

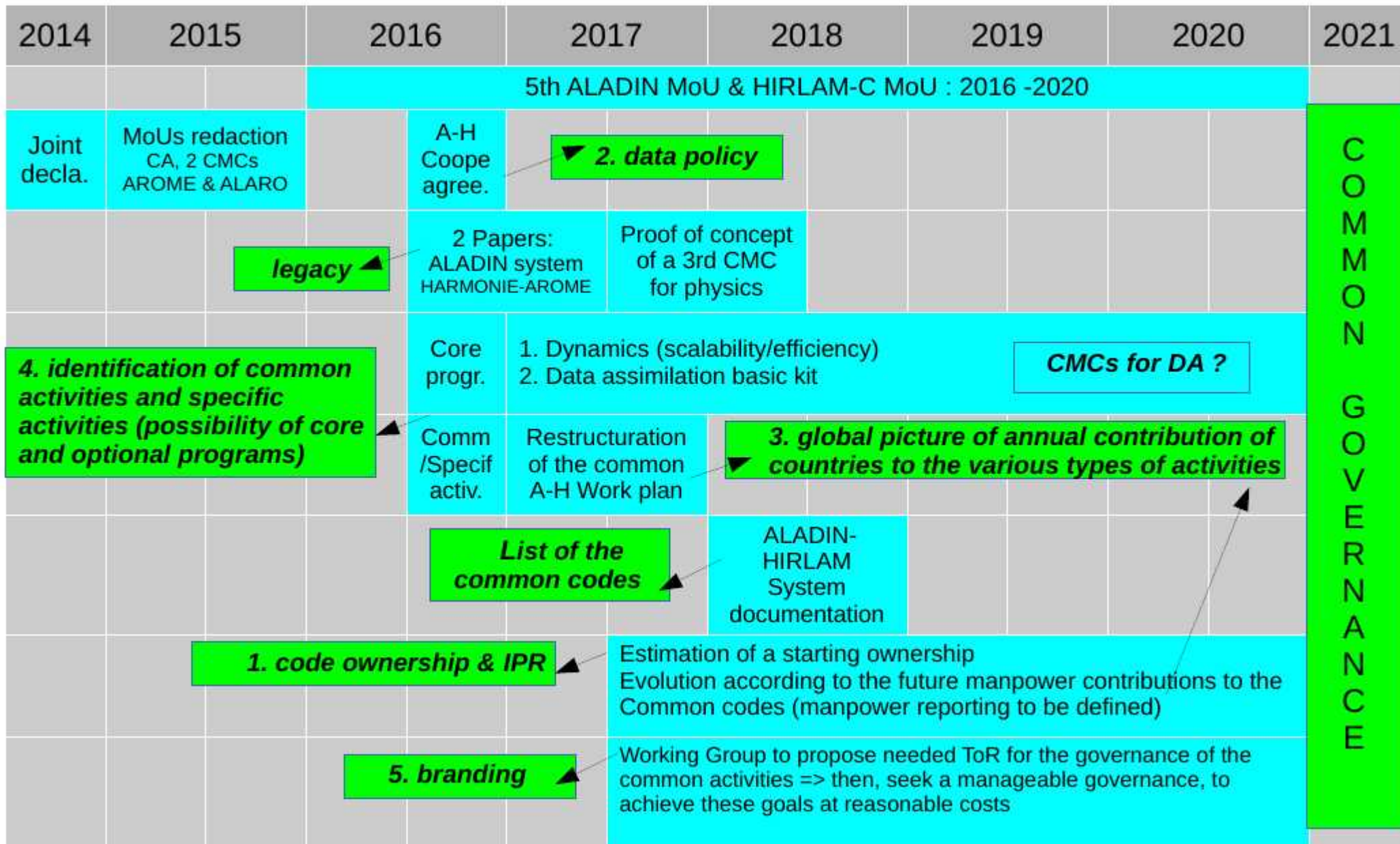


ALADIN status overview

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

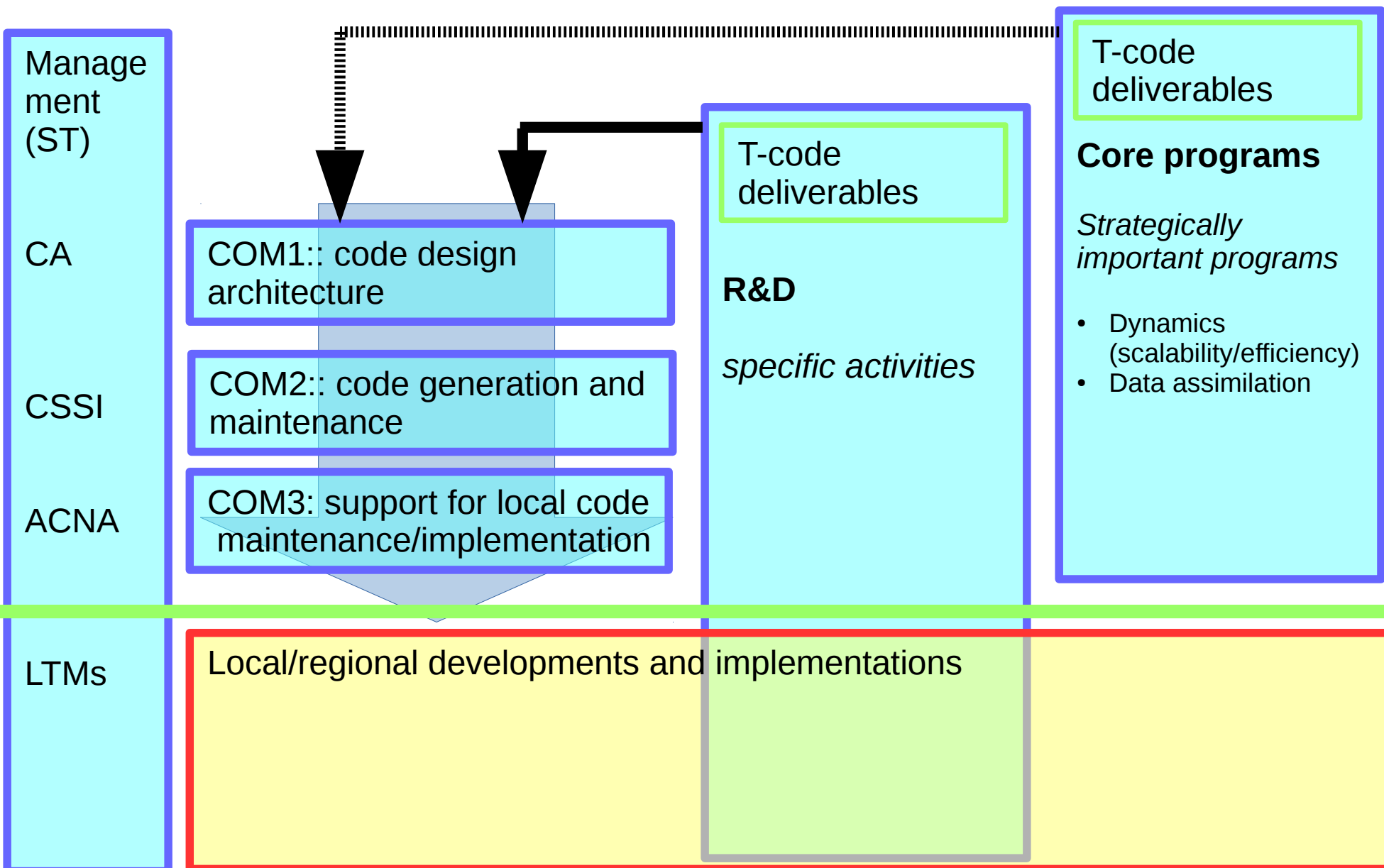


Convergence road map





Structure of the 2018 ALADIN/HIRLAM/LACE rolling work plan





ALADIN General Assembly/HIRLAM Council

The PMs were tasked, together with HAC/PAC :

- to **look into the scope of the future single consortium** (what the 26 NMSs want to do together);
- to **make this vision consistent with the “2016 - 2025 Strategy of the European National Meteorological and Hydrological Services : Towards a network of European NMHSs : collaboration & complementarity”**, signed in May 2016 by many ALADIN-HIRLAM NMSs;
- to **propose possibilities for the future governance**, after studying the governance of other international cooperation such as EUMETNET, EUMETSAT, ECMWF, ECOMET;
- to **work out a kind of “dictionary”** to make sure the same words are used with the same meaning among 26 ALADIN-HIRLAM NMSs currently belonging to different consortia with different practices and culture.





