ARPEGE MEMORANDUM

From: GCO Date: August 06, 2008
To: GMAP, COMPAS, GMGEC, GMME, DIR/RE/CRC, Mats Hamrud
Subject: New cycle CY34

A new cycle CY34 has been created. This is a common cycle with the ECMWF. The different contributions for this cycle are described in the following pages.

ClearCase label: CY34
Modified libraries: ifs,ifsaux,aladin,odb,obstat,satrad,bl,scat,mpa,mse,aladin transforms,utilities

Contributors:

ALIAS Antoinette	CCase branch:mrga589_CY33T0_gco
	CCase branch:mrga589_CY33T1_test
BOGATCHEV Andrey & MLADEK Richard	CCase branch:mrpe702_CY33T1_abrm
CHAPNIK Bernard	CCase branch:mrpa658_CY33T1_lam4d
	CCase branch:mrpa658_CY33T1_newjk
DESROZIERS Gerald	CCase branch:mrpm611_CY33T1_n1cg1
DZIEDZIC Adam	CCase branch:marp003_CY33T1_adam
DZIEDZIC Adam & LELATKO Iwona	CCase branch:marp003_CY33T1_adam
EL KHATIB Ryad	CCase branch:marp001_CY33T1_bip
	CCase branch:marp003_CY33T1_eclite
	CCase branch:mrpm602_CY33T1_aeolus
	CCase branch:mrpm602_CY33T1_bip
	CCase branch:mrpm602_CY33T1_norms
GCO	CCase branch:marp001_CY33T0_op1B
	CCase branch:marp001_CY33T1_sct
	CCase branch:marp001_CY33_r2bf
	CCase branch:marp003_CY33T1_mrgvarbc
	CCase branch:marp003_CY33T1_oulan
	CCase branch:marp003_CY33T1_r2bf
	CCase branch:marp003_CY33T1_radar_station
GCO & EL KHATIB Ryad	CCase branch:marp001_CY33T1_pandor
GCO & Sami SAARINEN	CCase branch:marp001_CY33_yomdb
JIDANE Mohamed	CCase branch:mrpe731_CY33T1_jidane
Mats HAMRUD	CCase branch:marp001_CY33T1_sm_ekf_main
POLI Paul	CCase branch:mrpa679_CY33T0_gbgps
	CCase branch:mrpa679_CY33T1_obstat_fixr2
PUECH Dominique	CCase branch:marp001_CY33T0_op1aro
	CCase branch:mrpa660_CY33T1_phas
SEITY Yann	CCase branch:mrpm637_CY33T1_arome
	CCase branch:mrpm637_CY33T1_aromebf
	CCase branch:mrpm637_CY33T1_surfex2bf8
SEVAULT Eric	CCase branch:marp003_CY33T1_fcq
WATTRELOT Eric	CCase branch:mrpa652_CY33T1_bufrradar_ew
YESSAD Karim	CCase branch:mrpm603_CY33T1_bugfix…

ALIAS Antoinette

Doc:

1/ Modifications introduced to set values of RI0 et and Green House Gases.
2/ Add Nudding for ALADIN .
*3/ Introduction de PRTI=1/R*T et LZOHSREL (achmt).*
4/ New version of the Top-PBL height (acpblh / acnebr).
5/ Introduction of XWSLB in the namelist.
6/ Add prints of TRENTRV et TENTRVL .
7/ Adding some printing of setups : LZ0SREL .
8/ Introduction of the Lenderinck/Holtslag Mixing Length (acnebr).
9/ Modification of specfitadm for the 927 configuration.
10/ Fix some bugs in Nudding.

Project: aladin,ifs
ClearCase branch: mrga589_CY33T0_gco

Added:

ald/inidata	epak3wsp.F90	
arp/ald_inc/namelist	nemspcpl.h	
arp/module	yemspcpl.F90	yomscen.F90

Modified:

ald/adiab	espchor.F90		
ald/inidata	elswa3.F90	epak3wsp.F90	
ald/setup	suect0.F90	suesc2.F90	
arp/ald_inc/namelist	nemct0.h	nemspcpl.h	
arp/canari	caclsi.F90		
arp/climate	updnuddm.F90	updsst.F90	
arp/module	yemct0.F90	yemspcpl.F90	yomdim.F90
	yomnud.F90	yomscen.F90	
arp/namelist	namphy0.h		
arp/parallel	disspec.F90		
arp/phys_dmn	achmt.F90	acnebr.F90	acpblh.F90
	aplpar.F90	hl_aplpar.F90	radaer15.F90
	suphy0.F90	surdi15.F90	
arp/pp_obs	fpachmt.F90	ppobsac.F90	specfitadm.F90
arp/setup	su0phy.F90	sucst.F90	sudim1.F90
	sunud.F90		
arp/utility	updtim.F90		

Doc:

Bugfix.

Project: ifs
ClearCase branch: mrga589_CY33T1_test

Modified:

arp/setup su_surf_flds.F90

BOGATCHEV Andrey & MLADEK Richard

Doc:

ALADIN phasing.

Project: aladin,ifs,aladin transforms
ClearCase branch: mrpe702_CY33T1_abrm

Modified:

ald/adiab	elascaw.F90	elascawad.F90	elascawtl.F90
	espcsi.F90	espnhsi.F90	
arp/dia	echkevo.F90		
tal/external	edir_trans.F90	edir_transad.F90	einv_trans.F90
	einv_transad.F90		
tal/module	eftdir_ctl_mod.F90	egath_spec_control_mod.F90	eltdir_ctl_mod.F90
	eltdir_ctlad_mod.F90	eltinv_ctl_mod.F90	eltinv_ctlad_mod.F90

CHAPNIK Bernard

Doc:

Coherency between stepotl.F90 and stepoad.F90 .

