

Development of High Speed Spectrograph for Sprite Observations

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We describe a high speed spectrograph being developed for sprite observations. The spectrograph is based around a 16 channel multi-anode photo-multiplier array which can be run at 20kHz per channel. The spectral range of the instrument will cover the 400-500nm, thus making it possible to track the temporal evolution of both neutral and ionized Nitrogen emissions from sprites. Calibration results on optical emissions from streamers in low pressure gasses in a large plasma chamber will be presented.