



# PITHIA-NRF Research Infrastructure

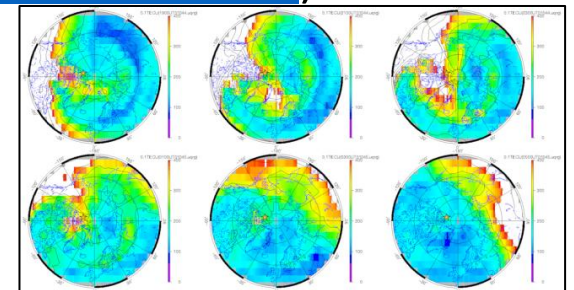
## Presentation of the project beneficiaries:

### UNIVERSITAT POLITÈCNICA DE CATALUNYA (UPC-IonSAT)

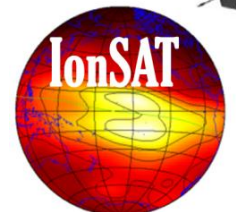


**UPC** is a public Spanish University @ Barcelona on technology. **UPC-IonSAT** res. group has more than 30 years of experience in GNSS research (photogrammetry, new models for ionospheric modeling, space weather and precise positioning) including GNSS teaching (<https://scholar.google.com/citations?user=Tm-DcsMAAAAJ&hl=en>).

**Infrastructure: 6 multicore servers with a total of +100 Xeon processors, ~1 Tb of RAM and 50 Tb in hard disks**, running 24/7 Real-Time (RT) intensive processing (e.g. RT ionospheric tomography from +200 GNSS worldwide receivers). **Classrooms adapted for hybrid (in-person & on-line) teaching and dissemination.**



**Products, Models & Dissemination: Final, rapid, RT and predicted Global Ionospheric Maps for IGS and ICAO, GNSS-based solar flare indices and EUV flux rate estimation for ESA, and inversion of challenging ionospheric radio-occultations for EUMETSAT.** Experience in international teaching.



**UPC-IonSAT is a PITHIA-NRF access node** contributing to the 8 WPs:

[manuel.hernandez@upc.edu](mailto:manuel.hernandez@upc.edu) (contact person), [alberto.garcia.rigo@upc.edu](mailto:alberto.garcia.rigo@upc.edu), [q.liu@upc.edu](mailto:q.liu@upc.edu)

# UPC-IonSAT facilities: **UNIX servers**



# UPC-IonSAT facilities: **hybrid classrooms**

