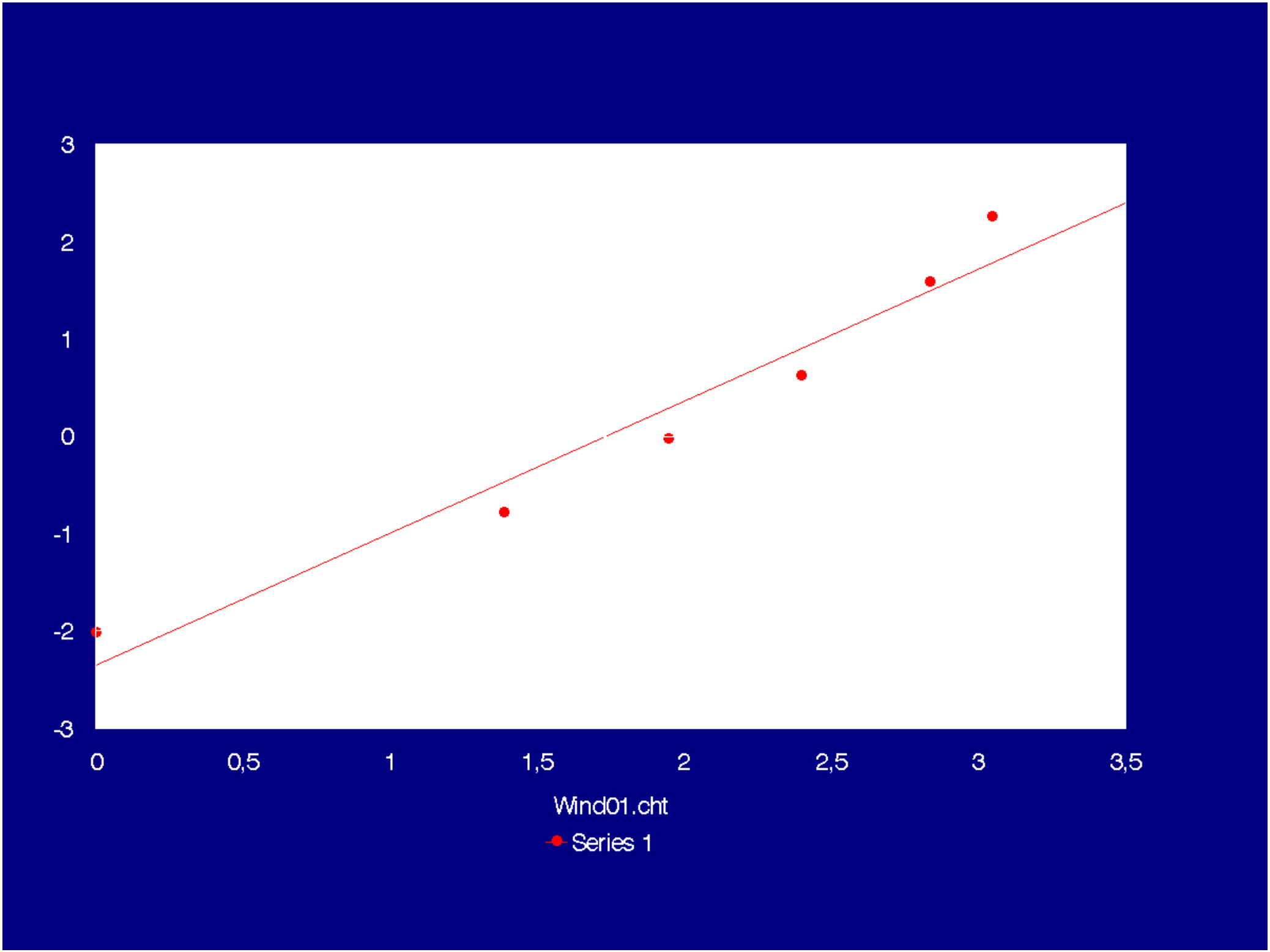
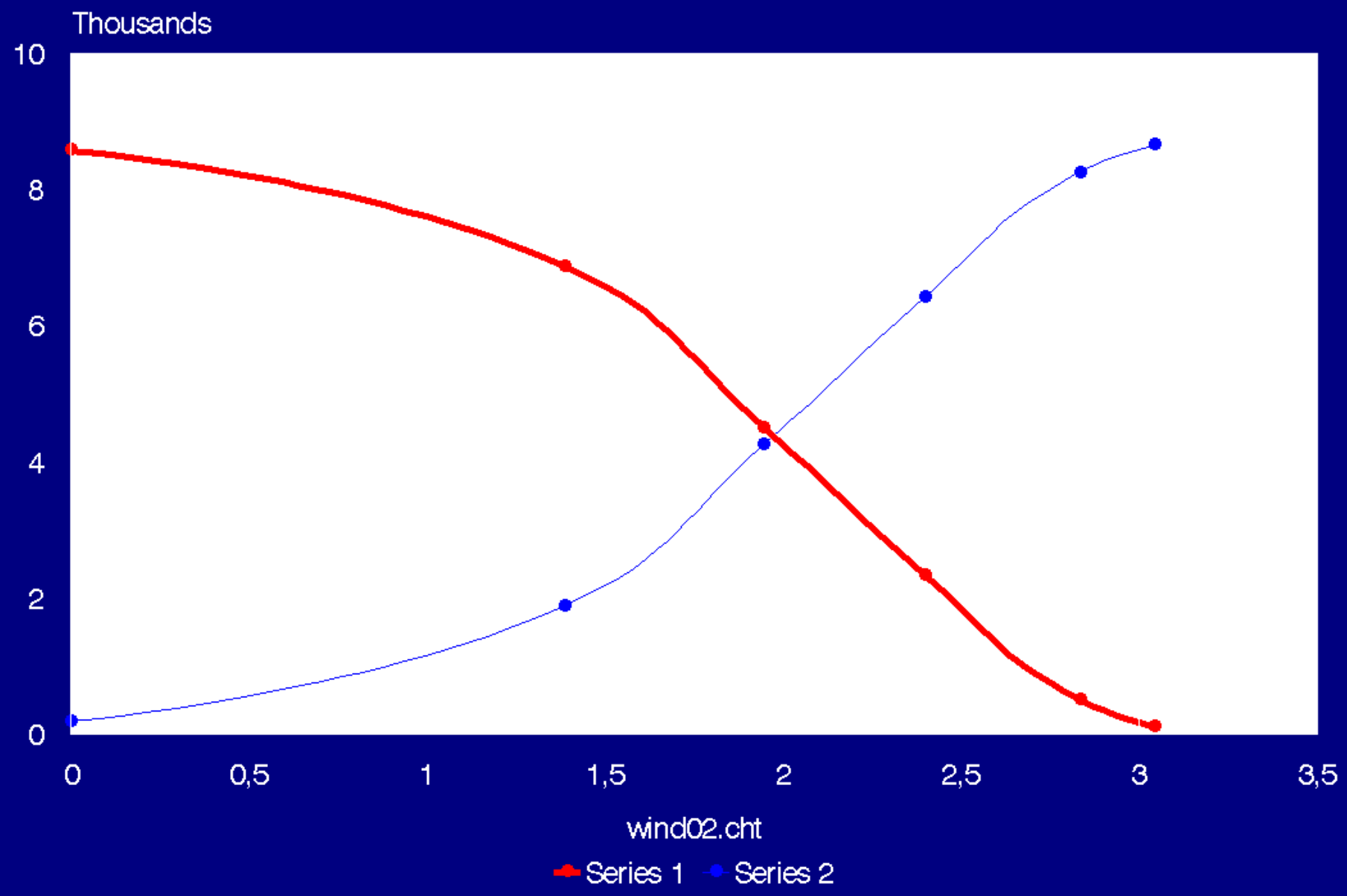
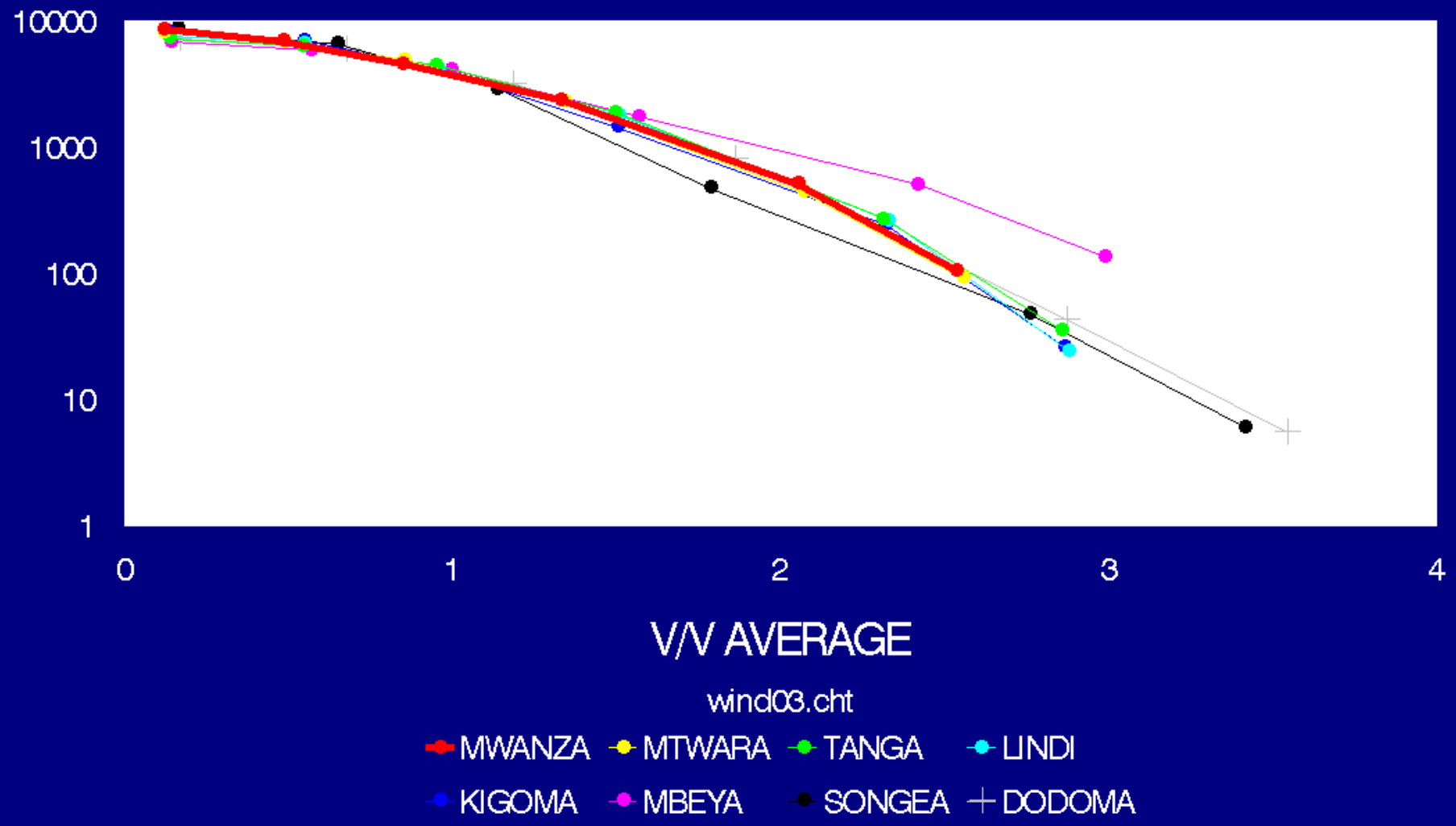

