



Erratum: “The Origin of Faint Tidal Features around Galaxies in the RESOLVE Survey” (2018, ApJ, 857, 144)

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Supporting material: machine-readable table

Table 2 in the published article provided incorrect *kd*-tree nearest neighbor distances calculated using the *kd*-tree algorithm for all galaxies. This error came from running the *kd*-tree algorithm using spherical coordinates of the galaxies, instead of Cartesian coordinates as the prepackaged function assumed. Using the updated *kd*-tree nearest neighbor distances does not change the results or conclusions of the published article, only yielding minor changes by eye to Figures 15 and 16 and similar statistical significances as determined using the Kolmogorov–Smirnov and Mann–Whitney-U tests.

Table 2 in the published article also provided incorrect projected distances to the nearest neighbor in a cylindrical volume within $cz = 500 \text{ km s}^{-1}$ of the main object. Previously, projected nearest neighbor distances calculated to be less than 0.1 Mpc were erroneously set equal to 0 Mpc. The projected nearest neighbor distances were not used for any of the figures in the published article and the updated values still do yield similar overall trends with respect to tidal features as the updated *kd*-tree nearest neighbor distances do.

Finally, the galaxy rs1492, which has faulty photometry due to superposition on a much larger galaxy but is nonetheless clearly too faint for membership in RESOLVE, is now excluded from our catalog. It could not be inspected for tidal features so was already omitted from our analysis as a primary galaxy, but it was previously listed in the catalog and also counted as the projected nearest neighbor of another galaxy. The corrected Table 2 in this erratum provides updated *kd*-tree and projected nearest neighbor distances corrected for the aforementioned errors and omitting rs1492, and the updated values do not change any of the results in the published article.

Table 2
RESOLVE Tidal Feature Catalog

Column	Label	Description
1	Name	RESOLVE ID
2	Confidence	Detection confidence class. 4 = certain, 3 = probable, 2 = possible, 1 = hint, and 0 = none. Same scheme as Atkinson et al. (2013).
3	Type	Type of feature seen. 1 = narrow and 2 = broad. 0 if detection confidence = 0.
4	SFR	Star formation rate ($M_{\odot} \text{ yr}^{-1}$).
5	μ_{Δ}	Morphological metric μ_{Δ} .
6	NNdist_kd	Distance to nearest neighbor (Mpc) calculated using the <i>kd</i> -tree algorithm and suppressing peculiar velocities within groups.
7	NNdist_proj	Distance to nearest neighbor (Mpc) calculated as the projected distance to the nearest neighbor in a cylindrical volume within $cz = 500 \text{ km s}^{-1}$ of the main object.

(This table is available in its entirety in machine-readable form.)

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References

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