

ARPEGE MEMORANDUM

From: GCO **Date:** August 20, 2010
To: GMAP, COMPAS, GMGEC, GMME, DIR/RE/CRC, Mats Hamrud
Subject: New cycle CY36T2

A new cycle CY36T2 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: CY36T2

Contributors:

AUGER Ludovic	Project:arpege	CCase branch:marp003_CY36T1_mrpa645_cplcomp
	Project:arpege	CCase branch:mrpa645_CY36T1_cplcomp
BOUTELOUP Yves	Project:arpege	CCase branch:mrpa648_CY36T1_b347
	Project:arpege	CCase branch:mrpa648_CY36T1_b351
BOUYSSSEL Francois	Project:arpege	CCase branch:mrpa649_CY36T1_sfx1
DESROZIERS Gerald	Project:arpege	CCase branch:mrpm611_CY36_congrad
	Project:arpege	CCase branch:mrpm611_CY36_evcost
	Project:arpege	CCase branch:mrpm611_CY36_femars_full
EL KHATIB Ryad	Project:arpege	CCase branch:mrpm602_CY36T1_fix1
	Project:arpege	CCase branch:mrpm602_CY36T1_fixt2
	Project:arpege	CCase branch:mrpm602_CY36T1_mem
	Project:arpege	CCase branch:mrpm602_CY36T1_oasist2
	Project:arpege	CCase branch:mrpm602_CY36T1_optim3b
GCO	Project:arpege	CCase branch:marp001_CY35T2_op1rst
	Project:arpege	CCase branch:marp003_CY36T1_36t1bf
	Project:arpege	CCase branch:marp003_CY36T1_eggx

	Project:arpege	CCase branch:marp003_CY36T1_fft992
	Project:arpege	CCase branch:marp003_CY36T1_fix_dr_hook
	Project:arpege	CCase branch:marp003_CY36T1_fix_sump0
	Project:arpege	CCase branch:marp003_CY36T1_obstat_reflew
	Project:arpege	CCase branch:marp003_CY36T1_swapbytes
	Project:arpege	CCase branch:marp003_CY36T1_t2
	Project:arpege	CCase branch:marp003_CY36T1_t2_t1bf
	Project:arpege	CCase branch:marp003_CY36T1_t2bis
GEIJO Carlos	Project:arpege	CCase branch:mrpe729_CY36T1_dbg_arome_36t2
GUIDARD Vincent	Project:arpege	CCase branch:mrpe710_CY36T1_NNEcleaning
GUILLAUME Frank	Project:arpege	CCase branch:mrpa644_CY36T1_36t2_iasi2
	Project:arpege	CCase branch:mrpa644_CY36T1_abort
	Project:arpege	CCase branch:mrpa644_CY36T1_chgt_bator_lecture
	Project:arpege	CCase branch:mrpa644_CY36T1_t1t2_hook
KANIT Emin	Project:arpege	CCase branch:mrpe737_CY36T1_ddh_bfx_4cy36t2
MARGUINAUD Philippe	Project:arpege	CCase branch:marp003_CY36T1_mrpm609_drhook
MOLL Patrick	Project:arpege	CCase branch:mrpa646_CY36T1_obsbf6
PAYAN Christophe	Project:arpege	CCase branch:mrpa642_CY36T1_bataeo
	Project:arpege	CCase branch:mrpa642_CY36T1_cleanscat
	Project:arpege	CCase branch:mrpa642_CY36T1_dcdascats
	Project:arpege	CCase branch:mrpa642_CY36T1_dcdascatsm
	Project:arpege	CCase branch:mrpa642_CY36T1_thinsatam
	Project:arpege	CCase branch:mrpa642_CY36T1_windplus
PIRIOU Jean-Marcel	Project:arpege	CCase branch:mrpm606_CY36T1_capeopt
RIVIERE Olivier	Project:arpege	CCase branch:mrpe601_CY36T1_espcl36t2
	Project:arpege	CCase branch:mrpe601_CY36T1_wrsurfextst1_t2
SAINT-RAMOND Nathalie	Project:arpege	CCase branch:mrpa641_CY36T1_GRAS_bl
SANTOS Inesse	Project:arpege	CCase branch:mrpm612_CY36T1_lesidg

SEITY Yann	Project:arpege	CCase branch:mrpm637_CY36T1_arome36t1pourt2
	Project:arpege	CCase branch:mrpm637_CY36T1_bfdbl_aro
TAILLEFER Francoise	Project:arpege	CCase branch:mrpa647_CY36T1_dbt2
	Project:arpege	CCase branch:mrpa647_CY36T1_ftdb
	Project:arpege	CCase branch:mrpa647_CY36T1_tot2
VERELLA Hubert	Project:arpege	CCase branch:mrpm627_CY36T1_wavediv
VIGNES Ole	Project:arpege	CCase branch:mrpe726_CY36T1_gatherv
	Project:arpege	CCase branch:mrpe726_CY36T1_ole
WATTRELOT Eric	Project:arpege	CCase branch:mrpa652_CY36T1_batorpourt2ew
	Project:arpege	CCase branch:mrpa652_CY36T1_cy36t1bf04_radarew
YESSAD Karim	Project:arpege	CCase branch:mrpm603_CY36T1_bft2
	Project:arpege	CCase branch:mrpm603_CY36T1_dev36t1pour36t2
	Project:arpege	CCase branch:mrpm603_CY36T1_dev36t1pour36t2egg
	Project:arpege	CCase branch:mrpm603_CY36T1_netintobs
	Project:arpege	CCase branch:mrpm603_CY36T1_netyom2

AUGER Ludovic

Doc:

- 1) Fix for reading an ARPEGE file (crash if NSTRIN is not equal to NBPROC...).
- 2) Fixes for "compression" of coupling files.

Project: arpege
ClearCase branch: marp003_CY36T1_mrpa645_cplcomp

Modified:

arp/module	yomfpd.F90	
arp/namelist	namfpd.h	
arp/parallel	rdpxfa.F90	
arp/setup	sugridspa.F90	
arp/utility	prepacka.F90	rdgpfa.F90

Doc:

This modset allows "compression" of coupling files.

Project: aladin,arpege,auxiliaire
ClearCase branch: mrpa645_CY36T1_cplcomp

Added:

xrd/fa	compact.F90	uncompact.F90
xrd/include	compact.intfb.h	uncompact.intfb.h

Modified:

ald/inidata	elsirf.F90	
arp/fullpos	sufpd.F90	wrhfp.F90
arp/module	yomfpd.F90	
arp/parallel	rdpxfa.F90	

arp/setup	sugridspa.F90	
arp/utility	prepacka.F90	
xrd/fa	compact.F90	uncompact.F90
xrd/include	compact.intfb.h	uncompact.intfb.h

BOUTELOUP Yves

Doc:

New version of cputqy family in order to have only one call to these routines in mf_phys(ad/tl).

Project: arpege
ClearCase branch: mrpa648_CY36T1_b347

Modified:

arp/adiab	cputqy.F90	cputqy_arome.F90	cputqys.F90
	cputqysad.F90	cputqystl.F90	
arp/phys_dmn	mf_phys.F90	mf_physad.F90	mf_phystl.F90

Doc:

Bug correction in CPTEND_NEW in connection with new version of cputqy family in order to have only one call to these routines in mf_phys(ad/tl) .

Project: arpege
ClearCase branch: mrpa648_CY36T1_b351

Modified:

arp/adiab	cptend_new.F90
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BOUYSSSEL Francois

Doc:

- 1) Bug correction in case of implicit coupling used in SURFEX .
- 2) Cleaning of SURFEX interface routine "aro_ground_param.f90".

Project: arpege,Meso-NH surface

ClearCase branch: mrpa649_CY36T1_sfx1

Modified:

arp/adiab	cpg.F90		
arp/phys_dmn	apl_arome.F90	aplpar.F90	hl_aplpar.F90
	mf_phys.F90		
mse/externals	aro_ground_diag.f90	aro_ground_param.f90	
mse/interface	aro_ground_diag.h	aro_ground_param.h	

DESROZIERS Gerald

Doc:

- 1) Print value of total cost function for each iteration of minimizations.
- 2) Fix a bug in the writing of the gradient of total cost function in sim4d.F90 .

Project: arpege

ClearCase branch: mrpm611_CY36_congrad

Modified:

arp/control	cva2.F90	sim4d.F90
arp/var	congrad.F90	

Doc:

Bugfix.

Project: arpege
ClearCase branch: mrpm611_CY36_evcost

Modified:
arp/var evcost.F90

Doc:

Write in GRIB format of the elements of an assimilations ensemble (even for ALADIN/AROME).

Project: arpege
ClearCase branch: mrpm611_CY36_femars_full

Modified:
arp/control cnt3.F90

EL KHATIB Ryad

Doc:

*sugrclia.F90 : correction of the bug leading to abort with "orography mismatch" in Fullpos (thanks to Philippe Marguinaud).
Others : remove cpp macro USE_SAMIO .*

Project: arpege,auxiliaire
ClearCase branch: mrpm602_CY36T1_fix1

Modified:
arp/control cnt0.F90
arp/programs master.F90
arp/setup sugrclia.F90
xrd/lfi lfiicc.F lfiiedo.F lfifer.F
lfilcc.F lfildo.F lfiouv.F

xrd/module samio_mod.F90

Doc:

Fix misplaced drhook statement.

Project: auxiliaire

ClearCase branch: mrpm602_CY36T1_fixt2

Modified:

xrd/grib_mf mxmn_mf.F

Doc:

*odb/lib/Magics_dummy.F90 : use a new cpp macro HAS_MAGICS if this file should not contain dummy magics routines.
Others : enhanced memory management to improve the code portability.*

Project: aeolus,arpege,Meso-NH surface,odb,satrad,

ClearCase branch: mrpm602_CY36T1_mem

Added:

mse/externals	deallmse.F90	suallmse.f90
mse/interface	deallmse.h	suallmse.h
surfex/surf_atm/phys	alloc_surfex.f90	dealloc_surfex.f90

Modified:

aeo/BUFR_file_handling	L1B_BufrUtil.F90	TestL1B_ee2bufr.F90	
arp/module	yomemis.F90	yomvarbc.F90	
arp/programs	merge_varbc.F90		
arp/setup	su0yomb.F90	suemis_conf.F90	
arp/utility	freemem.F90		
mse/externals	deallmse.F90	suallmse.f90	
mse/interface	deallmse.h	suallmse.h	
mse/programs	oi_main.f90	pgd.f90	prep.f90
	sxpost.f90		
odb/lib	Magics_dummy.F90		
odb/module	bufr_module.F90	bufr_module1.F90	

odb/tools	Bator.F90	Bufr2odb.F90	Fbnew2old.F90
	Odb2bufr.F90	Split_bufr_data.F90	Split_timeslot_bufr_data.F90
sat/pre_screen	bufr_screen_meris.F90		
sat/programs	bufr_grid_screen.F90	bufr_screen_amsre.F90	bufr_screen_amsre_1d.F90
	bufr_screen_ssmi_1d.F90	bufr_screen_ssmis.F90	bufr_screen_ssmis_1d.F90
	bufr_screen_tmi.F90	bufr_screen_tmi_1d.F90	
surfex/aux	modd_io_buffn.f90		
surfex/offlin/phys	ncpost.f90	offline.f90	
surfex/surf_atm/phys	alloc_surfex.f90	dealloc_surfex.f90	

Doc:

Pruning of branches calling clim_import or clim_export (dead code).

