# Abstracts

## Radiometric Measurement of Attenuation and Emission by the Earth's Atmosphere at Wavelengths from 4 cm to 8 mm

*G.G. Haroules and W.E. Brown, III. "Radiometric Measurement of Attenuation and Emission by the Earth's Atmosphere at Wavelengths from 4 cm to 8 mm." 1968 Transactions on Microwave Theory and Techniques 16.9 (Sep. 1968 [T-MTT] (Special Issue on Noise)): 611-620.*

Measurement instrumentation for the investigation of atmospheric noise fluctuations at 4 cm to 8 mm wavelengths is described. A brief review of the published literature on this subject is presented in support of the methods used in the measurement. Observations using the sun as a background source to obtain a measure of atmospheric opacity are described as providing an average value over an observing period frequently longer than the time during which a significant change in atmospheric opacity is detectable at these short wavelengths. Preliminary observational data are presented which indicate the potential of the measurement instrument to obtain the amplitude distribution function of sky noise fluctuations for various weather cases.

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