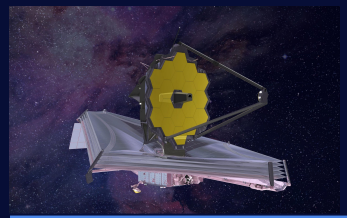
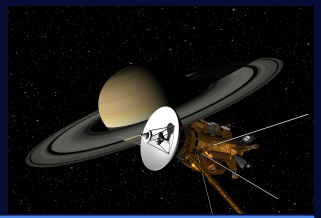
Such for lightning in the Solar System





Space telescopes and missions

Infrared telescopes

Optical telescopes

Radio telescopes

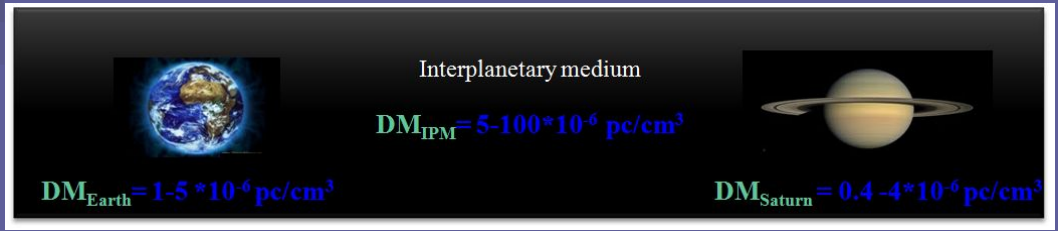
K. Mylostna

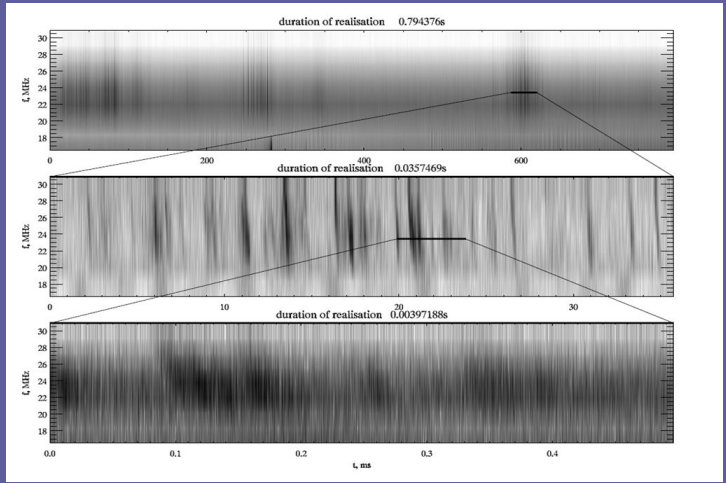
Institute of Radio Astronomy of NASU,
Kharkiv, Ukraine

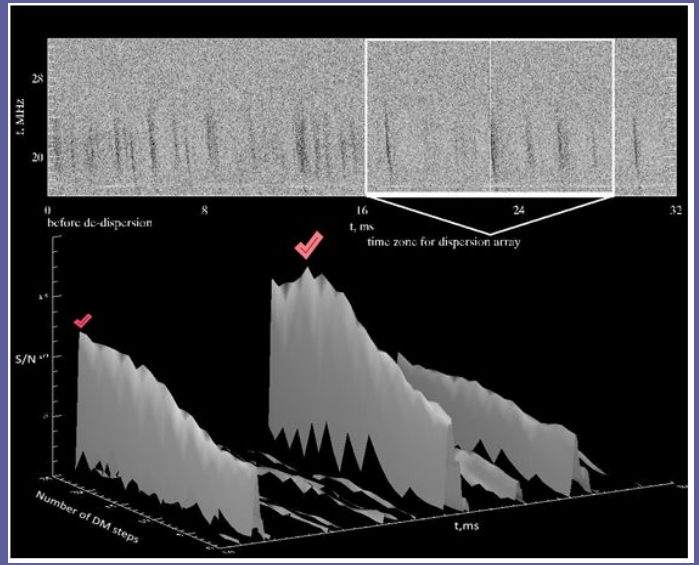
Ground-based astronomy possibilities of *Saturn* observations

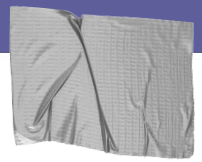
The distance between Saturn and Earth is constantly changing from 1.2 to 1.7 billion kilometers as both of the planets travel through space.

Ground-based astronomy achievements of the observations of *Saturn and Uranus* observations

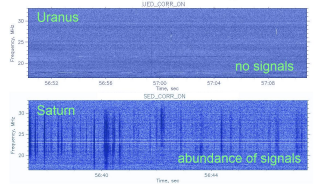


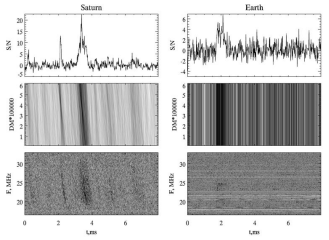






Comparison of observations of Earth, Saturn, and Uranus

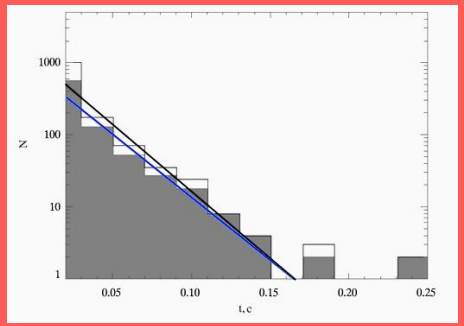




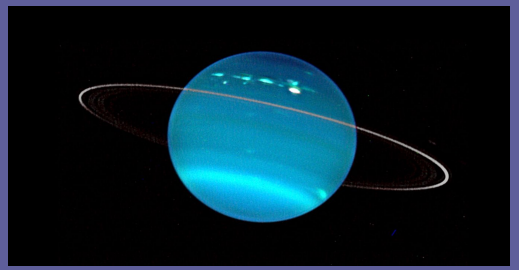
1. STUDY OF SED'S EMISSION PARAMETERS. K. Y. Mylostna, V.V. Zakharenko, G. Fischer, A. A.Konovalenko, and P. Zarka. Planetary Radio Emissions VIII, Vienna, 2017, p. p. 223 - 232 .

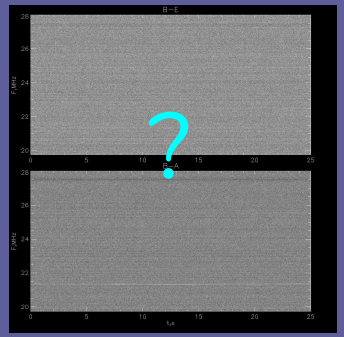
The next important targets

The parameters of complex structure of Saturn Electrostatic discharges (radio emission of saturnian lightning) and statistical analysis of the future data set.



Uranian lightning





Variations of dispersion measures each signal experienced on the path from Saturn to Earth.