Project: arpege
ClearCase branch: mrpm602_CY36T1_oasist2

Modified:

arp/climate updcpl.F90
 arp/ocean wrcpl.F90

Doc:

arp/fullpos/ndvpos.F90 : Open-MP optimisation
arp/adiab/gpprs0d.F90, arp/module/yomclmicst.F90, arp/setup/su0yoma.F90
arp/setup/suclmicst.F90 : constants calculations moved to the setup
Others : IO-related communications savings

Project: aladin,arpege
ClearCase branch: mrpm602_CY36T1_optim3b

Added:

arp/dia wrgrida.F90
 arp/parallel disgrid_mod.F90 diwrgrid_mod.F90

Modified:

ald/dia ewmovph.F90

ald/fullpos	ebipos.F90	sufpmove.F90	
ald/utility	espareord.F90		
arp/adiab	gpprs0d.F90		
arp/c9xx	intice.F90		
arp/canari	caclsst.F90	caeincw.F90	caissedm.F90
	calice.F90	calincw.F90	canife.F90
	casmswi.F90		
arp/climate	cormass2.F90	cormass3a.F90	cormass3b.F90
	updcli.F90	updclie.F90	updclie_aer.F90
	updclie_co2.F90	updcpl.F90	updnud.F90
arp/dia	wmovph.F90	wrgrida.F90	wrgridua.F90
	wrmlppa.F90	wrspeca.F90	
arp/fullpos	endvpos.F90		
arp/module	yomclmicst.F90		
arp/ocean	wrcoe.F90	wrcom.F90	wrcpl.F90
arp/parallel	disgrid_mod.F90	diwrgrfp.F90	diwrgrid_mod.F90
	rdpxfa.F90		
arp/setup	su0yoma.F90	suclmicst.F90	sugrclia.F90
	sugrida.F90	sugridva.F90	suspeca.F90
arp/utility	grid_minmaxavg.F90	maxgpfv.F90	pkgrida.F90
	pkspeca.F90	pksurfa.F90	read_grid_grib.F90
	spareord.F90	spreord.F90	wrgp2fa.F90

GCO

Doc:

Introduce stuff for radiosonde unbiasing.

Project:

odb

ClearCase branch:

marp001_CY35T2_op1rst

Added:

odb/ddl.COUNTRYRSTRHBIAS	COUNTRYRSTRHBIAS.ddl bits.h countryrstrhbody.sql ecstdlib.h info.h namecfg.h odb_macros.h pcma_extern.h sensor.h vertco_type.h	COUNTRYRSTRHBIAS.dep cdrhook.h countryrstrhhdr.sql funcs.h magicwords.h obstype.h odbcrc.h ppcode.h swapbytes.h	alloc.h cma.h dca.h idx.h mdi.h odb.h odbmd5.h privpub.h varno.h
odb/ddl.RSTBIAS	RSTBIAS.ddl bits.h dca.h idx.h mdi.h odb.h odbmd5.h privpub.h sensor.h vertco_type.h	RSTBIAS.dep cdrhook.h ecstdlib.h info.h namecfg.h odb_macros.h pcma_extern.h rstbody.sql swapbytes.h	alloc.h cma.h funcs.h magicwords.h obstype.h odbcrc.h ppcode.h rsthdr.sql varno.h
odb/ddl.SONDETYPERSTRHBIAS	SONDETYPERSTRHBIAS.ddl bits.h dca.h idx.h mdi.h odb.h odbmd5.h privpub.h sondetyperstrhhdr.sql vertco_type.h	SONDETYPERSTRHBIAS.dep cdrhook.h ecstdlib.h info.h namecfg.h odb_macros.h pcma_extern.h sensor.h swapbytes.h	alloc.h cma.h funcs.h magicwords.h obstype.h odbcrc.h ppcode.h sondetyperstrhbody.sql varno.h
odb/ddl	countryrstrhbody.sql rsthdr.sql thinn_robhdr_2.sql thinn_robhdr_5.sql	countryrstrhhdr.sql sondetyperstrhbody.sql thinn_robhdr_3.sql thinn_robhdr_6.sql	rstbody.sql sondetyperstrhhdr.sql thinn_robhdr_4.sql thinn_robhdr_7.sql

thinn_robhdr_8.sql
thinn_roboddy_4.sql
thinn_roboddy_7.sql

thinn_roboddy_2.sql
thinn_roboddy_5.sql
thinn_roboddy_8.sql

thinn_roboddy_3.sql
thinn_roboddy_6.sql

Doc:

Catch-up of bugfix num 06 of cycle CY36T1 (from Patrick Moll / Eric Wattrelot / Yann Seity) :

- 1) *Miscellaneous bugfixes .*
- 2) *apl_arome.F90 : abort if TKE <= 0 .*
- 3) *compute_entr_detr.f90 : first dimension of an array was 5 instead of " : " .*

Project: arpege,black_list,Meso-NH physique altitude,odb,satrad

ClearCase branch: marp003_CY36T1_36t1bf

Modified:

arp/obs_preproc	flgtst.F90		
arp/op_obs	hop.F90	inv_refl1dstat.F90	reflsim_2dop.F90
arp/phys_dmn	apl_arome.F90		
bla	mf_blacklist.b		
mpa/turb/internals	compute_entr_detr.f90		
odb/pandor/module	bator_decodbufr_mod.F90		
sat/rttov	rttov_direct.F90		

Doc:

Put CHIEN, ECHIEN and group EGGX in XRD. EGGX/(E)CHIEN routines are moved from ifs/ald to ifsaux .

Project: aladin,arpege,auxiliaire

ClearCase branch: marp003_CY36T1_eggx

Added:

xrd/module	yemggcm.F90		
xrd/utilities	chien.F90	echien.F90	eggdir.F90
	eggmlt.F90	eggrvs.F90	eggx.F90
	eggx_n.F90		

Deleted:

ald/utility	eggdir.F90	eggmlt.F90	eggrvs.F90
	eggx.F90	eggx_n.F90	
arp/module	yemggcm.F90		
arp/utility	chien.F90	echien.F90	

Doc:

Recompilation of routine fft992.F without macro "-DMATHKEISAN" , on NEC SX9 only. We have a problem of reproductibility concerning singular vectors in truncation T95 on NEC SX9, which seems to be caused by the use of mathematical library "MathKeisan" on this platform.

Project: algebre linéaire
ClearCase branch: marp003_CY36T1_fft992

Modified:

xla/external/fourier fft992.F

Doc:

Remove calls to DR_HOOK after last instruction RETURN of a subroutine (NB: this call appeared twice: before and after RETURN).

Project: Meso-NH physique altitude,Meso-NH surface,surfex,algebre linéaire,auxiliaire
ClearCase branch: marp003_CY36T1_fix_dr_hook

Modified:

mpa/chem/internals	ares.F	ch_aer_intermin.f90	ch_aer_nucl.f90
	ch_aer_thermo.f90	ch_aqua.f90	ch_fcn.f90
	ch_gauss.f90	ch_get_cnames.f90	ch_get_rates.f90
	ch_ini_orilam.f90	ch_init_ccs.f90	ch_inter1.F
	ch_inter2.F	ch_jac.f90	ch_nonzeroterms.f90
	ch_prodloss.f90	ch_read_vector.f90	ch_scopy.F
	ch_set_photo_rates.f90	ch_set_rates.f90	ch_sparse.f90
	ch_terms.f90	fchap.F	fctreso.f90
	fery.F	fsum.F	futr.F
	gridck.F	gridw.F	gridz.F
	ichsamax.F	ichsamx.F	inter3.F
	jspec1.F	lunsav.F	mflgsv.F

	nn.f90	o2spec.F	ps2str.F
	qgaus.f90	r1mach.F	rdetfl.F
	rdno2xs.F	rdo3xs.F	rdso2xs.F
	read1.F	read2.F	rtlink.F
	sacopy.F	saxpy.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.Fcy36t1_t2	svsol.F
	svsrco.F	svstep.F	tridag.F
	unifac.F	xsetf.F	xsetun.F
	zenith.F	zero1.F	zero2.F
mpa/micro/externals	aro_subudget.f90	aroini_budget.f90	aroini_cstmnh.f90
mpa/micro/internals	gamma.f90	gamma_inc.f90	general_gamma.f90
mpa/turb/externals	aroini_mfshal.f90	aroini_turb.f90	
mse/internals	fm_writ.f90	fmattr.f90	fmclos.f90
	fmfree.f90	fminit.f90	fmlook.f90
	fmopen.f90		
surfex/isba/phys	dgam.F	dlga.F	gammas.f90
	mode_dstmblutl.f90		
surfex/offlin/assim	oi_acsolw.f90	oi_bc_soil_moisture.f90	oi_cacsts.f90
	oi_cavegi.f90	oi_fctveg.f90	oi_jacobians.f90
	oi_kalman_gain.f90	oi_latlon_conf_proj.f90	
surfex/pgd	arpege_stretch_a.f90	hor_interpol_rotlatlon.f90	latlontoxy1d.f90
	mode_gridtype_conf_proj.f90	mode_gridtype_gauss.f90	splines.F
surfex/prep	adapt_horibl_surf.f90	hor_interpol_gauss.f90	horibl_surf.f90
surfex/teb/phys	flxsurf3bx.F		
xla/external/fourier	fft992.F		
xla/external/linalg	minv.F		

xla/internal/minim	mlis0r.F
xrd/eclite	n_compat.F
xrd/programs	splitgrib.F

Doc:

Add variable L_GATHERV_WRGP in use of module YOMMP .

Project:	arpege
ClearCase branch:	marp003_CY36T1_fix_sump0

Modified:

arp/setup	sump0.F90
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Doc:

Fixes for obstat.

