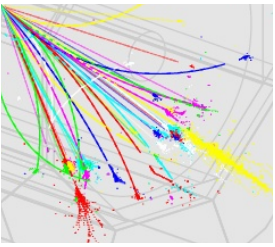


# $^{55}\text{Fe}$ plots

RAL 12.09.2008

M. Stanitzki

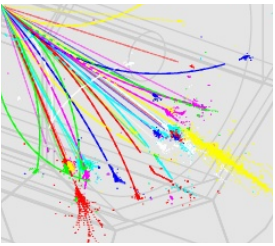




# The Idea

- Fit spectrum with Exponential and ERF
- Simple Idea (just fit an Erf and you are fine) but
  - After Glow is a problem
  - Stats are a problem
  - Fit stability is not so good
  - needs some more work if we want to do 1000 pixels automatic

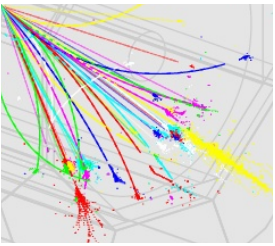




# Results

- applied quality cuts
  - $\chi^2 < 2000$
  - Mean > 100 (if the fit gets stuck it goes below 100)
- Used Pedestals from Paul/Owen (“Sensor13Owen.txt”)



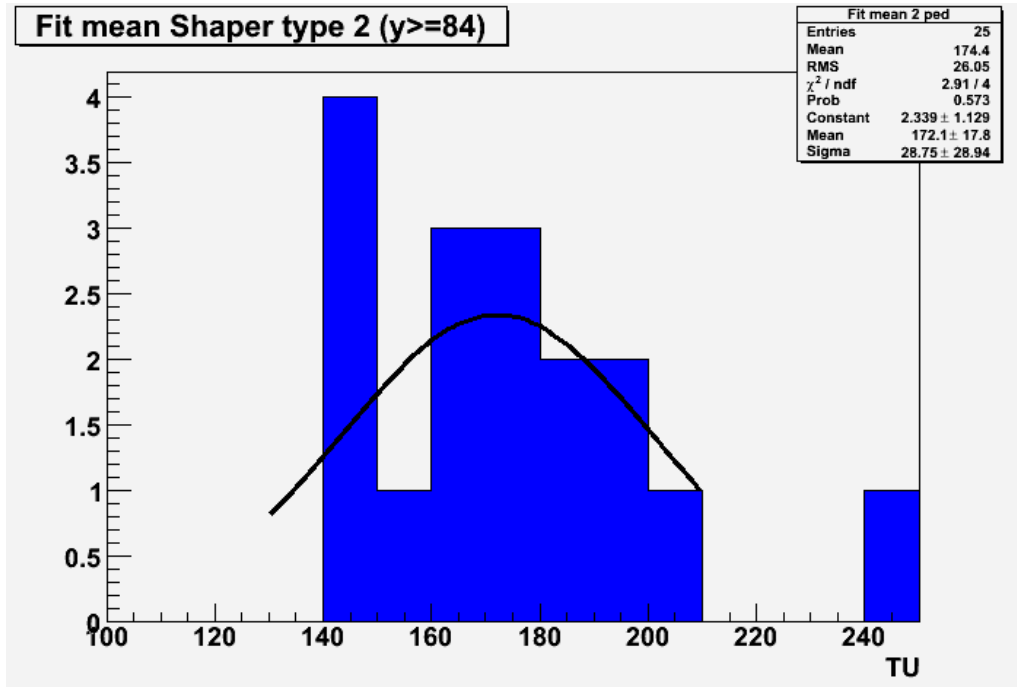
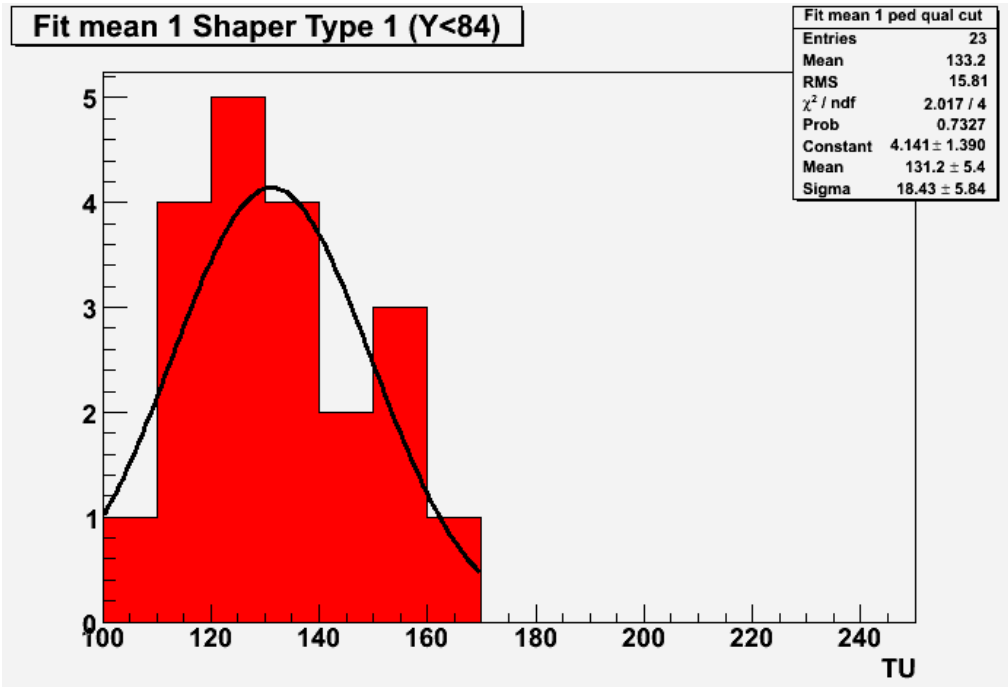
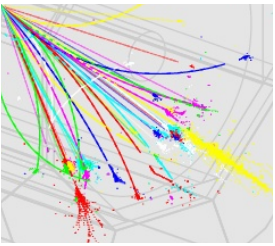


