

run 4621, event 742

time stamp: 1050027415 s 705310317 ns

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

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

geometry: hybrid, station 393 (ToT), showerPlaneDistance = 338 m

$(\theta, \phi) = (63.4 \pm 0.4, 16.0 \pm 1.5)$ deg

$(x, y) = (-23.57 \pm 0.20, -16.55 \pm 0.11)$ km

$R_p = 11.89 \pm 0.04$ km

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

$E = (1.81 \pm 0.08 \pm 0.10) \times 10^{18}$ eV

$X_{\max} = 1016 \pm 32$ g/cm²

$(dE/dX)_{\max} = 2.67 \pm 0.08$ PeV/(g/cm²)

$(\lambda, X_0, L) = (58, 105, 229 \pm 9)$ g/cm², $R = 0.25 \pm 0.05$

Cherenkov-fraction = 9%, mva=39 deg.

databases:

Mie attenuation: measured (h<10.4 km, VAOD at 3km: 0.02)

LIDAR: h(cloud)=8.2 km, 62%; CloudCam: no data; CloudMap: max=20%

molecular profile: GDAS; time correction: good