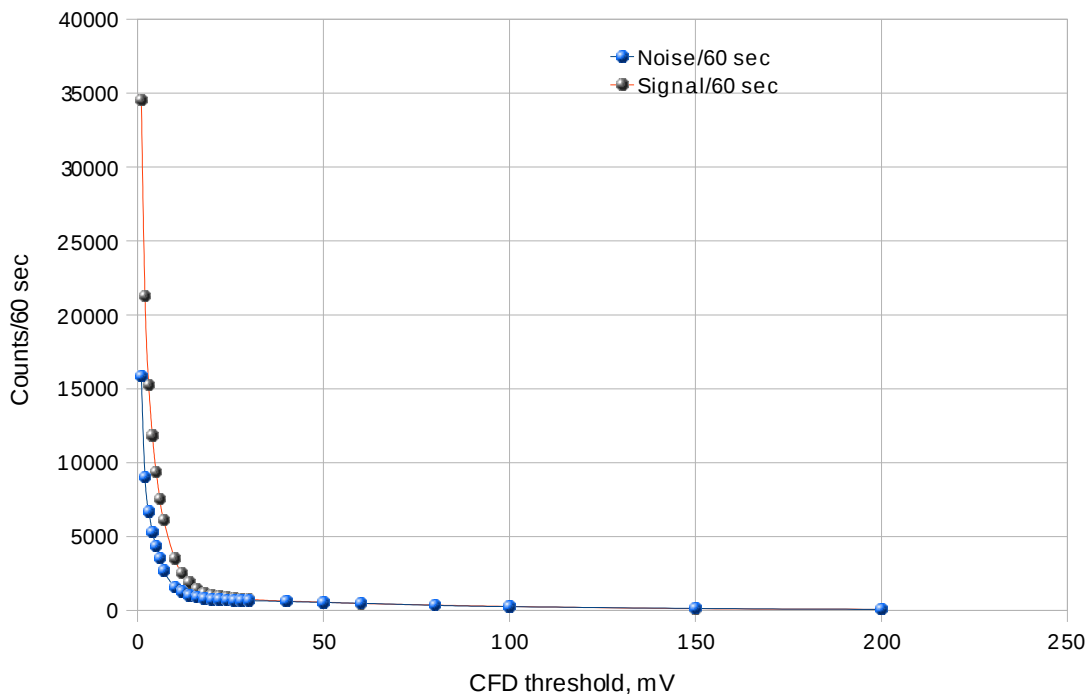


Sheet1

CFD thresh,mV	Noise/60 sec	Signal/60 sec	CFD thresh,mV	Noise, Hz	Signal, Hz
1	15860.7	34530.3	1	264.35	575.51
2	9047	21273	2	150.78	354.55
3	6684	15225	3	111.4	253.75
4	5312.66	11812.66	4	88.54	196.88
5	4365	9370	5	72.75	156.17
6	3557.66	7544	6	59.29	125.73
7	2704.33	6120.66	7	45.07	102.01
10	1579.33	3508.66	10	26.32	58.48
12	1264.33	2523.66	12	21.07	42.06
14	1014.33	1882.33	14	16.91	31.37
16	893.66	1431	16	14.89	23.85
18	814.66	1202	18	13.58	20.03
20	748	1043.33	20	12.47	17.39
22	736.33	943.66	22	12.27	15.73
24	698	876	24	11.63	14.6
26	671.33	827.33	26	11.19	13.79
28	671.66	762	28	11.19	12.7
30	674.66	747.66	30	11.24	12.46
40	611.33	636.66	40	10.19	10.61
50	548	571	50	9.13	9.52
60	490	478.33	60	8.17	7.97
80	353	370.66	80	5.88	6.18
100	265	275.66	100	4.42	4.59
150	143.66	131.33	150	2.39	2.19
200	78.33	85	200	1.31	1.42



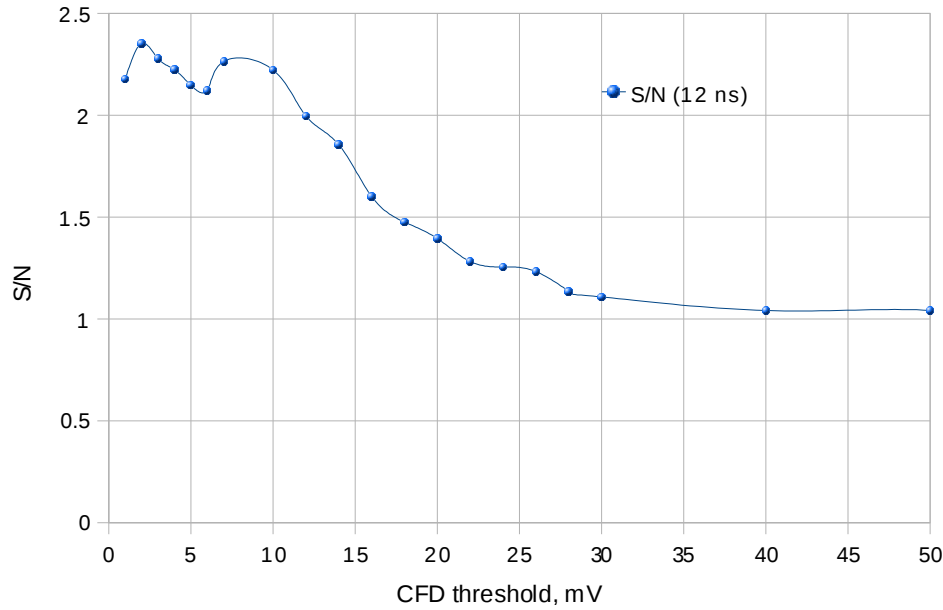
Sheet1

CFD thresh,mV	S/N (12 ns)
1	2.18
2	2.35
3	2.28
4	2.22
5	2.15
6	2.12
7	2.26
10	2.22
12	2
14	1.86
16	1.6
18	1.48
20	1.39
22	1.28
24	1.26
26	1.23
28	1.13
30	1.11
40	1.04
50	1.04
60	0.98
80	1.05
100	1.04
150	0.91
200	1.09

Cf-252 source was placed at a distance 71.12 cm away from the big plastic neutron detector shielded by 2" of lead in front.

