Message ID: **4518** Entry time: **Tue Apr 21 09:15:08 2009**

Run:	123
Author:	TP
Type:	Problem
System:	Detector
Subject:	MCP2 beam spot in high B-fields

Quick check of beam spots measured on MCP2 at high WEW fields with new settings of Mirror (294.2 degree instead of 294.8),
15kV transport:

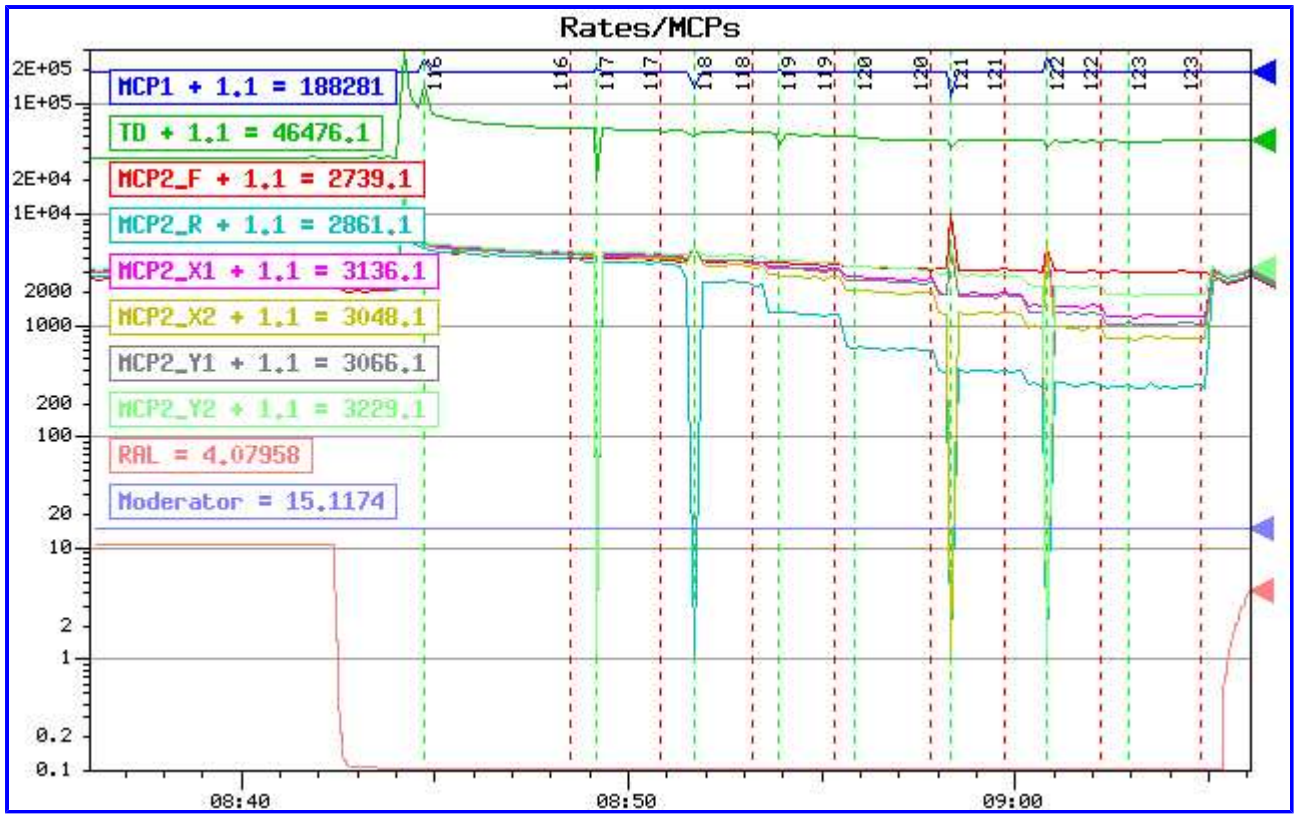
- L3=9.75kV, RA=0
- TD 85/29 (degree/mm)
- Mirror 294.2/17.5 (degree/mm)

Run	Field	Current	in 20x20 mm²	x0 (mm)	y0 (mm)
116	0.75 kG	132 A	0.647	1.93	-0.52
117	1.00 kG	175 A	0.761	0.36	-1.29
118	1.25 kG	219 A	0.807	-1.31	-0.82
119	1.50 kG	263 A	0.967	-1.95	0.87
120	1.75 kG	306 A	0.935	-2.01	2.39
121	2.00 kG	350 A	0.675	-1.64	2.71
122	2.25 kG	394 A	0.485	-1.12	0.53
123	2.50 kG	438 A	0.4??	0.38??	-1.17??

