A Big Earth Data Platform for Three Poles

**WATER: Dataset of airborne WiDAS mission in the A'rou flight zone on Jul. 7, 2008**

1、Description

The dataset of airborne WiDAS mission was obtained in the A'rou flight zone on Jul. 7, 2008. Due to cloud/cloud shadow influence, atmospheric correction could not be performed, and geometric registration was performed manually instead of automatic matching. Level-2B (after radiometric and manual geometric corrections) and mosaic images were available for users. For the visible near infrared band the resolution is 1.25m, Radiance was recorded (W/ (sr•m^2•nm);DN=Radiance\*100000); for TIR band, the brightness temperature was recorded (℃; DN=Brightness\_Temperature\*100) .  
 The flying time of each route was as follows:  
  
{|  
! id  
! flight  
! relative height  
! starttime  
! endtime  
! data size  
! data state  
! data quality  
! ground targets   
|-  
| 1 || 6#1 || 1500m || 13:43:18 || 13:46:26 || 48 || incomplete || incomplete  
|-  
| 2 || 6#3 || 1500m || 13:52:26 || 13:55:18 || 43 || incomplete || incomplete  
|-  
| 3 || 6#5 || 1500m || 13:59:30 || 14:02:38 || 48 || incomplete || incomplete || A’rou freeze/thaw observation station  
|-  
| 4 || 6#7 || 1500m || 14:08:02 || 14:11:02 || 46 || incomplete || incomplete  
|}

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, A'rou flight zone  
Time：

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：530.2MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.15 | - |
| west：100.15 | - | east：100.65 |
| - | south：38.0 | - |

5、Time frame:2008-07-16 18:43:00+00:00--2008-07-16 23:45:00+00:00

6、Reference method

References to data:

MA Mingguo, WANG Heshun. WATER: Dataset of airborne WiDAS mission in the A'rou flight zone on Jul. 7, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0216.db2012

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

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