



## **ROTI monitoring with reference to the International LOFAR Telescope**

Kacper Kotulak, Adam Froń, and Andrzej Krankowski

University of Warmia and Mazury, Space Radio-Diagnostics Research Centre, Poland (kacper.kotulak@uwm.edu.pl)

Interferometric networks operating on relatively long baselines, such as LOFAR (approx. baseline of 1500km) are one of the important scientific users of ionosphere monitoring products. Simultaneous observations of the radiource from the different interferometric stations with such distance between can be distracted by the ionospheric medium in different ways, as signal would cross ionospheric regions with different ionization level.

The main objective of presented work is to introduce ionospheric fluctuation product (ROT and ROTI maps), which will complement the main ILT dedicated product – high spatial and temporal resolution ionospheric maps (ILTG). Presented ROT/ROTI product is prepared basing on the real-time EUREF Permanent Network GNSS observations and generated with similar assumptions as ILTG products – one degree by one degree in spatial and one hour in temporal resolution. Presented product will be a part of the ILT ionospheric service planned for the nearest future.

The presentation briefly presents the ROT and ROTI obtaining methodology as well as first results.