



Seminari IRSA 2023



Giovedì 26 Ottobre, ore 15:00 (*)

Consiglio Nazionale delle Ricerche
Sala Conferenze dell'Area di Ricerca di Roma 1

Mapping Arctic lakes: a bet for the 79° N parallel (Ny-Ålesund campaign - summer 2023)

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As part of the project PRA-EcoClimate, which aims to understand how climate change will affect the structure and functioning of Arctic lake ecosystems, considered biodiversity hotspots and carbon sinks at the highest latitudes, an hydrographic unmanned surface vessel has been used in glacial lakes at extreme latitudes. The use of hydrographic drones (USV) is becoming commonplace in ocean research activities, especially in extreme environments such as the Arctic and Antarctic. However, this is the first time that a USV has been used on **land** for mapping Arctic lakes at the **79°N Parallel**. This technology was specially configured for data collection in the Arctic. This technological advancement represents an important contribution to the ecological research in the Arctic and was made possible thanks to the instrumentation supplied and ad hoc configured by Seafloor Systems Inc. for the portable hydrographic drone and by the Italian company Microgeo srl. for the GNSS (Global Navigation Satellite System) antenna. We were able to map lakes, never detected before, with unique details and evaluate volumes and nutrient loads.

“Climbing glacial moraines, crossing swollen streams with a rifle and tools as a backpack, and mapping red water lakes never detected before is undoubtedly a unique experience, to be shared and passed down to new generations. The best job in the world” (Rossi 2023)

Per ulteriori informazioni: david.rossi@irsa.cnr.it

* Fruibile in streaming attraverso la piattaforma 'GoToMeeting' previa registrazione. Il seminario verrà registrato e reso successivamente disponibile sul sito web dell'Istituto.