Technique for Radiometer and Antenna Array Calibration with a Radiated Noise Diode

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This paper presents a new technique to calibrate a microwave radiometer and antenna array system. This calibration technique uses a radiated noise source in addition to two calibration sources internal to the radiometer. The method accurately calibrates antenna arrays with embedded active devices (such as amplifiers) which are used extensively in active phased array antennas.

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