

Phasing report for pre-CY40

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The first Aladin mitraillette tests were done to perform comparison between cy39t1_r1.05 and cy39t1_main.01 (the reference).

The status of validation was as follows (only the crashing part) :

AH8T51 :

cy39t1_main.01 :

```
18:38:56 STEP    6 H= 0:24 +CPU= 0.020
18:38:56 STEP    7 H= 0:28 +CPU= 0.017
 * 250 Floating-point data overflow PROG=elarchead ELN=358(4082caa18)
 * 250 Floating-point data overflow PROG=elarchead ELN=358(4082caa18)
```

cy39t1_r1.05 :

```
16:41:37 STEP    6 H= 0:24 +CPU= 0.018
16:41:37 STEP    7 H= 0:28 +CPU= 0.017
**** 90 Fatal exception PROG=elascaw ELN=503(407674db4)
SIGSEGV: Segmentation violation
    Called from larcina ELN=487(400508d40)
    Called from elarmes5 ELN=431(40866e490)
    Called from lapinea5 ELN=328(40784fe98)
    Called from call_sl_ad ELN=458(4021fd36c)
    Called from gp_model_ad ELN=649(40126a114)
```

AH8T052 :

cy39t1_main.01 :

```
18:40:36 STEP    6 H= 0:24 +CPU= 0.020
18:40:36 STEP    7 H= 0:28 +CPU= 0.018
 * 250 Floating-point data overflow PROG=elarchead ELN=358(4082caa18)
 * 250 Floating-point data overflow PROG=elarchead ELN=358(4082caa18)
```

cy39t1_r1.05 :

```
16:42:18 STEP    6 H= 0:24 +CPU= 0.020
16:42:18 STEP    7 H= 0:28 +CPU= 0.018
 * 250 Floating-point data overflow PROG=elarchead ELN=358(4075c4d18)
 * 250 Floating-point data overflow PROG=elarchead ELN=358(4075c4d18)
```

AN1E055 & AN1E056 :

cy39t1_r1.05 :

```
>>>ignore_signals(): DR_HOOK will ignore signal#54 altogether
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
SIGSEGV: Segmentation violation
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
    Called from suegem2 ELN=423(40768c3c4)
SIGSEGV: Segmentation violation
    Called from su0yomb ELN=999(40006a07c)
    Called from suegem2 ELN=423(40768c3c4)
    Called from cnt0 ELN=269(400001bb8)
    Called from su0yomb ELN=999(40006a07c)
    Called from master ELN=94(400000e74)
```

```

        Called from cnt0 ELN=269(400001bb8)
        Called from master ELN=94(400000e74)
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
SIGSEGV: Segmentation violation
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
        Called from suegem2 ELN=423(40768c3c4)
SIGSEGV: Segmentation violation

```

AN1S061 & AN1S062 & AN1S063 & AN1S064 :

cy39t1_r1.05 :

```

>>>ignore_signals(): DR_HOOK will ignore signal#54 altogether
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
SIGSEGV: Segmentation violation
        Called from suegem2 ELN=423(40768c3c4)
        Called from su0yomb ELN=999(40006a07c)
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
        Called from cnt0 ELN=269(400001bb8)
SIGSEGV: Segmentation violation
        Called from master ELN=94(400000e74)
        Called from suegem2 ELN=423(40768c3c4)
        Called from su0yomb ELN=999(40006a07c)
        Called from cnt0 ELN=269(400001bb8)
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
./ALDEXE(lang:f90): signal trap(SIGTERM: Software termination)

```

AN1T080 & AN1T081 & AN1T082 & AN1T083 & AN1T084 & AN1T085 & AN1T086 & AN1T087 & AN1T088 & AN1T089 & AN1T090 & AN1T091 & AN1T092 & AN1T093 & AN1T094 :

cy39t1_r1.05 :

```

>>>ignore_signals(): DR_HOOK will ignore signal#54 altogether
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
SIGSEGV: Segmentation violation
        Called from suegem2 ELN=423(40768c3c4)
        Called from su0yomb ELN=999(40006a07c)
        Called from cnt0 ELN=269(400001bb8)
        Called from master ELN=94(400000e74)
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
**** 90 Fatal exception PROG=suemapf ELN=700(407679c80)
SIGSEGV: Segmentation violation
SIGSEGV: Segmentation violation
./ALDEXE(lang:f90): signal trap(SIGTERM: Software termination)

```

AH9E099 :

cy39t1_r1.05 :

```

>>>ignore_signals(): DR_HOOK will ignore signal#54 altogether
**** 90 Fatal exception PROG=deallo ELN=277(40021ccbc)
SIGSEGV: Segmentation violation
        Called from freemem ELN=398(400011d10)
        Called from cnt0 ELN=406(400002684)
        Called from master ELN=94(400000e74)
**** 90 Fatal exception PROG=deallo ELN=277(40021ccbc)
SIGSEGV: Segmentation violation

```

AH9E100 :

cy39t1_r1.05 :

```

>>>ignore_signals(): DR_HOOK will ignore signal#54 altogether
**** 90 Fatal exception PROG=suelap ELN=255(407507c00)
SIGBUS: Bus error
        Called from su0yomb ELN=930(40006a8b4)
        Called from cnt0 ELN=269(400001bb8)

```

```

Called from cprep4 ELN=180(401276fd0)
Called from cnt4 ELN=1188(40774f710)
Called from cnt3 ELN=438(400668574)
Called from cnt2 ELN=82(40060381c)
Called from cnt1 ELN=158(400652a6c)
Called from cnt0 ELN=281(4000038c8)
Called from master ELN=94(400000e74)
./ALDEXE(lang:f90): signal trap(SIGTERM: Software termination)

```

AHFE129 & AHFE130 & AHFE131 : cy39t1_main.01 & cy39t1_r1.05

```

ABORT!      1 INIFAUT : AB0R1 CALLED
MPL_BUFFER_METHOD: 2          0
SDL_TRACEBACK: Calling NEC/MESPUT, THRD =    1
*** Calling NEC traceback ***
Called from necsx_trbk ELN=17(404d3cb78)
Called from sdl_mod.sdl_traceback ELN=60(404b8d6cc)
Called from abor1 ELN=36(404cf44dc)
Called from inifaout ELN=261(4079d2740)
Called from wrmlppa ELN=250(4079820d8)
Called from iopack ELN=210(400ea39b8)
Called from stepo ELN=433(40005c3ec)

```

AG1T135 & AG1T136 & AG1T137 :

Large differences between the two cycles in terms of spectral norms.
The difference between 39t1_r1.05 and 39t1_main.01 concerning AG1T are not just numerical, they came with a modset from the E-suite.

I did some plot at time step 0. You can find them following this link :
http://webdav/public/proc/jidane/39t1_r1.05/

