



The Red Snow Event in Eastern Europe: Study of its peak development on 23 March 2018

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In the second half of April 2018 the European media published in great headlines a strange occurrence. Red colored snow fell in Bulgaria, Rumania, Ukraine and what is most interesting for the media, in the mountains around Sochi, the location of the former winter Olympic Games.

The phenomenon of the red snow in southwestern Europe is shown to be the result of a cold trough, which penetrated from the north toward the central Mediterranean and Saharan Africa, and moved eastward. Consequently, a strong southwesterly flow formed along the eastern flank of the trough. This flow transported a large amount of red Saharan dust which upon mixing with the snowfall in the area painted the snow red.

In this case the trough developed further east which is not a common occurrence. This has caused heavy dust storms in central Sahara near the most ample dust sources (Barkan, Kutiel and Alpert, 2004). Additionally, the strong southwestern flow at the eastern flank of the trough reached Eastern Europe which is colder and snowier. So it will be shown that the transported dust reached the area together with snow flakes and probably painted it in red or brown.

Relevant References:

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