

# The cosmic microwave background radiation\*

R. W. Wilson

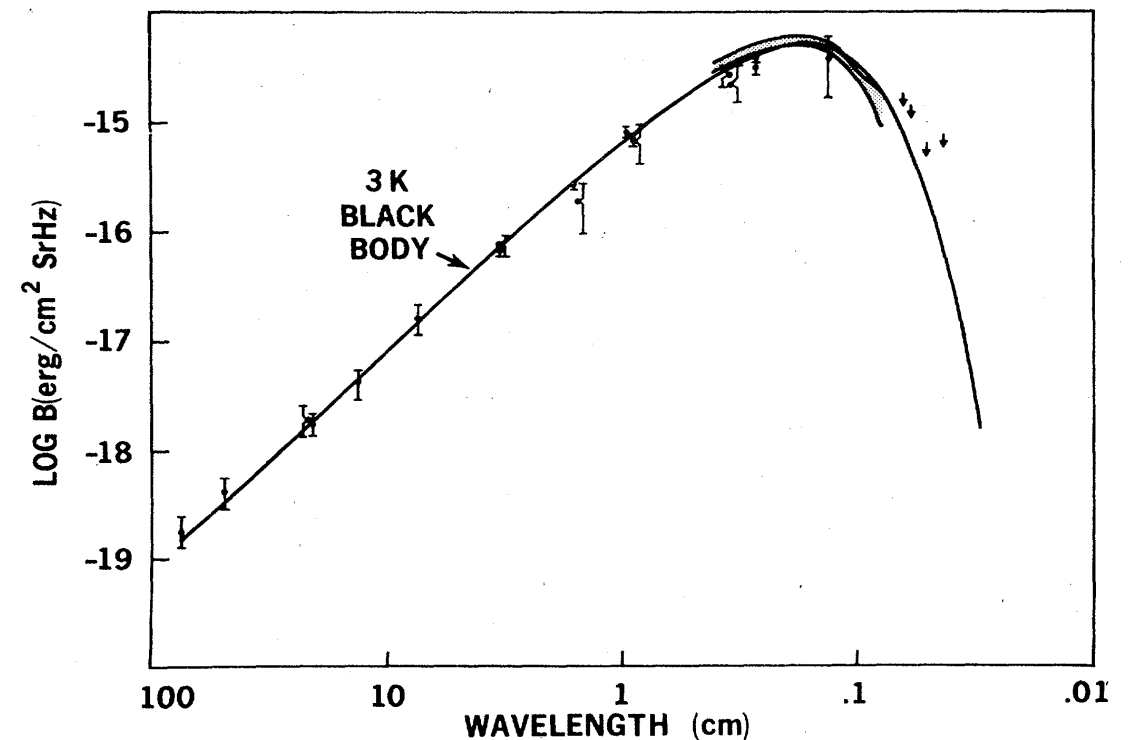
*Crawford Hill Laboratory, Bell Laboratories, Box 400, Holmdel, New Jersey 07733*