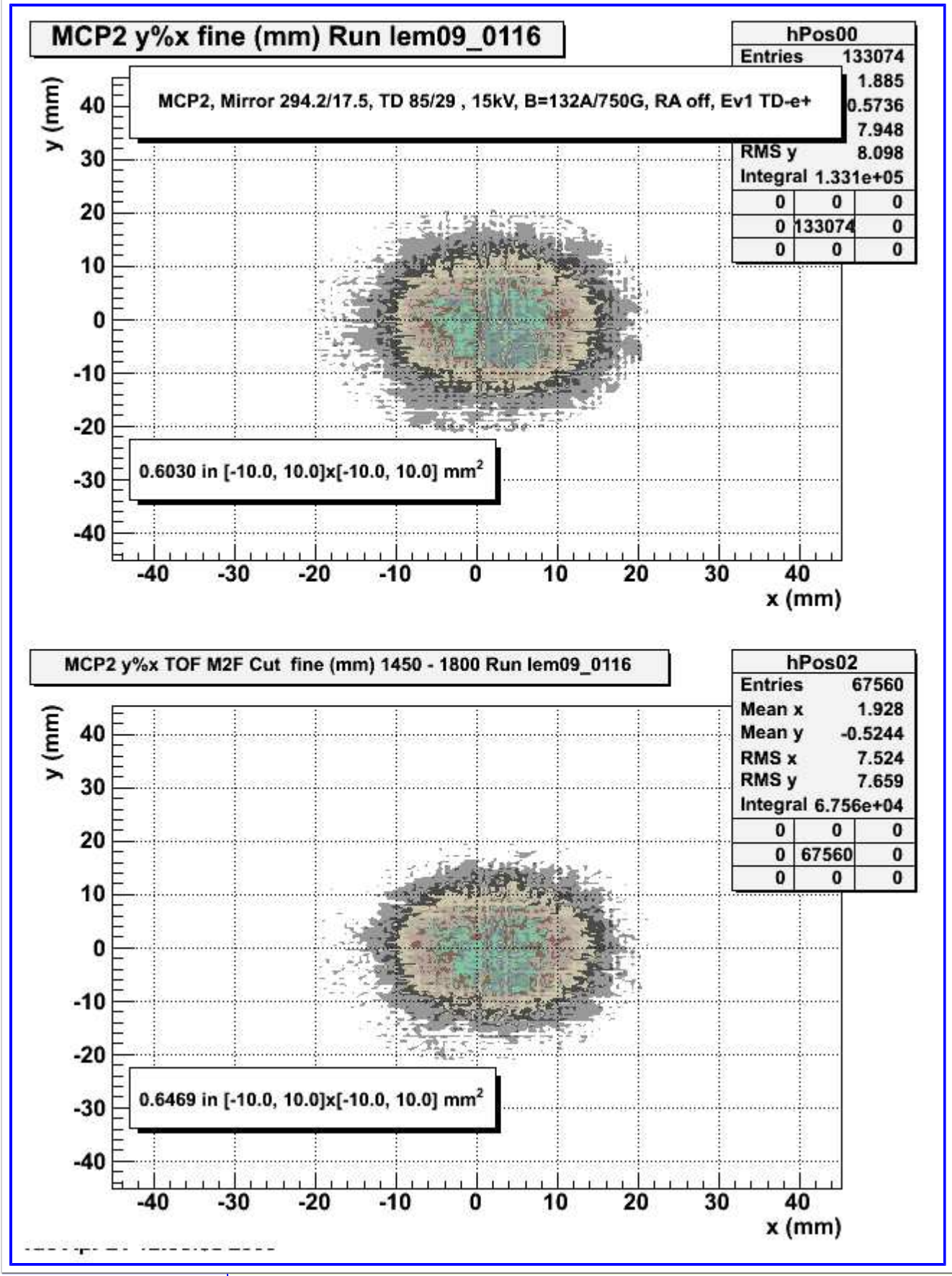
MCP2 rates change differently as a function of B-field, see Fig. 1. This could lead to a wrong/distored image of the beam spot, especially at
higher fields. This requires much more time to be solved by playing with MCP2 thresholds etc. Also, although the event rate does not change,
the histogram entries in the beam spot image decreases with field, indicating that we have less and less events where all four anode signals
are present.

Beam spots in Figs. 2-9.

