

**Details of the Expedition to Iradatganj during Total Solar Eclipse of  
October 24, 1995**

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**Abstract**

Equipment Celestron C 14 Schmidt Cassegrain Telescope (14" diameter), off-axis 6" solar filter, ST6 CCD camera, Off axis polaroid filter 6" rotatable in steps of 60 degree

**Experiments**

- 1 To measure the solar diameter by accurate observations of the contact timings of the four contacts
- 2 Polarisation study of the solar corona For this purpose we planned to take the CCD images of the corona during totality using the polaroid filter (described above) mounted on the objective end of the C-14 tube by rotating it in two steps of 60 degree each In this way three pictures were taken, one at the initial position of the polaroid, and one each for the two other positions at 60 and 120 degree A f/6.3 focal reducer was employed before the CCD to reduce the effective focal length of the system in order to bring down the image size This data shall be used in deriving information about the electron density and temperature distribution in the corona
- 3 To take colour pictures of the various phases of the eclipse for mass education purposes through the Planetariums' astronomical presentations