Practicalities (ALADIN ST)

- Preparation of the Rolling Work Plan (including handling of the numbers and statistics);
- Development of a joint reporting system for ALADIN and HIRLAM;
- Working Group on Governance has started its work and will report to PAC/HAC on (22-23 May);
- New positions: LACE PM (M. Tudor), ALADIN DA coordinator (M. Monteiro), changes in CSSI;
- A “Grand Tour” ALADIN-HIRLAM Newsletter;



ALADIN-HIRLAM Newsletter
 No. 10, January 31st, 2018



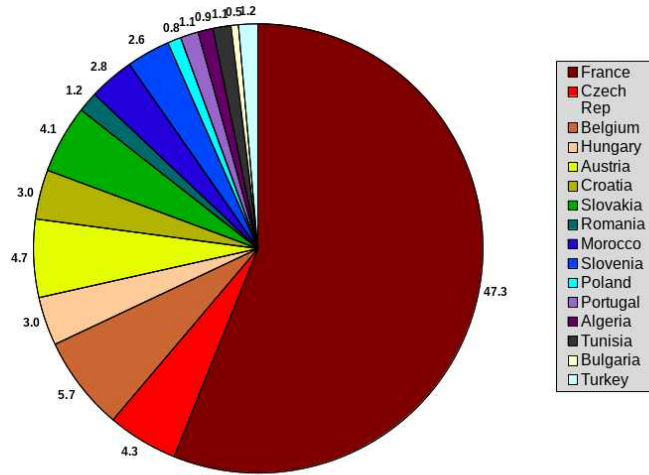
ALADIN Programme, c/o P. Termonia, IRM, Avenue Circulaire 3, 1180 Bruxelles, Belgium
 HIRLAM-C Programme, c/o J. Onvlee, KNMI, P.O. Box 201, 3730 AE De Bilt, The Netherlands





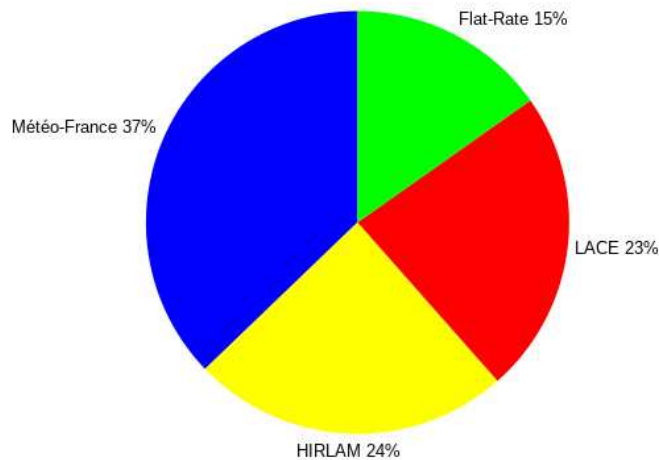
RWP2018 (slide shown to the ALADIN GA/HIRLAM Council)

Breakdown of committed F.T.E. in RWP2018



- The RWP2018 has been composed by sheets.
- So one can extract statistics
- The work plan is a tool: these are not executed actions.

