THE WAY TO PREVENT HAIL

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ABSTRACT

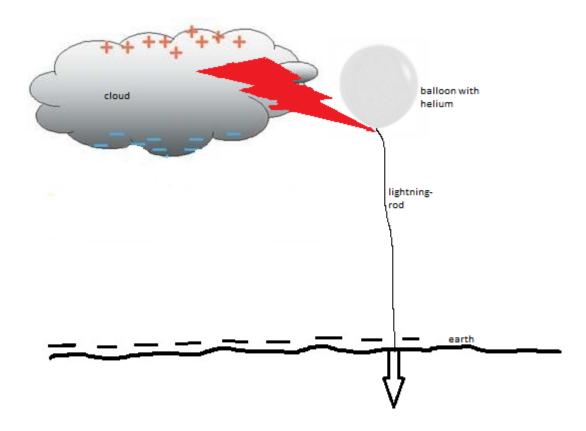
Suggested an original method to prevent hail with lightning rod

Keywords: hail, lightning-rod, helium, air balloon, cloud

It is meaningless dealing with the result, if you do not know what is the reason. Author

Hail is one of the most terrible natural disaster causing damage to mankind. About the formation of hail and its negative consequences were given detailed information in the recently published articles. [1-7].

It should be noted that, the reason for the formation of hail have been determined incorrect, false views and theories put forward till today. That is why, we have been unable to prevent or avoid it. The major trends in this research is not to prevent hail, but detract it from a large part of the mass [8-14]. Thus, in order to make small granular hail with large mass through shells and missiles spreading cloud different chemical reagents over the (eg, CO_2 , AgI, NaCl. tetraalkilamoniumun freon solution, and so on) have been used. The aim of this difficult operation was: to create a large number of crystallization centers, with this way to be replaced hail pieces with large mass by hail with smaller particles and thus reduce the amount of damage caused. The fact of hail related to the lightning discharge for the first time put forward by the theory[1-7] and in this context chemical reagents will have no effect. In our opinion, the only way prevention of hail to overcome the lightning discharge or at least mitigate it. We suggest to use the following units for this purpose:



It is known that for the first time in 1750 American scientist, Benjamin Franklin was indicated the only way to guard against lightning. He colud transferred an electric discharge in the atmosphere to ground securely with simple way –metal wire by creating lightning rod and this unique method has not lost its relevance till today..

Regarding to this, his invention helps prevention of hail **.

Thus,lightning rod is buried into the protected area (land),while the other side of the wire is combined with balloon filled with helium gas wich is 7 times lighter than air.Then the balloon is released into the air.The distance between balloon and the ground (1-2 km) how much more ,you can get it that much effective.So in this case, lightning rod will be near not only to the nimbus cloud, but also its conical influence will be greater.In our opinion, the discharge of electric charges accumulated in the cloud will be transferred to the ground by an easier way-a metal wire. This is the principle. Moreover, the construction and engineering side of the device, it is up to other experts in the ways of its solution..

^{*}The article has been accepted for publication by the publishing house.

^{**}Simple working principle of lightning rod is not mentioned here, because it has the necessary amount of information on the scientific literature.

References

- 1. Ismailov S.A. A new hypothesis about the mechanism of the hail formation. //Meždunarodnyj naučno-issledovatel'skij žurnal. 2014. No.6. (25). Part 1. pp.9-12;
- 2. Ismailov S.A. About the building mechanism of hail showers.// <u>Universum</u> 7universum.com/en/tech/archive/item/1463;
- 3. Ismailov S.A. About the building mechanism of hail showers.// www.academia.edu/7789706/;
- Ismailov S.A. About the building mechanism of hail showers.// www.hexachlorocyclopentadiene.jimdo.com;
- 5. Ismailov S.A. A new hypothesis about the mechanism of the hail formation.// www.hexachlorocyclopentadiene.jimdo.com;
- 6. Ismailov S.A. About the mechanism of the hail formation.// www.intellectualarchive.com/?link=find#detail
- 7. Ismailov S.A. About the mechanism of the hail formation.// Problems of modern science and education. Moscow, 2014. No.2. (20). pp.16-27.
- Abshaev M.T. On a new method effects on hail processes. Scientific works; of the WGI 1989, V.72, pp.14-28.
- 9. Bibilashvili N. Sh., Bourtsev I.I., Seregin N.A. Guidelines for the organization and conducting anti-hail work. L .: Gidrometeoizdat, 1981, 168 p.
- 10.Tlisov M.I., Kagermazov A.H. Statistical analysis of the special hail measuring network during the active effects and in their absence, based on grades / in the book. "Review of Industrial and Applied Mathematics" - M .: Scientific Publishers "RTA", 1995, V. 2, No.2. pp.187-194.
- 11.Tlisov M.I., Khuchunaev B.M. "Physical characteristics of Hail from naturally developed and seeded cloud processes. Recommendations on modification of present hail suppression Methods "/ 12-th International Conferense on Clouds and Precipitation Zurich, Switzerland, 19-22 August 1996, Proceedings - V. 1, pp. 1275-1276.
- 12. Tlisov M.I., Huchunaev V.M. Patent RU 2119741. Method for preventing the formation large hail in the clouds.
- 13. Beytuganov MN .; Zalikhanov M.CH .; Romanov VG Patent RU 2076579. Method prevent hail.
- 14. Dinevich L., Kamalov B. Ways of optimization methods to influence the processes formation of precipitation .// Modern high technologies. 2013. No.12. pp. 94-100.

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