

Abstract Submitted  
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**A Three-decade X-band VLBI Study of the Nucleus in the Lobe-dominated Quasar 3C207<sup>1</sup>** DAVID HOUGH, Trinity University — We report on X-band (8.4/10.7 GHz) VLBI observations of the nucleus in the lobe-dominated quasar 3C207 from 1981 to 2010, mostly obtained with the NRAO VLBA. The goal is to follow flux outbursts and to fully determine the jet morphology and kinematics on 1-100 pc scales. Core region outbursts occur at mean intervals of 7 yr. The core region is resolved, and can be modeled with a stationary true core and a swinging component separated by about 0.5 mas. This reveals that two of the apparently single core region outbursts are actually double outbursts in the true core. The swinging component has varied in position angle (PA) over a range of 40 degrees, with jet components emerging along paths spread over 25 degrees. Numerous jet components are detected out to 25 mas. Average superluminal speeds are about 10c. One component has been seen to undergo an apparent acceleration from 7c to 14c at about 2-3 mas from the true core, in what we identify as a jet recollimation zone that appears to redirect the flow along an average PA of about 90 degrees. We detect definite expansion of individual jet components until they reach the recollimation zone. Possible physical interpretations will be discussed.

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