

State of the art of the development of the Arome Diagnostics

Actions	Auteur	Etat	livraison
surfex Diag and call surfex/nproma	RZ	The diag of surfex are called on the part 5 of stepo	RZ--> cc branch given to YS (ok), Inside YS cc branch for 31T1 .
Writing of rainfall by CPG_DIA	RZ	Separation of surfex diag and surfex I/O. The I/I are done under IOPACK and the diag under CPG_DIA. Work not entirely completed because of an abort during the I/O. Pack of Rashyd on ~mrpe729/pack/surfex + email of 17 of may. If no volunteer GH will try to continue.	32 ?
New Surface fluxes	GH	detailed radiative budget + dvt of diag of wind friction. Switch on by key LSURF_NET_BUDGET in EXSEG1.nam namelist.	Surfex internal modifications → cc banch GH given to PLM (ok) → YS (ok) inside YS cc branch for 31T1 (beginning of june)

Budgets	TK	Plug-in of MNH physics budget for Arome. Tendancies→ fluxes conversion. Key LPHCDPI (Common Dynamical Physical Interface) of NAMPHY.	Inside JMP cc branch for 31T1 (beginning of June)
DDH	TK-JMP	Plug-on of DDH for Arome :variables vertical profiles at given grid-points or inside given horizontal domains. variables profiles (LONLYVAR=T in NAMDDH), or variables + prognostics budgets (LONLYVAR=F in NAMDDH).	Inside JMP cc branch 31T1
Easy Diag	SM	New GFL (Ezdiag) allows to write variables inside the physics run at chosen time steps (by namelist actions)	Inside cc branch 1D de SM for 31T1 (beginning of june)

Short user-doc to use DDH in AROME

DDH files output frequencies of geographical domains : add in NAMCT0 for example the following variable:

- > NFRDHFD=1,
- > NDHFDTS(0)=-6,
- > NDHFDTS(1)=-1,
- > NDHFDTS(2)=-2,
- > NDHFDTS(3)=-3,
- > NDHFDTS(4)=-4,
- > NDHFDTS(5)=-5,

> NDHFDT(6)=-6,

To switch on AROME DDH, variable mode only, put in NAMDDH

> LHDHKS=.TRUE.,
> LHDDOP=.TRUE.,
> LHDEFD=.TRUE.,
> BDEDDH(1,01)=4., BDEDDH(2,01)=1., BDEDDH(3,01)=0001.374, BDEDDH(4,01)=0043.575,
> BDEDDH(1,02)=4., BDEDDH(2,02)=1., BDEDDH(3,02)=-000.692, BDEDDH(4,02)=0044.832,
> BDEDDH(1,03)=4., BDEDDH(2,03)=1., BDEDDH(3,03)=0004.407, BDEDDH(4,03)=0043.858,
> BDEDDH(1,04)=4., BDEDDH(2,04)=1., BDEDDH(3,04)=0000.370, BDEDDH(4,04)=0043.128,
> LHDLIST=.FALSE.,
> LONLYVAR=.TRUE.,
> LHDORIGP=.FALSE.,
> LHDCDPI=.FALSE.,

To switch on AROME DDH, Variables + budgets : put in NAMDDH

> LHDHKS=.TRUE.,
> LHDDOP=.TRUE.,
> LHDEFD=.TRUE.,
> BDEDDH(1,01)=4., BDEDDH(2,01)=1., BDEDDH(3,01)=0001.374, BDEDDH(4,01)=0043.575,
> BDEDDH(1,02)=4., BDEDDH(2,02)=1., BDEDDH(3,02)=-000.692, BDEDDH(4,02)=0044.832,
> BDEDDH(1,03)=4., BDEDDH(2,03)=1., BDEDDH(3,03)=0004.407, BDEDDH(4,03)=0043.858,
> BDEDDH(1,04)=4., BDEDDH(2,04)=1., BDEDDH(3,04)=0000.370, BDEDDH(4,04)=0043.128,
> LHDLIST=.FALSE.,
> LONLYVAR=.FALSE.,
> LHDORIGP=.TRUE.,
> LHDCDPI=.TRUE.,