



Cold and Arid Regions Science Data Center

HiWATER: Observation Dataset of Spectral Reflectance in  
the lower reaches of the Heihe River Basin

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# HiWATER: Observation Dataset of Spectral Reflectance in the lower reaches of the Heihe River Basin

## Abstract

Spectral reflectance observation was carried out for the typical underlying surface and black and white cloth in the low reaches of the Heihe River Basin during the aviation flight experiment in 2014, which will provide basic data set for the preprocessing of the flight data.

### 1. Observation Instrument

PRS-3500 portable spectrometer, with the spectral range is 350-2500 nm, and the reference board.

### 2. Samples and observation methods

The samples including the black and white cloth, the cantaloupe, the *Tamarix chinensis*, the *Populus euphratica*, the reeds, the weeds, the *Karelinia caspica*, the sandy soil, the gobi, the *Sophora alopecuroides* and so on.

Reflectance of the reference board was measure vertically for once and then objective reflectance were measured for five times for each observation objective.

### 3. Observation time

The typical underlying surface vegetation observation was on days of 24 July, 27 July, 31 July, 2014. The black and white cloth simultaneous observation was on 29 July, 2014.

### 4. Data storage

The observation recorded data were stored in excel and the original spectral data were stored in \*.sed files derived from the spectrometer, which can be opened by the matched software of the spectrometer or by a txt.

## Keywords

Theme: Reflectance, ground object spectrum, synchronous observation,

Place: the natural oasis eco-hydrology experimental area, Heihe River Basin,

Temporal: 2014, 2014-07-24 to 2014-07-31,

Discipline: remote sensing, Geographic science,

Statrum:

## ISO 19115 Category

Category: geoscientificInformation

## Detail

Project: +proj=longlat +datum=WGS84 +no\_defs

Data Volume(MB): 423

Data Format: \*.sed

## Position and Thumbnail



## Temporal Range

Start: 2014-07-24

End: 2014-07-31

## Citation

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## Recommended Publications

DOI

10.3972/hiwater.270.2015.db

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1. National Natural Science Foundation of China : (No: 91125004)

## Limitation

1. The dataset is generated from the "Heihe Watershed Allied Telemetry Experimental Research (HiWATER)". User must have a clear statement in the article of the original data source and cite the dataset and papers in the Citation section.

## Online Resources

1. Cold and Arid Regions Science Data Center at Lanzhou (CARD) [www.heihedata.org](http://www.heihedata.org)

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