



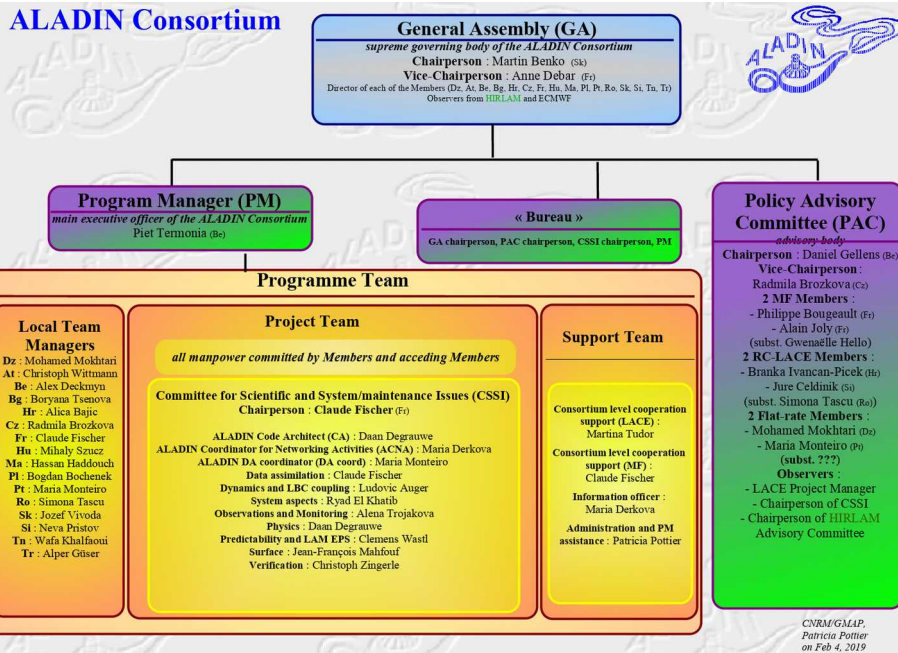
ALADIN status overview

<http://www.umr-cnrm.fr/aladin/>



Governance

ALADIN Consortium



Doctor Martina took a flying start as the new LACE PM!



Governance: last GA/HC

- Scope document discussed, some more input from the Directors is collected.
- The WG started to make a first draft of the MoU for the future ALADIN-HIRLAM collaboration.

