A Big Earth Data Platform for Three Poles

**Aeolian observation data in the Ulanbh Desert and in the Kubuqi desert (2011-2012)**

1、Description

I. overview
The data set includes wind and sand activity data of Ulanbuh Desert and Kubuqi Desert along the upper Yellow River from April to May 2011 and April 2012, mainly including wind speed profile, surface roughness, wind-sand flow structure, sand transport rate data under different vegetation coverage and different parts of sand dunes.
II. Data Processing Instructions
The wind speed and direction are observed by 014A wind speed sensor 024A wind direction sensor and CR200 data acquisition instrument produced by MetOne company, and the sediment transport amount is observed by stepped sediment collection instrument.
III. Description of Data Content
The data are stored in EXCEL table, mainly including wind speed profile, surface roughness, wind-sand flow structure and sand transport rate data under different vegetation coverage.
IV. Data Usage Instructions
This paper evaluates the sandstorm hazards along the Yellow River, estimates the amount of sandstorm entering the Yellow River in the upper reaches of the Yellow River, and provides data support for the establishment of an early warning system for sandstorm hazards in the region.

2、Keywords

Theme：Winds,Wind direction,wind speed
Discipline：Atmosphere
Places：Ulan Buh Desert, Kubuqi Desert
Time：2011-2012

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：2010.0MB

4.Data format：excel

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：41.0 | - |
| west：106.5 | - | east：110.0 |
| - | south：40.0 | - |

5、Time frame:2011-05-03 02:04:00+00:00--2012-05-06 02:04:00+00:00

6、Reference method

References to data:

XUE Xian, DU Heqiang. Aeolian observation data in the Ulanbh Desert and in the Kubuqi desert (2011-2012). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2705852015

References to articles:

7、Supporting project information

the National Basic Research Program of China

8、Data resource provider

name: XUE Xian
unit:
email: xianxue@lzb.ac.cn

name: DU Heqiang
unit:
email: dilikexue119@163.com