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Title: Compact radio sources as probes of jet-mode feedback

In their early growth phase, radio sources lie entirely within the galaxy atmosphere, before continuing expansion into large-scale radio sources. The effects of the powerful jet activity on host galaxy are expected to be much more pronounced in this infancy phase than in extended radio sources. At projected linear sizes of 1-20 kiloparsecs, these galaxy-sized Compact Steep-Spectrum (CSS) radio sources are key to understanding radio-mode AGN feedback. Recent studies have argued a 'positive feedback' scenario of host-AGN interaction, where propagating jets drive a powerful bow shock through the host galaxy, triggering the star formation in the vicinity of the radio source. Our study finds extended UV emission closely aligned with radio structure in six out of seven CSS sources in a sample observed with the Hubble Space Telescope. Estimated ages of stellar populations produced in the starburst models consistent with our observations, are comparable to the dynamical ages of CSS sources ($\sim 0.1\text{--}1$ Myr) from previous studies. So the spatial alignment of UV emitting regions— likely due to newly formed stellar population— with the jet axis could be strong evidence of jet-induced starbursts and hence crucial in understanding the interaction of young radio sources with their environments.