Black Sea	Wave height and period statistics	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1
	Wave height and period statistics | Significant height of waves {Hs} on the water body | Orion | WAM Cycle 4 wave model - Black Sea	Wave height and period statistics	2016-05-10	2016-05-13	15300	50	3	150	1	0.04	N/A	1

7. Indicators for Challenge 4: Climate

Table A4.21 CH04 Climate: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH04_Specification_1 / Map of the change of the average temperature over 2006-2015 period (10 years) - At surface		2006	2015	436402	0	3652	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_2 / Map of the change of the average temperature over 2006-2015 period (10 years) - At mid water column (500m)		2006	2015	436402	500	3652	1	5000	500	1	0	30
BLACKSEA_CH04_Specification_3 / Map of the change of the average temperature over 2006-2015 period (10 years) - At sea bottom (1500m)		2006	2015	436402	1500	3652	1	5000	1500	1	0	30

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH04_Specification_4 / Map of the change of the average temperature over 50 years - At surface		1966	2015	436402	0	18250	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_5 / Map of the change of the average temperature over 50 years - At mid water column (500m)		1966	2015	436402	500	18250	1	5000	500	1	0	30
BLACKSEA_CH04_Specification_6 / Map of the change of the average temperature over 50 years - At sea bottom (1500m)		1966	2015	436402	1500	18250	1	5000	1500	1	0	30
BLACKSEA_CH04_Specification_7 / Map of the change of the annual mean temperature over 100 years - At surface		1916	2015	436402	0	36500	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_8 / Map of the change of the average temperature over 100 years - At mid water column (500m)		1916	2015	436402	500	36500	1	5000	500	1	0	30
BLACKSEA_CH04_Specification_9 / Map of the change of the average temperature over 100 years - At sea bottom (1500m)		1916	2016	436402	1500	36500	1	5000	1500	1	0	30
BLACKSEA_CH04_Specification_10 / Map of the average extent of sea ice coverage over 2006-2015 period (10 years)		2006	2015	436402	0	3652	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_11 / Map of the average extent of sea ice coverage over 50 years		1966	2015	436402	0	18250	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_12 / Map of the average extent of sea ice coverage over 100 years		1916	2015	436402	0	36500	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_13 / Time series of average temperature - At surface		1916	2015	436402	0	36500	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_14 / Time series of average temperature - At mid water column (500 m)		1916	2015	436402	500	36500	1	5000	500	1	0	30

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH04_Specification_15 / Time series of average temperature - At sea bottom (1500 m)		1916	2015	436402	1500	36500	1	5000	1500	1	0	30
BLACKSEA_CH04_Specification_16 / Time series of average annual internal energy		1916	2015	436402	1500	36500	1	5000	100, non-uniform: 0, 5, 10, 20, 30, 50, 75, 100, 200, 300, 400, 500, 750, 1000, 1200, 1400	1	0	30
BLACKSEA_CH04_Specification_17 / Time series of total ice cover in sea over past 100 years		1908	2017	436402	0	36500	1	5000	0	1	0	30
BLACKSEA_CH04_Specification_18 / Time series of abundance of three most abundant species of phytoplankton		1968	2017	436402	1500	18250	1	5000	100	1	0	30

Table A4.22 CH04 Climate: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH04_Product_1/ Map of the change of the average temperature over 2006-2015 period (10 years) - At surface	Skin temperature of the water column | Skin temperature of the water body by advanced very high resolution radiometer (AVHRR) | Copernicus Marine Environment Monitoring Service | SST_BS_SST_L4_REP_OBSERVATIONS_010_022
BLACKSEA_CH04_Product_2/ Map of the change of the average temperature over 2006-2015 period (10 years) - At mid water column (500m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004
BLACKSEA_CH04_Product_3/ Map of the change of the average temperature over 2006-2015 period (10 years) - At sea bottom (1500m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004
BLACKSEA_CH04_Product_4/ Map of the change of the average temperature over 50 years - At surface	N/A
BLACKSEA_CH04_Product_5/ Map of the change of the average temperature over 50 years - At mid water column (500m)	N/A
BLACKSEA_CH04_Product_6/ Map of the	N/A

TDP Name	List of Input data sets by product
change of the average temperature over 50 years - At sea bottom (1500m)	
BLACKSEA_CH04_Product_7/ Map of the change of the annual mean temperature: over 100 years - At surface	N/A
BLACKSEA_CH04_Product_8/ Map of the change of the average temperature over 100 years - At mid water column (500m)	N/A
BLACKSEA_CH04_Product_9/ Map of the change of the average temperature over 100 years - At sea bottom (1500m)	N/A
BLACKSEA_CH04_Product_10/ Map of the average extent of sea ice coverage over 2006-2015 period (10 years)	Snow and ice mass, thickness and extent | Coverage (by area) of ice on the water body by image analysis | National Snow & Ice Data Center USA | Multisensor analyzed sea ice extend – Northern Hemisphere 4 km
BLACKSEA_CH04_Product_11/ Map of the average extent of sea ice coverage over 50 years	N/A
BLACKSEA_CH04_Product_12/ Map of the average extent of sea ice coverage over 100 years	N/A
BLACKSEA_CH04_Product_13/ Time series of annual mean temperature - At surface	Skin temperature of the water column | Skin temperature of the water body by advanced very high resolution radiometer (AVHRR) | Copernicus Marine Environment Monitoring Service | SST_BS_SST_L4_REP_OBSERVATIONS_010_022
BLACKSEA_CH04_Product_14/ Time series of annual mean temperature -At mid water column (500 m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004
BLACKSEA_CH04_Product_15/ Time series of annual mean temperature - At sea bottom (1500 m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004
BLACKSEA_CH04_Product_16/ Time series of average annual internal energy	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004
BLACKSEA_CH04_Product_17/ Time series of total ice cover in sea over past 100 years	Snow and ice mass, thickness and extent | Coverage (by area) of ice on the water body by image analysis | National Snow & Ice Data Center USA | Multisensor analyzed sea ice extend – Northern Hemisphere 4 km
BLACKSEA_CH04_Product_18/ Time series of abundance of three most abundant species of phytoplankton	Phytoplankton generic abundance in water bodies | Abundance of phytoplankton [Size: 4-1800um**3] per unit volume of the water body by optical microscopy | Black Sea Commission | Black Sea Phytoplankton checklist
	Phytoplankton generic abundance in water bodies | Abundance of phytoplankton [Size: 4-1800um**3] per unit volume of the water body by optical microscopy | Institute of Marine Sciences METU | NATO SfP-971818 ODBMS Black Sea Project

Table A4.23 CH04 Climate: The TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH04_Product_1/ Map of the change of the average temperature over 2006-2015 period (10 years) - At surface	2006	2015	436402	0	3652	1	4000	0	1	50	365
BLACKSEA_CH04_Product_2/ Map of the change of the average temperature over 2006-2015 period (10 years) - At mid water column (500m)	2006	2015	436402	500	3652	1	3000	500	1	50	365
BLACKSEA_CH04_Product_3/ Map of the change of the average temperature over 2006-2015 period (10 years) - At sea bottom (1500m)	2006	2015	436402	1500	3652	1	3000	1500	1	50	365
BLACKSEA_CH04_Product_4/ Map of the change of the average temperature over 50 years - At surface	1966	2015	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_5/ Map of the change of the average temperature over 50 years - At mid water column (500m)	1966	2015	N/A	500	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_6/ Map of the change of the average temperature over 50 years - At sea bottom (1500m)	1966	2015	N/A	1500	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_7/ Map of the change of the annual mean temperature: over 100 years - At surface	1916	2015	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_8/ Map of the change of the average temperature over 100 years - At mid water column (500m)	1916	2015	N/A	500	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_9/ Map of the change of the average temperature over 100 years - At sea bottom (1500m)	1916	2015	N/A	1500	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_10/ Map of the average extent of sea ice coverage over 2006-2015	2006	2015	436402	0	3652	1	4000	0	1	50	1