3
2
1
0
-1
-2
-3
0
0,5
1
1,5
2
2,5
3
3,5
Wind01.cht
Series 1


Thousands
10
8
6
4
2
0
0
0,5
1
1,5
2
2,5
3
3,5
wind02.cht
Series 1
Series 2

WINDSPEED DISTRIBUTION

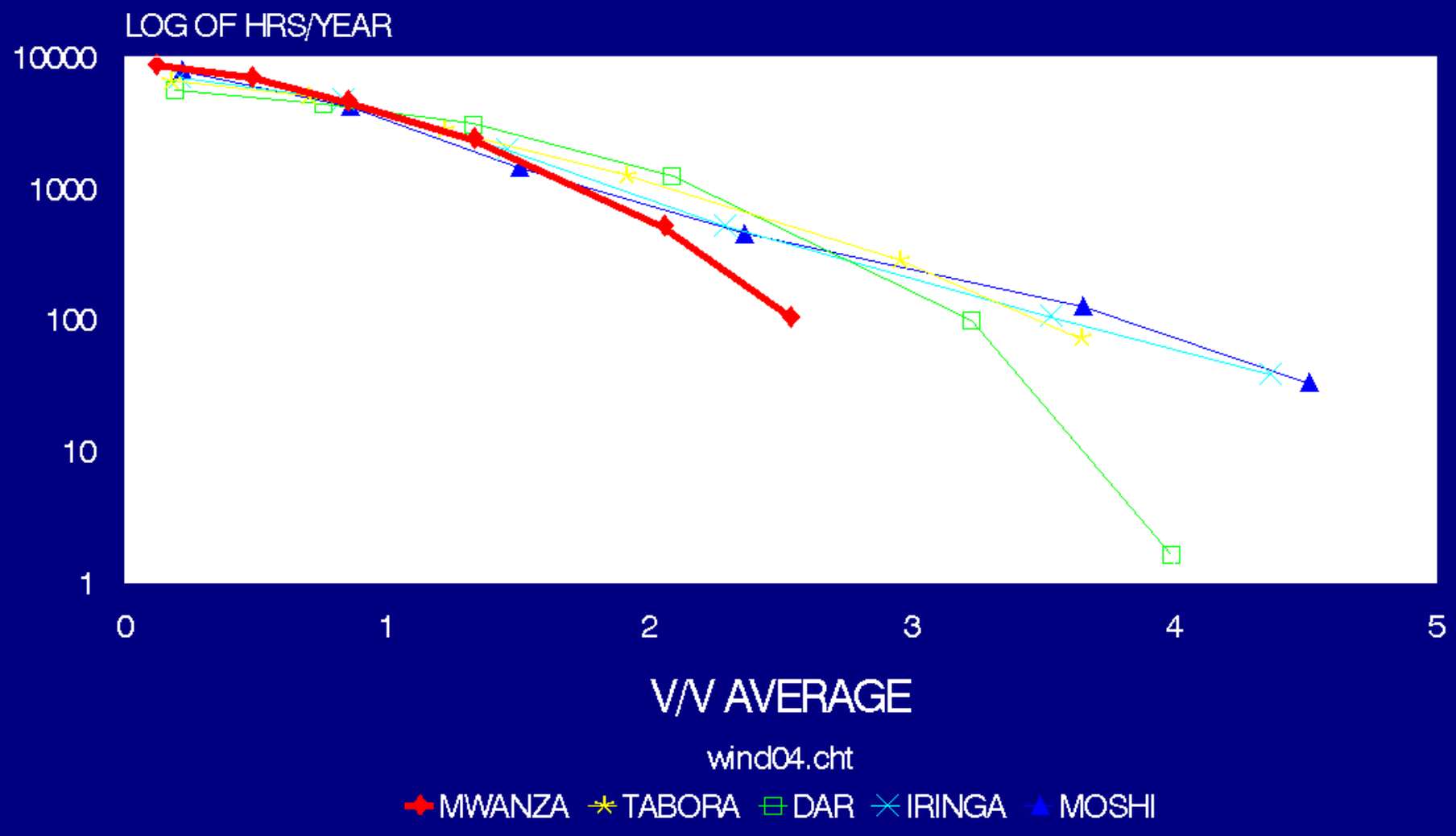
TANZANIA 1975 - BETTER SITES



BEAUFORT

