

ACNA

role within the ALADIN consortium

(input for Strategy workshop in Tls, April 2016)

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ACNA position

ACNA = Aladin Coordinator for Networking Aspects (Activities, Applications)

ToR - to assist the ALADIN PM in the following tasks:

- Preparation of the LTM meeting and the coordination of actions to be taken by the LTMs.
- Supervise changes in the preparation of coupling files, due to specific changes in the Arpège suite.
- Coordinate the tests of the new cycles: supervise the meteorological performance, help on the installation of the new cycle in partner countries, distribute the needed technical tasks among the ALADIN partners, take part in the relevant System coordination
- CSSI member

Maria Derkova (SHMU, Slovakia) since March 07, 2013

unpaid position, missions to LTM meetings (+) covered

Work organization:

- webex meetings with PM & TASS (joined by HIRLAM System PL if relevant)
- e-mails exchange
- Table summary (google sheet on web)

Coordination and networking with LTMs

Preparation of the LTM meetings (Agenda, documents) twice/year: Aladin WKS
HIRLAM ASM + EWGLAM/SRNWP

Information exchange via e-mails

- Questionnaires, inquires (TAC2BUFR migration, ISP facility, local activities on geospatial data)
- Announcements (LBC switches, WWs)
- Knowledge & information spread; feedbacks (e923 updates)

Table summary (google sheet on web - shown later on)

Supervision and coordination of changes in the preparation of telecom coupling/climate files, due to specific changes in the Arpège suite

- migration to BULL (new climate & LBC files, e-suite evaluation)
- increase of Arpege resolution => upgraded telecom LBCs requested

Example of LBC WW in Toulouse, March 2015

Supervision and coordination of telecom LBC Δs

Increase of ARPEGE resolution T1198C2.2L105 (April 2015) + various requests by Partners to update their telecom domain

- all ALADIN Partners informed @ LTM meetings and via e-mails (road-map, detailed instructions)...note that not all Partners do couple with ARPEGE
- requirements for changes in domain size/resolution/forecast ranges/NTs collected by ACNA
- translated into namelist parameters changes
- WW in Tls organized (March 2015) to prepare and test new telecom climate and LBC files
- checked with GCO (namelists, files)
- checked with IT (data volumes, telecom bandwidth)
- coordinated & simultaneous switch supervised on 30/06/2015
- wrap-up

grp				
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name/ist params	new clim		new e927		old domain			
	pdg	e923						
LACE	NJMAX	349	NDOLG	360	NLAT	360	256	
			NDGUXG	349	NFGOLX	349	245	
			NDLON	384	NLON	384	288	
		373	NDLUXG	373	NFLUX	373	277	
	NIMAX			NNSMAX	127	NMFMAX	127	95
				NSMAX	119	NMFMAX	119	85
		17.00	ELONG	17.00	FLOND	17.00	17.00	
		46.2447	XLATO	46.2447	FLATO	46.2447	46.2447	
	XLONCEN	17.00	ELONC	17.00	RLONC	17.00	17.00	
		46.2447	XLATC	46.2447	RLATC	46.2447	46.2447	
		8000.0	XDX	8000.0	RDELX	8000.0	10610.00	
		8000.0	XDY	8000.0	RDELY	8000.0	10610.00	
	XRPK	0.722299992317207					0.722299992317207	
	Algeria	NJMAX	439	NDOLG	450	NLAT	450	300
			NDGUXG	439	NFGOLX	439	289	
			NDLON	450	NLON	450	300	
439			NDLUXG	439	NFLUX	439	289	
NIMAX				NNSMAX	149	NMFMAX	149	100
				NSMAX	149	NMFMAX	149	100
		3.25	ELONG	3.25	FLOND	3.25	3.25	
		32.50	XLATO	32.50	FLATO	32.50	32.50	
XLONCEN		3.25	ELONC	3.25	RLONC	3.25	3.25	
		32.50	XLATC	32.50	RLATC	32.50	32.50	
		8000.00	XDX	8000.00	RDELX	8000.00	12000.00	
		8000.00	XDY	8000.00	RDELY	8000.00	12000.00	
XRPK		0.5372996003					0.5372996003	
Belgium		NJMAX	475	NDOLG	486	NLAT	486	360
			NDGUXG	475	NFGOLX	475	349	
			NDLON	324	NLON	324	300	
	313		NDLUXG	313	NFLUX	313	289	
	NIMAX			NNSMAX	107	NMFMAX	107	99