# All Data

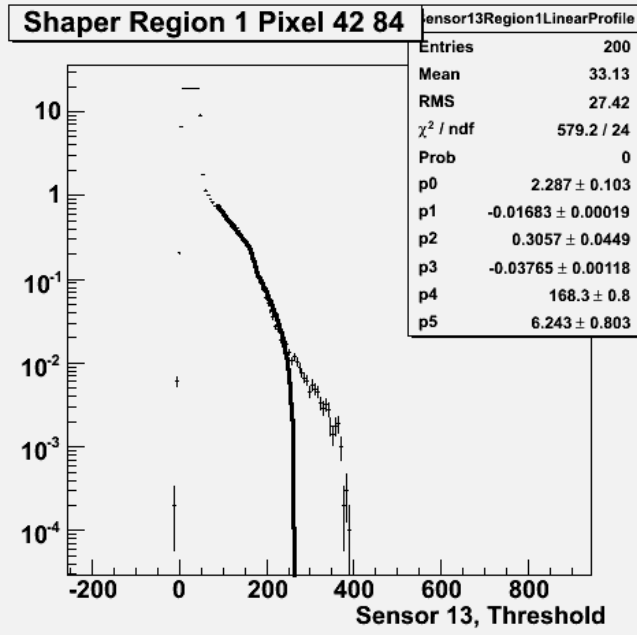
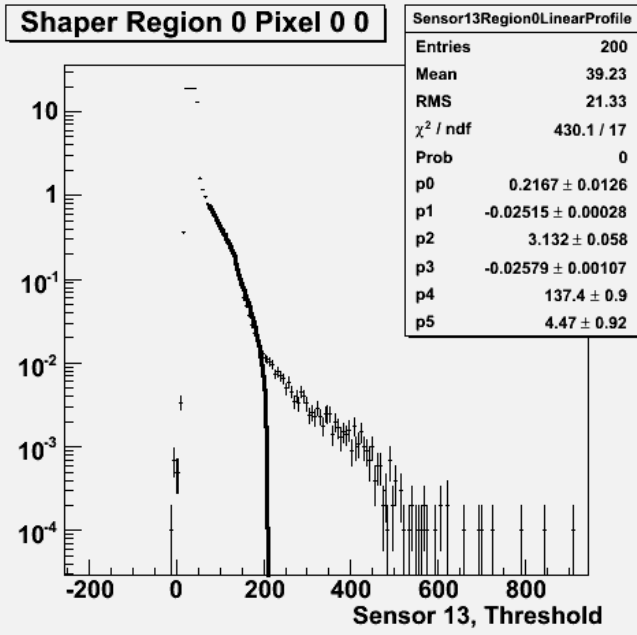
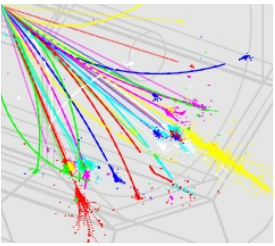
X	Y	Hmean	Mean	sigma	Chi2	Pedestal
021	049	55.009	171.968	4.431	921.271	48.417
045	150	54.660	208.041	10.768	105.152	48.810
031	049	32.859	133.434	5.373	344.585	39.421
045	130	33.253	198.892	14.457	59.516	20.325
011	161	11.816	181.686	11.377	208.285	-14.297
052	049	13.580	150.769	5.179	1278.392	-16.768
000	000	39.230	137.353	4.470	430.052	17.975
042	084	33.126	168.307	6.243	579.184	18.818
007	007	24.998	140.898	4.785	912.622	22.840
049	091	40.174	110.010	0.500	981.801	28.821
014	014	97.972	235.532	3.787	812.826	85.588
056	098	70.243	96.000	28.665	1104.125	-1.274
021	021	46.125	190.113	9.542	78.555	34.265
063	105	11.908	190.989	19.141	22.179	7.697
028	028	34.563	170.096	3.535	37951.574	29.416
070	112	-14.533	165.076	8.344	824.698	-17.644
035	035	23.118	142.584	3.702	784.185	13.948
077	119	34.084	171.508	10.459	30.561	30.460
000	017	52.911	163.280	3.213	645.767	36.850
048	044	57.350	176.745	5.268	597.242	56.081
001	017	72.741	209.707	11.677	83.020	55.182
049	044	44.480	153.139	7.299	249.536	44.633
002	017	19.172	111.070	6.476	53.347	26.779
050	044	42.724	168.484	4.667	693.927	34.737
003	017	19.840	130.829	8.080	124.073	20.749
051	044	75.552	191.392	6.066	496.841	71.830
004	017	57.378	278.123	40.000	30985.909	40.888
052	044	49.180	185.737	10.280	126.570	34.365
005	017	16.050	145.778	3.524	1235.768	7.150
053	044	22.027	112.320	8.963	13.616	13.585
000	087	26.728	178.300	7.895	831.225	17.684
048	124	63.882	96.000	13.927	47690.749	24.629
001	087	97.027	233.903	8.790	145.166	88.226
049	124	76.353	129.955	0.646	133.542	47.887
002	087	69.224	110.000	2.881	49.808	23.599
050	124	65.883	219.351	9.891	151.195	52.792
003	087	37.717	96.000	18.003	22236.834	38.468
051	124	15.167	175.588	8.886	301.829	13.449
004	087	41.052	205.838	15.105	51.127	33.766
052	124	37.525	241.411	11.849	90.556	-5.717
005	087	66.049	199.545	9.827	96.982	58.077
053	124	62.841	235.790	18.309	34.905	33.268
010	017	33.984	154.885	0.511	711.780	16.224
068	164	18.988	183.706	10.879	115.349	4.351
010	018	22.879	143.815	3.545	485.141	13.410
068	165	64.330	96.000	12.508	56374.820	9.070
010	019	-13.048	110.924	5.145	645.714	-15.589
068	166	33.188	270.000	30.984	52.488	9.362
010	020	65.610	194.070	9.048	115.334	53.037
068	167	11.610	200.296	13.726	54.453	3.064



