

Astrometric Accuracy of Adaptive Optics on the

W. M. Keck II 10 meter Telescope
 Hamilton Mitchell Observatory, University of California, Los Angeles, California

Measuring Astrometric Accuracy

Images

Optical distortions in camera lens contribute to astrometric inaccuracy. In order to limit its contribution images were selected to keep the position of 16C within a limited area of pixels.

- Images taken with the slit viewing camera (scam) built by Doctor Ian McLean of UCLA
- Image being taken by scam was positioned on plate so that 16NW was consistently located in the plate's slit for spectroscopic measurements

Measurement

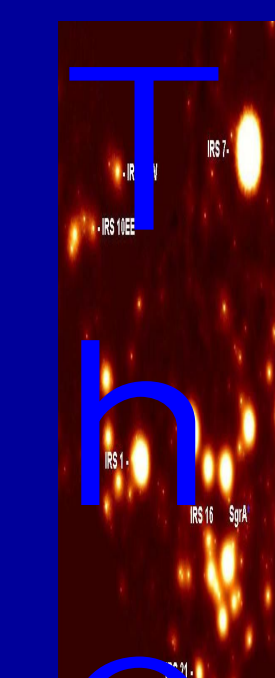
Method
 Astrometric uncertainty can be measured as the standard deviation through 68 images of the

16C
 Central position relative to IRS 16cc, IRS 16sw, IRS 16SW-E, IRS 29N makes it an effective correlation star

Adaptive Optics Systems, Galactic Center Images, Sean McGeehan, Aggelos Tzannas, and Shelley Wright from UC Los Angeles, Marika Moravveq, Lisa Hunter, and Bryan Brackley from the Center for Adaptive Optics

exposures to accurately determine their centers bright stars and proximity

exposures loss of light through imaging apparatus's slit make its astrometry and photometry unreliable



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Assumed perfect Adaptive Optics (A.O.) system

Functioning properly through the Reseach and Education for Rare