

Parameter	1 σ value	BANFF -3 σ		BANFF tuned -1 σ		BANFF tuned +1 σ		BANFF tuned +3 σ	
All syst		0.985 04	−87.254 90(%)	3.461 27	−55.216 00(%)	14.884 00	92.576 00(%)	43.257 40	459.694 00(%)
BANFF 0, SK numu flux, 0.0 - 0.4 GeV	0.098 73	7.725 11	−0.047 25	7.727 55	−0.015 75	7.729 98	0.015 75	7.732 42	0.047 25
BANFF 1, SK numu flux, 0.4 - 0.5 GeV	0.103 49	7.690 47	−0.495 49	7.716 00	−0.165 16	7.741 53	0.165 16	7.767 06	0.495 49
BANFF 2, SK numu flux, 0.5 - 0.6 GeV	0.096 44	7.635 12	−1.211 61	7.697 55	−0.403 87	7.759 98	0.403 87	7.822 41	1.211 61
BANFF 3, SK numu flux, 0.6 - 0.7 GeV	0.086 70	7.598 09	−1.690 74	7.685 21	−0.563 58	7.772 32	0.563 58	7.859 44	1.690 74
BANFF 4, SK numu flux, 0.7 - 1.0 GeV	0.113 05	7.392 83	−4.346 59	7.616 79	−1.448 90	7.840 74	1.448 90	8.064 70	4.346 59
BANFF 5, SK numu flux, 1.0 - 1.5 GeV	0.091 75	7.582 13	−1.897 19	7.679 89	−0.632 40	7.777 64	0.632 40	7.875 39	1.897 19
BANFF 6, SK numu flux, 1.5 - 2.5 GeV	0.070 17	7.668 25	−0.783 02	7.708 59	−0.261 01	7.748 94	0.261 01	7.789 28	0.783 02
BANFF 7, SK numu flux, 2.5 - 3.5 GeV	0.073 68	7.688 76	−0.517 63	7.715 43	−0.172 54	7.742 10	0.172 54	7.768 77	0.517 63
BANFF 8, SK numu flux, 3.5 - 5.0 GeV	0.087 37	7.672 80	−0.724 13	7.710 11	−0.241 37	7.747 42	0.241 37	7.784 73	0.724 13
BANFF 9, SK numu flux, 5.0 - 7.0 GeV	0.097 94	7.701 61	−0.351 38	7.719 71	−0.117 13	7.737 82	0.117 13	7.755 92	0.351 38
BANFF 10, SK numu flux, 7.0 - 30.0 GeV	0.114 36	7.713 96	−0.191 60	7.723 83	−0.063 87	7.733 70	0.063 87	7.743 57	0.191 60
BANFF 11, SK numubar flux, 0.0 - 0.7 GeV	0.102 58	7.725 54	−0.041 70	7.727 69	−0.013 90	7.729 84	0.013 90	7.731 99	0.041 70
BANFF 12, SK numubar flux, 0.7 - 1.0 GeV	0.078 53	7.723 48	−0.068 33	7.727 00	−0.022 78	7.730 52	0.022 78	7.734 04	0.068 33
BANFF 13, SK numubar flux, 1.0 - 1.5 GeV	0.084 45	7.720 30	−0.109 46	7.725 94	−0.036 49	7.731 58	0.036 49	7.737 22	0.109 46
BANFF 14, SK numubar flux, 1.5 - 2.5 GeV	0.085 57	7.718 44	−0.133 63	7.725 32	−0.044 54	7.732 21	0.044 54	7.739 09	0.133 63
BANFF 15, SK numubar flux, 2.5 - 30.0 GeV	0.086 43	7.718 32	−0.135 09	7.725 28	−0.045 03	7.732 24	0.045 03	7.739 20	0.135 09
BANFF 16, SK nue flux, 0.0 - 0.5 GeV	0.089 70	7.534 64	−2.511 76	7.664 06	−0.837 25	7.793 47	0.837 25	7.922 89	2.511 76
