# Layered structure of Aerosol Distributions caused by Continental and Marine Air Masses : Observation at Gosan, Jeju Island, Kerea in Spring 2001

Poster presentation

# Layered structure of Aerosol Distributions caused by Continental and Marine Air Masses : Observation at Gosan, Jeju Island, Korea in Spring 2001

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## Abstract

In order to identify the sources and pathway of the air mass reaching to Gosan (33°17′N, 126°10′E), Jeju island, Korea in spring which has been suggested as the season with strong westerly in northeast Asia, an air mass backward trajectory analysis was performed, using the National Oceanic and Atmospheric Administration Hybrid Single-Particle Lagrangian-Integrated Trajectory (HYSPLIT-4), in March and April, 2001. The analytical result of the air mass trajectories suggested that the effect of marine air mass become noticeable as time goes, especially lower than 4km. The frequency of the marine air mass appearance has increased an average of 2.8 times in April compared with March, and the frequency of the continental air mass appearance an average of 0.6 times at lower than 4km. Air quality was strongly controlled by both continental and marine air masses on the coast areas of the Asian continent, and LIDAR returns obtained at Gosan, Jeju island confirmed this suggestion.