PROPAGATION SAW TEST (PST) - 2008

- 30 cm cross slope and 100 cm upslope. If the weak layer is deeper than 100 cm, the length should be equal to the layer depth.
- Isolate the column at the front and one side by digging and on the remaining two sides by cord cut or saw cut. All walls should be vertical.
- Identify weak layer along column with aid of glove or brush, then drag the blunt edge of saw upslope along through the weak layer at 10-20 cm/s being careful to stay within layer until the fracture jumps ahead of the saw. Stop cutting and mark the spot in the layer where the fracture began to propagate ahead of the saw. Repeat the test if you suspect the saw left the weak layer.
- The propagating fracture will either reach the end of column (End), stop at a slab fracture (SF), or self-arrest within the layer (Arr).
- Record results as **PST x/y (Arr, SF or End) down z on yymmdd** where *x* is cut length, *y* is col. length, z and *yymmdd* are layer depth and ID.
- Propagation is predicted to be likely *only* when the fracture propagates to the end and less than half the column has been cut (Gauthier and others, 2008).

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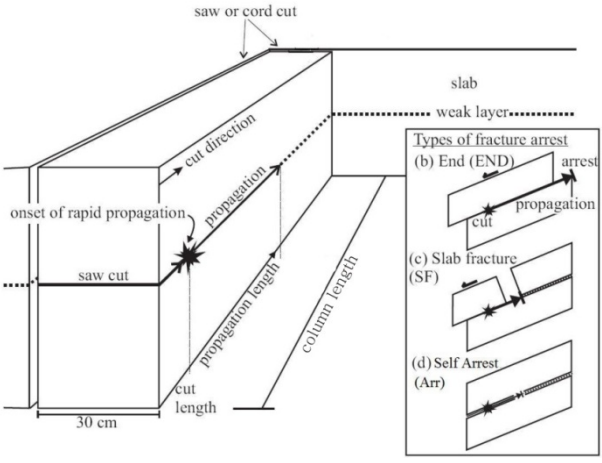

Fig. 1: PST column schematic with observable result types.

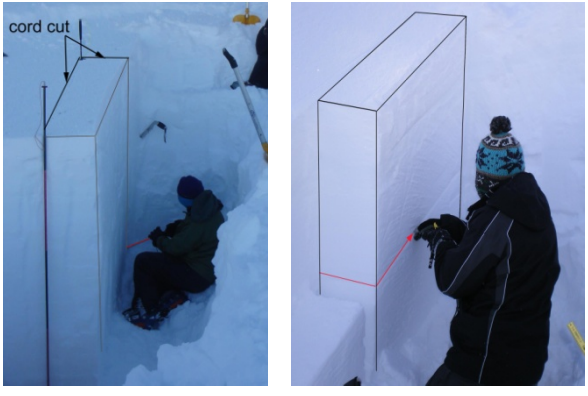

Fig. 2: Isolating a PST column (left) and saw-cutting upslope along the weak layer with the blunt edge (right).

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