



## SEA BASIN CHECKPOINT LOT4: BLACK SEA

### CHALLENGE 8 - Eutrophication Expert evaluation of Targeted Products

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## Document Log

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### **Expert evaluation of Targeted Product quality**

Please use your own judgement to describe for each Targeted product of the assessment of the "fitness for purpose and use". For each Targeted product please comment on the following points:

1) Assign an overall product quality score with respect to scope (fitness for purpose) and explain why, according to the scale in Table 1.

2) Identify the most important characteristic(s) for the Targeted Product quality (if all characteristics are important, please say so).

3) Identify and explain what is (are) the quality element(s) of the most important Characteristic(s) that affects the Targeted product quality;

4) Identify and explain the limitations on the quality of Targeted products due to the input data set used (fitness for use)

5) Comment and explain which Characteristics and respective data set "fails the most" to meet the scope of the Targeted product (fitness for use)

<b>SCORE</b>	<b>MEANING</b>
<b>1</b>	EXCELLENT → completely meets the scope of the Targeted Product
<b>2</b>	VERY GOOD → meets more than 70% of the scope of the Targeted Product
<b>3</b>	GOOD → meets less than 50% of the scope of the Targeted Product
<b>4</b>	SUFFICIENT → does not adequately meet the scope but is a starting point
<b>5</b>	INADEQUATE → does not fulfill the scope and is not usable

**Table 1. Targeted Products quality scores and their meaning.**

### **Expert evaluation of gaps**

Please use your expert judgement to describe for each Targeted product the **most important gaps in the input data sets** (gaps could be due to: characteristics required but not available, geographical coverage, temporal coverage, thematic inconsistency ...)

## CHALLENGE 08: Eutrophication

### 1 Expert evaluation of Targeted Product quality

#### 1.1 BLACKSEA\_CH08\_Product\_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)

*Upstream data used:*

*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 (UPSTREAMDATA)*

The overall product quality score with respect to scope (fitness for purpose) is **VERY GOOD (2)**. Chlorophyll concentration data cover the entire Black Sea.

- 1) All product components are important because they allow monitoring the Black Sea as one of the most eutrophicated basin among the European seas. The product is represented by 4 components including the winter, spring, summer, and autumn seasons.
- 2) The following aspects of quality have the greatest effect on the Targeted product quality:
  - **Spatial extent:** the product covers the entire Black Sea basin
  - **Temporal extent:** the product covers the period 2005-2014, 10 years.
  - **Temporal resolution:** 90-92 days, depending on the season
  - **Horizontal resolution:** 1000 m
  - **Usability:** the product is easy to understand and use.
  - **Completeness:** data are complete.
  - **Logical consistency:** the targeted product agrees with the format required.
  - **Thematic accuracy:** the values reported in the targeted product are close to the true values at the highest level of correctness.

#### 1.2 BLACKSEA\_CH08\_Product\_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014)

*Upstream data used:*

*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 (UPSTREAMDATA)*

The overall product quality score with respect to scope (fitness for purpose) is **VERY GOOD (2)**. Mean chlorophyll trend data cover the entire Black Sea.

- 1) The product is important because they allow monitoring the Black Sea as one of the most eutrophicated basin among the European seas. The

following aspects of quality have the greatest effect on the Targeted product quality:

- **Spatial extent:** the product covers the entire Black Sea basin
- **Temporal extent:** the product covers the period 2005-2014, 10 years.
- **Temporal resolution:** 28-30 days, depending on the month
- **Horizontal resolution:** 1000 m
- **Usability:** the product is easy to understand and use.
- **Completeness:** data are complete.
- **Logical consistency:** the targeted product agrees with the format required.
- **Thematic accuracy:** the values reported in the targeted product are close to the true values at the highest level of correctness.

## 2 Expert evaluation of Targeted Product quality

### 2.1 BLACKSEA\_CH08\_Product\_1 / Mapping of seasonal Chlorophyll over 10 years (2005-2014)

The product gap stems from temporal validity of 3 years, while it should be 1 year according to Data Product Specification. The reason for this gap is a time delay in publication of the data. This delay does not allow rating of “Excellence” for the target product.

### 2.2 BLACKSEA\_CH08\_Product\_2 / Mapping of mean Chlorophyll trend over 10 years (2005-2014)

The product gap stems from temporal validity of 3 years, while it should be 1 year according to Data Product Specification. The reason for this gap is a time delay in publication of the data. This delay does not allow rating of “Excellence” for the target product.