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
period (10 years)											
BLACKSEA_CH04_Product_11/ Map of the average extent of sea ice coverage over 50 years	1916	2015	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_12/ Map of the average extent of sea ice coverage over 100 years	1916	2015	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_13/ Time series of annual mean temperature - At surface	1982	2016	436402	0	12410	1	4000	0	1	50	365
BLACKSEA_CH04_Product_14/ Time series of annual mean temperature -At mid water column (500 m)	1992	2015	436402	500	8395	1	3000	500	1	50	365
BLACKSEA_CH04_Product_15/ Time series of annual mean temperature - At sea bottom (1500 m)	1992	2015	436402	1500	8395	1	3000	1500	1	50	365
BLACKSEA_CH04_Product_16/ Time series of average annual internal energy	1992	2015	436402	1500	8395	1	3000	1500	1	50	365
BLACKSEA_CH04_Product_17/ Time series of total ice cover in sea over past 100 years	2006	2017	436402	0	4380	1	4000	0	1	50	1
BLACKSEA_CH04_Product_18/ Time series of abundance of three most abundant species of phytoplankton	1968	2017	436402	200	17520	1	non-uniform sampling	non-uniform sampling	30	100	365

Table A4.24 CH04 Climate: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH04_Product_1/ Map of the change of the average temperature over 2006-2015 period (10 years) - At surface	N/A	N/A	0	1	20	0	0	0	-100
BLACKSEA_CH04_Product_2/ Map of the change of the average temperature over 2006-2015 period (10 years) - At mid water column (500m)	0	0	0	1	40	0	0	0	-100

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH04_Product_3/ Map of the change of the average temperature over 2006-2015 period (10 years) - At sea bottom (1500m)	0	0	0	1	40	0	0	0	-100
BLACKSEA_CH04_Product_4/ Map of the change of the average temperature over 50 years - At surface	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_5/ Map of the change of the average temperature over 50 years - At mid water column (500m)	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_6/ Map of the change of the average temperature over 50 years - At sea bottom (1500m)	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_7/ Map of the change of the annual mean temperature: over 100 years - At surface	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_8/ Map of the change of the average temperature over 100 years - At mid water column (500m)	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_9/ Map of the change of the average temperature over 100 years - At sea bottom (1500m)	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_10/ Map of the average extent of sea ice coverage over 2006-2015 period (10 years)	0	0	0	1	20	0	0	0	96.67
BLACKSEA_CH04_Product_11/ Map of the average extent of sea ice coverage over 50 years	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_12/ Map of the average extent of sea ice coverage over 100 years	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_13/ Time series of annual mean temperature - At surface	0	0	-66	1	20	0	0	0	-100
BLACKSEA_CH04_Product_14/ Time series of annual mean temperature - At mid water column (500 m)	0	0	-77	1	40	0	0	0	-100
BLACKSEA_CH04_Product_15/ Time series of annual mean temperature - At sea bottom (1500 m)	0	0	-77	1	40	0	0	0	-100
BLACKSEA_CH04_Product_16/ Time series of average annual internal energy	0	0	-77	1	40	0	0	0	-100
BLACKSEA_CH04_Product_17/ Time series of total ice cover in sea over past 100 years	0	0	-88	1	20	0	0	0	96.67
BLACKSEA_CH04_Product_18/ Time series of abundance of three most abundant species of phytoplankton	0	-86.67	-4	1	N/A	N/A	0	0	-100

Table A4.25 CH04 Climate: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH04_Product_1/ Map of the change of the average temperature over 2006-2015 period (10 years) - At surface	Skin temperature of the water column | Skin temperature of the water body by advanced very high resolution radiometer (AVHRR) | Copernicus Marine Environment Monitoring Service | SST_BS_SST_L4_REP_OBSERVATIONS_010_022	Skin temperature of the water column	1982-11-01	2012-12-31	436402	0	3652	4000	0	1	50	365
BLACKSEA_CH04_Product_2/ Map of the change of the average temperature over 2006-2015 period (10 years) - At mid water column (500m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004	Temperature of the water column	1992-01-01	2015-12-31	436402	500	3652	3000	500	1	50	365
BLACKSEA_CH04_Product_3/ Map of the change of the average temperature over 2006-2015 period (10 years) - At sea bottom (1500m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004	Temperature of the water column	1992-01-01	2015-12-31	436402	1500	3652	3000	1500	1	50	365
BLACKSEA_CH04_Product_4/ Map of the change of the average temperature over 50 years - At surface	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_5/ Map of the change of the average temperature over 50 years - At mid water column (500m)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_6/ Map of the change of the average temperature over 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
years - At sea bottom (1500m)												
BLACKSEA_CH04_Product_7/ Map of the change of the annual mean temperature: over 100 years - At surface	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_8/ Map of the change of the average temperature over 100 years - At mid water column (500m)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_9/ Map of the change of the average temperature over 100 years - At sea bottom (1500m)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_10/ Map of the average extent of sea ice coverage over 2006-2015 period (10 years)	Snow and ice mass, thickness and extent | Coverage (by area) of ice on the water body by image analysis | National Snow & Ice Data Center USA | Multisensor analyzed sea ice extend – Northern Hemisphere 4 km	Snow and ice mass, thickness and extent	2006-01-10	2015-12-31	436402	0	3652	4000	0	1	50	1
BLACKSEA_CH04_Product_11/ Map of the average extent of sea ice coverage over 50 years	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_12/ Map of the average extent of sea ice coverage over 100 years	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH04_Product_13/ Time series of annual mean temperature - At surface	Skin temperature of the water column | Skin temperature of the water body by advanced very high resolution radiometer (AVHRR) | Copernicus Marine Environment Monitoring Service |	Skin temperature of the water column	1982-11-01	2012-12-31	436402	0	3652	4000	0	1	50	365

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	SST_BS_SST_L4_REP_OBSERVATIONS_010_022											
BLACKSEA_CH04_Product_14/ Time series of annual mean temperature -At mid water column (500 m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004	Temperature of the water column	1992-01-01	2015-12-31	436402	500	3652	3000	500	1	50	365
BLACKSEA_CH04_Product_15/ Time series of annual mean temperature - At sea bottom (1500 m)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004	Temperature of the water column	1992-01-01	2015-12-31	436402	1500	3652	3000	1500	1	50	365
BLACKSEA_CH04_Product_16/ Time series of average annual internal energy	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | BLKSEA_REANALYSIS_PHYS_007_004	Temperature of the water column	1992-01-01	2015-12-31	436402	500	3652	3000	500	1	50	365
BLACKSEA_CH04_Product_17/ Time series of total ice cover in sea over past 100 years	Snow and ice mass, thickness and extent | Coverage (by area) of ice on the water body by image analysis | National Snow & Ice Data Center USA | Multisensor analyzed sea ice extend – Northern Hemisphere 4 km	Snow and ice mass, thickness and extent	2006-01-10	2015-12-31	436402	0	3652	4000	0	1	50	1
BLACKSEA_CH04_Product_18/ Time series of abundance of three most abundant species of phytoplankton	Phytoplankton generic abundance in water bodies | Abundance of phytoplankton [Size: 4-	Phytoplankton generic abundanc	1969-01-11	2005-09-08	436402	200	48 years	non-uniform sampling	non-uniform sampling	30	50	365

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	1800um**3] per unit volume of the water body by optical microscopy | Black Sea Commission | Black Sea Phytoplankton checklist	e in water bodies										
	Phytoplankton generic abundance in water bodies | Abundance of phytoplankton [Size: 4-1800um**3] per unit volume of the water body by optical microscopy | Institute of Marine Sciences METU | NATO SfP-971818 ODBMS Black Sea Project	Phytoplankton generic abundance in water bodies	1969-01-11	2004-07-15	436402	200	17520	non-uniform sampling	non-uniform sampling	30	50	365

8. Indicators for Challenge 5: Coasts

Table A4.26 CH05 Coasts: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH05_Specification_1 / Sea level rise (trend) from altimetry for the last 10 years (2006-2015)		2006-01-01	2015-12-31	1317120	0	3650	1	7000	0	365	100	30
BLACKSEA_CH05_Specification_2 / Regional sea level time series and trend for 11 sub-regions for the past 10 years (2006-2015)		2006-01-01	2015-12-31	416790	0	3650	1	39700	0	365	50	30
BLACKSEA_CH05_Specification_3 / Regional sea level time series and trend for 5 coastal sub-regions for the past 50 years		1966-01-01	2015-12-31	108691.2	0	18250	1	20000	0	365	17	183

