

ARPEGE MEMORANDUM

From: GCO

Date: January 05, 2006

To: GMAP, COMPAS, GMGEC, GMME, DIR/RE/CRC, Mats Hamrud

Subject: New cycle CY30T1

A new cycle CY30T1 has been created. This is not a common cycle with the ECMWF. The different contributions for this cycle are described in the following pages.

ClearCase label: CY30T1

Modified libraries: arpege,aladin,mpa,mse,ifsaux,odb,utilities

Contributors:

BOUTELOUP Yves	Project:arpege CCase branch:mrpa648_CY30_b247
	Project:arpege CCase branch:mrpa648_CY30_b248b
	Project:arpege CCase branch:mrpa648_CY30_b251
	Project:arpege CCase branch:mrpa648_CY30_b252
Bernard CHAPNIK	Project:arpege CCase branch:mrpa658_CY30_jkbf
FISCHER Claude	Project:arpege CCase branch:mrpe722_CY30_none
Francoise TAILLEFER	Project:arpege CCase branch:mrpa647_CY30_db30
GCO	Project:arpege CCase branch:marp001_CY29T2_bf
	Project:arpege CCase branch:marp001_CY29T2_none
	Project:arpege CCase branch:marp001_CY29T2_op1
	Project:arpege CCase branch:marp001_CY29T2_op2
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	Project:arpege CCase branch:marp001_CY30_none
Karim YESSAD	Project:arpege CCase branch:mrpm603_CY30_dev30pour30t1
	Project:arpege CCase branch:mrpm603_CY30_none
Karim Yessad	Project:arpege CCase branch:marp001_CY30_bfkarim
Marek Jerczynski	Project:arpege CCase branch:marp001_CY30_sumddh
POLI Paul	Project:arpege CCase branch:mrpa679_CY30_scr005
PUECH Dominique	Project:arpege CCase branch:mrpa660_CY30_none
	Project:arpege CCase branch:mrpa660_CY30_phas
Patrick MOLL	Project:arpege CCase branch:mrpa646_CY30_obs30_t1
Ryad El KHATIB	Project:arpege CCase branch:mrpm602_CY30_fpos
	Project:arpege CCase branch:mrpm602_CY30_ibmfix
	Project:arpege CCase branch:mrpm602_CY30_none
SEITY Yann	Project:arpege CCase branch:mrpm637_CY30_AROME
	Project:arpege CCase branch:mrpm637_CY30_SURFEX
	Project:arpege CCase branch:mrpm637_CY30_bfAROME
	Project:arpege CCase branch:mrpm637_CY30_none
VANA Filip	Project:arpege CCase branch:mrpe706_CY30_slhddefaults

BOUTELOUP Yves

Doc:

Phasage de la chaine en double version v3 (cy29t2_op2.08) sur le cy30t1.

Project: arpege
ClearCase branch: mrpa648_CY30_b247

Modified:

arp/adiab	cpg.F90	cpg_dia.F90
arp/canari	cacsts.F90	
arp/dia	cpphddh.F90	ppfidh.F90 sunddh.F90
arp/module	yomphy0.F90	
arp/obs_preproc		blacksat.F90
arp/phys_dmn	acmicro.F90	acnebn.F90 acnebsm.F90
	acpluiz.F90	aplpar.F90 mf_phys.F90
	qngcor.F90	suphy0.F90
arp/varrdfpinc.F90		

Doc:

Modification in order to compute moisture convergence when q is grid point. Two technics are coded, first a new spectral GFL is introduced and derivatives are used. Second, Semi-Lagrangian advection of a new grid point GFL is used. This is driven by a new switch in NAMDYN: NCVGQ

*NCVGQ = 0 ==> as present (q must be spectral)
NCVGQ = 1 ==> q can be grid point spectral computation is done (YCVGQ must be spectral and not advected)
NCVGQ = 2 ==> q can be grid point SL computation is done (YCVGQ must be be grid point and advected)*

Validation :

*NCVGQ = 0 equivalent to operationnal
NCVGQ = 1 very closed to operationnal : some difference because no horizontal diffusion are applied on GFL and derivatives are computed after horizontal diffusion
NCVGQ = 2 Running but need scientific validations and retuning of deep convection.*

Project: arpege
ClearCase branch: mrpa648_CY30_b248b

Modified:

arp/adiab	call_sl.F90	cpg.F90	cpphinp.F90
	lapineb.F90	lattex.F90	
arp/dia	wrspeca.F90		
arp/module	yom_ygfl.F90		yomdyn.F90yomfa.F90
arp/namelist	namdyn.h	namfa.h	namgfl.h
arp/phys_dmn		mf_phys.F90	mf_physad.F90
arp/setup	sudim1.F90	sudyn.F90	sufa.F90
	sugfl.F90	suspeca.F90	

Doc:

*1/ Pouvoir faire tourner fullpos sur des fichiers historiques issus d'un run avec q point de grille.
2/ Modifications de tests dans sudyn et sudim1 afin d'éviter des call abort intempestif.*

Project: arpege
ClearCase branch: mrpa648_CY30_b251

Modified:

arp/setupsudim1.F90 sudyn.F90

Doc:

To run MTS (Model To Satellite) package in CY30, ie with rttov 8 package. No impact if LMTS=.FALSE. (default)

Project: arpege
ClearCase branch: mrpa648_CY30_b252

Modified:

arp/phys_dmn mts_phys.F90
sat/rttov phrtsetup.F90

Bernard CHAPNIK

Doc:

Handle term "JK" in the setup of cost function.

Project: arpege
ClearCase branch: mrpa658_CY30_jkbf

Modified:

arp/varsucos.F90

FISCHER Claude

Doc:

Do not DEACT_CLOUD_GFL if 3DVAR FGAT for ARPEGE/ALADIN .

Project: arpege
ClearCase branch: mrpe722_CY30_none

Modified:

arp/control cva1.F90

Francoise TAILLEFER

Doc:

- 1) le debugging de CANARI par rapport au cycle 30
- 2) une modif de Jean-Daniel, correction de bug dans la geometrie ALADIN
- 3) le phasage des modifs de la config 923 rentrees dans la version export de CY29T2

4) le contournement d'une division par le pas de temps introduite tres haut dans le code
(et donc pb quand TSTEP=0.)

Project: arpege
ClearCase branch: mrpa647_CY30_db30

Modified:

ald/c9xx eincli2.F90 eincli3.F90 eincli4.F90
eincli5.F90 eincli6.F90 eincli7.F90
ald/module eggpack.F90
arp/c9xx incli6.F90
arp/canari calver.F90
arp/module goms.F90
arp/obs_preproc sugoms.F90
arp/pp_obs mpobseq.F90 ppobsn.F90
arp/setup sudyn.F90
odb/cma2odb ctxinitdb.F90

GCO

Doc:

Bugfixes coming from CY29T2, mainly for configuration 923 .

Project: arpege
ClearCase branch: marp001_CY29T2_bf

Added:

arp/c9xxcoord_dts.F90 ppv923.F90

Modified:

ald/c9xx eincli10.F90 eincli2.F90 eincli3.F90
eincli4.F90 eincli5.F90 eincli6.F90
eincli7.F90
ald/dia ewrimova.F90
ald/module eggangles.F90 eggmrt.F90 eggpack.F90
ald/pp_obs ffillb.F90
ald/utility eggx_n.F90
arp/c9xx coord_dts.F90 incli6.F90 ppv923.F90
arp/dia wmovieh.F90
arp/phys_dmn mf_phys.F90

Doc:

Miscellaneous stuff from current parallel suite.

Project: arpege
ClearCase branch: marp001_CY29T2_none

Modified:

odb/bufr2odb satobfreq.F90

Doc:

Miscellaneous stuff from current parallel suite.

Project: arpege
ClearCase branch: marp001_CY29T2_op1

Added:

uti/oulan oulan_airsbt_bufnr.F oulan_georad_bufnr.F
oulan_geowind_bufnr.F
oulan_tovsamsua_bufnr.F

Modified:

arp/obs_preproc blacksat.F90 tempinmf.F90
uti/include oulan_yomdirs.h oulan_yomnbob.h oulan_yomtomv.h
uti/namelist oulan_nadirs.h oulan_nanbob.h
uti/oulan ext_airsbt.F ext_buoy.F ext_cyclone.F
ext_geowind.F ext_satob.F ext_tovsamsub.F
oulan_airsbt_bufnr.F oulan_extract.F oulan_georad_bufnr.F
oulan_geowind_bufnr.F oulan_init.F oulan_namelist.F
oulan_quikscat_bufnr.F oulan_tovsamsua_bufnr.F
oulan_traitements.F
uti/prescat/qretrieve read_qscat25kmbufr.F
uti/progrid procor2.F prodom.F

Doc:

1/ Miscellaneous stuff from current parallel suite.

