

run 2028, event 18864

time stamp: 857961598 s 242714688 ns

Trigger: 'Physics - Int or L/R trigger', 'Shower Candidate'

in Coihueco mirror 2 3 (in DAQ: 1 2 3 4 5 6)

geometry: hybrid, station 1220 (ToT), showerPlaneDistance = 599 m

$(\theta, \phi) = (61.8 \pm 0.4, 224.5 \pm 1.2)$ deg

$(x, y) = (-12.51 \pm 0.15, 12.59 \pm 0.27)$ km

$R_p = 16.30 \pm 0.03$ km

profile: 4-parameter Gaisser-Hillas (type: USP)

$E = (3.85 \pm 0.25 \pm 0.24) \times 10^{18}$ eV

$X_{\max} = 594 \pm 24$ g/cm²

$(dE/dX)_{\max} = 5.96 \pm 0.22$ PeV/(g/cm²)

$(\lambda, X_0, L) = (54, -304, 221 \pm 11)$ g/cm², $R = 0.25 \pm 0.05$

Cherenkov-fraction = 8%, mva=59 deg.

databases:

Mie attenuation: measured (h<2.4 km, VAOD at 3km: 0.09)

LIDAR: h(cloud)=5.6 km, 97%; CloudCam: max(ζ)=(100/100)% (elev>5.5[^]); CloudMap: max=80%

molecular profile: GDAS; time correction: good