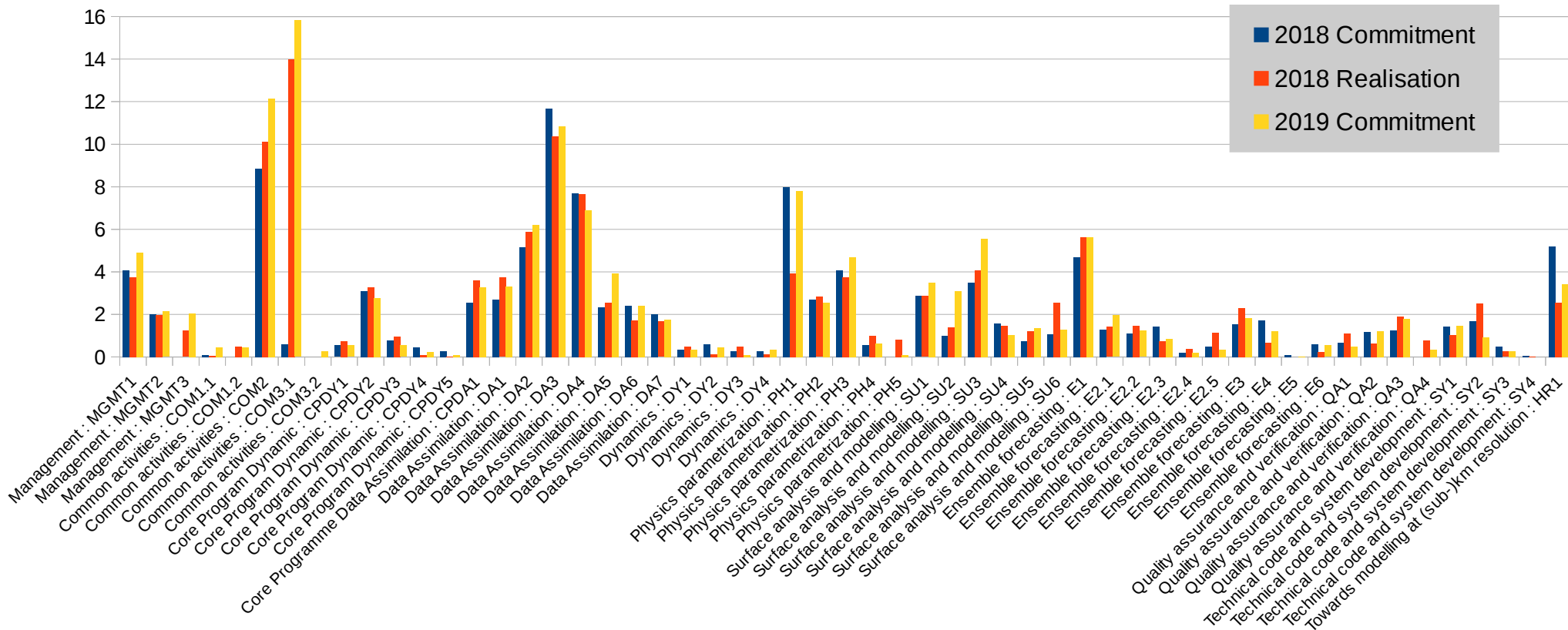




What we promised and what we actually did ...

Manpower (in F.T.E.) in 2018 & 2019 RWP Work Packages

