ARPEGE MEMORANDUM

From: GCO
Date: Feb 25, 2016
Subject: New cycle CY43

A new cycle CY43 has been created. This is a common cycle with ECMWF. The different contributions for this cycle are described in the following pages.

Contributors:

CEBRON Pierrick	cebron_CY42_combi_ajour
EL KHATIB Ryad	khatib_CY42_cy43.01%ddlcanari khatib_CY42_cy43.01%fixphase43 khatib_CY42_cy43.01%morefix khatib_CY42_cy43.01%rephasefftw khatib_CY42_cy43.02%cleanfix khatib_CY42_cy43.03%fix khatib_CY42_cy43.04%posfix
GCO	gco_CY42_cy43 gco_CY42_cy43.01%guidardv_miscBfVar gco_CY42_cy43.05%last_fixes gco_CY42_cy43b
KEMETMULLER Josef	kemetmullerj_CY42_cy43.02_phasing kemetmullerj_CY42_cy43_phasing
PAYAN Christophe	payan_CY42_cy43.01_kscat-thinfix payan_CY42_cy43v04_merger3updt
TAILLEFER Francoise	tailefer_CY42_db923 tailefer_CY42_dbdiv
YESSAD Karim	yessad_CY42_cy43V01bf1 yessad_CY42_cy43V04bf2

CEBRON Pierrick

Doc:
Update from cycle CY41.
Projects: utilities
Git branch: cebron_CY42_combi_ajour
Deleted:
utilities/combi masque.F90, proba.F90
Modified:
utilities/combi combi.F90, combi_opti.F90, combi_pert.F90, combi_stat.F90

EL KHATIB Ryad

Doc:
ODB ddl includes now CANARI-specific columns without need to define a cpp macro.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: odb
Git branch: khatib_CY42_cy43.01%ddlcanari
Modified:

odb/ddl	body.h, camelo_robody.sql, canaco_robody.sql, cancer_robody.sql, carcfo.sql, caviso_robody.sql, cavodk_robody.sql, hop_canari_robody.sql, hretr_canari_robody.sql

Doc:
Bugfix on phasing.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: arpifs
Git branch: khatib_CY42_cy43.01%fixphase43
Modified:

arpifs/namelist	namtrans.nam.h
arpifs/op_obs	hretr.F90

Doc:
Bugfixes for post-processing on isothermic levels (suafn2) and for post-processing of Tn,Tx on LAM area including an extension zone (fpbillb).
Bugfix for NSTOP>9999 in MF physics.
Bugfix for conf. 903.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: aladin, arpifs
Git branch: khatib_CY42_cy43.01%morefix
Modified:

aladin/fullpos	fpfillb.F90
arpifs/phys_dmn	aplpar.F90
arpifs/setup	suafn2.F90, suarg.F90, suctrl_gflattr.F90

Doc:
Re-phase fftw interface.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: ecfftw, etrans, trans
Git branch: khatib_CY42_cy43.01%rephasefftw
Renamed:

trans/module	fftw3.f03.h ecfftw/include/fftw3.f03.h

Modified:

ecfftw/module	tpm_fftw.F90
etrans/external	esetup_trans.F90
etrans/module	eftdirad_mod.F90, eftinvad_mod.F90, eledir_mod.F90, eleinv_mod.F90
trans/module	ftdir_mod.F90, ftdirad_mod.F90, ftinv_mod.F90, ftinvad_mod.F90

Doc:

** arpifs/utility/filedate.F90*
arpifs/setup/sudimf1.F90
arpifs/setup/sudefo_gflattr.F90
arpifs/setup/suctrl_gflattr.F90
arpifs/control/cprep3.F90
arpifs/setup/sudyn.F90:

Miscellaneous bugfixes for NCONF=903 .

** arpifs/fullpos/sufpdyn.F90*
arpifs/setup/suarg.F90
arpifs/setup/sufpinif.F90:

Cleanings.

** odb/pandor/module/bator_decodnetcdf_mod.F90*
mse/externals/fp2sx1.F90:

Portability fix.