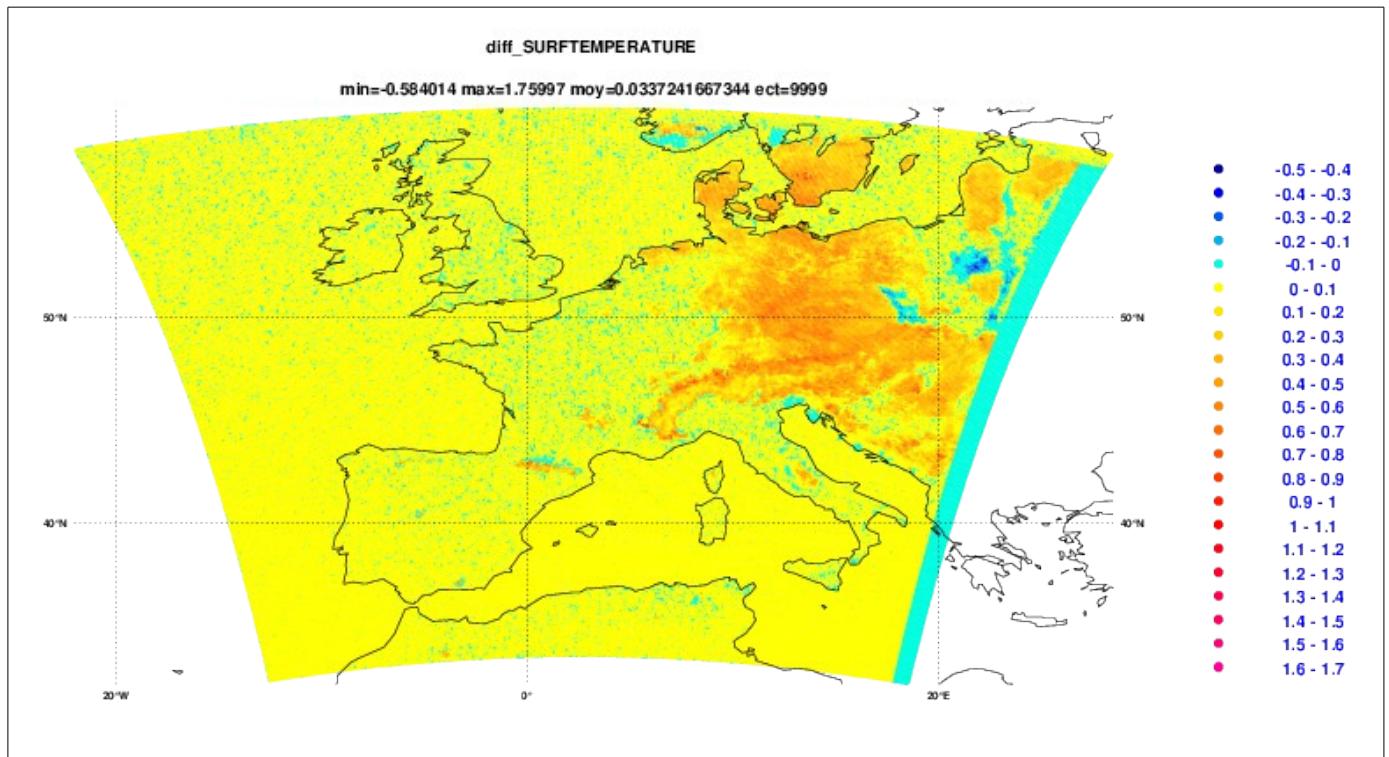


Fig 1 : (New-cycle - reference)_SURFTEMPERATURE

AA1T139 & AA1T140 :**cy39t1_r1.05 (crash at the end of job)**

```

21:05:50 STEP 119 H= 11:54 +CPU= 1.114
21:05:55 STEP 120 H= 12:00 +CPU= 3.960
MPI process (universe 0, rank 1) terminated by signal(11); Segmentation violation
yuki02: mpid: MPI process terminated by signal(11)
MPI process (universe 0, rank 2) terminated by signal(11); Segmentation violation
MPI process terminated by signal(11)
MPI process (universe 0, rank 0) terminated by signal(11); Segmentation violation
MPI process terminated by signal(11)
MPI process (universe 0, rank 3) terminated by signal(11); Segmentation violation
MPI process terminated by signal(11)

```

AC5T147 & AC5T148 & AC5T149 & AC5T150 & AC5T151 & AC5T152 :**cy39t1_main.01 & cy39t1_r1.05**

```

MAX V WIND= 445.5914114652976
MAX U WIND= 401.7254904006685
V WIND = 445.5914114652976 IS TOO STRONG, EXPLOSION.
LEVEL= 1 POINT= 896
LON = 0.2151305955490610 degrees
LAT = -3.098771957600418 degrees
ABORT! 1 !V WIND TOO STRONG, EXPLOSION!!!
MPL_BUFFER_METHOD: 2 0
SETUP_CTLVEC: CONTROL_VECTOR type has been setup.
SETUP_CTLVEC: LINITCV, LWAVELETJB, LREPRO0= T F F
SETUP_CTLVEC: NMODERR, NPARAM= 0 0
SETUP_CTLVEC: LTOVSCV, LELAM = F T
SDL_TRACEBACK: Calling NEC/MESPUT, THRD = 1
*** Calling NEC traceback ***
    Called from necsx_trbk ELN=17(404d3cb78)
    Called from sdl_mod.sdl_traceback ELN=60(404b8d6cc)
    Called from abor1 ELN=36(404cf44dc)
    Called from elarmes ELN=376(4073f6d8c)
    Called from lapinea ELN=414(400472978)
    Called from call_sl ELN=446(4004397d8)
    Called from gp_model ELN=965(4003e1e1c)
    Called from scan2m ELN=598(4002de604)
    Called from stepo ELN=491(40005b984)
    Called from cnt4 ELN=1355(40774e3b4)
    Called from cnt3 ELN=438(400668574)
    Called from testli ELN=365(407960bb4)
    Called from ctrl1 ELN=93(400666e68)
    Called from cnt0 ELN=318(400003118)
    Called from master ELN=94(400000e74)
SDL_TRACEBACK: Done NEC/MESPUT, THRD = 1

```

AR1T159 & AR1T160 & AR1T161 :

Large differences between the two cycles in terms of spectral norms (E-suite modset).

AR1T162 & AR1T163 & AR1T164 & AR1T166 :**cy39t1_r1.05 (crash at the end of job)**

```

22:15:02 STEP 239 H= 3:59 +CPU= 5.664
22:15:36 STEP 240 H= 4:00 +CPU= 26.458
**** 90 Fatal exception
PROG=deallocate_if_associated_mod.deallocate_if_associated_real_1d ELN=63(404c40d6c)
SIGSEGV: Segmentation violation

```

```

Called from yomleg.deallo_tcsgleg ELN=62(4008126f8)
Called from deallo ELN=273(4002148c4)
**** 90 Fatal exception
PROG=deallocate_if_associated_mod.deallocate_if_associated_real_1d ELN=63(404c40d6c)
SIGSEGV: Segmentation violation
**** 90 Fatal exception
PROG=deallocate_if_associated_mod.deallocate_if_associated_real_1d ELN=63(404c40d6c)
**** 90 Fatal exception
PROG=deallocate_if_associated_mod.deallocate_if_associated_real_1d ELN=63(404c40d6c)
    Called from freemem ELN=398(400011d10)
    Called from yomleg.deallo_tcsgleg ELN=62(4008126f8)
SIGSEGV: Segmentation violation
SIGSEGV: Segmentation violation
    Called from cnt0 ELN=406(400002684)
    Called from deallo ELN=273(4002148c4)
    Called from yomleg.deallo_tcsgleg ELN=62(4008126f8)
    Called from yomleg.deallo_tcsgleg ELN=62(4008126f8)
    Called from master ELN=94(400000e74)
    Called from freemem ELN=398(400011d10)
    Called from deallo ELN=273(4002148c4)
    Called from deallo ELN=273(4002148c4)
    Called from cnt0 ELN=406(400002684)
MPL_BUFFER_METHOD: 2      1000000
    Called from freemem ELN=398(400011d10)
    Called from freemem ELN=398(400011d10)
    Called from master ELN=94(400000e74)
    Called from cnt0 ELN=406(400002684)

```

AR1T165 & AA1T167 :

[cy39t1_r1.05](#) (crash at the end of job)

```

21:23:32 STEP 239 H= 3:59 +CPU= 5.349
21:24:09 STEP 240 H= 4:00 +CPU= 28.669
MPI process (universe 0, rank 1) terminated by signal(11); Segmentation violation
yuki09: mpid: MPI process terminated by signal(11)
MPI process (universe 0, rank 2) terminated by signal(11); Segmentation violation
MPI process terminated by signal(11)
MPI process (universe 0, rank 0) terminated by signal(11); Segmentation violation
MPI process terminated by signal(11)
MPI process (universe 0, rank 3) terminated by signal(11); Segmentation violation
MPI process terminated by signal(11)

```

The crash in AN1S and AN1T was resolved (thanks to Ryad).

