

**Review Form 1.6**

Journal Name:	<a href="#">International Astronomy and Astrophysics Research Journal</a>
Manuscript Number:	Ms_IAARJ_84174
Title of the Manuscript:	Looking into Dark Energy Effect on the Extragalactic Radio Quasar Luminosity Evolution
Type of the Article	Original Research Article

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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)
<b>Compulsory</b> REVISION comments	<p>Please check the mathematics and cross references:</p> $\mathcal{P}_{CE} \sim (D^2 P)^{-\beta} \quad (25)$ $D = \left[ \frac{1}{m_h c^3 \Omega \epsilon} \left( \frac{\mathcal{P}_{CE}}{Q p_j^\psi} \right)^{\frac{1}{\beta}} \right]^{\frac{1}{2}} P^{-0.5} \quad (27)$ <p>Putting the values of the indices into equation (26), we obtain for extended quasars (in one significant figure),</p> $\mathcal{P}_{CE[z(EGRO)]} = \mathcal{G} \left( \frac{1}{m_h c^3 \Omega \epsilon D^2 P} \right)^2 p_j^{0.52} \quad (35)$ $\mathcal{P}_{CE[z(EGRO)]} = \mathcal{G} \left( \frac{1}{m_h c^3 \Omega \epsilon (1+z)^{-3.2} P} \right)^2 p_j^{0.52} \quad (37)$ $\mathcal{P}_{CE[z(CSSQ)]} = \mathcal{H} \left( \frac{1}{m_h c^3 \Omega \epsilon (1+z)^{-5} P} \right)^{0.031} p_j^{32} \quad (38)$ $(1+z) \sim \mathcal{P}_{CE[z(EGRO)]}^{-0.16} \quad (39)$ $(1+z) \sim \mathcal{P}_{CE[z(CSSQ)]}^{-6.4} \quad (40)$ <p><b>8. Discussion and Conclusion</b></p> <p>We have carried out linear regression analysis of observed source linear sizes (<math>D</math>) of the more extended radio quasars against their corresponding observed redshifts, <math>z</math>, (Figure 1) in our sample. Results of the regression analysis show that <math>D</math> relates with <math>z</math> according to equation (3), <math>(1+z) \sim D^{-0.6}</math>, with correlation coefficient, 0.50. The correlation is good.</p> <p>Moreover, on the <math>D - z</math> plane (Figure 2), we obtain the relation, <math>(1+z) \sim D^{-0.4}</math> (i.e. equation (7)), which connects the observed linear sizes of CSS quasars and their respective redshifts. The correlation is marginal</p> <p>Furthermore, we solve for source projected linear size, and get equation (27); i.e.</p> $D = \left[ \frac{1}{m_h c^3 \Omega \epsilon} \left( \frac{\mathcal{P}_{CE}}{Q p_j^\psi} \right)^{\frac{1}{\beta}} \right]^{\frac{1}{2}} P^{-0.5}.$ <p>This equation simply shows that <math>\beta</math> and <math>\psi</math> may be estimated from linear regression of the <math>D/P</math> data.</p> <p>Combining equations (2) &amp; (35), and equations (6) &amp; (36) yield respectively, equations (39) and (40); i.e. <math>(1+z) \sim \mathcal{P}_{CE[z(EGRO)]}^{-0.16}</math> and <math>(1+z) \sim \mathcal{P}_{CE[z(CSSQ)]}^{-6.4}</math>. Hence, we find <math>\mathcal{P}_{CE[z(CSSQ)]} \gg \mathcal{P}_{CE[z(EGRO)]}</math>; i.e. equation (41).</p>	

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<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(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)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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