THE NAGOYA COSMIC-RAY MUON SPECTROMETER III

III AUTOMATIC FILM SCANNING EQUIPMENT

Shibata, S., Kamiya, Y., Iijima, K. and Iida, S.*

Nagoya University, Nagoya, Japan

* Toyohashi University of Technology, Toyohashi, Japan

ABSTRACT

In the regular operation of the Nagoya cosmic-ray muon spectrometer, about 2000 events per day will be recorded on the photographic film.

To derive the track locations from such a huge number of photographs with high accuracy in a short time, we have developed an automatic film scanning equipment. At Paris conference (1), we have reported the construction and characteristics of this equipment.

After that time, we have improved the film driving mechanism. Old mechanism is only used for the frame-to-frame advancement and the film is clamped on a table at every frame. For scanning of each frame, this table is driven by the pulsed stepping motor.

This modification makes the equipment suitable for the practical application to our measurments.

Reference.

1. Shibata, S. et al., 17th ICRC, Paris, 9, 376 (1981)