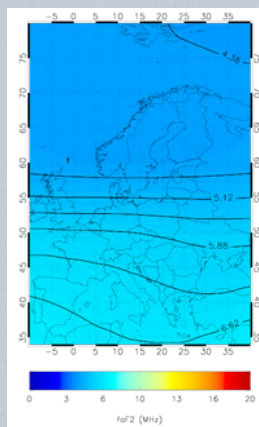
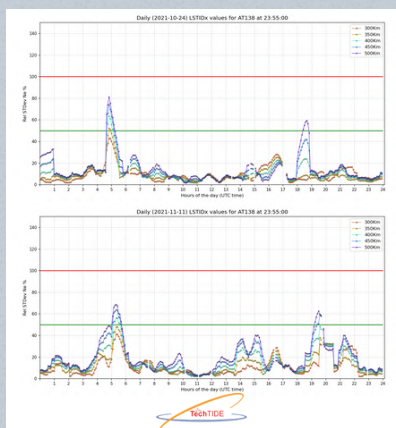


Funding Agencies & Projects

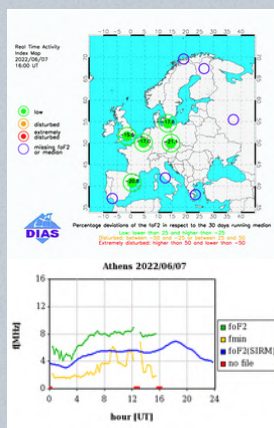


ESA Space Weather
Service Network EIS

PITHIA-NRF
H2020 Research
Infrastructure Project



TechTIDE H2020 Research
and Innovation Project



DIAS, FP6 Project

The Ionospheric Group of the National Observatory of Athens operates the Athens Digisonde [URSI code: AT138], one of the most advanced European real-time ionospheric stations, a Digisonde Portable Sounder – 4D (DPS-4D) at Penteli site (38oN, 23.5oE) since September 2000.

The Athens Digisonde performs 5-minute scheduled observations with vertical incidence ionograms and ionospheric plasma drifts.

The Athens Digisonde is part of the European Ionosonde Network DIAS (European Digital upper Atmosphere Server) and part of the Global Network GIRO (Global Ionospheric Radio Observatory), operated by the University of Massachusetts Lowell. The Athens Digisonde observations support the European Ionospheric Service (EIS) of the European Space Agency (ESA) Space Weather Service Network.

Info

National Observatory of Athens
IAASARS
Ionospheric Group

Address | Vas. Pavlou & I. Metaxa,
15236 Penteli, Attiki, GREECE

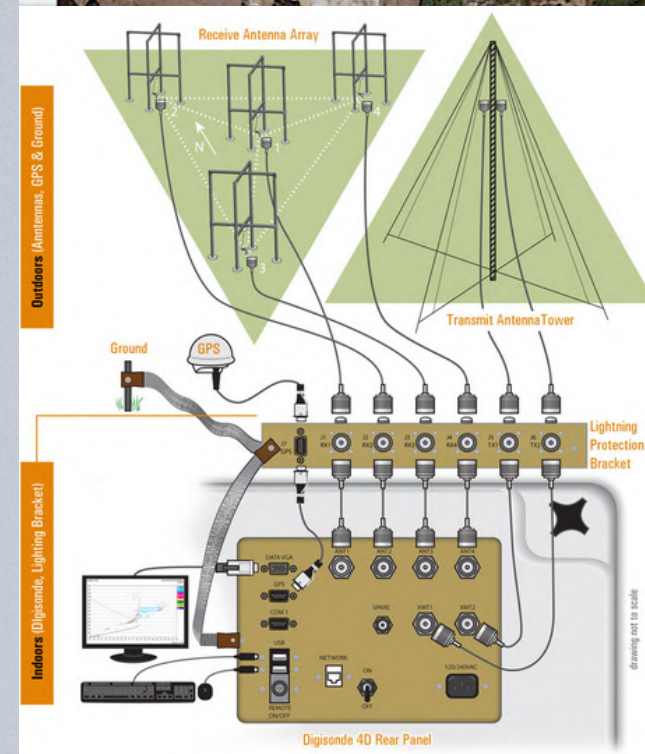
Homepage | www.iono.noa.gr



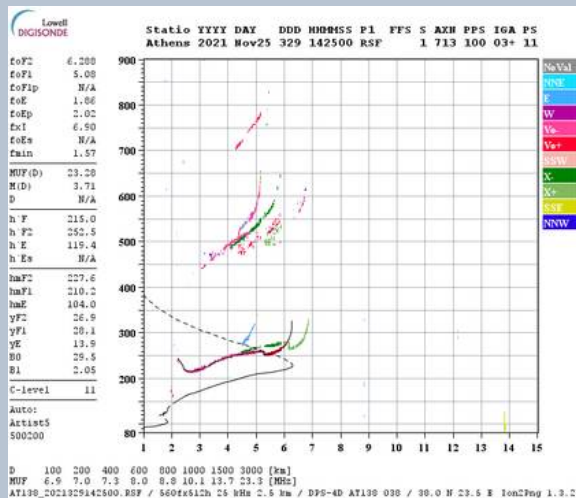
Ionospheric Group
Institute for Astronomy, Astrophysics,
Space Applications and Remote Sensing
NATIONAL OBSERVATORY OF ATHENS



