

Report on maintenance activities

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Prag, 14-15 2010

Aladin General

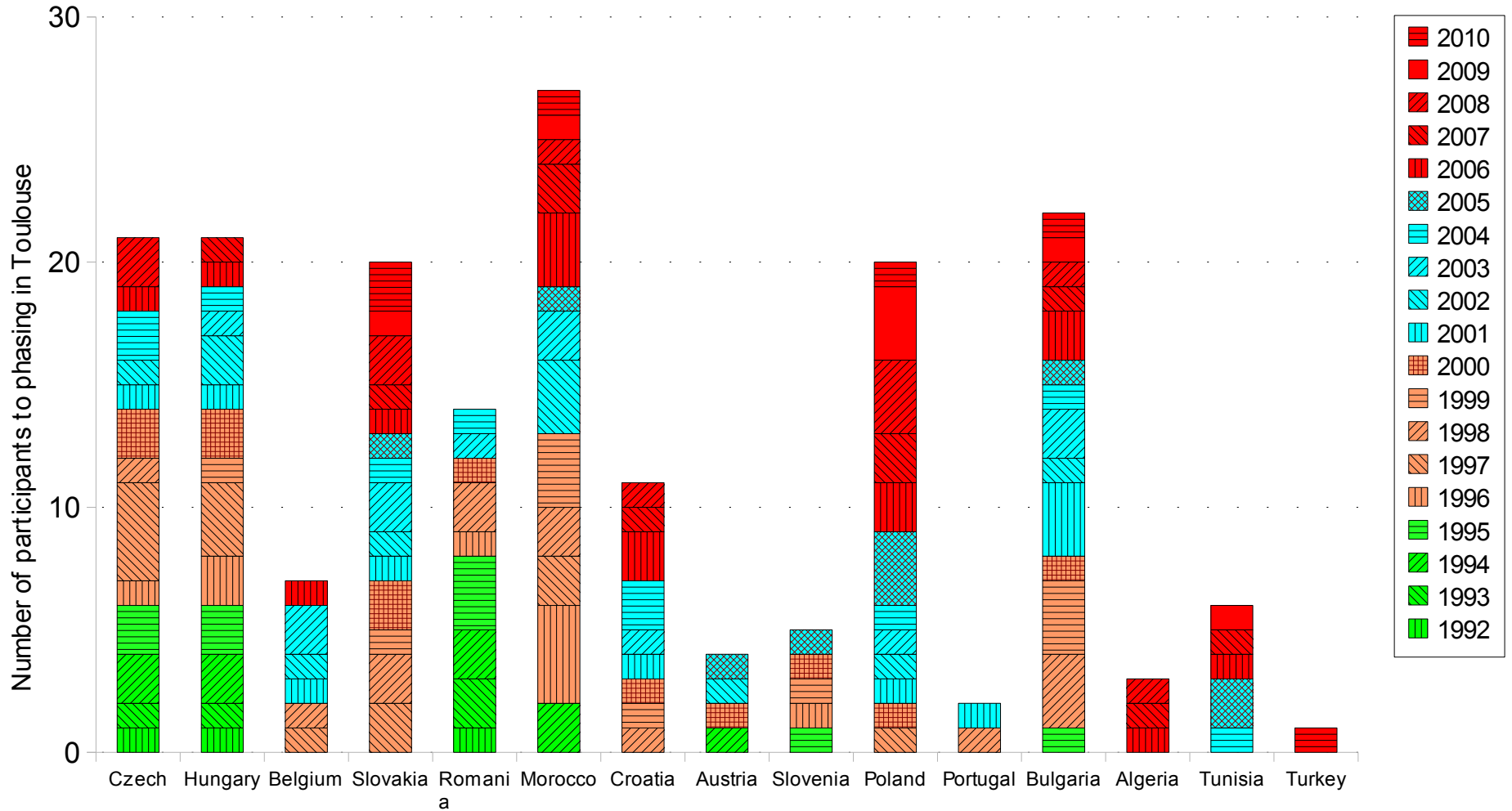
Assembly

Calendar of IFS and interim cycles

Maintenance = Phasing (quite centralized) + code cleaning (split) + scientific developments (as decentralized as possible)

- CY36T1: declared in Dec'09; export in Feb'10
- CY36T2: declared in Aug'10
- CY37: common with IFS, declared in Oct'10

