

Abstract Submitted
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Searching for Unresolved Binary Brown Dwarfs JACOB ALBRETS-
SEN, DENISE STEPHENS, Brigham Young University — There are currently L
and T brown dwarfs (BDs) with errors in their classification of +/- 1 to 2 spectra
types. Metallicity and gravitational differences have accounted for some of these
discrepancies, and recent studies have shown unresolved binary BDs may offer some
explanation as well. However limitations in technology and resources often make it
difficult to clearly resolve an object that may be binary in nature. Stephens and Noll
(2006) identified statistically strong binary source candidates from Hubble Space
Telescope (HST) images of Trans-Neptunian Objects (TNOs) that were apparently
unresolved using model point-spread functions for single and binary sources. The
HST archive contains numerous observations of BDs using the Near Infrared Camera
and Multi-Object Spectrometer (NICMOS) that have never been rigorously analyzed
for binary properties. Using methods developed by Stephens and Noll (2006), BD
observations from the HST data archive are being analyzed for possible unresolved
binaries. Preliminary results will be presented. This technique will identify potential
candidates for future observations to determine orbital information.

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