

Land-Ocean-Atmosphere Interactions Lab



We study impacts of anthropogenic pressures and environmental hazards on biogeochemical cycles, ecological processes, and ecosystem services

[urban development](#) | [atmospheric pollution](#) | [water quality](#) | [eutrophication](#) | [global warming](#) | [coastal hazards](#)

Partnering with relevant stakeholders, a key objective of our research is applying results to link science to practice and enhance decision support systems



Long Island Sound Project

Understand, model and predict the role of human activities on the Sound's health.



Learn about **impacts of human activities on water quality and ecological processes** in the Long Island Sound.

Learn about **spatial and temporal patterns** in nearshore atmospheric composition, **transport of air pollution across urban-terrestrial-aquatic interfaces**, and **impacts on coastal ecosystems and human health**.

Students will have the opportunity to use **satellite observations and measurements from past and ongoing air-quality and oceanographic field campaigns**

Gain **experience in statistical and GIS software** to quantify and map water composition and atmospheric pollutant concentrations along heavily urbanized coastlines, and **develop new skills in satellite data analysis and remote sensing techniques** fundamental to understanding and monitoring physical and biogeochemical processes in economically and ecologically important coastal environments.