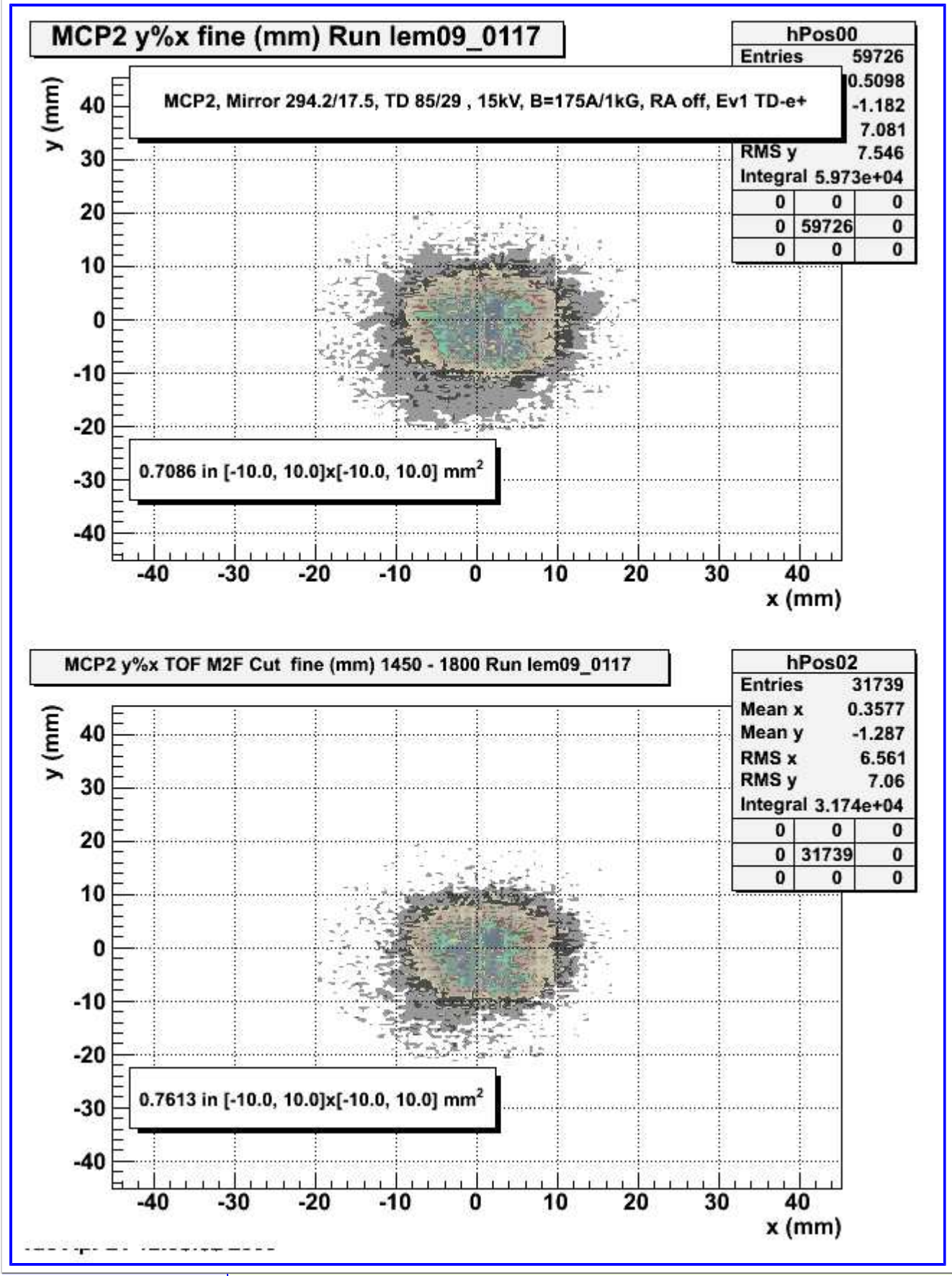
Attachment 1:	MCPs.gif 15 kB | Hide | Hide all