BANFF 17, SK nue flux, 0.5 - 0.7 GeV	0.089 95	7.451 62	−3.585 93	7.636 38	−1.195 30	7.821 15	1.195 30	8.005 91	3.585 93
BANFF 18, SK nue flux, 0.7 - 0.8 GeV	0.085 96	7.591 93	−1.770 43	7.683 15	−0.590 14	7.774 38	0.590 14	7.865 60	1.770 43
BANFF 19, SK nue flux, 0.8 - 1.5 GeV	0.080 92	7.322 91	−5.251 20	7.593 48	−1.750 40	7.864 05	1.750 40	8.134 62	5.251 20
BANFF 20, SK nue flux, 1.5 - 2.5 GeV	0.078 97	7.698 79	−0.387 78	7.718 77	−0.129 26	7.738 75	0.129 26	7.758 73	0.387 78
BANFF 21, SK nue flux, 2.5 - 4.0 GeV	0.083 85	7.724 35	−0.057 14	7.727 29	−0.019 05	7.730 24	0.019 05	7.733 18	0.057 14
BANFF 22, SK nue flux, 4.0 - 30.0 GeV	0.093 89	7.726 91	−0.023 99	7.728 15	−0.008 00	7.729 38	0.008 00	7.730 62	0.023 99
BANFF 23, SK nuebar flux, 0.0 - 2.5 GeV	0.074 03	7.690 08	−0.500 56	7.715 87	−0.166 85	7.741 66	0.166 85	7.767 45	0.500 56
BANFF 24, SK nuebar flux, 2.5 - 30.0 GeV	0.128 42	7.727 33	−0.018 56	7.728 29	−0.006 19	7.729 24	0.006 19	7.730 20	0.018 56
BANFF; Norm; 2p2h	1	7.104 26	−8.080 25	7.104 26	−8.080 20	8.353 27	8.080 20	9.602 27	24.240 70
BANFF; CA5 RES	0.148 52	6.793 92	−12.095 70	7.367 30	−4.676 90	8.140 08	5.321 80	9.112 25	17.900 50
BANFF; Norm; BgRES Isospin 1/2	0.307 69	7.596 03	−1.717 41	7.635 36	−1.208 60	7.871 33	1.844 60	8.303 95	7.442 18
BANFF, Ma QE	0.025 00	7.533 14	−2.531 09	7.665 25	−0.821 73	7.790 58	0.799 82	7.909 19	2.334 48
BANFF, Ma RES	0.157 90	6.865 91	−11.164 20	7.440 66	−3.727 70	8.011 07	3.652 70	8.549 77	10.622 80
BANFF; Fermi Momentum	0.057 78	7.835 22	1.377 35	7.785 78	0.737 73	7.668 52	−0.779 53	7.539 18	−2.452 99
BANFF; Shape; CC Oth	0.400 00	7.676 97	−0.670 10	7.709 61	−0.247 85	7.747 92	0.247 85	7.786 23	0.743 55
BANFF; Norm, CC Coh	0.300 00	7.721 50	−0.093 97	7.726 34	−0.031 32	7.731 19	0.031 32	7.736 03	0.093 97
BANFF; Norm, NC Coh	0.300 00	7.439 23	−3.746 20	7.632 25	−1.248 70	7.825 28	1.248 70	8.018 30	3.746 20
BANFF; Norm, NC Oth	0.300 00	7.567 27	−2.089 58	7.674 93	−0.696 53	7.782 60	0.696 53	7.890 26	2.089 58
BANFF; Norm, ν_e To ν_μ	0.028 28	7.385 68	−4.439 09	7.614 40	−1.479 70	7.843 13	1.479 70	8.071 85	4.439 09
BANFF; Norm; NC 1 γ	1	6.677 89	−13.596 90	6.677 89	−13.597 00	8.779 64	13.597 00	10.881 40	40.790 70
