

**OBSERVATIONAL PROGRAM FOR THE
TOTAL SOLAR ECLIPSE OF AUGUST 11, 1999**

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We plane our program of eclipse observation on August 11, 1999 to consists of the following experiments:

1. Photographic observation of the partial phases of eclipse with the aim to determine the time of contacts (T_1 - T_4), to evaluate the orbital elements of Moon and the value of ΔT .

2. CCD observation of the partial phase of the eclipse with the same aims as in 1.

3. Flash spectrum observations during the second and third contacts of the eclipse around the Balmer jump. These spectra could give the changes of the Balmer jump with height in the solar atmosphere.

4. Flash spectrum observations during the second and third contacts of the eclipse around Balmer lines H_8 ($\lambda 388.905$ nm) and He $\lambda 388.865$ nm. These spectra could give the relative abundances of He and H in spicules.

5. Photographic observation of polarization of the inner solar corona. The polarization degree and position angle will be measured. From these parameters the electron density in the corona could be found.

6. CCD polarimetric observation of the corona with low angular resolution. The aim of this observation is to find the integral coronal polarization. These data together with others, obtained at earlier solar eclipses, will be used for correlation investigation between the integral polarization of corona and the phase of solar activity.

7. High resolution radio observations of the Sun during the partial phase of solar eclipse using the occultation technique.