

Optimizing data processing in information networks of airspace surveillance systems

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Abstract—The analysis of existing data processing structures in information networks of airspace surveillance systems where certain stages of processing are implemented sequentially has shown that an inter-stage optimization of air object detection and coordinate measurements are impossible. However, the synthesis and analysis of an optimal structure for the joint processing of signal data and the primary processing of data from a surveillance system information network have proven the feasibility of inter-stage optimization for the stages of signal processing and primary data processing.

Keywords—surveillance system information network, optimization of data processing.

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