Hazard Levels Warning for Avalanche Danger on Dwellings Proposal

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Avalanches effecting or destroying dwellings are fortunately relatively rare. As such, when these events occur they are surprising and often devastating. To help mayors of the communes concerned make possible decisions regarding evacuations, 36 criteria pertaining to avalanche hazards for the protection of dwellings were recently identified and organized into six main groups. The determinants of danger are rather different than those concerning the skier, hiker or out-tracker. The source of the danger is distinguished by determining also the nature of the danger. Firstly, a hierarchical organization is proposed. A fast visualization of the target area allows the evaluation of the hazard level concerned. Examples are proposed for hazards that are either exceptional (period of return greater than 100 years), strong, or "moderate." The European avalanche scale of risk is not sufficient for these characterizations. A genuine technical preparation in the event of a possible intense degradation of the snow-weather conditions appears essential to the adequate management of a crisis avalanche impacting dwellings.