

## Emerging COntaminants in Antarctic Snow: sources and TRAnsport PNRA18\_00229

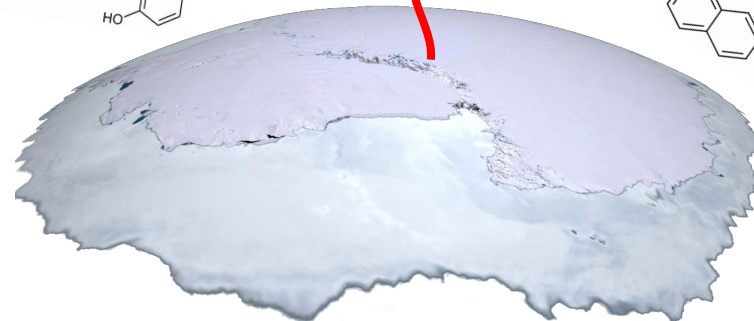
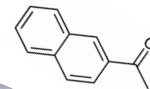
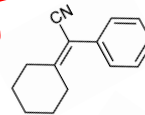
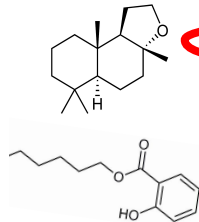
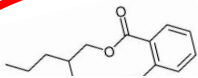
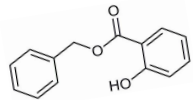
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Study of fragrances and emerging contaminants in snow and atmosphere.

The impact of the anthropic activities in Antarctica is a concerning and in-depth scrutinized issue. Despite this, little is known about the role of the **emerging contaminants** and in this context the study of the long-range transport of the next-generation pollutants in **Antarctica** is an unexplored research field.

The main objective of the project is to identify the **sources**, the **long-range transport** processes and the **distribution** of the emerging contaminants in the Antarctic environment. **Snow** was selected as the most effective matrix to record the **atmospheric deposition** and to describe the transport patterns. Moreover, the temporal trends of the pollution will be determined together with the seasonal snowmelt fluxes of the **contamination** towards the marine environment. To correctly identify the sources and the environmental transport drivers, the study of the emerging contaminants will be coupled with inorganic tracers, providing information on the air mass transport and deposition processes.



Participation to the **XXXVII Antarctic campaign**:



Sampling of:

- Surface snow
- Snow-pit
- Snowmelt

Clean-room laboratory sample preparation.