

*Regional Cooperation for  
Limited Area Modeling in Central Europe*

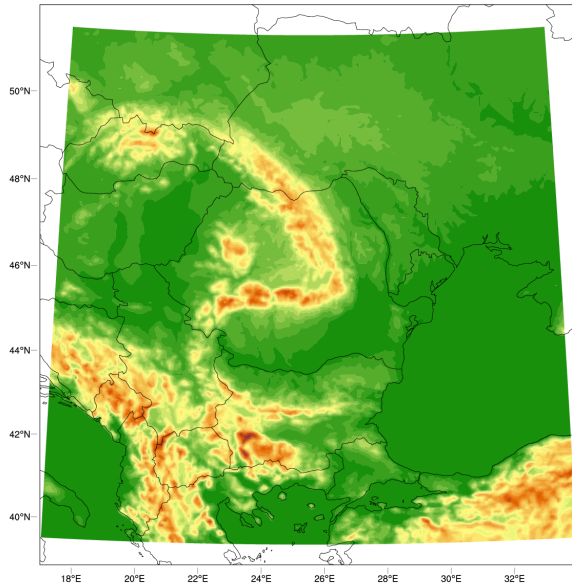


# Data assimilation status in Romania

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## Characteristics

cy43t2 - **ALARO-0 baseline**;

semi-implicit semi-Lagrangian 2TL,  $\Delta t=240$  s;

$\Delta x=6.5$  km, 240 x 240 points, 60 vertical levels, linear grid, Lambert projection;

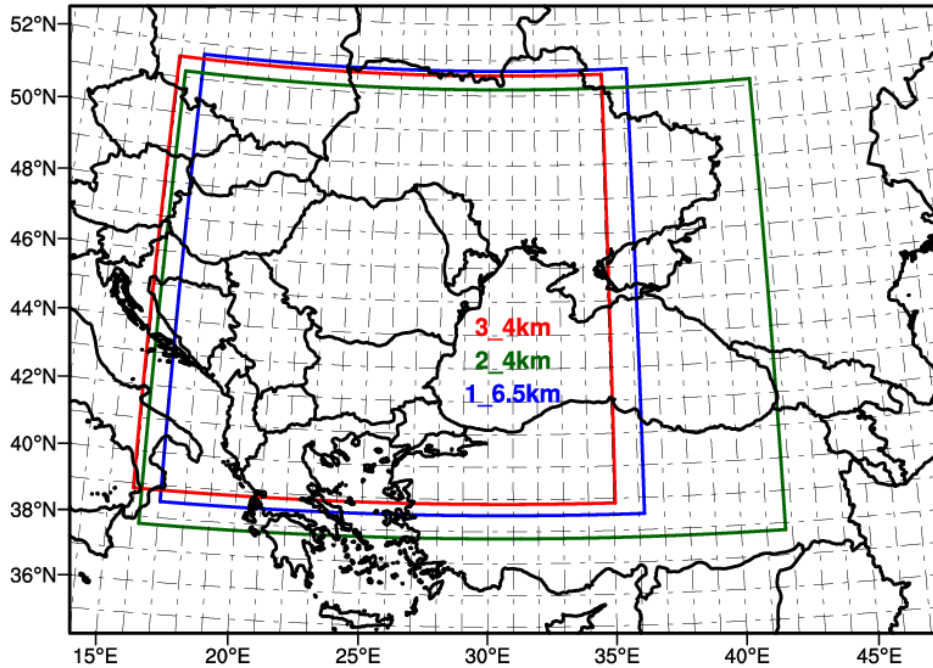
LBC from ARPEGE (3h frequency), DFI Initialization;

4 runs /day 00, 06, 12, 18 UTC - no DA;

forecast range: 78/54/78/54 hours;

