

Notes sur l'integration des differentes version de SEM 2D et 3D

- Pour le couplage avec MKA3D on introduit Tdomain%communicateur qui vaut MPLCOMMWORLD dans le cas non couple.

SEM2D/Capteur.f90

SEM3D/Capteur.f90

- Les sources ont la meme structure, et quasi identique a l'exception du traitement de la troisieme dimension pour SEM3D

calcul_xi_eta_psi : calcul des coordonnees locales d'une maille duplique pour les capteur, le couplage, la source ?

- bugge pour les capteurs.

SourcePosition.f90 : calcul des coordonnees locales duplique (dans SEM3D Mka), dans Receiver-Position sur RegSEM.U

Courant.f90 : dans Mka on calcule le pas de temps en fonction du pb

allocate_domain.f90 : on traite amortissement et anisotropie -> pas besoin des Acoef. ils sont encore alloues pour PML oubli ?

- ForcesMka : allouee meme sans couplage ??

invert_3d.f90 : librairie ?

RegSEM.U -- SEM3D-mka

Dans les deux versions on ajoute

```
!! Local Variables:
!! mode: f90
!! show-trailing-whitespace: t
!! End:
```

et un entete

```
!>
!! \file get_Mass_Elem2Face.f90
!! \brief
!! \author
!! \version 1.0
!! \date
!!
!<
```

Files RegSEM.U/CODE/Newmark.f90 and mka3d/mka3d-src/SEM3D/SRC/Newmark.f90 differ :

- communicateur, couplages, arguments de CALL xxx et save_trace

Files RegSEM.U/CODE/SourcePosition.f90 and mka3d/mka3d-src/SEM3D/SRC/SourcePosition.f90 differ :

- output (mpi) et calcul xi,eta,zeta de la source

Files RegSEM.U/CODE/VALEPO.f90 and mka3d/mka3d-src/SEM3D/SRC/VALEPO.f90 differ

Files RegSEM.U/CODE/WELEGL.f90 and mka3d/mka3d-src/SEM3D/SRC/WELEGL.f90 differ

Files RegSEM.U/CODE/ZELEGL.f90 and mka3d/mka3d-src/SEM3D/SRC/ZELEGL.f90 differ :

- passage en module f90

Files RegSEM.U/CODE/allocate_domain.f90 and mka3d/mka3d-src/SEM3D/SRC/allocate_domain.f90 differ :

- anisotropie, couplage

Files RegSEM.U/CODE/compute_GLL.f90 and mka3d/mka3d-src/SEM3D/SRC/compute_GLL.f90 differ :

- use module f90

Files RegSEM.U/CODE/courant.f90 and mka3d/mka3d-src/SEM3D/SRC/courant.f90 differ :

- calcul du dt en fonction de courant

Files RegSEM.U/CODE/deallocate_domain.f90 and mka3d/mka3d-src/SEM3D/SRC/deallocate_domain.f90 differ :

- cf allocate

Files RegSEM.U/CODE/define_arrays.f90 and mka3d/mka3d-src/SEM3D/SRC/define_arrays.f90 differ :

- aniso, communicateur, et depuis peu MPML

Files RegSEM.U/CODE/define_neu_properties.f90 and mka3d/mka3d-src/SEM3D/SRC/define_neu_properties.f90 differ :

- bidouilles pour ngll = 6, 8

Files RegSEM.U/CODE/define_planew_properties.f90 and mka3d/mka3d-src/SEM3D/SRC/define_planew_properties.f90 differ :

- DKappa, semfiles

Files RegSEM.U/CODE/drive_sem.f90 and mka3d/mka3d-src/SEM3D/SRC/drive_sem.f90 differ :

- couplage, force_int

Files RegSEM.U/CODE/global_numbering.f90 and mka3d/mka3d-src/SEM3D/SRC/global_numbering.f90 differ :

- un gros bout a ete supprime dans RegSEM.U

Files RegSEM.U/CODE/read_input.f90 and mka3d/mka3d-src/SEM3D/SRC/read_input.f90 differ :

- aniso, print mpi, et petites diff du format de fichier

Files RegSEM.U/CODE/read_restart.f90 and mka3d/mka3d-src/SEM3D/SRC/read_restart.f90 differ :

Files RegSEM.U/CODE/save_checkpoint.f90 and mka3d/mka3d-src/SEM3D/SRC/save_checkpoint.f90 differ :

- aniso, format hdf5, semfiles

Files RegSEM.U/CODE/savefield.f90 and mka3d/mka3d-src/SEM3D/SRC/savefield.f90 differ :

- sorties spécifiques mka3d ?

