Multi-Frequency VLBA Observations of a Parsec-Scale Counterjet in NGC 6251

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We have observed the nucleus of NGC 6251 with the VLBA and phased VLA at 1.6, 5.0, 8.4, and 15.3 GHz. At 1.6 GHz we detect a faint, short radio counterjet with a peak brightness of about 1.3 mJy/beam. This is 0.5% of the peak image brightness (0.25 mJy/beam). The counterjet lies along the same position angle as the main jet. The angular resolution at 1.6 GHz is insufficient to tell if there is evidence for free-free absorption at the base of the counterjet, as seen in NGC 4261, but our higher frequency data should clarify this. These data are being analyzed, and we expect to present results from all four frequencies.

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