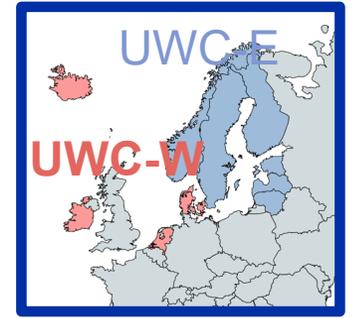


Use of satellite atmospheric sounding data in UWC-W

E. Whelan (Met Éireann), I. Monteiro* and J. Barkmeijer (KNMI) M. Dahlbom and B. Amstrup (DMI), S.Thorsteinsson (IMO)



Common operations

HARMONIE-AROME @ 2km, 90 levs, 3D-Var, continuous EPS and deterministic.

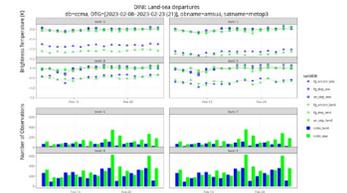
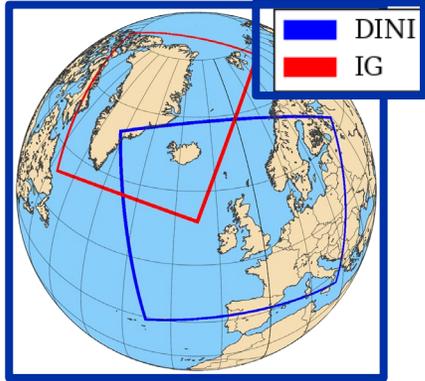
Parallel 4D-Var suite, targeting operations in near future.

Use of satellite data:

- Superset of radiances assimilated by each NMHS, i.e., AMSUA, MHS, ATMS, MWHS2, IASI, CrIS*.
- Satellite products, i.e., AMVs, ASCAT winds and RO.
- Implementation, use expertise from each NMHS.

Progress & Plans:

- Heritage missions, ATMS@NOAA-21 and MWHS2@FY-3E
- Next generation missions, priority will be given to MTG-IRS.
- Implementation the “all-sky” framework in HARMONIE- AROME 4D-Var.



DINI: Observation Usage
db=cma, DTG=2023-03-07 12 UTC, obsname=iasi, satname=metop1