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
(1966-2015)												
BLACKSEA_CH05_Specification_4 / Regional sea level time series and trend for 5 coastal sub-regions for the past 100 years (1916-2015)		1916-01-01	2015-12-31	108691.2	0	36500	1	20000	0	365	100	365
BLACKSEA_CH05_Specification_5 / Sea level time series and trend for the past 10 years for each 4 NUTS3 in Turkey		2006-01-01	2015-12-31	108691.2	0	3650	1	117000	0	365	200	30
BLACKSEA_CH05_Specification_6 / Sea level time series and trend for the past 50 years for each NUTS3 from selected coastal stations		1966-01-01	2015-12-31	108691.2	0	18250	1	117000	0	365	50	188
BLACKSEA_CH05_Specification_7 / Sea level time series and trend for the past 100 years for each NUTS3 from selected coastal stations		1916-01-01	2015-12-31	108691.2	0	36500	1	117000	0	365	50	365
BLACKSEA_CH05_Specification_8 / Sediment mass balance trend for the last 10 years (2006-2015)		2006-01-01	2015-12-31	108691.2	0	3650	1	117000	0	365	20	30
BLACKSEA_CH05_Specification_9 / Sediment mass balance trend for the last 50 years (1966-2015)		1966-01-01	2015-12-31	108691.2	0	18250	1	117000	0	365	50	183
BLACKSEA_CH05_Specification_10 / Sediment mass balance trend for the last 100 years (1916-2015)		1916-01-01	2015-12-31	108691.2	0	36500	1	117000	0	365	70	365

Table A4.27 CH05 Coasts: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH05_Product_1/ Sea level rise (trend) from altimetry for the last 10 years (2006-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Copernicus Marine Environment Monitoring Service | Black Sea L4 gridded MAPS REP SLA
BLACKSEA_CH05_Product_2/ Regional sea level time series and trend for 11 sub-regions for the past 10 years (2006-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Copernicus Marine Environment Monitoring Service | Black Sea L4 gridded MAPS REP SLA
BLACKSEA_CH05_Product_3/ Regional sea level time series and trend for 5	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | POTI – annual mean sea level data

TDP Name	List of Input data sets by product
coastal sub-regions for the past 50 years (1966-2015)	
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | SEVASTOPOL – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BATUMI – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | VARNA – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | TUAPSE – annual mean sea level data
BLACKSEA_CH05_Product_4/ Regional sea level time series and trend for 5 coastal sub-regions for the past 100 years (1916-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BATUMI – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | POTI – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | TUAPSE – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | SEVASTOPOL – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data
BLACKSEA_CH05_Product_5/ Sea level time series and trend for the past 10 years for each 4 NUTS3 in Turkey	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset
	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset
	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset
	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset
BLACKSEA_CH05_Product_6/ Sea level time series and trend for the past 50 years for each NUTS3 from selected coastal stations	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | VARNA – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data
BLACKSEA_CH05_Product_7/ Sea level time series and trend for the past 100 years for each NUTS3 from selected	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | VARNA – annual mean sea level data

TDP Name	List of Input data sets by product
coastal stations	
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data
BLACKSEA_CH05_Product_8/ Sediment mass balance trend for the last 10 years (2006-2015)	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.
	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.
BLACKSEA_CH05_Product_9/ Sediment mass balance trend for the last 50 years (1966-2015)	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.
	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.
BLACKSEA_CH05_Product_10/ Sediment mass balance trend for the last 100 years (1916-2015)	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load
	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.

Table A4.28 CH05 Coasts: the TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH05_Product_1/ Sea level rise (trend) from altimetry for the last 10 years (2006-2015)	2006	2015	1317120	0	3650	1	14100	0	365	650	30
BLACKSEA_CH05_Product_2/ Regional sea level time series and trend for 11 sub-regions for the past 10 years (2006-2015)	2006	2015	416790	0	3652	1	195000	0	365	210	730
BLACKSEA_CH05_Product_3/ Regional sea level time series and trend for 5 coastal sub-regions for the past 50 years (1966-2015)	1966	2015	54345.6	0	18250	1	489600	0	365	130	7665
BLACKSEA_CH05_Product_4/ Regional sea level time series and trend for 5 coastal sub-regions for the past 100 years (1916-	1916	2015	54345.6	0	36500	1	489600	0	365	170	7665

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
2015)											
BLACKSEA_CH05_Product_5/ Sea level time series and trend for the past 10 years for each 4 NUTS3 in Turkey	2006	2015	18115.2	0	3650	1	204000	0	365	421	30
BLACKSEA_CH05_Product_6/ Sea level time series and trend for the past 50 years for each NUTS3 from selected coastal stations	1966	2015	N/A	0	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_7/ Sea level time series and trend for the past 100 years for each NUTS3 from selected coastal stations	1916	2015	N/A	0	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_8/ Sediment mass balance trend for the last 10 years (2006-2015)	2006	2015	N/A	0	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_9/ Sediment mass balance trend for the last 50 years (1966-2015)	1966	2015	N/A	0	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_10/ Sediment mass balance trend for the last 100 years (1916-2015)	1916	2015	N/A	0	N/A	1	N/A	N/A	N/A	N/A	N/A

Table A4.29 CH05 Coasts: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH05_Product_1/ Sea level rise (trend) from altimetry for the last 10 years (2006-2015)	0	N/A	0	1	-100	N/A	0	N/A	-2333.33
BLACKSEA_CH05_Product_2/ Regional sea level time series and trend for 11 sub-regions for the past 10 years (2006-2015)	0	N/A	0	1	-100	N/A	0	N/A	-100
BLACKSEA_CH05_Product_3/ Regional sea level time series and trend for 5 coastal sub-regions for the past 50 years (1966-2015)	-50	N/A	0	1	-100	N/A	0	N/A	-100
BLACKSEA_CH05_Product_4/ Regional sea level time series and trend for 5 coastal sub-regions for the past 100 years (1916-2015)	-50	N/A	0	1	-100	N/A	0	N/A	-100
BLACKSEA_CH05_Product_5/ Sea level time series and trend for the past 10 years for each 4 NUTS3 in Turkey	-83.33	N/A	0	1	-74.36	N/A	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH05_Product_6/ Sea level time series and trend for the past 50 years for each NUTS3 from selected coastal stations	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_7/ Sea level time series and trend for the past 100 years for each NUTS3 from selected coastal stations	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_8/ Sediment mass balance trend for the last 10 years (2006-2015)	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_9/ Sediment mass balance trend for the last 50 years (1966-2015)	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_10/ Sediment mass balance trend for the last 100 years (1916-2015)	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A

Table A4.30 CH05 Coasts: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH05_Product_1/ Sea level rise (trend) from altimetry for the last 10 years (2006-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Copernicus Marine Environment Monitoring Service | Black Sea L4 gridded MAPS REP SLA	Sea level	2006	2015	1317120	0	8030	14000	0	1	650	730
BLACKSEA_CH05_Product_2/ Regional sea level time series and trend for 11 sub-regions for the past 10 years (2006-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Copernicus Marine Environment Monitoring Service | Black Sea L4 gridded MAPS REP SLA	Sea level	2006	2015	1317120	0	8030	14000	0	1	210	730
BLACKSEA_CH05_Product_3/ Regional sea level time series and trend for 5 coastal sub-regions for the past 50 years (1966-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL)	Sea level	1966	2015	N/A	0	51465	N/A	0	365	117	183

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	| POTI – annual mean sea level data											
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | SEVASTOPOL – annual mean sea level data	Sea level	1917	2016	N/A	0	36135	N/A	0	365	130	183
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BATUMI – annual mean sea level data	Sea level	1882	2015	N/A	0	48545	N/A	0	365	117	183
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data	Sea level	1933	1997	N/A	0	23360	N/A	0	365	44	6570
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | VARNA – annual mean sea level data	Sea level	1929	1996	N/A	0	24455	N/A	0	365	2	6935
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL)	Sea level	1929	1996	N/A	0	24455	N/A	0	365	1298	6935

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	| BOURGAS – annual mean sea level data											
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | TUAPSE – annual mean sea level data	Sea level	1917	2016	N/A	0	36135	N/A	0	365	130	183
BLACKSEA_CH05_Product_4/ Regional sea level time series and trend for 5 coastal sub-regions for the past 100 years (1916-2015)	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BATUMI – annual mean sea level data	Sea level	1933	1997	N/A	0	23360	N/A	0	365	44	6570
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | POTI – annual mean sea level data	Sea level	1988	2015	N/A	0	51465	N/A	0	365	107	365
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data	Sea level	1933	1997	N/A	0	23360	N/A	0	365	170	6570
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL)	Sea level	1917	2016	N/A	0	36135	N/A	0	365	130	183

