Selection for tH	Signal	QCD Multijet	tī	Other backgrounds
Basic selection ($m_{b\bar{b}} > 100 \text{GeV}$)	23.1 ± 0.9	9360 ± 810	2612 ± 28	353 ± 23
Relative $H_{\rm T} > 0.4$	81.4%	42.8%	51.9%	52.9%
$Max(\chi^2) < 3.0$	54.3%	14.1%	25.1%	21.8%
$\Delta R(\mathbf{b}_{\mathrm{H}},\mathbf{b}_{\mathrm{H}}) < 1.1$	44.4%	7.5%	11.9%	8.9%
$\chi^2_{ m H} < 1.5$	39.8%	4.9%	9.3%	7.1%
$\Delta R(j_{\rm W}, j_{\rm W}) < 1.75$	33.7%	3.2%	7.2%	5.6%
$\Delta R(\mathbf{b}_{t},\mathbf{W}) < 1.2$	25.7%	1.9%	4.5%	2.5%
Full selection	5.9 ± 0.4	181 ± 52	116.5 ± 6.1	9.3 ± 0.6
			-	
Selection for tZ	Signal	QCD Multijet	tt	Other backgrounds
Selection for tZ Basic selection ($m_{b\overline{b}} < 100 \text{GeV}$)	$\frac{\text{Signal}}{5.7 \pm 0.2}$	$\frac{\text{QCD Multijet}}{6810 \pm 630}$	$\frac{\text{tt}}{1270 \pm 17}$	$\frac{\text{Other backgrounds}}{223 \pm 24}$
Basic selection ($m_{b\overline{b}} < 100 \text{GeV}$) Relative $H_{\rm T} > 0.4$	0	,		0
Basic selection ($m_{b\bar{b}} < 100 \text{GeV}$)	5.7 ± 0.2	6810 ± 630	1270 ± 17	223 ± 24
Basic selection ($m_{b\overline{b}} < 100 \text{GeV}$) Relative $H_{\rm T} > 0.4$	5.7 ± 0.2 86.9%	$6810 \pm 630 \\ 48.5\%$	$\begin{array}{c} 1270\pm17\\ 47.2\%\end{array}$	$223 \pm 24 \\57.5\%$
$\begin{array}{l} \text{Basic selection } (m_{\mathrm{b}\overline{\mathrm{b}}} < 100\mathrm{GeV}) \\ \text{Relative } H_{\mathrm{T}} > 0.4 \\ \mathrm{Max}(\chi^2) < 3.0 \end{array}$	5.7 ± 0.2 86.9% 53.3%	6810 ± 630 48.5% 15.9%	$1270 \pm 17 \\ 47.2\% \\ 24.1\%$	$223 \pm 24 \\57.5\% \\28.8\%$
$\begin{array}{l} \text{Basic selection } (m_{b\overline{b}} < 100\text{GeV}) \\ \text{Relative } H_{\text{T}} > 0.4 \\ \text{Max}(\chi^2) < 3.0 \\ \Delta R(b_Z, b_Z) < 1.1 \end{array}$	$5.7 \pm 0.2 \\86.9\% \\53.3\% \\51.1\%$	6810 ± 630 48.5% 15.9% 11.7%	$\begin{array}{c} 1270 \pm 17 \\ 47.2\% \\ 24.1\% \\ 16.4\% \end{array}$	$223 \pm 24 \\57.5\% \\28.8\% \\22.7\%$
Basic selection ($m_{b\overline{b}} < 100 {\rm GeV}$)Relative $H_{\rm T} > 0.4$ ${\rm Max}(\chi^2) < 3.0$ $\Delta R({\rm b_Z},{\rm b_Z}) < 1.1$ $\chi^2_Z < 1.0$	5.7 ± 0.2 86.9% 53.3% 51.1% 45.0%	6810 ± 630 48.5% 15.9% 11.7% 7.3%	$\begin{array}{c} 1270 \pm 17 \\ 47.2\% \\ 24.1\% \\ 16.4\% \\ 11.5\% \end{array}$	$\begin{array}{c} 223 \pm 24 \\ 57.5\% \\ 28.8\% \\ 22.7\% \\ 18.4\% \end{array}$