The bug was related to the difference between NSMAX and NCMAX, which by the way should no more be used in case LELAM.

Building a master on PC was the key to find the bug.

On PC, some AN1T jobs were running good, others were crashing in **suwavedi** :

```
[lxgmap12:00456] [ 5] ./ALDEXE(__suwavedi_mod_MOD_suwavedi+0x1133) [0x1fabef3]
[lxgmap12:00456] [ 6] ./ALDEXE(ini_spec_dist_+0xb0) [0x1f92d2b]
[lxgmap12:00456] [ 7] ./ALDEXE(sulap_+0x631) [0xc16b51]
[lxgmap12:00456] [ 8] ./ALDEXE(su0yomb_+0xbe8) [0x69b9f8]
```

In case LELAM, we should not pass through **ini_spec_dist** routine.

Still, on PC the jobs AN1S and AN1T, after the bug cleaning, crashes at the end of the job (freemem problem), which was not the case on yuki.

The issue with freemem was then resolved.
Fixes are on my ClearCase branch : **mrpe731_CY39T1_public**

On PC, we were having a problem with **deallo** :

```
13:17:36 STEP 29 H= 0:14 +CPU= 0.300
13:17:36 STEP 30 H= 0:15 +CPU= 0.000
[lxgmap12:27712] *** Process received signal ***
[lxgmap12:27713] *** Process received signal ***
[lxgmap12:27713] Signal: Aborted (6)
[lxgmap12:27713] Signal code: (-6)
[lxgmap12:27712] Signal: Aborted (6)
[lxgmap12:27712] Signal code: (-6)
[lxgmap12:27711] *** Process received signal ***
[lxgmap12:27711] Signal: Aborted (6)
[lxgmap12:27711] Signal code: (-6)
[lxgmap12:27710] *** Process received signal ***
[lxgmap12:27710] Signal: Aborted (6)
[lxgmap12:27710] Signal code: (-6)
[lxgmap12:27713] [ 0] /lib64/libpthread.so.0(+0xef70) [0x2b4e99d20f70]
[lxgmap12:27713] [ 1] /lib64/libc.so.6(gsignal+0x35) [0x2b4e99f62245]
[lxgmap12:27712] [ 0] /lib64/libpthread.so.0(+0xef70) [0x2b2fb18b9f70]
[lxgmap12:27712] [ 1] /lib64/libc.so.6(gsignal+0x35) [0x2b2fb1afb245]
[lxgmap12:27712] [ 2] /lib64/libc.so.6(abort+0x17b) [0x2b2fb1afc7cb]
[lxgmap12:27712] [ 3] /lib64/libc.so.6(+0x6d5be) [0x2b2fb1b345be]
[lxgmap12:27713] [ 2] /lib64/libc.so.6(abort+0x17b) [0x2b4e99f637cb]
[lxgmap12:27712] [ 4] /lib64/libc.so.6(+0x73476) [0x2b2fb1b3a476]
[lxgmap12:27712] [ 5]
./ALDEXE(__deallocate_if_associated_mod_MOD_deallocate_if_associated_integer_1d+0x1f)
[0x241e3cf]
[lxgmap12:27712] [ 6] ./ALDEXE(__yomlap_MOD_deallo_lap+0x48) [0x956e28]
[lxgmap12:27712] [ 7] ./ALDEXE(deello_+0x4e) [0xb993fe]
[lxgmap12:27712] [ 8] ./ALDEXE(freemem_+0x20) [0x650b10]
```

After fixing **yomlap** (nullifying some pointers in a structure), we face another problem, this time with **deello** :

```
11:55:45 STEP 29 H= 0:14 +CPU= 0.300
11:55:45 STEP 30 H= 0:15 +CPU= 0.010
```

Program received signal 11 (SIGSEGV): Segmentation fault.

Backtrace for this error:

```
+ /lib64/libc.so.6(+0x342c0) [0x2b6b2d8cd2c0]
+ function deello (0x32CE206)
  at line 110 of file deello.F90
+ function freemem (0x6510BF)
  at line 157 of file freemem.F90
```

The problem with **deello** is that we were trying to access a logical component of a pointer structure which was not associated :

```
IF (CVA_STRUCT%YVAZX%lalloc ) CALL DEALLOCATE_CTLVEC(CVA_STRUCT%YVAZX)
```

After the correction everything goes well.

A new version of the pre-cycle was then available.

With this new version (v08), we were facing crashes almost everywhere.

'A bug' introduced by myself in `xla/module/control_vectors_data_mix.F90` caused the crash of 501, 401, 801 and 601 jobs :

ABORT! 1 Trying to allocate a control_vector, but CTLVEC_STRUCT is not initialised

However, we did not crash with the old version v05 !!!

The bug was fixed, and yet it was full of crashes in many confs :

AH1E :

```
18:50:36 DFI STEP -13/ 30 +CPU= 0.024
18:50:36 DFI STEP -14/ 30 +CPU= 0.026
  * 252 Floating-point zero divide PROG=gphpre ELN=180(400ee6ce8)
  * 250 Floating-point data overflow PROG=gphpre ELN=181(400ee6d84)
  * 252 Floating-point zero divide PROG=gphpre ELN=181(400ee6d84)
  * 253 Invalid operation PROG=gphpre ELN=181(400ee6d84)
  * 253 Invalid operation PROG=gpprxyb ELN=166(401f7b3b0)
  * 253 Invalid operation PROG=gpprxyb ELN=184(401f7b10c)
  * 252 Floating-point zero divide PROG=cpeuldyn ELN=1459(406eade14)
  * 250 Floating-point data overflow PROG=gphpre ELN=176(400ee6ce0)
```

AH1S & AH1T & AN1S & AN1T & AA1T :

```
18:50:37 DFI STEP +0/ 32 +CPU= 0.058
18:50:37 DFI STEP -1/ 32 +CPU= 0.058
SMILAG TRAJECTORY OUT OF ATM      30 TIMES.
SMILAG TRAJECTORY UNDERGROUND    527 TIMES.
```

V WIND = 189.9068981704474 IS TOO STRONG, EXPLOSION.

LEVEL= 3 POINT= 672
LON = 4.245964226517493 degrees
LAT = 35.18899726218053 degrees

ABORT! 1 !V WIND TOO STRONG, EXPLOSION!!!

MPL_BUFFER_METHOD: 2 1000000
SDL_TRACEBACK: Calling NEC/MESPUT, THRD = 1
*** Calling NEC traceback ***

```
          Called from necsx_trbk ELN=17(4042f4b78)
          Called from sdl_mod.sdl_traceback ELN=60(404102acc)
          Called from abor1 ELN=36(40428855c)
          Called from elarmes ELN=376(40813208c)
          Called from lapinea ELN=414(406aab838)
          Called from call_sl ELN=446(40683c518)
          Called from gp_model ELN=959(406663694)
          Called from scan2m ELN=598(4062a94c4)
          Called from stepo ELN=493(400491cd4)
```

AH5T & AH4T & AH6T & AH8T & AC5T & AC4T :

SMILAG TRAJECTORY OUT OF ATM 118 TIMES.

MAX V WIND= 434.1351297670683

V WIND = 434.1351297670683 IS TOO STRONG, EXPLOSION.

LEVEL= 1 POINT= 328
LON = 2.531404699086532 degrees
LAT = 36.47058966054233 degrees

ABORT! 1 !V WIND TOO STRONG, EXPLOSION!!!