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	| TUAPSE – annual mean sea level data											
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | SEVASTOPOL – annual mean sea level data	Sea level	1917	2016	N/A	0	36135	N/A	0	365	117	365
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data	Sea level	1929	1996	N/A	0	24455	N/A	0	365	140	6935
BLACKSEA_CH05_Product_5/ Sea level time series and trend for the past 10 years for each 4 NUTS3 in Turkey	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset	Sea level	2002	2015	N/A	0	4745	N/A	0	365	366	30
	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset	Sea level	2006	2015	N/A	0	3650	N/A	0	365	342	30
	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset	Sea level	2002	2015	N/A	0	4745	N/A	0	365	220	30

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Sea level | Surface elevation (Rijkswaterstaat Mean Sea Level) of the water body | General Command of Mapping (GCM) | TUDES dataset	Sea level	2008	2015	N/A	0	2555	N/A	0	365	421	30
BLACKSEA_CH05_Product_6/ Sea level time series and trend for the past 50 years for each NUTS3 from selected coastal stations	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data	Sea level	1988	2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | VARNA – annual mean sea level data	Sea level	1988	2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data	Sea level	1933	1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_7/ Sea level time series and trend for the past 100 years for each NUTS3 from selected coastal stations	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | VARNA – annual mean sea level data	Sea level	1918	2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | CONSTANTZA – annual mean sea level data	Sea level	1933	1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Sea level | Surface elevation annual mean (unspecified datum) of the water body | Permanent Service for Mean Sea Level (PSMSL) | BOURGAS – annual mean sea level data	Sea level	1988	2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_8/ Sediment mass balance trend for the last 10 years (2006-2015)	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.	Coastal geomorphology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.	Coastal geomorphology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH05_Product_9/ Sediment mass balance trend for the last 50 years (1966-2015)	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.	Coastal geomorphology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.	Coastal geomorphology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLACKSEA_CH05_Product_10/ Sediment mass balance trend for the last 100 years (1916-2015)	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load	Coastal geomorphology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Coastal geomorphology | * | S/R Firm 'GAMMA"; Iv.Javakhishvili Tbilisi State University	Coastal geomorphology	2006-01-10	2015-12-31	436402	0	3652	4000	0	1	50	1

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	ADU/TOCE/1ODE; National Environmental Agency; | Beachforming material nearshore flow, direction and volumes. Sediment balance. Sea shore dynamics. Rivers load.											

9. Indicators for Challenge 6: Fishery management

Table A4.31 CH06 Fishery management: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH06_Specification_1 / Collated data set of landings, fish and shellfish, by species and year	COLLATED DATA SET OF LANDINGS BY SPECIES MASS WHOLE BLACK SEA 2008-2014	2008	2014	416790	1	2200	1	100	1	365	50	1095
	COLLATED DATA SET OF LANDINGS BY SPECIES MASS ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
	COLLATED DATA SET OF LANDINGS	2010	2016	25000	1	2200	1	100	1	365	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	BY SPECIES NUMBER ROMANIA 2010-2016											
	COLLATED DATA SET OF LANDINGS BY SPECIES MASS BULGARIA 2009-2015	2009	2015	25000	1	2200	1	100	1	365	50	1095
BLACKSEA_CH06_Specification_2 / Collated data set of discards, by species and year	COLLATED DATA SET OF DISCARDS BY SPECIES MASS ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
	COLLATED DATA SET OF DISCARDS BY SPECIES NUMBER ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
BLACKSEA_CH06_Specification_3 / Collated data set of by-catch, by species and year	COLLATED DATA SET OF BY-CATCHES BY SPECIES MASS ROMANIA BULGARIA 2009-2016	2009	2016	50000	1	2500	1	100	1	365	50	1095

Table A4.32 CH06 Fishery management: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH06_Product_1/ Collated	Fish and shellfish catch statistics | Abundance of Fish (WoRMS 11676) per unit area of the bed by picking | General Fisheries Commission for the Mediterranean -

TDP Name	List of Input data sets by product
data set of landings, fish and shellfish, by species and year	Food and Agriculture Organization | Catches - Mediterranean and Black Sea, Fisheries production in selected years; Capture fisheries production in the Black Sea (1976-2013) by selected countries
BLACKSEA_CH06_Product_2/ Collated data set of discards, by species and year	Fish and shellfish catch statistics | Abundance of Fish (WoRMS 11676) per unit area of the bed by picking | General Fisheries Commission for the Mediterranean - Food and Agriculture Organization | Catches - Mediterranean and Black Sea, Fisheries production in selected years; Capture fisheries production in the Black Sea (1976-2013) by selected countries
BLACKSEA_CH06_Product_3/ Collated data set of by-catch, by species and year	Fish and shellfish catch statistics | Abundance of Fish (WoRMS 11676) per unit area of the bed by picking | General Fisheries Commission for the Mediterranean - Food and Agriculture Organization | Catches - Mediterranean and Black Sea, Fisheries production in selected years; Capture fisheries production in the Black Sea (1976-2013) by selected countries

Table A4.33 CH06 Fishery management: the TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH06_Product_1/ Collated data set of landings, fish and shellfish, by species and year											
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES MASS WHOLE BLACK SEA 2008-2014	2008	2014	416790	1	2200	1	100	1	365	50	1095
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES NUMBER ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES MASS ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES MASS BULGARIA 2009-2015	2009	2015	25000	1	2200	1	100	1	365	50	1095
BLACKSEA_CH06_Product_2/ Collated data set of discards, by species and year	2006	2015	416790	0	3652	1	195000	1	365	210	730

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
COLLATED DATA SET OF DISCARDS, BY SPECIES AND YEAR - COLLATED DATA SET OF DISCARDS BY SPECIES MASS ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
COLLATED DATA SET OF DISCARDS, BY SPECIES AND YEAR - COLLATED DATA SET OF DISCARDS BY SPECIES NUMBER ROMANIA 2010-2016	2010	2016	25000	1	2200	1	100	1	365	50	1095
BLACKSEA_CH06_Product_3/ Collated data set of by-catch, by species and year	2009	2016	50000	1	2500	1	100	1	365	50	1095

Table A4.34 CH06 Fishery management: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH06_Product_1/ Collated data set of landings, fish and shellfish, by species and year									
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES MASS WHOLE BLACK SEA 2008-2014	0	0	0	1	0	0	0	N/A	0
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES NUMBER ROMANIA 2010-2016	0	0	0	1	0	0	0	N/A	0
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES MASS ROMANIA 2010-2016	0	0	0	1	0	0	0	N/A	0
COLLATED DATA SET OF LANDINGS, FISH AND SHELLFISH, BY SPECIES AND YEAR - COLLATED DATA SET OF LANDINGS BY SPECIES MASS BULGARIA 2009-2015	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH06_Product_2/ Collated data set of discards, by species and year									
COLLATED DATA SET OF DISCARDS, BY SPECIES AND YEAR - COLLATED DATA SET OF DISCARDS BY SPECIES MASS ROMANIA 2010-2016	0	0	0	1	0	0	0	N/A	0
COLLATED DATA SET OF DISCARDS, BY SPECIES AND YEAR - COLLATED DATA SET OF DISCARDS BY SPECIES NUMBER ROMANIA 2010-2016	0	0	0	1	0	0	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH06_Product_3/ Collated data set of by-catch, by species and year	0	0	0	1	0	0	0	N/A	0

Table A4.35 CH06 Fishery management: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH06_Product_1/ Collated data set of landings, fish and shellfish, by species and year	Fish and shellfish catch statistics | Abundance of Fish (WoRMS 11676) per unit area of the bed by picking | General Fisheries Commission for the Mediterranean - Food and Agriculture Organization | Catches - Mediterranean and Black Sea, Fisheries production in selected years; Capture fisheries production in the Black Sea (1976-2013) by selected countries	Fish and shellfish catch statistics	2008	2014	416790	1	2200	100	1	365	50	1095
BLACKSEA_CH06_Product_2/ Collated data set of discards, by species and year)	Fish and shellfish catch statistics | Abundance of Fish (WoRMS 11676) per unit area of the bed by picking | General Fisheries Commission for the Mediterranean - Food and Agriculture Organization | Catches - Mediterranean and Black Sea, Fisheries production in selected years; Capture fisheries production in the Black Sea (1976-2013) by	Fish and shellfish catch statistics	2009	2016	50000	1	2500	100	1	365	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	selected countries											
BLACKSEA_CH05_Product_3/ Regional sea level time series and trend for 5 coastal sub-regions for the past 50 years (1966-2015)	Fish and shellfish catch statistics | Abundance of Fish (WoRMS 11676) per unit area of the bed by picking | General Fisheries Commission for the Mediterranean - Food and Agriculture Organization | Catches - Mediterranean and Black Sea, Fisheries production in selected years; Capture fisheries production in the Black Sea (1976-2013) by selected countries	Fish and shellfish catch statistics	2008	2014	416790	1	2200	100	1	365	50	1095

