

# Report on Operations

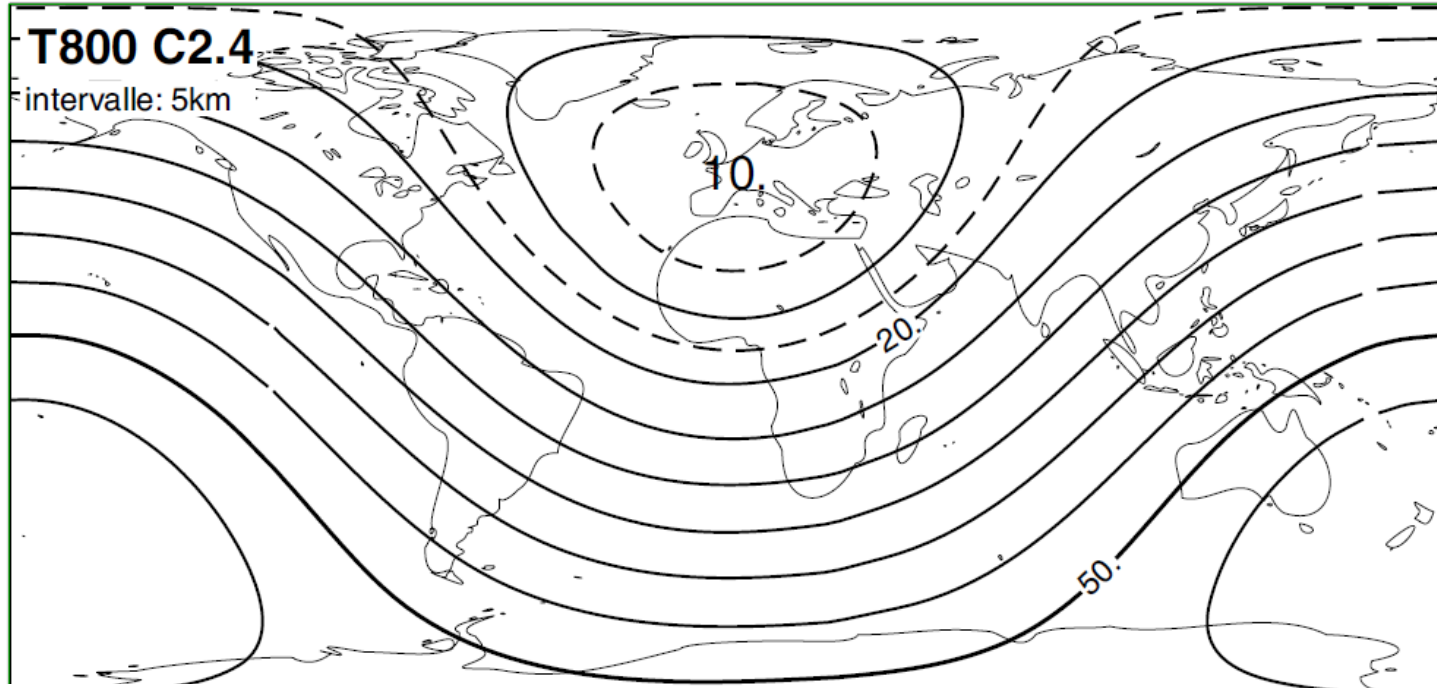
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Météo-France/CNRM/GMAP

