

The Geostationary Operational Satellite R Series SpaceWire Based Data System Architecture

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Long Paper

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ABSTRACT

The GOES-R program selected SpaceWire as the best solution to satisfy the desire for simple and flexible instrument to spacecraft command and telemetry communications. Data generated by GOES-R instruments is critical for meteorological forecasting, public safety, space weather, and other key applications. In addition, GOES-R instrument data is provided to ground stations on a 24/7 basis. GOES-R requires data errors be detected and corrected from origin to final destination. This paper describes GOES-R developed strategy to satisfy this requirement.