2/ Add 4 channels for AIRS .

Project: arpege
ClearCase branch: marp001_CY29T2_op2

Modified:

ald/programs blend.F90
arp/obs_preproc blacksat.F90
uti/bator bator_decodbufr.F90
uti/oulan ext_tovsamsub.F

Doc:

Miscellaneous stuff from current parallel suite.

Project: arpege
ClearCase branch: marp001_CY30_dble

Deleted:

uti/oulan ext_geowind.F ext_quikscat.F
oulan_airsbt_bufnr.F
oulan_georad_bufnr.F oulan_geowind_bufnr.F oulan_map_bufnr_quikscat.F
oulan_quikscat_bufnr.F oulan_quikscat_to_obsoul.F
oulan_read_bufnr_quikscat.F
oulan_tovsamsua_bufnr.F oulan_traitements.F

Modified:

ald/c9xx eincli6.F90

arp/adiab	cpg_dia.F90			
arp/control	scan2mdm.F90			
arp/dia	cpxfu.F90	ppfidh.F90		
arp/module	ptrxfu.F90	type_fads.F90	yomphy.F90	
	yomxfu.F90			
arp/namelist	namphy.h	namxfu.h		
arp/phys_dmn		accoefk.F90	acmixlenz.F90	acnebn.F90
	acnebsm.F90	acnebxrs.F90	acpluie.F90	
	acpluiz.F90	acradin.F90	advprc.F90	
	apl_arome.F90	aplpar.F90		
arp/pp_obs	pos.F90	rad1cnne.F90	specfitadm.F90	
	vpos.F90			
arp/setup	su0phy.F90	sucfu.F90	sufa.F90	
	sufpd.F90	suspeca.F90	suxfu.F90	
arp/utility	wrgp2fa.F90			
uti/bator	bator_decodbufr.F90			
uti/include	oulan_yomdirs.h	oulan_yomnbob.h		oulan_yomtomv.h
uti/namelist	oulan_nadirs.h	oulan_nanbob.h		
uti/oulan	ext_airsbt.F	ext_buoy.F	oulan.F	
	oulan_carobs.F	oulan_extract.F	oulan_init.F	
	oulan_namelist.F			
uti/progrid	prodom.F	profac.F	progrid.F	

Doc:

Add link to query "obsort_limb.sql" in "odb/ddl.ECMASCR" directory. This prevents the REDUCE task in 3DVAR ALADIN to crash!

Project: arpege

ClearCase branch: marp001_CY30_none

Added:

odb/ddl.ECMASCR obsort_limb.sql

Karim YESSAD

Doc:

ADTSL : SL2TL: AD+TL codes for variable mesh.

DDHNNH : Correct formulation for entropy and conversion term in the NH model (CPDYDDH).

DM911 : A-level parallelisation of conf 911.

NETD4 : NH model:

cleaning for d4; removal of the auxiliary variable;

make d4 available in ARPEGE.

(cf. mrpe684_CY29T4_dctyri)

- The auxiliary variable is now replaced by a GMV variable containing X.

- This new GMV variable does not exist if LGWADV=T.

NETLAIDEP: removal of LAIDEP.. routines, call directly LARCIN(H)A.. routines.

NETLAINOR: removal of LAINOR.. routines, call directly LARCIN(H)B.. routines.

NETSI : SI scheme coded in ALADIN like in ARPEGE (removal of array SIEHEL)

NETTR : (ETRMtos,ETRSTOM) replaced by (TRMtos,TRSTOM) in ESPCM and ESPCMAD.
ETRMtos and ETRSTOM disappear.

TRAJHR : LTRAJHR split into LTRAJHR_ALT1 and LTRAJHR_SURF;
adaptation of LTRAJHR to METEO-FRANCE applications, with
the possibility to read the trajectory on ARPEGE files.

This modset allows B-Level parallelization for NH model (and reduces CPU cost).

+ Some bugfixes.

Project: arpege

ClearCase branch: mrpm603_CY30_dev30pour30t1

Added:

ald/transform	esperree_der.F90	espeuv.F90
arp/parallel read_spec_fromfa.F90	trltom_dil.F90	
arp/setup dilatb.F90	su3fpos.F90	sump_dila.F90
sump_dilb.F90	surcordi.F90	surfric.F90
arp/transform	spereee_der.F90	

Modified:

ald/adiab elascaw.F90	espchor.F90	espcm.F90
espcmad.F90	espcsi.F90	espcsiad.F90
espnhsi.F90	espnhsiad.F90	gpspng.F90
ald/coupling ecoupl1.F90	esrlxt1.F90	
ald/inidata elsirf.F90	erlbc.F90	
ald/parallel etrmtos.F90	etrstom.F90	
ald/setup suebicu.F90	suct0.F90	suedim.F90
suedyn.F90	suehel.F90	suello.F90
ald/transform	esperree_der.F90	espeuv.F90
etransdir_mdl.F90		
etransdir_nhconv.F90	etransinv_mdl.F90	etransinv_nhconv.F90
etransinvh.F90		
ald/utility deello.F90		
arp/adiab call_sl.F90	cpeuldyn.F90	cpg.F90
cpg_dia.F90	cpg_dyn.F90	cpg_end.F90
cpg_gp.F90	cpglag.F90	gnh_conv_nhvar.F90
gpendtr.F90	gpinislb.F90	gmpmfc.F90
gptf1.F90	gptf1pc.F90	gptf2.F90
gptf2pc.F90	lacdyn.F90	lacone.F90
laconead.F90	laconetl.F90	laidep.F90
laidepad.F90	laideph.F90	laideptl.F90
lainorh.F90	lanhsib.F90	lapinea.F90
lapinea5.F90	lapineaad.F90	lapineatl.F90
lapineb.F90	larche.F90	larche5.F90
larchead.F90	larchetl.F90	larcinb.F90
lascaw.F90	lattex.F90	spchor.F90
sphn_conv_nhvar.F90	spnhsi.F90	
arp/control cnt4.F90	cnt4ad.F90	cnt4tl.F90
gp_model.F90	ini2scan2m.F90	scan2mdm.F90
sim4d.F90	spcm.F90	spcmad.F90
testlievol.F90		
arp/dfi edfi2.F90	edfi3.F90	
arp/dia cpdyddh.F90	pregrbenc.F90	wrm1ppadm.F90

wrspeca.F90			
arp/module gmvs_subs.F90	ptrslb1.F90	traj_data.F90	
traj_main.F90	traj_surface.F90	trajectory.F90	
type_gmvs.F90	yemct0.F90	yemdyn.F90	
yemspbc.F90	yomct0.F90	yomdyna.F90	
yomgmv.F90	yomlun.F90	yomop.F90	
yomsp.F90			
arp/namelist namct0.h	namdyna.h	namvar.h	
arp/parallel_read_spec_fromfa.F90		trltom_dil.F90	trmtos.F90
trstom.F90			
arp/setup dilat.F90	dilatb.F90	su1yom.F90	
suct0.F90	sudil.F90	sudim1.F90	
sudim2.F90	sudyn.F90	sudyna.F90	
suhdf.F90	suinif.F90	sulun.F90	
sump_dila.F90	sump_dilb.F90	sumpini.F90	
suoph.F90	surcordi.F90	surfric.F90	
suslb.F90	suspec.F90	suspeca.F90	
arp/sinvect cun3.F90			
arp/transform	speree_der.F90	transdir_nhconv.F90	
transinv_nhconv.F90			
arp/utility dealspa.F90	openfa.F90	sualspa.F90	
arp/varsuvar.F90	suvazx.F90	tltest.F90	

Doc:

Remove obsolete routines.

Project: arpege

ClearCase branch: mrpm603_CY30_none

Deleted:

ald/paralleletrmtos.F90	etrstom.F90	
ald/setup suehel.F90		
arp/adiab laidep.F90	laidepad.F90	laideph.F90
laideptl.F90	lainorh.F90	
arp/control ini2scan2m.F90		
arp/module	yomaux.F90	

Karim Yessad

Doc:

Bugfixes.

