References


Sloanaker, R. M. (1959), Apparent temperature of Jupiter at a Wave-length of 10 cm, Astron. J. 64, 346.


(Paper 69D12–591)

A Report of Measurements

D. Barber 1 and J. F. R. Gower 2

Summary: The main results are values of the flux density for Jupiter at 610 Mc/s (normalized to 4.04 A.U.):

Flux density = 6.6 ± 0.3 × 10⁻²⁶ W m⁻² (c/s)⁻¹ at 610 Mc/s

Flux density = 5.1 ± 0.8 × 10⁻²⁶ W m⁻² (c/s)⁻¹ at 178 Mc/s.

1 Royal Radar Establishment, Ministry of Aviation, Great Malvern, England.

(Paper 69D12–592)
The following will replace the paper "A Report of Measurements" on page 1563.

**A Report of Measurements**

**D. Barber**¹ and **J. F. R. Gower**²

Summary: Values for the flux density of Jupiter have been obtained simultaneously at 610 Mc/s and 178 Mc/s [Barber and Gower 1965²]:

\[ S_{610} = \text{average flux density} = 6.6 \pm 0.3 \times 10^{-26} \text{ Wm}^{-2} \text{ (c/s)}^{-1} \text{ at 610 Mc/s} \]
\[ S_{178} = \text{average flux density} = 5.1 \pm 0.8 \times 10^{-26} \text{ Wm}^{-2} \text{ (c/s)}^{-1} \text{ at 178 Mc/s} \]

These are the average values over all Jovian longitudes (and have been normalized to 4.04 A.U.). At 610 Mc/s, the variation of flux density with Jupiter’s rotation, attributed to the beaming effect, could be picked out; and the flux density corresponding to zero planetocentric magnetic latitude of the Earth, that is, in the plane of Jupiter’s magnetic equator, was determined [Barber 1966³]:

\[ S_{610}^0 = \text{flux density for zero magnetic latitude} = 7.05 \pm 0.20 \text{ Wm}^{-2} \text{ (c/s)}^{-1} \text{ at 610 Mc/s.} \]

(Paper 69 D12–592)

---

¹ Royal Radar Establishment, Ministry of Aviation, Great Malvern, England.
² Mullard Radio Astronomy Observatory, Cavendish Laboratory, Cambridge, England.