Project:	,odb
ClearCase branch:	marp003_CY36T1_obstat_reflew

Added:

odb/ddl.CCMA	obstat_radhure.sql	obstat_radrefl.sql
odb/ddl.ECMA	obstat_radhure.sql	obstat_radrefl.sql
odb/ddl	obstat_radhure.sql	obstat_radrefl.sql

Modified:

obt/src	iniitemloc.F90	odbread.F90	plotrms.F90
	plotrmsbias.F90		
odb/ddl.CCMA	CCMA.dep		
odb/ddl.ECMA	ECMA.dep		
odb/ddl	obstat_radhure.sql	obstat_radrefl.sql	

Doc:

- 1) *Portability fixes for NEC/SX9 (samio_mod.F90) .*
- 2) *ODB routine swapbytes.c (and its interface) is duplicated in ifsaux , and renamed as swapbytes_ifsaux.c (NB: subroutines swap*bytes are also renamed).*

Project: auxiliaire
ClearCase branch: marp003_CY36T1_swapbytes

Added:

xrd/include swapbytes_ifsaux.h
xrd/support swapbytes_ifsaux.c

Modified:

xrd/include swapbytes_ifsaux.h
xrd/module samio_mod.F90
xrd/support swapbytes_ifsaux.c

Doc:

- 1) Remove obsolete routines.
- 2) Remove obsolete SQL queries, and remove them from ECMA.dep file (NB: cleaning of old thinning).
- 3) Fix phasing bugs.

Project: arpege,odb,auxiliaire
ClearCase branch: marp003_CY36T1_t2

Deleted:

arp/parallel	dicomout.F90	disgrid_mod.F90	diwrgrid_mod.F90
	packmsg.F90	unpkmsg.F90	
odb/ddl.ECMA	thinn_robhdr_2.sql	thinn_robhdr_3.sql	thinn_robhdr_4.sql
	thinn_robhdr_5.sql	thinn_robhdr_6.sql	thinn_robhdr_7.sql
	thinn_robhdr_8.sql	thinn_roboddy_2.sql	thinn_roboddy_3.sql
	thinn_roboddy_4.sql	thinn_roboddy_5.sql	thinn_roboddy_6.sql
	thinn_roboddy_7.sql	thinn_roboddy_8.sql	
odb/ddl	thinn_robhdr_2.sql	thinn_robhdr_3.sql	thinn_robhdr_4.sql
	thinn_robhdr_5.sql	thinn_robhdr_6.sql	thinn_robhdr_7.sql
	thinn_robhdr_8.sql	thinn_roboddy_2.sql	thinn_roboddy_3.sql
	thinn_roboddy_4.sql	thinn_roboddy_5.sql	thinn_roboddy_6.sql
	thinn_roboddy_7.sql	thinn_roboddy_8.sql	

Modified:

arp/control cnt0.F90

arp/dia	cpdyddh.F90		
odb/dcl.ECMA	ECMA.dep		
xrd/utilities	echien.F90	eggx.F90	eggx_n.F90

Doc:

Catch-up from bugfix 07 of cycle CY36T1:

- 1) Add explicit kind on real constants (achmt.F90) .
- 2) Don't fail on existing surfex output file (aro_surf_diag.f90) .
- 3) Remove extra ")" in format statements (gstats_print.F90) .

Project: arpege,Meso-NH surface,auxiliaire

ClearCase branch: marp003_CY36T1_t2_t1bf

Modified:

arp/phys_dmn	achmt.F90
mse/externals	aro_surf_diag.f90
xrd/support	gstats_print.F90

Doc:

1) Fix phasing bugs.

2) Some fixes upon Ludovic Auger's modset (mrpa645_CY36T1_cplcomp):

- * Add "INTENT" to arguments of subroutines COMPACT and UNCOMPACT (NB: interfaces have been changed too).
- * Interface file "compact.intfb.h" (resp. "uncompact.intfb.h") is renamed to "compact.h" (resp "uncompact.h").
- * Some cleanings in interfaces "compact.h" and "uncompact.h".
- * Add include for interfaces of COMPACT and UNCOMPACT in prepacka.F90 and rdpxfa.F90 .

3) Remove 3 routines integrated by mistake.

4) Rename deallmse.F90 to deallmse.f90 .

5) Add DR_HOOK in compact.F90 and uncompact.F90 .

6) Remove use of JPIM from interface "compact.h" (useless).

7) Remove unused variables, and fix norm violations.

8) Remove obsolete routines.

Project: arpege,odb,

ClearCase branch: marp003_CY36T1_t2bis

Renamed:

arp/parallel	disgrid_mod.F90 to arp/module/disgrid_mod.F90
	diwrgrid_mod.F90 to arp/module/diwrgrid_mod.F90
mse/externals	deallmse.F90 to mse/externals/deallmse.f90
xrd/include	compact.intfb.h to xrd/include/compact.h
	uncompact.intfb.h to xrd/include/uncompact.h

Deleted:

ald/setup	esuheg.F90	esunhheg.F90	esusmap.F90
odb/include	netcdf.h		
odb/scripts	mpif.h	mpif.h.mpich-1.2.5.2	
surfex/include	netcdf.inc		

Modified:

arp/climate	updcpl.F90		
arp/dia	cpdyddh.F90		
arp/parallel	rdpxfa.F90		
arp/phys_dmn	mf_phys.F90		
arp/utility	prepacka.F90		
mse/externals	deallmse.f90		
xrd/fa	compact.F90	uncompact.F90	
xrd/include	compact.h	uncompact.h	

GEIJO Carlos

Doc:

Fix error in IPTR array element referencing.

Project: arpege
ClearCase branch: mrpe729_CY36T1_dbg_arome_36t2

Modified:

arp/phys_dmn	mf_phys.F90
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GUIDARD Vincent

Doc:

Neural network for AIRS bias correction was introduced by Thomas Auligné in cy28t0. This method is not used anymore since couples of cycles. Some of its core routines have already been removed. This contribution intends to remove all remaining routines or parts of routines dealing with AIRS neural network.

Project: arpege
ClearCase branch: mrpe710_CY36T1_NNEcleaning

Deleted:

arp/module	module_radtc_mix.F90	yomgmv_ptr.F90	yomnne.F90
	yomparar.F90		
arp/namelist	namnn.h		
arp/op_obs	conv_weights.F90	rad1cnne.F90	rad1cnnead.F90
	rad1cnnetl.F90	writenn.F90	
arp/var	sunne.F90		

Modified:

arp/op_obs	hop.F90	hretr.F90
arp/utility	deallo.F90	
arp/var	rtsetup.F90	

GUILLAUME Frank

Doc:

- 1) File 'ficdate' was opened but never closed. This could affect (runtime error) files opening by pbopen (gribex).
- 2) Changes in the sampling of datas SSMI, TOVSAMSUB, TOVSHIRS .

Project: odb
ClearCase branch: mrpa644_CY36T1_36t2_iasi2

Modified:

odb/pandor/module bator_decodbufr_mod.F90 bator_init_mod.F90 bator_lectures_mod.F90

Doc:

Error exits from BATOR use now subroutine ABOR1 instead of STOP . This allow to handle correctly return codes in operational scripts.

Project: odb
ClearCase branch: mrpa644_CY36T1_abort

Modified:

odb/pandor/module bator_decodbufr_mod.F90 bator_decodgrib_mod.F90 bator_init_mod.F90
 bator_lectures_mod.F90 bator_module.F90 bator_saisies_mod.F90
 bator_util_mod.F90
odb/tools Bator.F90

Doc:

- 1) Re-organize the BUFR files reading part in BATOR .
- 2) Update for datas sampling (as it is for current parallel suite).
- 3) Change in the organization of file "param.cfg": the full list of non-expanded descriptors is now mandatory.
- 4) Add key InbTypeObs (maximum number of observations type blocks to be read in "param.cfg") in namelist.
- 5) Prepare decoding of SYNOPs in bufr format.

Project: odb
ClearCase branch: mrpa644_CY36T1_chgt_bator_lecture

Modified:

odb/pandor/module	bator_decodbufr_mod.F90	bator_init_mod.F90	bator_lectures_mod.F90
	bator_module.F90		
odb/pandor/namelist	bator_namelist.h		
odb/tools	Bator.F90		

Doc:

Fix some calls to dr_hook .

Project: odb
ClearCase branch: mrpa644_CY36T1_t1t2_hook

Modified:
odb/pandor/module bator_lectures_mod.F90 bator_util_mod.F90

KANIT Emin

Doc:

Bugfix.

Project: arpege
ClearCase branch: mrpe737_CY36T1_ddh_bfx_4cy36t2

Modified:
arp/dia cpdyddh.F90

MARGUINAUD Philippe

Doc:

Add "drhook" instructions in surfex, and in xrd/fa/* and xrd/lfi* .

Project: arpege,biper,Meso-NH physique altitude,Meso-NH surface,surfex,algebre linéaire,auxiliaire
ClearCase branch: marp003_CY36T1_mrpm609_drhook

Modified:

arp/fullpos	endpos_prepogl.F90		
arp/phys_ec	wvcouple.F90		
arp/setup	sump0.F90		
bip/external	etibihie.F90	fpbipere.F90	horiz_field.F90
mpa/chem/externals	aro_mnhc.f90	aro_mnhdust.f90	aro_rainaero.f90
	aroini_mnhc.f90	aroini_nsv.f90	aroini_nsv0.f90
	ch_aer_init.f90	ch_aer_mod_init.f90	
mpa/chem/internals	addpnt.F	aer_effic.f90	aer_velgrav.f90
	aer_wet_dep_kmt_warm.f90	ares.F	ch_aer_coag.f90
	ch_aer_driver.f90	ch_aer_eqm_cormass.f90	ch_aer_eqm_init0d.f90
	ch_aer_eqsam.f90	ch_aer_growth.f90	ch_aer_init_soa.f90
	ch_aer_intermin.f90	ch_aer_mineral.f90	ch_aer_mpmo.f90
	ch_aer_nucl.f90	ch_aer_organic.f90	ch_aer_pun.f90
	ch_aer_reallfi_n.f90	ch_aer_sedim_n.f90	ch_aer_solv.f90
	ch_aer_surf.f90	ch_aer_thermo.f90	ch_aer_trans.f90
	ch_aer_velgrav_n.f90	ch_allocate_tacacs.f90	ch_aqua.f90
	ch_ares.f90	ch_convect_scatenging.f90	ch_cranck.f90
	ch_deallocate_tacacs.f90	ch_diagnostics.f90	ch_exqssa.f90
	ch_fcn.f90	ch_gauss.f90	ch_get_cnames.f90
	ch_get_rates.f90	ch_ini_orilam.f90	ch_init_ccs.f90
	ch_init_diagnostics.f90	ch_init_jvalues.f90	ch_init_output.f90
	ch_init_scheme.f90	ch_inter1.F	ch_inter2.F
	ch_interp_jvalues.f90	ch_interp_jvalues_n.f90	ch_isoropia.f90
	ch_jac.f90	ch_jvalues_clouds.f90	ch_jvalues_clouds_n.f90

