

Problems of acquisition of auroral image data and data processing

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We have obtained various types of auroral image data in various shooting styles around the world. In this lecture, we will report on several problems of data processing. Experiments currently undertaken include real-time image processing of aurora with possibility of 4K / 8K streaming, acquisition of continuous image data of 100 fps by the EMCCD camera and the data release, and photographing of aurora from unmanned aircraft using a small infrared camera. In the past attempts using commercially available digital cameras, outreach-purpose experiments include 4K-3D dome-master time-lapse images and 20K-VR shooting, scientific-purpose experiments include automatic detection of auroras to control high-speed imaging of aurora.

Keywords: aurora, image processing, high-speed imaging