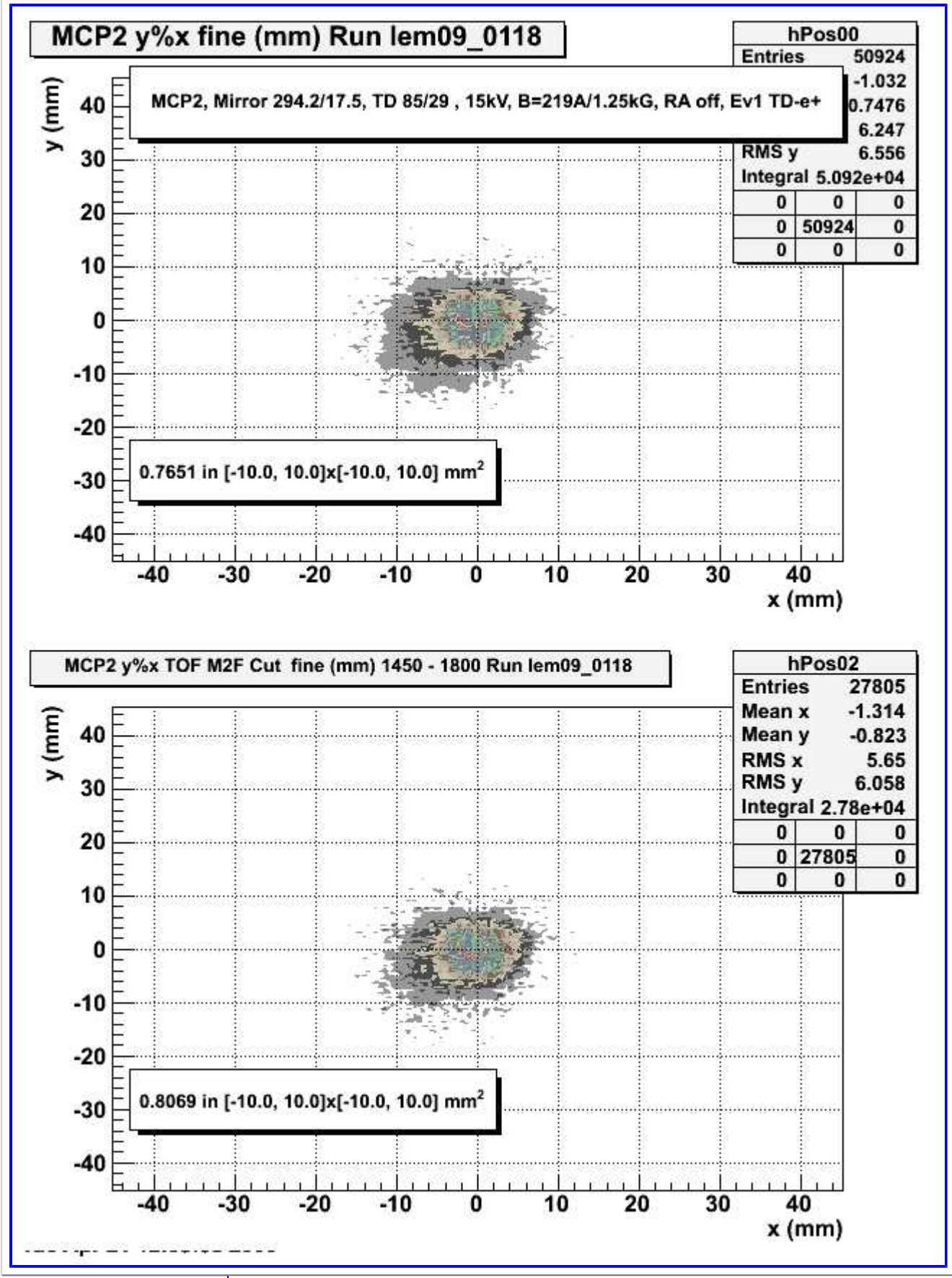
Attachment 2:	lem09_0116_beamspot.gif 34 kB Uploaded Tue Apr 21 17:46:42 2009 | Hide | Hide all