Project: ifs
ClearCase branch: mrpa658_CY33T1_lam4d

Modified:

arp/control stepotl.F90

Doc:

This branch includes two features for the Jk code.
- repairing the reading of the "large scale fields" in evarjkini.F90 (made useless since cycle 30 or so);
- introducing some modulation of the jk term with respect to model levels and to the parameter.

Project: aladin,ifs
ClearCase branch: mrpa658_CY33T1_newjk

Added:

ald/var suemodjk.F90

Modified:

ald/var	evarjk.F90	evarjkini.F90	suejk.F90
	suemodjk.F90		
arp/ald_inc/namelist	nemjk.h		
arp/module	yemjk.F90		
arp/setup	su0yomb.F90		

DESROZIERS Gerald

Doc:

This modset allows the externalization of n1cg1 minimizer.

Project: ifs
ClearCase branch: mrpm611_CY33T1_n1cg1

Modified:

arp/control	cva2.F90	
arp/var	n1cg1.F90	n1cga.F90

DZIEDZIC Adam

Doc:

Bugfixes for ALADIN 3DVAR .

Project: aladin,black_list,odb,utilities
ClearCase branch: marp003_CY33T1_adam

Added:

odb/ddl.ECMA	get_soe_reo3.sql	sathdr_screen_aeolus_sat.sql	

Modified:

ald/programs	blend.F90		
bla	mf_blacklist.b		
odb/ddl.ECMA	ECMA.dep		
odb/pandor/module	bator_decodbufr_mod.F90	bator_decodgrib_mod.F90	bator_ecritures_mod.F90
	bator_impr_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		
uti/merge_varbc	merge_varbc.F90		

DZIEDZIC Adam & LELATKO Iwona

Doc:

Fixes for 3DVAR .

Project: ifs,odb
ClearCase branch: marp003_CY33T1_adam

Added:

odb/ddl.CCMA	get_soe_reo3.sql

Modified:

arp/obs_preproc	black.F90	blinit.F90
arp/setup	suvert.F90	

odb/ddl.CCMA CCMA.dep

EL KHATIB Ryad

Doc:
Externalisation of the biperiodicisation computation of Aladin.
Project: bip
ClearCase branch: marp001_CY33T1_bip

Added:

bip/build	Makefile		
bip/doc	biper_field.gif	doc_biper.odt	doc_biper.pdf
	horiz.gif		
bip/external	etibihie.F90	fpbipere.F90	horiz_field.F90
bip/interface	etibihie.h	fpbipere.h	horiz_field.h
bip/module	esmoothe_mod.F90	espline_mod.F90	
bip/programs	test_Biper.F90	test_Ezones.F90	test_TwoTrunc.F90

Doc:

Light version of ECLIB for arpege/aladin put inside the auxilary library.

Project: ifsaux
ClearCase branch: marp003_CY33T1_eclite

Added:

xrd/eclite	datecmd.h	datediff.c	dateincr.c
	eclib.h	eclib_c.c	eclib_f.c
	error.c	i_system.c	julian.h
	julian_lib.c	myhdr.h	n_compat.F
	signal_trap.c	syminv.F	uv2sd.F

Doc:

Modset for "aeolus" compilation:
** arpifs_excluded_files : extended list of source files that should not be compiled ;*
** do_aeolus_setup_for_gmkpack : script to select the actual list of source files that should not be compiled, following environment variables telling the "compiler feature" and the "latlon handling".*

Project:
ClearCase branch: mrpm602_CY33T1_aeolus

Added:

aeo/Scripts	arpifs_excluded_files	do_aeolus_setup_for_gmkpack

Modified:

aeo/Scripts	arpifs_excluded_files	do_aeolus_setup_for_gmkpack

Doc:

Externalisation of the biperiodicisation computation of Aladin.

Project: aladin,ifs
ClearCase branch: mrpm602_CY33T1_bip

Modified:

ald/pp_obs	ebipos.F90	fpezone.F90
ald/setup	suebig.F90	sufpezo.F90
arp/adiab	cppfttcdir.F90	
arp/canari	caissedm.F90	

Doc:

Fix norms violations.

Project: aladin,ifs
ClearCase branch: mrpm602_CY33T1_norms

Added:

arp/var	get_jbvcoord_coeffs.F90

Modified:

