From: **EL KHATIB Ryad** <ryad.elkhatib@meteo.fr>
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Subject: [system experts : ALADIN-HIRLAM contact points] [alabobo2] problem with 927 "POINTS OUT OF DOMAIN" in export version
To: alabobo2@meteo.fr

Dear all, let's start by this one ;-)

problem with 927 "POINTS OUT OF DOMAIN" in the export version - actually this is Fullpos-2 so you must be having in namelist "NFPOS=2" :

This issue with E-zone came in with Fullpos-2.
In this new framework, a dummy E-zone has to be setup for interpolations ; then it will be overwritten by a true biperiodicization.
This dummy E-zone could be placed anywhere inside the input domain but it should not be placed too near from the input domain borders to avoid an abort later (in suefpg3), even if the interpolations for these points would be dummy.
There were various possible strategies to setup this E-zone ; for instance one could just place it in the middle of the output domain ; or spread it all over the output domain (but not too near from the domain borders). The strategy I used was to set all the E-zone at the same point, as far as possible from the center of the output doamin in the idea that it will limit the load imbalance of the interpolations. However my strategy was a bit rough in the calculation of this point, so eventually we added a parameter in namelist NEMFPEZO : RCO_EZO to "push" this point toward the center of the domain.
Consequently, the cure should be to set RCO_EZO to a bigger (even much much bigger) value than the default. Actually the default value is 5._JPRB in the export version but it has been increased to 80.0_JPRB in more recent version !
But the proper solution should be to calculate the E-zone point exactly, without the need of RCO_EZO. Even better : the E-zone points should be calculated to be spread all over the limits of the output domain : this should be the almost optimal solution to minimize the load imbalance.

Best regards,
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