

run 1156, event 5509

time stamp: 939970475 s 573480041 ns

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

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

geometry: hybrid, station 1546 (ToT), showerPlaneDistance = 391 m

$(\theta, \phi) = (47.8 \pm 0.5, 258.0 \pm 0.5)$ deg

$(x, y) = (-4.67 \pm 0.05, 29.87 \pm 0.04)$ km

$R_p = 8.31 \pm 0.03$ km

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

$E = (2.26 \pm 0.09 \pm 0.12) \times 10^{18}$ eV

$X_{\max} = 1009 \pm 17$ g/cm²

$(dE/dX)_{\max} = 3.16 \pm 0.06$ PeV/(g/cm²)

$(\lambda, X_0, L) = (60, 21, 243 \pm 7)$ g/cm², $R = 0.25 \pm 0.04$

Cherenkov-fraction = 11%, mva=29 deg.

databases:

Mie attenuation: measured (h<14.3 km, VAOD at 3km: 0.00)

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

molecular profile: GDAS; time correction: good