** arpifs/fullpos/sufptr2.F90*
arpifs/fullpos/endvpos.F90:

Bugfix for computation of CAPE without climatology nor interpolations.

** arpifs/module/model_mod.F90*
arpifs/setup/su0yomb.F90
arpifs/setup/susc2b.F90
arpifs/setup/suxfu.F90
arpifs/setup/sucfu.F90:

Bypass max wind test for SL scheme in offline-Fullpos.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: arpifs, mse, odb
Git branch: khatib_CY42_cy43.02%cleanfix
Modified:

arpifs/control	cprep3.F90
arpifs/fullpos	endvpos.F90, sufpdyn.F90, sufptr2.F90
arpifs/module	model_mod.F90
arpifs/setup	su0yomb.F90, suarg.F90, sucfu.F90, suctrl_gflattr.F90, sudefo_gflattr.F90, sudimf1.F90, sudyn.F90, sufpinif.F90, susc2b.F90, suxfu.F90
arpifs/utility	filedate.F90
mse/externals	fp2sx1.F90
odb/pandor/module	bator_decodnetcdf_mod.F90

Doc:
1) Bugfix for LSPRT with the representation of q.
2) Protection against the use of the buiperiodicization of Boyd with different width of extension zone along X and Y axes.
Projects: arpifs
Git branch: khatib_CY42_cy43.03%fix
Modified:

arpifs/fullpos	sufpd.F90
arpifs/setup	suctrl_gflattr.F90

Doc:

Revert the change 0:KFLEVG for ZTT0 because PP2DINT is still awaiting for 0:KFLEVG arrays.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: arpifs
Git branch: khatib_CY42_cy43.04%posfix
Modified:
arpifs/pp_obs pos.F90

GCO

Doc:
1) Manual merge between CY42 + CY41T1_op1 and cycle CY42R2 + bfs .

2) Remove obsolete routines.

3) Set VERSION_MAJOR to 43 in odb/lib/version.c .

4) The maximum surface pressure was set to 1100hPa in RTTOV11 instead of 1200hPa. This can induce problems for LAM models in the "E" area
when producing ISP during a forecast.

5) pertobs.F90, line 147: replace argument ISENSOR by IOBSTYPE in call of PERTOBS_UNCORR..
Projects: aladin, arpifs, ecfftw, etrans, ifsaux, mse, odb, trans, utilities
Git branch: gco_CY42_cy43
Deleted:

arpifs/control	cprep4.F90
arpifs/dia	dealdyn_ddh.F90, wrspeca_compress1_mt.F90
arpifs/fullpos	extfpfboyd.F90, specfita.F90, specfitg.F90, sufpuf.F90
arpifs/io_serv	io_serv_handlef.F90, io_serv_recv.F90, io_serv_send.F90
arpifs/module	couplo4_mix.F90, yompldsw.F90
arpifs/setup	sugridspa.F90, sunmen.F90
arpifs/utility	dealddh.F90, espareordx.F90, freemem.F90, spareordx.F90, spreordx.F90
etrans/module	easre1_mod.F90
ifsaux/fa	fagribexi.h, fagribexr.h, fandat.F90
ifsaux/fi_pthread	fifo_body.h, fifo_decl.h
ifsaux/hack	bdump.c
ifsaux/include	precision.h
ifsaux/lfi	lfiarticles.F90, lfisuffix.h, lfisuffix.pl
ifsaux/misc	lfi_alt_remv.F90
ifsaux/programs	lfiindx.F90, lfipack.F90
mse/externals	aroini_surfa1.F90, fp2sx1fa.F90, ini_prep_surfex_aro.F90, ini_prep_surfex_aroa.F90, ini_prep_surfex_arob.F90
mse/interface	aroini_surfa1.h, ini_prep_surfex_aro.h, ini_prep_surfex_aroa.h, ini_prep_surfex_arob.h
mse/internals	old_ndim.F90, read_in_lfi_x2.F90, read_in_lfi_x3.F90, set_surfex_file_name_aro.F90, write_in_lfi_x1.F90, write_in_lfi_x2.F90, write_in_lfi_x3.F90
mse/new	arordgp_surf2.F90, arowrgp_surf2.F90, disgrid_surf_ext2.F90, diwrgrid_surf_ext2.F90, sfxconv.F90
utilities/aca	prepsurf_arome.F90