	check	modes	NT		ranges		freq		number of files		LBC file size		total volume		increase ratio
			old	new	old	new	old	new	old	new	old *	new	old	new	
LACE	ok	prod	00,06,12,18	00,06,12,18	72,72,72,60	78,72,72,60	3h	3h	96	98	24477696	56279040	2349858816	5515345920	2.347096720
		assim	00,06,12,18	00,06,12,18	06,06,06,06	06,06,06,06	3h	3h	12	12	24379392	56279040	292552704	675348480	2.308467742
		pacourt	00*	00*		54	54	3h	3h	19	19	24477696	56279040	465076224	1069301760
Algeria	ok	prod	00,12	00,12	48,48	72,72	3h	3h	34	50	29933568	60358656	1017741312	3017932800	2.965324061
Belgium	ok	prod	00,06,12,18	00,06,12,18	60,60,60,60	60,60,60,60	3h	3h	84	84	35291136	64733184	2964455424	5437587456	1.834261838
Morocco/NORAF	ok	prod	00,12	00,12	72,72	72,72	6h	6h	26	26	34553856	79183872	898400256	2058780672	2.291607397
Morocco/AIBachir	ok	prod	00,12	00,12	72,72	72,72	3h	3h	50	50	18776064	44285952	938803200	2214297600	2.358638743
		assim	00,06,12,18	00,06,12,18	06,06,06,06	06,06,06,06	3h	3h	12	12	18628608	44285952	223543296	531431424	2.377308707
Poland	ok	prod	00,12	00,06,12,18	54,54	66,66,66,60	3h	3h	38	90	3145728	13025280	119537664	1172275200	9.806743421
Portugal	ok	prod	00,12	00,06,12,18	72,72	72,30,84,30	3h	3h	50	76	9830400	35487744	491520000	2697068544	5.487200000
Tunisia	ok	prod	00,12	00,12	48,48	54,54	3h	3h	34	38	3096576	19415040	105283584	737771520	7.007469655
		assim	-	00,06,12,18	-	06,06,06,06	-	3h	0	12	0	19415040	0	232980480	9.220354809
Turkey	ok	prod	00,06,12,18	00,06,12,18	72,72,72,60	72,72,72,60	3h	3h	96	96	14647296	34111488	1406140416	3274702848	2.328859060
SELAM	ok	prod	00,06,12,18	00,06,12,18	78,54,78,54	78,54,78,54	3h	3h	92	92	13175008	29982720	1212100736	2758410240	2.275726891
total volume													12485013632	31393234944	2.514473421
			modification w/r to oper												
			* note that the size of LBC files is as of today, March 16. After e-suite switch the size will be smaller (18 vs 16bits packing)												
			?? the size of assim LBC slightly overestimated (should be smaller, no CUF1PRESSURE array)												

Installation of new cycles in ALADIN countries

Long-term practice in ALADIN: only export version of the T cycles are installed coordinately (i.e. with support)

Example of CY38T1.bf03 (2014) & CY40T1.bf05 (2015-6)

ACNA

- follows the progress in installation by Partners
- reports @LTM meetings
- transfers the information (e-mails, e-mail lists, LACE forum) = **weak point!**

Special actions for CY40T1.bf05 (cooperation with HIRLAM)

- the known bugs were collected aiming for bf06
- hangout with HIRLAM organized (thx Roger) to check assim configs
- baby steps for assim. configs: BATOR (& CANARI) in mitraille proposed

Status of CY38T1.bf03_export installation, Sep2014

list of countries	answ	CY38T1_bf03 installation	install known	configurations	oper	problems/comments
Algeria	n		yes			
Austria	y	yes		AROME	end of the year (e-suite in Oct)	
				ALARO	in the e-suite	not 100% convincing results, waiting for ALARO-1
Belgium	y	yes		4km, 7km	operational since 14/07/2014	
Bulgaria	y	yes			planned for 16/10/2014	in e-suite since mid June
Croatia	y	yes		8km, 4km	planned for this year on new domain/resolution	8km scores better in warm part of year, worse in winter (better in highres); 4km NH run with technical problems (hangout)
Czech R.	y	yes			oper 18/2/2014 (model), 11/9/2014 (canari)	diagpack not running (upper air canari)
				ALARO-1	in e-suite since 17/09/2014	
France	y	yes		AROME	another version of CY38 is operational	AROME-FR in 2weeks R&D assim+prod; mitraillette (also ALADIN?)
Hungary	y	yes		AROME	operational since 3/7/2014	
				ALARO	planned for Oct/Nov (with sms)	validated (neutral)
Morocco	n		yes			
Poland	y	yes			operational since 16/04/2014	
Portugal	y	yes		ALADIN/PORTUGAL, AROME/mainland	validation end of 2014; oper first half of 2015	installed on local IBM (technical software pb), and @MF; - info on RTTM_const and ecoclimap files not trivial to get; ALADIN without SURFEX - what is recommendation?
Romania	y	yes			by the end of the year	longer integration time wrt cy36t1, optimisation needed
Slovakia	y	yes		ALARO in new 4.5km res.	in the e-suite since 1/07/2014	probably waiting for HPC upgrade?
Slovenia	y	yes		ALARO+RUC+ECMWF lbc	operational since 19/06/2014	
Tunisia	y	yes			waiting for new HPC (IBM)	installed on quad corre TERRA machine
Turkey	y			4.5km, 60L, no assim	operational since 01/01/2014	