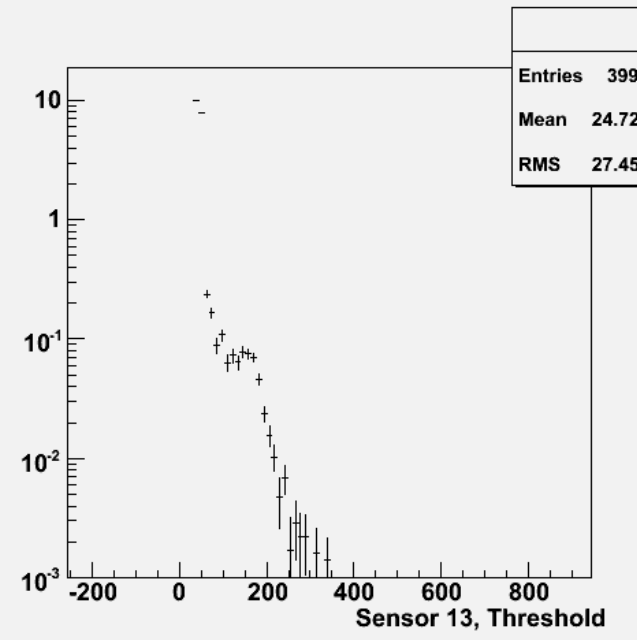
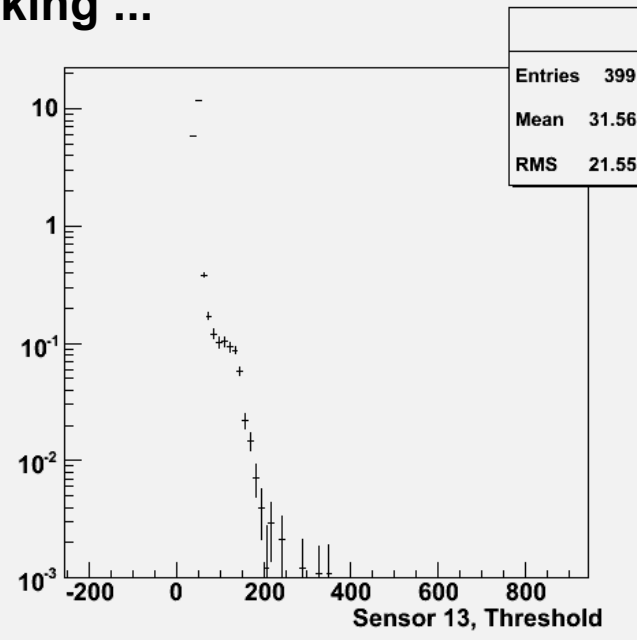
# Results



