Abstract Details

<u>AOGS 1st Annual Meeting</u> > <u>Ocean and Atmospheres</u> > (OA3) The characteristics of the Micro-Meteorology in the Surface Layer Over Hunshandake Desert Area in Duolun >

Corresponding Author :	Ms. Yan Peng (<u>ypeng@pku.edu.cn</u>)
Organization:	Department of Environmental Sciences, College of Environmental Sciences, Peking University
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Title:	(OA3) The characteristics of the Micro-Meteorology in the Surface Layer Over Hunshandake Desert Area in Duolun
Abstract:	A dust storm monitoring station was set up at Duolun, Inner Mongolia Province, under the collaborated research project between Korea and China. The data include (1) the wind speed profiles of surface layer obtained from four levels at the height of 2, 4, 16 and 20 m above the ground (AP301, Korea); (2) the temperature and humidity profiles were measured from four levels at 2, 4, 8 and 16 m (HMP45C, Vaisala); (3) the radiation system include net radiation, solar radiation and reflect radiation (LI200X and NR- Lite, Kipp & Zonen); (4) soil temperature (PT100) and soil moisture (CS616) were measured at depths 5, 20 and 50cm under ground; (5) one level soil heat flux (HFP-01SC), precipitation and air pressure (CS105). The data were recorded using data loggers made by Campbell Co. automatically. The signals were sampled at a rate of 10 minutes, and averaged over 30 minutes were used in this paper. Based on the data of meteorological elements in the surface layer that was obtained at duolun site, the characteristic of the monthly variation and the profiles of the wind speed, temperature and humidity from August 2003 to April 2004 have been investigated. The result was shown that the comparison with the temperature and wind speed of the corresponding time in 2001 and 2002 obtained from the meteorological station of Duolun and IOP data. Moreover the characteristics of the surface atmospheric variables and energy budget were analyzed during several dust storms events.
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Co-Authors

No.	Title	First Name	Family Name	Organization
1	Dr.	Hongsheng	Zhang	Department of Atmospheric Sciences, Peking University, Key Laboratory of the Rain Storm, Drought and Waterlog of Ministry of Education, China
2	Dr.	Youngsin	Chun	Applied Meteorology Research Lab., Meteorological Research Institute, Korea Meteorological Administration, Korea
3	Dr.	Mingxu	Zhao	The Grassland Research Station of Duolun, Inner-Mongolia Province, China
4	Dr.	Shijie	Zhao	The Grassland Research Station of Duolun, Inner-Mongolia Province, China
5	Prof.	Soon-Ung	Park	School of Earth and Environmental Sciences, Seoul National University, Korea
6	Dr.	Hongwei	Zhang	The Grassland Research Station of Duolun, Inner-Mongolia Province, China