WINDSPEED DISTRIBUTION

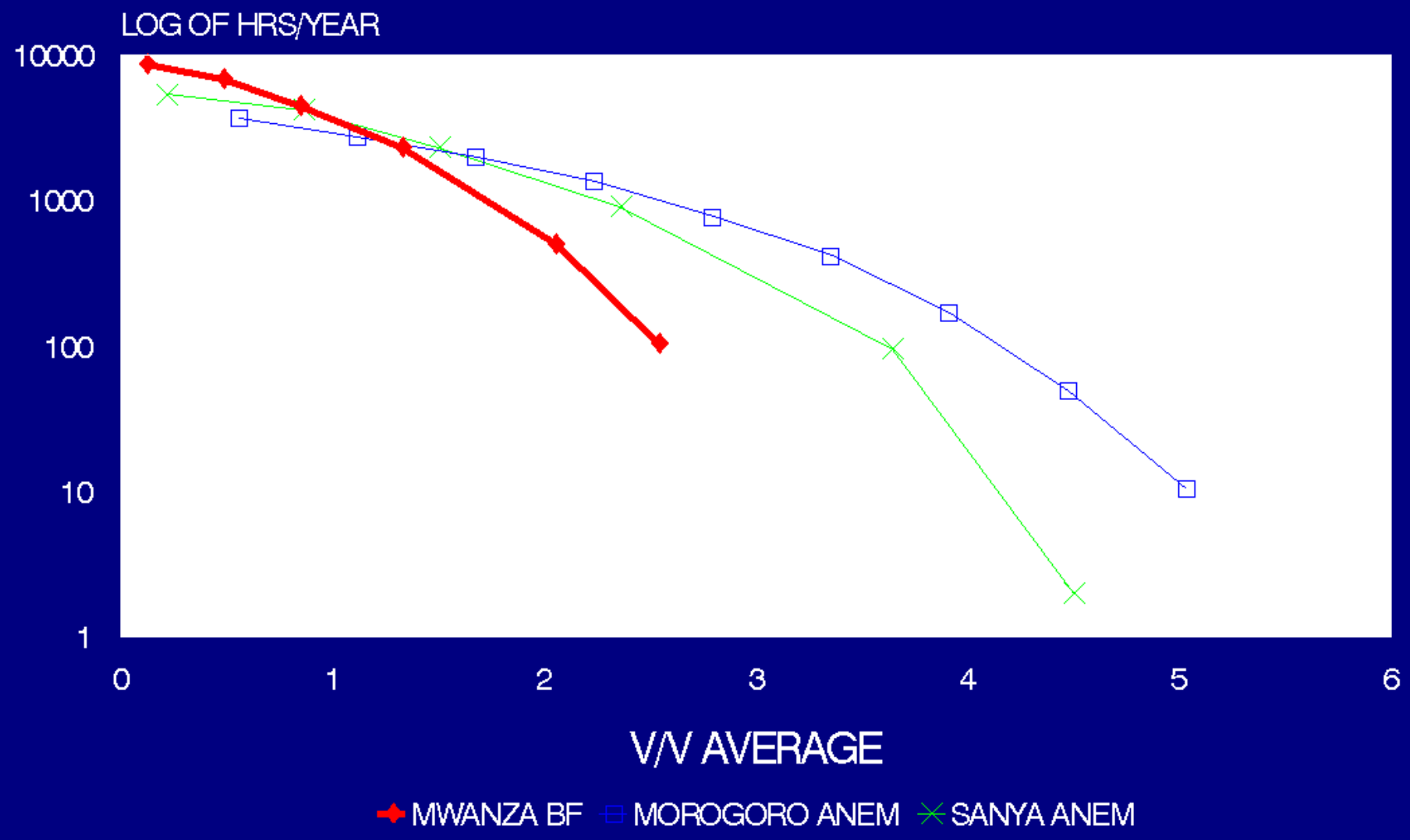
TANZANIA 1975 - POORER SITES



BEAUFORT

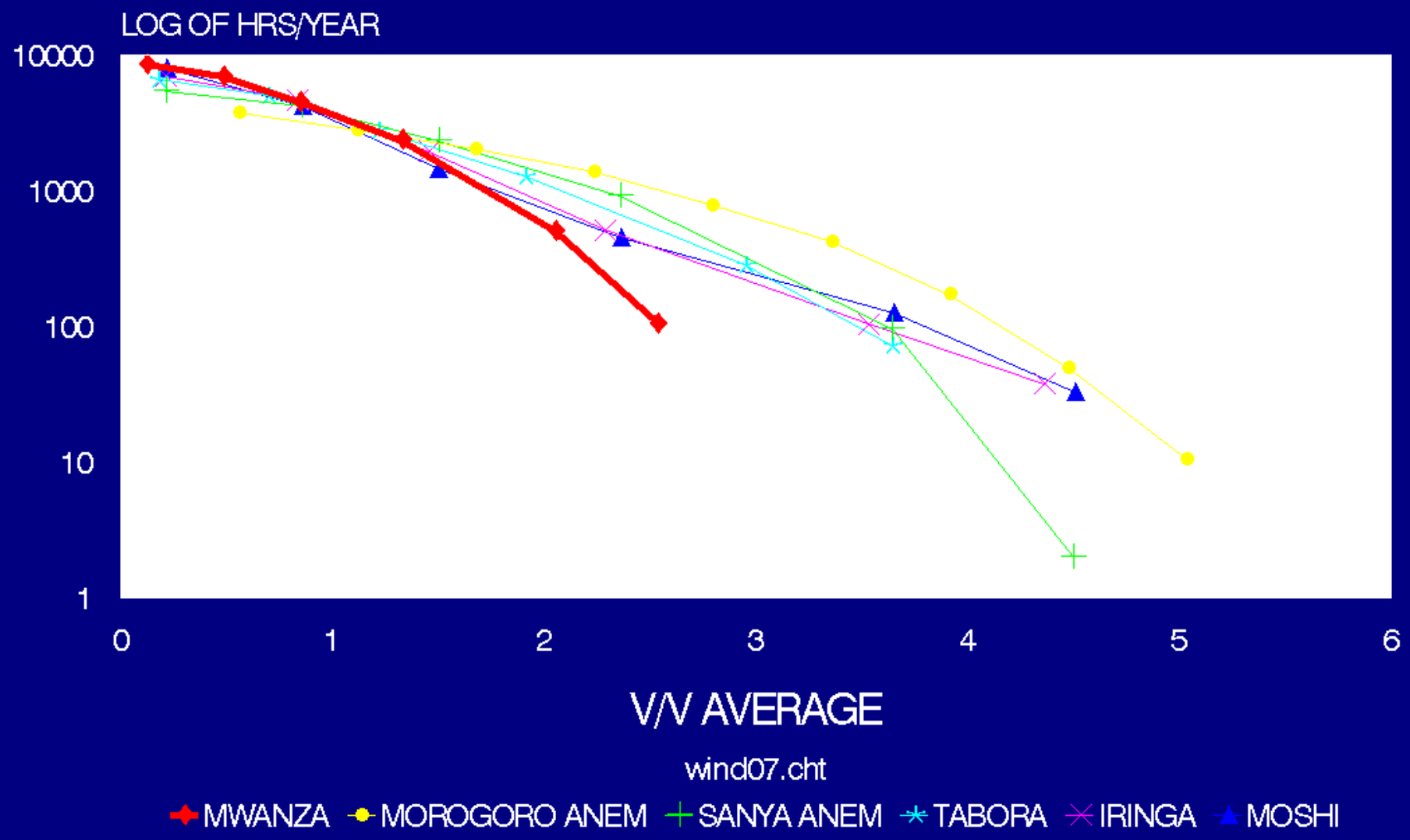
WINDSPEED DISTRIBUTION

TANZANIA 1975 - ANEM VS BF



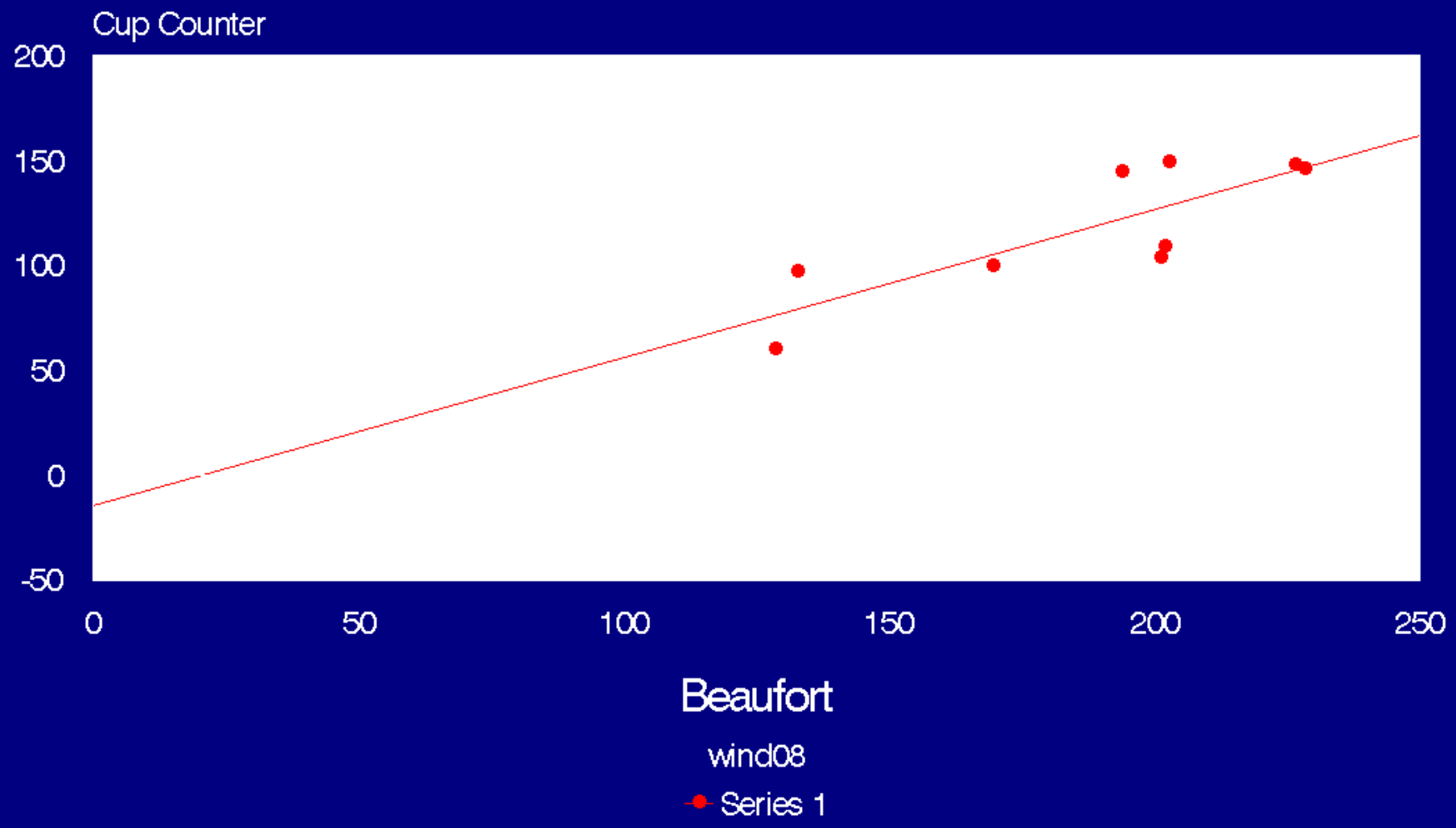
