



Laboratoire de Glaciologie et Géophysique de l'Environnement



Séminaire

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Salle L. Lliboutry, LGGE

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***Arctic climate response to black carbon and other short-lived
climate forcings***

Black carbon is a light-absorbing aerosol species that is the product of incomplete combustion. Interest in black carbon has arisen because it is a short-lived climate forcing agent that warms the climate system, indicating some (if limited) potential to mitigate near-term climate change through targeted, cost-effective actions that would also benefit air quality. Here, I explore some of the mechanisms through which black carbon and other co-emitted species influence Arctic climate, including through snow darkening, atmospheric heating at different altitudes, and altered poleward heat flux. Modeling studies from a recent report by the Arctic Monitoring and Assessment Programme (AMAP) will also be highlighted.