Abstract Submitted for the NEF19 Meeting of The American Physical Society

Image Fidelity of Legacy vs Modern VLA Data in the Analysis of High Redshift Quasar Morphology¹ ERIK CARLSON, VICTORIA SUTHER-LAND, DOUG GOBEILLE, University of Rhode Island, UNIVERSITY OF RHODE ISLAND TEAM — Utilizing legacy data from both the Very Large Array (VLA) and the upgraded Jansky VLA, we both compare and contrast the snapshot imaging capabilities (time on source approximately 5 minutes or less) of both telescopes as well as using these results to set flux depth limits of the putative morphologies of high redshift quasars (z over 2.5). This analysis is performed on a sample of 374 flux limited quasars, with a minimum flux of 70 mJy in L band (1.4 GHz) found in the region of sky from 7 to 17.5 hours and 0 to 65 degrees, a region covered by the FIRST, GB 86, and SDSS surveys, giving L band, C band, and optical spectra, respectively, of all sources.

¹University of Rhode Island

Victoria Sutherland Univ of Rhode Island

Date submitted: 27 Sep 2019

Electronic form version 1.4