WINDSPEED DISTRIBUTION

TANZANIA 1975 - POORER SITES



COMPARISON

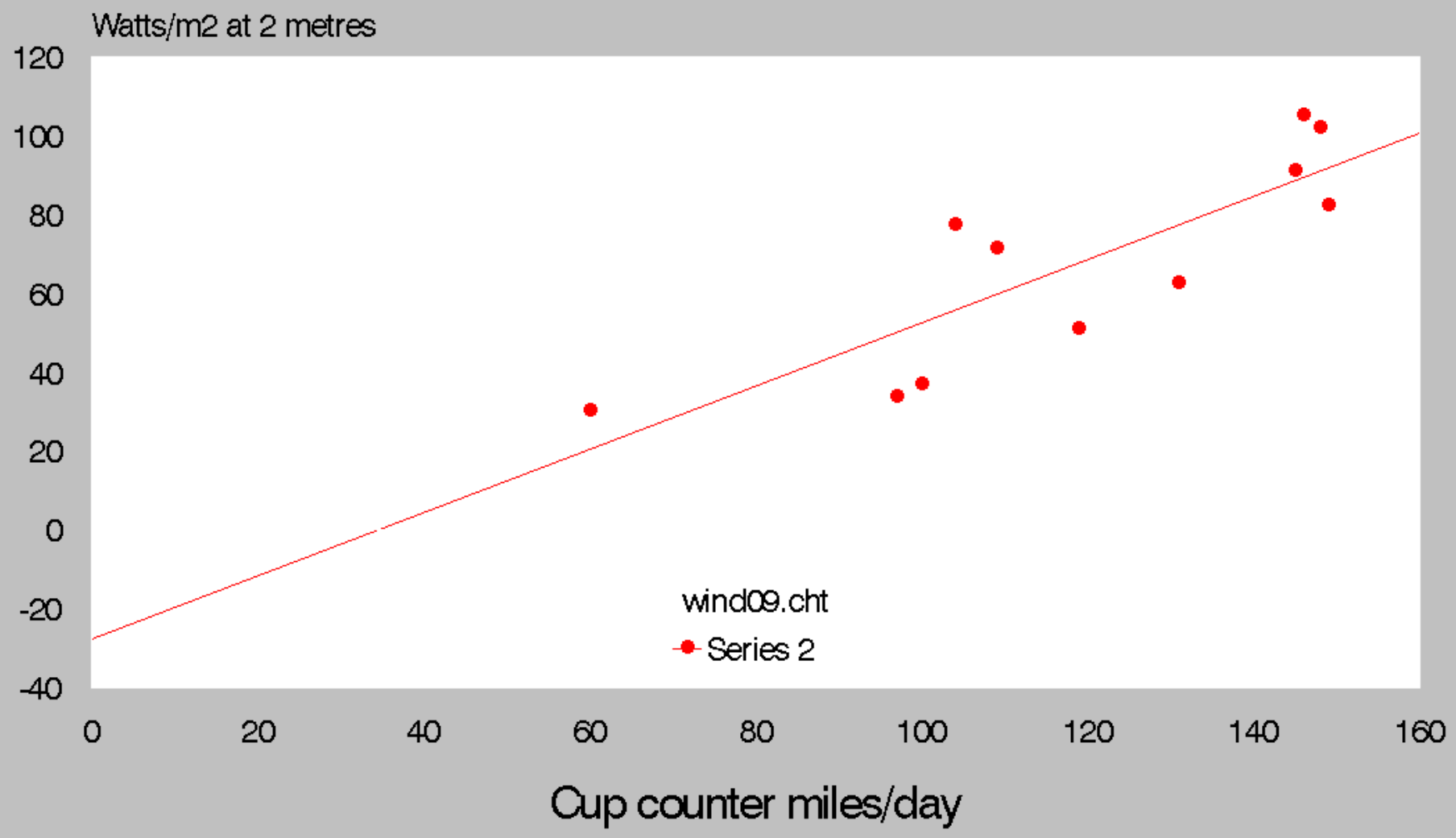
TANZANIA 1975



miles/day

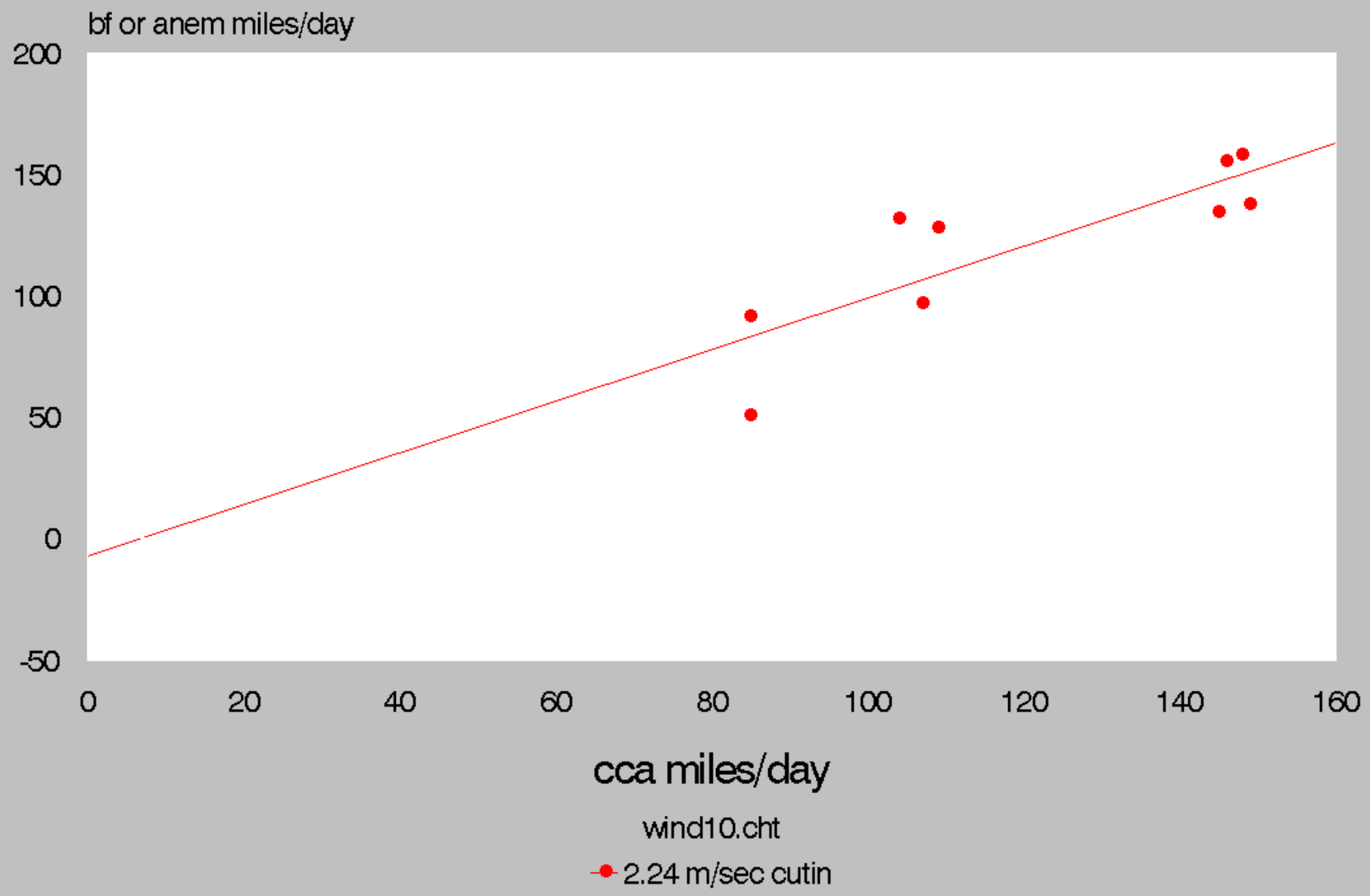
WINDSPEED DATA

TANZANIA 1975



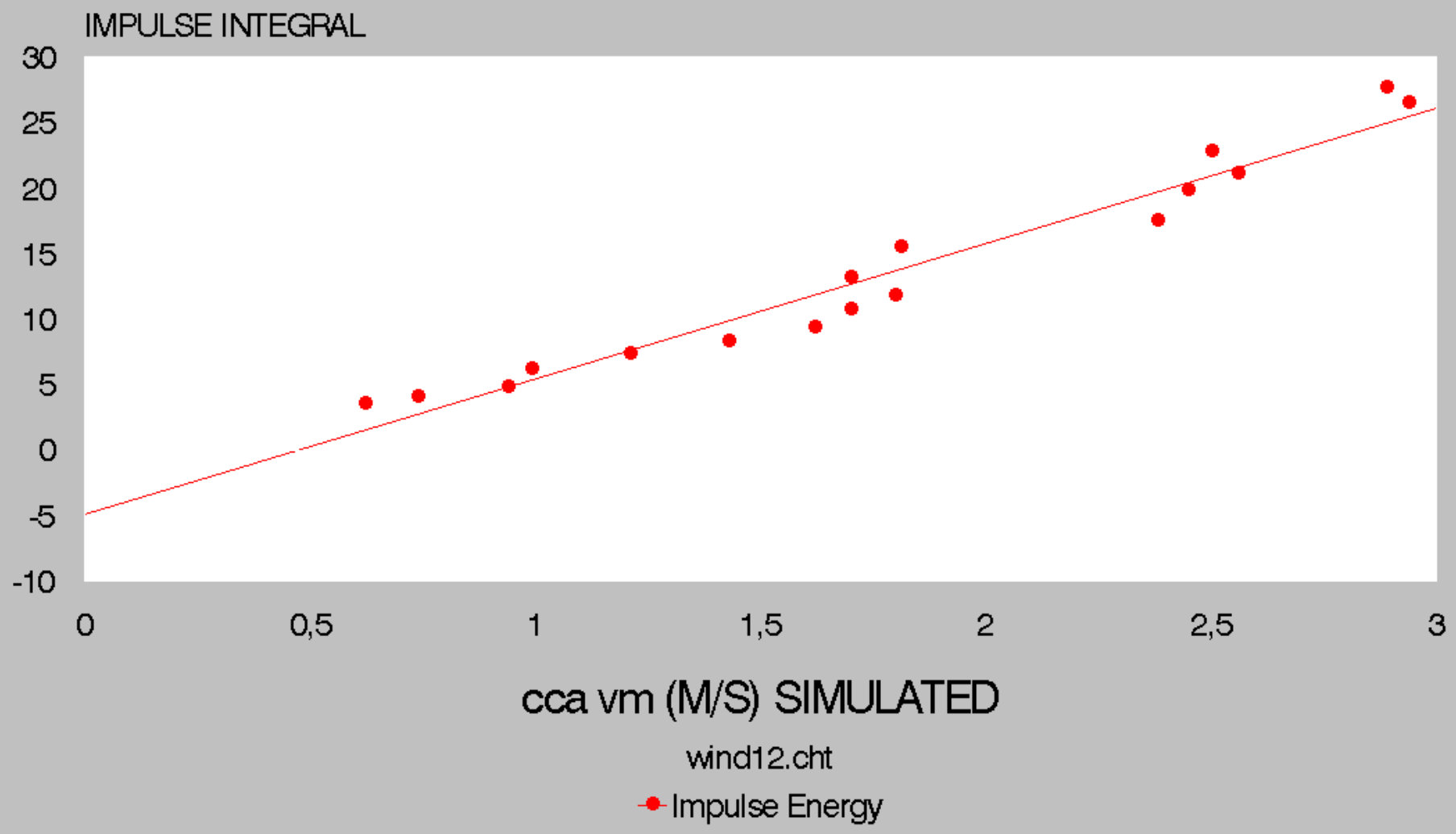
