Contents of Week 8

Topics

This week, all learning materials related to Topic 8, "Numerical models and simulation of Ocean behavior" are presented. You may find also the first set of learning materials associated to Topic 9, "Aerial and marine robotic systems". The use of "Unmanned aerial vehicles (UAV) for environmental monitoring" is the first subject to be addressed.

Resources

The lecture "Ocean Dynamics: circulation, biological productivity and plastics transport & fate" is presented by Prof. Ramiro Neves, from Instituto Superior Técnico. He shows how simulation can be used to estimate floating debris distribution. The video with the lecture is subdivided into three parts and a pdf file containing the powepoint version is also made available.

Six questions related to the subject "Unmanned aerial vehicles (UAV) for environmental monitoring" are treated by Prof. Alexandra Moutinho from Instituto Superior Técnico: "Introduction to UAV", "How do drones work?", "Comparison of UAVs for environmental monitoring", "UAVs payload: sensors for environmental monitoring", "UAVs operation" and "Examples of application of UAVs for environmental monitoring". The videos with these lectures are made available together with the pdf files containing the corresponding powerpoint versions. Additional videos are also included.

As usual, advanced learning materials are available for those who may be willing to deepen knowledge on those subjects.

Activities

This week, the sixth quiz will be launched. It includes questions related to the subjects discussed in Topic 6, "Mitigation techniques and solutions". The quiz will be opened on the 12th of May and, if you wish, you may repeat it once You may submit your answers until the 13th of June. The seventh Social Networking Activity is also launched.

Enjoy the week!

Ulisses Team

Lisbon, 7th May 2021