

## Artificial FAI observation using SuperDARN raw time series analysis and FDI method and EISCAT heater facility

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SuperDARN observation of artificially induced FAI by EISCAT heater facility was performed. An observation in the past utilizing raw time series (TMS) analysis method with high time resolution of about 0.1 second showed highly temporal varying echo power. This time FDI (frequency domain interferometer) method was newly applied to the TMS method. The observation result will be shown to discuss whether we can observe FAI with soliton-like structure and its dynamics including the number of such structure in a observed range-bin, correlation time and lifetime.