Modified:

aladin/coupling	ecoupl1.F90, etenc.F90
aladin/setup	elsac.F90, sueinif.F90, suetrans.F90
aladin/var	ebalvert.F90, ebalvertad.F90, ewrlsgrad.F90
arpifs/c9xx	cseaice.F90
arpifs/canari	caidgu.F90, canari.F90
arpifs/control	cnt3_wait.F90
arpifs/dia	posddh.F90, sunddh.F90, suppdate.F90
arpifs/fullpos	gridfpos.F90, scan2m_mpos.F90, sufpd.F90, sufpg.F90
arpifs/io_serv	io_serv_init.F90
arpifs/module	elbc0b_mod.F90, gom_mod.F90, model_mod.F90, sats_mix.F90,

	varbc_rad.F90, varbc_setup.F90, varbc_sfcobs.F90, yomct0.F90, yomobs.F90
arpifs/namelist	namafn.nam.h, namobs.nam.h
arpifs/obs_preproc	black.F90, decis.F90, defrun.F90, fgwnd.F90, kscatin.F90, obadat.F90, pertobs.F90, pertobs_interchan_corr.F90, pertobs_uncorr.F90, pre_thinner.F90, scaqc.F90, screen.F90, selec.F90, sugoms.F90, upecma.F90
arpifs/oops	allobs_oper_mod.F90, error_covariance_3d_mod.F90
arpifs/op_obs	hop.F90, hop_decide_required_sqls.F90, hradp_ml_tl.F90, hretr.F90, hretr_rad.F90, inv_refl1dstat.F90, mw_clearsky_screen_mfdecis.F90, obsop_rad.F90, rad1cemis.F90, radtr_ml.F90, sat_avg_stdev_filter.F90
arpifs/parallel	trmtos.F90, trstom.F90
arpifs/phys_dmn	achmt.F90, acmtud.F90, aplpar.F90, suparar.F90, suphmse.F90
arpifs/pp_obs	pos.F90, ppobsac.F90
arpifs/programs	hop_driver.F90
arpifs/setup	rdfa2sp.F90, su0yomb.F90, suafn1.F90, sucfu.F90, suct0.F90, suspeca.F90, suspeca_fixup.F90, sutrans.F90
arpifs/utility	maxgpfv.F90, pksurfa.F90, rdfa2gp.F90, wrgp2fa.F90
arpifs/var	jgvcor.F90, sujbwavelet0.F90, taskob.F90, taskobad.F90, taskobtl.F90
ecfftw/module	tpm_fftw.F90
ifsaux/fa	facdec.F90, facine.F90, facodx.F90, faicor.F90, fainig.F90, faipag.F90
ifsaux/module	rttov_const.F90
mse/externals	aro_surf_diagh.F90, canari_sx_ics.F90, fp2sx1.F90, prep1_real.F90, sugridsfx.F90, suphmse_surface.F90
mse/interface	prep_step0.h, prep_step1.h, prep_step2.h
mse/module	modd_io_surf_aro.F90
mse/new	sfxconv.F90, sfxlfi2fa.F90
mse/programs	sfxtools.F90
odb/lib	version.c
odb/pandor/fcq	fcqodb_pilotverif.F90, fcqodb_tempverif.F90
odb/pandor/module	bator_ecritures_mod.F90, bator_init_mod.F90
trans/module	ftdir_mod.F90, ftdirad_mod.F90, ftinv_mod.F90, ftinvad_mod.F90
utilities/combi	combi.F90, combi_pert.F90

Doc:
Miscellaneous catch-up from e-suite and bugfixes.

