

Mawson Muon Telescope

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Basic informations. 0 mwe

Geographic latitude	-67.60 ⁰ S
Geographic longitude	62.88 ⁰ E
Altitude	30 m above sea level
Standard pressure, mbar [hPa]	1000
Vertical geomagnetic cutoff rigidity	0.20 GV
Detector type	2×2×2 plastic scintillate detectors (unit 1×1×0.05 m ³)
X×Y×H, m	2.0×2.0×1.0
Площадь детектора, м ²	4
In continuous operation since	1982
Time resolution	1 min

Mawson, s.l.

Telescope Name	Directional Telescope	Number of sub-telescopes	Count (imp/sec)	Count error (%/hour)	P _m (GV)	β (%/hPa)	Viewing Lat °N lon °E
v0							
n1							
s1							
e1							
w1							
ne2 NL			7.5		27		
nw2 NH			5.0		106		
se2 SL			7.5		72		
sw2 SH			5.0		106		
UpCarpet	2π						
DnCarpet	2π						

Basic information. 30 mwe.

Geographic latitude	-67.60 ⁰ S
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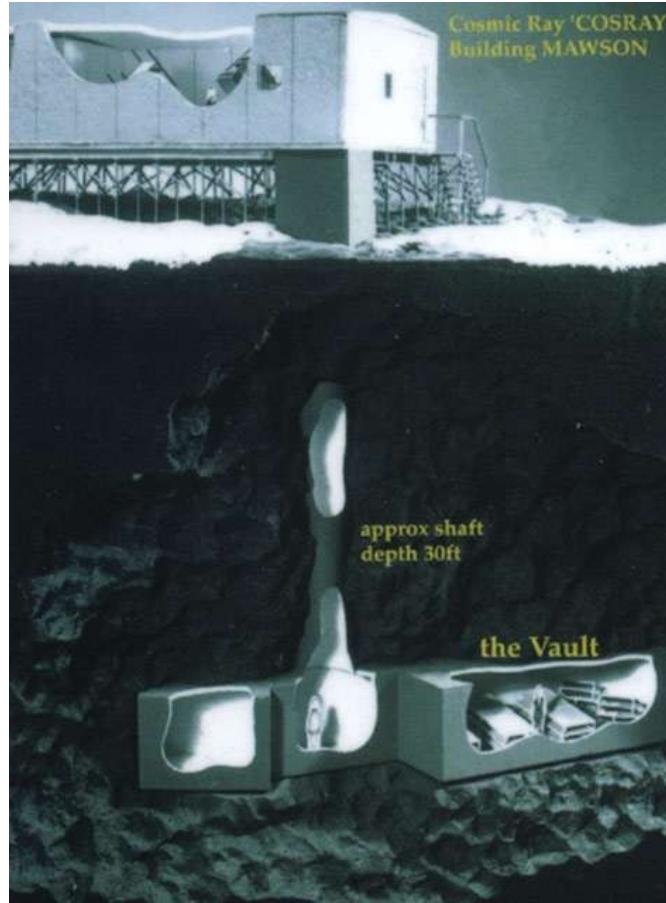
Geographic longitude	62.88° E
Altitude	30 m above sea level
Standard pressure, mbar [hPa]	1000
Vertical geomagnetic cutoff rigidity	0.20 GV
Detector type	$2 \times 2 \times 2$ plastic scintillate detectors (unit $1 \times 1 \times 0.05 \text{ m}^3$)
X×Y×H, m	$2.0 \times 2.0 \times 1.0$
Площадь детектора, м²	4
In continuous operation since	May 19
Time resolution	1 min

Mawson, 30 mwe

Telescope Name	Directional Telescope	Number of sub-telescopes	Count (imp/sec)	Count error (%/hour)	P _m (GV)	β (%/hPa)	Viewing Lat °N lon °E
V					164		
N							
S							
E							
W							
NE							
NW							
SE							
SW							



The Mawson Cosmic Ray observatory contains telescopes which detect and measure cosmic rays coming from outside our solar system. It has a shaft going down in the rock to a vault to a second set of telescopes and also some seismic detection equipment.



В верхней U и нижней L плоскости по $k_x = 2$ и $k_y = 2$ детекторов по каждой координате. Каждая плоскость содержит $k_x \times k_y$ детекторов, между которыми организовано $m = (k_x \times k_y)^2 = 16$ независимых двукратных совпадений. С помощью этих телескопов можно выделить $n = (2k_x - 1) \times (2k_y - 1) = 9$ независимых направления прихода частиц.