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Exploring Accretion Variability via Jet Evolution in G023.01-00.41

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A complete understanding of high-mass (> 8 M_{Sun}) star formation, including the overall process of jet emission and its behavior, remains elusive. Whether or not the accretion variability broadly observed in low-mass star formation is also a common process regulating the formation of massive stars has been highly debated in the last decade. We have recently discovered that the 1.3 cm continuum brightness of the massive protostellar jet G023.01−00.41 has decreased by ~50% since 2008 (Rodriguez et al., submitted). Follow up observations confirm a brightness variation is found throughout the radio spectrum, and the jet morphology appears to have changed as well. The implications of our results will be discussed in the context that changes in jet emission, which are expected to be directly related to accretion outbursts, may be common during high-mass star formation.

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