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Stellar Surface Imaging of LO Pegasi[1] RACHEL DECKER, Ohio Wesleyan University, CONRAD MOORE, Bucknell University, ROBERT HARMON, Ohio Wesleyan University — We present images of dark starspots on the surface of the K8 main-sequence star LO Pegasi. CCD camera images of the star and surrounding field were acquired through B, V, R and I filters at Perkins Observatory in Delaware, OH on clear nights in June and July, 2008. The images were dark-subtracted and flat-fielded and then aperture photometry was performed to yield light curves through each of the four filters. These light curves were then simultaneously inverted via an algorithm devised by one of us (Harmon) so as to yield images of the spots based on the rotational modulation they produced in the light curves. The use of multiple filters significantly improves the latitude resolution of the reconstructions. Comparison of our results with results from 2006 and 2007 shows that the spot structure was more complex in 2008 than in the prior years.

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