

Scientists reveal the transportation mechanism of atmospheric microplastics

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The common definition of microplastics is a plastic particle 100 nm to 5 mm in size. As a kind of atmospheric pollutant and particulate, microplastics have recently been detected in the atmosphere of urban,

suburban, and even remote areas far away from source regions of microplastics, suggesting the potential long-distance atmospheric transport for microplastics.

However, there still exist questions regarding the occurrence, fate, transport, and effect of atmospheric microplastics. Therefore, it is necessary to collate and compare current research findings, to determine the current state of knowledge and to compare atmospheric microplastic characteristics with microplastics from other environments.

Recently, a research group led by Prof. KANG Shichang from Northwest Institute of Eco-Environment and Resources of the Chinese Academy of Sciences, together with their colleagues from universities at home and abroad, reviewed the current status of knowledge on atmospheric microplastics and the methods for sample collection, analysis and detection.

Scientists reviewed and compared the methods used in the previous studies and provided recommendations for atmospheric microplastic sampling and measurement.

Besides, scientists summarized the findings related to atmospheric [microplastic](#) characteristics, including abundance, size, shapes, colors, and polymer types.

Furthermore, scientists also indicated that the potential impact of atmospheric microplastics on [transport](#) and deposition to [remote areas](#) and humans via food webs was as an emerging global concern.

This study has been published on the *Earth-Science Reviews* in an article titled "Atmospheric microplastics: A review on current status and perspectives."

More information: Yulan Zhang et al. Atmospheric microplastics: A review on current status and perspectives, *Earth-Science Reviews* (2020). DOI: [10.1016/j.earscirev.2020.103118](https://doi.org/10.1016/j.earscirev.2020.103118)

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