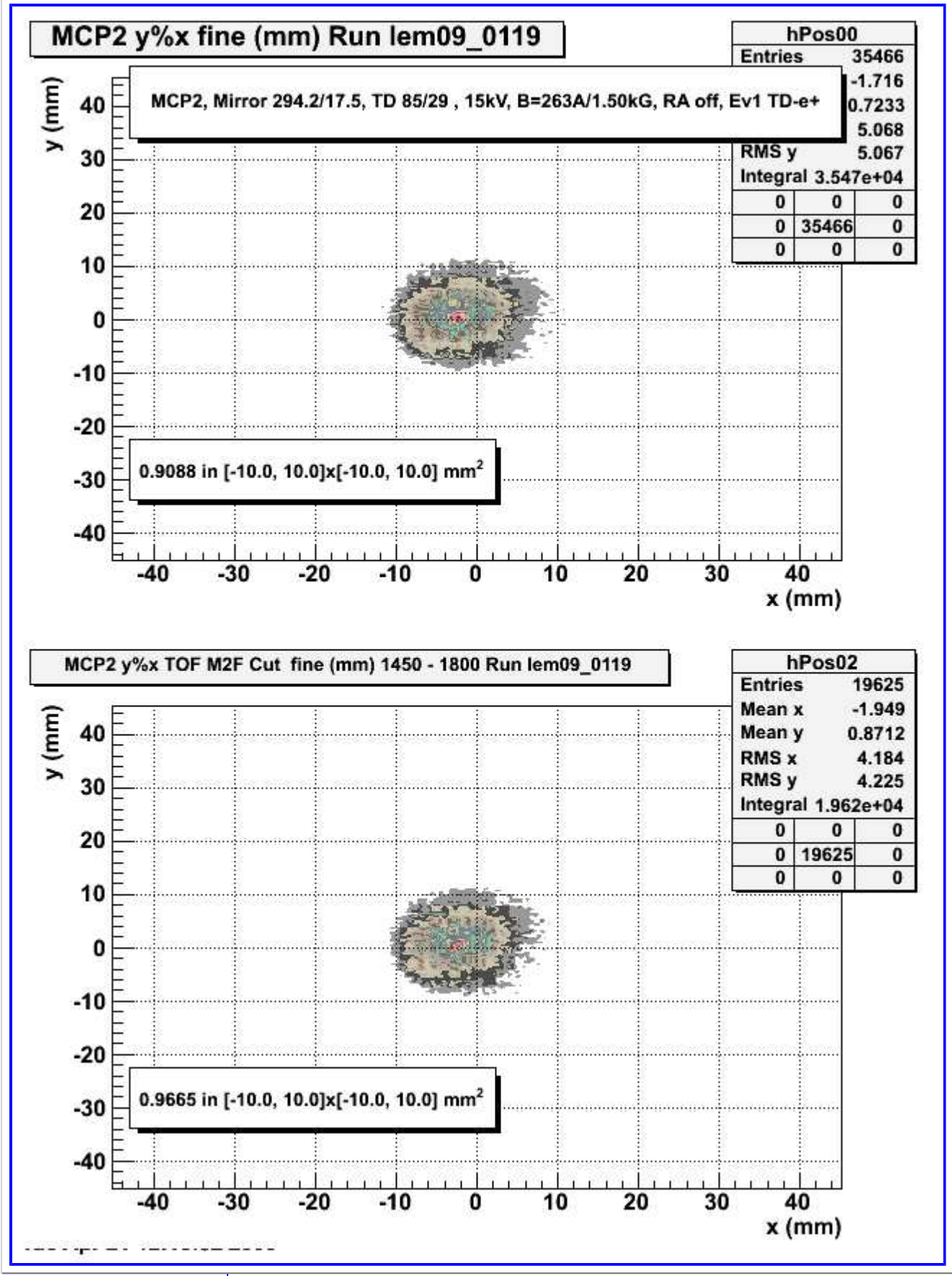
Attachment 3:	lem09_0117_beamspot.gif 31 kB Uploaded Tue Apr 21 17:46:57 2009 | Hide | Hide all



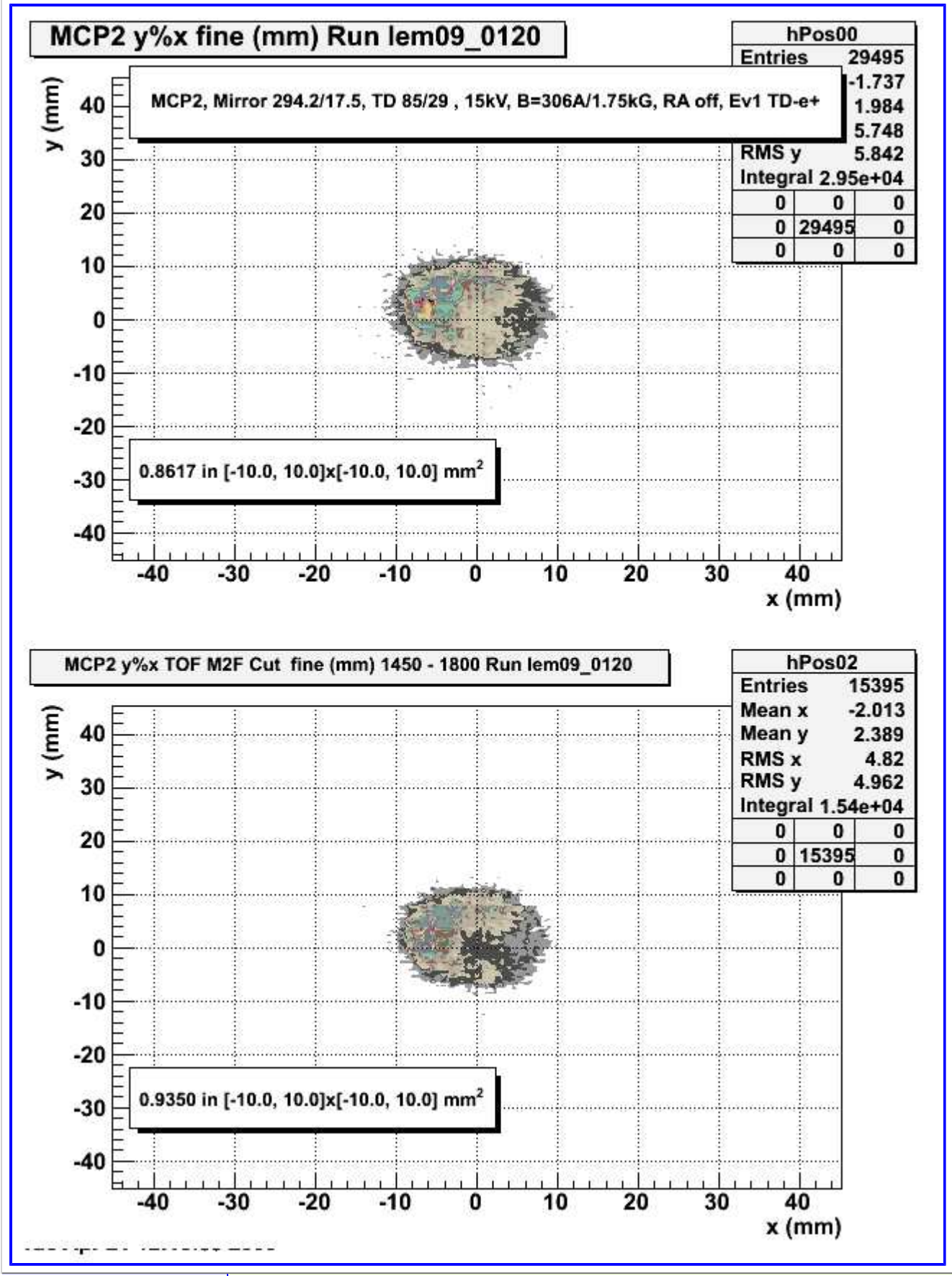
Attachment 4:	lem09_0118_beamspot.gif 26 kB Uploaded Tue Apr 21 17:47:07 2009 | Hide | Hide all



