Call for applications for doctoral research project (Oct. 2024-Sept. 2027): Spatio-temporal dynamics of suspended particulate matter in the

estuary/coastal sea continuum: integration of high-temporal-resolution in situ observations and high-spatial-resolution water color satellite data (C. Verpoorter LOG and R. Verney IFREMER)

The estuary-coastal sea continuum represents an important key zone of aquatic systems, providing essential functions to the ecosystem and numerous services to society. A major challenge at the estuary-coastal sea continuum is to observe and alert on a modification of the system's state in response to these pressures, notably in terms of sediment transport which is a major ecosystem process. The European project H2020 LandSeaLot (project start: February 2024 | project end: January 2028) aims to propose original solutions to enhance knowledge on the interface between estuary and coastal sea by bringing together scientific communities specializing in *in situ* observation, remote sensing, and modeling.

In this context, the thesis project aims to integrate and interact high-frequency in situ data (COAST-HF, SYNAPSES) with water color satellite data (Sentinel 2/3 - Landsat - MODIS) to enhance our understanding of the land-sea interface. This project focuses on the Seine estuary and bay, a site of high importance with a substantial history of in situ observations.

The thesis will be co-supervised by Charles Verpoorter (ULCO/LOG UMR 8187) and Romaric Verney (Ifremer Brest). The doctoral candidate will be based in Wimereux and will undertake regular stays in Brest. Strong interactions are expected with the European project partners.

University Establishment : Université du Littoral Côte d'Opale

Doctoral School : EDSTS 585 - Sciences, Technologie, Santé

Specialty: Sciences de la Terre et de l'Univers, Espace Terres, Enveloppes fluides

Application Deadline: May 21, 2024, at 11:59 PM

Keywords: Remote Sensing, Observation, Hydro-meteorological, Anthropogenic, and Environmental Forcings, Seine Estuary and Bay, European Project HE LandSeaLot Profile and

Desired Skills: Master's degree in Marine Sciences or Remote Sensing or Coastal Environment or Physical Oceanography. Strong knowledge in remote sensing. Proficiency in programming (R, Python, MATLAB). Strong skills in data analysis.

Send your CV and cover letter to charles.verpoorter@univ-littoral.fr and romaric.verney@ifremer.fr

The final application process will be established on ADUM platform. For more information, you can follow this link: [link removed] and do not hesitate to contact us directly: charles.verpoorter@univ-littoral.fr and romaric.verney@ifremer.fr