

ALADIN 2000 Working Plan (16/02/2000)

(references in italics refer to the updated version of the medium-term research plan)

I. Physics

II. Dynamics, coupling, post-processing

III. Data assimilation

I. Physics

Ref.	Topic	Team	Place	Date
I.1 <i>A3</i>	Local implementation of 923 and tuning of orography	every team	deported	
I.2 <i>A3 B3</i>	Study of different effects of the mountains (improving orography representation, dynamics, physics)	Romania (S. Alexandru) + Slovenia (N. Pristov) +	Toulouse deported	Feb.-Apr.
I.3 <i>A3 B3</i>	Using new vegetation databases in configuration 923 and validation	France Morocco (M. Jidane)	Toulouse Casablanca	Mar.- June
I.4 <i>A3 B3</i>	Representation of lakes - 1 (collecting observations, contact point S. Kertesz)	every team	deported	asap
I.5 <i>A3 B3</i>	Representation of lakes - 2 (modifying 923 and 927)	Hungary (S. Kertesz) + France + Morocco (J. Boutahar)	Budapest Toulouse	Jan.- Apr.
I.6 <i>A3 B3</i>	Representation of lakes - 3 (new parameterization)	Hungary (S. Kertesz) + France (E. Bazile)	Toulouse Budapest	Jan.- Aug.
I.7 <i>A3</i>	Representation of snow - 1 (collecting informations for case studies, contact point V. Spiridonov)	every team	deported	asap
I.8 <i>A3</i>	Representation of snow - 2 (test and tuning of more sophisticated parameterizations)	Bulgaria (A. Bogatchev, V. Spiridonov)		

I.9 <i>B3</i>	Initialization of the interception water content (water on the leaves) (slight modification of 927, sensitivity of short range forecasts using 1d then 3d model)			
I.10 <i>B3</i>	Moving to several stacked layers in the soil (coding and tests)	France + Hungary (A. Mika)	Toulouse Budapest	
I.11 <i>A3</i>	Technical developments required for ozone	Poland (M. Szczech) + France (K.Yessad, D.Giard)	Toulouse	Feb. - Apr.
I.12 <i>A3 B3</i>	Further tuning of the new cloudiness and convection parameterizations (a : refinements in the parameterizations, b : local tests and tunings)	LACE (Greilberger) every team	deported	asap
I.13 <i>B3</i>	Introduction of liquid and ice water in the parameterization of convection	D. Banciu (PhD) + France (E. Bazile)	Toulouse Bucarest	year
I.14 <i>A3 B3</i>	Implementation of a parameterization of Turbulent Kinetic Energy	Slovenia (M. Zagar)	Toul., Prague, Ljubljana	year
I.15 <i>A3</i>	Improved consistency between vertical diffusion and cloudiness parameterizations		Toulouse	
I.16 <i>A3 B3</i>	Analysis for applying a new thermodynamics in the model (specific heat of liquid and ice water)	Morocco (Y. Moudden)	Toulouse	Jan.-June
I.17 <i>A3</i>	Diagnostic mixing length			
I.18 <i>A3</i>	New parameterization of evaporation over sea (a. implementation and "global" validation, b. local validation)	France (E. Bazile) (a) Morocco (M. El Abed) + (b)	Toulouse deported	Winter (a) asap
I.19 <i>B3</i>	Improved representation of urban areas through changes in surface characteristics (changes in 923, sensitivity studies)			

II. Dynamics, coupling, post-processing

Ref.	Topic	Team	Place	Date
------	-------	------	-------	------

II.1 <i>A</i>	New definition of geometry	France (J.D. Gril)	Toulouse	Jan.- Feb.
II.2 <i>A4, C4</i>	Impact of 4-points vs 12-points interpolations in Full-Pos (post-processing, 927, ...)	Morocco (J. Boutahar) + France (R. El Khatib +)	Toulouse, ?	Feb. - Mar.
II.3 <i>A4</i>	New post-processing of boundary-layer fields	Poland (W. Owcarz) + France (R. El Khatib)	Toulouse	Feb. - Apr..
II.4 <i>C2</i>	Convection indices in Full-Pos	Slovenia (N.Pristov, M.Zagar)+ France (R.El Khatib, E.Bazile)	Ljubljana Toulouse	Jan. -
II.5 <i>B2</i>	New coupling strategy for non-hydrostatic dynamics	A. Mokssit (PhD)	Casablanca	year
II.6 <i>B2</i>	Coupling surface pressure tendency			
II.7 <i>A4 B2</i>	Strategy for coupling : part of frequency	Slovenia + LACE (R. Bubnova) + (every team)		year
II.8 <i>A4 B2</i>	Strategy for coupling : part of resolution	Slovenia	Ljubljana	year
II.9 <i>A4</i>	Optimal choice of vertical levels	Slovakia (J. Vivoda)	Bratislava	
II.10 <i>A2</i>	Radiative upper boundary condition (investigation of problems with the 2d-model)	France (R. El Khatib)	Toulouse	
II.11 <i>A2</i>	Design and validation of a new semi-lagrangian advection scheme	I. Gospodinov (PhD) + Bulgaria (V Spiridonov) +	Toulouse Sofia	year
II.12 <i>A2</i>	Study of dissipative properties of semi-lagrangian advection schemes	F. Vana (PhD)	Toulouse Prague	year
II.13 <i>A2 B1</i>	Implementation and test of a new formulation of continuity equation Application to the problem of orographic resonance	France (P. Bénard) + Czech R. (P. Smolikova)	Toulouse	Winter
II.14	Two-time-level semi-lagrangian advection schemes in non-hydrostatic dynamics	LACE (J. Vivoda, M. Janousek, R. Bubnova)	Prague	

