

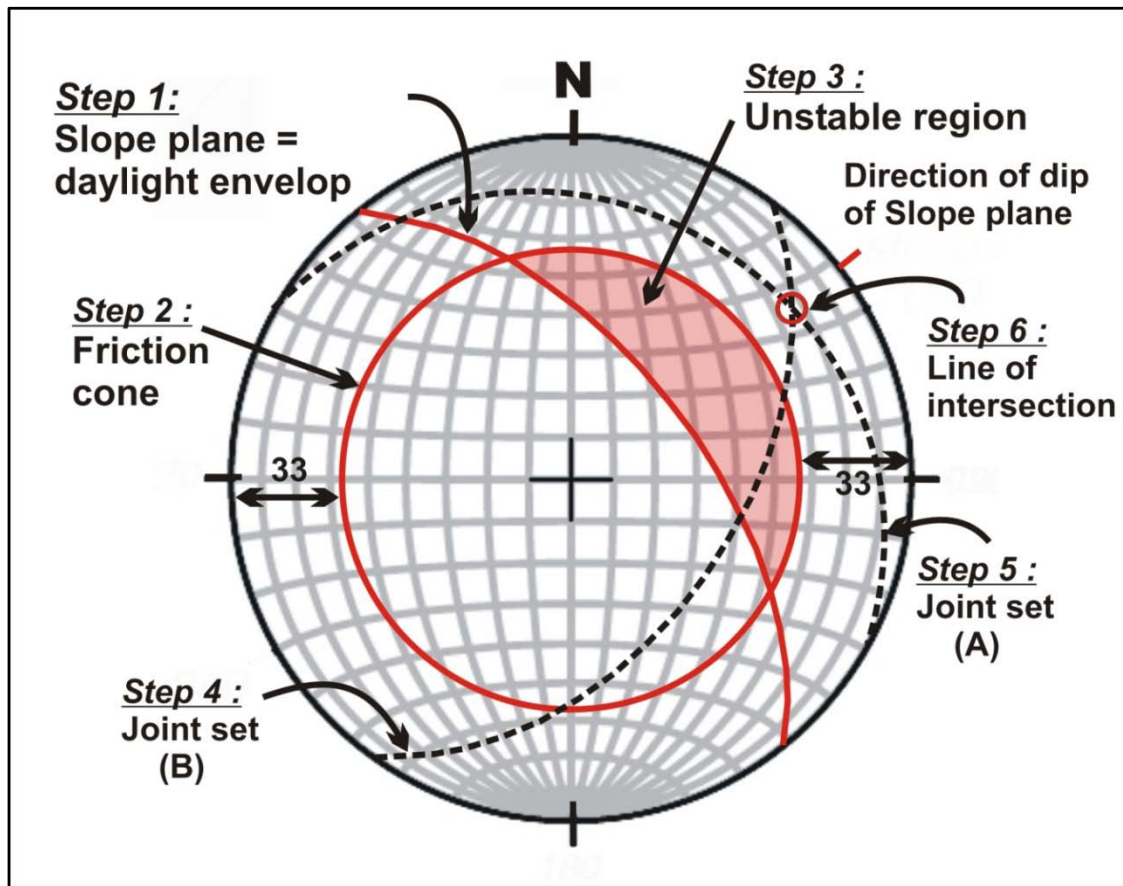
Example on wedge failure

A rock slope with an angle of slope 60° and sloping towards the direction 052° is intersected by two sets of joints (set A and set B)

Set (A) with orientation $120^\circ/20^\circ\text{NE}$ (i.e. dip = 50° , dip direction = 030°)

set (B) with orientation $036^\circ/50^\circ\text{SE}$ (i.e. dip = 50° , dip direction = 126°).

Assuming an angle of friction of 33° , discuss the possibility of wedge failure of the rock slope.



Answer:

The line of intersection of the two joint sets daylight the slope, and is plunging at an angle lower than the friction angle. Accordingly, there is no possibility for wedge failure.