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The structure of control and data transfer management system for the GAMMA-400 scientific complex

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A description of the control and data transfer management system for scientific apparatus involved in the GAMMA-400 space project is given. The technical capabilities of all specialized equipment to provide the function of the scientific instrumentation and satellite support systems are unified in a single structure. The correctness of the proposed and implemented structure has been verified by the operation of the prototype of GAMMA-400 scientific complex. Control of the scientific instruments is maintained using one-time and program pulse commands, as well as program commands, which are transmitted via onboard control units and scientific data acquisition system. Up to 100 GByte of data per day can be downlinked to the ground control stations.

Presentation type

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