EXPECTED IMPACT:
As expected from e-suite
Projects: arpifs, satrad
Git branch: gco_CY42_cy43.01%guidardv_miscBfVar
Modified:

arpifs/dia	grib_code_message.F90
arpifs/module	model_mod.F90, varbc_rad.F90
arpifs/obs_preproc	defrun.F90
arpifs/op_obs	gpsro_oberror.F90, hopad.F90, hoptl.F90
satrad/rttov/ifs	phrtsetup.F90

Doc:
** arpifs/op_obs/gpsro_oberror.F90:*

Replace block:

```
61 IF (.NOT.(LECMWF)) THEN
62 Z_FRAC1 = 0.05_JPRB
63 ELSE
64 Z_FRAC1 = 0.2_JPRB
```

65 ENDIF
66 Z_FRAC2 = 0.01_JPRB

by:

61 IF (.NOT.(LECMWF)) THEN
62 Z_FRAC1 = 0.05_JPRB
63 Z_FRAC2 = 0.01_JPRB
64 ELSE
65 Z_FRAC1 = 0.2_JPRB
66 Z_FRAC2 = 0.0125_JPRB
67 ENDIF
Projects: arpifs
Git branch: gco_CY42_cy43.05%last_fixes
Modified:

arpifs/op_obs	gpsro_oberror.F90

Doc:
Manual merges from CY42_cy43.03 upon CY42R3.
Projects: algor, arpifs, odb
Git branch: gco_CY42_cy43b
Modified:

algor/external/minim	m1qn3_1dv.F
algor/internal/minim	m1qn3a_1dv.F, mlis0_1dv.F
arpifs/c9xx	aplm1g.F90, cseaice.F90, relspe.F90
arpifs/canari	caidgu.F90, canari.F90
arpifs/control	cprep3.F90
arpifs/dia	grib_code_message.F90
arpifs/fullpos	endvpos.F90, gridfpos.F90, scan2m_mpos.F90, sufpd.F90, sufpg.F90
arpifs/module	control_vectors_comm_mod.F90, elbc0b_mod.F90, gom_mod.F90, model_mod.F90, varbc_pred.F90, yomcosjo.F90
arpifs/namelist	namcosjo.nam.h
arpifs/obs_preproc	black.F90, decis.F90, defrun.F90, fgwnd.F90, obadat.F90, pertobs_interchan_corr.F90, pertobs_uncorr.F90, pre_thinner.F90, scaqc.F90, screen.F90, selec.F90, sugoms.F90, upecma.F90
arpifs/oops	error_covariance_3d_mod.F90
arpifs/op_obs	hop_decide_required_sqls.F90, inv_refl1dstat.F90, rad1cemis.F90, radtr_ml.F90, sat_avg_stdev_filter.F90
arpifs/parallel	trmtos.F90, trstom.F90
arpifs/phys_dmn	achmt.F90, acmtud.F90, aplpar.F90, suparar.F90, suphmse.F90, suphy0.F90
arpifs/pp_obs	pos.F90, ppobsac.F90
arpifs/setup	rdfa2sp.F90, su0yoma.F90, su0yomb.F90, suafn1.F90, sucfu.F90, sudyn.F90, sufpinif.F90, susc2b.F90, suspeca.F90, suspeca_fixup.F90, sutrans.F90, suxfu.F90
arpifs/utility	maxgpfv.F90, pksurfa.F90, rdfa2gp.F90, wrgp2fa.F90
arpifs/var	cvar2.F90, cvar2inad.F90, jgvcor.F90, sujbwavelet0.F90, sujbwavgen.F90
odb/pandor/module	bator_ecritures_mod.F90

KEMETMULLER Josef

Doc:
** arpifs/phys_dmn/suphy0.F90:*

Bugfix for uninitialized ITTYPE in case LCOEFKTKE is .FALSE.

** aladin/programs/holo.F90*
aladin/programs/unholo.F90:

Fix ESPAREORD call in holo and unholo.
Argument of ESPAREORD must be of type TDIM, so YLGEOMETRY%YRDIM is the correct choice.