Signal-to -Noise ratio vs. CFD threshold

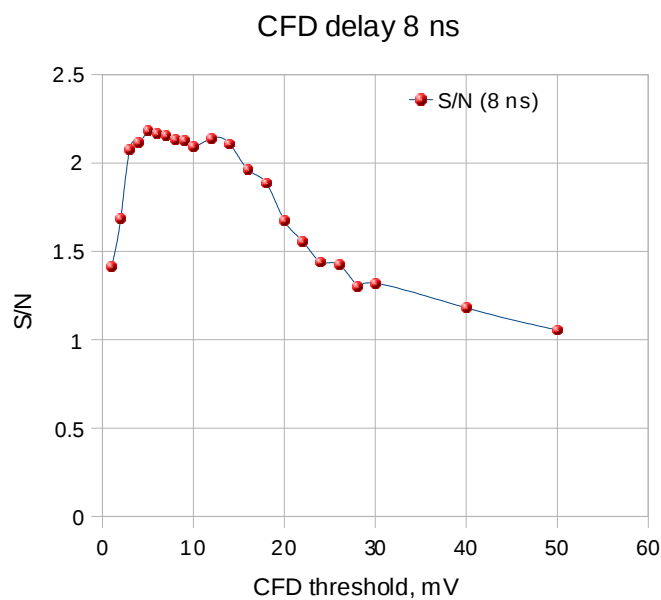
CFD delay 12 ns



CFD thresh,mV	Noise/60 sec	Signal/60 sec	CFD thresh,mV	Noise, Hz	Signal, Hz
1	59464	84151.66	1	991.07	1402.53
2	20396.66	34398.66	2	339.94	573.31
3	9699	20153.33	3	161.65	335.89
4	7010.66	14840.66	4	116.84	247.34
5	5506.33	12015.66	5	91.77	200.26
6	4600	9972	6	76.67	166.2
7	3936.33	8486	7	65.61	141.43
8	3393.33	7238.66	8	56.56	120.64
9	2929.66	6228.33	9	48.83	103.81
10	2589.33	5415.66	10	43.16	90.26
12	1915.66	4099.66	12	31.93	68.33
14	1514.33	3191.33	14	25.24	53.19
16	1290.66	2532.33	16	21.51	42.21
18	1103.33	2081.33	18	18.39	34.69
20	1000.66	1674.66	20	16.68	27.91
22	911.66	1420	22	15.19	23.67
24	836.66	1205	24	13.94	20.08
26	772	1099.66	26	12.87	18.33
28	769.66	1003	28	12.83	16.72
30	747.33	986.33	30	12.46	16.44
40	676	798	40	11.27	13.3
50	656	692	50	10.93	11.53

CFD thresh,mV	S/N (8 ns)
1	1.42
2	1.69
3	2.08
4	2.12
5	2.18
6	2.17
7	2.16
8	2.13
9	2.13
10	2.09
12	2.14
14	2.11
16	1.96
18	1.89
20	1.67
22	1.56
24	1.44
26	1.42
28	1.3
30	1.32
40	1.18
50	1.05

Signal-to-Noise ratio vs. CFD threshold



Sheet1

CFD thresh,mV	Noise/60 sec	Signal/60 sec	CFD thresh,mV	Noise, Hz	Signal, Hz
1	228076.33	249286	1	3801.27	4154.77
2	107156.66	121807	2	1785.94	2030.12
3	53796.33	64653.66	3	896.61	1077.56
4	27370.66	35598	4	456.18	593.3
5	14232.33	20982.33	5	237.21	349.71
6	8697	14124.33	6	144.95	235.41
7	5827.33	10598.33	7	97.12	176.64
8	4472	8463.66	8	74.53	141.06
9	3559	7065	9	59.32	117.75
10	2912.33	6065.33	10	48.54	101.09
12	2188	4544	12	36.47	75.73
14	1755	3550	14	29.25	59.17
16	1429	2923.66	16	23.82	48.73
18	1243.66	2333.66	18	20.73	38.89
20	1066	1885	20	17.77	31.42
22	956	1583.33	22	15.93	26.39
24	912.33	1405.66	24	15.21	23.43
26	853.33	1227	26	14.22	20.45
28	787.33	1105	28	13.12	18.42
30	779.33	1046.66	30	12.99	17.44
40	719	851	40	11.98	14.18

CFD thresh,mV	S/N (4 ns)
1	1.09
2	1.14
3	1.2
4	1.3
5	1.47
6	1.62
7	1.82
8	1.89
9	1.99
10	2.08
12	2.08
14	2.02
16	2.05
18	1.88
20	1.77
22	1.66
24	1.54
26	1.44
28	1.4
30	1.34
40	1.18

Signal-to-Noise ratio vs. CFD threshold  
CFD delay 4 ns

