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The Proper Motion of 4C 39.25 Revisited

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Abstract. We have previously reported proper motion of the radio source 4C 39.25 during the period 1986-1997 as observed by astrometric and geodetic VLBI. This astrometric motion agreed well with the superluminal motion of the brightest component as seen in VLBI images. We also found evidence that the component was decelerating, and suggested that it would stop moving in late 1997. Synoptic observations of 4C 39.25 by geodetic and astrometric VLBI have occurred on a regular basis since our previous analysis in 1997. An examination of the new data shows that, contrary to our previous prediction, the source has continued to move but has recently (2004-2005) changed direction. Here we revisit the astrometric motion of 4C 39.25 and examine the astrometric motion as well as new images obtained since our previous report, and discuss implications of this motion for physical models of 4C 39.25.