

Image Digitizer

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Abstract. Equipment for digitizing 24×36 mm negatives was described. The sensing unit is a 1024-element CCD. Apart from the optical train, the transparency is held in a rigid carrier that is moved by a stepper motor to scan one row at a time. The whole operation is controlled by computer, and results in a 170.5 kb file for each image.

“Comet” Software

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Abstract. A suite of programs written in BASIC for use on Apple (II, IIe, etc.) computers was described. A data file, extracted from the general catalogue by Marsden is incorporated. The programs are applicable to any geographical location and allow the determination of positions (in both celestial and horizontal coordinates), times of rising, transit and setting, and the calculation of ephemerides from orbital elements.

Dumoulin, C.: *La Gazette d'Uranie*, Hors-Série No.1, Groupe de Recherche et d'Animation en Astronomie du Limousin, IREM de Limoges, 1986

Dumoulin, C., Parisot, J.P.: *Astronomie pratique et informatique*, Masson, Paris, 1987

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Refining the Orbit of Visual Double Stars

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Abstract. An iterative method of refining the orbital parameters of visual double stars was described. The sum of the least-square differences is minimized by the Levenberg-Marquardt method. The application to two examples was described, including one highly inclined orbit, ADS 8862 = Hussey 664 ($i = 94.3$ degrees).

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