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ERRATUM: "A STUDY OF 13 POWERFUL CLASSICAL DOUBLE RADIO GALAXIES" (2008, ApJS, 174, 74)

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There are errors in the slopes estimated with the IDL linear model-fitting routine "LADFIT" that relies on the least absolute deviation method in Sections 5.2 and 5.3 of the published article. The incorrect slopes propagate through the Model III equations in Section 5.2, and an erroneous conclusion about the suitability of Model III for radio galaxy jets is reached. Conclusions 1 and 2 in the published paper are affected by these changes. However, these constitute minor changes to the published paper.

In Section 5.2, the correct slope for the linear relation between hot-spot size (r_h) and core-hot-spot distance (l) is 0.44, with the mean absolute deviation being 0.22 (as opposed to a slope of 0.72 and a mean absolute deviation of 0.06, as reported in the published paper). Therefore, $r_h \propto l^{0.4}$. Following the relations for Model III of Carvalho & O'Dea (2002a), the exponent $\delta = -1.6$. This leads to the following relation between the ambient gas density and the distance from the source: $\rho_a \propto d^{1.6}$, while the hot-spot advance speed becomes proportional to $t^{-0.5}$. Although the latter relation, implying a decelerating source, could be regarded as physically plausible, the former relation, suggesting an increase in ambient density with distance from the source, is clearly unphysical. This suggests that the radio source propagation is not well described by the self-similar models discussed by Carvalho & O'Dea (2002a). In the caption for Figure 1 (left) of the published article, the revised slope of the correlation is ∼0.4.

In Section 5.3, the correct slope for the relation between hot-spot spectral index ($\alpha_{\rm HS}$) and redshift (z) is 0.22, with the mean absolute deviation being 0.11 (as opposed to a slope of 0.4 with a mean absolute deviation of 0.03, as reported in the published paper). Therefore, $\alpha_{\rm HS} \propto z^{0.2}$. Excluding the data from Leahy et al. (1989) does not significantly alter the slope value. In the caption for Figure 1 (right) of the published article, the revised slope of the correlation is ∼0.2.

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