# Porting of ALARO-0 to Linux Cluster

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## Compiling ALARO-0

code:LAM-cy29t2_alaro_jan07.IA32_intel90.score
local compiler: Intel 9.0
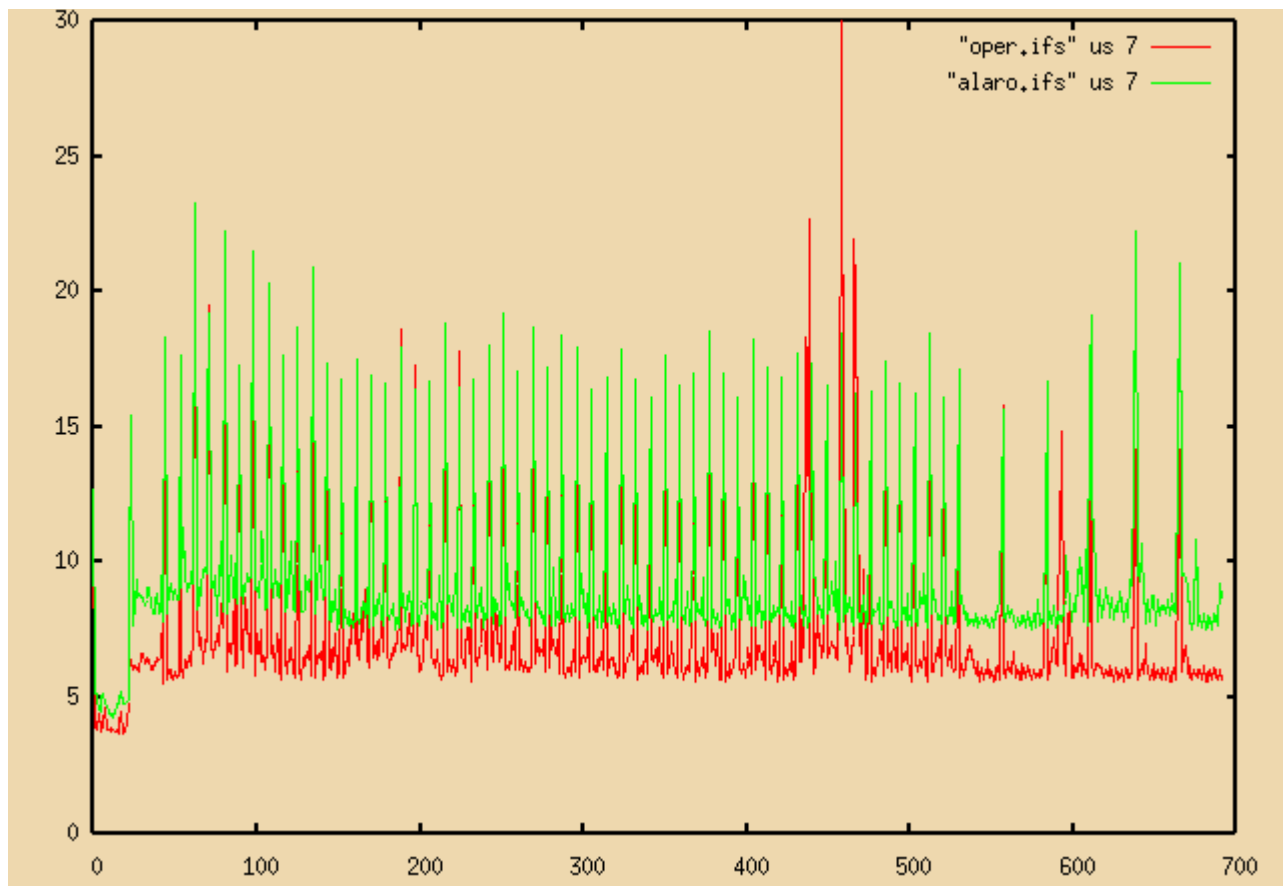gmkpack is not used, our compilation is based on a set of Makefiles, prepared with a simple perl script.

compilation errors: only due to syntax  (same as O.Spaniel (sk) reported)

1. src/local/arp/phys_dmn/suaer15.F90
```
   fortcom: Error: suaer15.F90, line 71: Syntax error, found ')' when
   expecting one of: ( <IDENTIFIER> <CHAR_CON_KIND_PARAM>
   <CHAR_NAM_KIND_PARAM> <CHARACTER_CONSTANT> <INTEGER_CONSTANT> ...
    ),SHAPE=(/5,5/))
   -^
```

2. src/local/arp/phys_dmn/acdifus.F90
```
   IF ((NSTEP <= NSTAR2).AND.(YTKE_NL%NREQIN = 0)) THEN
   has to be changed to
   IF ((NSTEP <= NSTAR2).AND.(YTKE_NL%NREQIN == 0)) THEN
```

## Running ALARO-0

ALARO-0 is compared with the operational run for 12. Feb 2007 00 run. Integration till +72 with DFI needed 107 minutes to finish, operational run 86 minutes (ICMSH file is written every hour till +54, after every 3 hours). Prolongation of around 25% is expected. ALARO-0 is in double suite since 15th February.

CPU time (sec) for each time step is presented on the graph (from 1-42 are DFI steps, 43 is first real time step), 22 processors are used, green ALARO-0, red operational run.

aladin (operational run)
Nodes:22, User:79.53[M], Elapsed:**85.43[M]**, CSW:9772, CKPT:0
03:08:26 DFI
03:12:19 STEP 0
04:33:34 STEP 648

alaro (simulated operational run)
Nodes:22, User:102.1[M], Elapsed:**106.6[M],** CSW:12435, CKPT:0
12:01:33 DFI
12:06:42 STEP 0
13:47:50 STEP 648