ald/adiab	elascawtl.F90		
ald/c9xx	eincli10.F90		
ald/obs_preproc	lamflag_odb_select.F90		
ald/programs	blend.F90		
ald/setup	suefpg3.F90		
ald/utility	eggx_n.F90	elalo2xy.F90	
ald/var	ebalnonlin.F90	ebalvert.F90	
arp/adiab	cptend_new.F90	gprcp.F90	laitre_gfl.F90
	spchorad.F90		
arp/c9xx	intice.F90	relnew.F90	
arp/climate	updclie_aer.F90	updclie_co2.F90	
arp/control	cmacad.F90	csekf1.F90	csekf2.F90
	restart_cnt3.F90		
arp/dia	aro_cpphddh.F90	cpphddh.F90	pregrbenc.F90
arp/module	couplo4_module.F90	gfl_subs.F90	grib_header_def.F90
	gridpoint_fields.F90	indexfind.F90	pargen.F90
	parmcuf.F90	parptrs.F90	spectral_columns.F90
	watch_arrays.F90	yemdyn.F90	yemgeo.F90
	yemvargp.F90	yhlturb.F90	yoeaeratm.F90
	yoeaerop.F90	yoeaersu.F90	yoecldp.F90
	yoecumf2.F90	yoewcou.F90	yom_grgctm.F90
	yomafn.F90	yomarar.F90	yomascatsm.F90
	yomcoctp.F90	yomcosjo.F90	yomct0.F90
	yomgamma.F90	yomgrb.F90	yomintgt.F90
	yomjq.F90	yomlimb.F90	yommkodb.F90
	yommts.F90	yommwimager.F90	yomphy0.F90
	yomphy3.F90	yomscc.F90	yomsekf.F90
	yomtvrad.F90	yomvar.F90	yomvarbc.F90
	yomvareps.F90		
arp/mwave	mwave_igp2obs.F90	mwave_iobs2gp.F90	mwave_obsop_test.F90
	mwave_obsop_tl.F90	mwave_put.F90	mwave_put_tl.F90
	mwave_read_sat_error.F90	mwave_setup.F90	

arp/obs_error	obserr.F90		
arp/obs_preproc	ascatif.F90	ascatsm_cdfmatch.F90	ascatsm_cdfpar.F90
	biascor_era40.F90	cloud_detect_setup.F90	conventional_ob.F90
	defrun.F90	dwlin.F90	hirs_cld.F90
	limb_plane.F90	mkglobstab.F90	new_thinn_radar.F90
	new_thinner_no_sq.F90	obsgen.F90	pre_thinner.F90
	radar_profs.F90	redml.F90	reo3sin.F90
	repsel.F90	s0towind.F90	sekf_prep_ascat.F90
	speedcor_nag.F90	suobscor.F90	thin_red_presort.F90
	thinn_radar.F90	thinner_no_sq.F90	
arp/onedvar	onedvar_diagnostics.F90	onedvar_find_satsens.F90	onedvar_fstscrn.F90
	onedvar_get_bgcor.F90	onedvar_obsop.F90	onedvar_obsop_grad.F90
	onedvar_obsop_tl.F90	onedvar_passive_ok.F90	onedvar_raintb.F90
	onedvar_raintb_rcv.F90	onedvar_read_sat_bias.F90	onedvar_read_sat_error.F90
	onedvar_screen.F90	onedvar_setup.F90	onedvar_simul.F90
arp/parallel	bcastcov.F90	diwrspe0.F90	dot_product_ctlvec.F90
	gathflnm.F90	gpnorm1.F90	gridpoint_norm.F90
	pe2set.F90	set2pe.F90	trmtos_spec.F90
	trstom_spec.F90	trwvtof.F90	
arp/phys_dmn	ac_cloud_model.F90	accvimp.F90	accvud.F90
	acdifv1.F90	acmodo.F90	acnebr.F90
	acptke.F90	acupd.F90	acupm.F90
	acupu.F90	apl_arome.F90	aplmini.F90
	aplmphys.F90	ecr1d.F90	ecr2df.F90
	ecr2dv.F90	ecrpnebh.F90	frasolu.F90
	hlcldia.F90	hlcldiag.F90	hlcloudcv.F90
	hlcondcv.F90	hlcondfc.F90	hlconds.F90
	hlcondst.F90	hlnocondcv.F90	hlprevap.F90
	hlqcampli.F90	hlradia.F90	hlstraco.F90
	hltend2flx.F90	hltridiag.F90	hlvcbr.F90
	mts_phys.F90	nomfi.F90	posct.F90
	radlsw15.F90	suphmpa.F90	
arp/phys_ec	aer_bdgtmss.F90	aer_clim.F90	aer_climg.F90
	aer_climz.F90	aer_dmso.F90	aer_drydep.F90
	aer_phy1.F90	aer_phy2.F90	aer_phy3.F90
	aer_scavin.F90	aer_sdust.F90	aer_sedimnt.F90
	aer_src.F90	aer_ssalt_ms.F90	aer_stratcl.F90
	aer_tau2mixr.F90	callpar.F90	callparad.F90
	callpartl.F90	cldpp.F90	cloudsc.F90
	cuascn.F90	cuascn2tl.F90	cuascnad.F90
	cuascntl.F90	cubasen2.F90	cuctracerad.F90
	cudtdqn2ad.F90	cudtdqn2tl.F90	cududv.F90
	cududvad.F90	cududvtl.F90	ec_phys.F90
	ec_physg.F90	gpsstaqua.F90	grg_nox2no2.F90
	grg_tendctm.F90	gwdrag.F90	lwneur.F90
	mcica_cld_gen.F90	phys_tl.F90	radaca.F90
	radact.F90	radghg.F90	radlswtl.F90
	rrtm_ecrt_140gp.F90	srtm_cmbgb16.F90	srtm_setcoef.F90
	su_aerop.F90	su_aerp.F90	su_aerw.F90
	su_ghgclim.F90	su_uvrad.F90	sucld.F90
	suclopn.F90	sucumf.F90	suecrad.F90
	sulwneur.F90	susrtm.F90	sw.F90
	sw1s.F90	swni.F90	uvclr.F90