ch_jvalues_n.f90
ch_nnares.f90
ch_output.f90
ch_read_meteo.f90
ch_set_photo_rates.f90
ch_sis.f90
ch_svode.f90
ch_update_jvalues_n.f90
dust_filter.f90
eqsam_v03d_sub.f90
fery.F
gridck.F
ichsamax.F
inter3.F
isorev.F
mflgsv.F
ps2str.F
rdetfl.F
rdo3xs.F
read2.F
salt_filter.f90
saxpy.F
sedim_dust.f90
setair.F
setno2.F
setso2.F
sgbfa.F
sgesl.F
sto2xs.F
svindy.F
svnlsd.F
svset.F
svstep.F
troe_equil.f90

ch_linssa.f90
ch_nonzeroterms.f90
ch_prodloss.f90
ch_read_vector.f90
ch_set_rates.f90
ch_solver_n.f90
ch_terms.f90
ch_update_meteo.f90
dust_velgrav.f90
fchap.F
fsum.F
gridw.F
ichsamx.F
isocom.F
jspec1.F
nn.f90
qgaus.f90
rdno2xs.F
rdso2xs.F
rtlink.F
salt_velgrav.f90
schu.F
sedim_salt.f90
setalb.F
seto2.F
settmp.F
sgbsl.F
sphers.F
sundis.F
svjac.F
svnorm.F
svsol.F
tridag.F
tuvmain.F

ch_meteo_trans.f90
ch_orilam.f90
ch_qssa.f90
ch_scopy.F
ch_show_chem.f90
ch_sparse.f90
ch_update_jvalues.f90
ch_write_chem.f90
dustlfi_n.f90
fctreso.f90
futr.F
gridz.F
init_dust.f90
isofwd.F
lunsav.F
o2spec.F
r1mach.F
rdo2xs.F
read1.F
sacopy.F
saltlfi_n.f90
sdot.F
setaer.F
setcld.F
setozo.F
sewset.F
sgefa.F
sscal.F
svhin.F
svjust.F
svode.F
svsrco.F
troe.f90
unifac.F

	xerrwv.F	xsetf.F	xsetun.F
	zenith.F	zero1.F	zero2.F
mpa/chem/module	modd_ch_aero_n.f90	modd_ch_dep_n.f90	modd_ch_jvalues_n.f90
	modd_ch_mnhc_n.f90	modd_ch_solver_n.f90	modd_sub_ch_field_value_n.f90
	modd_sub_ch_monitor_n.f90	mode_aero_psd.f90	mode_ainmain.f90
	mode_bmain.f90	mode_dust_psd.f90	mode_dustopt.f90
	mode_firstguess.f90	mode_modeln_handler.f90	mode_oainmain.f90
	mode_salt_psd.f90	mode_soaeql.f90	mode_soaeqlutl.f90
	mode_soainit.f90	mode_typea.f90	mode_typeb.f90
	mode_unifac.f90	mode_zsrpun.f90	
mpa/conv/externals	aro_conv_mnh.f90	convection_shal.f90	
mpa/conv/internals	convect_chem_transport.f90	convect_closure.f90	convect_closure_adjust.f90
	convect_closure_adjust_shal.f90	convect_closure_shal.f90	convect_closure_thrvccl.f90
	convect_condens.f90	convect_downdraft.f90	convect_mixing_funct.f90
	convect_precip_adjust.f90	convect_satmixratio.f90	convect_trigger_funct.f90
	convect_trigger_shal.f90	convect_tstep_pref.f90	convect_updraft.f90
	convect_updraft_shal.f90	deep_convection.f90	ini_convpar.f90
	ini_convpar_e1.f90	ini_convpar_shal.f90	shallow_convection.f90
mpa/micro/externals	aro_adjust.f90	aro_buprocn.f90	aro_convbu.f90
	aro_rain_ice.f90	aro_startbu.f90	aro_subbudget.f90
	aro_suintbudget.f90	aroini_budget.f90	aroini_cstmnh.f90
	aroini_micro.f90	invert_vlev.f90	
mpa/micro/internals	budget.f90	cart_compress.f90	condensation.f90
	gamma.f90	gamma_inc.f90	general_gamma.f90
	ice_adjust.f90	ini_budget.f90	ini_cst.f90
	ini_rain_ice.f90	rain_ice.f90	read_xker_gweth.f90
	read_xker_raccs.f90	read_xker_rdryg.f90	read_xker_sdryg.f90
	read_xker_sweth.f90	rrolss.f90	rscolrg.f90
	rzcolx.f90		
mpa/micro/module	modd_conf_n.f90		
mpa/programs	ch_make_lookup.f90		
mpa/turb/externals	aro_shallow_mf.f90	aro_turb_mnh.f90	aroini_mfshal.f90
	aroini_turb.f90		
mpa/turb/internals	bl89.f90	bl_depth_diag_1d.f90	bl_depth_diag_3d.f90

	compute_bl89_ml.f90	compute_entr_detr.f90	compute_frac_ice1d.f90
	compute_frac_ice2d.f90	compute_frac_ice3d.f90	compute_function_thermo_mf.f90
	compute_mf_cloud.f90	compute_updraft.f90	emoist.f90
	etheta.f90	gx_m_m.f90	gx_m_u.f90
	gx_u_m.f90	gx_v_uv.f90	gx_w_uw.f90
	gy_m_m.f90	gy_m_v.f90	gy_u_uv.f90
	gy_v_m.f90	gy_w_vw.f90	gz_m_m.f90
	gz_m_w.f90	gz_u_uw.f90	gz_v_vw.f90
	gz_w_m.f90	ini_cmfshall.f90	ini_cturb.f90
	mf_turb.f90	prandtl.f90	rnc01.f90
	sbl_depth.f90	shallow_mf.f90	shumanaro.f90
	th_r_from_thl_rt_1d.f90	th_r_from_thl_rt_2d.f90	thl_rt_from_th_r_mf.f90
	tke_eps_sources.f90	tm06.f90	tm06_h.f90
	tridiag.f90	tridiag_massflux.f90	tridiag_thermo.f90
	tridiag_tke.f90	tridiag_wind.f90	turb.f90
	turb_ver.f90	turb_ver_dyn_flux.f90	turb_ver_sv_corr.f90
	turb_ver_sv_flux.f90	turb_ver_thermo_corr.f90	turb_ver_thermo_flux.f90
	updraft_sope.f90		
mpa/turb/module	mode_prandtl.f90	mode_sbl.f90	mode_thermo_mono.f90
mse/externals	aro_ground_diag.f90	aro_ground_param.f90	aro_put_zs.f90
	aro_surf_diag.f90	aroini_surf.f90	atm2sx_env.f90
	atm2sx_field.f90	close_buffer_surfex.f90	close_prep_surfex_aro.f90
	get_bufc0.f90	get_bufn0.f90	get_bufn1.f90
	get_bufx0.f90	get_bufx1.f90	ini_prep_surfex_aro.f90
	prep_surf_aro.f90	put_bufc0.f90	put_bufn0.f90
	put_bufn1.f90	put_bufx0.f90	put_bufx1.f90
mse/internals	aroclose_aux_io_surf.f90	aroclose_namelist.f90	aroclose_write_cover_tex.f90
	aroend_io_surf_n.f90	aroget_desfm_n.f90	aroget_luout.f90
	aroget_size_full_n.f90	aroinit_io_surf_n.f90	aropen_aux_io_surf.f90
	aropen_namelist.f90	aropen_write_cover_tex.f90	detect_field_aro.f90
	error_read.f90	error_read_surf_asc.f90	error_write.f90
	error_write_surf_asc.f90	error_write_surf_txt.f90	fm_read.f90
	fm_writ.f90	fmattr.f90	fmclos.f90
	fmfree.f90	fminit.f90	fmlook.f90

	fmopen.f90	fmreadc0.f90	fmreadl0.f90
	fmreadl1.f90	fmreadn0.f90	fmreadn1.f90
	fmreadn2.f90	fmreadt0.f90	fmreadx0.f90
	fmreadx1.f90	fmreadx2.f90	fmreadx3.f90
	fmreadx4.f90	fmreadx5.f90	fmreadx6.f90
	fmwritc0.f90	fmwritl0.f90	fmwritl1.f90
	fmwritn0.f90	fmwritn1.f90	fmwritn2.f90
	fmwritt0.f90	fmwritx0.f90	fmwritx1.f90
	fmwritx2.f90	fmwritx3.f90	fmwritx4.f90
	fmwritx5.f90	fmwritx6.f90	ini_sun.f90
	ini_sw_setup.f90	old_ndim.f90	pack_1d_1d_from2d.f90
	pack_1d_1d_from3d.f90	pack_1d_1d_from4d.f90	pack_1d_1d_fromi2d.f90
	pack_2d_1d_from2d.f90	pack_2d_1d_from3d.f90	pack_2d_1d_from4d.f90
	pack_2d_1d_fromi2d.f90	pack_2d_1d_froml2d.f90	read_in_lfi_x2.f90
	read_in_lfi_x3.f90	read_surfc0_aro.f90	read_surfl0_aro.f90
	read_surfl1_aro.f90	read_surfn0_aro.f90	read_surfn1_aro.f90
	read_surft0_aro.f90	read_surfx0_aro.f90	read_surfx1_aro.f90
	read_surfx2_aro.f90	unpack_1d_1d_from2d.f90	unpack_1d_1d_from3d.f90
	unpack_1d_1d_from4d.f90	unpack_1d_1d_fromi2d.f90	unpack_1d_2d_from2d.f90
	unpack_1d_2d_from3d.f90	unpack_1d_2d_from4d.f90	unpack_1d_2d_fromi2d.f90
	write_in_lfi_x1.f90	write_in_lfi_x2.f90	write_in_lfi_x3.f90
	write_surfc0_aro.f90	write_surfl0_aro.f90	write_surfl1_aro.f90
	write_surfn0_aro.f90	write_surfn1_aro.f90	write_surft0_aro.f90
	write_surfx0_aro.f90	write_surfx1_aro.f90	write_surfx2_aro.f90
mse/programs	oi_main.f90	pgd.f90	prep.f90
	sxpost.f90		
surfex/aux	abor1_sfx.f90	close_aux_io_surf.f90	close_aux_io_surf_asc.f90
	close_aux_io_surf_fa.f90	close_file.f90	close_file_asc.f90
	close_file_fa.f90	close_namelist.f90	close_namelist_asc.f90
	close_namelist_fa.f90	dealloc_ideal_flux.f90	dealloc_sean.f90
	end_io_surf_ascn.f90	end_io_surf_fan.f90	end_io_surfn.f90
	get_1d_mask.f90	get_aosn.f90	get_coordn.f90
	get_default_namn.f90	get_dim_fulln.f90	get_fluxn.f90
	get_fracn.f90	get_lonlatn.f90	get_luout.f90

