COMBINED_SmallDataSample_wA_runs_4775-7039_HDF5

every 40th event from the database is taken into account for this selection, all data arrays are included

general information

Set name	COMBINED_SmallDataSample_wA_runs_4775-7039_ROOT
Data selection	comb_1s
Data format	HDF5
Number of events	general 390,888 combined 390,888 lopes 36
Zip-file name / size	COMBINED_SmallDataSample_wA_runs_4775-7039_HDF5.zip / 647 MB
Data file names / sizes	events.h5 / 660 MB
Creation date	16.4.2020
Application	Quick tests of data samples and cuts to optimize requests

COMBINED quantities selected

Quantity	Description	Range	Cut
E	Estimated primary energy	10^{15} -10^{19} eV	1/40th
Xc	X-core position	-500 - +91 m	1/40th
Yc	Y-core position	-550 - +91 m	1/40th
Ze	Zenith angle	0° - 30°	1/40th
Az	Azimuth angle	0° - 360°	1/40th
Ne*	Number of e/γ particles	1e3.2 / 1e4.8 – 1.0e9	1/40th
Nmu	Number of Muons	1000 – 1.9e9	1/40th
Age	Shower age	0.15 – 1.48	1/40th

* for Ne the range depends on the reconstructed shower core position; see manual

GENERAL quantities selected

Quantity	Description	Range	Cut
T	Air temperature	-20 ° - +50°	1/40th
P	Air pressure	960 -1040 hPa	1/40th
Gt	Global time (sec's since 1.1.1970)	1,078,737,917 – 1,288,855,193	1/40th
Mt	Micro time	0 – 999,999,999	1/40th
DateTime	Date & Time	8.3.2004 – 4.11.2010	1/40th
R	Run number	4775 - 7039	1/40th
Ev	Event number	1 – 4,100,000	1/40th
UUID	Universal Unique Identifier		1/40th
EDeposit	Energy Deposit of e/γ-particles / station	0.0– 30,000.0 MeV	1/40th
MDeposit	Energy Deposit of Muons / station	0.0 – 1000.0 MeV	1/40th
GDeposit	Energy Deposit of charged-particles / GRANDE station	0.0 – 100,000.0 MeV	1/40th
Arrival	Arrival Time / station	-1550.0 – 2550.0 ns	1/40th
GArrival	Arrival Time / GRANDE station	1000.0 – 10,000.0	1/40th
Height	amplitude of pulse	0 – 60 µV/m/MHz	
Distance	distance of antenna position to shower axis	ms	
EnvelopTime	time of maximum envelop	0 – 800 ms	
Polarization	alignment of antenna	NS or EW	

LOPES quantities selected

Quantity	Description	Range	Cut
EfieldMaxAbs	maximum atmospheric electric field	0 - 50,000 V/m	
Azimuth EW & NS	azimuth of LOPES CC beam; EW & NS	0 – 360°	
Elevation EW & NS	elevation of CC beam; EW & NS	0 – 360°	
CC Height EW & NS	amplitude of CC beam; EW & NS	0 – 20 µV/m/MHz	
XHeight EW & NS	amplitude of X-beam; EW & NS	0 – 20 µV/m/MHz	
ConeAngle EW & NS	cone angle of wavefront; EW & NS	0 – 0,1 rad	
NCCBeanAnt EW & NS	nr of antennas contributing; EW & NS	0 – 30	
Eta EW & NS	slope parameter of LDF; EW & NS	-0.04 - 0.11 /m	
Eps EW & NS	ampl parameter of LDF; EW & NS	-0.04 - 0.11 µV/m/MHz	
Geomag_Angle	angle between geomagnetic field and KASCADE shower axis	0 – 120 °	
Geomag_AngleG	angle between geomagnetic field and GRANDE shower axis	0 – 120 °	
Reconstruction	angle between geomagnetic field and GRANDE shower axis	65 or 71	
LOPES Comp ID	LOPES identifier	0 or 1	