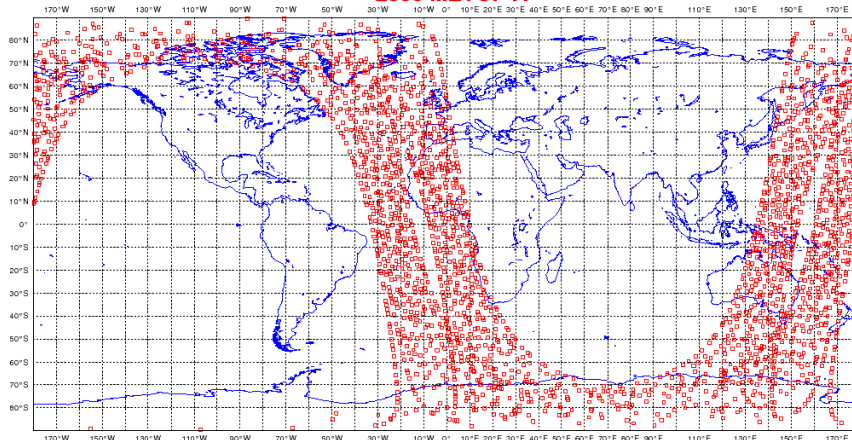
# Evolution of MF's operations

- Acceptance test of NEC/SX9: mid-June 2009
- Switch operations to the SX9: September 22<sup>nd</sup> 2009
- Next E-suite: to start in November
  - Arpège higher resolution: 10km over W. Europe, 70 levels
  - Doubled-density of satellite radiances (125km extraction distance)
  - Aladin-FR: 7.5 km, 70 levels
  - Arome-FR: 60 levels, assimilation of radar reflectivity
  - PEARP: 35 members, Ens. Assim. Perturbations + S.V., some physics perturbations, 65 levels

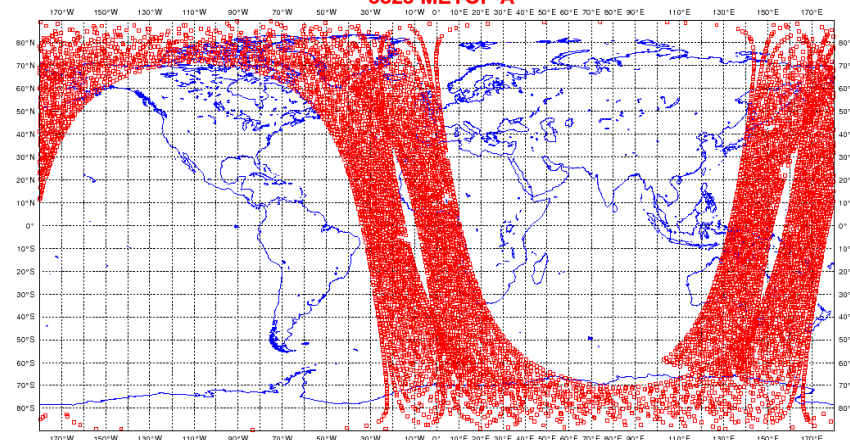
# Arpège :



**METEO-FRANCE couverture de donnees - IASI**  
**2009/10/26 00H UTC cut-off court**  
Nombre total d'observations apres screening : 2338  
2338 METOP A



**METEO-FRANCE couverture de donnees - IASI**  
**2009/10/21 00H UTC cut-off court**  
Nombre total d'observations apres screening : 8825  
8825 METOP A



# Operations overview in partner centers:

Algeria	Austria	Belgium	Bulgaria	Croatia	Czech R
33T1	35T1	35T1	31T1	32T3	35T1
~ MF	ALARO0	ALARO0 with 3MT		ALARO0	ALARO0 with 3MT
France	Hungary	Morocco	Poland	Portugal	Romania
33T1	33T1	29T2	29T2	32T3	28T3
ARPEGE 35T2 E-suite	ALARO to be tested		Expect 35T1 asap		ALARO in E-suite/5km
	Slovakia	Slovenia	Tunisia	Turkey	
	32T1	35T1	29T2	35T1	
	ALARO0 without 3MT	ALARO0 with 3MT		Tests with ALARO	

# Plans at MF for 2010

- Assimilation: monitoring of SSMI/S
- Arpège physics: new convection scheme (possibly based on 3MT)
- SURFEX in some Aladin-models (France, Overseas, ...)
- PEARP: increase horizontal resolution
- Arome-France:
  - ICE4 microphysics (including hail)
  - Extend horizontal size of domain
- A deeper reorganization of the Arpège production schedules, especially the 00 UTC run ??

# Other models:

- Going from ALARO-0 to ALARO-1:
  - A) Separating nearly completely the physics time step in 3 parts:
    - Radiative cloud properties and radiative fluxes' computation
    - (Moist) turbulence and diffusive transport
    - Condensation/evaporation associated processes (including deep convection)
  - B) Making the recent incorporation of the RK scheme of HIRLAM in 3MT compatible with the steps in (A).
  - C) Not forgetting to include a '3D minus 1D' turbulent part, by extension and diversification of the SLHD functionalities.