



CLIMATE IN NORTHERN-CENTRAL ITALY IN WINTER 2016-17

By the ArCis workteam

The 2016-2017 winter season, though not exceptional like the previous winter in terms of positive thermal anomaly and scarce precipitation in central-northern Italy, confirmed the series of warm and dry winter seasons observed in the last five years, with a resulting impact on territory and population.

SNOWCOVER EVOLUTION IN THE ALPS Winter 2016-2017

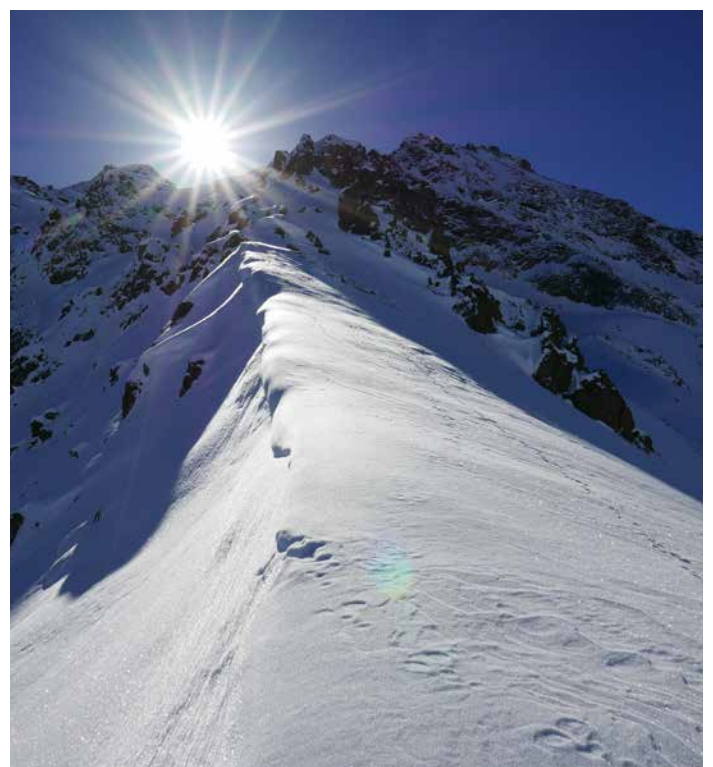
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The 2016-2017 winter season was characterised by a snowy November in the western Alps, followed by a long period with no precipitation, very mild temperatures in December and

cold weather in January, with the early days of February and March characterised by snowfalls, and then followed by mild temperatures. Late winter was characterised by intense snowfalls in the Western Alps, then snowfalls reached the whole Alpine range, in late April. The season was therefore generally dry, and mild temperatures resulted in snow melting even in winter, with serious consequences on water resource.

Scarce snow in January and the long cold period led to a change of ground snow, with an impact on snowcover stability in the following months.

Avalanche accidents mainly took place in two periods, and more precisely in the first fortnight of February and March, during snowfalls and windy weather conditions.



SNOWFALLS AND AVALANCHES

By AINEVA *Avalanche services*

Snow and weather events and issues on territory in the 2016-2017 winter season

The article presents some short reports in sequence on the 2016-2017 winter season trend in the autonomous regions and provinces where AINEVA operates.

The analyses of the main meteorological parameters, snow conditions, historical trends, avalanche problems and avalanche accidents highlight, for the single zones, the main situations that have characterised the season. After 2015 and 2016, a winter season with several anomalies was once again observed, especially regarding temperatures and snow accumulations, with a resulting major impact on the water resources needed for the summer season.

The winter season, however, also showed several significant snow and weather events that required great attention from people involved in recreational and sports activities outside controlled areas, in addition to single events in the Alps that required monitoring of well-known avalanche sites, not to mention the tragic event that, with

historical return periods, affected the Apennines in January.

JANUARY 2017 - EMERGENCY MANAGEMENT IN THE APENNINE - ANALYSIS

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Between 15th and 20th January 2017 heavy snowfalls affected a large area of the central and southern Apennines, mainly on the Adriatic side of the chain, which reached average cumulated thicknesses from 150 up to over 300 cm and locally also 400 - 500 cm . Several hamlets were isolated and both main and secondary roads were affected by disruption, interruptions and various problems even at low elevations. During this precipitation episode there was an intense avalanche activity cycle which produced numerous damages to the forests and created a civil protection emergency for the Rigopiano resort and other hamlets and roads of the Apennine territory. The technicians of the regions and autonomous provinces belonging to AINEVA were summoned to support in the emergency management

the National Department of Civil Protection and the Regions affected by. This article illustrates, in general terms, the meteorological scenario, the avalanche activity cycle and the operations of forecaster technicians dealing with the emergency management phase.

AVALANCHE ACCIDENTS IN ITALY, SEASON 2016 - 2017

S. Pivot

Unfortunately, the 2016-2017 season will its historically negative record, with a total of 49 victims. A really high number, when comparing it with the average of the last thirty years, amounting to

20 casualties a year.

Actually, when analysing avalanche accidents, this would have been a season within the average, would not have been for a catastrophic event that resounded through the world: the avalanche that wrecked the Rigopiano hotel in Farindola in Abruzzo, causing 29 victims. This article does not deal with this avalanche event because, as soon as judicial authorities give their authorisation, the "Neve e Valanghe" magazine will give space to this event that directly involved Aineva experts, both in the steps of avalanche danger management and subsequent investigation.