Project: arpege

ClearCase branch: marp001_CY30_bfkarim

Modified:

ald/adiab elarmes.F90		
arp/adiablarmes.F90	larmes5.F90	larmesad.F90
larmestl.F90		

Marek Jerczynski

Doc:

1/ Bugfix which allow multi-processor work for DDH.
2/ Exclude computation in cap of E-zone and modified some code for checking if points and domains are inside of C+I area. All - in practice - changes are introduced under LELAM key. There is still possible some optimization in right side of E-zone below cap.

Project: arpege

ClearCase branch: marp001_CY30_sumddh

Modified:

arp/diasumddh.F90

POLI Paul

Doc:

arp/obs_preproc/defrun.F90

Paul Poli: Decreased acceptance threshold from 4 sigmas down to 2 for ground-based GPS observations.

arp/obs_preproc/fgchk.F90

Paul Poli: Introduction of support for ground-based GPS data.

arp/obs_preproc/first.F90

Paul Poli: Introduction of support for ground-based GPS data.

arp/obs_preproc/gefger.F90

Paul Poli: Definition of ground-based GPS first guess error.

arp/pp_obs/gpszen_delay.F90

Paul Poli: Added header and comments.

arp/pp_obs/gpszen_delayad.F90

Paul Poli: New routine: adjoint of the tangent linear model of the routine GPSZEN_DELAY (observation operator for ground-based GPS data).

arp/pp_obs/gpszen_delaytl.F90

Paul Poli: New routine: tangent linear model of the routine GPSZEN_DELAY (observation operator for ground-based GPS data).

arp/pp_obs/hop.F90

Paul Poli: Added calls to GPSZEN_DELAY and PPPMER (required for assimilation of ground-based GPS data).

arp/pp_obs/hopad.F90

Paul Poli: Added calls to GPSZEN_DELAYAD and PPPMERAD (required for assimilation of ground-based GPS data).

arp/pp_obs/hoptl.F90

Paul Poli: Added calls to GPSZEN_DELAYTL and PPPMERTL (required for assimilation of ground-based GPS data).

arp/pp_obs/hretr.F90

Paul Poli: Cleaning: split previously line too long.

uti/bator/bator_ecritures.F90

Paul Poli: Added support for ground-based GPS data.

Project: arpege

ClearCase branch: mrpa679_CY30_scr005

Added:

arp/pp_obs gpszen_delayad.F90 gpszen_delaytl.F90

Modified:

arp/obs_preproc defrun.F90 fgchk.F90 first.F90
gefger.F90
arp/pp_obs gpszen_delay.F90 gpszen_delayad.F90 gpszen_delaytl.F90
hop.F90 hopad.F90 hoptl.F90
hretr.F90
uti/bator bator_ecritures.F90

PUECH Dominique

Doc:

Remove obsolete routines.

Project: arpege

ClearCase branch: mrpa660_CY30_none

Deleted:

uti/fcqfcqodb_AIREP.F90 fcqodb_SATOB.F90 fcqodb_radome.F90
fcqodb_ship.F90 fcqodb_synop.F90 fcqodb_synor.F90

Doc:

* *bator*

*récupération des modifications déjà incluses dans la chaine en double
adaptations pour création possible sans définition de time-slots
bator.F90 bator_ecritures.F90 bator_init.F90 bator_module.F90 bator_util.F90
initialisation effectuée alors au niveau du merge*

* *fcq* *récupération des modifications déjà incluses dans la chaine en double
réduction du fichier de flags*

* *odb*

*shuffle_odb.F90 : adaptation pour le merge
getsatid.sql, getsatobid.sql : remplacement de UNIQUEBY par DISTINCT
ctxgetdb.F90 : correction bug donnée par CEP pour run avec DISTINCT*

* *arpege*

*hoptl.F90 : flag des données passives
readoba.F90 : adaptation pour merge
suamv.F90, surad.F90 : adaptation suite aux problèmes UNIQUEBY (réduction
du nombre de données sélectionnées)*

* *mandalay* : *récupération des modifications déjà incluses dans la chaine en double.*

**Bugfixes.*

** Re-introduce a call to "codb_putenv", in place of "putenv" .*

Project: arpege
ClearCase branch: mrpa660_CY30_phas

Added:

uti/fcqfcqodb_SYNOP.F90

Deleted:

uti/fcqfcqodb_radome.F90 fcqodb_ship.F90 fcqodb_synop.F90
fcqodb_synor.F90

Modified:

arp/obs_preproc readoba.F90
arp/pp_obs hoptl.F90
arp/varsuamv.F90 surad.F90
odb/cma2odb ctxgetdb.F90 shuffle_odb.F90
odb/ddl cma.h getsatid.sql getsatobid.sql
uti/bator bator.F90 bator_decodbufr.F90
bator_decodgrib.F90
bator_ecritures.F90 bator_impr.F90 bator_init.F90
bator_lectures.F90 bator_saisies.F90 bator_util.F90
uti/fcq fcqodb.F90 fcqodb_DRIBU.F90 fcqodb_PILOT.F90
fcqodb_TEMP.F90 fcqodb_init.F90 man_fcq_bdm_fus.F90
uti/mandalay mandalay.F90
uti/module bator_module.F90 fcqodb_module.F90
uti/namelist bator_namelist.h

Patrick MOLL

Doc:

Fix a vectorization problem in the thinning of the SATOBs.

Project: arpege
ClearCase branch: mrpa646_CY30_obs30_t1

Modified:

arp/obs_preproc new_thinner_no_sq.F90 pre_thinner.F90

Ryad EI KHATIB

Doc:

** Ryad El Khatib : Compliancy with PGI compiler. Huge routines have been split into shorter "contained" subroutines in order to make the compilation safe and fast. Too long subroutines could lead to memory fault (arp/phys_ec/*, xrd/*, uti/*, ald/c9xx/cchien.F90).*

** Sylvie Malardel, Gwenaelle Hello, Ryad El Khatib : Change of geometry and fields from an ALADIN file to an AROME file (mse/*, arp/*), including the handling of either one single*

surface mask (land vs. sea) or two surface masks (land mask and sea mask) ; post-processing of sea surface temperature. The use of two surface masks imposes that only the target climatology could be used for the time being.

New namelists variables :

GFP_SST (NAMAFN) : control structure for post-processing of SST.

NFPSURFEX (NAMFPC) : =1 to subcontract surface fields to the externalized surface SURFEX.

NFPMASK (NAMFPC) : number of masks used (0, 1 or 2).

NFPSURFEX=1 => NFPMASK=2 ; NFPMASK=2 => NFPCLI=1

* Rachida El Ouaraini : post-processing of Warning index for coupling file
(arp/control/scan2mdm.F90, arp/dia/wrspeca.F90, arp/module/yomafn.F90,
arp/module/yommcf.F90, arp/namelist/namafn.h, arp/namelist/nammcf.h,
arp/pp_obs/fpinvtrcuf.F90, arp/pp_obs/pos.F90, arp/pp_obs/specfitadm.F90,
arp/pp_obs/vpos.F90, arp/setup/suafn1.F90, arp/setup/suafn2.F90, arp/setup/suafn3.F90,
arp/setup/sufpcuf.F90, arp/setup/sumcuf.F90, arp/setup/suspeca.F90, arp/utility/allocuf.F90,
arp/utility/deallo.F90, arp/utility/deallocuf.F90)

New namelist variables :

- LREACUF (NAMMCUF) : to read Warning index(es) field(s) from input file

- TFP_CUF1 to TFP_CUF5 (NAMAFN) : control structures for post-processing of up to 5 warning indexes