	uvrad.F90	vdfdifcsad.F90	vdfdifhs.F90
	vdfdifhsad.F90	vdfdifhstl.F90	vdfdifms.F90
	vdfexcu.F90	vdfhghtn.F90	vdfouter.F90
	wvcouple.F90		
arp/pp_obs	aerod_ad.F90	aerod_op.F90	aerod_tl.F90
	aod_ad.F90	aod_op.F90	aod_tl.F90
	biaspred.F90	ch4_tcmr.F90	ch4_tcmr_ad.F90
	ch4_tcmr_tl.F90	ch4bcor.F90	co2_tcmr.F90
	co2_tcmr_ad.F90	co2_tcmr_tl.F90	cod_op.F90
	dopplsim.F90	dopplsim_ad.F90	dopplsim_tl.F90
	fpcincape.F90	fpinvtrcuf.F90	gpscalc_alpha.F90
	gpscalc_alpha2d.F90	gpscalc_alpha2dad.F90	gpscalc_alpha2dtl.F90
	gpscalc_alphaad.F90	gpscalc_alphatl.F90	gpscalc_nr2d.F90
	gpscalc_nr2dad.F90	gpscalc_nr2dtl.F90	gpscalc_nrad.F90
	gpscalc_nrtl.F90	gpscalc_refrac.F90	gpscalc_refrac2d.F90
	gpscalc_refrac2dad.F90	gpscalc_refrac2dtl.F90	gpscalc_refracad.F90
	gpscalc_refractl.F90	gpserad.F90	gpserf.F90
	gpserf_ad.F90	gpserf_tl.F90	gpsglat.F90
	gpsro_2dad.F90	gpsro_2dop.F90	gpsro_2dtl.F90
	gpsro_ad.F90	gpsro_oberror.F90	gpsro_op.F90
	gpsro_tl.F90	gpszen_delay.F90	gpszen_delayad.F90
	gpszen_delaytl.F90	grg_fparam.F90	grg_fparamad.F90
	grg_fparamtl.F90	hdepart.F90	hop.F90
	hopad.F90	hoptl.F90	hpos.F90
	hradp.F90	hretr.F90	intavg.F90
	inv_refl1dstat.F90	layeravg.F90	mpobseq.F90
	mwimager_cloud.F90	mwimager_lwp.F90	nox2no2.F90
	obscor_sumup_scalp.F90	phymfpos.F90	ppak.F90
	ppaktl.F90	ppnoxtl.F90	rad1cnne.F90
	radtr.F90	radtr_ml.F90	radtrb.F90
	radtrbad.F90	radtrbtl.F90	reflsim.F90
	reflsim_2dop.F90	rtl_hop_1d.F90	rtl_hop_1d_ad.F90
	rtl_hop_1d_tl.F90	rtl_hop_2d.F90	rtl_hop_2d_ad.F90
	rtl_hop_2d_tl.F90	rtl_oberror.F90	rtl_screen.F90
	slintad.F90	specfitg.F90	statpred.F90
	sublayer.F90		
arp/prism	couplo4_cor_test.F90	couplo4_definitions.F90	couplo4_endmpi.F90
	couplo4_exchange.F90	couplo4_grg_input.F90	couplo4_grg_stats.F90
	couplo4_inimpi.F90		
arp/sekf	pertsekf_v2.F90	sekf_backgerr.F90	sekf_costf.F90
	sekf_gain.F90	sekf_magn_rh.F90	sekf_matinv.F90
	sekf_write.F90	sm_ekf_main.F90	store_sekf_cv.F90
arp/setup	ca.F90	cmoctmap.F90	setinidyncore.F90
	sucmoctp.F90	sufpdyn.F90	sugfl.F90
	sugridug2.F90	suhdfvareps.F90	suhlcond.F90
	suhlconst.F90	suhloption.F90	suhlrad.F90
	suhlturb.F90	sulsforc.F90	sunh_vertfe3dbc.F90
	suphy.F90	surand1.F90	suspecg2.F90
arp/transform	grid2spec.F90	grid2specad.F90	spec2grid.F90
	spec2gridad.F90		
arp/utility	addfgs.F90	allocuf.F90	multvdv.F90
	prepacka.F90	prt_conv_diags.F90	prt_ctlvec_max.F90
	prt_ctlvec_norms.F90	random_ctlvec.F90	save_evecs.F90

	save_merr_tend.F90	spec_concat.F90	spec_split.F90
	write_ctlvec_grib.F90		
arp/var	congrad.F90	csvarbc.F90	cvarbc.F90
	cvarbcad.F90	cvarbcin.F90	cvarbcinad.F90
	cvargpad.F90	cvtest.F90	dbfgsl.F90
	dpseuclid.F90	dysave.F90	ecset.F90
	fjvarbc.F90	get_jbvcoord_coeffs.F90	getmini.F90
	gp_nearest.F90	gp_ssmi_igp2obs.F90	gp_ssmi_inv.F90
	n1cg1.F90	n1cga.F90	prvarbc.F90
	rdfpinc.F90	savmini.F90	sqrtq.F90
	sqrtqad.F90	sqrtqin.F90	sqrtqinad.F90
	suhess.F90	sujbvcoord.F90	sujbwavwri.F90
	sujqcor.F90	sujqdata.F90	sujqstd.F90
	sulimb.F90	sumoderr.F90	sureo3.F90
	suscalmerr.F90	taskob.F90	taskobad.F90
	tlprop.F90	tltest.F90	weak_constraint.F90
	weak_constraint_ad.F90	weak_constraint_tl.F90	

GCO

Doc:

Catch-up of parallel suite:
** rrtm_rtrn1a_140gp.F90: dynamic allocation of some arrays, to solve a potential memory problem ;*
** hretr.F90: test the observation kind for radar reflectivities.*

Project: ifs
ClearCase branch: marp001_CY33T0_op1B

Modified:

arp/phys_ec	rrtm_rtrn1a_140gp.F90
arp/pp_obs	hretr.F90

Doc:

Move (and merge) all METEO-FRANCE modifications of scat software into project "scat". The directory "uti/prescat" is now useless and will be removed.