MPL_BUFFER_METHOD: 2 1000000
SETUP_CTLVEC: CONTROL_VECTOR type has been setup.

```

SETUP_CTLVEC: LINITCV, LWAVELETJB, LREPRO= T F F
SETUP_CTLVEC: NMODERR, NPARAM= 0 0
SETUP_CTLVEC: LTOVSCV, LELAM = F T
SDL_TRACEBACK: Calling NEC/MESPUT, THRD = 1
*** Calling NEC traceback ***
    Called from necsx_trbk ELN=17(4042f4b78)
    Called from sdl_mod.sdl_traceback ELN=60(404102acc)
    Called from abor1 ELN=36(40428855c)
    Called from elarmes ELN=376(40813208c)
    Called from lapinea ELN=414(406aab838)
    Called from call_sl ELN=446(40683c518)
    Called from gp_model ELN=959(406663694)

```

AH6E :

```

18:52:01 STEP 12 H= 0:12 +CPU= 0.279
18:52:02 STEP 13 H= 0:13 +CPU= 0.279
* 252 Floating-point zero divide PROG=gphpre ELN=180(400ee6ce8)
* 250 Floating-point data overflow PROG=gphpre ELN=176(400ee6ce0)
* 250 Floating-point data overflow PROG=gphpre ELN=180(400ee6ce8)
* 252 Floating-point zero divide PROG=gphpre ELN=180(400ee6ce8)
* 253 Invalid operation PROG=gphpre ELN=180(400ee6ce8)
* 253 Invalid operation PROG=gphpre ELN=181(400ee6d84)
* 253 Invalid operation PROG=gprxyb ELN=166(401f7b3b0)
* 253 Invalid operation PROG=gprxyb ELN=184(401f7b10c)
* 252 Floating-point zero divide PROG=cpeuldyn ELN=1459(406eade14)
* 250 Floating-point data overflow PROG=gphpre ELN=176(400ee6ce0)
* 253 Invalid operation PROG=gprxyb ELN=166(401f7b3b0)
* 253 Invalid operation PROG=qpassf ELN=662(403f62b70)
* 253 Invalid operation PROG=qpassf ELN=738(403f62678)
* 253 Invalid operation PROG=qpassf ELN=866(403f60ab4)
* 253 Invalid operation PROG=qpassf ELN=761(403f615f8)

```

AH8E :

```

* 253 Invalid operation PROG=evcost ELN=315(400150a6c)
* 253 Invalid operation PROG=evcost ELN=315(400150a78)
* 253 Invalid operation PROG=evcost ELN=315(400150a84)
* 253 Invalid operation PROG=evcost ELN=340(40014feec)
* 253 Invalid operation PROG=evcost ELN=340(40014fef8)
* 253 Invalid operation PROG=evcost ELN=340(40014ff04)
* 253 Invalid operation PROG=grtest ELN=163(4000558f0)
18:53:12 STEP 0 H= 0:00 +CPU= 0.023
18:53:12 STEP 1 H= 0:01 +CPU= 0.023
18:53:12 STEP 2 H= 0:02 +CPU= 0.023
18:53:12 STEP 3 H= 0:03 +CPU= 0.023
* 250 Floating-point data overflow PROG=gp_spv ELN=115(40284d6c0)
* 250 Floating-point data overflow PROG=gp_spv ELN=121(40284d5f0)
* 252 Floating-point zero divide PROG=gphpre ELN=175(400ee6cc0)
* 252 Floating-point zero divide PROG=gphpre ELN=175(400ee6cc0)
* 250 Floating-point data overflow PROG=gphpre ELN=180(400ee6ce8)

```

AN1E :

```

18:52:58 DFI STEP -14/ 18 +CPU= 0.127
18:52:58 DFI STEP -15/ 18 +CPU= 0.141
* 250 Floating-point data overflow PROG=gpgrp ELN=408(406ef5790)
* 250 Floating-point data overflow PROG=gpxx ELN=174(4020094d4)
* 250 Floating-point data overflow PROG=gpxx ELN=174(4020094d4)
* 250 Floating-point data overflow PROG=gpxx ELN=174(4020094d4)
* 253 Invalid operation PROG=gpgw ELN=281(401f6475c)
* 253 Invalid operation PROG=gpgw ELN=301(401f63ba8)
* 253 Invalid operation PROG=gnhrgrw ELN=252(406e35358)

```

```
* 253 Invalid operation PROG=gnhgrgw ELN=252(406e35358)
* 253 Invalid operation PROG=gnhgrgw ELN=252(406e35358)
```

AH9E :

```
GRIB_API ERROR : Unable to locate sample file budg.tmpl
                  in /usr/local/SX/grib_api_1.9.9_jan2/share/samples
GRIB_NEW_FROM_TEMPLATE budg FAILED -2
GRIB_API ERROR MSG: Internal error
MPL_ABORT: CALLED FROM PROCESSOR      1 THRD      1
MPL_ABORT: THRD 1      GRIB_NEW_FROM_TEMPLATE FAILED
```

some AHFE :

```
19:10:54 STEP 0 H= 0:00 +CPU= 21.373
* 253 Invalid operation PROG=accvimpd ELN=705(4071d1060)
* 253 Invalid operation PROG=accvimpd ELN=882(4071ce850)
* 253 Invalid operation PROG=accvimpd ELN=930(4071ce638)
* 253 Invalid operation PROG=accvimpd ELN=930(4071ce628)
* 253 Invalid operation PROG=accvimpd ELN=2280
* 253 Invalid operation PROG=accvimpd ELN=2280
* 253 Invalid operation PROG=accvimpd ELN=2280
* 250 Floating-point data overflow PROG=shallow_convection ELN=339(407bd518c)
* 252 Floating-point zero divide PROG=convect_closure_shal ELN=323(407de3ec0)
* 250 Floating-point data overflow PROG=acnebn ELN=558(4071b9e48)
* 253 Invalid operation PROG=acnebn ELN=558(4071b9e48)
* 253 Invalid operation PROG=acnebn ELN=2204(4060bcd28)
```

AGIT & AG1T & AC1T :

```
SMILAG TRAJECTORY UNDERGROUND 409 TIMES.
SMILAG TRAJECTORY OUT OF ATM 88 TIMES.
```

```
19:10:06 DFI STEP -1/ 18 +CPU= 1.620
* 252 Floating-point zero divide PROG=cpq_gp ELN=1584(402846358)
* 253 Invalid operation PROG=gphluv ELN=98(401ff577c)
* 252 Floating-point zero divide PROG=gphluwi ELN=83(402846564)
* 252 Floating-point zero divide PROG=gphluwi ELN=83(402846564)
* 252 Floating-point zero divide PROG=gphluwi ELN=83(4028463a4)
* 252 Floating-point zero divide PROG=gphluwi ELN=83(4028463b0)
* 252 Floating-point zero divide PROG=gphluwi ELN=83(4028463b0)
* 253 Invalid operation PROG=gphluv ELN=98(401ff5a00)
* 253 Invalid operation PROG=gphluv ELN=98(401ff5a00)
```

AC1U :

```
SMILAG TRAJECTORY UNDERGROUND 133 TIMES.
SMILAG TRAJECTORY UNDERGROUND 29 TIMES.
```

```
19:17:25 DFI STEP +0/ 18 +CPU=14.804
* 252 Floating-point zero divide PROG=gphpre ELN=210(400ee622c)
* 253 Invalid operation PROG=gphpre ELN=210(400ee622c)
* 253 Invalid operation PROG=gpgrxyb ELN=166(401f7b3b0)
* 253 Invalid operation PROG=gpgrxyb ELN=195(401f7accc)
* 250 Floating-point data overflow PROG=gnhpre ELN=137(401f80634)
```