	get_size_fulln.f90	get_sson.f90	get_surf_grid_dimn.f90
	get_surf_maskn.f90	get_surf_sizen.f90	get_surf_undef.f90
	get_surf_varn.f90	get_type_dimn.f90	get_z0n.f90
	get_zsn.f90	init_io_surf_ascn.f90	init_io_surf_fan.f90
	init_io_surfn.f90	io_buff_cleann.f90	io_buffn.f90
	modd_io_buffn.f90	open_aux_io_surf.f90	open_aux_io_surf_asc.f90
	open_aux_io_surf_fa.f90	open_file.f90	open_file_asc.f90
	open_file_fa.f90	open_namelist.f90	open_namelist_asc.f90
	open_namelist_fa.f90	read_ascllv.f90	read_binllv.f90
	read_binllvfast.f90	read_buffer.f90	read_direct.f90
	read_dummyn.f90	read_eco2_irrig.f90	read_grib.f90
	read_grid.f90	read_lclim_lai.f90	read_lecoclimap.f90
	read_netcdf.f90	read_pre_surfa_dat_conf.f90	read_sson.f90
	read_surf.f90	read_surf_asc.f90	read_surf_atm_confn.f90
	read_surf_atm_date.f90	read_surf_fa.f90	readhead.f90
	readwrite_emis_fieldn.f90	second_sfx.f90	surf_version.f90
	write_header_fa.f90	write_surf.f90	write_surf_asc.f90
	write_surf_fa.f90		
surfex/canopy	canopy_evol.f90	canopy_evol_temp.f90	canopy_evol_tke.f90
	canopy_evol_wind.f90	canopy_grid.f90	canopy_grid_update.f90
	mode_sbls.f90		
surfex/flake/init	default_prep_flake.f90	init_flaken.f90	pgd_flake.f90
	prep_ctrl_flake.f90	prep_flake.f90	prep_flake_buffer.f90
	prep_flake_extern.f90	prep_flake_grib.f90	prep_flake_sbl.f90
	prep_flake_unif.f90	prep_hor_flake_field.f90	prep_ver_flake.f90
	read_pgd_flaken.f90	read_prep_flake_conf.f90	writesurf_pgd_flaken.f90
surfex/flake/module	modd_diag_flaken.f90	modd_diag_misc_flaken.f90	modd_flake_gridn.f90
	modd_flake_sbln.f90	modd_flaken.f90	modn_flaken.f90
surfex/flake/phys	SfcFlx.f90	coupling_flake_orographyn.f90	coupling_flake_sbln.f90
	coupling_flaken.f90	dealloc_flaken.f90	default_diag_flake.f90
	default_flake.f90	diag_flake_initn.f90	diag_flaken.f90
	diag_inline_flaken.f90	diag_misc_flaken.f90	flake.f90
	flake_interface.f90	goto_wrapper_flake.f90	read_default_flaken.f90
	read_flake_confn.f90	read_flake_date.f90	read_flake_sbln.f90

surfex/ideal	read_flaken.f90 write_diag_misc_flaken.f90 writesurf_flake_confn.f90 coupling_ideal_flux.f90 diag_ideal_initn.f90 init_ideal_flux.f90 modn_idealn.f90 tsz0.f90	read_pre_flake_dat_conf.f90 write_diag_seb_flaken.f90 writesurf_flake_sb1n.f90 coupling_tsz0n.f90 diag_idealn.f90 modd_diag_idealn.f90 read_default_idealn.f90	write_diag_flaken.f90 write_flaken.f90 writesurf_flaken.f90 default_diag_ideal.f90 goto_wrapper_ideal.f90 modd_idealn.f90 read_ideal_confn.f90
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surfex/sea/module	<pre> modd_ch_seafluxn.f90 modd_diag_seafluxn.f90 modd_seaflux_gridn.f90 modd_sltn.f90 </pre>	<pre> modd_data_seafluxn.f90 modd_ocean_gridn.f90 modd_seaflux_sbl.f90 modn_seafluxn.f90 </pre>	<pre> modd_diag_oceann.f90 modd_oceann.f90 modd_seafluxn.f90 </pre>
surfex/sea/phys	<pre> coare30_flux.f90 coupling_seaflux_sbl.f90 dealloc_seafluxn.f90 default_sltn.f90 diag_seaflux_initn.f90 diag_surf_budget_sea.f90 goto_wrapper_ocean.f90 mixtln.f90 mode_sltn_surf.f90 put_zs_sean.f90 read_oceann.f90 read_seaflux_date.f90 read_sltn_conf.f90 slt_init_names.f90 treat_bathyfield.f90 write_diag_seafluxn.f90 write_diag_seb_seafluxn.f90 writesurf_oceann.f90 writesurf_seafluxn.f90 </pre>	<pre> coare30_seaflux.f90 coupling_seafluxn.f90 default_diag_seaflux.f90 diag_inline_oceann.f90 diag_seafluxn.f90 flag_update.f90 goto_wrapper_seaflux.f90 mod1dn.f90 mode_sltnmb1.f90 read_default_seafluxn.f90 read_pre_seaf_dat_conf.f90 read_seaflux_sbln.f90 slt_dep.f90 slt_velgrav1d.f90 unitfp_flux.f90 write_diag_sean.f90 write_seafluxn.f90 writesurf_seaflux_conf.f90 </pre>	<pre> coupling_seaflux_orography.f90 coupling_sltn.f90 default_seaflux.f90 diag_inline_seafluxn.f90 diag_sean.f90 get_var_sean.f90 ice_sea_flux.f90 mode_coare30_psi.f90 ocean_mercatorvergrid.f90 read_default_sltn.f90 read_seaflux_conf.f90 read_seafluxn.f90 slt_init_modes.f90 sst_update.f90 unitfp_seaflux.f90 write_diag_seb_oceann.f90 write_sean.f90 writesurf_seaflux_sbln.f90 </pre>

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	writesurf_teb_canopyn.f90	writesurf_teb_confn.f90	writesurf_tebn.f90
surfex/trip/init	init_diag_tripn.f90	init_param_tripn.f90	init_restart_tripn.f90
	init_trip_par.f90	init_tripn.f90	prep_trip.f90
surfex/trip/module	modd_diag_tripn.f90	modd_trip_gridn.f90	modd_tripn.f90
	modn_tripn.f90		
surfex/trip/phys	default_trip.f90	diag_tripn.f90	flood_update.f90
	get_conf_tripn.f90	get_grid_conf_tripn.f90	get_trip_sizen.f90
	goto_trip.f90	goto_wrapper_trip.f90	mode_convert.f90
	mode_grid_trip.f90	mode_modeln_trip_handler.f90	mode_rw_trip.f90
	mode_trip_function.f90	mode_trip_init.f90	mode_trip_netcdf.f90
	read_nam_grid_trip.f90	read_trip_confn.f90	restart_tripn.f90
	trip.f90	trip_gound_water.f90	trip_interface.f90
	trip_surface_water.f90	trip_surface_water_flood.f90	trip_surface_water_velvar.f90
surfex/water/init	default_prep_watflux.f90	init_inland_watern.f90	init_watfluxn.f90
	pgd_inland_water.f90	pgd_watflux.f90	prep_ctrl_watflux.f90
	prep_hor_watflux_field.f90	prep_inland_water.f90	prep_ver_watflux.f90
	prep_watflux.f90	prep_watflux_buffer.f90	prep_watflux_extern.f90
	prep_watflux_grib.f90	prep_watflux_sbl.f90	prep_watflux_unif.f90
	read_pgd_watfluxn.f90	read_prep_watflux_conf.f90	writesurf_pgd_watfluxn.f90
	zoom_pgd_inland_water.f90		

surfex/water/module	modd_ch_watfluxn.f90 modd_watflux_sb1n.f90	modd_diag_watfluxn.f90 modd_watfluxn.f90	modd_watflux_gridn.f90 modn_watfluxn.f90
surfex/water/phys	ch_dep_water.f90 coupling_watfluxn.f90 default_diag_watflux.f90 diag_inline_watfluxn.f90 diag_watfluxn.f90 mr98.f90 read_pre_watf_dat_conf.f90 read_watflux_sb1n.f90 write_cover_tex_water.f90 write_diag_watfluxn.f90 writesurf_watflux_confn.f90	coupling_watflux_orographyn.f90 dealloc_inland_watern.f90 default_watflux.f90 diag_surf_budget_water.f90 get_var_watern.f90 put_zs_inland_watern.f90 read_watflux_confn.f90 read_watfluxn.f90 write_diag_inland_watern.f90 write_inland_watern.f90 writesurf_watflux_sb1n.f90	coupling_watflux_sb1n.f90 dealloc_watfluxn.f90 diag_inland_watern.f90 diag_watflux_initn.f90 goto_wrapper_watflux.f90 read_default_watfluxn.f90 read_watflux_date.f90 water_flux.f90 write_diag_seb_watfluxn.f90 write_watfluxn.f90 writesurf_watfluxn.f90
xla/external/fourier	fft992.F	set99.F	
xla/external/lanczos	gcr.F	landr.F	loadev.F
xla/external/linalg	minv.F	sgtsl.F	
xla/external/minim	m1qn3.F	m1qn3_1dv.F	m1qn3r.F
xla/internal/fourier	qpassf.F	rpassf.F	
xla/internal/lanczos	angles.F lanso.F prangl.F pythag.F startv.F tqlb.F	datx.F machar.F prrule.F random.F stpone.F	dsort2.F ortbnd.F purge.F ritvec.F tql2.F
xla/internal/linalg	balanc.F elmhes.F hqr2.F sgemmx.F	balbak.F eltran.F mxva.F	cdiv.F hqr.F rg.F
xla/internal/minim	ctcab_1dv.F dd_1dv.F dds_1dv.F ecube_1dv.F euclid_1dv.F m1qn3ar.F	ctonb_1dv.F ddr.F ddsr.F ecuber.F m1qn3a.F mlis0.F	dd.F dds.F ecube.F euclid.F m1qn3a_1dv.F mlis0_1dv.F

