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Extreme Veiling Variability and Circumstellar Disk Evolution in the UY Aur Infrared Companion

Lisa Prato¹ Peter Knowlton¹ Jacob Hyden¹ Taylor Kutra¹

¹Lowell Observatory

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Historically the UY Aur system has varied in optical light by many magnitudes; in the early 1990s, the 0.9 arcsecond binary component was identified as an infrared companion (IRC). The stars have similar spectral types, K7 and M1 for the A and B components, respectively. Adaptive optics imaging has not revealed any additional visual components in the system. Over the past 20 years, a dozen high-resolution ($R=30,000$ or higher), infrared spectra have demonstrated stable and consistent results for the primary component but extreme variability in the IRC: at times the spectrum manifests normal absorption lines and in some cases within months the absorption lines disappear completely. We interpret this behavior as extreme veiling variability and in this contribution we explore the implications for accretion and inner disk structure and evolution in the IRC. This research was supported in part by NSF awards AST-1313399 and AST-2109179.