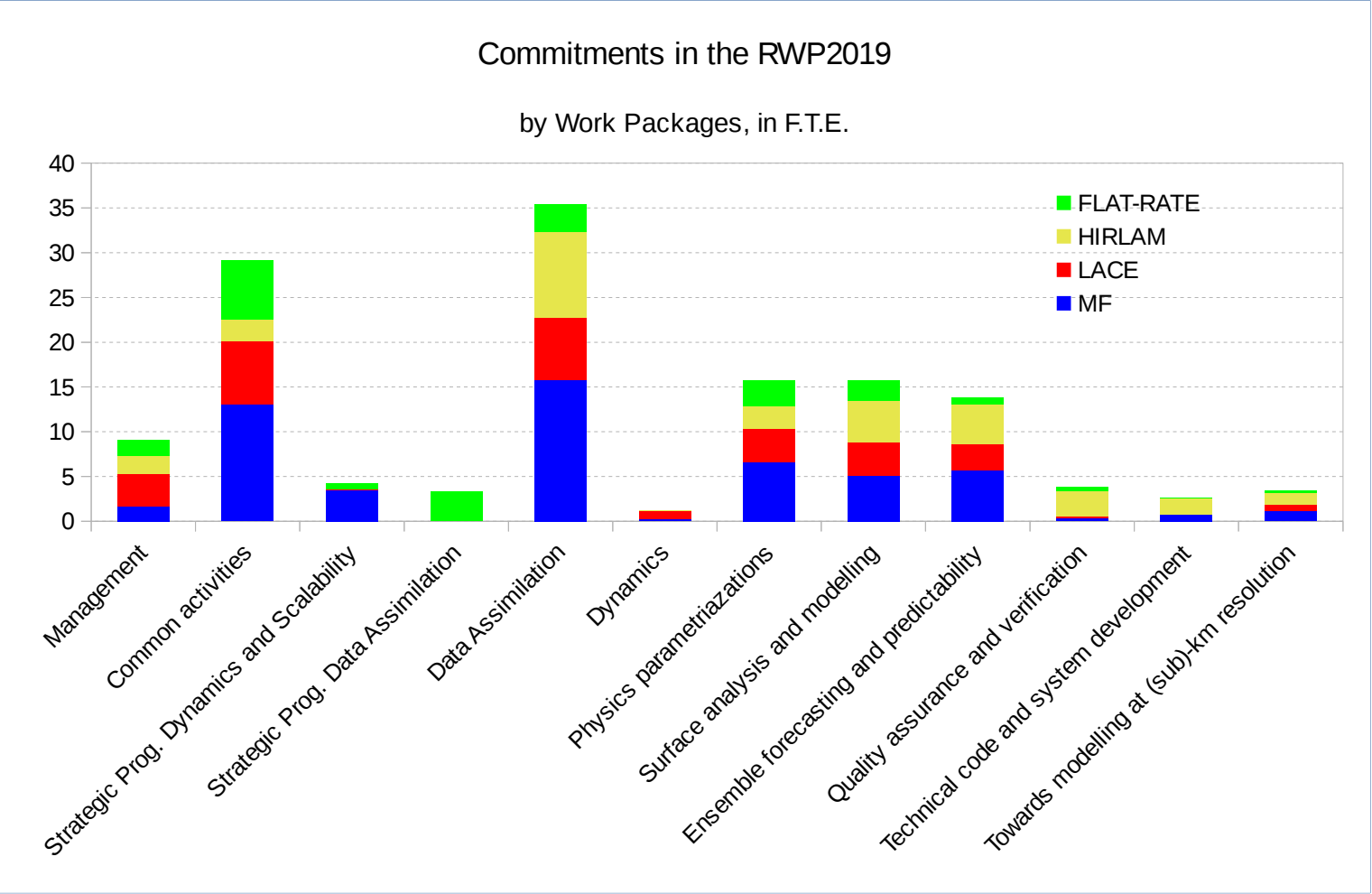
Committed in RWP2018, Reported in manpower DB in 2018, Committed in RWP2019



