### **T-FORS Innovation Day**

You are invited to join us for the T-FORS Innovation Day! The event aims at presenting the major achievements resulted from the T-FORS project and at discussing with stakeholders about their needs and priorities in TID forecasting services.

#### Tentative agenda

- T-FORS major achievements
- TID forecasting system demonstrations
- Users experience
- Round Table Discussion

### **Preliminary list of speakers**

Anna Belehaki (NOA, Greece), Axel Garcia (ONERA, France), Ivan Galkin (UML, USA), Luca Spogli (INGV, Italy), Konstantinos Themelis (NOA, Greece), Claudio Cesaroni (INGV, Italy)

Date and Place: December 4, 2024 | Athens, Greece



### Contact ☑ info@t-fors.eu ⊕ https://t-fors.eu



The T-FORS project is funded by the European Union (GA-101081835). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HaDEA). Neither the European Union nor the granting authority can be held responsible for them.





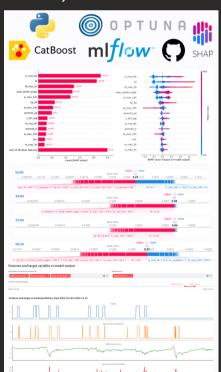


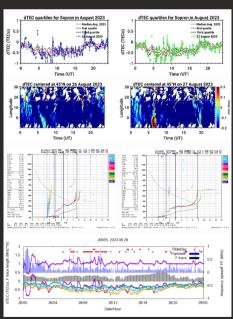
# T-FORS

# Travelling Ionospheric Disturbances FORecasting System

# What are the T-FORS objectives?

T-FORS aims at providing **new models** able to interpret a broad range of observations of the solar corona, the interplanetary medium, the magnetosphere, the ionosphere and the atmosphere, and to issue **forecasts** and **warnings** for Large Scale and Medium Scale Travelling Ionospheric Disturbances (**LSTIDs** and **MSTIDs**).



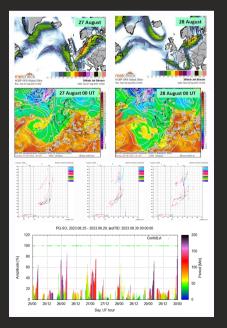


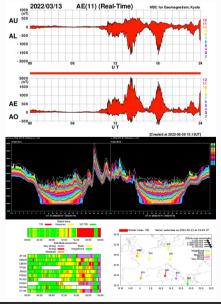
The project is coordinated by the lonospheric Group of the National Observatory of Athens.

# The T-FORS Big Data Collections

Critical data are acquired from networks of **ground-based facilities** and **LEO satellites**, providing geophysical characteristics that are drivers of TIDs or are affected by TIDs, as well as TID characteristics from the TechTIDE database, that are used in the T-FORS forecasting models for training, development and verification.

- Digisonde SAO and RSF files and autoscaled characteristics
- Digisonde-to-Digisonde oblique skymaps
- RINEX data files from ground-based GNSS receivers and extracted slant and vertical TEC
- Continuous Doppler Sounding System data files
- Swarm A, C and B datafiles from the LP experiments and the GPS on board Swarm
- Geomagnetic field data from the FMI IMAGE network
- Airglow All Sky Cameras Nighttime OI 630nm airglow emission intensity
- Barometric data from stations co-located with Digisonde sounders





# On ground demonstration tests

**Experiments** of aerospace and civil protection agencies, **to validate** the performance of the T-FORS **prototype services**. **Skywave propagation results** from NOSTRADAMUS HF OTH-R (ONERA) to HF Direction Finding system (GFP).

