

Search region bin	Bin name	HH	ZH	WH (200,1)	\tilde{b} (450,1)	\tilde{b} (450,300)
SP 25	0j, $\geq 0b$, p_T^0	3.9 ± 0.6	2.9 ± 0.5	2.6 ± 0.3	2.7 ± 0.1	0.0 ± 0.0
SP 26	0j, $\geq 0b$, p_T^{75}	2.4 ± 0.3	2.1 ± 0.2	1.8 ± 0.2	0.54 ± 0.02	0.0 ± 0.0
SP 27	0j, $\geq 0b$, p_T^{125}	1.7 ± 0.2	2.7 ± 0.4	1.7 ± 0.2	0.15 ± 0.01	0.01 ± 0.00
SP 28	1-3j, 0b, p_T^0 , m_{T2}^0	4.7 ± 0.8	2.7 ± 0.4	2.9 ± 0.3	4.2 ± 0.5	0.03 ± 0.00
SP 29	1-3j, 0b, p_T^0 , m_{T2}^{30}	4.7 ± 0.5	2.6 ± 0.3	2.1 ± 0.2	1.6 ± 0.3	0.03 ± 0.01
SP 30	1-3j, 0b, p_T^{75} , m_{T2}^0	9.0 ± 1.5	5.1 ± 0.9	3.1 ± 0.6	0.73 ± 0.15	0.27 ± 0.05
SP 31	1-3j, 0b, p_T^{75} , m_{T2}^{30}	0.21 ± 0.04	0.10 ± 0.02	0.10 ± 0.01	0.34 ± 0.09	0.04 ± 0.01
SP 32	1-3j, 0b, p_T^{125} , m_{T2}^0	0.18 ± 0.02	0.10 ± 0.01	0.07 ± 0.01	0.15 ± 0.04	0.05 ± 0.01
SP 33	1-3j, 0b, p_T^{125} , m_{T2}^{30}	0.66 ± 0.14	0.35 ± 0.07	0.19 ± 0.04	0.14 ± 0.03	0.35 ± 0.07
SP 34	1-3j, 1b, p_T^0 , m_{T2}^0	6.1 ± 0.9	2.2 ± 0.3	1.1 ± 0.1	7.1 ± 1.0	0.12 ± 0.02
SP 35	1-3j, 1b, p_T^0 , m_{T2}^{30}	6.6 ± 0.6	2.4 ± 0.2	0.81 ± 0.06	3.4 ± 0.3	0.20 ± 0.02
SP 36	1-3j, 1b, p_T^{75} , m_{T2}^0	13.7 ± 2.1	5.1 ± 0.9	1.4 ± 0.2	2.2 ± 0.3	1.7 ± 0.2
SP 37	1-3j, 1b, p_T^{75} , m_{T2}^{30}	0.23 ± 0.03	0.09 ± 0.01	0.08 ± 0.01	0.82 ± 0.13	0.27 ± 0.04
SP 38	1-3j, 1b, p_T^{125} , m_{T2}^0	0.36 ± 0.04	0.13 ± 0.01	0.07 ± 0.00	0.39 ± 0.06	0.59 ± 0.08
SP 39	1-3j, 1b, p_T^{125} , m_{T2}^{30}	1.2 ± 0.2	0.47 ± 0.09	0.18 ± 0.03	0.37 ± 0.05	3.5 ± 0.5
SP 40	1-3j, $\geq 2b$, p_T^0 , m_{T2}^0	0.60 ± 0.09	0.21 ± 0.04	0.08 ± 0.01	1.9 ± 0.2	0.43 ± 0.05
SP 41	1-3j, $\geq 2b$, p_T^0 , m_{T2}^{30}	0.81 ± 0.07	0.27 ± 0.02	0.07 ± 0.01	1.2 ± 0.1	0.69 ± 0.07
SP 42	1-3j, $\geq 2b$, p_T^{75} , m_{T2}^0	2.0 ± 0.4	0.67 ± 0.11	0.09 ± 0.03	0.98 ± 0.12	5.0 ± 0.6
SP 43	1-3j, $\geq 2b$, p_T^{75} , m_{T2}^{30}	0.08 ± 0.01	0.03 ± 0.01	0.02 ± 0.01	0.38 ± 0.04	1.3 ± 0.1
SP 44	1-3j, $\geq 2b$, p_T^{125} , m_{T2}^0	0.11 ± 0.03	0.04 ± 0.00	0.03 ± 0.00	0.28 ± 0.03	2.2 ± 0.2
