Abstract Details

<u>AOGS 1st Annual Meeting</u> > <u>Ocean and Atmospheres</u> > AN OVERVIEW OF JAPAN-SINO JOI PROJECT ADEC @AEOLIAN DUST EXPERIMENT ON CLIMATE IMPACT- >

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 - Title: AN OVERVIEW OF JAPAN-SINO JOINT PROJECT ADEC @AEOLIAN DU EXPERIMENT ON CLIMATE IMPACT-

Abstract:

From April 2000, Japan-Sino joint project ADEC (Aeolian Dust Experi on Climate impact) has been conducted in order to understand the a ϵ dust impact on climate via radiative forcing. The goal of this project is evaluate the global dust supply to the atmosphere and its radiative fc direct effect. For this purpose, we have made: 1) in situ observations Taklimakan Desert and Dunhuang in China in order to monitor the ou processes, 2) network observations from China to Japan, ranging fror 140 East, for understanding spatial and size distributions, chemical, a optical properties of dust particles, and 3) numerical simulation by G(model for evaluation of dust impact on the global climate over the pa years. This was planned as five-years project and two intensive obser IOP-1, April 12-25 2002, and IOP-2, March 15-26 2003, were put into practice so far. Two IOPs were made at 6 sites in China (Qira, Aksu, Dunhuang, Shapotou, Beijing, and Qingdao) and 4 sites in Japan (Nal Fukuoka, Nagoya, and Tsukuba), respectively. During the IOPs, we have made 1) precise measurements of saltation process with monitoring (meteorological, 2) Lidar observations from outbreak region to Japan, Radiometer and dust sampler network observation at above 10 sites, long-term calculation of dust distribution and evaluation of radiative f by aeolian dust using a GCM dust model developed at MRI/Japan. In t presentation, a brief summary of the two IOPs and preliminary result: 2004 spring field campaign will be shown.

Presentation Mode:

Keywords: Aeolian dust, radiative forcing, Yellow sand, dust outbreak, saltation, observation, mineral dust, GCM dust model

Status: Reviewed.

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