APPENDIX 1. Glossary of Technical Terms

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Absolute age: The age of an event to which no correction factor is applied, e.g. the age of a scar represents the exact age of the event (debris impact) that caused the scarring.

Actual age: The estimated sample age of the avalanche event corrected with respect to the revegetation time. Actual age and estimated sample age may be the same if the estimated sample age was based on scars and reaction wood rather than trunk sections cut from revegetation.

Allochthonous: A deposit that is predominantly composed of material derived from external sources outside of its present area of deposition.

Anthropogenic: Refers to the direct or indirect result of human influence.

Autochthonous Refers to a deposit that is predominantly composed of material derived from sources proximal to its present area of deposition.

Catchment basin: Drainage basin.

Colluvium: A loose, heterogeneous mass of soil and/or rock debris deposited by rainwash, sheetwash and/or creep.

Compression wood: Reaction wood in conifers that occurs on the lower side of the tree, is denser than normal and has a characteristic dark coloration.

Dendrochronology: The use of tree rings to date events. In this study the events being dated are avalanches, a geomorphic process of mass wasting. As such dendrogeomorphology is the actual application of dendrochronology that is being undertaken in this study.

Diamicton: A nonlithified, nonsorted or poorly sorted, noncalcareous, terrigenous material that contains a wide range of particle sizes.

Early wood: Large, thin-walled cells formed during the early part of a tree's growth cycle.

Estimated sample age (ESA): The estimated age of an avalanche determined by considering the various "sample ages".

Felsenmeer: A thin accumulation of usually angular blocks (may be allochthonous or autochthonous) with no fine grain sizes in the upper part, over solid or weathered bedrock (Bates and Jackson, 1980). Angular blocks or rock fragments form through the forces exerted by monomolecular films of unfrozen water that spread along and propagate pre-existing cracks in rocks (Bloom, 1978). Freezing is thought to aid in the penetration of the thin films of unfrozen water into microscopic cracks.

Glaciotectonic features: Features attributed to glacial action that reflect overturning, inversion, folding and shearing.

Growth ring: An early wood - late wood couplet usually representing one year of growth.

Grus: The fragmental product of *in situ* granular disintegration (grain - grain crystal boundary fracture due to weathering) of granite and granitic rocks (Bates and Jackson, 1980). Hydrating grains of biotite fracture adjacent grains of quartz and feldspar (Crooke and Gillespie, 1986), resulting in disintegration of the rock.

Image Age: The time interval during which an avalanche occurred as indicated by airphotographs and orthophotographs.

Isovolumetric weathering: During weathering, elements are removed from or added to the weathering profile without dilation or compaction so that a unit volume of weathered rock can be considered to have evolved from an equivalent volume of fresh rock (Gardner *et al.*, 1978).

Late wood: Flattened, thick-walled cells formed during the latter part of a tree's annual growth cycle.

Original slope angle: Average angle of the valley wall (measured from the horizontal) prior to an avalanche event.

Paleoplain: An ancient degradational plain that is now buried beneath later deposits.

Peneplain: A surface of regional extent, low local relief, and low absolute altitude, produced by long-continued fluvial erosion.

Reaction wood: Nonsymmetric growth rings formed in response to tilting.

Residual slope angle: Average angle of the valley wall in the avalanche chute (measured from the horizontal).

Revegetation time (RT): The time in years between an avalanche event and the occurrence of new growth either along the sides of the avalanche chute or on debris at the base of the avalanche.

Sample age: The age of an individual wood sample, scar or reaction wood as it pertains to an avalanche event. Several samples at a given avalanche site may have different "sample ages".

Saprolite: A soft, earthy, clay-rich residual material formed by isovolumetric weathering. Mineral forms present in the nonweathered parent bedrock are usually preserved in saprolite as pseudomorphs of the original minerals; similarly, primary structural features are preserved.

Tension wood: Reaction wood in angiosperms that occurs on the upper side of the tilted tree.

Till: An unconsolidated diamicton deposited directly by ice underneath a glacier without subsequent significant reworking by meltwater. Till consists of a heterogeneous mixture of clay, silt, sand, gravel and boulders.

Unconformity: A substantial break or gap in the geological record where a rock unit is overlain by another that is not next in stratigraphic succession.