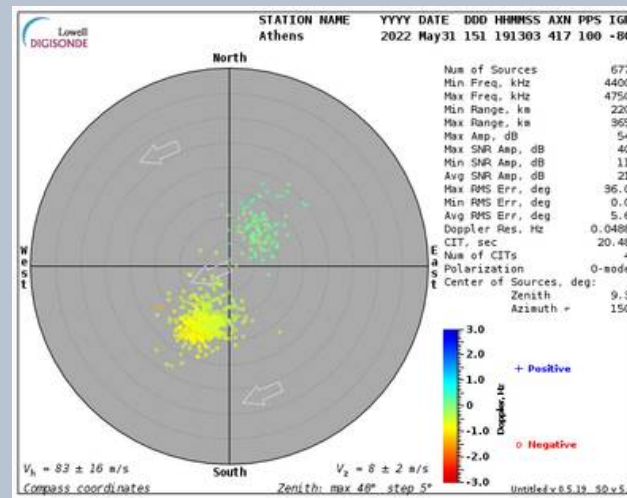
Athens Digisonde



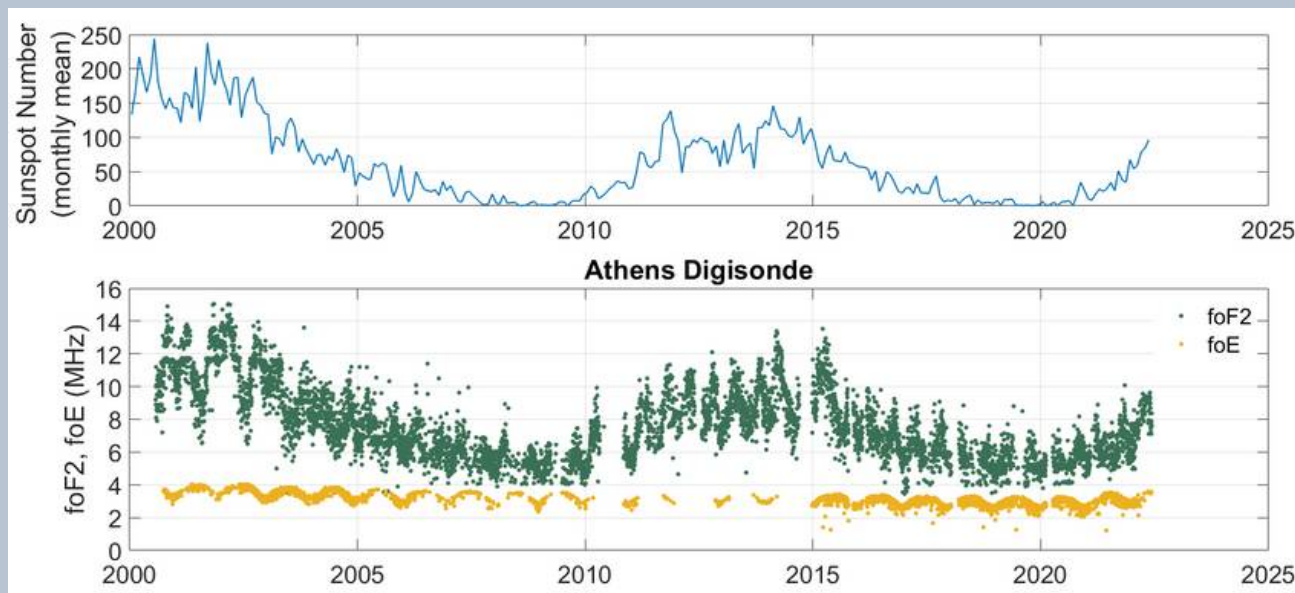
Characteristic Observations



Ionograms



Skymaps



Two solar cycles of observations

The Ionospheric Group

The main activities of the Ionospheric Group focus around the performance of systematic ionospheric monitoring and the development of ionospheric and trans-ionospheric nowcasting and prediction systems through the on-line implementation of advanced modelling techniques ingesting ground and space data from all geospace regions. The Group operates since 2000 the Athens Digisonde, which is of key importance for HF communications due to its unique geographic location.

The strategic goal of the Ionospheric Group of IAASARS is the establishment of a unique e-infrastructure in Europe and worldwide for the monitoring, specification, forecasting and prediction of the ionosphere - plasmasphere and thermosphere environment for both scientific and operational applications. The DIAS system (European Digital Upper Atmosphere Server) is the core of this activity and the main system in Europe that provides alerts, nowcasts and forecasts for ionospheric conditions.

Today, the Ionospheric Group through its research infrastructures, provides services able to support systematically HF communication systems, satellites orbiting at LEO and MEO heights and systems relying on transionospheric propagation, at any location of the Earth's upper atmosphere up to the plasmopause, and protect these systems from ionospheric disturbances and irregularities triggered by space weather events.