Project: scatt
ClearCase branch: marp001_CY33T1_sct

Added:

sct/qretrieve	sd2uv.F	
sct/to_obsoul	map_bufr_seq_312211_to_mgdr.F	read_qscat50kmbufr.F

Modified:

sct/afilter	ascat_bufr_filter.F		
sct/etimesort	timesort.F		
sct/qbukey	bufr_qscat.F		
sct/qfilter	qscat_filter_bufr25km.F		
sct/qretrieve	fft99.F	invert50.F	map_bufr2rainymgdr.F
	map_bufr_seq_312026_to_mgdr.F	map_bufr_seq_312028_to_mgdr.F	qscat25to50km.F

	regroup.F	write_50kmbufr.F
sct/to_obsoul	map_bufr_seq_312211_to_mgdr.F	read_qscat50kmbufr.F

Doc:

1/ Portability fixes (from Ryad El Khatib).

2/ Bugfix for variational quality control (hjo.F90).

3/ Bugfix: change array name ZOBSA_TSTEP to IOBSA_TSTEP, and declare it as integer instead of real (sm_ekf_main.F90).

4/ Portability fix: declare variable IVAR=Z"3FFFFFFF" and use of this variable in function IAND, instead of direct use of Z"3FFFFFFF" (random_numbers.F90) .

5/ Miscellaneous phasing fixes.

Project: aladin,ifs,odb,satrad,scatt,aladin transforms,ifsaux
ClearCase branch: marp001_CY33_r2bf

Modified:

ald/programs	blend.F90	blendsur.F90	check_limits.F90
ald/setup	suetrans.F90		
ald/sinvect	suelcz.F90		
arp/namelist	namscc.h		
arp/obs_preproc	defrun.F90	reo3sin.F90	suobscor.F90
arp/phys_ec	callpar.F90	su_c11clim.F90	su_c12clim.F90
	su_c22clim.F90	su_ccl4clim.F90	su_ch4clim.F90
	su_co2clim.F90	su_n2oclim.F90	su_no2clim.F90
	su_ozoclim.F90	su_so4_A1B2000.F90	su_so4_A1B2010.F90
	su_so4_A1B2020.F90	su_so4_A1B2030.F90	su_so4_A1B2040.F90
	su_so4_A1B2050.F90	su_so4_A1B2060.F90	su_so4_A1B2070.F90
	su_so4_A1B2080.F90	su_so4_A1B2090.F90	su_so4_A1B2100.F90
	su_so4_obs1920.F90	su_so4_obs1930.F90	su_so4_obs1940.F90
	su_so4_obs1950.F90	su_so4_obs1960.F90	su_so4_obs1970.F90
	su_so4_obs1980.F90	su_so4_obs1990.F90	
arp/pp_obs	hjo.F90	hradp.F90	
arp/prism	couplo4_definitions.F90	couplo4_endmpi.F90	couplo4_exchange.F90
arp/sekf	sekf_gain.F90	sekf_write.F90	sm_ekf_main.F90
odb/tools	Rs_t_rh_bias_statistics.F90		
sat/onedvar	onedvar_obsop_grad_rttov.F90		
sat/pre_screen	bufr_screen_ssmi.F90	reo3_prescreen.F90	
sat/rttov	aer_clim_prof.F90		
sct/qbukey	bufr_qscat.F		
sct/qfilter	qscat_filter_bufr25km.F		
tal/programs	aatestprog.F90		
xrd/lanczos	startv.F		
xrd/module	random_numbers.F90		

Doc:

- Create directory ifs/programs .
- Move merge_varbc.F90 from uti/merge_varbc to ifs/programs.
- Remove empty directory uti/merge_varbc .
- Fix: add interface for routine SETINIDYNCORE .

Project:
ClearCase branch: marp003_CY33T1_mrgvarbc

Renamed:

uti/merge_varbc merge_varbc.F90 to arp/programs/merge_varbc.F90

Doc:

Move OULAN sources to new VOB "gco" .

Project:
ClearCase branch: marp003_CY33T1_oulan

Added:

gco/include	oulan_pardimo.h	oulan_yombitu.h	oulan_yomcsts.h
	oulan_yomctpm.h	oulan_yomdate.h	oulan_yomdirs.h
	oulan_yomfthermo.h	oulan_yomnbob.h	oulan_yompin.h
	oulan_yomtomv.h		
gco/namelist	oulan_nadirs.h	oulan_nanbob.h	
gco/oulan	ext_acar.F	ext_airep.F	ext_airsbt.F
	ext_atovs.F	ext_bathy.F	ext_buoy.F
	ext_cyclone.F	ext_ers1.F	ext_europrofil.F
	ext_gpssol.F	ext_paobreu.F	ext_pilot.F
	ext_profiler.F	ext_radomeh.F	ext_satem.F
	ext_satgeo.F	ext_satob.F	ext_ssmi.F
	ext_ssmice.F	ext_synop.F	ext_synor.F
	ext_temp.F	ext_tesac.F	ext_tovs.F
	ext_tovsamsua.F	ext_tovsamsub.F	ext_tovshirs.F
	ext_tovshirs_ech.F	ext_tovsmsu.F	oulan.F
	oulan_boite.F	oulan_carobs.F	oulan_erreur.F
	oulan_extract.F	oulan_four.F	oulan_init.F
	oulan_moisjour_to_quantieme.F	oulan_namelist.F	oulan_quantieme_to_moisjour.F

Doc:

1/ Fix miscellaneous phasing errors.

