## A new system of rapidly installed avalanche barriers

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The winter of 2008-2009 will be recalled as an exceptional one. The small region of the Aosta Valley, situated in North–West Italy, and bordering on Switzerland and France, covers about 3,200 sq km. In an average season 215 avalanches are recorded in the region but during the winter of 2008-2009 there were 1274 events related to 866 avalanches; of these, 313 of them had never previously been recorded by the Regional Avalanche Register.

There was one event which will long be remembered by the community, among the many which involved built–up areas and the road network: the avalanche at Les Thoules in the territory of the municipality of Valsavarenche. The damage recorded was huge: 7 buildings were completely destroyed and another five were seriously damaged. Transit along the road running through the valley floor was obstructed for more than 350 meters. Fortunately there were no victims.

In order to ensure the safety of the remaining buildings and to consent the reconstruction of those that had been damaged, it was promptly decided to intervene by installing avalanche barriers. We immediately started the requisite planning surveys and, with the aim of reducing the risk as quickly as possible, we chose a system of individually- anchored snow blockers, the so-called 'umbrella' snow blockers.

In record time, only four months, more than 700 'single-anchorage structures" were put in place at 2,550 m a.s.l., covering a linear area of over 1,5 mi at Plan de la Tour.

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