“Ionospheric Electron Density (Ion_ED)” Workflow

+ Date
+ Coordinates (latitude & longitude)
+ Algorithm (TaD-3D, NeQuick, NEDM2020)
+ Digisonde bottom-side profile (Electron Density, Frequency)

“Kp, ap, and Ap indices, F10.7 radio flux and sunspot number” Data Collection

- ✓ Geomagnetic three-hourly index Kp

“NOAA-SWPC predicted sunspot number and F10.7 radio flux” Data Collection

- ✓ SSN & F10.7 indices

“eSWua IONOWORD tool: Nowcasting global TEC maps” Data Collection

- ✓ TEC over Europe (nowcasting)

“The 3D EDD version of the TaD Model” Data Collection

- ✓ Electron Density & Frequency profiles over Europe for heights 100 ÷ 20,000 km

“The NeQuick ionosphere electron density model” Data Collection

- ✓ Electron Density & Frequency profiles over Europe for heights 100 ÷ 600 km

“NEDM2020: ionosphere electron density model” Data Collection

- ✓ Electron Density profiles at any given location for heights 80 ÷ 20,000 km

Get TaD-3D Electron Density Profile and/or Frequency Profile at specified locations on the European grid (lat = 34 ÷ 60, lon = -5 ÷ 40) for heights 100 ÷ 1,000 km

Get NeQuick Electron Density Profile and/or Frequency Profile at specified locations on the European grid (lat = 34 ÷ 60, lon = -5 ÷ 40) for heights 100 ÷ 1,000 km

Get NEDM2020 Electron Density Profile and/or Frequency Profile at specified locations on the European grid (lat = 34 ÷ 60, lon = -5 ÷ 40) for heights 100 ÷ 1,000 km