	mlis0r.F	mupdts_1dv.F	mupdts_orig.F
	mupdtsr.F		
xla/module	control_vectors_base_mix.F90	control_vectors_data_mix.F90	control_vectors_oper_mod.F90
	control_vectors_para_mod.F90	distributed_vectors_mix.F90	random_numbers_mix.F90
	spectral_arp_mod.F90	spectral_fields_mod.F90	spectral_fields_oper_mod.F90
	spectral_fields_para_mod.F90		
xrd/bufr_io	oldbufr_close.F	oldbufr_open.F	oldbufr_read.F
	oldbufr_rewind.F	oldbufr_write.F	
xrd/cma	oldcma_close.F	oldcma_get_address.F	oldcma_open.F
	oldcma_read.F	oldcma_rewind.F	oldcma_set_address.F
	oldcma_write.F		
xrd/ddh	caso.F90	dates.F90	etalae.F90
	fillzero.F90	intcar.F90	lfa_R8I4.F90
	modulo.F90	pridocf.F90	
xrd/eclite	getopt.F	n_compat.F	uv2sd.F
xrd/fa	decf10.F	ellips.F	facade.F
	facadi.F	facage.F	facdec.F
	facies.F	facile.F	facine.F
	facoch.F	facodx.F	facond.F
	facsim.F	factec.F	factui.F
	factum.F	fadeci.F	fadeco.F
	fadecx.F	fadies.F	fagiot.F
	fagote.F	faienc.F	faifla.F
	fainig.F	fainoc.F	faipag.F
	faipar.F	fairme.F	fairno.F
	fais2f.F	faisan.F	faisc1.F
	faisc2.F	faitou.F	faixla.F
	falais.F	falimu.F	falsif.F
	famiso.F	fandai.F	fandar.F
	fanerg.F	fanfar.F	fanime.F
	fanion.F	fanmsg.F	fanouv.F
	fanuca.F	fanumu.F	fapula.F
	farcis.F	faregi.F	faregu.F
	farflu.F	farine.F	farpar.F

	fatale.F	fatran.F	fautif.F
	faveur.F	favori.F	faxion.F
xrd/grib_io	grib_close.F	grib_info.F	grib_open.F
	grib_read.F	grib_rewind.F	grib_set.F
	grib_write.F		
xrd/grib_mf	codega.F	confi.F	confp_mf.F
	decfp_mf.F	decoga.F	gbyte_mf.F
	gbytes_mf.F	gsbite_mf.F	gsbyte_mf.F
	mxmn_mf.F	offset_mf.F	packgb.F
	prtbm_mf.F	sbyte_mf.F	sbytes_mf.F
	unpagb.F		
xrd/lfi	lfiafm.F	lficap.F	lficaq.F
	lficas.F	lficax.F	lficfg.F
	lfichi.F	lfidah.F	lfideb.F
	lfidst.F	lfiecc.F	lfiecd.F
	lfiecr.F	lfiecx.F	lfiedo.F
	lfiefr.F	lfiems.F	lfieng.F
	lfierf.F	lfifer.F	lfifmd.F
	lfifmp.F	lfifra.F	lfiini.F
	lfiintecr.F	lfiintlec.F	lfiist.F
	lfilaf.F	lfilap.F	lfilas.F
	lfilcc.F	lfildo.F	lfilec.F
	lfiled.F	lfimod.F	lfimst.F
	lfinaf.F	lfineg.F	lfinfo.F
	lfinim.F	lfinmg.F	lfinsg.F
	lfinum.F	lfioef.F	lfioeg.F
	lfiofd.F	lfiofm.F	lfiomf.F
	lfiomg.F	lfiosf.F	lfiosg.F
	lfiouv.F	lfipha.F	lfipim.F
	lfipos.F	lfipxa.F	lfipxf.F
	lfirac.F	lfiran.F	lfirec.F
	lfiree.F	lfiren.F	lfsfm.F
	lfista.F	lfisup.F	lfitam.F
	lfiver.F	lfivid.F	

xrd/misc	optbadcv.F optmccpa.F	opteff.F optremez.F	opterror.F optwate.F
xrd/module	compensated_summation_mod.F90	distio_mix.F90	
xrd/programs	datefa.F gribtrace.F tstlfi.F	decret.F splitgrib.F	gribdiff.F testfa.F

MOLL Patrick

Doc:

Put NEC/SX compiler directives in some RTTOV routines, in order to decrease level of optimization of those routines (NB: optimizations too strong lead to crash).

Project: satrad
ClearCase branch: mrpa646_CY36T1_obsbf6

Modified:

sat/rttov rtov_integrate.F90 rtov_integrate_ad.F90 rtov_integrate_tl.F90

PAYAN Christophe

Doc:

Some piece for decoding L1B aeolus bufr files in BATOR .

Project: odb
ClearCase branch: mrpa642_CY36T1_bataeo

Modified:

odb/pandor/module	bator_decodbufr_mod.F90	bator_init_mod.F90	bator_lectures_mod.F90
	bator_module.F90		

Doc:

- 1) Quality control is now handled by *mf_blacklist.b*.
- 2) Remove *NICE_SEAMASK/RSCATLI/RSCACLI*.
- 3) Replace *MDB_INSTTYPE_AT_HDR* by *MDB_GEN_CENTRE_AT_SAT*.

Project:

arpege,black_list,odb

ClearCase branch:

mrpa642_CY36T1_cleanscat

Modified:

arp/module	yomsc.F90	yomthlim.F90	
arp/namelist	namsc.h		
arp/obs_preproc	defrun.F90	fgwnd.F90	scaqc.F90
	scat_ob.F90	sufglim.F90	
arp/op_obs	hop.F90		
bla	mf_blacklist.b		
odb/ddl	scat_robhdr_1.sql		

Doc:

- 1) Replace "Likelihood Computed For Solution" by "Backscatter Distance" in ODB column *invresid* (modify a priori choice of the 2 solutions when 4 are present). Add body "soil moisture" (*varno=180*) to allow inversion in screening.
- 2) Sort *Ascat* and *Qscat* winds by *sortscatidx*, call in *bator_decodbufr_mod*, and possibility to chose until the *n* first winds (fixed to 4 for *Qscat*, 2 for *Ascat* [can be overwritten by *namelist : NScaWSolMax_DcdAscat*]).

Project:

arpege,odb

ClearCase branch:

mrpa642_CY36T1_dcdascap

Added:

arp/obs_preproc	sortscatidx.F90
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Modified:

arp/obs_preproc	scaqc.F90	sortscatidx.F90
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odb/pandor/module	bator_decodbufr_mod.F90	bator_ecritures_mod.F90	bator_init_mod.F90
odb/tools	Bator.F90		

Doc:

Full handling of the variable/body "soil moisture" (varno=180) in BATOR program.

Project: odb
ClearCase branch: mrpa642_CY36T1_dcdascatsm

Modified:

odb/pandor/module	bator_decodbufr_mod.F90	bator_ecritures_mod.F90
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Doc:

- 1) *Replace MDBSBDPT by MDB_GEN_CENTRE_AT_SAT in thinning routines.*
- 2) *End of cleaning of old thinning.*
- 3) *Remove NRESUPD in hjo.F90 .*

Project: arpege,odb
ClearCase branch: mrpa642_CY36T1_thinsatam

Modified:

arp/obs_preproc	new_thinner.F90	new_thinner_no_sq.F90	post_thinner.F90
	pre_thinner.F90		
arp/op_obs	hjo.F90		
odb/cma2odb	ctxinitdb.F90		
odb/ddl	new_thinn_robhdr_4.sql	new_thinn_robhdr_5.sql	post_thinn_robhdr_4.sql
	post_thinn_robhdr_5.sql	pre_thinn_robhdr_4.sql	pre_thinn_robhdr_5.sql

Doc:

Information for new ODB columns gen_centre, gen_subcentre, datastream, segment_size_at_x, segment_size_at_y, ht_assgn_mth for AMV/Scat .

Project: odb
ClearCase branch: mrpa642_CY36T1_windplus

Modified:

odb/pandor/module

bator_decodbufr_mod.F90
bator_saisies_mod.F90

bator_ecritures_mod.F90

bator_init_mod.F90

PIRIOU Jean-Marcel

Doc:

Optimize CAPE computation time:

- *compute CAPE initial trajectories for points such $p > GCAPEPSD * ps$, rather than such $ps - p < GCAPEPSD$. This saves computation time over orography ;*
- *reduce from 2 to 1 the number of steps to go from a layer to the above one, while computing the pseudo-adiabatic moist ascent. These two modifications reduce the total model cost from about 1% .*

Project:

arpege

ClearCase branch:

mrpm606_CY36T1_capeopt

Modified:

arp/fullpos

fpcica.F90

arp/setup

sucape.F90

RIVIERE Olivier

Doc:

Bugfix on the vertical distribution of the spectral coupling.

Project:

aladin

ClearCase branch:

mrpe601_CY36T1_espcl36t2

Modified:

ald/adiab espchor.F90
ald/control espcm.F90

Doc:

Modifications allowing to have right values of surface temperature field in historical files when using surfex with aladin.

Project: arpege
ClearCase branch: mrpe601_CY36T1_wrsurfextst1_t2

Modified:
arp/phys_dmn apl_arome.F90 mf_phys.F90
arp/var rdfpinc.F90

SAINT-RAMOND Nathalie

Doc:

- 1) Assimilation of GRAS from 8 to 25km, and from 10 to 25km under tropical areas.
- 2) Assimilation of Hu2m on earth during the day.

Project: black_list
ClearCase branch: mrpa641_CY36T1_GRAS_bl

Modified:
bla mf_blacklist.b

SANTOS Inesse

Doc:

LESIDG for tilted-rotated Mercator geometry and large domains.

Project: aladin,arpege
ClearCase branch: mrpm612_CY36T1_lesidg

Added:

ald/setup	esuheg.F90	esunhheg.F90	esusmap.F90
	sueheg.F90	suenhheg.F90	suesmap.F90

Modified:

ald/adiab	espcsi.F90	espnhsi.F90	espnhsi_geogw.F90
ald/control	espcm.F90		
ald/coupling	eseimpls.F90		
ald/setup	sueheg.F90	suelap.F90	sueldynb.F90
	suemp.F90	suenhheg.F90	suesmap.F90
arp/module	yemdyn.F90		
arp/setup	sudyn.F90	sunhsi.F90	susi.F90

SEITY Yann

Doc:

- 1) Modifications for activating hail scheme in AROME.
- 2) Renaming of yomamar in yomparar.
- 3) Correction of pb of date inconsistency when cycling Surfex files .
- 4) Calculation of 10m winds outside surfex in case lowest model level < 10m .

