FOREWARD

Special Scientific Session of the Department of Oceanology, Atmospheric Physics, and Geography of the Russian Academy of Sciences was held in Moscow from June 9 to 10, 1992 and was devoted to the current problems, methods, and means of remote monitoring and its role and place in the total system of monitoring of a natural medium.

At the Session 28 reports from 15 organizations were heard.

The reports delivered by Yu.A. Izrael', V.E. Zuev, K.Ya. Kondrat'ev, G.S. Golitsyn, and M.V. Kabanov were conceptual. The report delivered by Yu.A. Izrael' was devoted to the concept of integrated monitoring of the state of a natural medium developed at the Institute of Institute of Ecological Monitoring of Global Space.

K.Ya. Kondrat'ev gave some typical examples of satellite photographies of continental and marine objects and formulated a number of requirements for the methods of data retrieval from satellite observations. G.S. Golitsyn considered the problems of application of navigation and communication satellites to global monitoring of the meteorological parameters of the atmosphere. V.E. Zuev analyzed the global outlook for lidar monitoring of the atmosphere on the basis of generalization of the results of several international and regional symposia on lidar methods and means of investigation of the state of the atmosphere. M.V. Kabanov considered the results and prospects for integrated monitoring of the atmosphere state with the use of the ground–based means. S.S. Khmelevtsov reported on the development and routine operation of a federal network of lidar stations of monitoring of the atmosphere.

A group of scientists of the Institute for Radio Electronics of the Russian Academy of Sciences presented an interesting report on the prospects of radiophysical methods of spaceborne remote sensing of the environment. The scientists of the Institute of Limnology of the Russian Academy of Sciences presented a number of reports on spaceborne monitoring of the ocean and methods of estimating oceanic productivity. A number of organizations presented data of remote gamma–spectral monitoring of radioactive contaminations in individual regions of our country. A group of scientists of the Institute of Atmospheric Optics reported on the new feasibilities of lidar sensing of aerosols and hydrosols, gas composition of the atmosphere, and oil films with the use of ground–based and aerospace means, and so on.

The Session decided to publish its records in special issues of the Journal Atmospheric and Oceanic Optics. Here we publish the reports submitted to the editorial office by October 1, 1992.

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