

The Formation of the Hail and the Newlycome Snow

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The principally new approach of the hail formation is given in [2]. The existence of the hail is conditioned by the fact that the clouds are charged, especially when they are highly charged [2]. According to the existent viewpoint, the base of hail consists of a little ice-crystal, which then during eddy motion rolls up with the layers of frozen water, which is formed, from the clouds around. By the way, the formation of ice-crystals is not explained, yet. But the real structure of the hail that has a big, solid nucleus 5 mm cannot be explained by the existent explanation. And there is a real contradiction when egg-sized hailstone falls. It is also well known, that the hail is always accompanied with powerful thunders, which, naturally, is connected with the charged-ness of the clouds. Basing on this viewpoint, the hail formation is explained in the following way: the formation of the drop from smallest drops brings to the fact, that the charge density exceeds a certain critical value on the influence of Coulomb forces a rapid removal of the exterior layer of the drop takes place, which leads to the formation of a big, solid, icy nucleus of the hail. The formation of newlyfallen snow is the result of the cavitations in the domain of the clouds. In the basis of the formation of the newlyfallen snow is the cavitation in the clouds. The newlyfallen snow generally comes in early spring and in a warm late autumn. In that period the ground is still warm, but in the domain of the clouds it is already cold but not much enough to become snow, the powerful convective streams bring to cavitations inside the clouds, and in the formed cavities the temperature briefly reduces and the newlyfallen water is formed. The lightness and the porosity of the newlyfallen snow can be explained by the cavitations.

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