ABSTRACT: Since 1971, we use CLPA maps (geomorphic and registration plans of avalanche), as the main registration maps concerning the major threatened areas, especially the villages. Few years later (1978), in order to perform the land planning process in which we have to assess what the avalanche hazard level might be, appeared the first legal avalanche risk zoning maps (called PPR – Risk Prevention Plan). These two supports are not easily connected but significant progress in the methods appeared after 1999, the year an avalanche killed 13 persons in their home at Montroc (Chamonix). The presentation tries to display the main updates and improvements using several examples.

In the first part, the main evolutions of CLPA production process are described with a special focus put on the better coordination between forest rangers (in charge of a permanent avalanche survey) and avalanche mapping specialists. To improve this preventive action, an annual update distribution of digital files and via internet is set up now.

The second part details the main expert assessments to be used in the PPR mapping process: from the determination of potential hazard (considering the return period and the power of avalanche) to the representation by zones of different risk level. Corresponding to each zone, specific rules on housing and land planning process are applied.

Today the main perspectives are the adoption of crisis assessment plans to reduce the damaging consequences of avalanche and the identification of the most critical sites where efforts must be performed.

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