

# Supporting Information for ”Precipitating electron energy spectra and auroral power estimation by Incoherent scatter radar with high temporal resolution”

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## Introduction

This supporting information provides a brief description for the time-lapse video of auroral images obtained from the all-sky and narrow field of view camera observations.

**Text S1.**

The video illustrates the temporal evolution of aural structures and brightness during the studied event. In addition, the video shows altitude profiles of the electron density enhancement and magnitude of the auroral power corresponding to auroral structures observed inside the radar beam.

**Movie S1.** Temporal variation of the auroral event. Panels in the video are the following.

Top, left: Electron density, top, right: auroral power from radar (the black curve) and optical observations (the blue curve), bottom, left: auroral images (557.8 nm) from the all-sky camera and bottom, left: auroral images (427.8 nm) from the narrow field of view camera.