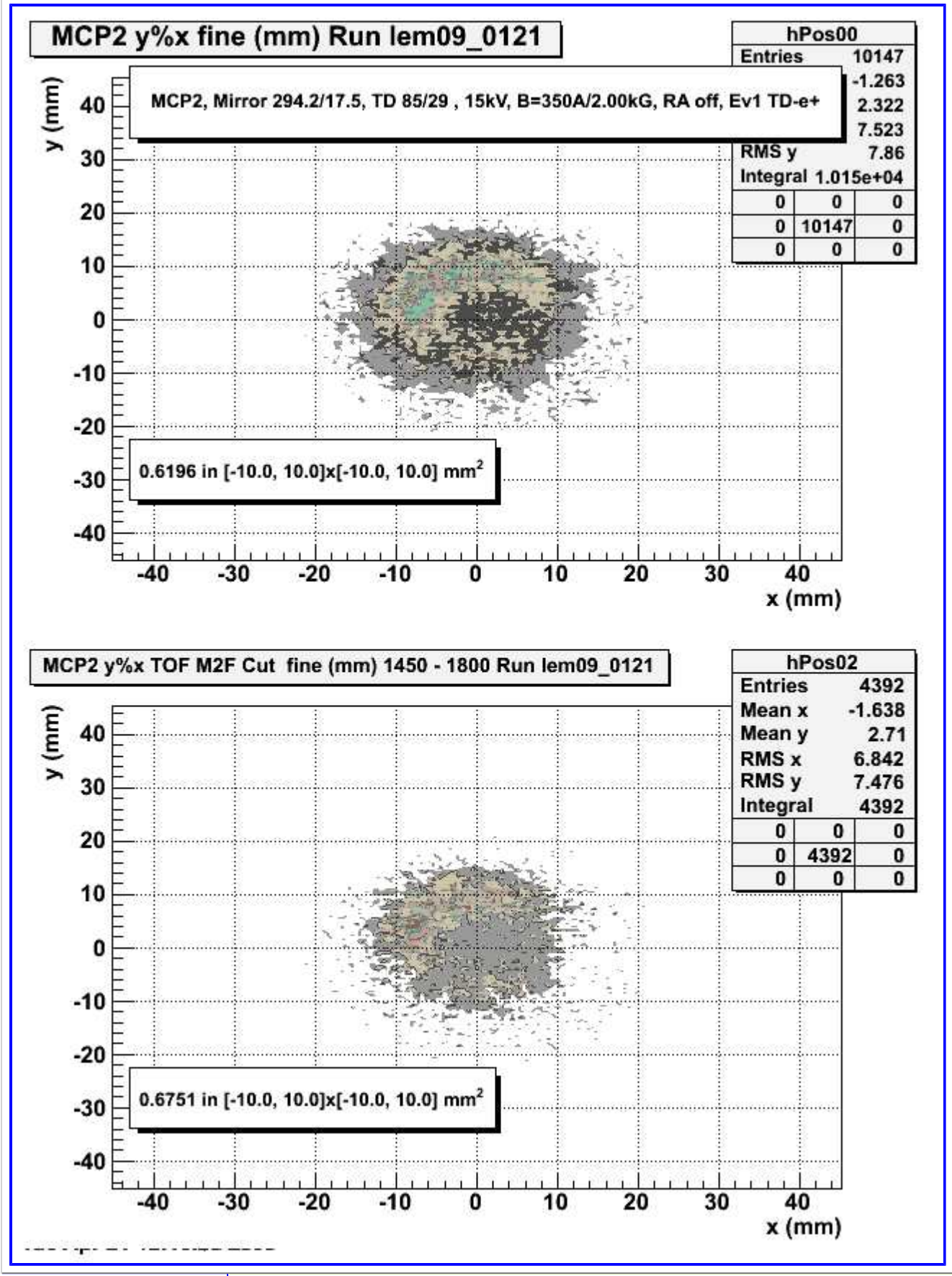
Attachment 5:	lem09_0119_beamspot.gif 26 kB Uploaded Tue Apr 21 17:47:23 2009 | Hide | Hide all



