



The September 2005 extended Incoherent Scatter Radar Campaign: high quality ionospheric Monitoring for CAWSES

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Incoherent scatter radars have traditionally operated for relatively limited periods. However, during the recent CAWES campaign in September 2005, a number of the radars operated throughout the whole 30-day interval. In particular, the tri-static EISCAT UHF system in northern Scandinavia, the EISCAT Svalbard radar (ESR) outside Longyearbyen, Svalbard, the Sondrestrom radar, Greenland, and the Millstone Hill Radar, Massachusetts, USA accumulated a unique joint data set which opens up a range of new possibilities for the study of ionospheric and neutral atmosphere phenomena, magnetosphere-ionosphere coupling, and solar-terrestrial interactions from sub-second plasma instabilities, up to multi-day tides. The data set is particularly relevant to the Second CAWSES Space Weather and Atmospheric Coupling Campaign. Using the EISCAT data as an example, the available incoherent scatter data will be reviewed, with particular reference to features relevant to CAWSES studies. The presentation will also consider practical issues of data calibration and validation as well as the mechanisms for other scientists to obtain and use the data.