Files RegSEM.U/CODE/savetrace.f90 and mka3d/mka3d-src/SEM3D/SRC/savetrace.f90 differ :

- il y a un dt2/nt2 dans version RegSem.U, semfiles

Files RegSEM.U/CODE/shape8.f90 and mka3d/mka3d-src/SEM3D/SRC/shape8.f90 differ :

- creation fichier PostG, connect,
- deallocate Iglobnum_Face, Iglobnum_Edge, verification orientation faces

Diff recursif

```
diff -wqs RegSEM.U/CODE/ ~/work/mka3d/mka3d-src/SEM3D/SRC/
Common subdirectories: RegSEM.U/CODE/BLAS and mka3d/mka3d-
src/SEM3D/SRC/BLAS
Only in mka3d/mka3d-src/SEM3D/SRC/: Capteur.f90
Files RegSEM.U/CODE/Comm_Forces_Edge.f90 and mka3d/mka3d-
src/SEM3D/SRC/Comm_Forces_Edge.f90 are identical
Files RegSEM.U/CODE/Comm_Forces_Face.f90 and mka3d/mka3d-
src/SEM3D/SRC/Comm_Forces_Face.f90 are identical
Files RegSEM.U/CODE/Comm_Forces_Vertex.f90 and mka3d/mka3d-
src/SEM3D/SRC/Comm_Forces_Vertex.f90 are identical
Files RegSEM.U/CODE/Comm_Mass_Edge.f90 and mka3d/mka3d-
src/SEM3D/SRC/Comm_Mass_Edge.f90 are identical
Files RegSEM.U/CODE/Comm_Mass_Face.f90 and mka3d/mka3d-
src/SEM3D/SRC/Comm_Mass_Face.f90 are identical
Files RegSEM.U/CODE/Comm_Mass_Vertex.f90 and mka3d/mka3d-
src/SEM3D/SRC/Comm_Mass_Vertex.f90 are identical
Files RegSEM.U/CODE/DMLEGL.f90 and mka3d/mka3d-
src/SEM3D/SRC/DMLEGL.f90 are identical
Only in RegSEM.U/CODE/: Makefile
Common subdirectories: RegSEM.U/CODE/Modules and mka3d/mka3d-
src/SEM3D/SRC/Modules
Files RegSEM.U/CODE/Newmark.f90 and mka3d/mka3d-
src/SEM3D/SRC/Newmark.f90 differ
Files RegSEM.U/CODE/PML_def.f90 and mka3d/mka3d-
src/SEM3D/SRC/PML_def.f90 are identical
Only in mka3d/mka3d-src/SEM3D/SRC/: README_SEM3D
Only in RegSEM.U/CODE/: ReceiverExactPosition.f90
Only in mka3d/mka3d-src/SEM3D/SRC/: ReceiverPosition.f90
Files RegSEM.U/CODE/SourcePosition.f90 and mka3d/mka3d-
src/SEM3D/SRC/SourcePosition.f90 differ
Files RegSEM.U/CODE/VALEPO.f90 and mka3d/mka3d-
src/SEM3D/SRC/VALEPO.f90 differ
Files RegSEM.U/CODE/WELEGL.f90 and mka3d/mka3d-
src/SEM3D/SRC/WELEGL.f90 differ
Files RegSEM.U/CODE/ZELEGL.f90 and mka3d/mka3d-
src/SEM3D/SRC/ZELEGL.f90 differ
Files RegSEM.U/CODE/allocate_domain.f90 and mka3d/mka3d-
src/SEM3D/SRC/allocate_domain.f90 differ
```

