

# 3<sup>rd</sup> Short Course on Marine Data Literacy

for graduate and postgraduate students (3 ECTS)

## **INTRO LECTURES**, online, October/November 2023 **PRACTICAL SESSIONS**, live in Split, Croatia, 2-10 December 2023

Joint BIP of the SEA-EU University Alliance, offered by:

University of Split, University of Algarve, University of Brest, University of Cadiz, University of Gdansk, University of Kiel, and University of Malta



- Are you struggling to find and use data proficiently in your project?
- Why do it by trial and error, without getting the full picture, resources and competence?
- If you are seeking to consolidate your skills in applying data and the scientific method in your research and work, then this Marine Data Literacy course is what you need.

#### Intro lectures – online

- 1. Introduction to Marine Data
- 2. Reliable oceanographic data sources: Metocean data sets: climate, reanalysis, forecast and in situ data
- 3. Concepts of Ocean Data Management
- 4. Online Data Portals
- 5. Accessing and transforming data
- 6. Reliable oceanographic data sources: Ocean Remote Sensing: Data source, downloading and software (SNAP)
- 7. Applying AI to Oceanography
- 8. Managing and Processing (Big) Scientific Data
- 9. Introduction to learning algorithms, neural networks and clustering
- 10. Applying AI to Oceanography: case studies

#### **Practical sessions – Live**

- 1. Tides: Sea-level time series: detecting processes, stationarity and trends
- 2. Climate: Reliable oceanographic data sources: Introduction to sea state, wind wave and wind wave climate characterization.
- 3. Biology / Chemistry: Quality control and visualization data on Ocean Data View
- 4. Environment: Computing satellite-derived bathymetry in shallow areas in SNAP, QGIS or ArcGIS; From data formats to practical use of water column depth data.
- 5. Safety, Security / Pollution: Oil Spill Detection from space with SENTINEL-1

#### **REQUIREMENTS**:

- 1. Activation of ERASMUS BIP Physical Mobility (Contact your Erasmus coordinator)
- 2. Basics in Marine and/or Environmental Science, own laptop
- 3. Participation in the online Intro Lectures of the course
- 4. Arrival in Split on Saturday, 2 December 2023; departure from Split on Sunday, 10 December 2023

### **APPLICATION** (only for PRACTICAL SESSIONS):

- Fill in the online application (see QR code or <u>https://forms.gle/hq1pox42DW8xmHgh6</u>) and upload SUPPORT LETTER (written and signed by the professor of your university) & MOTIVATION LETTER
- 2. After receiving the letter of acceptance, you must contact your local ERASMUS coordinator to apply for and receive a short-term BIP ERASMUS mobility grant.

If you have any additional questions, please send an email with the subject "Question for 3rd Short Course on Marine Data Literacy" to MarineDataLiteracy@unist.hr.

### **DEADLINE** for application is 15<sup>rd</sup> September 2023

University of Split, University Department of Marine Studies & Faculty of Science