

## I. PHYSICS

Astrophysics (Solar Corona)

### BROAD-BAND PHOTOMETRY OF CORONA

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THE aim was to obtain high resolution broad-band photographs of the corona to study the radial distribution of brightness in the corona as well as in specific features and also to study its shape and structure.

#### DESCRIPTION

A horizontal camera ( $f = 6$  metres) working at  $f/48$  was fed by a Siderostat.

#### SUMMARY OF PRELIMINARY RESULTS

Five exposures on the corona were obtained during totality phase on III-F emulsion through Wratten 25 filter ( $\sim 6300\text{\AA}$ ). These high resolution photographs are of a remarkably high quality and provide good material for the study of distribution of brightness in the corona out to  $2.5 R_{\odot}$ . The changing forms of a coronal transient are seen in this series of photographs. The absolute calibration obtained will permit the evaluation of the coronal brightness in absolute units.

#### LOCATION

Hosur, Karnataka. Long.  $75^{\circ} 09' 18''$  E, Lat.  $15^{\circ} 00' 12''$ N.