

Fusion of Airborne and Terrestrial Sensed Data for Real-time Monitoring of Traffic Networks Dataset

Dataset available at: <https://doi.org/10.7910/DVN/QYJXHI>

(This dataset supports report **Fusion of Airborne and Terrestrial Sensed Data for Real-time Monitoring of Traffic Networks**)

This U.S. Department of Transportation-funded dataset is preserved by the Pacific Northwest Transportation Consortium (PacTrans) in the digital repository Harvard Dataverse (<https://dataverse.harvard.edu>), and is available at <https://doi.org/10.7910/DVN/QYJXHI>

The related final report **Fusion of Airborne and Terrestrial Sensed Data for Real-time Monitoring of Traffic Networks**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/60062>.

Metadata from the Harvard Dataverse Repository record:

Dataset Persistent ID: doi:10.7910/DVN/QYJXHI

Publication Date: 2021-04-08

Title: Using GNSS to Evaluate Threats to Mobility of Resources and People on Coastal Roads in USDOT Region 10

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Description: The data is organized in three data sets. Data set 1: includes the LIDAR point cloud data in LAS format, data set 2: includes the LIDAR point cloud data in ASCII data format , data set 3: include the trajectory data organized in CSV file format.

Subject: Engineering; Computer and Information Science

Keyword: Object Detection, LiDAR, Unmanned Aircraft Systems, Real-time Transportation Applications

Related Publication: Watanabe, Rafael Akio Alves, Sameh Sorour, Mohamed Hefeida, and Ahmed Abdel-Rahim. "Towards Real-Time Traffic Monitoring using Airborne LiDAR." In 2019 IEEE Wireless Communications and Networking Conference (WCNC), pp. 1-6. IEEE, 2019.

Notes: <http://hdl.handle.net/1773/46922>

Depositor: Yarbrough, Christina

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Abdel-Rahim, Ahmed; Sorour, Sameh, 2021, "Fusion of Airborne and Terrestrial Sensed Data for Real-time Monitoring of Traffic Networks", <https://doi.org/10.7910/DVN/QYJXHI>, Harvard Dataverse, V1

Dataset description:

This dataset contains 1 file collection, described below.

Fusion of Airborne and Terrestrial Sensed Data for Real Time Monitoring_Data.zip

- Flight_Path_1_ASCII.csv
- Flight_Path_1_utm.las
- Flight_Path_2_ASCII.csv
- Flight_Path_2_utm.las
- Flight_Path_3_ASCII.csv
- Flight_Path_3_utm.las
- Trajectory Data for Data Fusion Project.csv

File Type Descriptions:

- The .csv, Comma Separated Value, file is a simple format that is designed for a database table and supported by many applications. The .csv file is often used for moving tabular data between two different computer programs, due to its open format. The most common software used to open .csv files are Microsoft Excel and RecordEditor, (for more information on .csv files and software, please visit <https://www.file-extensions.org/csv-file-extension>).
- The .las file type is associated with the LIDAR data exchange file format (for more information on .las files and software, please visit <https://www.file-extensions.org/las-file-extension-lidar-data-exchange>).

National Transportation Library (NTL) Curation Note:

As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (<https://doi.org/10.21949/1503647>) Section 7.4.2 Data, the NTL staff has performed *NO* additional curation actions on this dataset. NTL staff last accessed this dataset at <https://doi.org/10.7910/DVN/QYJXHI> on 2022-05-03 If, in the future, you have trouble accessing this dataset at the host repository, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.