"Total IONOspheric response Solar Wind Magnetosphere driven (TIONO_SWM)" Workflow

Time interval

+ Digisonde Station

+ Ionospheric Characteristics

Get Kp Index (Kp1, Kp2, …, Kp8)

- ✓ **Geomagnetic three-hourly (T00:00:00, T03:00:00, …, T21:00:00) index Kp**
- ✓ Included in the "***Kp, ap, and Ap indices, F10.7 radio flux and sunspot number***" Data Collection

Get B values (Bmag, Bx, By, Bz)

- ✓ **DSCOVR mission Magdata records**
- ✓ Included in the "***DSCOVR mission Magdata records***" and "***SWIF Model***" Data Collections

Get GNSS VTEC values over Digisondes

- ✓ **GNSS Vertical Total Electron Content (VTEC) values over 10 European Digisonde stations (AT138, EB040, RO041, RL052, PQ052, JR055, EA036, DB049, SO148, TR170)**
- ✓ Included in the "***GNSS: Global Ionosphere Maps (GIM)***" Data Collection

Get Ionosonde Characteristics

- ✓ **Distinct ionospheric characteristics (SAO records) for 10 European stations (AT138, EB040, RO041, RL052, PQ052, JR055, EA036, DB049, SO148, TR170)**
- ✓ Included in the "***European Ionosonde Network DIAS (European Digital upper Atmosphere Server) collection***" Data Collection

Get data (Kp, B, GNSS VTEC, ionosonde characteristics)