2/ Fixes:
** sujbwavwri.F90: Fix a wrong "INTENT" statement: INTENT(IN) was used, instead of INTENT(INOUT).*
** suescal.F90: remove references to ESTIM_PARAM & ESTPARAM .*
** rad1cobe.F90: catch-up of parallel suite (fix for VarBC in ALADIN).*
** test_Biper.F90: fix a non-standard use of WRITE instruction.*

3/ Catch-up of parallel suites: cleanings, better respect of Fortran 90 coding norms, and replace some strange pointer arrays declaration by classical ALLOCATABLE statement.

4/ Bugfix from Mohamed Jidane: add IPROC as argument of LANDR in nalan1.F90 . In landr.F90, argument KPROC is now mandatory (NB: it was optional before).

5/ BATOR modifications from Frank Guillaume:
** According to modifications of sucst.F90:*
- add USE YOMDYNCORE, ONLY : LAQUA, RPLRADI, RCORIOI ;
- add use of namelist NAMSCEN & NAMDYNCORE .

** Add new variables BATNAM/BATOUT (playing same roles as NULNAM/NULOUT) for a very use in BATOR.*

Project: ifs,aladin,odb,ifsaux
ClearCase branch: marp003_CY33T1_r2bf

Modified:

ald/var	suescal.F90		
arp/obs_preproc	scaqc.F90		
arp/phys_dmn	mts_phys.F90		
arp/pp_obs	hjo.F90	hretr.F90	mpobseq.F90
	rad1cobe.F90		
arp/setup	sucst.F90	sudim1.F90	sumpini.F90
arp/sinvect	nalan1.F90		
arp/var	sujbwavwri.F90		
bip/programs	test_Biper.F90		
odb/pandor/fcq	man_fcq_bdm_fus.F90		
odb/pandor/module	bator_decodbufr_mod.F90	bator_decodgrib_mod.F90	bator_ecritures_mod.F90
	bator_impr_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		
sat/rttov	phrtsetup.F90		
xrd/lanczos	landr.F		

Doc:

- Add view numpool_radar in ECMA.dep .
- Fix interface of routine copie_radsta.F90 .
- Add interface for subroutine COPIE_RADSTA in shuffledb.F90 .

Project: odb
ClearCase branch: marp003_CY33T1_radar_station

Modified:

odb/cma2odb	shuffledb.F90
odb/ddl.ECMA	ECMA.dep
odb/interface	copie_radsta.h

GCO & EL KHATIB Ryad

Doc:

Move of Meteo-France ODB-tools into ODB project.

Project: odb,utilities
ClearCase branch: marp001_CY33T1_pandor

Added:

odb	pandor		
odb/pandor	extrtovs	fcq	include
	mandalay	module	namelist

Renamed:

ald/module	eggangles.F90 to xrd/module/eggangles.F90
	eggmrt.F90 to xrd/module/eggmrt.F90
	eggpack.F90 to xrd/module/eggpack.F90
uti/bator	bator.F90 to odb/tools/Bator.F90
uti/extrtovs	add_bias_1c.F90 to odb/pandor/extrtovs/add_bias_1c.F90
	add_bias_1c.F90 to odb/tools/Add_bias_1c.F90
	add_scan_1c.F90 to odb/pandor/extrtovs/add_scan_1c.F90
	add_scan_1c.F90 to odb/tools/Add_scan_1c.F90
	biasconv_1c.F90 to odb/pandor/extrtovs/biasconv_1c.F90
	biasconv_1c.F90 to odb/tools/Biasconv_1c.F90
	calc_bias_1c.F90 to odb/pandor/extrtovs/calc_bias_1c.F90
	calc_bias_1c.F90 to odb/tools/Calc_bias_1c.F90
	calc_scan_1c.F90 to odb/pandor/extrtovs/calc_scan_1c.F90
	calc_scan_1c.F90 to odb/tools/Calc_scan_1c.F90
	cycle_bias_1c.F90 to odb/pandor/extrtovs/cycle_bias_1c.F90
	cycle_bias_1c.F90 to odb/tools/Cycle_bias_1c.F90
	cycle_biasprep_1c.F90 to odb/pandor/extrtovs/cycle_biasprep_1c.F90
	cycle_biasprep_1c.F90 to odb/tools/Cycle_biasprep_1c.F90
	cycle_biassele_1c.F90 to odb/pandor/extrtovs/cycle_biassele_1c.F90
	cycle_biassele_1c.F90 to odb/tools/Cycle_biassele_1c.F90
	cycle_scan_1c.F90 to odb/pandor/extrtovs/cycle_scan_1c.F90
	cycle_scan_1c.F90 to odb/tools/Cycle_scan_1c.F90
	extr_impr_1c.F90 to odb/pandor/extrtovs/extr_impr_1c.F90
	extr_init_1c.F90 to odb/pandor/extrtovs/extr_init_1c.F90
	extr_lecdata_1c.F90 to odb/pandor/extrtovs/extr_lecdata_1c.F90
	extr_lib_1c.F90 to odb/pandor/extrtovs/extr_lib_1c.F90
	extr_namelist_1c.F90 to odb/pandor/extrtovs/extr_namelist_1c.F90
	pred_conv.F90 to odb/pandor/extrtovs/pred_conv.F90
	regress_one.F90 to odb/pandor/extrtovs/regress_one.F90
uti/fcq	fcqodb.F90 to odb/pandor/fcq/fcqodb.F90
	fcqodb.F90 to odb/tools/Fcqodb.F90
	fcqodb_dribu.F90 to odb/pandor/fcq/fcqodb_dribu.F90
	fcqodb_init.F90 to odb/pandor/fcq/fcqodb_init.F90
	fcqodb_pilot.F90 to odb/pandor/fcq/fcqodb_pilot.F90
	fcqodb_synop.F90 to odb/pandor/fcq/fcqodb_synop.F90
	fcqodb_temp.F90 to odb/pandor/fcq/fcqodb_temp.F90
	man_fcq_bdm_fus.F90 to odb/pandor/fcq/man_fcq_bdm_fus.F90
	man_orders.F90 to odb/pandor/fcq/man_orders.F90
uti/include	bator_fonction.h to odb/pandor/include/bator_fonction.h
	fcqodb_fonction.h to odb/pandor/include/fcqodb_fonction.h
uti/mandalay	manda_util.F90 to odb/pandor/mandalay/manda_util.F90
	mandalay.F90 to odb/pandor/mandalay/mandalay.F90
	mandalay.F90 to odb/tools/Mandalay.F90
uti/module	bator_decodbufr_mod.F90 to odb/pandor/module/bator_decodbufr_mod.F90
	bator_decodgrib_mod.F90 to odb/pandor/module/bator_decodgrib_mod.F90
	bator_ecritures_mod.F90 to odb/pandor/module/bator_ecritures_mod.F90
	bator_impr_mod.F90 to odb/pandor/module/bator_impr_mod.F90
	bator_init_mod.F90 to odb/pandor/module/bator_init_mod.F90
	bator_lectures_mod.F90 to odb/pandor/module/bator_lectures_mod.F90
	bator_module.F90 to odb/pandor/module/bator_module.F90
	bator_saisies_mod.F90 to odb/pandor/module/bator_saisies_mod.F90

	bator_util_mod.F90 to odb/pandor/module/bator_util_mod.F90
	deco_bufr_1c_uti.F90 to odb/pandor/module/deco_bufr_1c_uti.F90
	extr_module_1c.F90 to odb/pandor/module/extr_module_1c.F90
	fcqodb_module.F90 to odb/pandor/module/fcqodb_module.F90
	rad_bias_1c_uti.F90 to odb/pandor/module/rad_bias_1c_uti.F90
uti/namelist	bator_namelist.h to odb/pandor/namelist/bator_namelist.h
	extr_namelist_1c.h to odb/pandor/namelist/extr_namelist_1c.h

Deleted:

uti	extrtovs	fcq	include
	mandalay	module	namelist

GCO & Sami SAARINEN

Doc:

Change too long variable name "mlnk_aeolus_hdr2aeolus_hdr_calib" to "mlnk_aeolus_hdr2aeolus_hdr_cal" (name is cut to 31 characters).

Project: ifs,odb
ClearCase branch: marp001_CY33_yomdb

Modified:

arp/common	yomdb_defs.h	yomdb_vars.h	
odb/bufr2odb	bufr2odb_aeolus.F90	get_varindex.F90	
odb/cma2odb	ctxinitdb.F90	getdb.F90	initmdb.F90
odb/ddl	cma.h	sathdr_screen_aeolus_hdr.sql	
odb/module	varindex_module.F90		
odb/scripts	create_ioassign		

JIDANE Mohamed

Doc:

ALADIN phasing.

Project: aladin,ifs,surf
ClearCase branch: mrpe731_CY33T1_jidane

Modified:

ald/sinvect	suelcz.F90	
ald/var	ebalvert.F90	suelges.F90
arp/setup	su_surf_flds.F90	
arp/var	balvert.F90	cvar3in.F90
sur/module	sussoil_mod.F90	susveg_mod.F90

Mats HAMRUD

Doc:

Bugfix: change array name ZOBSA_TSTEP to IOBSA_TSTEP, and declare it as integer instead of real.

Project: ifs
ClearCase branch: marp001_CY33T1_sm_ekf_main

Modified:

arp/sekf sm_ekf_main.F90

POLI Paul

Doc:

The changes in this branch store in the ODB the following quantities, for ground-based GPS, only in MF screening:
- the station altitude difference,
- the model-equivalent Zenith Hydrostatic Delay,
- the model-equivalent Zenith Wed Delay.

Project: ifs
ClearCase branch: mrpa679_CY33T0_gbgps

Modified:

arp/pp_obs hop.F90

Doc:

This branch is the result of phasing MF OBSTAT with ECMWF CY33R2 OBSTAT. Some developments made at MF during CY33T0 and CY33T1 have had to be dropped because they conflicted with others solutions adopted by CY33R2 (namely for IASI and SCATs). The remainining additions from MF side are the support of Doppler radar winds and the possibility to restrict the selection of observations to within 1h30 around the analysis time.