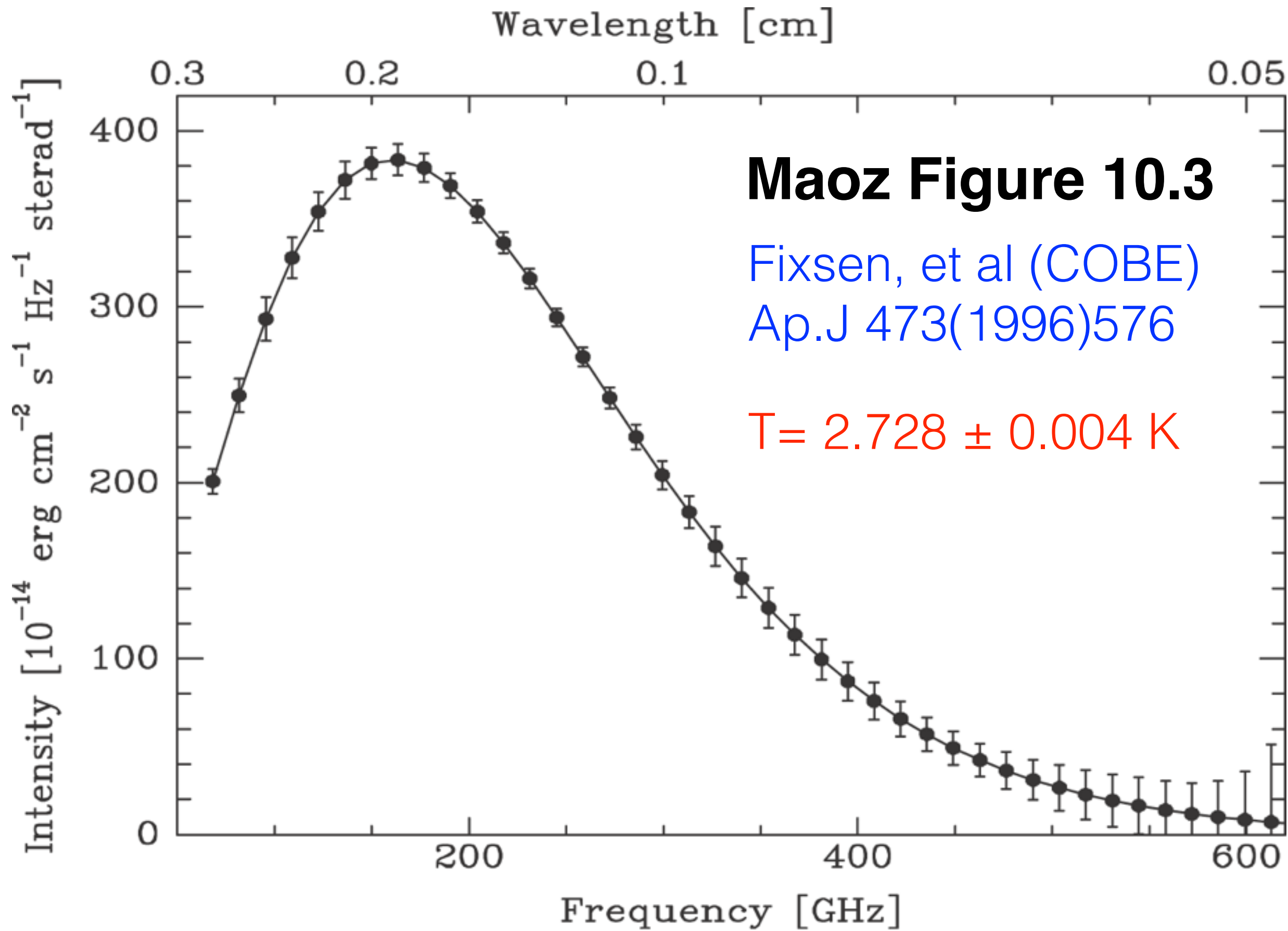
## Reviews of Modern Physics, Vol. 51, No. 3, July 1979

Measurement of "Excess Antenna Temperature" at 4080 MHz (7.4cm)

	New Throat	
He Temp.	4.22	4.22
Calculated Contribution from Cold Load Waveguide	.38	.70 ± 0.2
Attenuator Setting for Balance	<u>2.73</u>	<u>2.40 ± 0.1</u>
Total C.L.	7.33	7.32 ± 0.3
Atmosphere	2.3 ± 0.3	
Waveguide and Antenna loss	1.8 ± 0.3	
Back lobes	<u>.1 ± 0.1</u>	
Total Ant.	4.2 ± 0.7	
Background	3.1 ± 1	

Measurements in the decade that followed, performed at different frequencies, plotted as intensity vs wavelength







# The Cosmic Background Explorer (COBE) Satellite