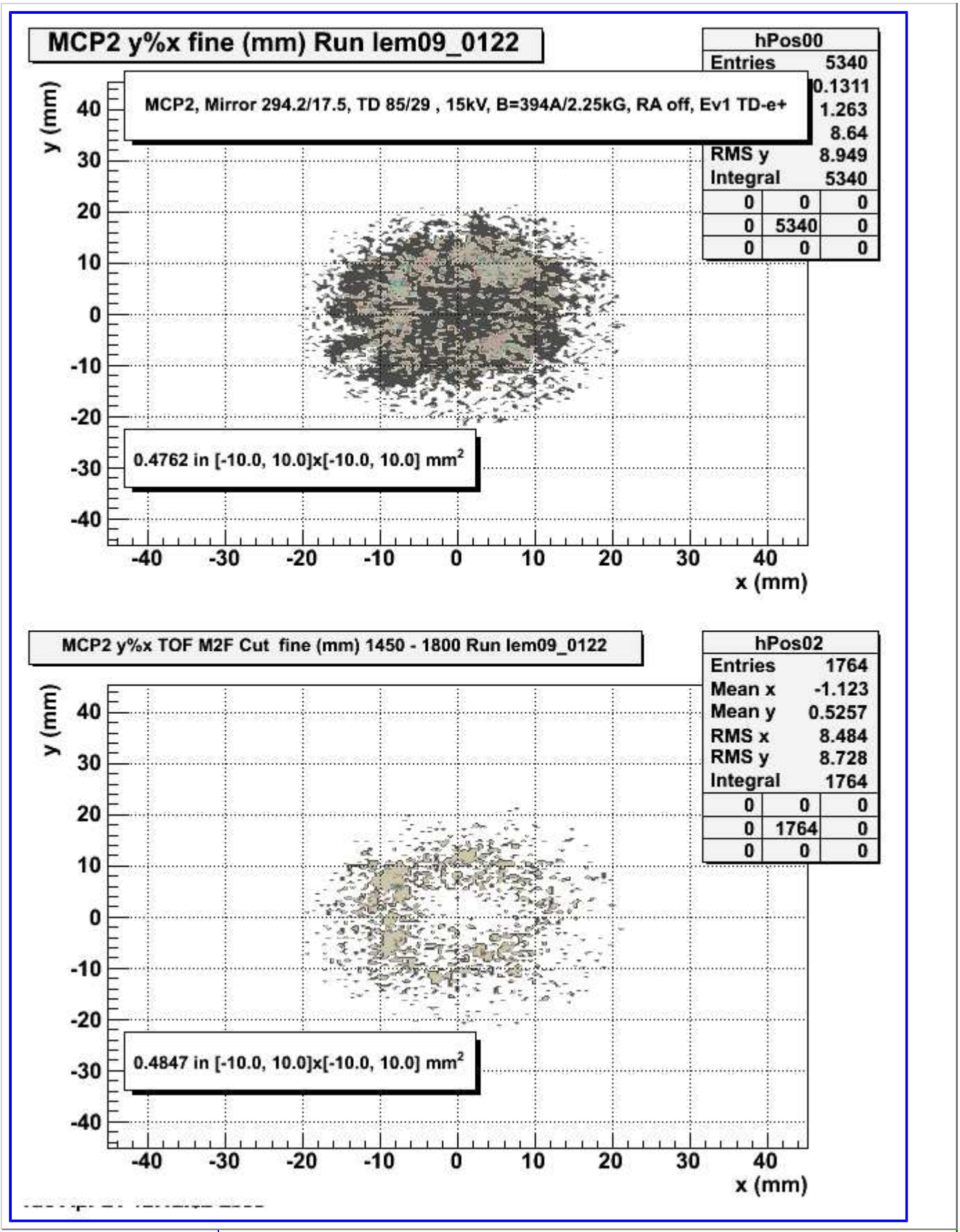
Attachment 6:	lem09_0120_beamspot.gif 26 kB Uploaded Tue Apr 21 17:47:38 2009 | Hide | Hide all



