THE POSSIBILITY OF IDENTIFICATION OF SAND-CLOUDS AND PREDICTION OF COLOURED RAIN OVER GREECE BY MEAN OF SATELLITE IMAGERY

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In the present work, and on the basis of case study of 02 Feb. 1986, it is shown that, by making use of VIS and IR satellite images, it is possible to identify sand-clouds coming from the Sahara entering the Mediterranean. When the sand-clouds enter the Greek area, they usually produce coloured rain over some areas.

By studying the successive pictures it is possible to estimate the velocity of the cloud to give a forecast of all the time of possible rainfall. It is also verified, yet once more, that the cause of the creation of the cloud is usually a barometric low initiated in the Sahare, end that the type of circulation in the troposphere is S-SW.

PARTICLE SIZE GRADING AS A FACTOR OF COMPACTION RESULT, IN SOILS

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Samples of sand from Kassandra-Chalkidiki peninsula are studied in relation to the influence of their grain size distribution on the change of their physicomechanical characteristics after compaction. The material can be characterised as a yellow-brown, fine sand, of medium-upper Miocene or Plio-Plistocene age.

For this purpose ten samples of artificially different particle size grading are studied and correlation diagrams between grain size, compaction optimum moisture content, max dry density and ultra sonic velocity are given; the mathematic expressions of the observed correlations are determined too.