** arpifs/phys_radi/rrtm_kgb3.F90:*

Remove unused ABOR1 statement.
Remove unnecessary "abor1.intfb.h" include.

** arpifs/module/yomspjb.F90:*

Use YDGEOMETRY as INTENT(IN) only, as nothing is being written to it.

** arpifs/setup/su0yomb.F90:*

Remove dead code: the allocation can never happen due to the abort above.

** odb/pandor/module/bator_decodnetcdf_mod.F90:*

Fix allocation check for POINTER variable. Pointer variables need the ASSOCIATED check instead of ALLOCATED.

** mse/externals/fp2sx1.F90*
mse/externals/ini_prep_surfex_aroc.F90:

Bugfix: match string length with dummy argument.

** arpifs/module/control_vectors_comm_mod.F90:*

1) Manually allocate YLSP for each thread of UN/PACK_CV.
This should fix an openMP problem with allocatable members in derived types. However the memory usage will be higher.
2) Add missing lines continuation.
3) Fix unneccessary duplication of YLSP.
4) Fix parentheses syntax error.
5) Remove a comment that did not reflect behaviour.

** aladin/setup/elsac.F90:*

Remove SPA3TO7 and SPA7TO3 in favor of a temporary SPECTRAL_FIELD.
Projects: aladin, arpifs, mse, odb
Git branch: kemetmullerj_CY42_cy43.02_phasing
Modified:

aladin/programs	holo.F90, unholo.F90
aladin/setup	elsac.F90
arpifs/module	control_vectors_comm_mod.F90, yomspjb.F90
arpifs/phys_dmn	suphy0.F90

arpifs/phys_radi	rrtm_kgb3.F90
arpifs/setup	su0yomb.F90
mse/externals	fp2sx1.F90, ini_prep_surfex_aroc.F90
odb/pandor/module	bator_decodnetcdf_mod.F90

Doc:
ALADIN & MSE phasing.

** mse/externals/fp2sx1.F90*
mse/externals/fp2sx2.F90
mse/externals/gridfpossfx_init.F90
mse/externals/prep1_real.F90
mse/externals/prep2_real.F90
mse/externals/prep_step1.F90
mse/externals/prep_step2.F90
mse/externals/rdclimosfx.F90
mse/interface/prep1_dumm.h
mse/interface/prep1_real.h
mse/interface/prep2_dumm.h
mse/interface/prep2_real.h
mse/interface/rdclimosfx.h:

Change INTENT of Variable YDGEOMETRY to INOUT.

The functions that end up being called are using YDGEOMETRY by INTENT(INOUT).

GRIDFPOS
-> GRIDFPOSSFX_INIT
-> PREP_STEP1
-> PREP1_REAL
-> PREP2_DUMM
-> RDCLIMOSFX
-> FP2SX1
-> RDCLIMOSFX
-> FP2SX2
-> PREP_STEP2
-> PREP1_DUMM
-> PREP2_REAL

** aladin/setup/elsac.F90:*

Add the parameter YDVARBC and pass it on to UPSPEC.

UPSPEC needs parameter YDVARBC since commit 6461eba93cb94a47210d3c4f31f78018d067cb5d .

** aladin/sinvect/ewrtsv.F90:*

Add YDVARBC to arguments and pass it on to STEPO and CAIN.

STEPO and CAIN need YDVARBC since commit 6461eba93cb94a47210d3c4f31f78018d067cb5d .

** arpifs/canari/can1.F90*

Pass the parameter YDVARBC to UPSPEC.

UPSPEC needs parameter YDVARBC since commit 6461eba93cb94a47210d3c4f31f78018d067cb5d.

** aladin/sinvect/echnorm.F90*
aladin/var/ewreini.F90

arpifs/control/cgr1.F90
arpifs/control/cnt3.F90
arpifs/sinvect/nalan1.F90
arpifs/sinvect/opk.F90
arpifs/var/costra.F90:

Add the parameter YDVARBC to ELSAC, ECHNORM, ECOSJR, EWREINI and EWRTSV.

