Course: TERRA Summer School – Module II – Remote Rock Mass Characterization

Exercise: Remote Rock Mass Mapping Exercise

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Plotting the results on a steronet

Fracture orientation measurements from CloudCompare's Compass plugin can be exported as .csv and then imported into Stereonet software for plotting the stereoplots.

DIPS Instructions (from lecture)

DIPS is a licensed software which analyzes orientation-based geological data. You must use the computers in Undergraduate center, Aalto University. Alternatively, you could ask for a free trial from: https://www.rocscience.com/software/dips

1. Open DIPS software and click on a new file.
2. It will open up an orientation table with dip and dip direction. Copy the dip and dip direction from the excel exported file from CloudCompare. Paste them in the table.
3. This will already create a stereoplot in another window.
4. Click on the contour preset on the top tool bar of the screen.
5. That will create a contour density plot for the orientation data.

Stereonet (free software, OpenLearning)

Stereonet is a free software for plotting and analyzing fracture orientation data.

1. Download and install the Stereonet software (link to software website)
2. Import the measurements exported from CloudCompare (File -> Import file)
3. The data are planes.
4. Dip dir, dip.
5. First row with data = 2
6. Assign columns: dip direction = 4 and dip = 3
7. In the top right table, change format to DD
8. Calculate poles (Calculations -> Poles)
9. Create a contour plot (Plot -> Contour plot -> All data sets)
10. Adjust the contour plot settings (View -> Inspector -> Contours), Smoothed = on and show legend = on
11. Export the plots (File -> Save Plot as SVG)