AR1T :

```
SMILAG TRAJECTORY OUT OF ATM 10 TIMES.
SMILAG TRAJECTORY OUT OF ATM 7 TIMES.
```

```
19:23:43 STEP 1 H= 0:01 +CPU= 21.250
* 250 Floating-point data overflow PROG=actqsat ELN=333(406f135a4)
* 250 Floating-point data overflow PROG=actqsat ELN=333(406f136a4)
* 252 Floating-point zero divide PROG=actqsat ELN=330(406f135e0)
* 252 Floating-point zero divide PROG=actqsat ELN=347(406f13784)
* 250 Floating-point data overflow PROG=actqsat ELN=333(406f136a4)
* 250 Floating-point data overflow PROG=actqsat ELN=333(406f135a4)
```

```

* 250 Floating-point data overflow PROG=actqsat ELN=333(406f136a4)
* 250 Floating-point data overflow PROG=actqsat ELN=333(406f136a4)
* 253 Invalid operation PROG=rain_ice.rain_ice_nucleation ELN=1660(407c6ee50)
* 253 Invalid operation PROG=rain_ice.rain_ice_nucleation ELN=1664(407c6ef30)
* 253 Invalid operation PROG=rain_ice.rain_ice_nucleation ELN=1660(407c6f00c)

```

The solution was to nullify the pointers that make up the structure **TYPE_LEP** in **arp/module/yemlap.F90**

That correction on **yemlap** solves most of the problems, however, it remained the crash of 801 confs and AC5T jobs :

AH8E047 :

```

15:51:35 STEP      6 H=    0:06 +CPU=  0.024
15:51:35 STEP      7 H=    0:07 +CPU=  0.018
* 253 Invalid operation PROG=evcost ELN=315(400156d6c)
* 253 Invalid operation PROG=evcost ELN=315(400156d78)
* 253 Invalid operation PROG=evcost ELN=315(400156d84)

```

AH8T050 :

```

16:00:17 STEP      6 H=    0:24 +CPU=  0.018
16:00:17 STEP      7 H=    0:28 +CPU=  0.016
* 250 Floating-point data overflow PROG=elarchehead ELN=358(407d1d418)
* 250 Floating-point data overflow PROG=elarchehead ELN=358(407d1d418)
* 250 Floating-point data overflow PROG=elarchehead ELN=339(407d1d5c0)

```

AC5T : (just like the reference)

```

16:12:24 STEP      6 H=    0:24 +CPU=  6.112
16:12:29 STEP      7 H=    0:28 +CPU=  5.217
MAX V WIND= 445.5914114652976
MAX U WIND= 401.7254904006685
V WIND = 445.5914114652976 IS TOO STRONG, EXPLOSION.
LEVEL= 1 POINT= 896
LON = 0.2151305955490610 degrees
LAT = -3.098771957600418 degrees
ABORT! 1 !V WIND TOO STRONG, EXPLOSION!!!

```

The fullpos jobs which crashes for :

GRIB_API ERROR : Unable to locate sample file budg.tmp1

go through with Stéphane bypass (**arp/setup/su_grib_api.F90** and **arp/dia/wrbudg.F90**), but the spectral norms for wind are zero!

```

SPECTRAL NORMS - LOG(PREHYDS) 0.114898578791594E+02 OROGRAPHY 0.704774176378444E+04
LEV VORTICITY DIVERGENCE TEMPERATURE HUMIDITY KINETIC
ENERGY
AVE 0.000000000000000E+00 0.000000000000000E+00 0.24253106127447E+03 0.193243168166620E-02
0.000000000000000E+00

S058WIND.V.PHYS /FRAN : 0.000000000000000E+00 0.000000000000000E+00 0.000000000000000E+00
S059WIND.V.PHYS /FRAN : 0.000000000000000E+00 0.000000000000000E+00 0.000000000000000E+00
S060WIND.V.PHYS /FRAN : 0.000000000000000E+00 0.000000000000000E+00 0.000000000000000E+00
S001TEMPERATURE /FRAN : 0.230296950407036E+03 0.219861235318317E+03 0.240461389467097E+03
S002TEMPERATURE /FRAN : 0.240879154752427E+03 0.232362914815167E+03 0.247570889028720E+03
S003TEMPERATURE /FRAN : 0.251030328578897E+03 0.235834191901933E+03 0.262084502518873E+03

```

Statistics of memory usage and time CPU between cy39t1_r1.08 and cy39t1_main.01
(cf mitrailllette doc for the meaning of the confs)

CONF	CYCLE	RUN	Max Mem used	MEM %	Tot CPU time	CPU %
AH1E000	al39t1_main.01	OK	1043.66	100.00%	7.30	70.273%
	al39t1_r1.08	OK	1043.66		5.13	
AH1E001	al39t1_main.01	OK	1043.66	100.00%	7.93	71.626%
	al39t1_r1.08	OK	1043.66		5.68	
AH1E002	al39t1_main.01	OK	3859.75	100.00%	11.67	76.949%
	al39t1_r1.08	OK	3859.75		8.98	
AH1E003	al39t1_main.01	OK	3859.75	100.00%	11.70	163.33%
	al39t1_r1.08	OK	3859.75		19.11	
AH1S004	al39t1_main.01	OK	1043.66	100.00%	9.15	78.579%
	al39t1_r1.08	OK	1043.66		7.19	
AH1S005	al39t1_main.01	OK	1043.66	100.00%	9.77	81.678%
	al39t1_r1.08	OK	1043.66		7.98	
AH1S006	al39t1_main.01	OK	1043.66	100.00%	9.63	85.669%
	al39t1_r1.08	OK	1043.66		8.25	
AH1S007	al39t1_main.01	OK	1043.66	100.00%	9.31	89.903%
	al39t1_r1.08	OK	1043.66		8.37	
AH1S008	al39t1_main.01	OK	3859.75	100.00%	16.52	79.116%
	al39t1_r1.08	OK	3859.75		13.07	
AH1S009	al39t1_main.01	OK	3859.75	100.00%	15.24	93.635%
	al39t1_r1.08	OK	3859.75		14.27	
AH1S010	al39t1_main.01	OK	3859.75	100.00%	15.76	87.817%
	al39t1_r1.08	OK	3859.75		13.84	
AH1S011	al39t1_main.01	OK	3859.75	100.00%	19.13	69.837%
	al39t1_r1.08	OK	3859.75		13.36	
AH1T012	al39t1_main.01	OK	1043.66	100.00%	7.55	81.059%
	al39t1_r1.08	OK	1043.66		6.12	
AH1T013	al39t1_main.01	OK	1043.66	100.00%	8.09	133.86%
	al39t1_r1.08	OK	1043.66		10.83	
AH1T014	al39t1_main.01	OK	1043.66	100.00%	8.09	78.368%
	al39t1_r1.08	OK	1043.66		6.34	
AH1T015	al39t1_main.01	OK	1043.66	100.00%	8.32	75.600%
	al39t1_r1.08	OK	1043.66		6.29	
AH1T016	al39t1_main.01	OK	3859.75	100.00%	12.77	145.88%
	al39t1_r1.08	OK	3859.75		18.63	
AH1T017	al39t1_main.01	OK	3859.75	100.00%	13.42	88.748%
	al39t1_r1.08	OK	3859.75		11.91	

