

ERRATUM: IRAS OBSERVATIONS OF IRREGULAR GALAXIES

D. A. Hunter and J. S. Gallagher
Lowell Observatory, Flagstaff, Arizona 86001

In "IRAS Observations of Irregular Galaxies" by D. Hunter *et al.* and "Measuring Star Formation Rates in Blue Galaxies" by J. Gallagher and D. Hunter in these proceedings, as well as in D. Hunter *et al.* (1986, *Ap. J.*, 303, 171), galactic blue luminosities are based on standard optical definitions. Thus we derive L_B from the blue absolute magnitude M_B using

$$L_B = 7.81 \times 10^{34} \text{ dex}(-0.4 M_B) \text{ erg s}^{-1}, \quad (1)$$

or from the in band flux derived via

$$f_B = \int B_\lambda S_\lambda(B) d\lambda = \text{dex}(-0.4 B_T - 5.19) \text{ erg s}^{-1} \text{ cm}^{-2}, \quad (2)$$

where $S_\lambda(B)$ is the Johnson B response function.

However, the L_B system adopted by de Jong *et al.* (1984, *Ap. J.* (**Letters**), 278, L67) for spiral galaxies was based on quasi-bolometric (rather than in band) fluxes given by

$$f_B^* = \lambda_B f_\lambda(4400 \text{ \AA}) \text{ erg s}^{-1} \text{ cm}^{-2}. \quad (3)$$

The L_B^* on this system are a factor of 4.5 times larger than the L_B from eq. (1). Thus our statements that the $L(\text{IR})/L(\text{B})$ ratios for irregular galaxies are systematically higher than those of spirals are an incorrect result of comparing data on two different L_B systems. In fact, the irregulars cover roughly the same range in $L(\text{IR})/L(\text{B})$ as the spirals when a consistent L_B system is used. A corrected $L(\text{IR})/L(\text{B})$ versus $S(100)/S(60)$ plot is given below.

