

# Profiles of Particulate Aerosols During the Invasion of Regional Pollutants Over Mid-Hills of Central Nepal Himalaya

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Vertical profiles of particulate aerosols and meteorological fields were obtained before, during, and after the invasion of regional pollutants over the mid-hill Trishuli and Sunkoshi River valleys that encroach deep into the Central Nepal Himalayas. Particulate aerosols and met-sensors integrated unmanned aerial vehicle was deployed for the purpose. Probing up to 500 m above the ground, more than 350 such vertical profiles were obtained continuously at 45 minutes intervals from 23 March to 6 April 2022. During the period, the Kathmandu Valley, lying in between the two valleys, witnessed an air pollution episode. In this paper, we will present the observed meteorological and particulate profiles over the valleys and discuss the transport and source reconstructions of regionally invaded particulates over the mid-hills of the Central Nepal Himalayan region.

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## Promotional text

Adds understanding of regional aerosol transport over mid-hills of Nepal Himalaya.

## Oral preference format

in-person

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