AH1T018	al39t1_main.01	OK	3859.75		13.31		
AH1T018	al39t1_r1.08	OK	3859.75	100.00%	11.10	83.395%	
AH1T019	al39t1_main.01	OK	3859.75		13.49		
AH1T019	al39t1_r1.08	OK	3859.75	100.00%	12.67	93.921%	
AH5E020	al39t1_main.01	OK	979.66		9.34		
AH5E020	al39t1_r1.08	OK	1043.66	106.53%	7.20	77.087%	
AH5E021	al39t1_main.01	OK	3603.75		16.60		
AH5E021	al39t1_r1.08	OK	3603.75	100.00%	14.06	84.698%	
AH5E022	al39t1_main.01	OK	3603.75		18.36		
AH5E022	al39t1_r1.08	OK	3603.75	100.00%	15.72	85.620%	
AH5T023	al39t1_main.01	OK	1235.66		11.44		
AH5T023	al39t1_r1.08	OK	1235.66	100.00%	9.56	83.566%	
AH5T024	al39t1_main.01	OK	1235.66		11.28		
AH5T024	al39t1_r1.08	OK	1235.66	100.00%	9.72	86.170%	
AH5T025	al39t1_main.01	OK	3923.75		21.02		
AH5T025	al39t1_r1.08	OK	3923.75	100.00%	19.45	92.530%	
AH5T026	al39t1_main.01	OK	3923.75		20.92		
AH5T026	al39t1_r1.08	OK	3923.75	100.00%	20.02	95.697%	
AH5T027	al39t1_main.01	OK	3859.75		23.54		
AH5T027	al39t1_r1.08	OK	3859.75	100.00%	21.27	90.356%	
AH5T028	al39t1_main.01	OK	3859.75		22.94		
AH5T028	al39t1_r1.08	OK	3859.75	100.00%	20.89	91.063%	
AH4E029	al39t1_main.01	OK	979.34		5.42		
AH4E029	al39t1_r1.08	OK	979.66	100.03%	4.17	76.937%	
AH4E030	al39t1_main.01	OK	3603.75		8.67		
AH4E030	al39t1_r1.08	OK	3603.75	100.00%	7.08	81.660%	
AH4E031	al39t1_main.01	OK	3603.75		8.46		
AH4E031	al39t1_r1.08	OK	3603.75	100.00%	6.92	81.796%	
AH4T032	al39t1_main.01	OK	1235.66		6.88		
AH4T032	al39t1_r1.08	OK	1235.66	100.00%	6.44	93.604%	
AH4T033	al39t1_main.01	OK	1235.66		6.97		
AH4T033	al39t1_r1.08	OK	1235.66	100.00%	6.20	88.952%	
AH4T034	al39t1_main.01	OK	3923.75		11.12		
AH4T034	al39t1_r1.08	OK	3923.75	100.00%	9.88	88.848%	
AH4T035	al39t1_main.01	OK	3923.75		11.21		
AH4T035	al39t1_r1.08	OK	3923.75	100.00%	9.98	89.027%	
AH4T036	al39t1_main.01	OK	3859.75		11.52		
AH4T036	al39t1_r1.08	OK	3923.75	101.65%	10.61	92.100%	
AH4T037	al39t1_main.01	OK	3859.75		14.26		
AH4T037	al39t1_r1.08	OK	3923.75	101.65%	10.04	70.406%	

AH6E038	al39t1_main.01	OK		1171.66		34.30	
AH6E038	al39t1_r1.08	OK		1171.66	100.00%	33.85	98.688%
AH6E039	al39t1_main.01	OK		4115.75		55.29	
AH6E039	al39t1_r1.08	OK		4115.75	100.00%	50.61	91.535%
AH6E040	al39t1_main.01	OK		4115.75		60.64	
AH6E040	al39t1_r1.08	OK		4115.75	100.00%	58.95	97.213%
AH6T041	al39t1_main.01	OK		1747.66		46.93	
AH6T041	al39t1_r1.08	OK		1747.66	100.00%	52.98	112.89%
AH6T042	al39t1_main.01	OK		1747.66		46.72	
AH6T042	al39t1_r1.08	OK		1747.66	100.00%	56.45	120.82%
AH6T043	al39t1_main.01	OK		4819.75		72.39	
AH6T043	al39t1_r1.08	OK		4819.75	100.00%	70.78	97.775%
AH6T044	al39t1_main.01	OK		4819.75		72.83	
AH6T044	al39t1_r1.08	OK		4819.75	100.00%	71.45	98.105%
AH6T045	al39t1_main.01	OK		4883.75		72.05	
AH6T045	al39t1_r1.08	OK		4883.75	100.00%	73.54	102.06%
AH6T046	al39t1_main.01	OK		4883.75		74.73	
AH6T046	al39t1_r1.08	OK		4883.75	100.00%	70.51	94.353%
AH8E047	al39t1_main.01	OK		1107.66		44.56	
AH8E047	al39t1_r1.08	OK		1107.66	100.00%	177.01	397.23%
AH8E048	al39t1_main.01	OK		3923.75		75.82	
AH8E048	al39t1_r1.08	OK		3923.75	100.00%	76.46	100.84%
AH8T049	al39t1_main.01	OK		1363.66		61.06	
AH8T049	al39t1_r1.08	DOWN			%		%
AH8T050	al39t1_main.01	OK		1363.66		62.51	
AH8T050	al39t1_r1.08	DOWN			%		%
AH8T051	al39t1_main.01	DOWN					
AH8T051	al39t1_r1.08	DOWN			%		%
AH8T052	al39t1_main.01	DOWN					
AH8T052	al39t1_r1.08	DOWN			%		%
AN1E053	al39t1_main.01	OK		1235.66		14.92	
AN1E053	al39t1_r1.08	OK		1235.66	100.00%	13.23	88.672%
AN1E054	al39t1_main.01	OK		1235.66		15.64	
AN1E054	al39t1_r1.08	OK		1235.66	100.00%	14.14	90.409%
AN1E055	al39t1_main.01	OK		4115.75		25.41	
AN1E055	al39t1_r1.08	OK		4115.75	100.00%	18.08	71.153%
AN1E056	al39t1_main.01	OK		4115.75		25.25	
AN1E056	al39t1_r1.08	OK		4115.75	100.00%	19.51	77.267%
AN1S057	al39t1_main.01	OK		1235.66		14.82	
AN1S057	al39t1_r1.08	OK		1235.66	100.00%	20.66	139.40%

AN1S058	al39t1_main.01	OK		1235.66		14.84	
AN1S058	al39t1_r1.08	OK		1235.66	100.00%	12.89	86.859%
AN1S059	al39t1_main.01	OK		1235.66		15.05	
AN1S059	al39t1_r1.08	OK		1235.66	100.00%	13.91	92.425%
AN1S060	al39t1_main.01	OK		1235.66		16.18	
AN1S060	al39t1_r1.08	OK		1235.66	100.00%	13.74	84.919%
AN1S061	al39t1_main.01	OK		4115.75		22.05	
AN1S061	al39t1_r1.08	OK		4115.75	100.00%	18.64	84.535%
AN1S062	al39t1_main.01	OK		4115.75		20.71	
AN1S062	al39t1_r1.08	OK		4115.75	100.00%	21.82	105.35%
AN1S063	al39t1_main.01	OK		4115.75		21.80	
AN1S063	al39t1_r1.08	OK		4115.75	100.00%	27.36	125.50%
AN1S064	al39t1_main.01	OK		4115.75		23.18	
AN1S064	al39t1_r1.08	OK		4115.75	100.00%	22.69	97.886%
AN1T065	al39t1_main.01	OK		1299.66		21.25	
AN1T065	al39t1_r1.08	OK		1299.66	100.00%	19.88	93.552%
AN1T066	al39t1_main.01	OK		1235.66		21.33	
AN1T066	al39t1_r1.08	OK		1235.66	100.00%	24.33	114.06%
AN1T067	al39t1_main.01	OK		1299.66		23.64	
AN1T067	al39t1_r1.08	OK		1299.66	100.00%	28.68	121.31%
AN1T068	al39t1_main.01	OK		1235.66		23.31	
AN1T068	al39t1_r1.08	OK		1235.66	100.00%	21.91	93.993%
AN1T069	al39t1_main.01	OK		1235.66		22.03	
AN1T069	al39t1_r1.08	OK		1299.66	105.17%	19.85	90.104%
AN1T070	al39t1_main.01	OK		1235.66		21.60	
AN1T070	al39t1_r1.08	OK		1299.66	105.17%	20.03	92.731%
AN1T071	al39t1_main.01	OK		1235.66		21.79	
AN1T071	al39t1_r1.08	OK		1299.66	105.17%	20.14	92.427%
AN1T072	al39t1_main.01	OK		1299.66		21.49	
AN1T072	al39t1_r1.08	OK		1299.66	100.00%	21.48	99.953%
AN1T073	al39t1_main.01	OK		1299.66		24.05	
AN1T073	al39t1_r1.08	OK		1299.66	100.00%	23.19	96.424%
AN1T074	al39t1_main.01	OK		1299.66		21.63	
AN1T074	al39t1_r1.08	OK		1299.66	100.00%	20.38	94.220%
AN1T075	al39t1_main.01	OK		1299.66		21.51	
AN1T075	al39t1_r1.08	OK		1299.66	100.00%	20.47	95.165%
AN1T076	al39t1_main.01	OK		1299.66		22.18	
AN1T076	al39t1_r1.08	OK		1363.66	104.92%	20.84	93.958%
AN1T077	al39t1_main.01	OK		1299.66		22.24	
AN1T077	al39t1_r1.08	OK		1299.66	100.00%	20.40	91.726%

