mirror

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intensified TV-rate cameras placed in particular points of the optical path:		
1) at the	focal plane of the finder telescope;	
2) in the	"offset" box, at the focal plane of the 91-cm telescope folded by 45°	

The remote control of the telescope is performed from the control room by using three

3) in the "fiber-holding" box, fed by a beam-splitter placed along the optical path before the fiber input.

The use of fast scan systems allows us the real-time control of telescope position without any delay in the electronic chain.

Micro Channel Plate image intensifiers are employed in all these systems. The TV-camera #1 is an "home-made" arrangement of a commercial camera and an image intensifier of the XX1500TV type made by Mullard-Philips. The #2 and #3, used at the focus of the main telescope, are custom cameras producted by EEV (now E2V Technologies).

The sensitivity of the whole system (intensifier+camera) allows to us to see, with camera #1 in the best sky conditions, stars as faint as V=12 magnitude in a field of view of about 40x30 arcminutes.

The spectral response of these CCTV system is shaped by the CCD RQE and by the photocatode S25 and S20 phosphors at the output of the MCP Intensifiers. These latter have a nearly flat spectral response in the range between 600 and 800 nm, so that the whole system performs a rather high sensitivity in the red region with a cut-off at around 500 nm (green wavelengths).

Here a block diagram of the system