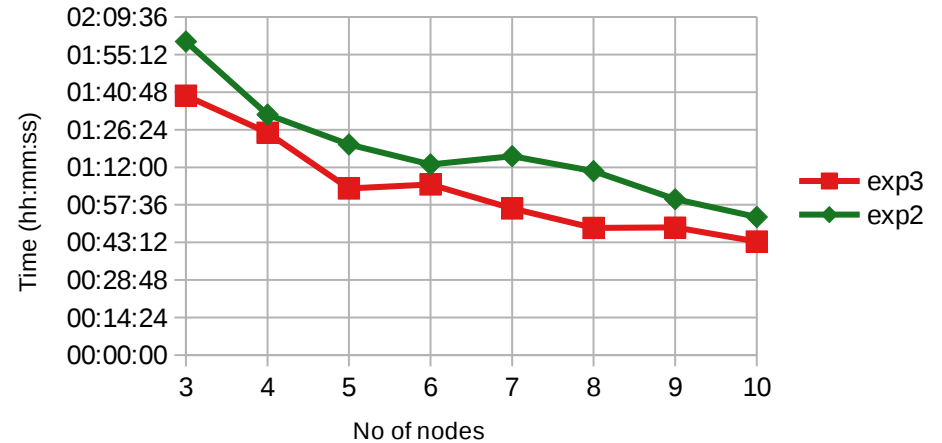
FULLPOS in line - geographical grid ( $0.06^\circ \times 0.085^\circ$ )

# Preparation of new operational setup

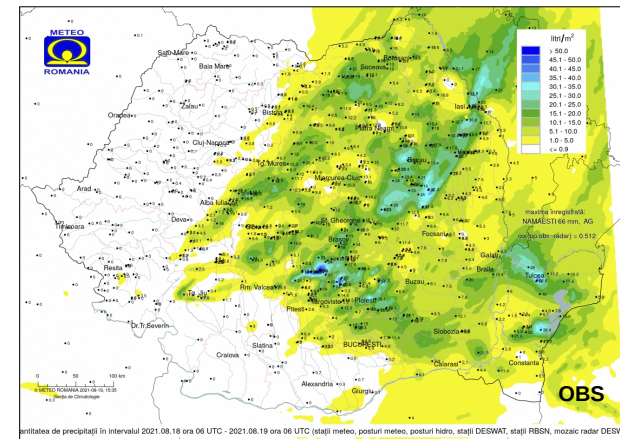
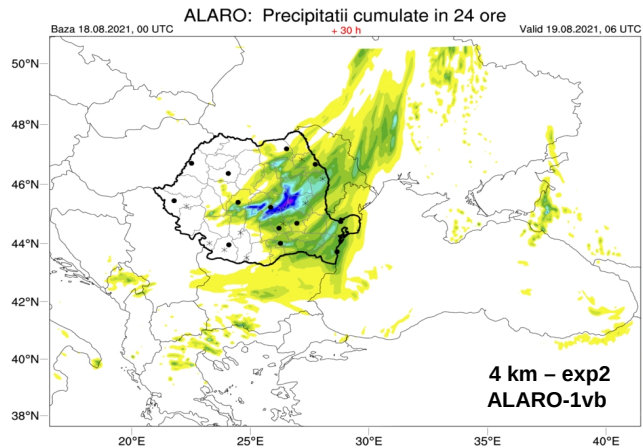
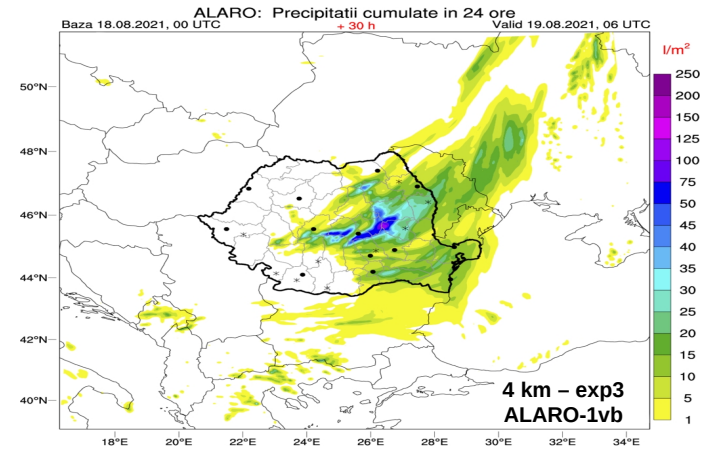
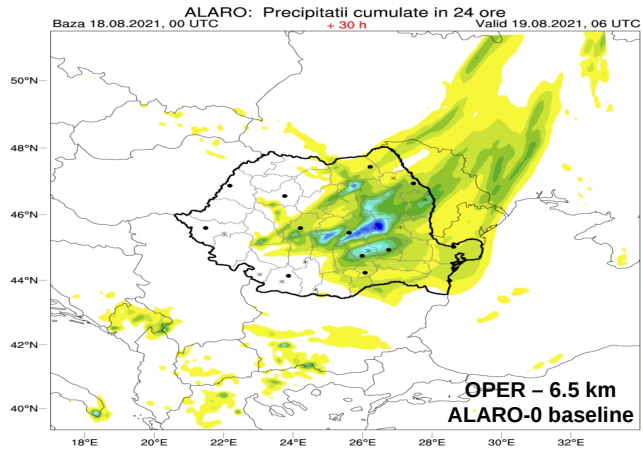


