

Latest version: NAIA v1.1.1

Changes, fixes and new features

- Rich:
 - Updated the geometric tests ([MR !64](#), E. Robyn)
- Tof:
 - Change the default computation of TOF beta for MC in `NtpMaker`. Old `GetMCBeta` can be run with a dedicated CLI flag.

Available datasets

```
Al.B1236 B.B1308 Ca.B1236 C.B1308 Fe.B1236 He.B1305 Li.B1305 N.B1236 Ni.B1236 P.B1236 Sc.B1236
Ar.B1236 Be.B1236 C.B1236 Cl.B1236 Fe.B1305 He.B1308 Li.B1306 N.B1304 O.B1236 pos.B1236 Si.B1236
B.B1236 Be.B1304 C.B1239 Cr.B1236 H.B1306 ISS.B1236 Li.B1308 N.B1305 O.B1304 Pr.B1236 Ti.B1236
B.B1304 Be.B1305 C.B1304 D.B1236 H.B1308 K.B1236 Mg.B1236 N.B1306 O.B1305 Pr.B1304 V.B1236
B.B1305 Be.B1306 C.B1305 el.B1236 He.B1236 Li.B1236 Mn.B1236 N.B1308 O.B1306 Pr.B1305
B.B1306 Be.B1308 C.B1306 F.B1236 He.B1304 Li.B1304 Na.B1236 Ne.B1236 O.B1308 S.B1236
```

Available environments

(Due to Ixplus permanently switching to AlmaLinux, NAIA v1.1.1 was not compiled for CentOS7)

```
/cvmfs/ams.cern.ch/Offline/amsitaly/public/install/x86_64-el9-gcc12.1/naia/v1.1.1/setenvs/setenv_gcc6.28_el9.sh
```

AlmaLinux 9

Ixplus has been permanently switched to AlmaLinux 9 since last summer.

CNAF very recently followed.

We have been testing AlmaLinux for some time (part of v1.1.0 production was run on AlmaLinux nodes at CERN). All should work as before, but please report any issue.

We will keep providing CentOS7 environment script for the time being, but it can only be used from a local installation of NAIA.

`cvmfs` deployment will be done only for AlmaLinux 9.

NAIA v1.2.0 Status

Changes, fixes and new features

- MCTruth:
 - `TrMCHit` now also includes the corresponding G4 track ID ([#97](#), F. Rossi, P. Zuccon)
- RTInfo:
 - Fixed `TTree` friending issue due to wrong index building ([#94](#))
- Rich:
 - Fixed misnamed variables (Rich charge) ([#95](#), E. Robyn)
 - Fixed `beta = 1` variables not being properly filled ([#96](#))
 - Added information on number of reflected hits ([MR !70](#), E. Robyn)
- TrTrack:
 - All Cluster EDep variables are now computed with the same units (MeV). Doc updated accordingly. ([#103](#))

Changes, fixes and new features

Work In Progress

- MCTruth:
 - Better information on the primary particle with added checkpoints and elastic scattering (P. Zuccon) (requires additional Nskip values in gbatch, any update on this?)

Environment and other changes

For v1.2.0 we will keep using LCG release 104:

```
gcc      12.1
CMake    3.26.2
python   3.9.12
ROOT     6.28/04 (c++17)
XROOTD   5.5.4
```

See here to know more about [LCG releases](<https://lcgdocs.web.cern.ch/lcgdocs/lcgreleases/introduction/>)

If there is a need to update the environment (e.g. some bug in ROOT was fixed in a newer version), please let us know as soon as possible.

Environment and other changes

v1.2.0 production is planned to start right before xmas.

At the moment we are setting up all the job management and production workflow.

After cutting the new release and performing the initial tests production will start with the usual 10k random runs for further checks.