SP 45	1-3j, $\geq 2b$, p_T^{125} , m_{T2}^{30}	0.44 ± 0.10	0.16 ± 0.03	0.05 ± 0.03	0.37 ± 0.03	15.5 ± 1.3
SP 46	$\geq 4j$, 0b, p_T^0 , m_{T2}^0	3.9 ± 0.6	3.1 ± 0.5	6.6 ± 0.7	3.3 ± 0.8	0.01 ± 0.00
SP 47	$\geq 4j$, 0b, p_T^0 , m_{T2}^{30}	4.2 ± 0.5	3.4 ± 0.4	5.6 ± 0.5	1.2 ± 0.2	0.03 ± 0.01
SP 48	$\geq 4j$, 0b, p_T^{75} , m_{T2}^0	7.5 ± 1.2	6.9 ± 1.2	8.0 ± 1.4	0.56 ± 0.11	0.13 ± 0.03
SP 49	$\geq 4j$, 0b, p_T^{75} , m_{T2}^{30}	0.14 ± 0.02	0.10 ± 0.01	0.19 ± 0.02	0.52 ± 0.11	0.02 ± 0.00
SP 50	$\geq 4j$, 0b, p_T^{125} , m_{T2}^0	0.16 ± 0.02	0.13 ± 0.02	0.19 ± 0.02	0.25 ± 0.05	0.02 ± 0.00
SP 51	$\geq 4j$, 0b, p_T^{125} , m_{T2}^{30}	0.81 ± 0.18	0.50 ± 0.11	0.51 ± 0.11	0.27 ± 0.05	0.16 ± 0.03
SP 52	$\geq 4j$, 1b, p_T^0 , m_{T2}^0	5.0 ± 0.8	2.3 ± 0.3	2.5 ± 0.3	5.1 ± 0.9	0.08 ± 0.01
SP 53	$\geq 4j$, 1b, p_T^0 , m_{T2}^{30}	5.4 ± 0.6	2.5 ± 0.2	2.1 ± 0.2	2.3 ± 0.2	0.15 ± 0.02
SP 54	$\geq 4j$, 1b, p_T^{75} , m_{T2}^0	11.4 ± 1.8	5.5 ± 0.9	3.5 ± 0.6	1.4 ± 0.2	1.1 ± 0.1
SP 55	$\geq 4j$, 1b, p_T^{75} , m_{T2}^{30}	0.27 ± 0.03	0.14 ± 0.02	0.18 ± 0.02	1.2 ± 0.2	0.11 ± 0.01
SP 56	$\geq 4j$, 1b, p_T^{125} , m_{T2}^0	0.33 ± 0.03	0.14 ± 0.01	0.17 ± 0.01	0.81 ± 0.13	0.15 ± 0.03
SP 57	$\geq 4j$, 1b, p_T^{125} , m_{T2}^{30}	1.4 ± 0.3	0.65 ± 0.12	0.42 ± 0.09	0.76 ± 0.12	1.5 ± 0.2
SP 58	$\geq 4j$, $\geq 2b$, p_T^0 , m_{T2}^0	0.42 ± 0.06	0.18 ± 0.03	0.16 ± 0.03	1.4 ± 0.1	0.18 ± 0.02
SP 59	$\geq 4j$, $\geq 2b$, p_T^0 , m_{T2}^{30}	0.65 ± 0.07	0.26 ± 0.03	0.13 ± 0.02	0.86 ± 0.08	0.35 ± 0.03
SP 60	$\geq 4j$, $\geq 2b$, p_T^{75} , m_{T2}^0	1.6 ± 0.3	0.67 ± 0.11	0.24 ± 0.07	0.71 ± 0.08	2.4 ± 0.3
SP 61	$\geq 4j$, $\geq 2b$, p_T^{75} , m_{T2}^{30}	0.08 ± 0.02	0.03 ± 0.00	0.03 ± 0.01	0.73 ± 0.07	0.44 ± 0.04
SP 62	$\geq 4j$, $\geq 2b$, p_T^{125} , m_{T2}^0	0.14 ± 0.03	0.05 ± 0.02	0.03 ± 0.00	0.53 ± 0.06	0.82 ± 0.09
SP 63	$\geq 4j$, $\geq 2b$, p_T^{125} , m_{T2}^{30}	0.51 ± 0.11	0.20 ± 0.06	0.11 ± 0.03	0.57 ± 0.05	6.4 ± 0.6