10. Indicators for Challenge 7: Fishery impacts

Table A4.36 CH07 Fishery impacts: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH07_Specification_1 / Extent of fisheries trawlers (bottom trawling) : computed from Vessel Monitoring System Dataset (2012-2015)	EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) COMPUTED FROM VESSEL MONITORING SYSTEM DATASET	2012-01-01	2012-12-31	2760	90	365	1	2000	1	365	50	365

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	FOR 2012,ROMANIAN WATERS											
	EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2013,ROMANIAN WATERS	2013-01-01	2013-12-31	3052	90	365	1	2000	1	365	50	365
	EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2014,ROMANIAN WATERS	2014-01-01	2014-12-31	4000	90	365	1	2000	1	365	50	365
	EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED	2015-01-01	2015-12-31	4000	40	365	1	2000	1	365	50	365

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	FROM VESSEL MONITORING SYSTEM DATASET FOR 2015,ROMANIAN WATERS											
BLACKSEA_CH07_Specification_2 / Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed	EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED. BEAM TRAWLING AREAS_ROMANIA 2016	2016-01-01	2016-12-31	652	30	365	1	100	1	365	50	365
	EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED. PELAGIC TRAWLING AREAS_ROMANIA 2016	2016-01-01	2016-12-31	5800	80	365	1	100	1	365	50	365

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED. TRAWLING AREAS_TURKEY 2014	2014-01-01	2014-12-31	1950	100	365	1	100	1	365	50	365
	EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED. TRAWLING AREAS_TURKEY_RAPANA 2014	2014-01-01	2014-12-31	12200	30	365	1	100	1	365	50	365

Table A4.37 CH07 Fishery impacts: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH07_Product_1 / Extent of fisheries trawlers (bottom trawling) : computed from Vessel Monitoring System Dataset (2012-2015)	Fishery characterisation | Fisheries characteristics-fish fleet | Statistical office of the European Union | Fishing fleet
BLACKSEA_CH07_Product_2 / Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed	Fishery characterisation | Fisheries characteristics-fish fleet | Statistical office of the European Union | Fishing fleet

TDP Name	List of Input data sets by product
	Fishery characterisation | Fisheries characteristics-fish fleet32 | Turkish Statistical Institute | MEDAS

Table A4.38 CH07 Fishery impacts: the TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH07_Product_1 / Extent of fisheries trawlers (bottom trawling) : computed from Vessel Monitoring System Dataset (2012-2015)											
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2012,ROMANIAN WATERS	2012-01-01	2012-12-31	2760	90	365	1	2000	1	365	50	365
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2013,ROMANIAN WATERS	2013-01-01	2013-12-31	3052	90	365	1	2000	1	365	50	365
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET	2014-01-01	2014-12-31	4000	90	365	1	2000	1	365	50	365

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
FOR 2014,ROMANIAN WATERS											
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2015,ROMANIAN WATERS	2015-01-01	2015-12-31	4000	40	365	1	2000	1	365	50	365
BLACKSEA_CH07_Product_2 / Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed											
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.1. BEAM TRAWLING AREAS_ROMANIA 2016	2016-01-01	2016-12-31	652	30	365	1	100	1	365	50	365
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.2. PELAGIC TRAWLING AREAS_ROMANIA 2016	2016-01-01	2016-12-31	5800	80	365	1	100	1	365	50	365

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.3. TRAWLING AREAS_TURKEY 2014	2014-01-01	2014-12-31	1950	100	365	1	100	1	365	50	365
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.4. TRAWLING AREAS_TURKEY_RAPANA 2014	2014-01-01	2014-12-31	12200	30	365	1	100	1	365	50	365

Table A4.39 CH07 Fishery impacts: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH07_Product_1 / Extent of fisheries trawlers (bottom trawling) : computed from Vessel Monitoring System Dataset (2012-2015)									
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2012,ROMANIAN WATERS	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS	0	0	0	1	0	0	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
(BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2013,ROMANIAN WATERS									
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2014,ROMANIAN WATERS	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH07_PRODUCT_1 / EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING) : COMPUTED FROM VESSEL MONITORING SYSTEM DATASET (2012-2015) - EXTENT OF FISHERIES TRAWLERS (BOTTOM TRAWLING): COMPUTED FROM VESSEL MONITORING SYSTEM DATASET FOR 2015,ROMANIAN WATERS	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH07_Product_2 / Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed									
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.1. BEAM TRAWLING AREAS_ROMANIA 2016	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.2. PELAGIC TRAWLING AREAS_ROMANIA 2016	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.3. TRAWLING AREAS_TURKEY 2014	0	0	0	1	0	0	0	N/A	0
BLACKSEA_CH07_PRODUCT_2 / EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED - EXTENT OF FISHERIES IMPACT ON THE SEAFLOOR: SANDY HABITATS WHERE TRAWLING IS PERFORMED_ CHILDPRODUCTCOMPONENT 2.4. TRAWLING AREAS_TURKEY_RAPANA 2014	0	0	0	1	0	0	0	N/A	0

Table A4.40 CH07 Fishery impacts: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH07_Product_1 / Extent of fisheries trawlers (bottom trawling) : computed from Vessel Monitoring System Dataset (2012-2015)	Fishery characterisation | Fisheries characteristics-fish fleet | Statistical office of the European Union | Fishing fleet	Fishery characterisation	2012-01-01	2015-12-31	2760	90	1460	2000	1	365	50	365
BLACKSEA_CH07_Product_2 / Extent of fisheries impact on the seafloor: sandy habitats where trawling is performed	Fishery characterisation | Fisheries characteristics-fish fleet | Statistical office of the European Union | Fishing fleet	Fishery characterisation	2014-01-01	2016-12-31	652	100	1095	100	1	365	50	365

11. Indicators for Challenge 8: Eutrophication

Table A4.41 CH08 Eutrophication: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH08_Specification_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)	WINTER CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	900	1	1000	0	90	50	365
	SPRING CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	920	1	1000	0	90	50	365
	SUMMER CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	920	1	1000	0	90	50	365
	AUTUMN CONCENTR	2004	2014	436402	1	910	1	1000	0	90	50	365

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	ATION OF CHLOROPHYLL											
BLACKSEA_CH08_Specification_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014)	A CSI023 INDICATOR (CHLOROPHYLL IN TRANSITIONAL, COASTAL AND MARINE WATERS) REFLECTS THE POLICY MEASURES TAKEN TO REDUCE LOADING OF NUTRIENTS FROM RIVERS THAT AFFECT PRIMARY PRODUCTION IN THE COASTAL ZONES	2005	2014	436402	1	3650	1	1000	N/A	30	N/A	30

Table A4.42 CH08 Eutrophication: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product
BLACKSEA_CH08_Product_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll {Chl CAS 1406-65-1} per unit mass of the water body | Copernicus Marine Environment Monitoring Service | OCEANCOLOUR_BS_CHL_L4_REP_OBSERVATIONS_009_079
BLACKSEA_CH08_Product_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014)	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 | OCEANCOLOUR_BS_CHL_L4_REP_OBSERVATIONS_009_079

Table A4.43 CH08 Eutrophication: the TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH08_Product_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)											
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - WINTER CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	900	1	1000	0	90	50	1095
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - SPRING CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	920	1	1000	0	90	50	1095
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - SUMMER CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	920	1	1000	0	90	50	1095
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - AUTUMN CONCENTRATION OF CHLOROPHYLL	2004	2014	436402	1	910	1	1000	0	90	50	1095
BLACKSEA_CH08_Product_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014) BLACKSEA_CH08_PRODUCT_2 / MAPPING OF MEAN CHLOROPHYLL TREND OVER 10 YEARS (2005-2014) - A CSI023 INDICATOR (CHLOROPHYLL IN TRANSITIONAL, COASTAL AND MARINE WATERS) REFLECTS THE POLICY MEASURES TAKEN	2005	2014	436402	1	910	1	1000	0	90	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
TO REDUCE LOADING OF NUTRIENTS FROM RIVERS THAT AFFECT PRIMARY PRODUCTION IN THE COASTAL ZONES											

