

run 3779, event 4171

time stamp: 975558985 s 159937279 ns

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

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

geometry: hybrid, station 612 (ToT), showerPlaneDistance = 151 m

$(\theta, \phi) = (44.1 \pm 0.3, 30.5 \pm 0.5)$ deg

$(x, y) = (-27.45 \pm 0.03, 9.73 \pm 0.03)$ km

$R_p = 6.89 \pm 0.03$ km

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

$E = (1.63 \pm 0.07 \pm 0.09) \times 10^{18}$ eV

$X_{\max} = 1014 \pm 12$ g/cm²

$(dE/dX)_{\max} = 2.26 \pm 0.04$ PeV/(g/cm²)

$(\lambda, X_0, L) = (50, -178, 245 \pm 8)$ g/cm², $R = 0.21 \pm 0.04$

Cherenkov-fraction = 10%, mva=40 deg.

databases:

Mie attenuation: measured (h<9.7 km, VAOD at 3km: 0.04)

LIDAR: h(cloud)=100.0 km, 0%; CloudCam: max(ζ)=(0/0)% (elev>5.5[^]); CloudMap: max=0%

molecular profile: GDAS; time correction: good