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Combine 2D electrical resistivity imaging and TLs survey for modification of Rock Quality Designation system.



## 1 Introduction:

The key objective Rock mass classification techniques are to define discontinuities such as orientation, spacing fracture density to determined rock mass strength. The traditional of rock mass characterization that is borehole logging is considered expensive, time consuming. Therefore, there is increasing interest in application of indirect non-destructive techniques for slope stability assessment due to several reasons such as light weigh easy portability, efficient, technological advancement data collection and interpretation, non-destructive data gathering gives the subsurface information over larger area.

The commonly used non-destructive techniques for landslide investigation are Ground penetration radar (GPR), 2D electrical resistivity imaging (2D ERT), terrestrial laser scanning (TLS) and seismic refraction. However, this research work mainly emphasized to correlate the fracture density of the rock mass obtained by TLS with resistivity values obtain by 2D ERT by incorporating with RQD application.

## Methodology and expected outcomes