Project: obstat
ClearCase branch: mrpa679_CY33T1_obstat_fixr2

Modified:

obt/module	obsdata.F90	statsoft.F90	
obt/src	calcairspop.F90	iniglob.F90	iniitemloc.F90
	inisoft.F90	inisoftdef.F90	inisoftstat.F90
	obstat.F90	odbread.F90	odbscatamb.F90
	plotcov.F90	plothis.F90	plotime.F90
	plotrms.F90	plotrmsbias.F90	plotsoft.F90
	plotusage.F90	updsoft.F90	writesoft.F90

PUECH Dominique

Doc:

Catch-up of parallel suite: fix a bug in writing of table radar_station .

Project: odb

ClearCase branch: marp001_CY33T0_op1aro

Added:

odb/ddl.ECMA numpool_radar.sql
odb/ddl numpool_radar.sql

Modified:

odb/cma2odb copie_radsta.F90
odb/ddl numpool_radar.sql

Doc:

Catch-up of parallel suite: fix a bug in writing of table radar_station (again…).

Project: odb
ClearCase branch: mrpa660_CY33T1_phas

Modified:

odb/cma2odb copie_radsta.F90 ctxinitdb.F90

SEITY Yann

Doc:

Phasing of phrtsetup.F90 .

Project: satrad
ClearCase branch: mrpm637_CY33T1_arome

Modified:

sat/rttov phrtsetup.F90

Doc:

** apl_arome.F90: optimizations.*
** aroini_micro.mnh, ini_rain_ice.mnh, modi_ini_rain_ice.mnh: initialization to NULOUT of the logical unit used for microphysics setup prints.*
** rain_ice.mnh: fix bugs in rain sedimentation.*

Project: ifs,mpa
ClearCase branch: mrpm637_CY33T1_aromebf

Modified:

arp/phys_dmn apl_arome.F90
mpa/micro/externals aroini_micro.mnh
mpa/micro/internals ini_rain_ice.mnh rain_ice.mnh
mpa/micro/module modi_ini_rain_ice.mnh

Doc:

1/ Miscellaneous fixes:

** apl_arome.F90: fixes for radiation diagnostic fluxes and sensible heat.*
** mf_phys.F90: new arguments for apl_arome.F90 .*
** aro_surf_diag.mnh: coding on 4 numbers historical files time step instead of 3.*
** Catch-up of surfex2 (bf8).*

2/ Fix a multiproc full-pos problem on HPCE .

Project: ifs,mse
ClearCase branch: mrpm637_CY33T1_surfex2bf8

Modified:

arp/c9xx	apache.F90		
arp/phys_dmn	apl_arome.F90	mf_phys.F90	
mse/externals	aro_surf_diag.mnh		
mse/internals	ch_aer_emission.mnh	diag_inline_teb_n.mnh	diag_surf_budget_water.mnh
	init_dst_n.mnh	init_slt_n.mnh	subscale_z0eff_1d_patch.mnh

SEVAULT Eric

Doc:

The aim of this modset is to handle a new flags combination in assimilation since cycle CY33 (an observation may be active AND rejected), and not to get those flags in files BDM_CQ .

Project: odb
ClearCase branch: marp003_CY33T1_fcq

Modified:

odb/pandor/fcq	fcqodb_dribu.F90	fcqodb_pilot.F90	fcqodb_synop.F90
	fcqodb_temp.F90		

WATTRELOT Eric

Doc:

Introduce CPP keys _BUFFER_JELEM & _BUFFER_JWORK .

Project: odb
ClearCase branch: mrpa652_CY33T1_bufrradar_ew

Modified:

odb/module	bufr_module.F90

YESSAD Karim

Doc:

1/ Fix GFL setups.
2/ Fix full-pos bugs, most were caused by GFLs.
3/ Miscellaneous cleanings: add ABOR1, add comments, better indentations.
4/ Remove obsolete routines, and remove call of SUPHYFL in suphy0.F90 .
5/ Aladin phasing.

6/ Fix miscellaneous phasing errors and wrong comments.
7/ sudefo_gflattr.F90: bugfixes.
8/ yomjr.F90: add comments.
9/ Remove useless (and too numerous) prints.
10/ Miscellaneous bugfixes.

Project: ifs,aladin
ClearCase branch: mrpm603_CY33T1_bugfixpour33t1r2

Added:

ald/adiab	espnhsi_geogw.F90	
ald/transform	etransdir_nhconvprhs.F90	etransinv_nhconvprhs.F90

Modified:

ald/adiab	elarche.F90	elarmes.F90	espcm.F90
	espcsi.F90	espcsiad.F90	espnhsi.F90
	espnhsi_geogw.F90	gpspng.F90	
ald/inidata	elsirf.F90		
ald/setup	suemp.F90		
ald/transform	etransdir_nhconvprhs.F90	etransinv_nhconv.F90	etransinv_nhconvprhs.F90
arp/adiab	call_sl.F90	cpg_gp.F90	
arp/module	phyflag.F90	phyflge.F90	phyflgm.F90
	surface_fields.F90	yomcver.F90	yomdyn.F90
	yomdyna.F90	yomdyncore.F90	yomjr.F90
	yommvo.F90		
arp/phys_dmn	athmt.F90	atradin.F90	atsol.F90
	mf_phys_prep.F90		
arp/phys_ec	heldsuarez.F90		
arp/pp_obs	fpachmt.F90	phymfpos.F90	pos.F90
arp/setup	suctrl_gflattr.F90	sudefo_gflattr.F90	sudim1.F90
	sudyn_setgflattr.F90	sugfl.F90	suphy.F90
	suphyfl.F90		