

Review Form 1.6

Journal Name:	International Astronomy and Astrophysics Research Journal
Manuscript Number:	Ms_IAARJ_80372
Title of the Manuscript:	On Size Evolution / Radiated Power of Extragalactic Radio Sources and Implication
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments		
Minor REVISION comments		
Optional/General comments	<p>The authors have applied in this work, statistical methods of analyses to find empirically some effect posed by source expansion on radiated power of extragalactic radio sources. The subclasses of the sources used are radio-loud quasars and radio galaxies. They have done this by carrying out linear regression analyses of observed source angular sizes (θ) of the quasars against their respective observed redshifts (z); as well as, observed source luminosities (P) against their respective observed redshifts. For the quasars, result indicates that with good correlation coefficient ($r \approx 0.5$), observed angular size shows an inverse relationship with observed redshift, and is given by $\theta \sim (1+z)^{-1.9}$. For the galaxies, the result indicates similar trend; they obtain $\theta \sim (1+z)^{-3.7}$, where $r \approx 0.6$ (which is also a good correlation). Moreover, on the $P-z$ plane, they obtain a direct relationship given by $P \sim (1+z)^{0.04}$ for the quasars; where $r \approx 0.8$ (which is a good correlation). However, for the galaxies, luminosity/redshift relationship is poor (with $r \approx 0.1$). This poor correlation may possibly have stemmed from lack of observation of galaxies at high redshifts unlike observation of their quasar counterparts. The θ/z relationships for the quasars and the galaxies simply indicate positive source size evolution with time. However, the converse is the case for P/z relationship – it shows negative source luminosity evolution with time. These results suggestively indicate that extragalactic radio sources, though small scaled at earlier epoch, were more powerful sources than what they are at present epoch. Their luminosity/angular size relation is given by $P \sim \theta^{-0.01}$. Therefore conclusively, the results suggestively indicate that the mechanisms of size evolution of these sources simply bring about diminution effect on their radiated power.</p> <p>The manuscript is clear, concise, reasonably self-contained presentation of the material and Figs. are clear, giving adequate reference to related work, the title is appropriate and the abstract is adequate for verbatim reproduction in abstract journals. This work is good.</p> <p><i>So I recommended this work to publish in the International Astronomy and Astrophysics Research Journal.</i></p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

As per the guideline of editorial office we have followed VANCOUVER reference style for our paper.

Kindly see the following link:

<http://sciencedomain.org/archives/20>

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