Project: arpege

ClearCase branch: mrpm602_CY30_fpos

Added:

arp/parallel	arordgp_surf.F90	arowrgp_surf.F90	prep.F90
arp/pp_obs	fp2sx1.F90	fpinvtrcuf.F90	
arp/setup	sufpcip.F90	sufpcuf.F90	sufpsuw.F90
arp/utility	allocuf.F90	deallocuf.F90	
mse/externals		atm2sx_env.mnh	atm2sx_field.mnh
	close_buffer_surfex.mnh		
	close_prep_surfex_aro.mnh	get_bufc0.mnh	get_bufn0.mnh
	get_bufn1.mnh	get_bufx0.mnh	get_bufx1.mnh
	ini_prep_surfex_aro.mnh	prep_surf_aro.mnh	put_bufc0.mnh
	put_bufn0.mnh	put_bufn1.mnh	put_bufx0.mnh
	put_bufx1.mnh		
mse/interfaceatm2sx_env.h		atm2sx_field.h	close_buffer_surfex.h
	ini_prep_surfex_aro.h	prep_surf_aro.h	
mse/internalshor_interpol_none.mnh		prep_buffer.grid.mnh	prep_isba_buffer.mnh
	prep_seaflux_buffer.mnh	prep_snow_buffer.mnh	prep_teb_buffer.mnh
	prep_watflux_buffer.mnh	read_bufc0.mnh	read_bufn0.mnh
	read_bufn1.mnh	read_bufx0.mnh	read_bufx1.mnh
mse/module	modd_bufc0.mnh	modd_bufn0.mnh	modd_bufn1.mnh
	modd_bufx0.mnh	modd_bufx1.mnh	modd_grid_buffer.mnh
	moddb_prep.mnh	mode_read_buffer.mnh	modi_atm2sx_env.mnh
	modi_atm2sx_field.mnh	modi_hor_interpol_none.mnh	
modi_prep_buffer_grid.mnh			
	modi_prep_isba_buffer.mnh	modi_prep_seaflux_buffer.mnh	
	modi_prep_snow_buffer.mnh		
	modi_prep_teb_buffer.mnh	modi_prep_watflux_buffer.mnh	
	modi_read_buffer.mnh		

Modified:

ald/c9xx	cchien.F90	
ald/inidata	elsac.F90	
ald/pp_obs	endepos.F90	fpfillb.F90

ald/setup	suehow2.F90	suehowism.F90	
arp/control	cnt3.F90	scan2mdm.F90	
arp/dia	wrspeca.F90		
arp/module	ptrfpb2.F90	type_fpdspphys.F90	yomafn.F90
	yomfpc.F90	yomfpsc2.F90	yommcf.F90
	yomsc2.F90	yomwfpb.F90	yomwfpds.F90
arp/namelist	namafn.h	namfpc.h	nammcf.h
arp/parallel	arordgp_surf.F90	arowrgp_surf.F90	
arp/phys_ec	rrtm_kgb1.F90	rrtm_kgb10.F90	rrtm_kgb11.F90
	rrtm_kgb12.F90	rrtm_kgb13.F90	rrtm_kgb14.F90
	rrtm_kgb15.F90	rrtm_kgb16.F90	rrtm_kgb2.F90
	rrtm_kgb3.F90	rrtm_kgb4.F90	rrtm_kgb5.F90
	rrtm_kgb6.F90	rrtm_kgb7.F90	rrtm_kgb8.F90
	rrtm_kgb9.F90	srtm_kgb16.F90	srtm_kgb17.F90
	srtm_kgb18.F90	srtm_kgb19.F90	srtm_kgb21.F90
	srtm_kgb22.F90	srtm_kgb24.F90	srtm_kgb28.F90
	suecaebc.F90	suecaec.F90	suecaeor.F90
	suecaesd.F90	suecaess.F90	suecaesu.F90
	suecozc.F90		
arp/pp_obs	cpclimi.F90	endvpos.F90	fp2sx1.F90
	fpcorphy.F90	fpint12.F90	fpint4.F90
	fpintdyn.F90	fpintphy.F90	fpinvtrcuf.F90
	fplake.F90	fpmmodprec.F90	fposhor.F90
	fpsampl.F90	fpscaw.F90	gridfpos.F90
	hpos.F90	pos.F90	ppreset.F90
	specfitadm.F90	vpos.F90	
arp/setup	suafn1.F90	suafn2.F90	suafn3.F90
	subfpos.F90	sufpc.F90	sufpcip.F90
	sufpcuf.F90	sufpsc2.F90	sufpsuw.F90
	sufptr2.F90	sufpwide.F90	suhow2.F90
	suhowism.F90	sumcuf.F90	surfpbuf.F90
	surfpds.F90	suspeca.F90	suwfpbuf.F90
	suwfpds.F90		
arp/utility	allocuf.F90	dealfpos.F90	deallo.F90
	deallocuf.F90		
mse/externals		aroini_surf.mnh	atm2sx_env.mnh
atm2sx_field.mnh			
	close_buffer_surfex.mnh	close_prep_surfex_aro.mnh	
get_bufc0.mnh			
	get_bufn0.mnh	get_bufn1.mnh	get_bufx0.mnh
	get_bufx1.mnh	ini_prep_surfex_aro.mnh	prep_surf_aro.mnh
	put_bufc0.mnh	put_bufn0.mnh	put_bufn1.mnh
	put_bufx0.mnh	put_bufx1.mnh	
mse/interface	atm2sx_env.h	atm2sx_field.h	close_buffer_surfex.h
	ini_prep_surfex_aro.h	prep_surf_aro.h	
mse/internals	aroend_io_surf_n.mnh	aroget_size_full_n.mnh	aroinit_io_surf_n.mnh
	aroopen_namelist.mnh	read_surfx1_aro.mnh	read_surfx2_aro.mnh
	write_surfc0_aro.mnh	write_surfl0_aro.mnh	write_surfl1_aro.mnh
	write_surfn0_aro.mnh	write_surfn1_aro.mnh	write_surft0_aro.mnh
	write_surfx0_aro.mnh	write_surfx1_aro.mnh	write_surfx2_aro.mnh
mse/module	modd_aro_ini_surf.mnh	modd_bufc0.mnh	modd_bufn0.mnh
	modd_bufn1.mnh	modd_bufx0.mnh	modd_bufx1.mnh
	modd_io_surf_aro.mnh	modi_atm2sx_env.mnh	modi_atm2sx_field.mnh
	modi_close_namelist.mnh	modi_get_luout.mnh	modi_open_namelist.mnh
uti/extrtavs	calc_bias_1c.F90	calc_scan_1c.F90	cycle_bias_1c.F90
	cycle_scan_1c.F90		
uti/mandalay	mandalay.F90		
xrd/ddh	lfa_R8I4.F90		

Doc:

Bugfixes for IBM xlf compiler.

Project: arpege
ClearCase branch: mrpm602_CY30_ibmfix

Modified:

mpa/chem/internals isocom.F
mse/module modd_bufc0_aro.mnh modd_bufn0_aro.mnh
modd_bufn1_aro.mnh
modd_bufx0_aro.mnh modd_bufx1_aro.mnh
odb/tools Ps_bias_correction.F90
uti/oulan oulan_airsbt_bufr.F oulan_extract.F oulan_georad_bufr.F
oulan_geowind_bufr.F oulan_quikscat_bufr.F
oulan_tovsamsua_bufr.F

Doc:

Remove obsolete routines.

Project: arpege
ClearCase branch: mrpm602_CY30_none

Deleted:

arp/pp_obs cpclimo.F90 hposlag.F90
arp/setup su3fpos.F90

SEITY Yann

Doc:

*Yann Seity et Pierre Tulet : ajout de la chimie MesoNH dans AROME
Phasage avec la version 1.1 de la surface externalisée.*