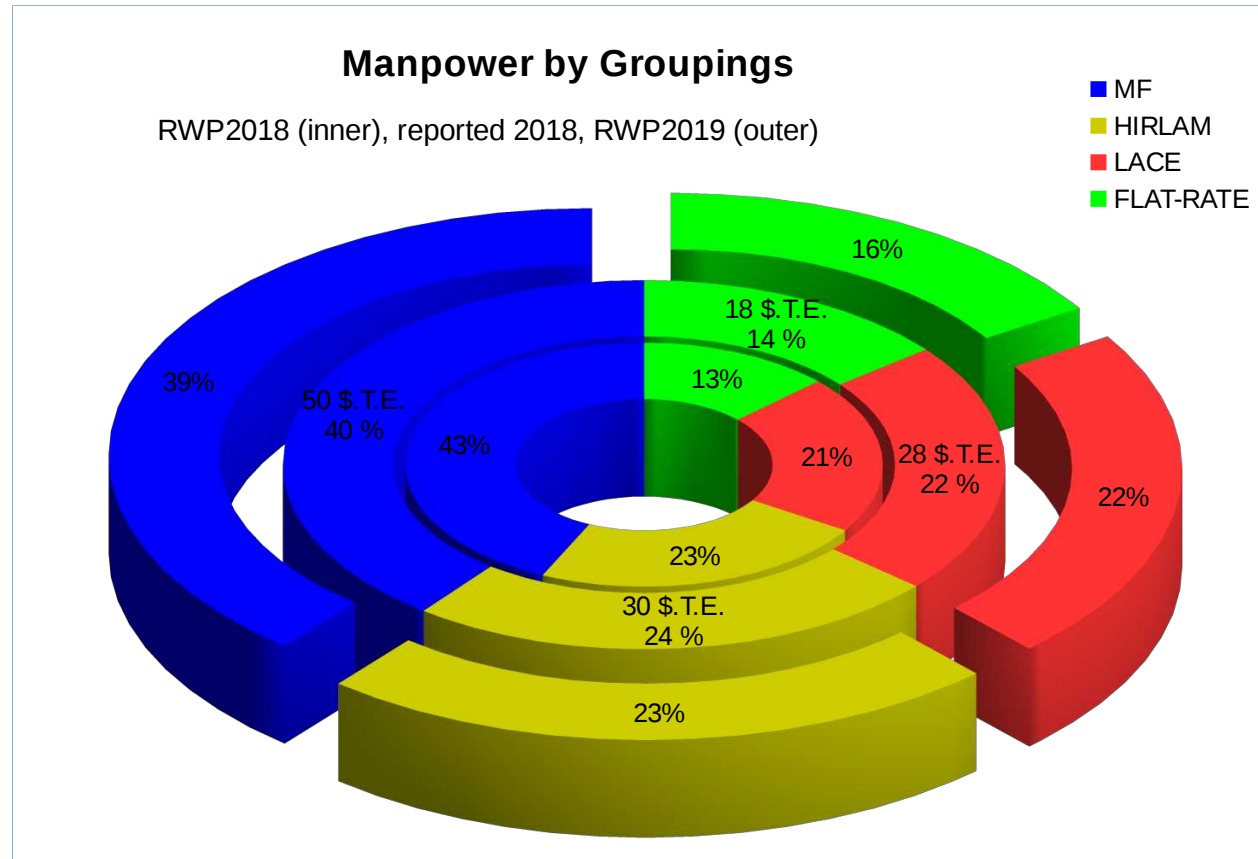
Courtesy Patricia Pottier



RWP2019



And per family



Courtesy Patricia Pottier

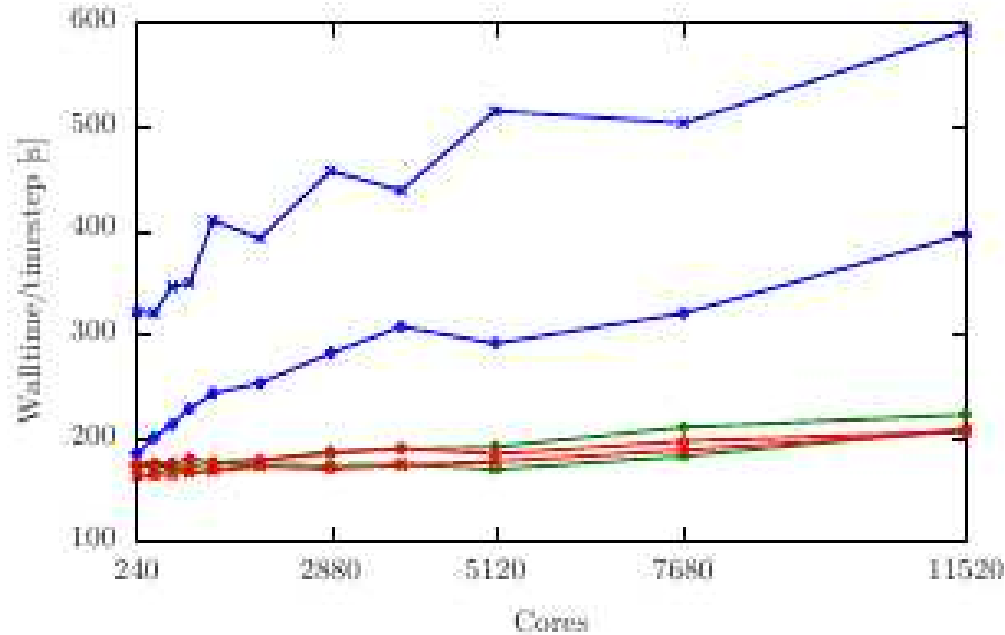


Dynamics

- Computational R&D:
 - The quasi elastic approximation:
 - implementation in the code done,
 - work continues to get stability.
 - Development of a gridpoint solver: partly done in 3D and creation of gridpoint Dwarf (see next slide).
 - The LAM part of Atlas has been developed. The impact of the projection on the operators is not done yet for discrete operators.
- Work on VFE finalized and published.
- Dynamics days planned in May in Toulouse.