PARKES

cca vs bf & anem data



ENERGY VS CCA READINGS

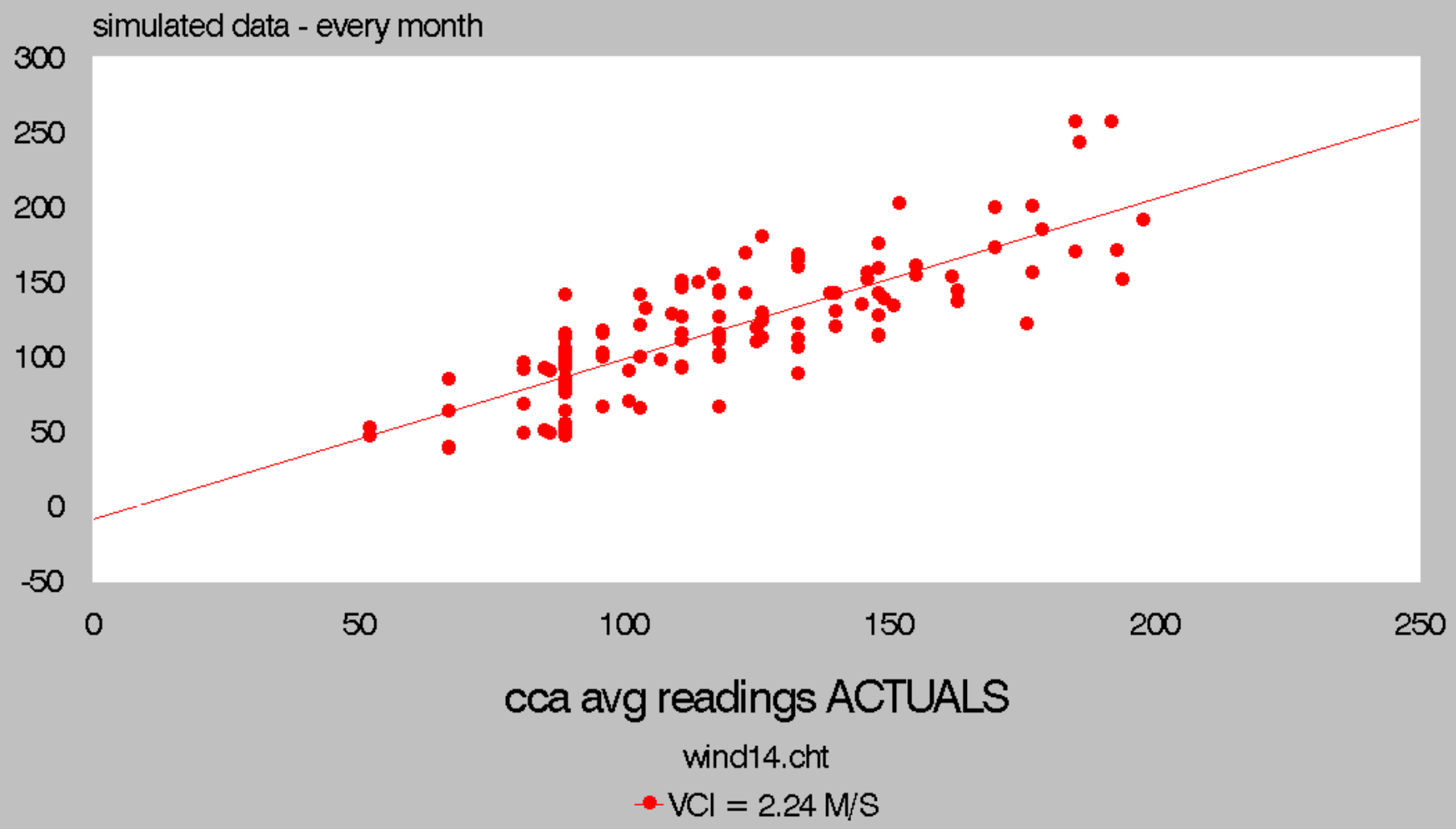
ANNUAL RESULTS



SIMULATION

cca vs anem&bf data

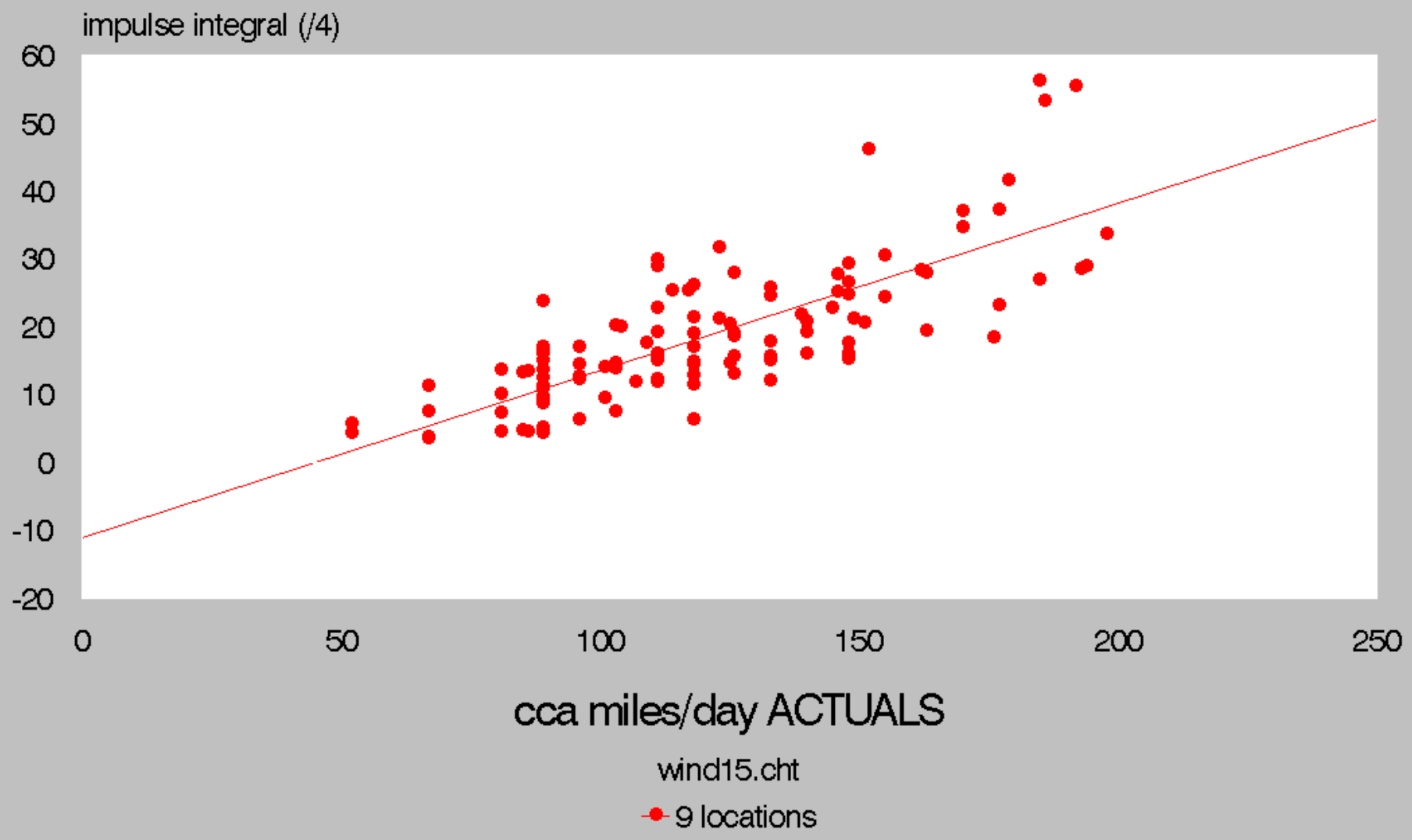
correlation at vci=2.24m/s

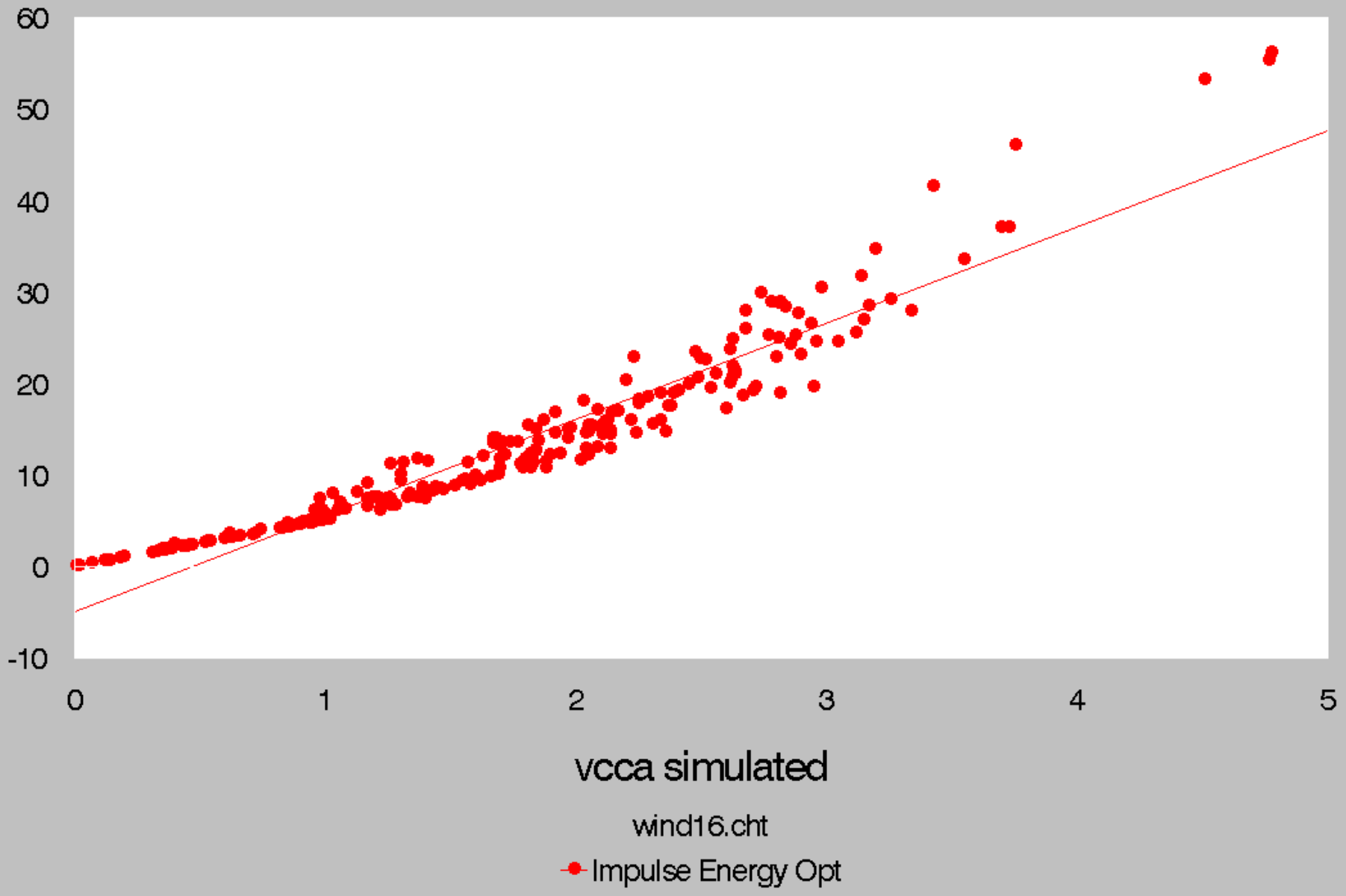