<i>B1</i>				
II.15 <i>B1</i>	Coding of a sponge upper boundary condition	Hungary (T. Szabo)	Toulouse	Feb.
II.16 <i>B1 B3</i>	High resolution configuration for the validation of new developments in (non-hydrostatic) dynamics and physics	Slovenia	Ljubiana	year
II.17 <i>A1,B4</i>	Definition of new verification tools for high-resolution models	every team	deported	
II.18 <i>B1</i>	Investigation of the stability of non-hydrostatic semi-lagrangian advection	Hungary (T. Szabo) + France (P. Bénard, K. Yessad)	Toulouse	Feb. - Apr.
II.19 <i>B1</i>	Relaxation of the thin layer hypothesis	France (K. Yessad)	Toulouse	Jan. -

III. Data assimilation

Ref.	Topic	Team	Place	Date
III.1 <i>C4</i>	"bogussing" (validation, improvement)	France (CRC)	La Réunion	year
III.2 <i>C3</i>	3d-Var : remaining problems in Jo (full observation files), sensitivity studies	Morocco (W. Sadiki) + France (E. Gérard)		
III.3 <i>C3</i>	3d-Var : new background error statistics	Morocco (W. Sadiki) + France (C. Fischer) + Hungary (stud.) +	deported	Winter
III.4 <i>C3</i>	3d-Var : extension zone	France (C. Fischer) +	Toulouse +	
III.4 <i>C3</i>	3d-Var : "temporal aspects" (noise control, impact of coupling)	Hungary (A. Horanyi, student)	Budapest	

III.4 C3	3d-Var : investigation of the decremental approach (scale analysis, feasibility, impact)	France + LACE (M.Siroka) + Hungary +	Toul., Prague, Budapest	
III.5 C3	3d-Var : real case studies	LACE + France + Hungary +	Prague, Tls, Budapest	
III.6 C3	Sensitivity studies -1 (lateral boundary conditions and physics in gradient computations- e801)	C. Soci (PhD) +	Toulouse Bucarest	year
III.7 C3	Sensitivity studies -2 (physics, non-hydrostatic, scale selection,... - e601)	France (C. Fischer) + Hungary (student)	Toulouse Budapest	year
III.8 C2	Correction of the analysis of relative humidity in CANARI/ALADIN	Morocco	Casablanca	
III.9 C2	Validation of the analysis of specific humidity in CANARI/ALADIN	Morocco	Casablanca	
III.10 C1 C2	Update and validation of snow analysis in CANARI/ALADIN	Bulgaria (L. Gaytandjieva)		
III.11 C1 C2	Visibility analysis in CANARI/ALADIN (a. implementation, b. validation and tuning)	France (E. Gérard)		
III.12 C1 C2	Cloudiness analysis in CANARI/ALADIN (a. implementation, b. validation and tuning)			
III.13 C1 C2	Precipitation analysis in CANARI/ALADIN (a. implementation, b. validation and tuning)	Hungary (G. Radnoti)		
III.14 C2	Improvement of upperair analysis in CANARI/ALADIN			
III.15 C2	Improving the selection of observations in CANARI/ALADIN	France (E. Gérard +)		
III.16 C2	Interface for Diag-Pack	Hungary + France + Slovenia +		asap after II.4
III.17	Validation and tuning of Diag-Pack	Hungary + France + Slovenia +	deported	year

<i>C2</i>				
III.18 <i>C1</i>	Quality control of TOVS for a LAM	France (E. Gérard) +		
III.19 <i>C4</i>	Blending of initial conditions -1 (spectral fields - further tuning)	LACE (D. Klaric)	Prague	
III.20 <i>C4</i>	Blending of initial conditions -2 (surface fields - further tuning)	LACE (S. Sahdam-Ivatek)	Prague	
III.21 <i>A4 C4</i>	Coupling between continuous and sequential data assimilation systems			