	exp 1 (oper)	exp 2	exp 3
	6.5 km	4 km	4 km
Number of points on OX	240	600	450
Number of points on OY	240	432	400

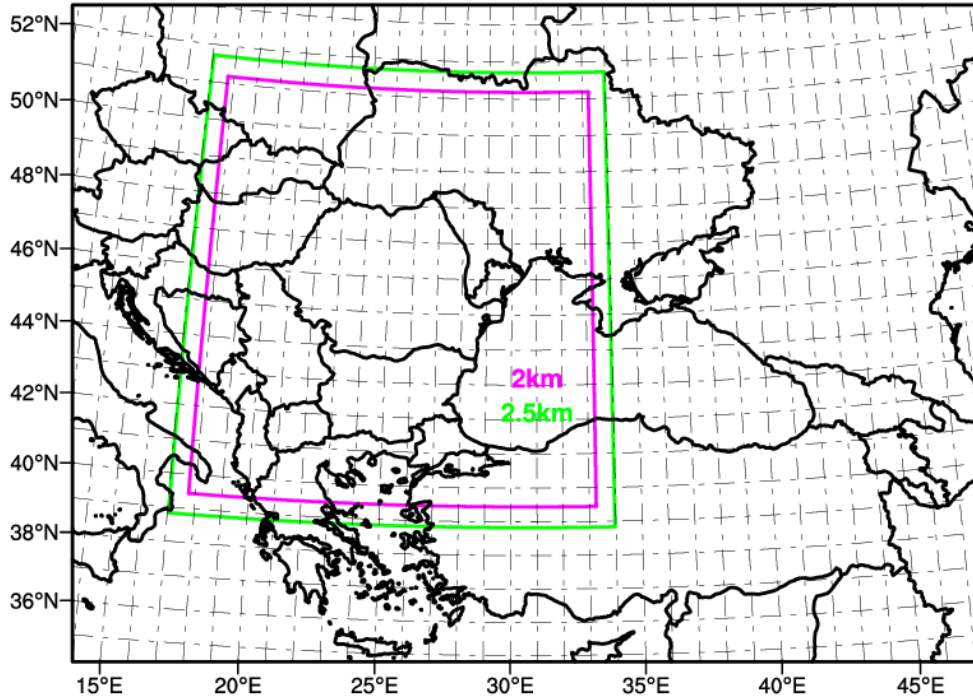
Scalability tests for e001 at 4km and 60 vertical levels



# 24-hour accumulated precipitation



# High resolution tests domains



	2.5 km	2 km
Number of points on OX	640	720
Number of points on OY	640	720

e001 still not working

## ▶ DONE list:

- ▶ Setup new domains at a higher resolution;
- ▶ Switch from ALARO-0 baseline to ALARO-1vb and perform different tests;
- ▶ Installed ecfLOW on local HPC necessary for future DA implementations.

## ▶ TO DO list:

- ▶ Compute B matrix for both domains at 4 km;
- ▶ Implement new set of scripts for DA;
- ▶ Install a verification tool on local HPC (possibly HARP).

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Thank you for your attention!



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