CY38T1bf03_export installation by Partners: status as on 23 September, 2014

comments:

2 countries did not answer (although their status is more-or-less known)

Turkey answered on 23/09 - one day later => statistics are redone

7 countries operational (out of them 1 did not answer)

9 countries either in the e-suite or with already installed/validated runs (out of them 1 did not answer)

4 technical remarks/still pb?

ALARO-1 in the e-suite @ CHMI :)

Status of CY40T1.bf05_export installation, Apr2016

http://www.cnrm					
update_Apr2016			Oct2015		
countries	answ	status+plans	answ	status	plans
Algeria		ported with help of MF, not operational yet	yes	not ported	planned for 2016
Austria	yes	AROME in e-suite, oper May but 3dvar on CY38t1; 927/FPOS, 001, BATOR, CANARI/OIMAIN, SCREENING, MINIMIZATION, PREP-OFFLINE, other tools like BLENDSUR/BLEND/ADDSURF/FESTAT/FEDIACOV/PROGRID/IOASSIGN/ODBTOOLS/PGD	yes	finished	parallel suite under preparation for AROME, if successful next operational cycle at ZAMG
Belgium	yes	ported, tested ALARO1 1.3km; locally fixed bugs (chkevo), points out of domain (RCO_EZO=80)	yes	ongoing	new HPC in test phase; plans to make it operational with new domain/resolution
Bulgaria			yes	ported	e-suite Oct 2015, oper June2016
Croatia	yes	not ported yet but planned	yes	not ported (but CY41)	not this year
Czech R.	yes	not ported (HPC upgrade expected)	yes	not ported	not this year (ITT priority)
France	-		-	operational	
Hungary	yes	porting started just recently, plans for oper mid-summer	yes	not ported	Installation is planned for the end of 2015, testing in Q1-2016, operational implementation by mid-2016.
Morocco	yes	ee927+cp(SURF+e001 AROME&ALARO; pb with screening when assimilating more obs; oper plan for 41t1 (?) during 2016	yes	ported	planned for december 2015
Poland	yes	no news to report	yes	operational	
Portugal			yes	not ported	??
Romania	yes	e001+ee927 (pb suefpg; RCO_EZO=90); oper 01/04/2016	yes	ported	oper end2015/beg2016
Slovakia	yes	e001,ee927,e701 ALARO+AROME; pb CANARI (GP diagnostics vs coupling); ALARO-1 in e-suite on new HPC soon	yes	installed	oper on new HPC (end of 2015?)
Slovenia	yes	not ported	yes	not ported	plans to compile and test in 2015
Tunisia	yes	compiled, validation ongoing. expecting bf06			
Turkey	yes	e001+ee927 ALARO-1 (runtime pb solved with intel compiler v11); ALARO oper in June2016, AROME on new HPC	yes	installed	planned for oper
HIRLAM				ongoing	Targeted as next reference version harmonie-40h1.1 with operational commitment from MetCoOp and AEMET. Several new developments introduced, see https://hirlam.org/trac/wiki/Harmonie_40h1#Differencebetween
	5	code problems with porting/validation encountered			
	3(+2?)	porting has not started			

Two common HARMONIE system working weeks

Bratislava, Oct 2014

3 HIRLAM, 9+6 ALADIN participants

Installation of CY38T1.bf03 under HARMONIE system...OK

ALADIN components in HARMONIE system...pending

Training in using of HARMONIE system

Verification, 3DVAR



Bratislava, Nov 2015

9 HIRLAM, 8 ALADIN participants

ALADIN T code version reproducibility in H code version...OK

ALADIN components in HARMONIE system...pending

E923 (climate files preparations) differ

SURFEX - common topic