Project: arpege,Meso-NH physique altitude,Meso-NH surface,surfex

ClearCase branch: mrpm637_CY36T1_arome36t1pourt2

Added:

arp/module yomparar.F90
surfex/isba interpol_sbl.f90

Modified:

arp/adiab	cpg.F90	cpg_dia.F90	cpg_end.F90
	cpg_gp.F90	cputqy_arome.F90	lavent.F90
arp/dia	cpdyddh.F90	sunddh.F90	
arp/module	yomparar.F90		
arp/namelist	namparar.h		
arp/phys_dmn	apl_arome.F90	aplpas.F90	hl_aplpas.F90
	mf_phys.F90	suparas.F90	suphmpa.F90
	suphmse.F90		
mpa/micro/externals	aro_adjust.f90	aro_rain_ice.f90	aroini_micro.f90
mpa/micro/interface	aro_adjust.h	aro_rain_ice.h	aroini_micro.h
mpa/micro/internals	rain_ice.f90		
mpa/micro/module	modi_rain_ice.f90		
mse/externals	aro_ground_diag.f90		
mse/interface	aro_ground_diag.h		
surfex/flake/phys	coupling_flake_sbln.f90		
surfex/isba	interpol_sbl.f90		
surfex/isba/phys	cls_wind.f90	coupling_isba_canopyn.f90	param_cls.f90
surfex/sea/phys	coupling_seaflux_sbl.f90		
surfex/surf_atm/phys	average_diag.f90		
surfex/teb/phys	coupling_tebn.f90		
surfex/water/phys	coupling_watflux_sbln.f90		

Doc:

Catch-up from current parallel suite:

- 1) Bugfix for 10m mean winds calculations.
- 2) Bugfixes to be able to produce ISP in AROME fullpos offline.
- 3) Add CLS height calculations thanks to AROCLDIA .
- 4) Bugfixes for reproductibility when changing NPROMA/NPROC .

Project: arpege,Meso-NH physique altitude,surfex
ClearCase branch: mrpm637_CY36T1_bfdbl_aro

Modified:

arp/dia	cpxfu.F90		
arp/fullpos	phymfpos.F90		
arp/phys_dmn	apl_arome.F90	aplpair.F90	arocldia.F90
	mf_phys.F90		
arp/setup	sumts.F90	suxfu.F90	
mpa/turb/internals	compute_updraft.f90		
surfex/sea/phys	coupling_seaflux_sbl.f90		
surfex/teb/phys	urban_drag.f90		

TAILLEFER Francoise

Doc:

Fix a manual phasing bug.

Project: arpege
ClearCase branch: mrpa647_CY36T1_dbt2

Modified:

arp/control cnt0.F90

Doc:

Variable SMASK from module YOMCLI has been put in namelist for cycle CY36T2, in aim to be able to change in namelist the threshold of definition of land/sea mask when building climatological files. Now, the fullpos needs this variable, which is now intialized too late, and so land/sea mask is equal to 1 everywhere in fullpos! This modset solves this problem.

Project: arpege
ClearCase branch: mrpa647_CY36T1_ftdb

Modified:

arp/c9xx	inclio.F90	val923.F90
arp/namelist	namcli.h	

Doc:

1) Modifications to allow CANARI snow analysis running.

2) Development of the use of the orography and the land/sea mask from a PGD surfex file in the 923 configuration (part 1).
By this way, we use full resolution of the GTOP030 database (for ALADIN/AROME only).

3) Development of the use of a second SST file in the 931 configuration, to improve the quality of this clim SST over lakes.

Project:

aladin,arpege

ClearCase branch:

mrpa647_CY36T1_tot2

Added:

arp/c9xx	csstbld.F90	
arp/namelist	nacieteo.h	nammn.h

Modified:

ald/c9xx	eincli1.F90		
arp/c9xx	csstbld.F90	inclio.F90	inclitc.F90
	relnew.F90	val923.F90	
arp/canari	cabiyo.F90		
arp/control	cnt0.F90		
arp/module	yomcla.F90	yomcltc.F90	
arp/namelist	nacieteo.h	namcla.h	namcli.h
	namcltc.h		
arp/op_obs	hop.F90		
arp/pp_obs	ppobsn.F90		

VERELLA Hubert

Doc:

This branch revises the current wavelet Jb code to allow a correct computation of the wavelet covariance file (named wavelet.cv) (see routines subjwavgen.F90 and iostream_mix.F90). The wavelet cutoff list considered is made slightly different for ECMWF or Météo France (in subjwavgen.F90), to be consistent with the actual spectral truncation of the increment in the minimization(s).

This branch also allows the randomized computation and writing of $\sigma_{\text{div}}^{\text{TM}}$ s for the divergence field (for diagnostic purposes), whatever the formulation (spectral or wavelet) considered (in writesd.F90, vec2gp.F90, yomaneb.F90, susc2b.F90 and scan2mtl.F90).

Project: arpege
ClearCase branch: mrpm627_CY36T1_wavediv

Modified:

arp/control	scan2mtl.F90		
arp/module	iostream_mix.F90	yomaneb.F90	
arp/setup	susc2b.F90		
arp/var	subjwavelet0.F90	subjwavgen.F90	vec2gp.F90
	writesd.F90		

VIGNES Ole

Doc:

Phasing with Sami Saarinen's modifications: introduce send/recv loops, OpenMP, and GATHERV .

Project: arpege
ClearCase branch: mrpe726_CY36T1_gatherv

Modified:

arp/module	diwrgrid_mod.F90	yommp.F90
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arp/namelist	nampar1.h	
arp/parallel	arowrgp_surf.F90	wrgp_surf.F90
arp/setup	sumpioh.F90	
arp/utility	wrgp2fa.F90	

Doc:

1) Performance improvements, in particular of AROME and SURFEX. Introduced new module SAMIO for asynchronous I/O with dedicated servers, see <https://hirlam.org/trac/wiki/SAMIO>.

2) Insert DrHook calls in xrd/fa and xrd/lfi.

3) Some other DrHook enhancements, e.g. new environment variable: DR_HOOK_INIT_SIGNALS to prevent interference with FPE signals in case DR_HOOK=0.

4) Various bugfixes and/or platform adaptations.

Project: arpege,odb,surfex,auxiliaire

ClearCase branch: mrpe726_CY36T1_ole

Added:

xrd/module	samio_mod.F90		
xrd/support	csamio.c	opfla_perfmon.c	wrap_ftn.c

Modified:

arp/common	yomdb_defs.h		
arp/control	cnt0.F90		
arp/dia	fpgpnorm.F90	inifaout.F90	
arp/module	yommp.F90		
arp/namelist	nampar1.h		
arp/parallel	arowrgp_surf.F90	diwrgrid.F90	diwrgrid_surf_ext.F90
	diwrspe0.F90	gathflnm.F90	wrgp_surf.F90
arp/phys_dmn	apl_rome.F90		
arp/phys_radi	srtm_cldprop.F90		
arp/programs	master.F90		
arp/setup	sump0.F90	sumpini.F90	
arp/utility	iopack.F90	rdgpfa.F90	wrgp2fa.F90

odb/aux	swapbytes.c		
odb/pandor/extrtovs	extr_init_1c.F90	extr_lecdata_1c.F90	
odb/pandor/fcq	man_fcq_bdm_fus.F90	man_orders.F90	
surfex/offlin/io	write_surf_lfi.f90		
xrd/fa	decf10.F	ellips.F	facade.F
	facadi.F	facage.F	facdec.F
	facies.F	facile.F	facine.F
	facoch.F	facodx.F	facom1.h
	facond.F	facsim.F	factec.F
	factui.F	factum.F	fadeci.F
	fadeco.F	fadecx.F	fadies.F
	fagiot.F	fagote.F	faicor.F
	faienc.F	faifla.F	fainig.F
	fainoc.F	faipag.F	faipar.F
	fairme.F	fairno.F	fais2f.F
	faisan.F	faisc1.F	faisc2.F
	faitou.F	faixla.F	falais.F
	falimu.F	falsif.F	famiso.F
	fundai.F	fandar.F	fanerg.F
	fanfar.F	fanime.F	fanion.F
	fanmsg.F	fanouv.F	fanuca.F
	fanumu.F	fapula.F	farcis.F
	faregi.F	faregu.F	farflu.F
	farine.F	farpar.F	fatale.F
	fatran.F	fautif.F	faveur.F
	favori.F	faxion.F	
xrd/lfi	lfiafm.F	lficap.F	lficaq.F
	lficas.F	lficax.F	lficfg.F
	lfichi.F	lfidah.F	lfideb.F
	lfidst.F	lfiecc.F	lfiecd.F
	lfiecr.F	lfiecx.F	lfiedo.F
	lfiefr.F	lfiems.F	lfieng.F
	lfierf.F	lfifer.F	lfifmd.F
	lfifmp.F	lfifra.F	lfiini.F

	lfiintecr.F	lfiintlec.F	lfiist.F
	lfilaf.F	lfilap.F	lfilas.F
	lfilcc.F	lfildo.F	lfilec.F
	lfiled.F	lformod.F	lfimst.F
	lfinaf.F	lfineg.F	lfinfo.F
	lfinim.F	lfinmg.F	lfinsg.F
	lfinum.F	lfoef.F	lfoeg.F
	lfiofd.F	lfofm.F	lfiomf.F
	lfiomg.F	lfiوسف.F	lfiosg.F
	lfiouv.F	lfipha.F	lfipim.F
	lfipos.F	lfipxa.F	lfipxf.F
	lfirac.F	lfiran.F	lfirec.F
	lfiree.F	lfiren.F	lfisfm.F
	lfista.F	lfisup.F	lfitam.F
	lfiver.F	lfivid.F	
xrd/module	mpl_data_module.F90	mpl_gatherv_mod.F90	mpl_init_mod.F90
	mpl_rcv_mod.F90	mpl_send_mod.F90	mpl_wait_mod.F90
	samio_mod.F90		
xrd/support	cargs.c	csamio.c	drhook.c
	opfla_perfmon.c	wrap_ftn.c	
xrd/utilities	linuxtrbk.c		

WATTRELOT Eric

Doc:

Important bugfixes for AROME (in order to avoid crashes in the screening).

Project: odb

ClearCase branch: mrpa652_CY36T1_batorpourt2ew

Modified:

odb/pandor/module

bator_decodbufr_mod.F90

bator_saisies_mod.F90

Doc:

- 1) *Code optimisation and harmonization of use of microphysics parameters used for reflectivity post-processed field, and for this computed via reflectivity observation operator.*
- 2) *Fix the processing of reflectivity in front of snow or fine hail in post-processed computation (gprs0d.F90) .*
- 3) *Modifications in BATOR to handle sensibility in a better way.*

Project:

arpege,odb

ClearCase branch:

mrpa652_CY36T1_cy36t1bf04_radarew

Modified:

arp/adiab

gprs0d.F90

arp/module

yomclmicst.F90

arp/op_obs

refsim_2dop.F90

arp/setup

su0yoma.F90

suclmicst.F90

arp/utility

fcgeneralized_gamma.F90

odb/pandor/module

bator_decodbufr_mod.F90

YESSAD Karim

Doc:

Clean recoding, and bugfixes.

- 1) *Add a test on LFPART2 for call to GPGRGEO .*
- 2) *Temporary fixes in order to run cleanly at least when NUNDEFLD<1 .*

Bugfix.

