A Big Earth Data Platform for Three Poles

**WATER: Dataset of airborne LiDAR mission in the Dayekou watershed flight zone on Jun. 23, 2008**

1、Description

The dataset of airborne LiDAR mission in the Dayekou watershed flight zone on Jun. 23, 2008 included peak pulse data (\*.LAS), full waveform data (.lgc), CCD photos, DEM, DSM and DOM. The flight routes were as follows:

{|
! flight route
! startpoint lat
! startpoint lon
! endpoint lat
! endpoint lon
! altitude (m)
! length (km)
! photos
|-
| 8 || 38°32′52.25″ || 100°12′35.26″ || 38°30′25.65″ || 100°18′31.76″ || 3650 || 9.7 || 34
|-
| 9 || 38°32′57.99″ || 100°12′39.09″ || 38°30′31.59″ || 100°18′35.14″ || 3650 || 9.7 || 34
|-
| 10 || 38°33′03.74″ || 100°12′42.91″ || 38°30′40.25″ || 100°18′31.88″ || 3650 || 9.5 || 34
|-
| 11 || 38°33′12.80″ || 100°12′38.68″ || 38°30′46.10″ || 100°18′35.47″ || 3650 || 9.8 || 35
|-
| 12 || 38°33′18.55″ || 100°12′42.51″ || 38°30′54.86″ || 100°18′31.99″ || 3650 || 9.6 || 35
|-
| 13 || 38°33′24.30″ || 100°12′46.34″ || 38°31′00.95″ || 100°18′34.98″ || 3650 || 9.5 || 36
|-
| 14 || 38°33′30.05″ || 100°12′50.16″ || 38°31′09.54″ || 100°18′31.92″ || 3650 || 9.3 || 35
|-
| 15 || 38°33′35.80″ || 100°12′53.99″ || 38°31′15.47″ || 100°18′35.29″ || 3750 || 9.3 || 35
|-
| 16 || 38°33′41.55″ || 100°12′57.82″ || 38°31′21.66″ || 100°18′38.05″ || 3750 || 9.3 || 35
|-
| 17 || 38°33′47.30″ || 100°13′01.65″ || 38°31′27.25″ || 100°18′42.27″ || 3750 || 9.3 || 35
|-
| 19 || 38°34′02.11″ || 100°13′01.25″ || 38°31′45.61″ || 100°18′33.27″ || 3750 || 9.1 || 45
|-
| 20 || 38°34′07.86″ || 100°13′05.07″ || 38°31′51.54″ || 100°18′36.64″ || 3750 || 9.1 || 45
|-
| 21 || 38°34′13.61″ || 100°13′08.90″ || 38°32′00.12″ || 100°18′33.60″ || 3750 || 8.9 || 45
|-
| 22 || 38°34′19.36″ || 100°13′12.73″ || 38°32′05.45″ || 100°18′38.44″ || 3750 || 8.9 || 45
|-
| 23 || 38°34′25.10″ || 100°13′16.56″ || 38°32′14.72″ || 100°18′33.72″ || 3750 || 8.7 || 45
|-
| 24 || 38°34′30.85″ || 100°13′20.39″ || 38°32′20.48″ || 100°18′37.52″ || 3750 || 8.7 || 45
|-
| 25 || 38°34′36.60″ || 100°13′24.22″ || 38°32′26.24″ || 100°18′41.32″ || 3750 || 8.7 || 45
|-
| 26 || 38°34′45.66″ || 100°13′19.98″ || 38°32′31.98″ || 100°18′45.15″ || 3750 || 8.9 || 45
|}

2、Keywords

Theme：Airborne laser radar,Remote Sensing Technology,Airborne remote sensing,CCD
Discipline：Remote Sensing Technology
Places：Heihe River Basin, Dayekou watershed foci experimental areas, Forest and Hydrology Experimental Areas
Time：

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：14999.8MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.75 | - |
| west：100.15 | - | east：100.5 |
| - | south：38.45 | - |

5、Time frame:2008-07-07 10:37:00+00:00--2008-07-07 15:45:00+00:00

6、Reference method

References to data:

MA Mingguo. WATER: Dataset of airborne LiDAR mission in the Dayekou watershed flight zone on Jun. 23, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0222.db2012

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刘清旺. 机载激光雷达森林参数估测方法研究. 北京: 中国林业科学研究院, 2009.

Tian, X., Li, Z.Y., van der Tol C, Su, Z., Li, X., He, Q.S., Bao, Y.F., Chen, E.X., & Li, L.H. (2011). Estimating zero-plane displacement height and aerodynamic roughness length using synthesis of LiDAR and SPOT-5 data. Remote Sensing of Environment, 115(9): 2330-2341. 10.1016/j.rse.2011.04.033.

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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