



## **Ionospheric drift and anisotropy measurements over LOFAR core.**

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The Low Frequency Array (LOFAR) is an excellent astronomical instrument as well as the very useful tool for studying irregularities in the ionosphere.

Due to its operational frequency range (10-270 MHz), LOFAR is very sensitive even to very small changes in ionospheric electron density. The interferometric nature of the instrument allows for the multi-point observations, and, thus gives the possibility for ionospheric scintillation measurements over distances ranging from tens of meters to hundreds of kilometers.

The project for scintillation monitoring over the LOFAR stations has been carried out for several years and a large amount of data has been collected and stored in the Long Term Archive (LTA). Available data contain signal amplitude for a few strongest radio sources (A Team) measured at all core and remote stations.

Based on the LTA data, correlation analysis between stations can be made in order to obtain information about the characteristics of ionospheric structures.

This work presents the attempts to measure ionospheric drifts and anisotropy of irregularities over LOFAR core stations using data from regular scintillation measurements.