Table A4.44 CH08 Eutrophication: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH08_Product_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)									
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - WINTER CONCENTRATION OF CHLOROPHYLL	0	0	0	1	0	N/A	0	N/A	-100
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - SPRING CONCENTRATION OF CHLOROPHYLL	0	0	0	1	0	N/A	0	N/A	-100
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - SUMMER CONCENTRATION OF CHLOROPHYLL	0	0	0	1	0	N/A	0	N/A	-100
BLACKSEA_CH08_PRODUCT_1 / MAPPING OF SEASONAL CHLOROPHYLL OVER 10 YEARS (2005-2014) - AUTUMN CONCENTRATION OF CHLOROPHYLL	0	0	0	1	0	N/A	0	N/A	-100
BLACKSEA_CH08_Product_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014) BLACKSEA_CH08_PRODUCT_2 / MAPPING OF MEAN CHLOROPHYLL TREND OVER 10 YEARS (2005-2014) - A CSI023 INDICATOR (CHLOROPHYLL IN TRANSITIONAL, COASTAL AND MARINE WATERS) REFLECTS THE POLICY MEASURES TAKEN TO REDUCE LOADING OF NUTRIENTS FROM RIVERS THAT AFFECT PRIMARY PRODUCTION IN THE COASTAL ZONES	0	0	0	1	0	N/A	0	N/A	-100

Table A4.45 CH08 Eutrophication: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH08_Product_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll {Chl CAS 1406-65-1} per unit mass of the water body | Copernicus Marine Environment Monitoring Service | OCEANCOLOUR_BS_CHL_L4_REP_OBSERVATIONS_009_079	Chlorophyll pigment concentrations in water bodies	2005	2014	436402	1	3650	1000	0	150	50	1095
BLACKSEA_CH08_Product_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014)	Chlorophyll pigment concentrations in water bodies | Concentration of chlorophyll {Chl CAS 1406-65-1} per unit mass of the water body | Copernicus Marine Environment Monitoring Service | OCEANCOLOUR_BS_CHL_L4_REP_OBSERVATIONS_009_079	Chlorophyll pigment concentrations in water bodies	2005	2014	436402	1	3650	1000	0	150	50	1095

12. Indicators for Challenge 9: River inputs

Table A4.46 CH09 River inputs: the DPS names and required quality elements

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
BLACKSEA_CH09_Specification_1 / Monthly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	MONTHLY MEAN TIME SERIES OF DANUBE DISCHARGE	1921	1984	807000	0	30	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	MONTHLY MEAN TIME SERIES OF KAMTEHIYA DISCHARGE	1965	1979	4857	0	30	1	100	1	30	50	1095
	MONTHLY MEAN TIME SERIES OF KIZILIRMAK DISCHARGE	1976	1983	75121	0	30	1	100	1	30	50	1095
	MONTHLY MEAN TIME SERIES OF SAKARYA DISCHARGE	1976	1983	55322	0	30	1	100	1	30	50	1095
	MONTHLY MEAN TIME SERIES OF DNIESTER DISCHARGE	1965	1984	66100	0	30	1	100	1	30	50	1095
	MONTHLY MEAN TIME SERIES OF DNIEPER DISCHARGE	1952	1984	463000	0	30	1	100	1	30	50	1095
BLACKSEA_CH09_Specification_2 / Yearly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	YEARLY MEAN TIME SERIES OF DANUBE DISCHARGE	1921	1984	807000	0	365	1	100	1	365	50	1095
	EARLY MEAN TIME SERIES OF KAMTEHIYA DISCHARGE	1965	1979	4857	0	365	1	100	1	365	50	1095
	YEARLY MEAN TIME SERIES OF KIZILIRMA	1976	1983	75121	0	365	1	100	1	365	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	K DISCHARGE											
	YEARLY MEAN TIME SERIES OF SAKARYA DISCHARGE	1976	1983	55322	0	365	1	100	1	365	50	1095
	YEARLY MEAN TIME SERIES OF DNIESTER DISCHARGE	1965	1984	66100	0	365	1	100	1	365	50	1095
	YEARLY MEAN TIME SERIES OF DNIEPER DISCHARGE	1976	1983	463000	0	365	1	100	1	365	50	1095
BLACKSEA_CH09_Specification_3 / Time series of daily river discharge at the discharge point into the Black Sea (1981 - 2010) (computed with Hype model)	SAKARYA RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	320	0	1	1	100	1	1	50	1095
	KAMCHIA RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	860	0	1	1	100	1	1	50	1095
	DNISTER RIVER DAILY	1981	2010	795	0	1	1	100	1	1	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)											
	DANUBE RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	738	0	1	1	100	1	1	50	1095
	SOUTH BUG RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	615	0	1	1	100	1	1	50	1095
	VELEKA RIVER MONTHLY DAILY DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	170	0	1	1	100	1	1	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	RIONI RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	100	0	1	1	100	1	1	50	1095
	CHOROKHI RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	473	0	1	1	100	1	1	50	1095
	SF.GHEORGHE RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	456	0	1	1	100	1	1	50	1095
	DNIPER RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK	1981	2010	493	0	1	1	100	1	1	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	SEA (1981 - 2010)											
	KIZILIRMAK RIVER MONTHLY MEAN RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	1209	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_Specification_4 / Time series of monthly mean river temperature at the discharge point into the Black Sea (2000-2010)	SAKARYA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	320	0	3600	1	100	1	30	50	1095
	KAMCHIA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	860	0	3600	1	100	1	30	50	1095
	DNISTER MONTHLY MEAN RIVER TEMPERATURE AT	2000	2010	795	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	THE DISCHARGE POINT INTO THE BLACK SEA											
	DANUBE MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	738	0	3600	1	100	1	30	50	1095
	SOUTH BUG MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	615	0	3600	1	100	1	30	50	1095
	VELEKA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	170	0	3600	1	100	1	30	50	1095
	RIONI MONTHLY MEAN RIVER	2000	2010	100	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA											
	CHOROKHI MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	473	0	3600	1	100	1	30	50	1095
	SF.GHEORGHE MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	456	0	3600	1	100	1	30	50	1095
	DNIPER MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	493	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	KIZILIRMAK MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	1209	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_Specification_5 / Time series of River nutrients (nitrate) monthly mean at surface (2000-2010)	TIME SERIES OF SAKARYA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	320	0	3600	1	100	1	30	50	1095
	TIME SERIES OF KAMCHIA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	860	0	3600	1	100	1	30	50	1095
	TIME SERIES OF DNISTER RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT	2000	2010	795	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	SURFACE (2000-2010)											
	TIME SERIES OF DANUBE RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	738	0	3600	1	100	1	30	50	1095
	TIME SERIES OF SOUTH BUG RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	615	0	3600	1	100	1	30	50	1095
	TIME SERIES OF VELEKA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	170	0	3600	1	100	1	30	50	1095
	TIME SERIES OF RIONI RIVER NUTRIENTS (NITRATE)	2000	2010	100	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	MONTHLY MEAN AT SURFACE (2000-2010)											
	TIME SERIES OF CHOROKHI RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	473	0	3600	1	100	1	30	50	1095
	TIME SERIES OF SF.GHEORGHE RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	456	0	3600	1	100	1	30	50	1095
	TIME SERIES OF DNIPER RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	493	0	3600	1	100	1	30	50	1095
	TIME SERIES OF KIZILIRMAK RIVER	2000	2010	1209	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)											
BLACKSEA_CH09_Specification_6 / Monthly mean of the phosphorus at river discharge into the Black Sea at surface	SAKARYA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	320	0	3600	1	100	1	30	50	1095
	KAMCHIA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	860	0	3600	1	100	1	30	50	1095
	DNISTER MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	795	0	3600	1	100	1	30	50	1095
	DANUBE MONTHLY MEAN OF THE PHOSPHOR	2000	2010	738	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	US AT THE DISCHARGE POINT INTO THE BLACK SEA											
	SOUTH BUG MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	615	0	3600	1	100	1	30	50	1095
	VELEKA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	170	0	3600	1	100	1	30	50	1095
	RIONI MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	100	0	3600	1	100	1	30	50	1095
	CHOROKHI MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE	2000	2010	473	0	3600	1	100	1	30	50	1095

