

Recent snow and synoptic situations bearers of heavy snowfall on the mountains of Sicily island

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Sicily covers over 25,000 square kilometers in the Mediterranean basin, which appears to be the largest Island; it has a population of over 5 million inhabitants. The mountain domains stretch for 24% of the total area, and they appear to be numerous and diversified elevation, morphology and geology. In the northern part of the region, overlooking the Tyrrhenian Sea, stands the mountainous alignment Nebrodis-Peloritani-Madonie that rises up to 1980 m of Pizzo Carbonara. Along the east coast there is the active volcano Mount Etna - 3,343 meters high. Given a typically Mediterranean rainfall regime, with cool and very rainy winters - despite the latitude between 37 and 39 degrees north - in these domains mountains, snow is quite generous and above 1800 meters it is possible the practice of ski. On the top of Mount Etna, the snowpack remains generally from late October to mid-June. In the period 1960-1992, the Regional Hydrographic Service has monitored the condition of the snowpack in the winter resort of Floresta - located on Nebrodi Mountain at over 1200 meters above sea level. There are measures the height of the snow on the 10th, 20th and 30th of the month and the duration of snow while you do not have measures relating to the cumulative of fresh snow. First analyzes of the data shows that the snow is conspicuous at least above 1500 meters above sea level; the sum of snow varies between 150 and 250 cm while the snow remains on the ground for an average period of 55 -100 days. In the last two seasons, the snowfall the snowfalls were very abundant due at the frequent advection of continental or intermediate polar air which affected also the central and southern areas of the Mediterranean basin. In the mid-March 2012, the height of the snow on the ground has exceeded 250 cm. The study of the synoptic conditions bearers of heavy snowfall occurred in the last two seasons, completed those relating to historical snowfall which also affected the plains and hilly areas of the region in the last fifty years, completed the study.