



THE MELTING OF GLACIERS

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In the last century, the glaciers of the Alps have lost 50% of their coverage: 70% of this percentage have disappeared in the last 30 years. This terrible fact is reported by Renato Colucci, a glaciologist by Cnr. The glaciers below 3500 meters of altitude are going to disappear in the following 20-30 years. The cause is climate change. The emission of CO₂ in the last century was a hundred times greater compared to the previous one. As a result, the weather has progressively been hotter, so glaciers are melting. This phenomenon has worsened in the last 30 years.



WHAT ARE THE RISKS OF MELTING ICE???

rising of
see level

the reduction or
disappearance of
the flows of rivers

the reduction
of Albedo

having less water
usable for
irrigation

the reduction of
biodiversity

increasing risk of
landslides and floods

damage in the
production of electric
energy

Albedo is the reflecting power of a surface.

White surfaces, such as snow and ice, help reflect solar radiations, keeping temperatures stable

negative consequences
on people



The Adamello Glacier

The Adamello, the largest glacier in Italy, which extends between Lombardy and Trentino, in the upper Val Camonica, with its 16.4 km². In recent years, all its glacier units have been experiencing a phase of retreat and thinning, due to less snowfall which, in general, affects all the Alps.

The Miage Glacier

The Miage glacier, in the Aosta Valley on the Italian side of Mont Blanc (the highest massif in our country) shows a worrying situation. In the last 30 years it has shrunk by about one meter a year, for a total of almost 30 meters.



The Forni Glacier

The situation of the Forni glacier is there for everyone to see: what was the largest valley glacier in Italy and the only one of the Himalayan type, in fact almost no longer exists. In just over a century it has seen almost half of its surface melt, with the temperature increasing by more than one degree.





The Marmolada and Fradusta glaciers

The Marmolada glacier, the highest mountain in the Dolomites, which has retreated by 85% of its volume in the last hundred years. Among the glaciers that have almost disappeared in Italy, there is the Fradusta glacier in Trentino, of which today it is possible to see only an extension of 5%, compared to the testimonies that have come down to us.



The Triobo and Paradisin glaciers

The Trobio glacier (in the Orobie) from 1935 to 2017 went from one hundred hectares to almost nothing, while the Campo Nord Paradisin glacier (Livigno), at the turn of three thousand meters, from 2007 to 2018 lost 29 meters in thickness





The Mandrone glacier

The Mandrone glacier, in the Adamello hills, lost 5.2 meters only in 2019. 55 meters disappeared in the last 14 years.

Glaciers in Italy are subject to a constant decrease. If we continue with the current trend, at the end of this century they will have shrunk by 80%. Alpine glaciers have existed for about 10.000 years, since the last glaciation, they began to melt, supplying water to the rivers of the plain, including the Po. Moreover, melting glaciers negatively impact mountain slopes, increasing the danger of landslides and floods.

