### **Tables**



#### $\sigma \, \operatorname{comp}$

$\sigma$	110 GeV	125 GeV	130 GeV	140 GeV
no cat	1.6815	1.7914	1.8280	1.9013
unconv eta1	1.3850	1.4767	1.5073	1.5684
unconv eta2	1.8905	2.0592	2.1154	2.2279
unconv eta3	1.6011	1.7101	1.7464	1.8191
1conv eta1	1.5162	1.6136	1.6461	1.7110
1conv eta2	2.2108	2.4057	2.4707	2.6006
1conv eta3	1.8623	1.9712	2.0075	2.0801

Table: DSCB global fit  $\sigma$ 

#### **Signal events**

Signal	110 GeV		125 GeV		130 GeV		140 GeV	
	МС	WS	МС	WS	МС	WS	МС	WS
nocat	5043.55	4837.93	5470.73	4756.55	5121.93	4497.31	3572.26	3583.96
unc eta1	777.589	743.637	842.152	731.715	790.323	692.004	551.257	551.719
unc eta2	371.877	355.753	397.986	345.757	369.978	325.759	257.827	257.88
unc eta3	1308.86	1248.32	1410.78	1226.18	1333.2	1159.02	923.673	923.147
1con eta1	480.782	462.915	526.501	457.137	491.21	432.8	343.588	345.766
1con eta2	623.682	596.811	675.171	586.586	631.844	554.563	441.421	441.859
1con eta3	1467.8	1415.07	1606.79	1394.92	1493.38	1319.94	1045.96	1053.44

Table: Number of signal events in  $[-\infty, +\infty]$  GeV intervall

### **Background events**

Bkg	nocat	unc eta1	unc eta2	unc eta3	1con eta1	1con eta2	1con eta3
	1311646.70						
WS	1311646.74	145296.40	104542.14	361461.98	90430.08	178343.13	428112.85

Table: Number of bkg events in  $[-\infty, +\infty]$  GeV intervall

## Sig/Bkg comp

S/B	110 GeV	125 GeV	130 GeV	140 GeV
no cat	0.016654	0.028482	0.030459	0.027733
unconv eta1	0.022935	0.039959	0.043401	0.040293
unconv eta2	0.015188	0.025486	0.027365	0.025094
unconv eta3	0.015641	0.026629	0.029040	0.026555
1conv eta1	0.022731	0.039530	0.042438	0.039615
1conv eta2	0.014479	0.024191	0.025957	0.023770
1conv eta3	0.014678	0.024909	0.026536	0.024405

Table: Number of signal and bkg events ratio in [peak-5,peak+5] GeV intervall

# $\operatorname{Sig}/\sqrt{Bkg}$ comp

$S/\sqrt{B}$	110 GeV	125 GeV	130 GeV	140 GeV
nocat	0.0242896	0.0329867	0.0329651	0.0262225
unc eta1	0.0112947	0.015498	0.0156348	0.0125786
unc eta2	0.0062962	0.0084047	0.0083935	0.0066883
unc eta3	0.0120645	0.0163146	0.0165593	0.0131567
1con eta1	0.0087962	0.0121206	0.0121116	0.0097966
1con eta2	0.0078205	0.0104387	0.0104291	0.0082988
1con eta3	0.0122576	0.0166494	0.0165323	0.013247

Table: Number of signal and  $\sqrt{bkg}$  events ratio in [peak-5,peak+5] GeV intervall