A Big Earth Data Platform for Three Poles

**WATER: Dataset of airborne WiDAS mission in the Zhangye-Yingke-Huazhaizi flight zone on June 1, 2008**

1、Description

The dataset of airborne WiDAS mission was obtained in the Zhangye-Yingke-Huazhaizi flight zone on Jun. 1, 2008.
 Data available for general users include Level-2C data (after geometric, radiometric and atmospheric corrections). Level-1B browse image (after intra-band matching) and Level-2B browse image (intra-band after registration). The raw data, Level-1A, and data processing parameters were filed; applications would be evaluated prior to access. Data processing started Aug. 2008 and ended Apr. 2009, and in Nov. 2009, CCD data were reprocessed to adjust radiometric calibration.
 The raw data set included 12 flight routs, some of which were repeated. There was discrepancy about 1.4s between exposure time of CCD images at 650nm/750nm and that of 550nm/700nm. Images in different bands has been matched during pre-processing. However, in areas with large elevation changes, intra-bands match error still existed.
 The flying time of each route was as follows:

{|
! id
! flight
! relative height
! starttime
! endtime
! data size
! data state
! data quality
! ground targets
|-
| 1 || 3#15 || 1500m || 13:35:46 || 13:39:37 || 59 || incomplete || incomplete
|-
| 2 || 3#13 || 1500m || 13:43:21 || 13:51:33 || 75 || incomplete || incomplete
|-
| 3 || 3#11 || 1500m || 13:54:41 || 14:03:17 || 41 || incomplete || incomplete || the resort, Yingke oasis maize field, and wheat field
|-
| 4 || 3#11a || 1500m || 14:07:23 || 14:14:46 || 111 || incomplete || incomplete || the resort, Yingke oasis maize field, and wheat field
|-
| 5 || 3#9 || 1500m || 14:18:21 || 14:26:17 || 119 || processed;complete || good || wetland park, Zhangye city, Yingke oasis maize field, and wheat field, Huazhaizi desert maize plot
|-
| 6 || 3#7 || 1500m || 14:31:01 || 14:38:25 || 112 || processed;complete || good
|-
| 7 || 3#5 || 1500m || 14:42:05 || 14:50:01 || 120 || incomplete || incomplete || Huazhaizi desert plot 1
|-
| 8 || 3#3 || 1500m || 14:53:49 || 15:02:41 || 134 || processed;complete || good || Huazhaizi desert plot 2
|-
| 9 || 3#1 || 1500m || 15:07:01 || 15:14:41 || 116 || processed;complete ||
good
|-
| 10 || 3#11b || 1500m || 15:20:05 || 15:26:37 || 99 || processed;complete || good || the resort, Yingke oasis maize field, and wheat field
|-
| 11 || 3#13a || 1500m || 15:30:45 || 15:39:01 || 125 || processed;complete || good
|-
| 12 || 3#5a || 1500m || 15:42:48 || 15:50:05 || 111 || processed;complete || good || Huazhaizi desert plot 1
|}

2、Keywords

Theme：Thermal imager,Remote Sensing Technology,Wide-angle infrared dual-mode line/Area array scanner,CCD
Discipline：Remote Sensing Technology
Places：Heihe River Basin, Arid Region Hydrology in the Middle Reaches, Zhangye City Foci Experimental Area,
Time：

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：35783.4MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.0 | - |
| west：100.2 | - | east：100.5 |
| - | south：38.5 | - |

5、Time frame:2008-06-15 13:17:00+00:00--2008-06-15 16:14:00+00:00

6、Reference method

References to data:

WATER: Dataset of airborne WiDAS mission in the Zhangye-Yingke-Huazhaizi flight zone on June 1, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0219.db2010

References to articles:

方莉, 刘强, 肖青, 柳钦火, 刘志刚. 黑河试验中机载红外广角双模式成像仪的设计及实现. 地球科学进展, 2009, 24(7): 696-704.

刘强, 肖青, 刘志刚, 方莉, 彭菁菁, 李波. 黑河综合遥感联合试验中机载WIDAS数据的预处理方法. 遥感技术与应用, 2010, 25(6): 797-804.

7、Supporting project information

The CAS (Chinese Academy of Sciences) Action Plan for West Development Project
National Program on Key Basic Research Project (973 Program

8、Data resource provider