Project: arpege
ClearCase branch: mrpm637_CY30_AROME

Added:

arp/module yomaux.F90 yomnsv.F90
arp/setup su3fpos.F90 suini_nsv.F90

Modified:

arp/adiab cpg.F90 cpg_pt.F90
cputqy_arome.F90
arp/control gp_model.F90
arp/module yom_ygfl.F90 yomarphy.F90 yommnh.F90
yomnsv.F90
arp/namelist namarphy.h namparar.h
arp/phys_dmn acradin.F90 apl_arome.F90 mf_phys.F90
recmwf.F90 suphmnh.F90 surfext.F90
arp/phys_ec radlsw.F90 sw.F90 sw1s.F90
swclr.F90 swni.F90
arp/setup su0phy.F90 sudim1.F90 sudyn.F90

sugfl.F90

mpa/micro/module	modd_nsv.mnh	
mpa/turb/externals	aro_turb_mnh.mnh	
mpa/turb/interface	aro_turb_mnh.h	
mpa/turb/internals	prandtl.mnh	rmc01.mnh
mse/externals	aro_ground_param.mnh	
mse/interface	aroini_surf.h	
mse/internals	allocate_gr_snow.mnh	
averaged_albedo_emis_isba.mnh	average_rad.mnh	
bilin.mnh	ch_bvocem_n.mnh	
build_pronoslist_n.mnh	ch_init_names.mnh	
ch_emission_flux_n.mnh		
clean_prep_output_grid.mnh		
co2_init_n.mnh	coef_ver_interp_lin_surf.mnh	
convert_cover_isba.mnh		
convert_cover_teb.mnh	cotwo.mnh	
cotwoinit_n.mnh		
cotwores.mnh	cotworessstress.mnh	
coupling_ideal_flux.mnh		
coupling_isba_n.mnh	coupling_isba_svat_n.mnh	
coupling_seaflux_n.mnh		
coupling_surf_atm_n.mnh	coupling_teb_n.mnh	
coupling_tsz0_n.mnh		
coupling_watflux_n.mnh	default_isba.mnh	
diag_inland_water_n.mnh	diag_nature_n.mnh	
diag_misc_isba_n.mnh		
diag_sea_n.mnh		
diag_town_n.mnh	drag.mnh	e_budget.mnh
get_adjacent_meshes.mnh	goto_wrapper_isba.mnh	
goto_wrapper_surfatm.mnh		
goto_wrapper_teb.mnh	hor_extrapol_surf.mnh	
hor_interpol.mnh		
hor_interpol_arome.mnh	hor_interpol_cartesian.mnh	
hor_interpol_conf_proj.mnh		
hor_interpol_gauss.mnh	horibl_surf.mnh	hydro.mnh
ini_data_cover.mnh	ini_data_param.mnh	
init_ideal_flux.mnh		
init_isba_n.mnh	init_surf_atm_n.mnh	init_teb_n.mnh
init_watflux_n.mnh	interpol_field1d.mnh	
interpol_field2d.mnh		
interpol_splines.mnh	isba.mnh	
isba_fluxes.mnh		
laigain.mnh	lailoss.mnh	
latlon_gridtype_cartesian.mnh		
latlon_gridtype_conf_proj.mnh	latlon_gridtype_lonlat_reg.mnh	
mkflag_snow.mnh		
nitro_decline.mnh	pack_diag_patch_n.mnh	pgd.mnh
pgd_grid.mnh	pgd_isba.mnh	
pgd_nature.mnh		
pgd_orography.mnh	pgd_seaflux.mnh	
pgd_surf_atm.mnh		
pgd_teb.mnh	pgd_town.mnh	
pgd_watflux.mnh		
prep.mnh	prep_grid_conf_proj.mnh	
prep_grid_cartesian.mnh	prep_hor_seaflux_field.mnh	
prep_hor_isba_field.mnh		
prep_hor_snow_field.mnh		
prep_hor_snow_fields.mnh	prep_hor_teb_field.mnh	
prep_hor_watflux_field.mnh		

prep_isba_extern.mnh	prep_nature.mnh	
prep_output_grid.mnh	prep_seaflux_extern.mnh	
prep_perm_snow.mnh	prep_teb_extern.mnh	
prep_snow_extern.mnh	prep_watflux_extern.mnh	
prep_surf_atm.mnh	read_isba_conf_n.mnh	
prep_teb_grib.mnh	read_pgd_isba_n.mnh	
prep_ver_snow.mnh	read_prep_isba_snow.mnh	
read_default_surf_atm_n.mnh	read_prep_teb_conf.mnh	
read_gr_snow.mnh	read_surf_atm_conf_n.mnh	
read_isba_date.mnh	read_surfn0_asc.mnh	
read_isba_n.mnh	read_watflux_date.mnh	soil.mnh
read_pgd_teb_n.mnh	teb.mnh	
read_prep_file_date.mnh	urban_fluxes.mnh	
read_prep_seaflux_conf.mnh	ver_interp_lin1d_surf.mnh	
read_prep_surf_atm_conf.mnh	write_diag_seb_isba_n.mnh	
read_prep_watflux_conf.mnh	writesurf_gr_snow.mnh	
read_seaflux_date.mnh	writesurf_pgd_seaflux_n.mnh	
read_surf_atm_date.mnh	z0eff.mnh	
read_surfn0_aro.mnh	modd_ch_surf_n.mnh	
read_surft0_asc.mnh	modd_ideal_flux.mnh	
read_teb_date.mnh	modd_prep.mnh	
surf_version.mnh	modd_sv_n.mnh	
unpack_diag_patch_n.mnh	mode_read_extern.mnh	
unpack_isba_patch_n.mnh	modi_ch_emission_flux_n.mnh	
vegetation_evol.mnh	modi_convert_cover_isba.mnh	
vegetation_update.mnh	modi_cotwores.mnh	
ver_interp_lin2d_surf.mnh	modi_drag.mnh	
write_cover_tex_isba_par.mnh	modi_horibl_surf.mnh	
write_surf_atm_n.mnh	modi_isba.mnh	
writesurf_atm_conf_n.mnh	modi_laigain.mnh	
writesurf_isba_n.mnh	modi_lailoss.mnh	
writesurf_pgd_isba_n.mnh		
writesurf_pgd_teb_n.mnh		
writesurf_pgd_watflux_n.mnh		
zoom_pgd_isba.mnh		
mse/module modd_ch_isba_n.mnh		
modd_co2v_par.mnh		
modd_data_cover.mnh		
modd_isba_n.mnh		
modd_pack_diag_isba.mnh		
modd_snow_par.mnh		
modd_surf_atm_n.mnh		
modd_teb_n.mnh		
mode_cover.mnh		
mode_surf_snow_frac.mnh		
modi_bilin.mnh		
modi_ch_init_names.mnh		
modi_co2_init_n.mnh		
modi_convert_cover_teb.mnh		
modi_cotwoinit_n.mnh		
modi_cotworestress.mnh		
modi_default_isba.mnh		
modi_e_budget.mnh		
modi_hor_extrapol_surf.mnh		
modi_interpol_field.mnh		
modi_interpol_field2d.mnh		
modi_isba_fluxes.mnh		
modi_laigain.mnh		
modi_pgd_isba.mnh		

modi_pgd_nature.mnh	modi_pgd_teb.mnh
modi_pgd_town.mnh	
modi_prep_hor_snow_fields.mnh	modi_read_gr_snow.mnh
modi_urban_fluxes.mnh	
modi_vegetation_evol.mnh	modi_vegetation_update.mnh
modi_write_cover_tex_isba_par.mnh	
modn_isba_n.mnh	

Doc:

Yann Seity : Création des nouvelles routines de la surface externalisée version 1.1 (qui n'existaient pas dans la version précédente qu'on avait dans Ccase depuis CY29T1).

Project: arpege

ClearCase branch: mrpm637_CY30_SURFEX

Added:

mse/internals	arofm_read.mnh
arofm_writ.mnh	arofmattr.mnh
arofmclos.mnh	arofmfree.mnh
arofminit.mnh	
arofmlook.mnh	arofmopen.mnh
arofmreadc0.mnh	
arofmreadl0.mnh	ch_aer_emission.mnh
ch_buildemiss_n.mnh	
ch_buildpronos_n.mnh	coupling_dst_n.mnh
default_assim.mnh	
default_dst_n.mnh	dst_init_modes.mnh
dst_init_names.mnh	
dust_emission_n.mnh	get_adj_mes_cart.mnh
get_adj_mes_conf_proj.mnh	
get_adj_mes_lonlat_reg.mnh	get_surf_size_n.mnh
get_vegtype_2_patch_mask.mnh	
hor_interpol_none.mnh	init_dst_n.mnh
init_dust_emission.mnh	
init_dust_emission_n.mnh	init_from_data_isba_n.mnh
init_from_data_teb_n.mnh	
liste_add	offline.mnh
pgd_frac.mnh	
pgd_isba_par.mnh	pgd_teb_par.mnh
prep_buffer_grid.mnh	
prep_isba_buffer.mnh	prep_seaflux_buffer.mnh
prep_snow_buffer.mnh	
prep_teb_buffer.mnh	prep_watflux_buffer.mnh
read_bufc0.mnh	
read_bufn0.mnh	read_bufn1.mnh
read_bufx0.mnh	
read_bufx1.mnh	read_default_dst_n.mnh
read_dst_conf_n.mnh	
read_pgd_isba_par_n.mnh	read_pgd_teb_par_n.mnh
read_pre_seaf_dat_conf.mnh	
read_pre_surfa_dat_conf.mnh	read_pre_watf_dat_conf.mnh
write_dst_conf_n.mnh	
writesurf_pgd_isba_par_n.mnh	writesurf_pgd_teb_par_n.mnh
mse/module modd_assim.mnh	modd_chs_aerosol.mnh
modd_data_isba_n.mnh	
modd_data_teb_n.mnh	modd_dst.mnh
modd_dst_n.mnh	