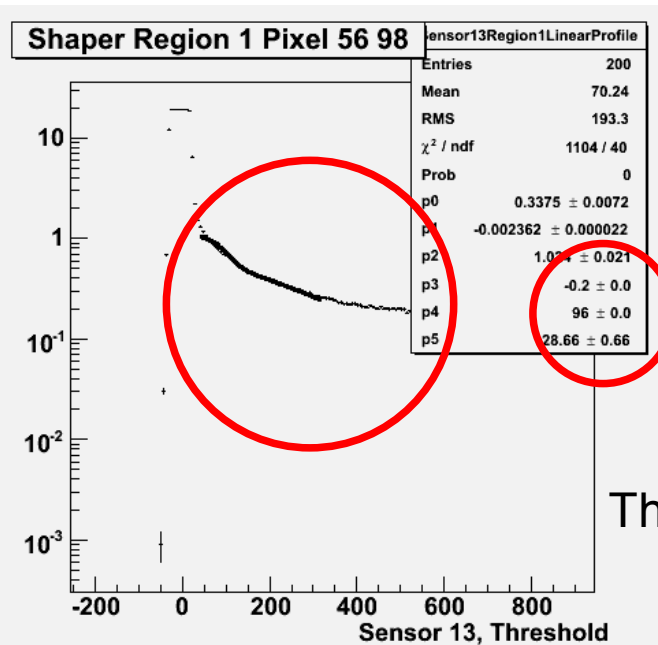
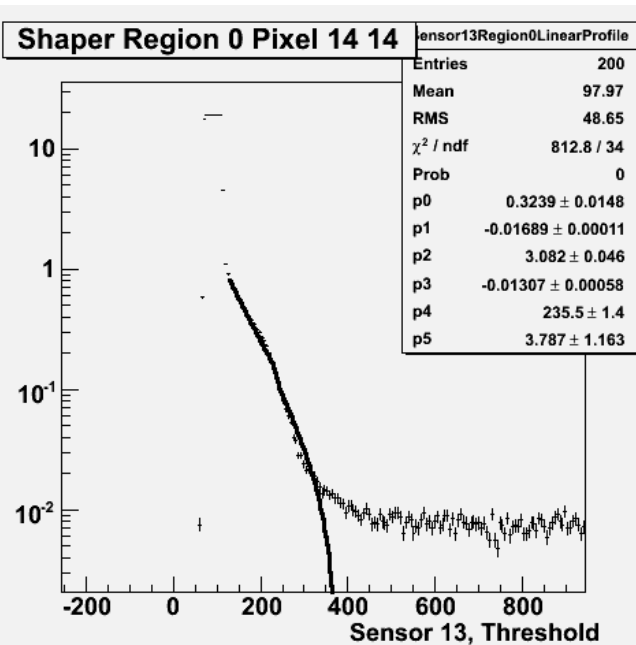
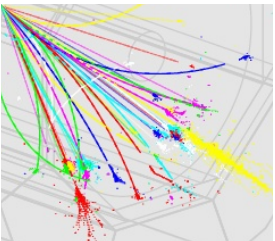
# Some Pixels



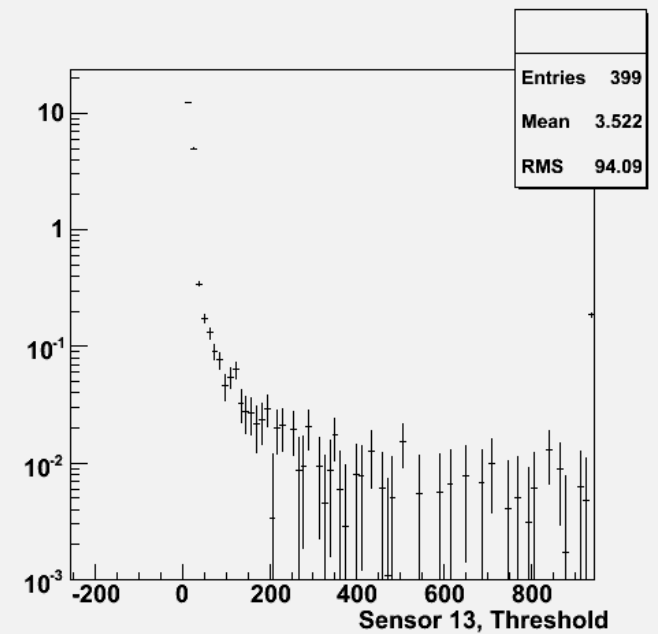
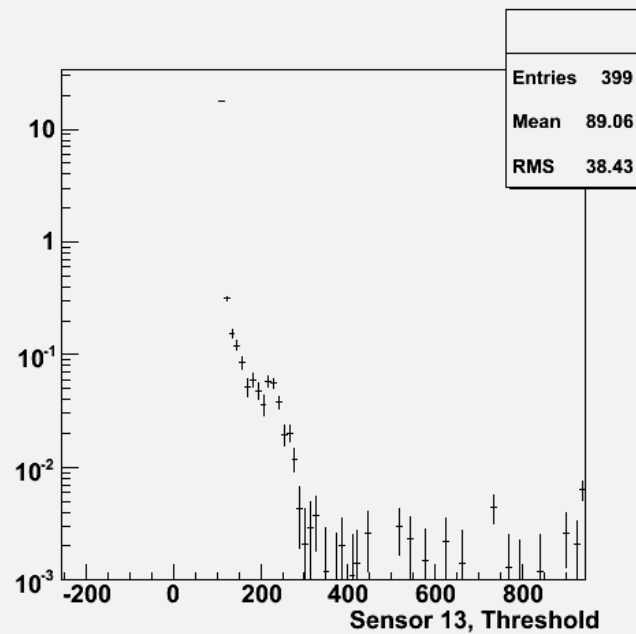
Well working ...