Breakdown of the committed FTE in the ALADIN/HIRLAM/LACE RWP2018





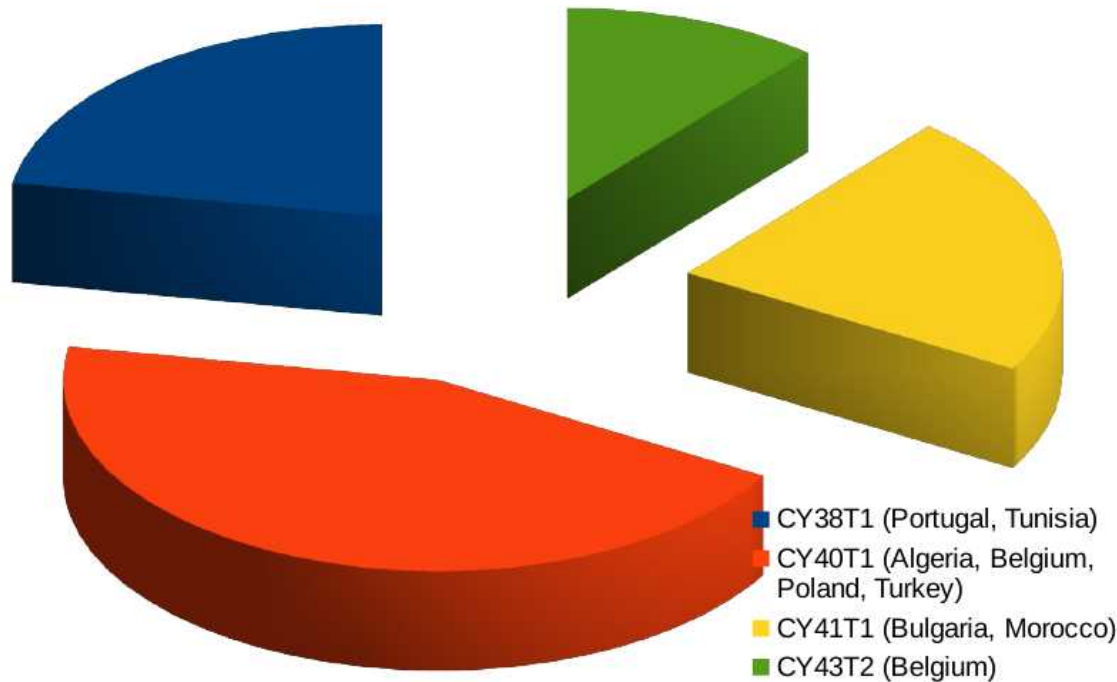
Core programs

Strategic R&D activities





CPDA1.3 (BATOR): courtesy Maria Monteiro (our new ALADIN DA coordinator)



STATUS

8/8 countries have implemented BATOR

4/8 have CY40T1

2/8 have CY41T1

2/8 still have CY38T1

1/8 is simultaneously testing CY43T2 (Belgium)

data types: SYNOP, TEMP and AMDAR

- DA meeting to be planned in the week of 17-21 September.
- Together with HIRLAM, LACE!
- Fix the exact dates this week.



ESCAPE

Energy-efficient Scalable Algorithms for Weather Prediction at Exascale: nearing its end (LAM contributions)

- The LAM aspects are included in WP4.
- Energy vs. wall-time profiling.
- Three Dwarves are studies (bi-FFT transform, ACRANEB, SL scheme) and have been profiled
- Preliminary results: Bi-FFT increases for wall-time, but decreases for energy (the energy of the communications not included in the test)

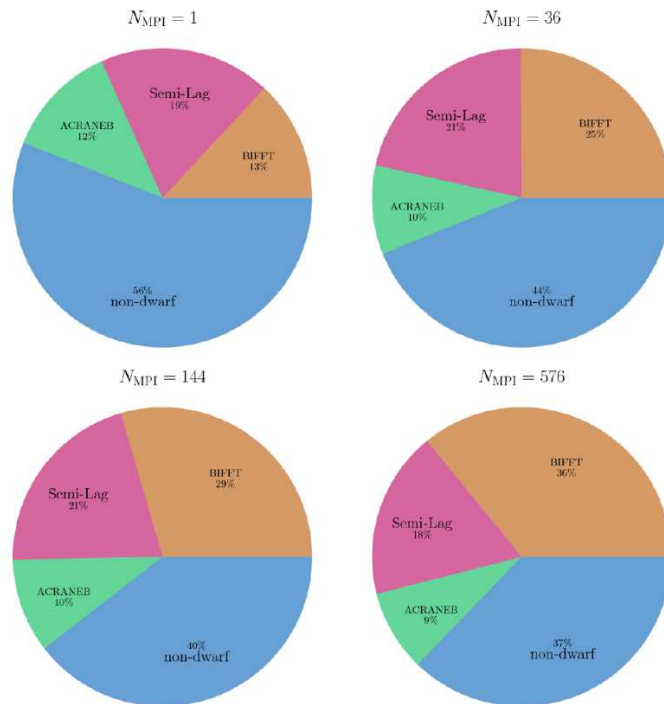


Figure 8: Distribution of the forecast runtime among dwarfs for the ALARO reference (2.5km).