AN1T078	al39t1_main.01	OK		1299.66		24.11	
AN1T078	al39t1_r1.08	OK		1299.66	100.00%	22.64	93.902%
AN1T079	al39t1_main.01	OK		1299.66		23.74	
AN1T079	al39t1_r1.08	OK		1299.66	100.00%	32.90	138.58%
AN1T080	al39t1_main.01	OK		4115.75		36.23	
AN1T080	al39t1_r1.08	OK		4115.75	100.00%	30.31	83.659%
AN1T081	al39t1_main.01	OK		4115.75		33.39	
AN1T081	al39t1_r1.08	OK		4115.75	100.00%	31.35	93.890%
AN1T082	al39t1_main.01	OK		4115.75		35.58	
AN1T082	al39t1_r1.08	OK		4115.75	100.00%	50.20	141.09%
AN1T083	al39t1_main.01	OK		4115.75		34.62	
AN1T083	al39t1_r1.08	OK		4115.75	100.00%	36.00	103.98%
AN1T084	al39t1_main.01	OK		4115.75		31.40	
AN1T084	al39t1_r1.08	OK		4115.75	100.00%	38.25	121.81%
AN1T085	al39t1_main.01	OK		4115.75		32.16	
AN1T085	al39t1_r1.08	OK		4115.75	100.00%	31.32	97.388%
AN1T086	al39t1_main.01	OK		4115.75		32.56	
AN1T086	al39t1_r1.08	OK		4115.75	100.00%	32.80	100.73%
AN1T087	al39t1_main.01	OK		4115.75		33.76	
AN1T087	al39t1_r1.08	OK		4115.75	100.00%	32.43	96.060%
AN1T088	al39t1_main.01	OK		4115.75		35.14	
AN1T088	al39t1_r1.08	OK		4115.75	100.00%	41.21	117.27%
AN1T089	al39t1_main.01	OK		4179.75		32.61	
AN1T089	al39t1_r1.08	OK		4179.75	100.00%	39.05	119.74%
AN1T090	al39t1_main.01	OK		4179.75		33.43	
AN1T090	al39t1_r1.08	OK		4179.75	100.00%	32.44	97.038%
AN1T091	al39t1_main.01	OK		4179.75		42.70	
AN1T091	al39t1_r1.08	OK		4179.75	100.00%	32.34	75.737%
AN1T092	al39t1_main.01	OK		4179.75		37.72	
AN1T092	al39t1_r1.08	OK		4179.75	100.00%	31.77	84.225%
AN1T093	al39t1_main.01	OK		4179.75		36.28	
AN1T093	al39t1_r1.08	OK		4179.75	100.00%	34.09	93.963%
AN1T094	al39t1_main.01	OK		4179.75		41.35	
AN1T094	al39t1_r1.08	OK		4179.75	100.00%	43.20	104.47%
AH9E095	al39t1_main.01	OK		7507.66		44.75	
AH9E095	al39t1_r1.08	OK		7507.66	100.00%	38.18	85.318%
AH9E096	al39t1_main.01	OK		11795.75		57.97	
AH9E096	al39t1_r1.08	OK		11795.75	100.00%	48.22	83.180%
AH9E097	al39t1_main.01	OK		14611.75		63.31	
AH9E097	al39t1_r1.08	OK		14611.75	100.00%	52.09	82.277%

AH9E098	al39t1_main.01	OK	38291.66		182.82		
AH9E098	al39t1_r1.08	OK	38291.66	100.00%	127.05	69.494%	
AH9E099	al39t1_main.01	OK	52947.75		205.30		
AH9E099	al39t1_r1.08	OK	52947.75	100.00%	140.88	68.621%	
AH9E100	al39t1_main.01	OK	52691.75		225.32		
AH9E100	al39t1_r1.08	OK	52627.75	99.878%	170.41	75.630%	
AH9E101	al39t1_main.01	OK	3411.69		40.90		
AH9E101	al39t1_r1.08	OK	3475.69	101.87%	40.28	98.484%	
AH9E102	al39t1_main.01	OK	7379.78		61.13		
AH9E102	al39t1_r1.08	OK	7379.78	100.00%	57.11	93.423%	
AH9E103	al39t1_main.01	OK	7379.78		62.48		
AH9E103	al39t1_r1.08	OK	7379.78	100.00%	60.82	97.343%	
AHFE104	al39t1_main.01	OK	3347.66		10.52		
AHFE104	al39t1_r1.08	OK	3347.66	100.00%	10.12	96.197%	
AHFE105	al39t1_main.01	OK	6739.75		15.16		
AHFE105	al39t1_r1.08	OK	6739.75	100.00%	12.38	81.662%	
AHFE106	al39t1_main.01	OK	6739.75		15.69		
AHFE106	al39t1_r1.08	OK	6803.75	100.94%	14.70	93.690%	
AHFE107	al39t1_main.01	OK	3347.66		8.85		
AHFE107	al39t1_r1.08	OK	3347.66	100.00%	6.80	76.836%	
AHFE108	al39t1_main.01	OK	6995.75		12.28		
AHFE108	al39t1_r1.08	OK	6995.75	100.00%	10.85	88.355%	
AHFE109	al39t1_main.01	OK	7059.75		14.10		
AHFE109	al39t1_r1.08	OK	7059.75	100.00%	11.53	81.773%	
AHFE110	al39t1_main.01	OK	3347.66		8.57		
AHFE110	al39t1_r1.08	OK	3347.66	100.00%	7.47	87.164%	
AHFE111	al39t1_main.01	OK	6995.75		14.31		
AHFE111	al39t1_r1.08	OK	6995.75	100.00%	11.60	81.062%	
AHFE112	al39t1_main.01	OK	6995.75		14.42		
AHFE112	al39t1_r1.08	OK	7059.75	100.91%	12.55	87.031%	
AHFE113	al39t1_main.01	OK	3347.66		8.40		
AHFE113	al39t1_r1.08	OK	3347.66	100.00%	7.31	87.023%	
AHFE114	al39t1_main.01	OK	6995.75		13.00		
AHFE114	al39t1_r1.08	OK	6995.75	100.00%	10.17	78.230%	
AHFE115	al39t1_main.01	OK	7059.75		14.43		
AHFE115	al39t1_r1.08	OK	7059.75	100.00%	12.09	83.783%	
AHFE116	al39t1_main.01	OK	3411.66		8.45		
AHFE116	al39t1_r1.08	OK	3411.66	100.00%	7.06	83.550%	
AHFE117	al39t1_main.01	OK	7123.75		13.07		
AHFE117	al39t1_r1.08	OK	7123.75	100.00%	11.23	85.921%	

