

Automatized system of precipitation monitoring and recording with use of radiolocation for urban areas

Nikolai Voronov, Alexandr Dikinis, and Maxim Ivanov

Russian State hydrometeorological university, Saint Petersburg, Russian Federation (7777777@mail.ru)

One of the most important lines of work in the field of increasing the efficiency of functioning of urban water disposal systems is automation of precipitation recording with application of new technological tools for measuring precipitations fallout and forecast.

The developed Automatized Information System for Atmospheric Precipitation Recording (AIS «Osadki») includes a network of automatic precipitation stations on the basis of use of the precipitation gauge OTT Pluvio2; a Doppler meteorological radar; software for collection of information about precipitations and control of work of the precipitation stations network; a specialized database that provides direct access to meteorological information and statistical estimation of precipitation distribution for urban conditions.

The main advantage of the System is the use of a Doppler meteorological radar which, in combination with the measurement data of the station in the automated mode with a 5-minute interval allows to estimate both the distribution of precipitations on the urban territory their intensity. As the result, it allows to drastically increase the speed of processing of hydrometeorological information and the efficiency of using it for the needs of urban services.

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