

***Interactive comment on “The role of cornice fall
avalanche sedimentation in the valley
Longyeardalen, Central Svalbard” by
M. Eckerstorfer et al.***

Anonymous Referee #2

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Interesting paper which does not meet completely the scope of THE CRYOSPHERE. It would be more appropriate to submit it to an international journal of Geomorphology, provided that:

1. the comparison of results with previous studies carefully takes into account the snow avalanche types (in order to make the comparison of sedimentation and rockwall retreat rates more valid);
2. the significance of the inferred rockwall retreat rates is more extensively discussed (cf. primary debris falls vs secondary debris reworking by avalanches);
3. some key references on the same topics are added and used, including:

C2834

Gardner, J., 1970. Geomorphic significance of avalanches in the Lake Louise District. *Arctic and Alpine Research*, 2 : 135-144.

Gardner, J., 1983. Accretion rates on some debris slopes in the Mount Rae area, Canadian Rocky Mountains. *Earth Surface Processes and Landforms*, 8 : 347- 355.

Gray, J.T., 1973. Geomorphic effects of avalanche and rockfalls on steep mountain slopes in Central Yukon Territory, p 107-117. In D. B. Fahey et R. D. Thompson, édit., *Research in Polar and Alpine Geomorphology Proceedings. 3rd Guelph Symposium on Geomorphology*, Norwich, 316 p.

Interactive comment on The Cryosphere Discuss., 6, 4999, 2012.