

run 1936, event 177

time stamp: 852791164 s 193802121 ns

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

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

geometry: hybrid, station 824 (ToT), showerPlaneDistance = 515 m

$(\theta, \phi) = (42.9 \pm 1.0, 66.4 \pm 0.8)$ deg

$(x, y) = (-21.93 \pm 0.05, 15.46 \pm 0.05)$ km

$R_p = 9.57 \pm 0.05$ km

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

$E = (1.25 \pm 0.08 \pm 0.07) \times 10^{18}$ eV

$X_{\max} = 1003 \pm 25$ g/cm²

$(dE/dX)_{\max} = 1.88 \pm 0.08$ PeV/(g/cm²)

$(\lambda, X_0, L) = (60, 173, 223 \pm 11)$ g/cm², $R = 0.27 \pm 0.05$

Cherenkov-fraction = 11%, mva=48 deg.

databases:

Mie attenuation: measured (h<16.4 km, VAOD at 3km: 0.06)

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

molecular profile: GDAS; time correction: good