DPS	Component	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)	Temporal Resolution DPS.AP.3.3 (Days)	Thematic Accuracy DPS.AP.3.4 (%)	Temporal Validity DPS.AP.4.1 (days)
	POINT INTO THE BLACK SEA											
	SF.GHEORGHE MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	456	0	3600	1	100	1	30	50	1095
	DNIPER MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	493	0	3600	1	100	1	30	50	1095
	KIZILIRMAK MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	1209	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_Specification_7 / Eel/salmon recruitment and escapement		2000	2010	436400	0	3600	1	50	50	90	50	1095

Table A4.47 CH09 River inputs: The TDP names, components and selected input data sets with related P02 characteristics

TDP Name	List of Input data sets by product

TDP Name	List of Input data sets by product
BLACKSEA_CH09_Product_1 / Monthly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dniester River, PointID: 776
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly discharge, years of min and max/Dnestr river, Bendery
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Kizilirmak River, PointID: 804
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Dniepr river, Hydroelectric Plant
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/ROMANIA/00765
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00775
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly min-mean-max discharge/Dnestr river, Bendery
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Sakarya River, PointID: 802
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dnieper River, PointID: 805
BLACKSEA_CH09_Product_2 / Yearly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Kizilirmak River, PointID: 804
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Dniepr river, Hydroelectric Plant
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dnieper River, PointID: 805
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly min-mean-max discharge/Dnestr river, Bendery
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dniester River, PointID: 776
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Danube River, Ceatal Izmail
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00181
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Sakarya River, PointID: 802
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/ROMANIA/00765
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly discharge, years of min and max/Dnestr river, Bendery
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00775
BLACKSEA_CH09_Product_3 / Time series of daily river discharge at the discharge point into the Black Sea (1981 - 2010) (computed with Hype model)	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Sakarya River, PointID: 802
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Danube River, Ceatal Izmail
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/ROMANIA/00765
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Kizilirmak River, PointID: 804
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00181
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly min-mean-max discharge/Dnestr river, Bendery
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Southern Bug river, Aleksandrovka
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dnieper River, PointID: 805
BLACKSEA_CH09_Product_4 / Time series of	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | Black Sea- In-situ Observations

TDP Name	List of Input data sets by product
monthly mean river temperature at the discharge point into the Black Sea (2000-2010)	Yearly Delivery in Delayed Mode (1990-2014)
	Temperature of the water column | Temperature of the water body | SEADATANET2 | Danube River data - Chilia Branch
BLACKSEA_CH09_Product_5 / Time series of River nutrients (nitrate) monthly mean at surface (2000-2010)	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | E-HYPE | Drainage basin of Europe
	Nitrate concentration parameters in the water column | Concentration of nitrate {NO3- CAS 14797-55-8} per unit mass of the water body [unknown phase] | EEA-WISE_SoE | Marine Data (ME-1) - Transitional-coastal-and-marine-waters in front of Danube Delta
	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | EMODNet Chemistry 2 | Black Sea data
BLACKSEA_CH09_Product_6 / Monthly mean of the phosphorus at river discharge into the Black Sea at surface	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | EMODNet Chemistry 2 | Black Sea data
	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | EMODNet Chemistry 2 | NW estuarine coastal systems
	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | CARBOOCEAN IP | GEMS-GLORI world river discharge database
	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | EEA-WISE_SoE | Marine Data (ME-1) - Transitional-coastal-and-marine-waters in front of Danube Delta
BLACKSEA_CH09_Product_7 / Eel/salmon recruitment and escapement	N/A

Table A4.48 CH09 River inputs: the TDP quality elements

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_Product_1 / Monthly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)											
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF DANUBE DISCHARGE	1921	1984	807000	0	30	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO	1965	1979	4857	0	30	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF KAMTEHIYA DISCHARGE											
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF KIZILIRMAK DISCHARGE	1978	1983	75121	0	30	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF SAKARYA DISCHARGE	1978	1983	55322	0	30	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF DNIESTER DISCHARGE	1965	1984	66100	0	30	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF DNIEPER DISCHARGE	1978	1983	463000	0	30	1	100	1	30	50	1095
BLACKSEA_CH09_Product_2 / Yearly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)											
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) -	1921	1984	807000	0	365	1	100	1	365	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
YEARLY MEAN TIME SERIES OF DANUBE DISCHARGE											
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF KAMTEHIYA DISCHARGE	1965	1979	4857	0	365	1	100	1	365	50	1095
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF SAKARYA DISCHARGE	1965	1979	55322	0	365	1	100	1	365	50	1095
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF KIZILIRMAK DISCHARGE	1978	1983	75121	0	365	1	100	1	365	50	1095
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF DNIESTER DISCHARGE	1965	1984	66100	0	365	1	100	1	365	50	1095
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF DNIEPER DISCHARGE	1978	1983	463000	0	365	1	100	1	365	50	1095
BLACKSEA_CH09_Product_3 / Time series of daily river discharge at the discharge point into the Black Sea (1981 - 2010) (computed with Hype model)											

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - DANUBE RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	738	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - SAKARYA RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	320	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - VELEKA RIVER MONTHLY DAILY DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	170	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - DNISTER RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	795	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED	1981	2010	615	0	1	1	100	1	1	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
WITH HYPE MODEL)- - SOUTH BUG RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)											
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - SF.GHEORGHE RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	456	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - DNIPER RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	493	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - RIONI RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	100	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - KAMCHIA RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA	1981	2010	860	0	1	1	100	1	1	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
(1981 - 2010)											
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - KIZILIRMAK RIVER MONTHLY MEAN RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	1209	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - CHOROKHI RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	1981	2010	473	0	1	1	100	1	1	50	1095
BLACKSEA_CH09_Product_4 / Time series of monthly mean river temperature at the discharge point into the Black Sea (2000-2010)											
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - SAKARYA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	320	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - DANUBE MONTHLY MEAN	2000	2010	738	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA											
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - VELEKA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	170	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - CHOROKHI MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	473	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - DNISTER MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	795	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - KAMCHIA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	860	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT	2000	2010	1209	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - KIZILIRMAK MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA											
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - RIONI MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	100	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - SF.GHEORGHE MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	456	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - DNIPER MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	493	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - SOUTH BUG MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	615	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_Product_5 / Time series of River nutrients (nitrate) monthly mean at surface (2000-2010)											
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF VELEKA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	170	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF CHOROKHI RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	473	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF DNIPER RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	493	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF SAKARYA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	320	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF SOUTH BUG RIVER NUTRIENTS	2000	2010	615	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
(NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)											
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF RIONI RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	100	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF DNISTER RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	795	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF SF.GHEORGHE RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	456	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF KIZILIRMAK RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	1209	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF DANUBE RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT	2000	2010	738	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
SURFACE (2000-2010)											
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF KAMCHIA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	2000	2010	860	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_Product_6 / Monthly mean of the phosphorus at river discharge into the Black Sea at surface											
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - VELEKA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	170	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - DNIPER MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	493	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - DANUBE MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	738	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - CHOROKHI MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	473	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - DNISTER MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	795	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - KIZILIRMAK MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	1209	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - SF.GHEORGHE MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	456	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - SOUTH BUG MONTHLY MEAN OF THE	2000	2010	615	0	3600	1	100	1	30	50	1095

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA											
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - RIONI MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	100	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - SAKARYA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	320	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - KAMCHIA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	2000	2010	860	0	3600	1	100	1	30	50	1095
BLACKSEA_CH09_Product_7 / Eel/salmon recruitment and escapement	2000	2010	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A

Table A4.49 CH09 River inputs: the TDP quality elements errors (%)

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_Product_1 / Monthly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)									