Scalability of a gridpoint solver vs. our spectral solver



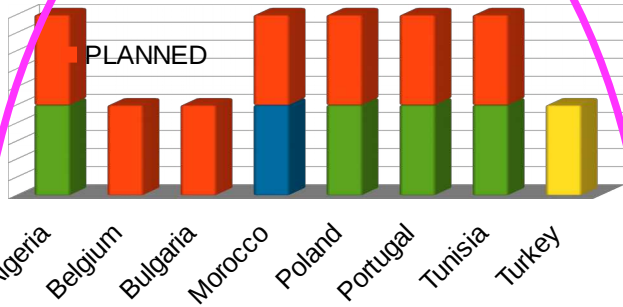
Wall-times of the weak-scalability experiment on beaufix: spectral solver (blue), GCR(k) solver (green) and Richardson solver (red). Circle markers denote pure MPI experiments; cross markers denote hybrid MPI-OpenMP experiments with 20 threads.

Degrauwe et al.

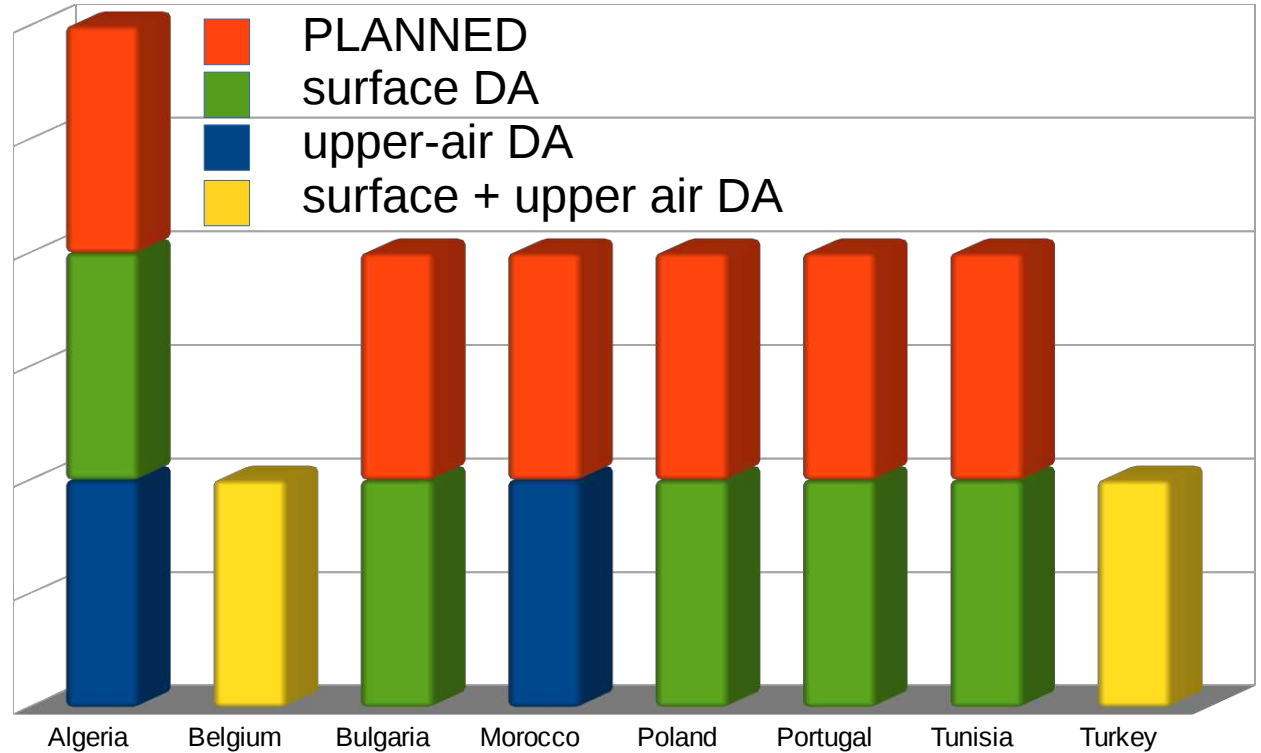


Progress on DA cycling Systems - II

Start 2018



Start 2019



STATUS

2/8 do not have
 6/8 countries have a DA cycling
 1/8 countries have a full DA
 (surface+upper-air)