Breakdown of the phasing effort by country



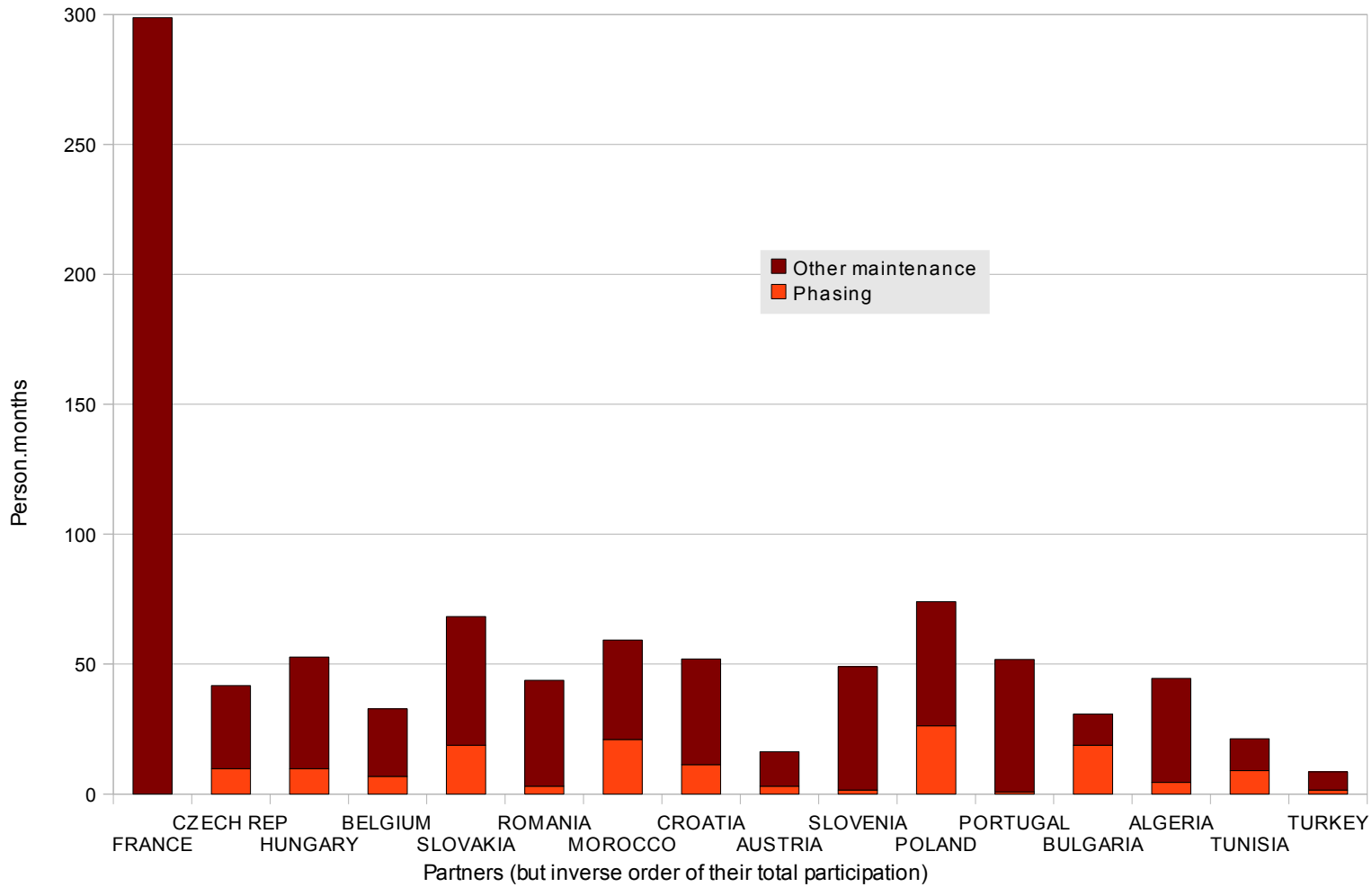
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Maintenance effort by country since July 2001

Phasing / outside phasing



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Future ...

- Phasing will continue, including invitations to Toulouse
! => 6 week stays for IFS/Arpège phasing; *possibility to pair 2*3 weeks for interim cycles*
- Calendar:
 - CY37T1: mid-March / end-April
 - CY37T2 (Surfex): June ?
 - CY38: Sept / Oct
- Enhance cooperation with HIRLAM on maintenance issues and phasing

Maintenance training workshop (Toulouse, Sept 20-22)



Maintenance workshop

- Thanks to Olivier Rivière and LACE support
- About 23 participants at Practical Exercises; a bit more than 30 attendees to the lectures
- What is phasing (Monkey business); code architecture; data structure; exercises
- MPI, OpenMP, Clearcase
- Proposals for the future:
 - Do it regularly (every 2 years ?)
 - Add a first day for newcomers only
- *Personal view: workshop was a good idea (unfortunately during CY37 phasing !) but is not enough to consider having trained seriously “new phasers” => knowledge of the inside of the code must be gained through R&D work between experienced and new staff, as much as possible everywhere in the Partner countries.*

OOPS

- Planning but also specifications & coding in 2011
- Present status:
 - Object oriented coding & C++: proof of concept approach, firm decision later => but we must get interested and get understanding of the benefits of OO:
 - toy model,
 - prototype 3D-VAR based on re-coded obs op & Jb (LAM declination)
 - Fortran source code modularization: analysis has started & **will not stay at the level of the assimilation code:**
 - classification of global variables,
 - proposal of new entities,
 - code encapsulated Fortran entities,
 - check LAM aspects; Full-Pos/e927
- OOPS actions will require (and benefit !) from the participation of **(experienced)** Aladin staff

Miscellaneous:

- SRNWP/Interoperability
- Efforts for a deeper algorithmic overhaul inside Full-Pos
- Continuous cleaning efforts