

Dear Ari Laor:

Below is our reply to the referee's report for manuscript ApJ82716 "A Powerful AGN Outburst in RBS 797." The referee's comments are *italicized* and our replies are not. We have found the comments helpful in improving the focus and discussion of the manuscript, and thank the referee for their time.

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*Page 4, 1st paragraph: Are some of these directions round the wrong way? Shouldn't "northwest-southeast" be "northeast-southwest"? Is it not the eastern cavity that has more internal structure and has less well-defined cavities than the western cavity?*

The coordinates are shown projected on the plane of the sky, hence west is to the right of north (which is at the top of the image).

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*Page 4, final paragraph: "but no counterpart" - maybe should be "but no radio counterpart"?*

The word "radio" has been added as it does make the description more clear.

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*Page 5, final paragraph: "pronounced entropy core" - should that be "pronounced low entropy core"?*

The word "low" has been added since it more clearly specifies the nature of the core without consulting the figure.

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*Fig 3: The caption has left and bottom panels mentioned. Presumably this should be left and right.*

We thank the referee for catching this holdover from an earlier draft version.

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*Fig 4: are the blips around 200-300 kpc in the surface brightness profile real or is it some sort of point source subtraction issue?*

All detectable or visible point sources were removed from the analysis prior to extracting any radial profiles. The variations in the surface brightness profile are interesting, and some of them do coincide with possible X-ray features. However, for the sake of clarity and brevity, we have reserved discussion of additional structure for later investigations which will hopefully incorporate deeper Chandra observations.

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*Fig 10: Is it possible to get a better colour scale for this image? It's a bit muddy and you can't see the features very well. Maybe one like Fig 2 or 1 might be better.*

We tried multicolor schemes, however, to make the features stand-out, the contrast in values had to

be very narrow, making the assignment of colors to numerical values uninformative. The only color scheme where this was not an issue were the “monotone” family (e.g. hot, cold, blue, red, etc.). In order to preserve clarity of value assignment, we thus stuck with the version from manuscript 1.