**R**egional **C**ooperation for Limited Area Modelling in Central Europe



#### **ALARO Physics** in ACCORD RWP 2023

#### Martina Tudor

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# The ACCORD RWP

Rolling Work Plan (RWP)

- inherited from previous practices
- started thinking/reorganizing/writing end of April
- arranged into different areas, common and management
- divided into work packages
  - several packages per area
- work packages contain a number of tasks
  WP contains
- editors and list of people
- description of main objectives of the WP and a description of each task
- deliverables

**Redaction guidelines** 

http://www.umr-cnrm.fr/accord/IMG/pdf/guidelinesrwp.pdf













## Physics area for 2023

	( PLAN 2	023	
Redaction guidelin	nes availalbe he	re: http://www.umr-cnrm.fr/accord/IMG/pdf/guidelinesrwp.pdf	
	WP NUMBER	WP NAME	WP LEADER & CO-LEADER(S)
	DA8old	Basic data assimilation setup	Roger Randriamampianina, Maria Monteiro
	<u>PH1</u>	Turbulence & shallow convection NEW !!!	Eric Bazile, Wim de Rooij, Mario Hrastinski ???
	<u>PH2</u>	Radiation NEW!!	Eric Bazile, Emily Gleeson, Jan Mašek ?
	PH3	Microphysics and clouds	Martina Tudor, Bogdan Bochenek ???, Emily Gleeson, Yann Seity ???
Physics parametrizations	PH4	Common 1D MUSC framework for parametrization validation	Eric Bazile, Martina Tudor and Wim de Rooij
	<u>PH5</u>	Model Output Postprocessing Parameters	Claude Fischer, Jeanette Onvlee, Eric Bazile and Martina Tudor
	<u>PH6</u>	Study the cloud/aerosol/radiation (CAR) interactions	Laura Rontu & Ján Mašek / Martina Tudor & Yann Seity ??
	<u>PH7</u>	On the interface with Surface NEW !!	Patrick Samuelsson + Adrien Napoly ?? + Wim de Rooij ??
	<u>PH8</u>	On the interface with Dynamics NEW !!	Ludovic Auger, + Emily Gleeson, Petra Smolikova ???
	PH9old	Consistency and convergence of the CSC physics	Claude Fischer, Jeanette Onvlee, Eric Bazile and Martina Tudor
	<u>PH10</u>	Fully stochastic physics parametrizations	Martina Tudor & Jeanette Onvlee & Claude Fischer
	Redaction guidelin	Redaction guidelines available he      WP NUMBER      WP NUMBER      DA8old      PH1      PH2      PH3      PH4      PH5      PH6      PH7      PH8      PH90dd	PH1      Turbulence & shallow convection      NEW !!!        PH2      Radiation NEW!!      PH3        PH3      Microphysics and clouds      PH4        PH4      Common 1D MUSC framework for parametrization validation        PH5      Model Output Postprocessing Parameters        PH6      Study the cloud/aerosol/radiation (CAR) interactions        PH7      On the interface with Surface NEW !!        PH8      On the interface with Dynamics NEW !!        PH90dd      Consistency and convergence of the CSC physics

- screenshot of a summary slide from 2023 ACCORD RWP
- substantially reorganized new WPS according to problems not CSCs
- at least one MG member among the editors in each WP,
- one representative per CSC among the editors















## ALARO physics in the RWP

Current: specific ALARO physics WP - few tasks in other packages

No more ALARO specific WP -> tasks distributed to different WPs according to parametrized processes

WP leaders













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#### ALARO physics in the RWP

	A	В	С	D	► F	G	
		ACCORD WorkPackage descriptio	n : PH1				
8	WP number	Name of WP					
	PH1	Turbulence & shallow convection NEW !!!					
	WP main editor	Eric Bazile, Wim de Rooij, Mario Hrastinski ???					
	Table of particip	Dants (for Météo-France, the total PersonMonth is the weighted sum of the individual contribu-	-				
	Participant Abbreviation	Participant	Institute	PersonMonth			
	RaBr JaMa	Radmila Brožkova , Jan Mašek	CHMI Czech	*			
)	PeSm	Peter Smerkol	ARSO Slovenia	<b>T</b>			
	MaHr MaTu	Mario Hrastinski, Martina Tudor	DHMZ Croatia	-			
2				*			
3			,	*			
5				<b>T</b>			
-							
	WP objective:	s and priorities					-
7							-
3		7. I					-
)	Descriptions of tasks				About code deli	verables (if any	
,	Task	Description	Participant abbrev.	Expected outcomes for this year	Code contrib to repository	Expected delivery (MM/YY)	
	PH1.1	Turbulence - TOUCANS scheme – work on the two turbulent energies scheme, numerical aspects including code re-organization, cleaning, debugging	RaBr, JaMa, PeSm				
2	PH1.2	Turbulence - TOUCANS scheme – work on the mixing length computation, several mixing length computation formulations are being tested including prognostic options	MaHr, JaMa, RaBr		IAL Surfex-NWP		
3	PH1.3	Reassess some basics about thermodynamics and turbulence in our models: Lewis number # 1, review stability functions for PBL, consistent moist energy definition and energy transformation cycle.	PaMa	doc, papers, t-code	00PS EPyGrAM		
		Turbulence and convection: Continue to explore options for improving the model representation of open cell convection. In this problem microphysics (no formation of cloud ice/snow/graupel for			DAVAI-tests harp IAL-build		This is
		DY3 - DA1 - DA2 - DA3 - DA4 - DA5			d other repo	PH1old +	

#### This is a drop down menu

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- tasks are CSC oriented (because it is easy)
- where we put subgrid clouds and convection?
  - WP1 for Turbulence and subgrid processes
  - WP3 for Microphysics
- where to put ALARO with SURFEX?
  - SU3, MQA, System? Proposal: All three!
- DDH goes to ...













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