



## Cold and Arid Regions Science Data Center

HiWATER: Airborne CCD image data production in the middle reaches of the Heihe River Basin (3 August, 2012)

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# HiWATER: Airborne CCD image data production in the middle reaches of the Heihe River Basin (3 August, 2012)

## Abstract

On 3 August 2012, Wide-angle Infrared Dual-mode line/area Array Scanner (WIDAS) carried by the Harbin Y-12 aircraft was used in a visible near Infrared thermal Dual-mode airborne remote sensing experiment, which is located in the artificial oasis eco-hydrology experimental area (5×5 km). WIDAS includes a CCD camera with a spatial resolution of 0.08 m, a visible near Infrared multispectral camera with five bands scanner (an maximum observation angle 48° and spatial resolution 0.4 m), and a thermal image camera with a spatial resolution of 2 m.

The CCD camera data are recorded in DN values processed by mosaic and orthorectification.

## Keywords

Theme: multi-angle observation, CCD, WIDAS, airborne remote sensing,

Place: Heihe River Basin, the artificial oasis experimental area,

Temporal: 2012, 2012-08-03,

Discipline: remote sensing,

Statrum:

## ISO 19115 Category

Category: geoscientificInformation

## Detail

Project: WGS84 UTM

Data Volume(MB): 88371.2

Data Format: \*.tif

## Position and Thumbnail



## Temporal Range

Start: 2012-08-03

End:

## Citation

1. Li X, Liu SM, Xiao Q, Ma MG, Jin R, Che T, Wang WZ, Hu XL, Xu ZW, Wen JG, Wang LX. A multiscale dataset for understanding complex eco-hydrological processes in a heterogeneous oasis system. *Scientific Data*, 2017, 4: 170083. doi:10.1038/sdata.2017.83.

## Recommended Publications

1. Liu Q, Xiao Q, Liu ZG, et al. Image Processing Method of Airborne WiDAS Sensor in WATER Campaign. Remote sensing technology and application, 2010, 25(6):799-804.
2. Liu Q, Yan CY, Xiao Q, Yan GJ, Fang L. Separating vegetation and soil temperature using airborne multiangular remote sensing image data. International Journal of Applied Earth Observation and Geoinformation, 2012, 17: 66-75, doi:10.1016/j.jag.2011.10.003.

## DOI

10.3972/hiwater.162.2014.db

## Funding

1. National Natural Science Foundation of China : (No: 91125003)

## 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. <ftp://ftp2.westgis.ac.cn>
2. <http://card.westgis.ac.cn>

## Contacts

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