modd_grid_buffer.mnh	modd_io_surf_ol.mnh
modd_ol_fileid.mnh	mode_dstmbl.mnh
modd_surf_dst_n.mnh	
mode_dstmblutl.mnh	
mode_read_buffer.mnh	modi_ch_aer_emission.mnh
modi_close_file_ol.mnh	
modi_close_namelist_ol.mnh	modi_create_file.mnh
modi_def_var_netcdf.mnh	
modi_default_assim.mnh	modi_default_dst_n.mnh
modi_dst_init_modes.mnh	
modi_dst_init_names.mnh	modi_dust_emission_n.mnh
modi_get_adj_mes_cart.mnh	
modi_get_adj_mes_conf_proj.mnh	modi_get_adj_mes_lonlat_reg.mnh
modi_get_dimlen_netcdf.mnh	
modi_get_surf_size_n.mnh	modi_handle_err.mnh
modi_hor_interpol_none.mnh	
modi_init_from_data_isba_n.mnh	modi_init_from_data_teb_n.mnh
modi_init_io_surf_ol_n.mnh	
modi_init_outfn_isba_n.mnh	modi_init_outfn_sea_n.mnh
modi_init_outfn_surf_atm_n.mnh	
modi_init_outfn_teb_n.mnh	modi_init_outfn_water_n.mnh
modi_ol_alloc_atm.mnh	
modi_ol_find_file.mnh	modi_ol_read_atm.mnh
modi_ol_read_atm_conf.mnh	
modi_ol_read_prescribed_veg.mnh	modi_ol_time_interp_atm.mnh
modi_open_file_ol.mnh	
modi_open_namelist_ol.mnh	modi_pgd_frac.mnh
modi_pgd_isba_par.mnh	
modi_pgd_teb_par.mnh	modi_prep_buffer_grid.mnh
modi_prep_isba_buffer.mnh	
modi_prep_seaflux_buffer.mnh	modi_prep_snow_buffer.mnh
modi_prep_teb_buffer.mnh	
modi_prep_watflux_buffer.mnh	modi_read_buffer.mnh
modi_read_default_dst_n.mnh	
modi_read_dst_conf_n.mnh	modi_read_pgd_isba_par_n.mnh
modi_read_pgd_teb_par_n.mnh	
modi_read_pre_seaf_dat_conf.mnh	modi_read_pre_surfa_dat_conf.mnh
modi_read_pre_watf_dat_conf.mnh	
modi_read_surfx1_ol.mnh	modi_write_dst_conf_n.mnh
modi_writesurf_pgd_isba_par_n.mnh	
modi_writesurf_pgd_teb_par_n.mnh	modn_assim.mnh
modn_chs_orilam.mnh	
modn_dst_n.mnh	

Modified:

mse/internals	ch_aer_emission.mnh	
ch_buildemiss_n.mnh	ch_buildpronos_n.mnh	
coupling_dst_n.mnh	default_assim.mnh	
default_dst_n.mnh		
dst_init_modes.mnh	dst_init_names.mnh	
dust_emission_n.mnh		
get_adj_mes_cart.mnh	get_adj_mes_conf_proj.mnh	
get_adj_mes_lonlat_reg.mnh		
get_surf_size_n.mnh	get_vegtype_2_patch_mask.mnh	
hor_interpol_none.mnh		
init_dst_n.mnh	init_dust_emission.mnh	
init_dust_emission_n.mnh		
init_from_data_isba_n.mnh	init_from_data_teb_n.mnh	offline.mnh

pgd_frac.mnh	pgd_isba_par.mnh
pgd_teb_par.mnh	prep_isba_buffer.mnh
prep_buffer_grid.mnh	prep_teb_buffer.mnh
prep_seaflux_buffer.mnh	read_bufn0.mnh
prep_snow_buffer.mnh	read_bufx1.mnh
prep_watflux_buffer.mnh	read_pgd_isba_par_n.mnh
read_bufc0.mnh	read_pre_surfa_dat_conf.mnh
read_bufn1.mnh	writesurf_pgd_isba_par_n.mnh
read_bufx0.mnh	modd_chs_aerosol.mnh
read_default_dst_n.mnh	modd_dst.mnh
read_dst_conf_n.mnh	modd_io_surf_ol.mnh
read_pgd_teb_par_n.mnh	mode_dstmbl.mnh
read_pre_seaf_dat_conf.mnh	modi_ch_aer_emission.mnh
read_pre_watf_dat_conf.mnh	modi_create_file.mnh
write_dst_conf_n.mnh	modi_default_dst_n.mnh
writesurf_pgd_teb_par_n.mnh	modi_dust_emission_n.mnh
mse/module modd_assim.mnh	modi_get_adj_mes_lonlat_reg.mnh
modd_data_isba_n.mnh	modi_handle_err.mnh
modd_data_teb_n.mnh	modi_init_from_data_teb_n.mnh
modd_dst_n.mnh	modi_init_outfn_sea_n.mnh
modd_grid_buffer.mnh	modi_init_outfn_water_n.mnh
modd_ol_fileid.mnh	modi_ol_read_atm.mnh
modd_surf_dst_n.mnh	modi_ol_time_interp_atm.mnh
mode_dstmblutl.mnh	modi_pgd_frac.mnh
mode_read_buffer.mnh	modi_prep_buffer_grid.mnh
modi_close_file_ol.mnh	modi_prep_snow_buffer.mnh
modi_close_namelist_ol.mnh	modi_read_buffer.mnh
modi_def_var_netcdf.mnh	modi_read_pgd_isba_par_n.mnh
modi_default_assim.mnh	modi_read_pre_surfa_dat_conf.mnh
modi_dst_init_modes.mnh	modi_write_dst_conf_n.mnh
modi_dst_init_names.mnh	
modi_get_adj_mes_cart.mnh	
modi_get_adj_mes_conf_proj.mnh	
modi_get_dimlen_netcdf.mnh	
modi_get_surf_size_n.mnh	
modi_hor_interpol_none.mnh	
modi_init_from_data_isba_n.mnh	
modi_init_io_surf_ol_n.mnh	
modi_init_outfn_isba_n.mnh	
modi_init_outfn_surf_atm_n.mnh	
modi_init_outfn_teb_n.mnh	
modi_ol_alloc_atm.mnh	
modi_ol_find_file.mnh	
modi_ol_read_atm_conf.mnh	
modi_ol_read_prescribed_veg.mnh	
modi_open_file_ol.mnh	
modi_open_namelist_ol.mnh	
modi_pgd_isba_par.mnh	
modi_pgd_teb_par.mnh	
modi_prep_isba_buffer.mnh	
modi_prep_seaflux_buffer.mnh	
modi_prep_teb_buffer.mnh	
modi_prep_watflux_buffer.mnh	
modi_read_default_dst_n.mnh	
modi_read_dst_conf_n.mnh	
modi_read_pgd_teb_par_n.mnh	
modi_read_pre_seaf_dat_conf.mnh	
modi_read_pre_watf_dat_conf.mnh	
modi_read_surfx1_ol.mnh	
modi_writesurf_pgd_isba_par_n.mnh	