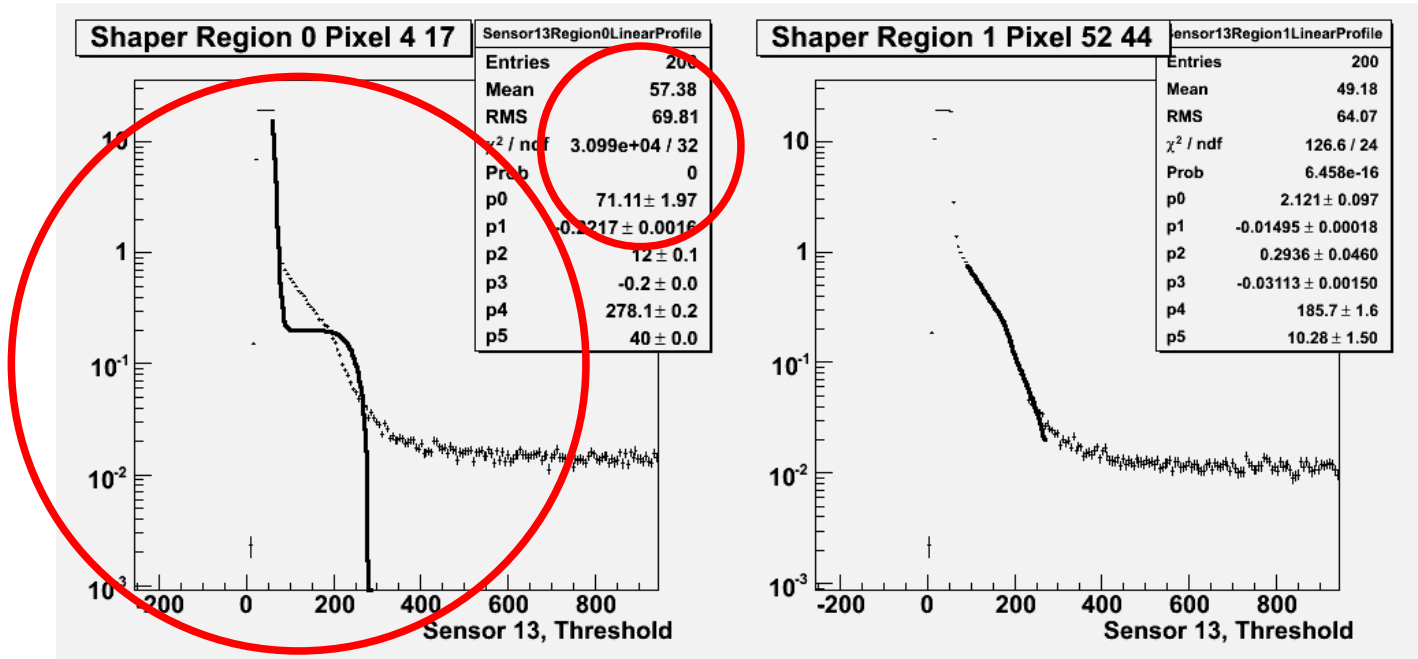
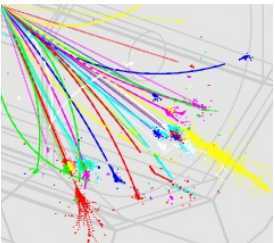
# more



Things going bad



# more



Killed by  $\chi^2$

