

The EISCAT-MIRACLE-ALIS radar, optical and HF heating campaigns in February-March 2014

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In February-March 2014 a campaign of several coordinated HF heating experiments and observations by radar and optical instruments was arranged. The EISCAT incoherent scatter radars, the MIRACLE all-sky imagers and the ALIS system were all observing a common volume around EISCAT. There were multiple campaign objectives including auroral emissions and ionisation, and artificial heater-induced optical emissions. During most of the experiments the MIRACLE and ALIS imagers were running synchronised filter sequences. For some of the heating experiments, however, the MIRACLE all-sky EMCCD in Abisko, Sweden, was operated at a comparably high frame rate of eight 512x512-pixel exposures per second, with the 5577 Å filter.

In this talk an overview of the campaign will be given and, more specifically, we aim at estimating the onset time of the heater-induced 5577 Å emission if possible.