AHFE118	al39t1_main.01	OK		7059.75		13.41	
AHFE118	al39t1_r1.08	OK		7123.75	100.90%	11.44	85.309%
AHFE119	al39t1_main.01	OK		1107.66		5.38	
AHFE119	al39t1_r1.08	OK		1107.66	100.00%	3.78	70.260%
AHFE120	al39t1_main.01	OK		4371.75		10.73	
AHFE120	al39t1_r1.08	OK		4371.75	100.00%	7.85	73.159%
AHFE121	al39t1_main.01	OK		4371.75		10.19	
AHFE121	al39t1_r1.08	OK		4371.75	100.00%	9.01	88.420%
AHFE122	al39t1_main.01	OK		30867.66		66.96	
AHFE122	al39t1_r1.08	OK		30867.66	100.00%	68.58	102.41%
AHFE123	al39t1_main.01	OK		4307.66		13.21	
AHFE123	al39t1_r1.08	OK		4307.66	100.00%	12.24	92.657%
AHFE124	al39t1_main.01	OK		8211.75		20.04	
AHFE124	al39t1_r1.08	OK		8275.75	100.77%	18.39	91.766%
AHFE125	al39t1_main.01	OK		8339.75		21.04	
AHFE125	al39t1_r1.08	OK		8339.75	100.00%	19.91	94.629%
AHFE126	al39t1_main.01	OK		3475.66		8.83	
AHFE126	al39t1_r1.08	OK		3475.66	100.00%	7.65	86.636%
AHFE127	al39t1_main.01	OK		7123.75		13.04	
AHFE127	al39t1_r1.08	OK		7123.75	100.00%	12.00	92.024%
AHFE128	al39t1_main.01	OK		7123.75		14.78	
AHFE128	al39t1_r1.08	OK		7123.75	100.00%	12.17	82.341%
AHFE129	al39t1_main.01	DOWN					
AHFE129	al39t1_r1.08	OK		10259.66	%	371.77	%
AHFE130	al39t1_main.01	DOWN					
AHFE130	al39t1_r1.08	OK		21395.75	%	433.60	%
AHFE131	al39t1_main.01	DOWN					
AHFE131	al39t1_r1.08	OK		21331.75	%	438.82	%
AGIT132	al39t1_main.01	OK		9427.66		297.22	
AGIT132	al39t1_r1.08	OK		9043.66	95.926%	321.15	108.05%
AGIT133	al39t1_main.01	OK		21907.75		348.44	
AGIT133	al39t1_r1.08	OK		21907.75	100.00%	385.51	110.63%
AGIT134	al39t1_main.01	OK		21971.75		363.91	
AGIT134	al39t1_r1.08	OK		21971.75	100.00%	371.49	102.08%
AG1T135	al39t1_main.01	OK		18323.66		1772.21	
AG1T135	al39t1_r1.08	OK		17491.66	95.459%	1804.13	101.80%
AG1T136	al39t1_main.01	OK		31315.75		2079.67	
AG1T136	al39t1_r1.08	OK		30675.75	97.956%	2129.54	102.39%
AG1T137	al39t1_main.01	OK		31571.75		2225.12	
AG1T137	al39t1_r1.08	OK		31059.75	98.378%	1956.03	87.906%

AA1T138	al39t1_main.01	OK	6739.66		798.03		
AA1T138	al39t1_r1.08	OK	6291.66	93.352%	830.76	104.10%	
AA1T139	al39t1_main.01	OK	12243.75		1132.97		
AA1T139	al39t1_r1.08	OK	11923.75	97.386%	876.98	77.405%	
AA1T140	al39t1_main.01	OK	12243.75		1050.37		
AA1T140	al39t1_r1.08	OK	11859.75	96.863%	973.20	92.653%	
AC1T141	al39t1_main.01	OK	24787.66		2855.43		
AC1T141	al39t1_r1.08	OK	23315.66	94.061%	2860.99	100.19%	
AC1T142	al39t1_main.01	OK	38163.75		2962.31		
AC1T142	al39t1_r1.08	OK	36563.75	95.807%	3150.54	106.35%	
AC1T143	al39t1_main.01	OK	38099.75		3037.36		
AC1T143	al39t1_r1.08	OK	36563.75	95.968%	3219.35	105.99%	
AC1U144	al39t1_main.01	OK	34963.66		4692.16		
AC1U144	al39t1_r1.08	OK	33427.66	95.606%	4539.20	96.740%	
AC1U145	al39t1_main.01	OK	48275.75		5710.61		
AC1U145	al39t1_r1.08	OK	46995.75	97.348%	5311.71	93.014%	
AC1U146	al39t1_main.01	OK	48147.75		5751.93		
AC1U146	al39t1_r1.08	OK	47507.75	98.670%	5302.79	92.191%	
AC5T147	al39t1_main.01	DOWN			%		%
AC5T147	al39t1_r1.08	DOWN					
AC5T148	al39t1_main.01	DOWN			%		%
AC5T148	al39t1_r1.08	DOWN					
AC5T149	al39t1_main.01	DOWN			%		%
AC5T149	al39t1_r1.08	DOWN					
AC5T150	al39t1_main.01	DOWN			%		%
AC5T150	al39t1_r1.08	DOWN					
AC5T151	al39t1_main.01	DOWN			%		%
AC5T151	al39t1_r1.08	DOWN					
AC5T152	al39t1_main.01	DOWN			%		%
AC5T152	al39t1_r1.08	DOWN					
AC4T153	al39t1_main.01	OK	48083.66		285.72		
AC4T153	al39t1_r1.08	OK	48083.66	100.00%	282.27	98.792%	
AC4T154	al39t1_main.01	OK	48083.66		302.74		
AC4T154	al39t1_r1.08	OK	48083.66	100.00%	304.83	100.69%	
AC4T155	al39t1_main.01	OK	54931.75		305.25		
AC4T155	al39t1_r1.08	OK	54931.75	100.00%	368.14	120.60%	
AC4T156	al39t1_main.01	OK	55298.75		302.36		
AC4T156	al39t1_r1.08	OK	54931.75	99.336%	349.68	115.65%	
AC4T157	al39t1_main.01	OK	54611.75		346.30		
AC4T157	al39t1_r1.08	OK	54611.75	100.00%	409.86	118.35%	

AC4T158	al39t1_main.01	OK	54611.75		334.24	
AC4T158	al39t1_r1.08	OK	54611.75	100.00%	409.04	122.37%
AR1T159	al39t1_main.01	OK	35667.66		5817.26	
AR1T159	al39t1_r1.08	OK	33683.66	94.437%	6191.69	106.43%
AR1T160	al39t1_main.01	OK	43283.66		7505.33	
AR1T160	al39t1_r1.08	OK	41299.66	95.416%	7999.53	106.58%
AR1T161	al39t1_main.01	OK	45843.66		6387.48	
AR1T161	al39t1_r1.08	OK	43859.66	95.672%	6885.75	107.80%
AR1T162	al39t1_main.01	OK	44755.75		7388.04	
AR1T162	al39t1_r1.08	OK	42771.75	95.567%	6551.42	88.676%
AR1T163	al39t1_main.01	OK	52563.75		10456.09	
AR1T163	al39t1_r1.08	OK	50707.75	96.469%	8456.77	80.878%
AR1T164	al39t1_main.01	OK	55187.75		8677.20	
AR1T164	al39t1_r1.08	OK	53267.75	96.520%	7132.37	82.196%
AR1T165	al39t1_main.01	OK	44947.75		8147.14	
AR1T165	al39t1_r1.08	OK	42899.75	95.443%	6371.60	78.206%
AR1T166	al39t1_main.01	OK	52691.75		11764.52	
AR1T166	al39t1_r1.08	OK	50643.75	96.113%	8299.26	70.544%
AR1T167	al39t1_main.01	OK	55251.75		9414.84	
AR1T167	al39t1_r1.08	OK	53203.75	96.293%	8348.85	88.677%