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# Assessment of secondary sources of Persistent Organic Pollutants in the Arctic

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Persistent organic pollutants (POPs) including highly toxic pesticides and other chemicals accumulate in living tissues and magnify in food chains. POPs are subject to long-range transport and hence represent a serious public health issue even in regions where their production is regulated.
Rational control strategies require an understanding of the overall relationship between environmental emissions of contaminants and environmental / human exposure.
In this study, we assess the relationships between environmental emissions and potential human exposure of organic contaminants with emphasis on long-range atmospheric transport. We investigate whether atmospheric levels of POPs measured at Zeppelin observatory in Svalbard since the early '90s are controlled by primary or secondary emissions. We present statistical indications that the measurements are affected by secondary ocean emissions and discuss the applicability of different inverse modeling approaches.