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF DANUBE DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF KAMTEHIYA DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF KIZILIRMAK DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF SAKARYA DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF DNIESTER DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_1 / MONTHLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - MONTHLY MEAN TIME SERIES OF DNIEPER DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_Product_2 / Yearly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)									
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF DANUBE DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF KAMTEHIYA DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF SAKARYA DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF KIZILIRMAK DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF DNIESTER DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_2 / YEARLY MEAN TIME SERIES OF WATER DISCHARGE INTO BLACK SEA BASIN FROM IN SITU DATA (RIVDIS) (1921-1984) - YEARLY MEAN TIME SERIES OF DNIEPER DISCHARGE	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_Product_3 / Time series of daily river discharge at the discharge point into the Black Sea (1981 - 2010) (computed with Hype model)									
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - DANUBE RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - SAKARYA RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - VELEKA RIVER MONTHLY DAILY DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - DNISTER RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - SOUTH BUG RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - SF.GHEORGHE RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - DNIPER RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - RIONI RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - KAMCHIA RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - KIZILIRMAK RIVER MONTHLY MEAN RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_3 / TIME SERIES OF DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010) (COMPUTED WITH HYPE MODEL)- - CHOROKHI RIVER DAILY RIVER DISCHARGE AT THE DISCHARGE POINT INTO THE BLACK SEA (1981 - 2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_Product_4 / Time series of monthly mean river temperature at the discharge point into the Black Sea (2000-2010)									
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - SAKARYA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - DANUBE MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - VELEKA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - CHOROKHI MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - DNISTER MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - KAMCHIA MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - KIZILIRMAK MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - RIONI MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - SF.GHEORGHE MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - DNIPER MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_4 / TIME SERIES OF MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA (2000-2010) - SOUTH BUG MONTHLY MEAN RIVER TEMPERATURE AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_Product_5 / Time series of River nutrients (nitrate) monthly mean at surface (2000-2010)									
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF VELEKA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF CHOROKHI RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF DNIPER RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF SAKARYA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF SOUTH BUG RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF RIONI RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF DNISTER RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF SF.GHEORGHE RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF KIZILIRMAK RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF DANUBE RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_5 / TIME SERIES OF RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010) - TIME SERIES OF KAMCHIA RIVER NUTRIENTS (NITRATE) MONTHLY MEAN AT SURFACE (2000-2010)	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_Product_6 / Monthly mean of the phosphorus at river discharge into the Black Sea at surface									
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - VELEKA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - DNIPER MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - DANUBE MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0

TDP/Component if applicable	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)	Temporal Resolution TDP.AP.3.3 (Days)	Thematic Accuracy TDP.AP.3.4 (%)	Temporal Validity TDP.AP.4.1 (days)
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - CHOROKHI MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - DNISTER MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - KIZILIRMAK MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - SF.GHEORGHE MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - SOUTH BUG MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - RIONI MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - SAKARYA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_PRODUCT_6 / MONTHLY MEAN OF THE PHOSPHORUS AT RIVER DISCHARGE INTO THE BLACK SEA AT SURFACE - KAMCHIA MONTHLY MEAN OF THE PHOSPHORUS AT THE DISCHARGE POINT INTO THE BLACK SEA	0	N/A	0	1	0	N/A	0	N/A	0
BLACKSEA_CH09_Product_7 / Eel/salmon recruitment and escapement	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A

Table A4.50 CH09 River inputs: the Upstream Data set quality elements

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
BLACKSEA_CH09_Product_1 / Monthly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dniester River, PointID: 776	River flow and discharge	1981	2010	320	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly discharge, years of min and max/Dnestr river, Bendery	River flow and discharge	1978	1983	463000	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Kizilirmak River, PointID: 804	River flow and discharge	1978	1983	75122	0	30	100	1	30	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Dniepr river, Hydroelectric Plant	River flow and discharge	1978	1983	463000	0	30	100	1	30	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/ROMANIA/00765	River flow and discharge	1978	1983	463000	0	30	100	1	30	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00775	River flow and discharge	1978	1983	463000	0	30	100	1	30	50	1095
	River flow and discharge | Riverine discharge of water |	River flow and discharge	1978	1983	463000	0	365	100	1	365	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	earch.datacite.org | Monthly min-mean-max discharge/Dnestr river, Bendery											
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Sakarya River, PointID: 802	River flow and discharge	1978	1983	55322	0	30	100	1	30	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dnieper River, PointID: 805	River flow and discharge	1952	1984	463000	0	30	100	1	30	50	1095
BLACKSEA_CH09_Product_2 / Yearly mean time series of Water Discharge into Black Sea basin from in situ data (RIVDIS) (1921-1984)	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Kizilirmak River, PointID: 804	River flow and discharge	1978	1983	75121	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Dniepr river, Hydroelectric Plant	River flow and discharge	1976	1983	463000	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dnieper River, PointID: 805	River flow and discharge	1976	1983	463000	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly min-mean-max discharge/Dnestr river,	River flow and discharge	1965	1984	66100	0	365	100	1	365	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Bendery											
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dniester River, PointID: 776	River flow and discharge	1965	1984	66100	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Danube River, Ceatal Izmail	River flow and discharge	1921	1984	807000	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00181	River flow and discharge	1921	1984	807000	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Sakarya River, PointID: 802	River flow and discharge	1978	1983	55322	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/ROMANIA/00765	River flow and discharge	1921	1984	807000	0	365	100	1	365	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Monthly discharge, years of min and max/Dnestr river, Bendery	River flow and discharge	1965	1984	66100	0	365	100	1	365	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00775	River flow and discharge	1921	1984	807000	0	365	100	1	365	50	1095
BLACKSEA_CH09_Product_3 / Time series of daily river discharge at the discharge point into the Black Sea (1981 - 2010) (computed with Hype model)	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Sakarya River, PointID: 802	River flow and discharge	1981	2010	320	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Danube River, Ceatal Izmail	River flow and discharge	1981	2010	320	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/ROMANIA/00765	River flow and discharge	1981	2010	320	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Kizilirmak River, PointID: 804	River flow and discharge	1981	2010	1209	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge | RivDIS.zip/BULGARIA/00181	River flow and discharge	1981	2010	320	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | earch.datacite.org |	River flow and discharge	1981	2010	795	0	1	100	1	1	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Monthly min-mean-max discharge/Dnestr river, Bendery											
	River flow and discharge | Riverine discharge of water | earch.datacite.org | Southern Bug river, Aleksandrovka	River flow and discharge	1981	2010	320	0	1	100	1	1	50	1095
	River flow and discharge | Riverine discharge of water | Global River Discharge Database | Dnieper River, PointID: 805	River flow and discharge	1981	2010	493	0	1	100	1	1	50	1095
BLACKSEA_CH09_Product_4 / Time series of monthly mean river temperature at the discharge point into the Black Sea (2000-2010)	Temperature of the water column | Temperature of the water body | Copernicus Marine Environment Monitoring Service | Black Sea- In-situ Observations Yearly Delivery in Delayed Mode (1990-2014)	Temperature of the water column	2000	2010	320	50	3600	100	2.5	30	50	1095
	Temperature of the water column | Temperature of the water body | SEADATANET2 | Danube River data - Chilia Branch	Temperature of the water column	2000	2010	738	0	3600	100	1	30	50	1095
BLACKSEA_CH09_Product_5 / Time series of River nutrients (nitrate) monthly mean at surface (2000-2010)	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | E-HYPE | Drainage basin of	Nitrate concentration parameters in the water column	2000	2010	456	0	3600	100	1	30	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	Europe											
	Nitrate concentration parameters in the water column | Concentration of nitrate {NO3- CAS 14797-55-8} per unit mass of the water body [unknown phase] | EEA-WISE_SoE | Marine Data (ME-1) - Transitional-coastal-and-marine-waters in front of Danube Delta	Nitrate concentration parameters in the water column	2000	2010	170	50	3600	100	2.5	30	48	1095
	Nitrate concentration parameters in the water column | Concentration of nitrate+nitrite {NO3+NO2} per unit mass of the water body [unknown phase] | EMODNet Chemistry 2 | Black Sea data	Nitrate concentration parameters in the water column	2000	2010	170	0	3600	100	1	30	50	1095
BLACKSEA_CH09_Product_6 / Monthly mean of the phosphorus at river discharge into the Black Sea at surface	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | EMODNet Chemistry 2 | Black Sea data	Phosphate concentration parameters in the water column	2000	2010	500	50	3600	100	2.5	30	50	1095
	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | EMODNet Chemistry 2 |	Phosphate concentration parameters in the water column	2000	2010	170	0	3600	100	1	30	50	1095

TDP	UD	P02	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	Vertical Resolution UD.AP.3.2 (m)	Temporal Resolution UD.AP.3.3	Thematic Accuracy TDP.UD.3.4 (%)	Temporal Validity UD.AP.4.1 (days)
	NW estuarine coastal systems											
	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | CARBOOCEAN IP | GEMS-GLORI world river discharge database	Phosphate concentration parameters in the water column	2000	2010	700	50	3600	100	2.5	30	50	1095
	Phosphate concentration parameters in the water column | Concentration of phosphate {PO43- CAS 14265-44-2} per unit volume of the water body [unknown phase] | EEA-WISE_SoE | Marine Data (ME-1) - Transitional-coastal-and-marine-waters in front of Danube Delta	Phosphate concentration parameters in the water column	2000	2010	738	0	3600	100	1	30	50	1095
BLACKSEA_CH09_Product_7 / Eel/salmon recruitment and escapement	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A