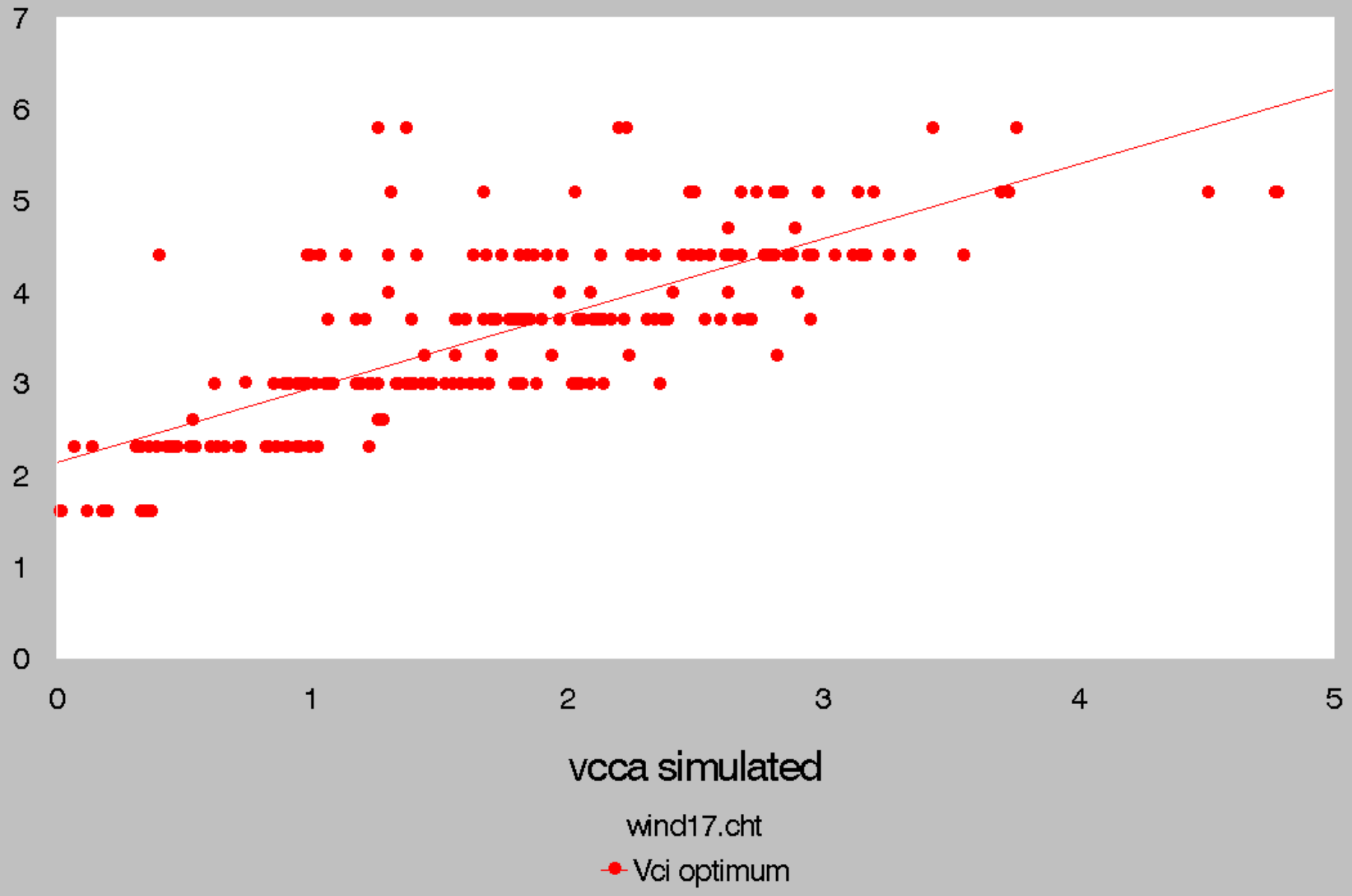
miles windrun/day - 9 LOCATIONS

Impulse energy vs cca reading

117 monthly & yearly readings

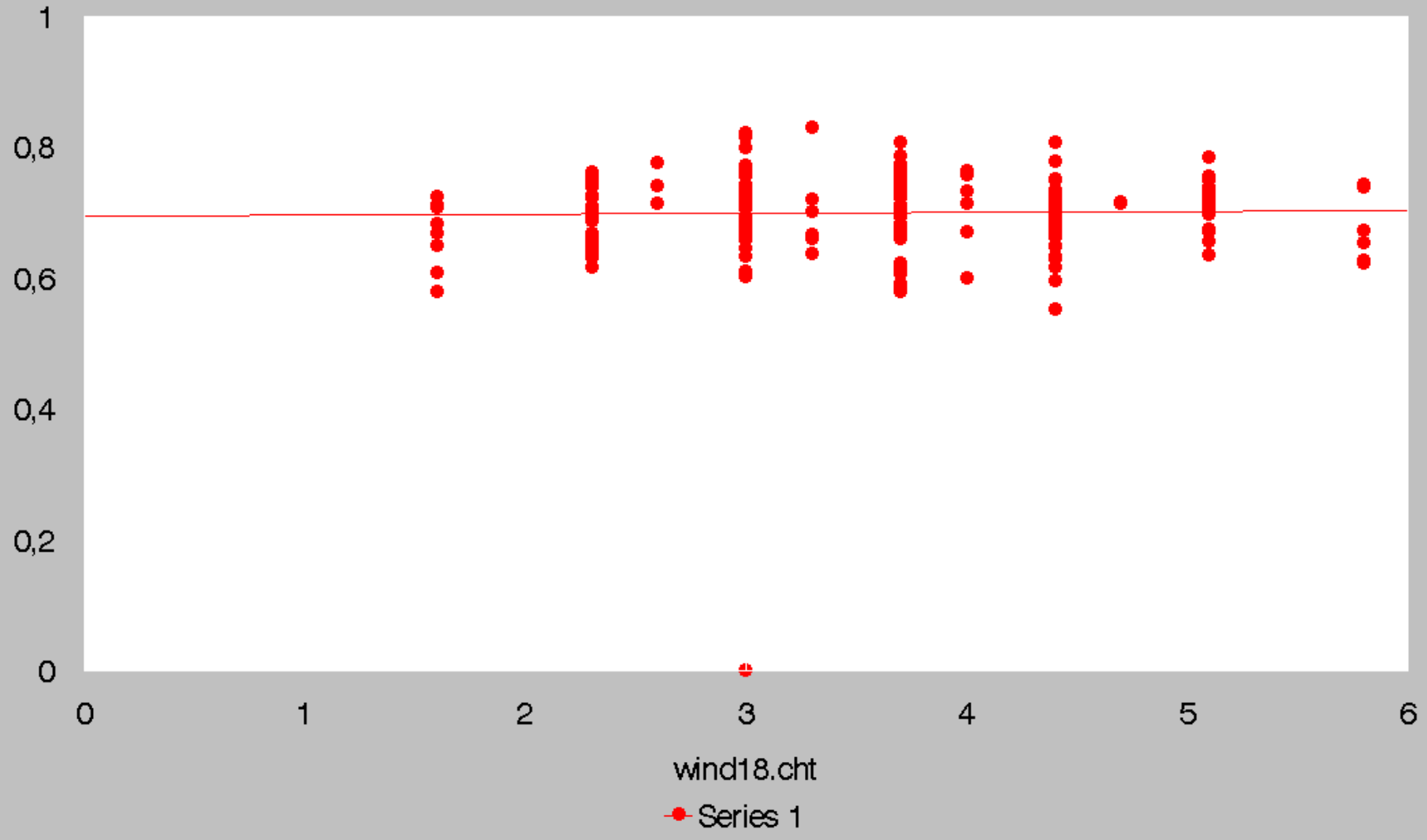



60
50
40
30
20
10
0
-10
0
1
2
3
4
5
vcca simulated