PLANS

7/8 wish to have a full DA
 (OI_MAIN (CANARI) + 3D-Var)
 8/8 countries are willing to improve DA

STATUS

8/8 countries have a DA cycling
 2/8 countries have a full DA (surface+upper-air)

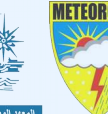
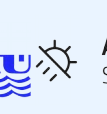
PLANS

6/8 wish to progress to a full DA (OI_MAIN (CANARI) + 3D-Var)
 8/8 countries are willing to improve DA systems

Thanks Maria and Alena!



ZAMG



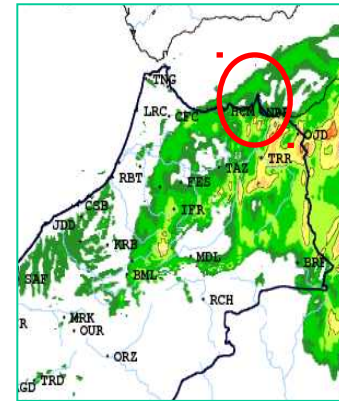
Preoperational Models in Morocco

- Arome 1.3km : 1800x1800xL90
- Arome 3DVAR 2.5km : 800x800xL90
- Alaro 5km : 600x600xL70
- Aladin 7.5km : 450x450xL70
- Noraf 10km : 600x1200xL70

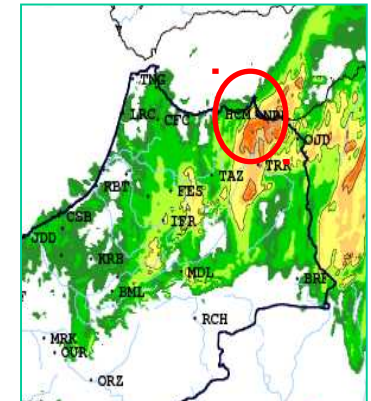
Data assimilation status

- AROME 2.5 km, cycle 40/41
- Ensemble B matrix
- Validation of precipitation forecast with gauge adjusted radar quantitative precipitation forecast
- Case studies to assess the impact of GPS ZTD on the precipitation Forecast in AROME
- DasKIT :
 - Surface data assimilation
 - Observation monitoring OBSMON

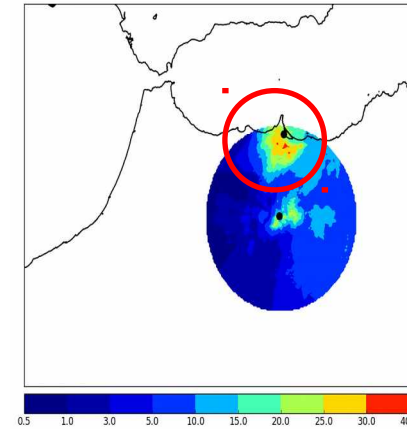
Case study 19/01/2018: 24h precipitation forecast



AROME-DYN



AROME-3DVAR



Radar
Precipitation

Scores : Aladin 7.5km vs Alaro 5km vs Arome 1.3km

- Coordination in the DAsKIT countries on data preprocessing, implementation of BATOR, observation monitoring (OBSMON).
- The majority of *DAsKIT* countries have now a *DA* cycling in-doors under testing mode; however procedures are not standard, depending on the model, the plans for the acquisition of new computer, etc.
- 2019 *DAsKIT* WD, Prague, 18-20 September 2019 will be partly joint with *LACE DA* WD; Candidate topics: basic conclusions on *SYNOP/AMDAR(/TEMP)*, pre-processing, monitoring (OBSMON); validation of surface *DA*; 3D-Var basic *KIT?*, outcome from common *A-H DA* Training Course



Thank you for your attention!