** aladin/c9xx/eincli1.F90*
aladin/c9xx/eincli10.F90
aladin/dia/ewmovph.F90
aladin/setup/sueinif.F90
mse/externals/aro_surf_diagh.F90:

Relocate variables from removed struct YOMOPH:YROPH.

Get NCADFORM, LINC, CNMCA, CETSTAMP,VALHIO, VBHIO from YOMOMPHO instead of removed YOMOPH:YROPH.

** mse/externals/canari_sx_ics.F90*
mse/interface/sugridsfx.h
mse/module/modd_io_surf_aro.F90
mse/new/sfxfa2lfi.F90
mse/new/sfxfilter.F90
mse/new/sfxlfi2fa.F90
mse/new/sfxlist.F90:

Change YDGEOMETRY to INTENT(INOUT) as required by the SURFEX routines.

** aladin/setup/suegem_naml.F90:*

Make YDGEOMETRY variable a target.

** aladin/setup/suemp.F90:*

Correct SETUP_SPEC call to match parameter-list.

** aladin/utility/cchien.F90:*

Relocate variables from removed struct YOMOPH:YROPH.

Get VALHIO, VBHIO from YOMOMPHO instead of removed YOMOPH:YROPH.

** arpifs/module/yomsp.F90:*

Make SPECTRAL_FIELD SPA3 a TARGET.

** aladin/var/suejknorm.F90:*

Forward YD_JB_STRUCT to call of COMMJBDAT.

** arpifs/oops/error_covariance_3d_mod.F90*

Forward YDVARBC to SUEJCOV, forward YDVARBC and YD_JB_STRUCT to SUESCAL.

** aladin/sinvect/esptrlcz.F90:*

Update call for ALLOCATE_SPEC.

** aladin/adiab/especrt.F90:*

Use BACKGROUND instead of SPA7.

** aladin/var/ewrlsgrad.F90:*

Get CNMCA and LINC from YOMOPH0 instead of YROPH.

** aladin/var/ecosjr.F90:*

WARNING: SPA7 disappeared we just make it compile and call ABOR1.

** aladin/var/suejbdat96.F90:*

Forward YD_JB_STRUCT to COMMJBDAT.

** aladin/var/suejbcov.F90*
aladin/var/suejbstd.F90
aladin/var/suejbtest.F90
aladin/var/suescal.F90
arpifs/setup/su0yomb.F90:

Multiple SU Changes.

Forward YDVARBC, BACKGROUND, JB_STRUCT, YD_JB_STRUCT.
Remove 801 as in global model.

** aladin/var/ecoptra.F90:*

WARNING: We just make it compile using an ABOR1, but not fix it!
Add YDVARBC to arguments and pass it on to STEPO and CAIN

Projects: aladin, arpifs, mse
Git branch: kemetmullerj_CY42_cy43_phasing
Modified:

aladin/adiab	especrt.F90
aladin/c9xx	eincli1.F90, eincli10.F90
aladin/dia	ewmovph.F90
aladin/setup	elsac.F90, suegem_naml.F90, sueinif.F90, suemp.F90
aladin/sinvect	echnorm.F90, esptrlcz.F90, ewrtsv.F90
aladin/utility	cchien.F90
aladin/var	ecoptra.F90, ecosjr.F90, ewreini.F90, ewrlsgrad.F90, suejbcov.F90, suejbdat96.F90, suejbstd.F90, suejbtest.F90, suejknorm.F90, suescal.F90
arpifs/canari	can1.F90
arpifs/control	cgr1.F90, cnt3.F90
arpifs/module	yomsp.F90
arpifs/oops	error_covariance_3d_mod.F90
arpifs/setup	su0yomb.F90
arpifs/sinvect	nalan1.F90, opk.F90
arpifs/var	costra.F90
mse/externals	aro_surf_diagh.F90, canari_sx_ics.F90, fp2sx1.F90, fp2sx2.F90, gridfpossfx_init.F90, prep1_real.F90, prep2_real.F90, prep_step1.F90, prep_step2.F90, rdclimosfx.F90
mse/interface	prep1_dumm.h, prep1_real.h, prep2_dumm.h, prep2_real.h, rdclimosfx.h, sugridsfx.h
mse/module	modd_io_surf_aro.F90
mse/new	sfxfa2lfi.F90, sfxfilter.F90, sfxlfi2fa.F90, sfxlist.F90

