

Using an Image-Intensifier in Astronomy

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Abstract

The use of an RTC XX 1390 second-generation intensifier (which consists of a S20R photocathode, a micro-channel plate and a screen) was described. In visual work, very faint objects become visible. Photographically, an 18th-magnitude object has been detected through a layer of cirrus. The effective focal length used was 20m, giving a resolution of 1 arcsecond, thanks to the short exposure times needed. With a Celestron C8 telescope, the coma of Comet Halley was photographed with 2-second exposures, allowing transitory phenomena to be detected. Used in conjunction with video techniques, high time-resolution images could be obtained, opening up the possibility of new forms of observation of faint objects.

References

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Amateur Polarimetric Research

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Abstract

The construction of both single- and twin-channel polarimeters was described. Refractors are suitable for this form of work, and Cassegrains may be used, but Newtonians are not recommended, because of the polarization it introduces. A summary of objects and their degree of polarization was given. Examples of variation in the amount of polarization and its correlation with visual observations of μ Cephei were given.

References

A full account (in German) has been published in *Sterne und Weltraum*, **25**, p.544–9, 1986
Observations of μ Cep are given in *Die Sterne*, **60**, p.315–8, 1984