

## **Experience with the operation of new automatic weather stations in Slovakia**

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### **Abstract:**

The surface meteorological station network of Slovakia has undergone a complete innovation in the last three years. In addition to traditional instruments like thermometers, humidity probes, anemometers, rain gauges, the new devices for snow depth measurements, soil moisture, present weather detectors, weather cameras have been installed for the first time in our wide operational network. This paper provides information on the experiences with several automatic measuring instruments as well as its reliability, calibration capabilities, and other data quality control needs. Parallel operation of new dataloggers and instruments also enabled us to compare the results of their measurements with other available methods. Comparisons of thermometers, relative humidity meters, rain gauges, sensors for snow depth measurements, soil temperature, present weather and visibility sensors were processed.