wind16.cht
Impulse Energy Opt


7
6
5
4
3
2
1
0
0
1
2
3
4
5
vcca simulated
wind17.cht
Vci optimum

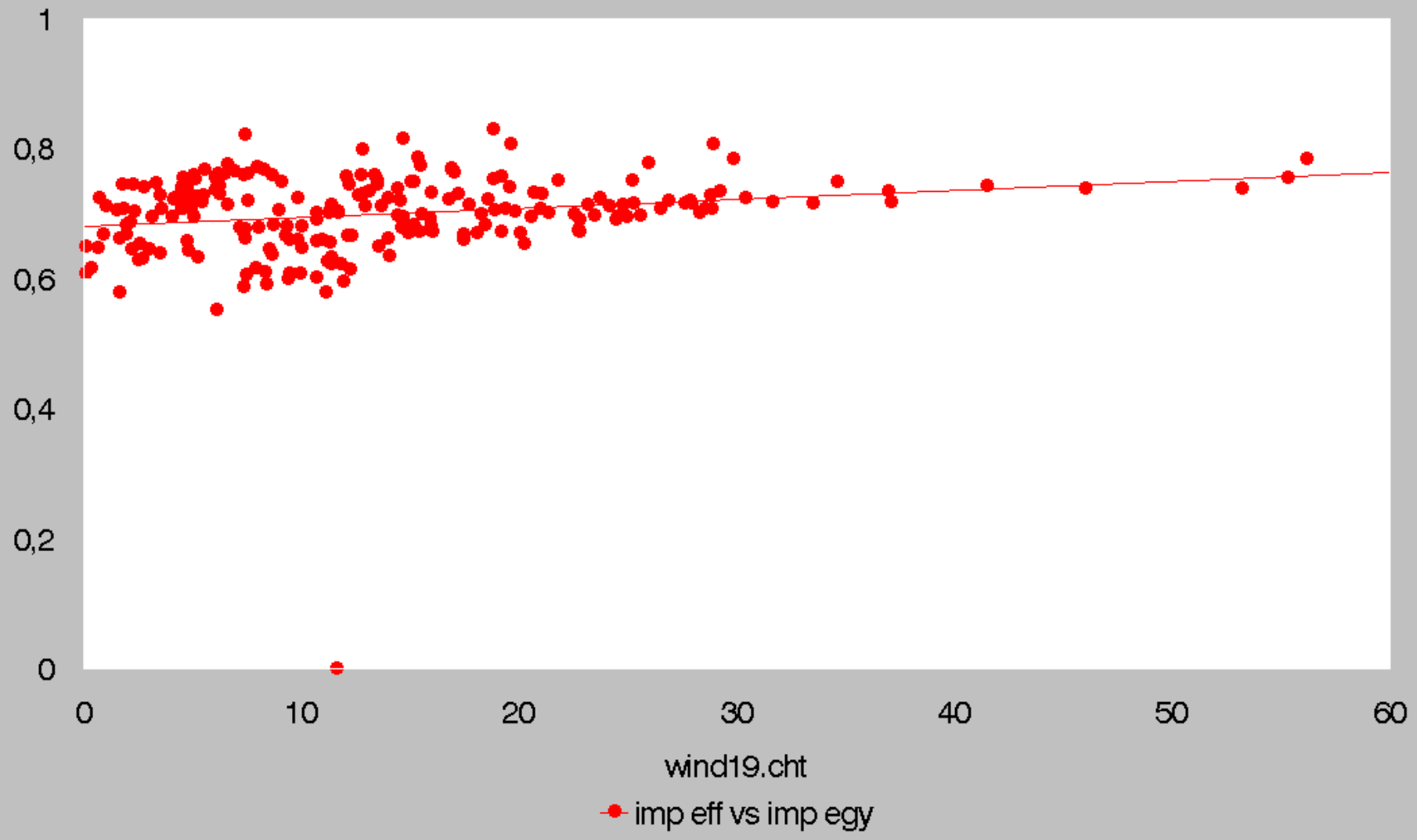
Impulse Efficiency

vs v cutin

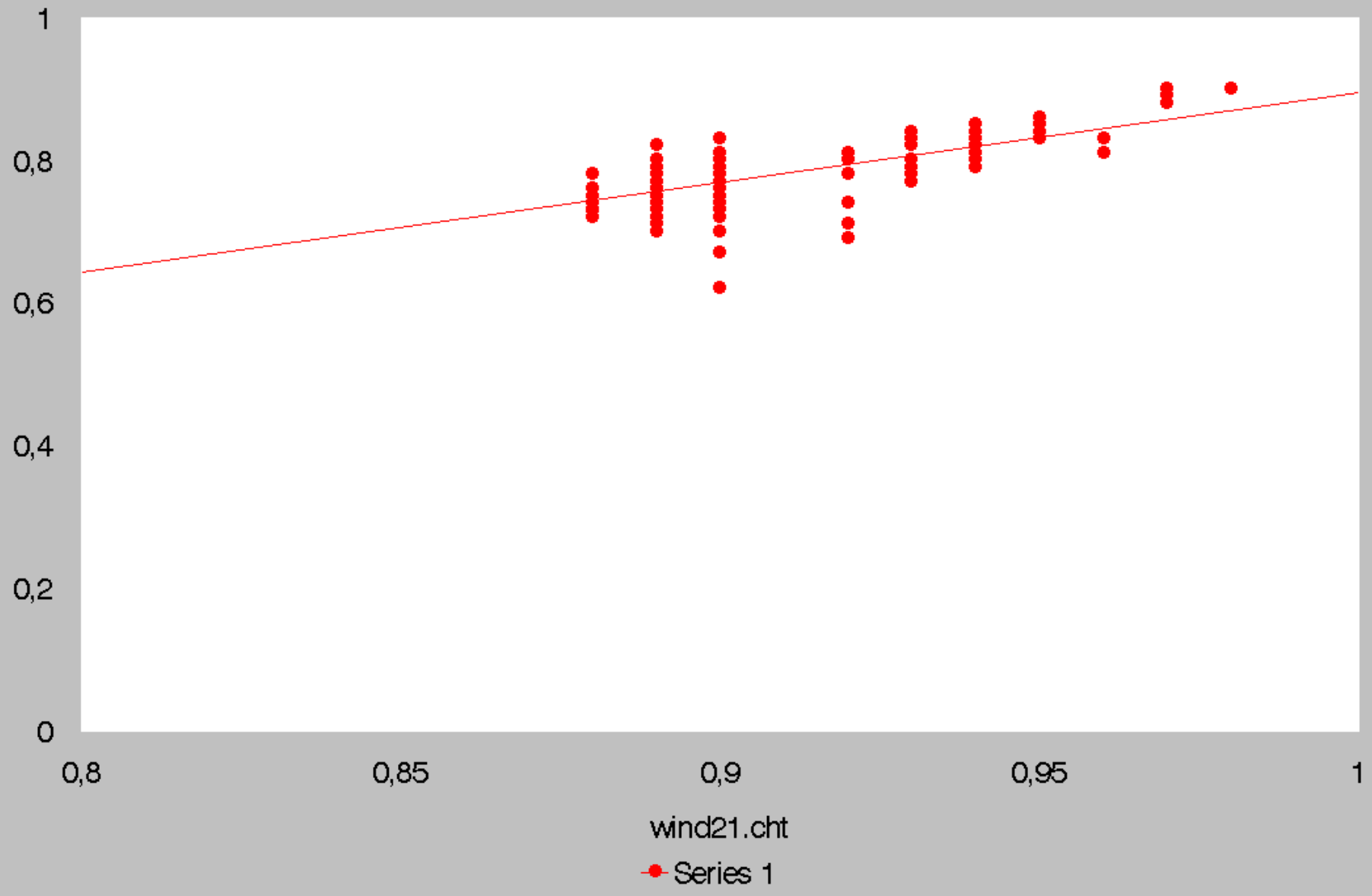


Impulse Efficiency