Only in mka3d/mka3d-src/SEM3D/SRC/: attenuation_aniso_update.f90
 Only in mka3d/mka3d-src/SEM3D/SRC/: attenuation_update.f90
 Only in mka3d/mka3d-src/SEM3D/SRC/: calcul_forces.f90
 Only in mka3d/mka3d-src/SEM3D/SRC/: calcul_forces_aniso.f90
 Only in mka3d/mka3d-src/SEM3D/SRC/: calcul_forces_aniso_att.f90
 Only in mka3d/mka3d-src/SEM3D/SRC/: calcul_forces_att.f90
 Files RegSEM.U/CODE/compute_GLL.f90 and mka3d/mka3d-src/SEM3D/SRC/compute_GLL.f90 differ
 Only in mka3d/mka3d-src/SEM3D/SRC/: compute_constant_Q.c
 Only in mka3d/mka3d-src/SEM3D/SRC/: compute_iso_Q.c
 Only in mka3d/mka3d-src/SEM3D/SRC/: constant_Q2_sub.c
 Only in mka3d/mka3d-src/SEM3D/SRC/: convertirUnv.f90
 Files RegSEM.U/CODE/courant.f90 and mka3d/mka3d-src/SEM3D/SRC/courant.f90 differ
 Files RegSEM.U/CODE/deallocate_domain.f90 and mka3d/mka3d-src/SEM3D/SRC/deallocate_domain.f90 differ
 Files RegSEM.U/CODE/define_arrays.f90 and mka3d/mka3d-src/SEM3D/SRC/define_arrays.f90 differ
 Files RegSEM.U/CODE/define_neu_properties.f90 and mka3d/mka3d-src/SEM3D/SRC/define_neu_properties.f90 differ
 Files RegSEM.U/CODE/define_planew_properties.f90 and mka3d/mka3d-src/SEM3D/SRC/define_planew_properties.f90 differ
 Only in mka3d/mka3d-src/SEM3D/SRC/: double_couple.f90
 Files RegSEM.U/CODE/drive_sem.f90 and mka3d/mka3d-src/SEM3D/SRC/drive_sem.f90 differ
 Only in mka3d/mka3d-src/SEM3D/SRC/: forces_int.f90
 Files RegSEM.U/CODE/getPMLpred_e2el.f90 and mka3d/mka3d-src/SEM3D/SRC/getPMLpred_e2el.f90 are identical
 Files RegSEM.U/CODE/getPMLpred_f2el.f90 and mka3d/mka3d-src/SEM3D/SRC/getPMLpred_f2el.f90 are identical
 Files RegSEM.U/CODE/getPMLpred_v2el.f90 and mka3d/mka3d-src/SEM3D/SRC/getPMLpred_v2el.f90 are identical
 Files RegSEM.U/CODE/get_Displ_Edge2Elem.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Displ_Edge2Elem.f90 are identical
 Files RegSEM.U/CODE/get_Displ_Face2Elem.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Displ_Face2Elem.f90 are identical
 Files RegSEM.U/CODE/get_Displ_Vertex2Elem.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Displ_Vertex2Elem.f90 are identical
 Files RegSEM.U/CODE/get_Forces_Elem2Edge.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Forces_Elem2Edge.f90 are identical
 Files RegSEM.U/CODE/get_Forces_Elem2Face.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Forces_Elem2Face.f90 are identical
 Files RegSEM.U/CODE/get_Forces_Elem2Vertex.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Forces_Elem2Vertex.f90 are identical
 Files RegSEM.U/CODE/get_Mass_Elem2Edge.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Mass_Elem2Edge.f90 are identical
 Files RegSEM.U/CODE/get_Mass_Elem2Face.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Mass_Elem2Face.f90 are identical
 Files RegSEM.U/CODE/get_Mass_Elem2Vertex.f90 and mka3d/mka3d-src/SEM3D/SRC/get_Mass_Elem2Vertex.f90 are identical
 Files RegSEM.U/CODE/global_numbering.f90 and mka3d/mka3d-src/SEM3D/SRC/global_numbering.f90 differ
 Only in mka3d/mka3d-src/SEM3D/SRC/: input.spec

Files RegSEM.U/CODE/invert2.f90 and mka3d/mka3d-src/SEM3D/SRC/invert2.f90 are identical
Files RegSEM.U/CODE/invert_3d.f90 and mka3d/mka3d-src/SEM3D/SRC/invert_3d.f90 are identical
Only in mka3d/mka3d-src/SEM3D/SRC/: iso_Q2_sub.c
Only in mka3d/mka3d-src/SEM3D/SRC/: nrutil.c
Only in mka3d/mka3d-src/SEM3D/SRC/: ondelette.f90
Only in RegSEM.U/CODE/: openfield.f90
Only in mka3d/mka3d-src/SEM3D/SRC/: pol_force.f90
Only in mka3d/mka3d-src/SEM3D/SRC/: pol_lagrange.f90
Files RegSEM.U/CODE/pow.f90 and mka3d/mka3d-src/SEM3D/SRC/pow.f90 are identical
Files RegSEM.U/CODE/read_input.f90 and mka3d/mka3d-src/SEM3D/SRC/read_input.f90 differ
Files RegSEM.U/CODE/read_restart.f90 and mka3d/mka3d-src/SEM3D/SRC/read_restart.f90 differ
Files RegSEM.U/CODE/save_checkpoint.f90 and mka3d/mka3d-src/SEM3D/SRC/save_checkpoint.f90 differ
Files RegSEM.U/CODE/savefield.f90 and mka3d/mka3d-src/SEM3D/SRC/savefield.f90 differ
Only in mka3d/mka3d-src/SEM3D/SRC/: savefield_disp.f90
Files RegSEM.U/CODE/savetrace.f90 and mka3d/mka3d-src/SEM3D/SRC/savetrace.f90 differ
Only in mka3d/mka3d-src/SEM3D/SRC/: set_attenuation_aniso_param.f90
Only in mka3d/mka3d-src/SEM3D/SRC/: set_attenuation_param.f90
Only in mka3d/mka3d-src/SEM3D/SRC/: shape27.f90
Files RegSEM.U/CODE/shape8.f90 and mka3d/mka3d-src/SEM3D/SRC/shape8.f90 differ