PAYAN Christophe

Doc:
Spatial thinning mode of NSCAT6 code type (Kuscat data as RapidSCAT) under key NSCATT_THIN (NAMOBS):

- NSCATT_THIN=0 => no thinning (historical use);
- NSCATT_THIN=1 => spatial thinning as NSCAT2 (ERS) and NSCAT3 (ASCAT).
The weighting in the cost function may be adjusted in function of the chosen spatial thinning (WSCAT6_FAC).

EXPECTED IMPACT:
NSCATT_THIN=1 versus NSCATT_THIN=0, the number of active NSCAT6 data (50km grid RapidSCAT data) is approximately divided by a factor 4
with a 100km thinning, as it is currently made for the other SCATT winds (ASCAT).

Projects: arpifs
Git branch: payan_CY42_cy43.01_kscat-thinfix
Modified:

arpifs/obs_preproc	defrun.F90, new_thinn.F90

Doc:
Miscellaneous merging of CY42_r3 subroutines on CY42_cy43.04.

Projects: arpifs
Git branch: payan_CY42_cy43v04_merger3updt
Modified:

arpifs/obs_preproc	pertobs.F90, pertobs_satob_corr.F90
arpifs/oops	allobs_oper_mod.F90
arpifs/op_obs	co2slicing_ml.F90, hop.F90, hretr_rad.F90, obsop_rad.F90, radtr_ml.F90
arpifs/programs	hop_driver.F90
arpifs/var	taskob.F90, taskobad.F90, taskobtl.F90

TAILLEFER Francoise

Doc:
First effort to run 923 configuration (problem of geometry phasing in spectral part solved).

NO NUMERICAL IMPACT IS EXPECTED.
Projects: algor, arpifs, mse
Git branch: tailefer_CY42_db923
Modified:

algor/external/minim	m1qn3r.F
algor/internal/minim	ddr.F, ddsr.F, m1qn3ar.F
arpifs/c9xx	aplm1g.F90, grtestr.F90, relspe.F90
mse/module	sfxflddesc_mod.F90

Doc:
Miscellaneous modifications.

1) Modifications for conf 923 (validated now in all the cases).
2) Beginning debugging screening and minimization for AROME.
3) Force redzone to 0 in lamflag for CANARI.
4) Debug coupling_surf task.
5) Debug HOLO/UNHOLO for LAM.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: aladin, algor, arpifs, mse, odb, trans
Git branch: tailefer_CY42_dbdiv
Modified:

aladin/programs	holo.F90, unholo.F90
algor/internal/minim	dd.F, ddr.F, dds.F, ddsr.F, m1qn3a.F, mlis0r.F
arpifs/c9xx	sid1.F90, sid2.F90
arpifs/obs_preproc	read_iasichans.F90
arpifs/op_obs	co2slicing_ml.F90, hoptl.F90
mse/externals	fp2sx1.F90, ini_prep_surfex_aroc.F90
odb/pandor/module	bator_util_mod.F90
trans/module	ftinv_ctl_mod.F90

YESSAD Karim

Doc:
1) Fix for pre-cy43: first set.
2) MITRAILLETTE environnement update.