ch_aer_mod_init.mnh		
mpa/chem/interface	aro_mnhc.h	
aro_mnhdust.h	aroini_mnhc.h	
aroini_nsv.h	aroini_nsv0.h	
mpa/chem/internals	addpnt.F	ares.F
ch_aer_coag.mnh	ch_aer_eqm_cormass.mnh	
ch_aer_driver.mnh	ch_aer_init_soa.mnh	
ch_aer_eqsam.mnh	ch_aer_mppmpo.mnh	
ch_aer_growth.mnh	ch_aer_pun.mnh	
ch_aer_intermin.mnh	ch_aer_surf.mnh	
ch_aer_mineral.mnh	ch_aer_velgrav_n.mnh	
ch_aer_nucl.mnh	ch_ares.mnh	
ch_aer_organic.mnh	ch_deallocate_taccs.mnh	
ch_aer_sedimentation_n.mnh	ch_fcn.mnh	
ch_aer_solv.mnh	ch_get_rates.mnh	
ch_aer_thermo.mnh	ch_init_diagnostics.mnh	
ch_aer_trans.mnh	ch_init_scheme.mnh	
ch_allocate_taccs.mnh	ch_jac.mnh	
ch_aqua.mnh	ch_linssa.mnh	
ch_convect_scvenging.mnh	ch_nnares.mnh	
ch_cranck.mnh	ch_output.mnh	
ch_diagnostics.mnh	ch_read_meteo.mnh	
ch_exqssa.mnh	ch_set_rates.mnh	
ch_gauss.mnh	ch_sis.mnh	
ch_get_cnames.mnh	ch_svode.mnh	
ch_ini_orilam.mnh	ch_update_meteo.mnh	
ch_init_ccs.mnh	data_blkiso.F	
ch_init_jvalues.mnh	data_kmcf223a.F	
ch_init_output.mnh	data_kmcf298a.F	
ch_interp_jvalues_n.mnh	fchap.F	
ch_isoropia.mnh	futr.F	
ch_jvalues_clouds_n.mnh	gridz.F	
ch_jvalues_n.mnh	inter3.F	
ch_make_lookup.mnh	isofwd.F	
ch_meteo_trans.mnh		
ch_nonzeroterms.mnh		
ch_orilam.mnh		
ch_prodloss.mnh		
ch_qssa.mnh		
ch_read_vector.mnh		
ch_scopy.F		
ch_set_photo_rates_n.mnh		
ch_show_chem.mnh		
ch_solver_n.mnh		
ch_sparse.mnh		
ch_terms.mnh		
ch_update_jvalues_n.mnh		
ch_write_chem.mnh		
data_aersr.F		
data_expon.F		
data_kmcf198.F		
data_kmcf248a.F		
data_kmcf273a.F		
data_kmcf323a.F		
eqsam_v03d_sub.mnh		
fctreso.mnh		
fery.F	fsum.F	
gridck.F	gridw.F	
inter1.F	inter2.F	
isamax.F	isocom.F	

isorev.F	isrpia.inc	jspec1.F
lunsav.F	mflgsv.F	mode_aero_psd.mnh
nn.mnh	o2spec.F	ps2str.F
r1mach.F	rdetfl.F	rdno2xs.F
rdo2xs.F	rdo3xs.F	rdso2xs.F
read1.F	read2.F	rtlink.F
sacopy.F	saxpy.F	schu.F
sdot.F	setaer.F	setair.F
setalb.F	setcld.F	setno2.F
seto2.F	setozo.F	setso2.F
settmp.F	sewset.F	sgbfa.F
sgbsl.F	sgefa.F	sgesl.F
sphers.F	sscal.F	sto2xs.F
sundis.F	svhin.F	svindy.F
svjac.F	svjust.F	svnlsd.F
svnorm.F	svode.F	svset.F
svsol.F	svsrco.F	svstep.F
tridag.F	troe.mnh	troe_equil.mnh
tuvmain.F	unifac.F	xerrwv.F
xsetf.F	xsetun.F	zenith.F
zero1.F	zero2.F	
mpa/chem/module	modd_ch_aero_n.mnh	modd_ch_aerosol.mnh
modd_ch_const.mnh		
modd_ch_dep_n.mnh		modd_ch_init_jvalues.mnh
modd_ch_jvalues_n.mnh		
modd_ch_m9.mnh		modd_ch_m9_scheme.mnh
modd_ch_meteo.mnh		
modd_ch_mnhc_n.mnh		modd_ch_model0d.mnh
modd_ch_solver_n.mnh		
modd_csts_dust.mnh		modd_dust.mnh
modd_dust_opt_lkt.mnh		
modd_indref_aer.mnh		modd_sub_ch_field_value_n.mnh
modd_sub_ch_monitor_n.mnh		
mode_dust_psd.mnh		mode_dustopt.mnh
modi_ch_aer_coag.mnh		
modi_ch_aer_driver.mnh		modi_ch_aer_eqm_cormass.mnh
modi_ch_aer_eqsam.mnh		
modi_ch_aer_growth.mnh		modi_ch_aer_init.mnh
modi_ch_aer_init_soa.mnh		
modi_ch_aer_intermin.mnh		modi_ch_aer_mineral.mnh
modi_ch_aer_mod_init.mnh		
modi_ch_aer_mpmmpo.mnh		modi_ch_aer_nucl.mnh
modi_ch_aer_organic.mnh		
modi_ch_aer_pun.mnh		modi_ch_aer_rhcalcn.mnh
modi_ch_aer_sedimentation_n.mnh		
modi_ch_aer_solv.mnh		modi_ch_aer_surf.mnh
modi_ch_aer_thermo.mnh		
modi_ch_aer_trans.mnh		modi_ch_aer_velgrav_n.mnh
modi_ch_allocate_taccs.mnh		
modi_ch_aqua.mnh		modi_ch_ares.mnh
modi_ch_boundaries.mnh		
modi_ch_cranck.mnh		modi_ch_deallocate_taccs.mnh
modi_ch_diagnostics.mnh		
modi_ch_emission_flux0d.mnh		modi_ch_exqssa.mnh
modi_ch_fcn.mnh		
modi_ch_field_value_n.mnh		modi_ch_gauss.mnh
modi_ch_get_cnames.mnh		
modi_ch_get_rates.mnh		modi_ch_ini_orilam.mnh
modi_ch_init_ccs.mnh		

modi_ch_init_const_n.mnh	modi_ch_init_jvalues.mnh
modi_ch_init_meteo.mnh	
modi_ch_init_model0d.mnh	modi_ch_init_output.mnh
modi_ch_init_scheme.mnh	
modi_ch_interp_jvalues_n.mnh	modi_ch_isoropia.mnh
modi_ch_jac.mnh	
modi_ch_jvalues_clouds_n.mnh	modi_ch_jvalues_n.mnh
modi_ch_linssa.mnh	
modi_ch_meteo_trans.mnh	modi_ch_monitor_n.mnh
modi_ch_nnares.mnh	
modi_ch_nonzeroterms.mnh	modi_ch_open_input.mnh
modi_ch_orilam.mnh	
modi_ch_output.mnh	modi_ch_prodloss.mnh
modi_ch_qssa.mnh	
modi_ch_read_chem.mnh	modi_ch_read_meteo.mnh
modi_ch_read_vector.mnh	
modi_ch_set_photo_rates_n.mnh	modi_ch_set_rates.mnh
modi_ch_show_chem.mnh	
modi_ch_sis.mnh	modi_ch_solver_n.mnh
modi_ch_sparse.mnh	
modi_ch_svode.mnh	modi_ch_terms.mnh
modi_ch_update_jvalues_n.mnh	
modi_ch_update_meteo.mnh	modi_ch_write_chem.mnh
modi_eqsam_v03d_sub.mnh	
modi_troe.mnh	modi_troe_equil.mnh
mse_dummy	
mse/dummy budget.mnh	ch_convect_scavenging.mnh
close_aux_io_surf_asc.mnh	
close_aux_io_surf_ol.mnh	close_namelist_ol.mnh
detect_field_mnh.mnh	
end_io_surf_ol_n.mnh	fmlook_ll.mnh
fmwrit.mnh	
init_io_surf_ol_n.mnh	les_mean_subgrid_3d.mnh
les_mean_subgrid_surf.mnh	
mnhclose_aux_io_surf.mnh	mnhclose_namelist.mnh
mnhclose_write_cover_tex.mnh	
mnhend_io_surf_n.mnh	mnhget_desfm_n.mnh
mnhget_luout.mnh	
mnhget_size_full_n.mnh	mnhinit_io_surf_n.mnh
mnhopen_aux_io_surf.mnh	
mnhopen_namelist.mnh	mnhopen_write_cover_tex.mnh
open_aux_io_surf_asc.mnh	
open_aux_io_surf_ol.mnh	open_namelist_ol.mnh
read_surfc0_mnh.mnh	
read_surfc0_ol.mnh	read_surfl0_mnh.mnh
read_surfl0_ol.mnh	
read_surfl1_mnh.mnh	read_surfl1_ol.mnh
read_surfn0_mnh.mnh	
read_surfn0_ol.mnh	read_surfn1_mnh.mnh
read_surfn1_ol.mnh	
read_surft0_mnh.mnh	read_surft0_ol.mnh
read_surfx0_mnh.mnh	
read_surfx0_ol.mnh	read_surfx1_mnh.mnh
read_surfx1_ol.mnh	
read_surfx2_mnh.mnh	read_surfx2_ol.mnh
second_mnh.mnh	
write_surfc0_mnh.mnh	write_surfc0_ol.mnh
write_surfl0_mnh.mnh	

write_surfl0_ol.mnh	write_surfl1_mnh.mnh
write_surfl1_ol.mnh	
write_surfn0_mnh.mnh	write_surfn0_ol.mnh
write_surfn1_mnh.mnh	
write_surfn1_ol.mnh	write_surft0_mnh.mnh
write_surft0_ol.mnh	
write_surfx0_mnh.mnh	write_surfx0_ol.mnh
write_surfx1_mnh.mnh	
write_surfx1_ol.mnh	write_surfx2_mnh.mnh
write_surfx2_ol.mnh	