BANFF; Norm, $\bar{\nu}_e$ To $\bar{\nu}_\mu$	0.028 28	7.714 27	−0.187 51	7.723 93	−0.062 50	7.733 59	0.062 50	7.743 26	0.187 51
BANFF; Norm; 2p2hBar	1	7.711 20	−0.227 32	7.711 20	−0.227 32	7.746 33	0.227 32	7.781 47	0.681 96
BANFF; BeRPA A	0.118 00	7.018 76	−9.186 49	7.492 10	−3.062 20	7.965 43	3.062 20	8.438 77	9.186 49
BANFF; BeRPA B	0.210 00	6.935 44	−10.264 50	7.464 32	−3.421 50	7.993 20	3.421 50	8.522 08	10.264 50
BANFF; BeRPA D	0.169 50	7.249 90	−6.195 88	7.569 14	−2.065 30	7.888 39	2.065 30	8.207 63	6.195 88
BANFF; BeRPA E	0.352 00	7.703 00	−0.333 31	7.718 46	−0.133 36	7.739 08	0.133 41	7.759 71	0.400 36
BANFF; Shape; 2p2h	3	7.676 46	−0.676 81	7.702 61	−0.338 40	7.739 77	0.142 40	7.750 78	0.284 81
BANFF; Norm; 2p2h C to O	0.200 00	7.343 52	−4.984 54	7.600 35	−1.661 50	7.857 18	1.661 50	8.114 01	4.984 54
SKDet + FSI/SI 9; E_{reco} (0.00 - 0.35)GeV; $\nu_\mu/\bar{\nu}_\mu$ CC ($1R_e$)	0.302 94	7.515 82	−2.755 27	7.657 78	−0.918 42	7.799 75	0.918 42	7.941 71	2.755 27
SKDet + FSI/SI 10; E_{reco} (0.35 - 0.80)GeV; $\nu_\mu/\bar{\nu}_\mu$ CC ($1R_e$)	0.321 11	7.371 44	−4.623 28	7.609 66	−1.541 10	7.847 87	1.541 10	8.086 09	4.623 28
SKDet + FSI/SI 11; E_{reco} (0.80 - 1.25)GeV; $\nu_\mu/\bar{\nu}_\mu$ CC ($1R_e$)	0.393 43	7.692 44	−0.469 98	7.716 66	−0.156 66	7.740 87	0.156 66	7.765 09	0.469 98
SKDet + FSI/SI 12; E_{reco} (0.00 - 0.35)GeV; $\nu_e/\bar{\nu}_e$ CC ($1R_e$)	0.135 33	7.526 48	−2.617 30	7.661 34	−0.872 43	7.796 19	0.872 43	7.931 05	2.617 30
SKDet + FSI/SI 13; E_{reco} (0.35 - 0.80)GeV; $\nu_e/\bar{\nu}_e$ CC ($1R_e$)	0.069 80	7.256 13	−6.115 24	7.571 22	−2.038 40	7.886 31	2.038 40	8.201 40	6.115 24
SKDet + FSI/SI 14; E_{reco} (0.80 - 1.25)GeV; $\nu_e/\bar{\nu}_e$ CC ($1R_e$)	0.077 18	7.390 95	−4.370 93	7.616 16	−1.457 00	7.841 37	1.457 00	8.066 58	4.370 93
SKDet + FSI/SI 15; E_{reco} (0.00 - 0.35)GeV; all NC ($1R_e$)	0.254 74	6.888 26	−10.875 10	7.448 60	−3.625 00	8.008 93	3.625 00	8.569 27	10.875 10
SKDet + FSI/SI 16; E_{reco} (0.35 - 0.80)GeV; all NC ($1R_e$)	0.173 69	6.971 72	−9.795 18	7.476 42	−3.265 10	7.981 11	3.265 10	8.485 81	9.795 18
SKDet + FSI/SI 17; E_{reco} (0.80 - 1.25)GeV; all NC ($1R_e$)	0.564 42	7.176 85	−7.140 99	7.544 79	−2.380 30	7.912 73	2.380 30	8.280 67	7.140 99