NO NUMERICAL IMPACT IS EXPECTED.
Projects: arpifs, mitraille
Git branch: yessad_CY42_cy43V01bf1
Added:

mitraille/namelist	obsolete_naml_ahut_e001_sl2
mitraille/pro_file	PRO_FILE.cy43_aldmonoref, PRO_FILE.cy43_aldmultiref, PRO_FILE.cy43_arpmonoref, PRO_FILE.cy43_arpmultiref

Modified:

arpifs/setup	su0yoma.F90
mitraille/namelist	namg_fila, namg_filb, namg_fpfa, namg_fpfb, namg_fpga, namg_fpla, namg_fplb, namg_fpmb, namg_fpmc, namg_fpsa, namg_fpsu_fc, namg_fpsu_fp, namg_fpsu_fp_l03, namg_fpsu_fp_l15, namg_fpsv_addnhvar, namg_fpsv_addnhvar_l15, namg_fpsv_gpq, namg_fpsv_gpq_l15, naml_ag1t_e001_fr_oper, naml_ah2s_e001_2dm_sl3, naml_ah2t_e001_2dm_sl2, naml_ah6e_e601_eul_physb, naml_ah6t_e601_sl2_physb, naml_ah9e_e927_fp_aru, naml_ah9e_ee927_fp_arunes, naml_ahfe_e001_fp_ope2, naml_ahme_e001_fp_lamars, naml_ahut_e001_sl2, naml_an2s_e001_nh2dm_d4_sl3, naml_an2t_e001_nh2dm_d4_sl2, naml_ar1t_e001_hyd, naml_ar1t_e001_hydmad, naml_ar1t_e001_pcc, naml_ar1t_e001_pccmad, naml_ar1t_e001_pccmad_adiab, naml_ar1t_e001_pccmadios, naml_ar1t_e001_pcf, naml_arut_e001_sl2, vv_complete_physics_arome

Doc:
Corrections and MITRAILLETTE environment update:
** update MITRAILLETTE environment (CY43, v012016);*
** one additional file under mitraille/doc describing changes to bring in namelists;*
** bug correction in LARCINB;*
** set right default for ND4SYS in SUDYNA.*

NO NUMERICAL IMPACT IS EXPECTED.
Projects: arpifs, mitraille
Git branch: yessad_CY42_cy43V04bf2
Deleted:

mitraille/doc	aainfo_mitraille_v032015.pdf
mitraille/namelist	obsolete_naml_ahut_e001_sl2, ssel_ar1t_frangp0025_0, ssel_ar1t_frangp0025_3, zfutur_naml_ahfe_e001_inl_fp
mitraille/pro_file	PRO_FILE.cy41t1_aldmonoref, PRO_FILE.cy41t1_aldmultiref, PRO_FILE.cy41t1_arpmonoref, PRO_FILE.cy41t1_arpmultiref

Renamed:

mitraille/pro_file	PRO_FILE.cy43_aldmonoref mitraille/pro_file/PRO_FILE.currentcycle_aldmonoref, PRO_FILE.cy43_aldmultiref mitraille/pro_file/PRO_FILE.currentcycle_aldmultiref, PRO_FILE.cy43_arpmonoref mitraille/pro_file/PRO_FILE.currentcycle_arpmonoref, PRO_FILE.cy43_arpmultiref mitraille/pro_file/PRO_FILE.currentcycle_arpmultiref

mitraille/procedure	mitraillette_v032015.x mitraille/procedure/mitraillette.x
Added:	
mitraille/doc	doc_mitraillette.pdf, history_difnam
Modified:	
arpifs/adiab	larcinb.F90
arpifs/setup	sudyna.F90
mitraille/namelist	aainfo, naml_ar1t_e001_hyd, naml_ar1t_e001_hydmad, naml_ar1t_e001_pcc, naml_ar1t_e001_pccmad, naml_ar1t_e001_pccmad_adiab, naml_ar1t_e001_pccmadios, naml_ar1t_e001_pcf, naml_arut_e001_sl2, sel_ag1t_exseg1, sel_ahfe_exseg1, sel_ar1t_3, sel_ar1t_exseg1, sel_arut_exseg1, sel_axsy_makepgd_fa_arome_frangp, vv_complete_physics_arome, vv_simplified_physics, vv_simplified_physics_4, vv_simplified_physics_5, vv_simplified_physics_6
mitraille/protojobs	aainfo, config, timetable, jobl_an2s_e001_nh2dm_d4_sl3, jobl_an2t_e001_nh2dm_d4_sl2
mitraille/protojobs/beaufix	config, timetable