GIS application in the comparison of the satellite derived precipitation with automatic rain gauge network measurements.

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The satellite observations provide the continuous information on the state of the atmosphere. On the contrary, the automatic rain gauge network measurements show that the precipitation is highly variable and local phenomenon.

The paper will discuss the application of Geographical Information Systems (GIS) to deriving and presentation of precipitation from the polar orbiting as well as geostationary satellites data. The precipitation estimated from satellites will then be compared with the measurements obtained from the automatic rain gauge network measurements (ATS) working in 10 minutes' regime.

The methods applied in Geographical Information Systems are well suited for visualising and analysis of the data from various sources. GIS is also used for the distribution of the results into the different forecasting departments. The different aspects of GIS