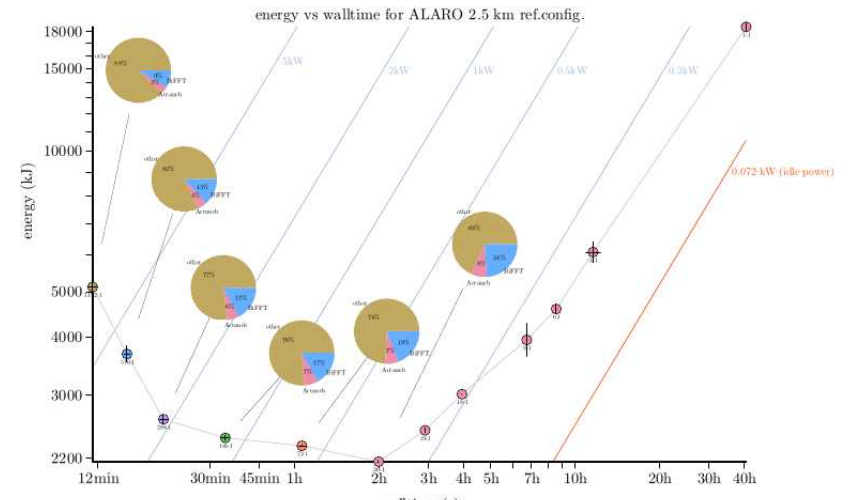


Figure 3: The energy consumption vs walltime for the ALARO 2.5 km reference configuration. Only pure MPI jobs were simulated. The colors and added lines have the same meaning as in Figure 2. The piecharts are estimates of the relative energy contributions of the BiFFT and Acraneb dwarfs for full-node runs.

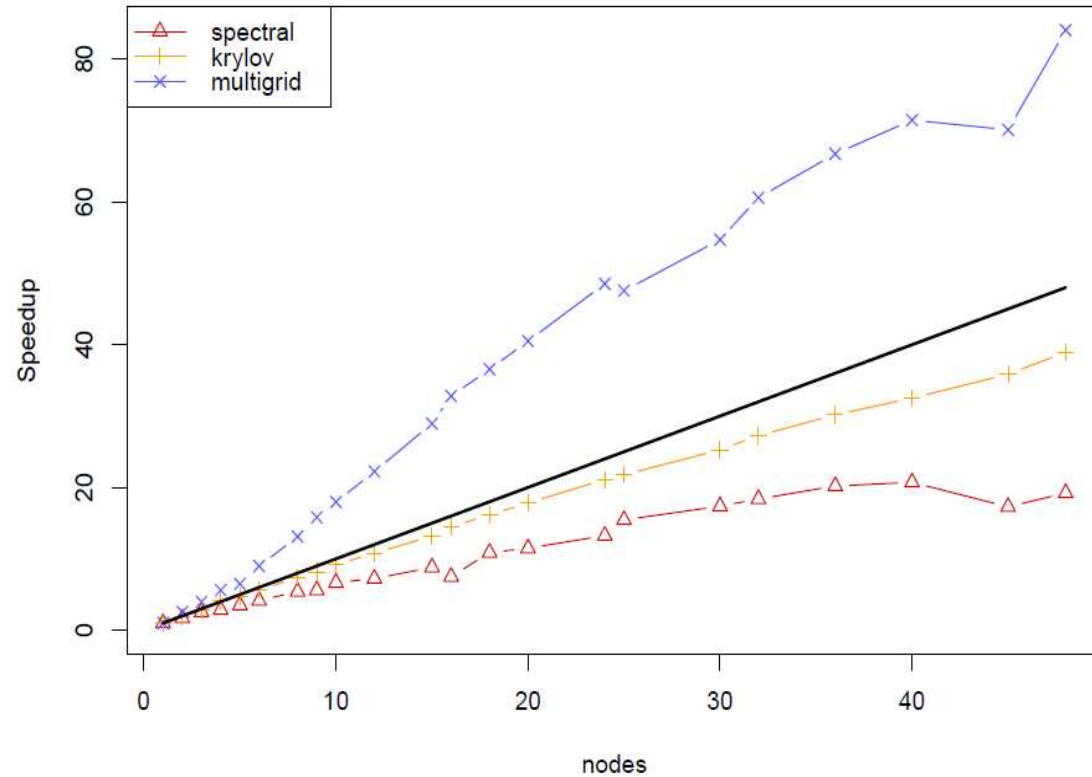
Courtesy J. Van Bever



CPDY: dynamics core program

- CPDY is quite on track.
- T-code deliverable CPDY1.1: the QE solutions is being coded (F. Voitus and K. Yessad), as announced.
- CPDY2 (t-codes expected in the short term)
 - CPDY2.1: Progress on dynamics equations to make them more suitable for **non-spectral solvers**, possibly with implicit treatment of orography.
 - CPDY2.2: Development of a small standalone program (**dwarf**) to test scalability of different Helmholtz-solvers.
 - First results look promising, but a lot of work remains to be done: test robustness, implicit orography,

Strong scalability speedup



Courtesy D. Degrauwe



QA1: HARP v.2 declared



- Joint development of ALADIN-HIRLAM Common Codes!
- Version 2 has been declared recently
- Stay in Brussels 21-23 March
- Presentations of Andrew and Christoph later this week.
- Question: open source?





Have a nice and fruitful meeting this week!