Project: aladin
ClearCase branch: mrpm603_CY36T1_bft2

Modified:

ald/control	espcm.F90	
ald/programs	blendsur.F90	check_limits.F90
arp/adiab	cputqy.F90	cputqy_arome.F90
arp/fullpos	endpos_prepqfl.F90	
arp/pp_obs	pos.F90	

Doc:

ALLOC2 : allocate arrays even when unused to avoid false alarms in bound checking runs.

BUG : bug corrections.

CDCONF : CDCONF(4:4)='S' replaced by CDCONF(4:4)='A'

NET2 : miscellaneous cleanings.

- add missing comments (in particular in tfl/external, tal/external, xla/external, tfl/module, tal/module).
- cosmetic presentation cleanings.
- remove useless declarations.
- rename some dummy or local variables.
- transmission coefficients: write code in a more concise way.

NETSL2 : set of cleanings in the semi-Lagrangian scheme (cont'd).

- use buffers PGMVF and PGMVF_SI for interpolated GMV quantities.
- rename some AD interpolation routines (use appendix AD instead of TLAD). For LAIDLITLAD and LAIDDITLAD, use decks LAIDLIAD and LAIDDIAD (remove the obsolete code) to store the code.
- SL2TL: remove non-SETTLS extrapolation in the trajectory calculation (case (LSETTLST,LPC_NESCT)=(F,F) to be removed in (E)LARMES.. and LAVENT.. routines).
- fix false comments.

REL : rename (RLONC,RLATC) of YEMGSL into (RELONC,RELATC) (because these names are already used in YOMFPD).

RHST : RHS of T equation done once (CPG_GP) and not three times (+TL, AD).

RMPCOLD_DI : Pruning of LPC_OLD in direct code.

RM903 : Pruning of configuration 903.

RM940 : Pruning of configuration 940.

RWSDL : NH-deep-layer equations for LGWADV=F NH model.

Project: aladin,arpege
ClearCase branch: mrpm603_CY36T1_dev36t1pour36t2

Added:

arp/adiab	laitliad.F90	laitriad.F90
arp/module	module_radtc_mix.F90	yomgmv_ptr.F90

Modified:

ald/adiab	elarche.F90	elarche5.F90	elarchead.F90
	elarchetl.F90	elarmes.F90	elarmes5.F90
	elarmesad.F90	elarmestl.F90	espawr.F90
	espay.F90		
ald/coupling	elscot1.F90		
ald/setup	suegeo1.F90		
ald/transform	etransinv_nhconv.F90		
ald/var	suescal.F90		
arp/adiab	cpeuldyn.F90	cpeuldynad.F90	cpeuldyntl.F90
	cpg.F90	cpg_dia.F90	cpg_dyn.F90
	cpg_dyn_ad.F90	cpg_dyn_tl.F90	cpg_end.F90
	cpg_gp.F90	cpg_gp_ad.F90	cpg_gp_tl.F90
	cpg_zero_ad.F90	cpgad.F90	cpglag.F90
	cpgtl.F90	cppfttcdir.F90	cppfttcinv.F90
	estrcpl.F90	gnh_conv_nhvar.F90	gnh_tndlagadiab_gw.F90
	gnh_tndlagadiab_svd.F90	gnhsim.F90	gnhy.F90
	lacdyn.F90	lacdynad.F90	lacdyntl.F90
	laidliad.F90	laidlitlad.F90	laidliad.F90
	laidlitlad.F90	laitliad.F90	laitlitlad.F90

	laitre_gmv_ad.F90	latriad.F90	laitritlad.F90
	lapineb.F90	lapinebad.F90	lapinebtl.F90
	larcin2ad.F90	larcinaad.F90	larcinb.F90
	larcinbad.F90	larcinbtl.F90	larmes.F90
	larmes5.F90	larmesad.F90	larmestl.F90
	lassiead.F90	lassietl.F90	lasure.F90
	latte_bbc.F90	lattex.F90	lattexad.F90
	lattextl.F90	lattey.F90	lavabo.F90
	lavent.F90	laventad.F90	laventtl.F90
	spawr.F90	spay.F90	
arp/climate	cormass.F90		
arp/control	cnt0.F90	cnt4.F90	cprep5.F90
	gp_model.F90	stepo.F90	
arp/dfi	dfi3.F90		
arp/dia	cpdyddh.F90	wrradcoef.F90	wrtc fou.F90
arp/module	gmv_subs_mod.F90	module_radtc_mix.F90	ptrgppc.F90
	ptrslb1.F90	ptrslb2.F90	type_gmvs.F90
	yemgsl.F90	yomct0.F90	yomfoutc.F90
	yomgmv_ptrs.F90	yomspcco.F90	
arp/phys_dmn	mf_phys.F90	mf_physad.F90	mf_phystl.F90
arp/phys_ec	ec_phys_drv.F90	sltend2.F90	
arp/setup	su0yomb.F90	sualfoutc.F90	suct0.F90
	sudim1.F90	sudim2.F90	sudyn.F90
	sudyna.F90	suptrgppc.F90	susc2b.F90
	suslb.F90	suslb2.F90	suspectc fou.F90
arp/transform	speree.F90	transinv_nhconv.F90	
arp/utility	dealtc.F90	rdradcoef.F90	

Doc:

Put CHIEN, ECHIEN and group EGGX in XRD. EGGX/(E)CHIEN routines are moved from ifs/ald to ifsaux .

Project: aladin,arpege,utilitaires,auxiliaire

ClearCase branch: mrpm603_CY36T1_dev36t1pour36t2egg

Added:

xrd/include	chien.h	echien.h	eggdir.h
	eggmlt.h	eggrvs.h	eggx.h
	eggx_n.h	sucst_ifsaux.h	
xrd/module	yomcst_ifsaux.F90		
xrd/support	sucst_ifsaux.F90		

Modified:

ald/programs	blend.F90	blendsur.F90	check_limits.F90
ald/utility	cchien.F90		
arp/c9xx	cseaiice.F90	incli10.F90	incli2.F90
	incli3.F90	incli4.F90	incli5.F90
	incli6.F90	incli7.F90	incli8.F90
	incli9.F90	inclub.F90	inclir.F90
	relnew.F90		
arp/canari	caclsst.F90	calincw.F90	caohis.F90
arp/climate	updcli.F90	updcpl.F90	updnud.F90
arp/fullpos	openfpfa.F90	sufpd.F90	sufpg2.F90
arp/setup	su0yoma.F90	suarg.F90	suspecb.F90
arp/utility	openfa.F90		
uti/combi	combi_pert.F90		
uti/ctpini/programs	inversion_master.F90		
xrd/include	chien.h	echien.h	eggdir.h
	eggmlt.h	eggrvs.h	eggx.h
	eggx_n.h	sucst_ifsaux.h	
xrd/module	yomcst_ifsaux.F90		
xrd/support	sucst_ifsaux.F90		

Doc:

NETINTOBS : rewriting observation interpolator (first step).

Project:

arpege

ClearCase branch:

mrpm603_CY36T1_netintobs

Added:

arp/module	module_obb1_mix.F90		
Modified:			
arp/canari	canari.F90		
arp/control	scan2m.F90	scan2mad.F90	scan2mtl.F90
arp/module	module_obb1_mix.F90		
arp/op_obs	cobs.F90	cobsad.F90	cobslag.F90
	cobslagad.F90	cobstl.F90	obshor.F90
	obshorad.F90	slint.F90	slintad.F90
arp/setup	susc2b.F90		

Doc:

Remove some unused module variables.

Project: aladin,arpege,odb
ClearCase branch: mrpm603_CY36T1_netyom2

Modified:

ald/setup	suct0.F90	suedim.F90	suedyn.F90
	suegeo2.F90	suello.F90	suemp.F90
	suesc2.F90		
ald/utility	deello.F90		
ald/var	suejknorm.F90	suelljk.F90	
arp/ald_inc/namelist	nemct0.h	nemdyn.h	
arp/canari	casino.F90		
arp/climate	updcpl.F90		
arp/dia	sunddh.F90		
arp/fullpos	sufpc.F90	sufpdyn.F90	sufpgrib.F90
arp/module	parcli.F90	parclimf.F90	parptrs.F90
	parrtm1d.F90	qakeki.F90	yemct0.F90
	yemdim.F90	yemdyn.F90	yemgt3b.F90
	yemjk.F90	yemlap.F90	yomchcod.F90
	yomchev.F90	yomclop15.F90	yomcma.F90
	yomcom.F90	yomcpl.F90	yomct0.F90
	yomct1.F90	yomct3.F90	yomdim.F90

	yomdimo.F90	yomdphy.F90	yomdyn.F90
	yomdyncore.F90	yomectab.F90	yomerr.F90
	yomersca.F90	yomfpc.F90	yomgem.F90
	yomglobs.F90	yomgrb.F90	yomios.F90
	yomjg.F90	yomlap.F90	yomlddh.F90
	yomlim.F90	yomlvly.F90	yomlw15.F90
	yommkodb.F90	yommp.F90	yommpg.F90
	yomobs.F90	yomoerr.F90	yomop.F90
	yomozo.F90	yomphy.F90	yomphy0.F90
	yomphy1.F90	yomphy2.F90	yomphy3.F90
	yomppc.F90	yomrdu15.F90	yomssmi.F90
	yomstre.F90	yomsw15.F90	yomtag.F90
	yomthlim.F90	yomtphy.F90	yomtrsl.F90
arp/namelist	namcom.h	namdim.h	namfpc.h
	namjg.h	nammkodb.h	namobs.h
	nampar1.h	namphy.h	namphy0.h
	namphy2.h	namphy3.h	namppc.h
	namssmi.h		
arp/obs_error	su_errors.F90	suobserr.F90	
arp/obs_preproc	defrun.F90	iniersca.F90	inissmip.F90
	mkglobstab.F90	obadat.F90	obatabs.F90
	rd_obs_boxes.F90	sudimo.F90	sufglim.F90
	sulevlay.F90	sulim.F90	
arp/parallel	sutag.F90		
arp/phys_dmn	suclop15.F90	suecrad15.F90	sulw15.F90
	suphy0.F90	suphy1.F90	suphy2.F90
	suphy3.F90	susw15.F90	
arp/setup	su0phy.F90	su1yom.F90	su3yom.F90
	su_events.F90	sualdyn.F90	suallo.F90
	sucodes.F90	sucom.F90	sucpl0.F90
	sudim1.F90	sudim2.F90	sugrib.F90
	suios.F90	sump0.F90	sumpini.F90
	suoph.F90	supp.F90	susatret.F90
	suspecg2.F90	suspgpg.F90	

arp/utility
arp/var
odb/cma2odb

dealges.F90
subj.F90
setcomcm.F90

deallo.F90

sualspa1.F90