

Processor breadboard for on-board RFI detection and mitigation in MetOp-SG radiometers - DTU Orbit (08/11/2017)

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Radio Frequency Interference (RFI) is an increasing threat to proper operation of space-borne Earth viewing microwave radiometer systems. There is a steady growth in active services, and tougher requirements to sensitivity and fidelity of future radiometer systems. Thus it has been decided that the next generation MetOp satellites must include some kind of RFI detection and mitigation system at Ku band. This paper describes a breadboard processor that detects and mitigates RFI on-board the satellite. Thus cleaned data can be generated in real time, and following suitable integration, downloaded to ground at the modest data rate usually associated with radiometer systems.

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