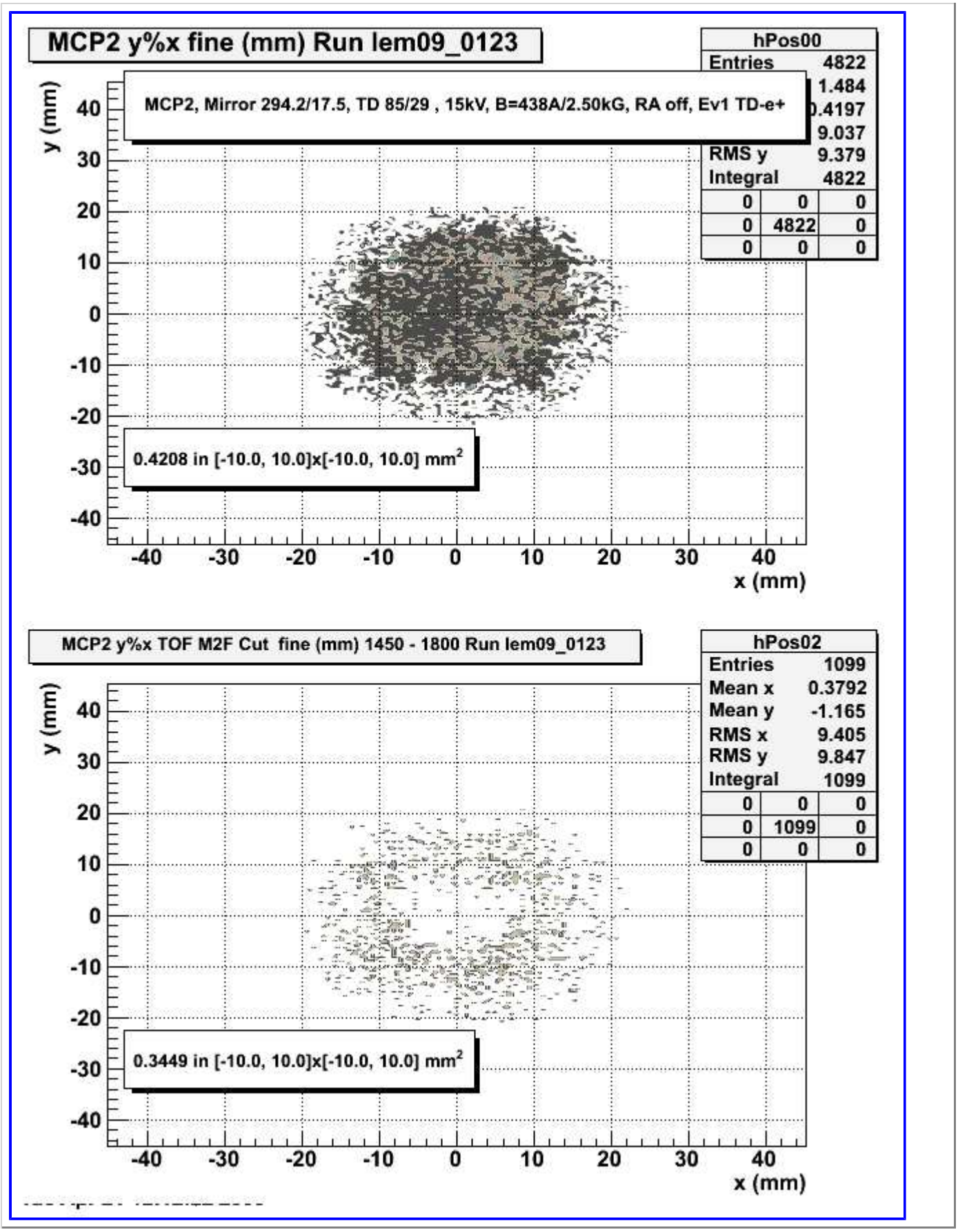
Attachment 7:	lem09_0121_beamspot.gif 30 kB Uploaded Tue Apr 21 17:47:48 2009 | Hide | Hide all



Attachment 8:	lem09_0122_beamspot.gif 31 kB Uploaded Tue Apr 21 17:48:09 2009 | Hide | Hide all



Attachment 9:	lem09_0123_beamspot.gif 31 kB Uploaded Tue Apr 21 17:48:19 2009 | Hide | Hide all



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