Renamed:

mse/internals

fm_read.mnh to mse/internals/fm_read_aro.mnh
fm_writ.mnh to mse/internals/fm_writ_aro.mnh
fmattr.mnh to mse/internals/fmattr_aro.mnh
fmclos.mnh to mse/internals/fmclos_aro.mnh
fmfree.mnh to mse/internals/fmfree_aro.mnh
fminit.mnh to mse/internals/fminit_aro.mnh
fmlook.mnh to mse/internals/fmlook_aro.mnh
fmopen.mnh to mse/internals/fmopen_aro.mnh
fmreadc0.mnh to mse/internals/fmreadc0_aro.mnh
fmreadl0.mnh to mse/internals/fmreadl0_aro.mnh
fmreadl1.mnh to mse/internals/fmreadl1_aro.mnh
fmreadn0.mnh to mse/internals/fmreadn0_aro.mnh
fmreadn1.mnh to mse/internals/fmreadn1_aro.mnh
fmreadn2.mnh to mse/internals/fmreadn2_aro.mnh
fmreadt0.mnh to mse/internals/fmreadt0_aro.mnh
fmreadx0.mnh to mse/internals/fmreadx0_aro.mnh
fmreadx1.mnh to mse/internals/fmreadx1_aro.mnh
fmreadx2.mnh to mse/internals/fmreadx2_aro.mnh
fmreadx3.mnh to mse/internals/fmreadx3_aro.mnh
fmreadx4.mnh to mse/internals/fmreadx4_aro.mnh
fmreadx5.mnh to mse/internals/fmreadx5_aro.mnh
fmreadx6.mnh to mse/internals/fmreadx6_aro.mnh
fmwritc0.mnh to mse/internals/fmwritc0_aro.mnh
fmwritl0.mnh to mse/internals/fmwritl0_aro.mnh
fmwritl1.mnh to mse/internals/fmwritl1_aro.mnh
fmwritn0.mnh to mse/internals/fmwritn0_aro.mnh
fmwritn1.mnh to mse/internals/fmwritn1_aro.mnh
fmwritn2.mnh to mse/internals/fmwritn2_aro.mnh
fmwritt0.mnh to mse/internals/fmwritt0_aro.mnh
fmwritx0.mnh to mse/internals/fmwritx0_aro.mnh
fmwritx1.mnh to mse/internals/fmwritx1_aro.mnh
fmwritx2.mnh to mse/internals/fmwritx2_aro.mnh
fmwritx3.mnh to mse/internals/fmwritx3_aro.mnh
fmwritx4.mnh to mse/internals/fmwritx4_aro.mnh
fmwritx5.mnh to mse/internals/fmwritx5_aro.mnh
fmwritx6.mnh to mse/internals/fmwritx6_aro.mnh
ini_sun.mnh to mse/internals/ini_sun_aro.mnh
ini_sw_setup.mnh to mse/internals/ini_sw_setup_aro.mnh
pack_1d_1d_from2d.mnh to mse/internals/pack_1d_1d_from2d_aro.mnh
pack_1d_1d_from3d.mnh to mse/internals/pack_1d_1d_from3d_aro.mnh
pack_1d_1d_from4d.mnh to mse/internals/pack_1d_1d_from4d_aro.mnh
pack_1d_1d_fromi2d.mnh to mse/internals/pack_1d_1d_fromi2d_aro.mnh
pack_2d_1d_from2d.mnh to mse/internals/pack_2d_1d_from2d_aro.mnh
pack_2d_1d_from3d.mnh to mse/internals/pack_2d_1d_from3d_aro.mnh
pack_2d_1d_from4d.mnh to mse/internals/pack_2d_1d_from4d_aro.mnh
pack_2d_1d_fromi2d.mnh to mse/internals/pack_2d_1d_fromi2d_aro.mnh

pack_2d_1d_from12d.mnh to mse/internals/pack_2d_1d_from12d_aro.mnh
unpack_1d_1d_from2d.mnh to mse/internals/unpack_1d_1d_from2d_aro.mnh
unpack_1d_1d_from3d.mnh to mse/internals/unpack_1d_1d_from3d_aro.mnh
unpack_1d_1d_from4d.mnh to mse/internals/unpack_1d_1d_from4d_aro.mnh
unpack_1d_1d_fromi2d.mnh to mse/internals/unpack_1d_1d_fromi2d_aro.mnh
unpack_1d_2d_from2d.mnh to mse/internals/unpack_1d_2d_from2d_aro.mnh
unpack_1d_2d_from3d.mnh to mse/internals/unpack_1d_2d_from3d_aro.mnh
unpack_1d_2d_from4d.mnh to mse/internals/unpack_1d_2d_from4d_aro.mnh
unpack_1d_2d_fromi2d.mnh to mse/internals/unpack_1d_2d_fromi2d_aro.mnh
mse/module modd_bufc0.mnh to mse/module/modd_bufc0_aro.mnh
modd_bufn0.mnh to mse/module/modd_bufn0_aro.mnh
modd_bufn1.mnh to mse/module/modd_bufn1_aro.mnh
modd_bufx0.mnh to mse/module/modd_bufx0_aro.mnh
modd_bufx1.mnh to mse/module/modd_bufx1_aro.mnh
modd_fmdeclar.mnh to mse/module/modd_fmdeclar_aro.mnh
modd_fmmulti.mnh to mse/module/modd_fmmulti_aro.mnh
modd_io_nam.mnh to mse/module/modd_io_nam_aro.mnh
modi_fmread.mnh to mse/module/modi_fmread_aro.mnh
modi_fmwrite.mnh to mse/module/modi_fmwrite_aro.mnh
modi_ini_sun.mnh to mse/module/modi_ini_sun_aro.mnh
modi_ini_sw_setup.mnh to mse/module/modi_ini_sw_setup_aro.mnh
modi_pack_1d_1d.mnh to mse/module/modi_pack_1d_1d_aro.mnh
modi_pack_2d_1d.mnh to mse/module/modi_pack_2d_1d_aro.mnh
modi_unpack_1d_1d.mnh to mse/module/modi_unpack_1d_1d_aro.mnh
modi_unpack_1d_2d.mnh to mse/module/modi_unpack_1d_2d_aro.mnh

Deleted:

mse/internals	get_adjacent_meshes_cartesian.mnh
get_adjacent_meshes_conf_proj.mnh	get_adjacent_meshes_lonlat_reg.mnh
read_prep_seaflux_date_conf.mnh	read_prep_surf_atm_date_conf.mnh
read_prep_watflux_date_conf.mnh	
mse/module modd_ch_const.mnh	modi_atm2sx_env.mnh
modi_atm2sx_field.mnh	
modi_get_adjacent_meshes_cartesian.mnh	
modi_get_adjacent_meshes_conf_proj.mnh	
modi_get_adjacent_meshes_lonlat_reg.mnh	
modi_read_prep_seaflux_date_conf.mnh	
modi_read_prep_surf_atm_date_conf.mnh	
modi_read_prep_watflux_date_conf.mnh	

VANA Filip

Doc:

Setup of LSLHD .

Project: arpege

ClearCase branch: mrpe706_CY30_slhddefaults

Modified:

arp/namelist namdyn.h
arp/setup sudyn.F90suhdir.F90