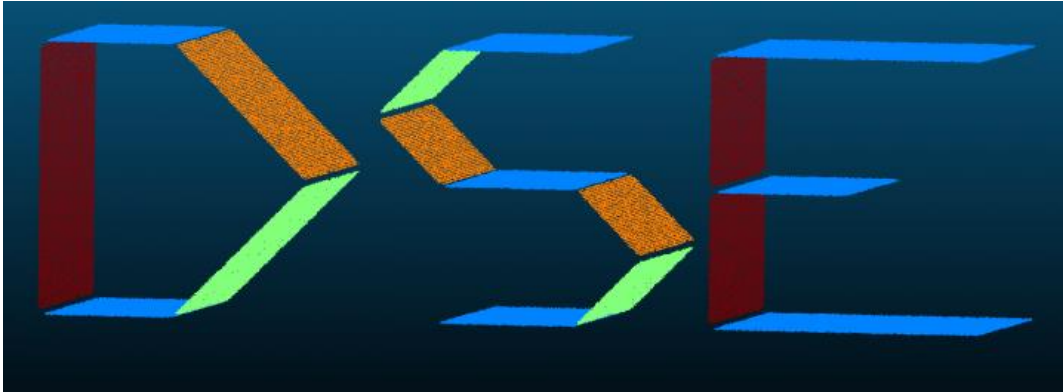


Discontinuity Set Extractor software



Description

- Discontinuity Set Extractor (DSE) is programmed by Adrián Riquelme for testing part of his PdD studies. Its aim is to extract discontinuity sets from a rock mass. The input data is a 3D point cloud, which can be acquired by means of a 3D laser scanner (LiDAR or TLS), digital photogrammetry techniques (such as SfM) or synthetic data. It applies [a proposed methodology](#) to semi-automatically identify points members of an unorganised 3D point cloud that are arranged in 3D space by planes.
- Discontinuity Set Extractor (DSE) is an open source software programmed in MATLAB. It can currently run on Windows, MAC or Linux.
- You can download the source files to execute them from its [Github website](#).
- You are free to use them for any purposes, including commercially or for education. Please remember to cite this software using the provided reference at the end of this website. This freedom is being defined by the [GNU General Public License \(GPL\)](#).
- Please, feel free to make questions, report bugs or make suggestions using the [Github Issues interface](#).
- I am pleased to get users feedback, so don't hesitate to send me an email.

Download

- You can download the source code from the [Github website](#). It can be executed running MATLAB under Windows or Linux.
- To start running the program, download all the files to your computer and execute the file DSE_v201.m under your MATLAB environment.

How to use the program

- This program is based on the published paper [Riquelme, A. J., Abellán, A., Tomás, R., & Jaboyedoff, M. \(2014\). A new approach for semi-automatic rock mass joints recognition from 3D point clouds. Computers & Geosciences, 68, 38-52.](#) As it is a semi-automatic method, the user can control the different steps in the discontinuity set extraction. In addition, it includes a tool to calculate the normal spacing using the classified point cloud. Further information will be published soon.
- Some videos using the DSE software can be in the [method's page](#).

Frequently Asked Questions

- Please visit the [Github Issues section](#) and feel free to leave your comments.