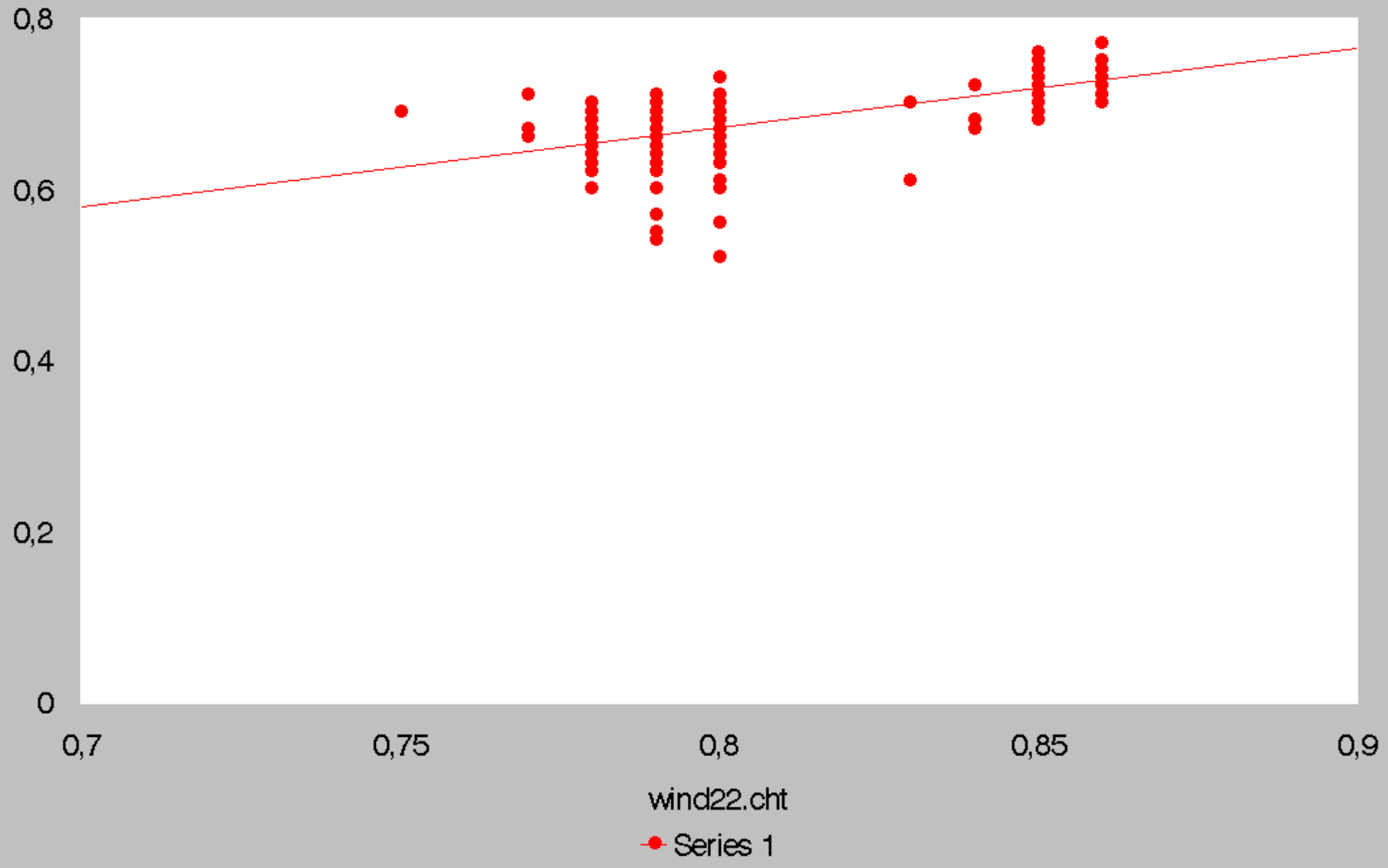
vs v imp energy



vci2/vci3

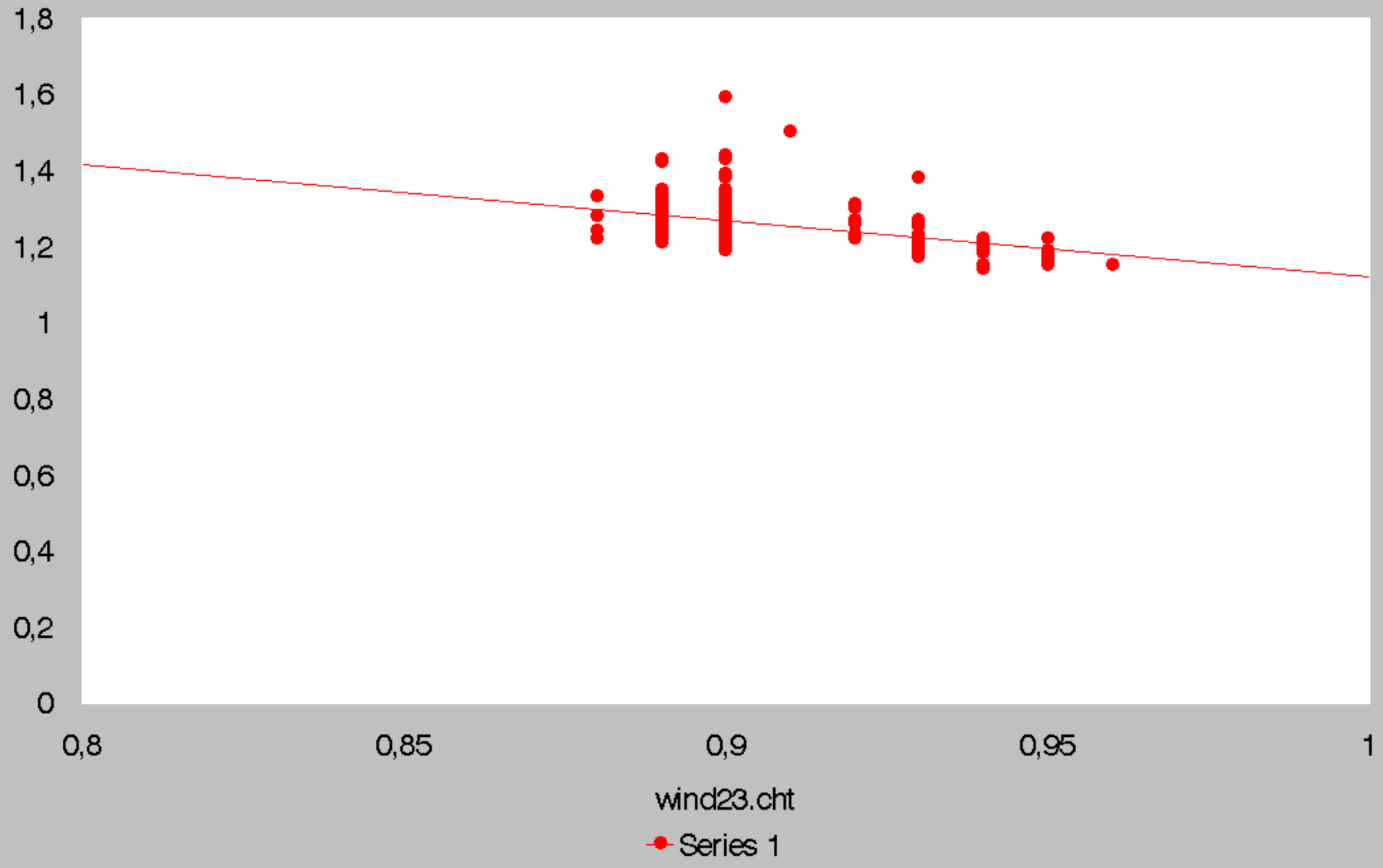


vci2/vci3



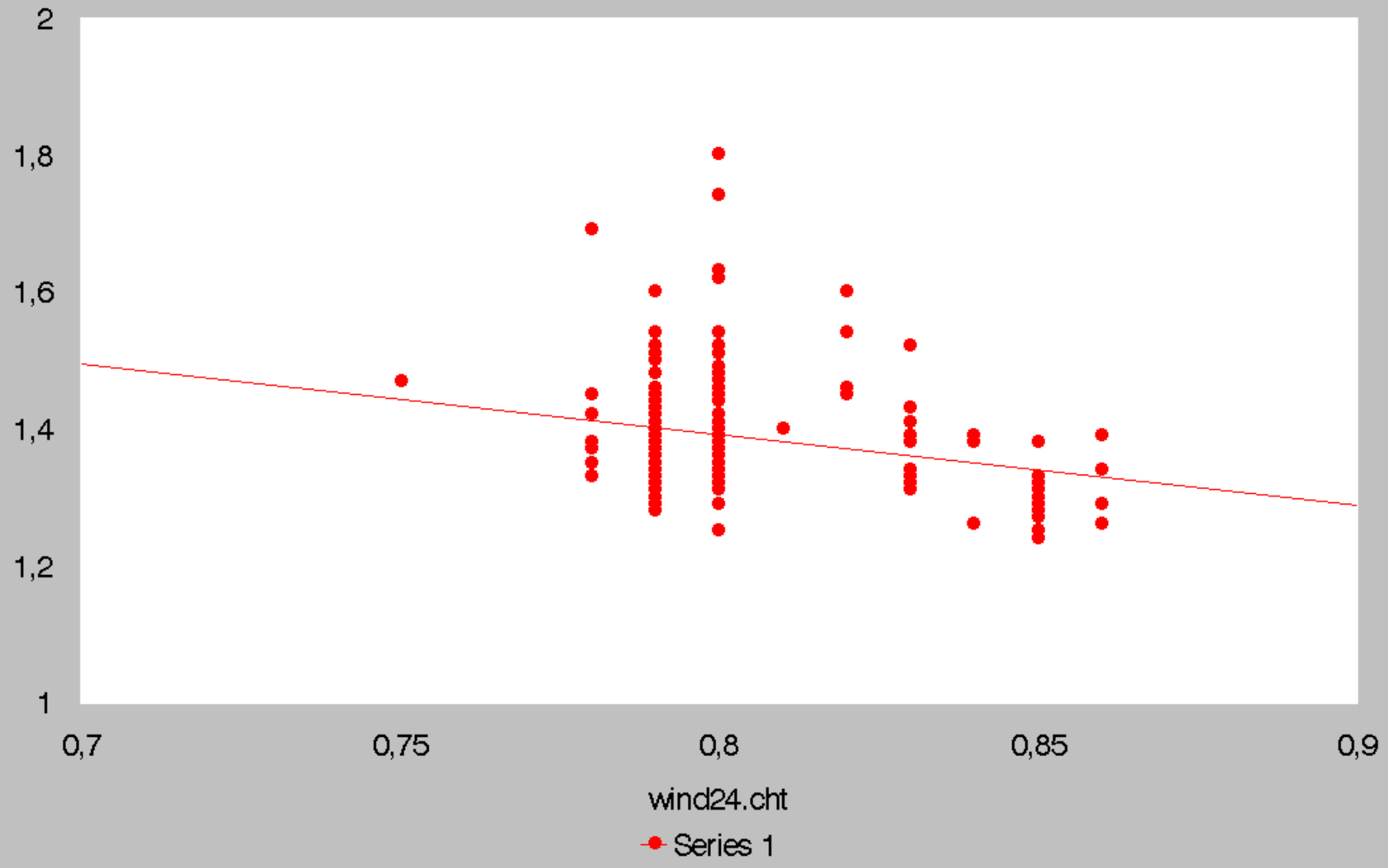
0.67 value

vci4/vci3



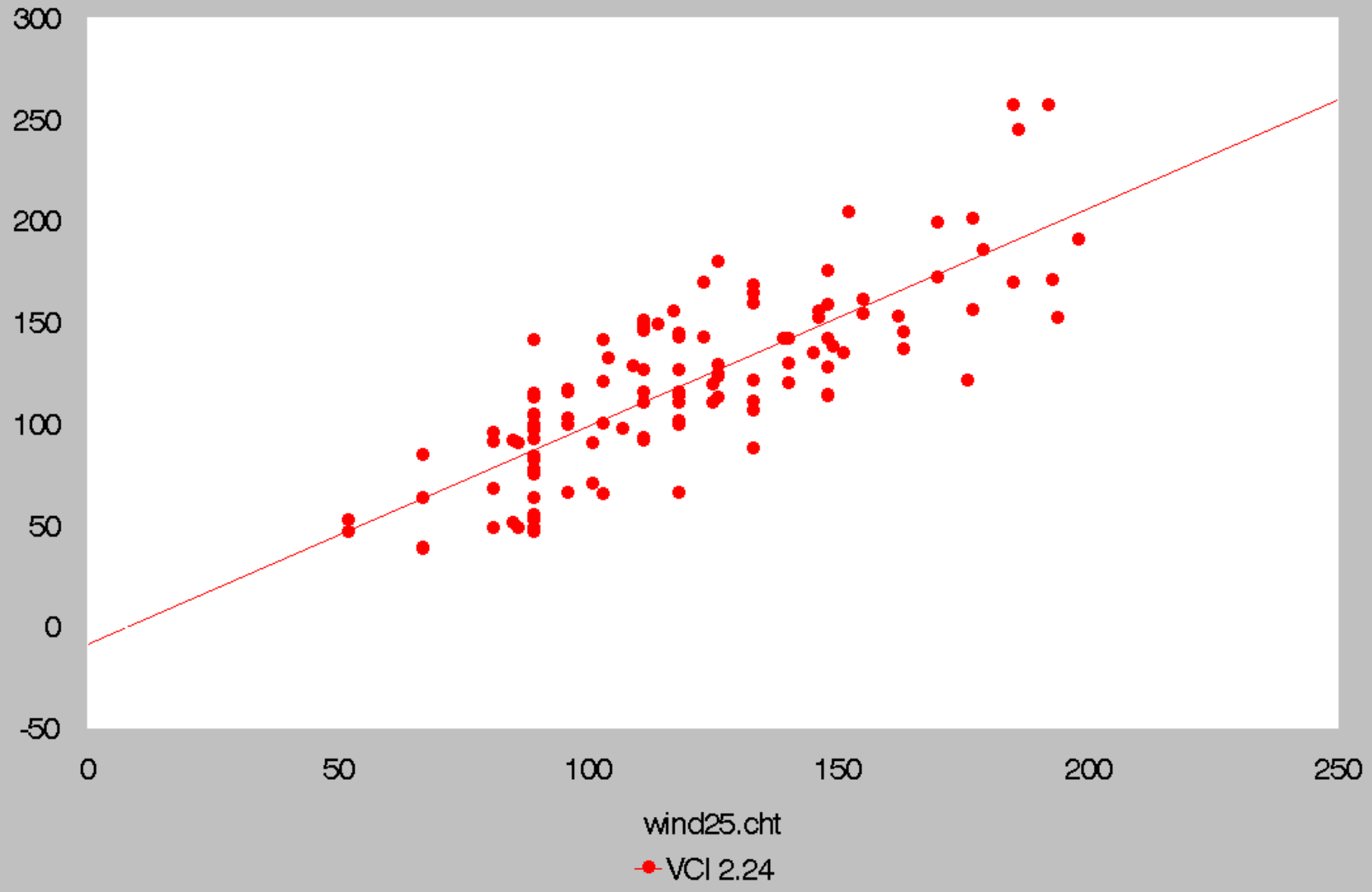
1.26 value

vci5/vci3



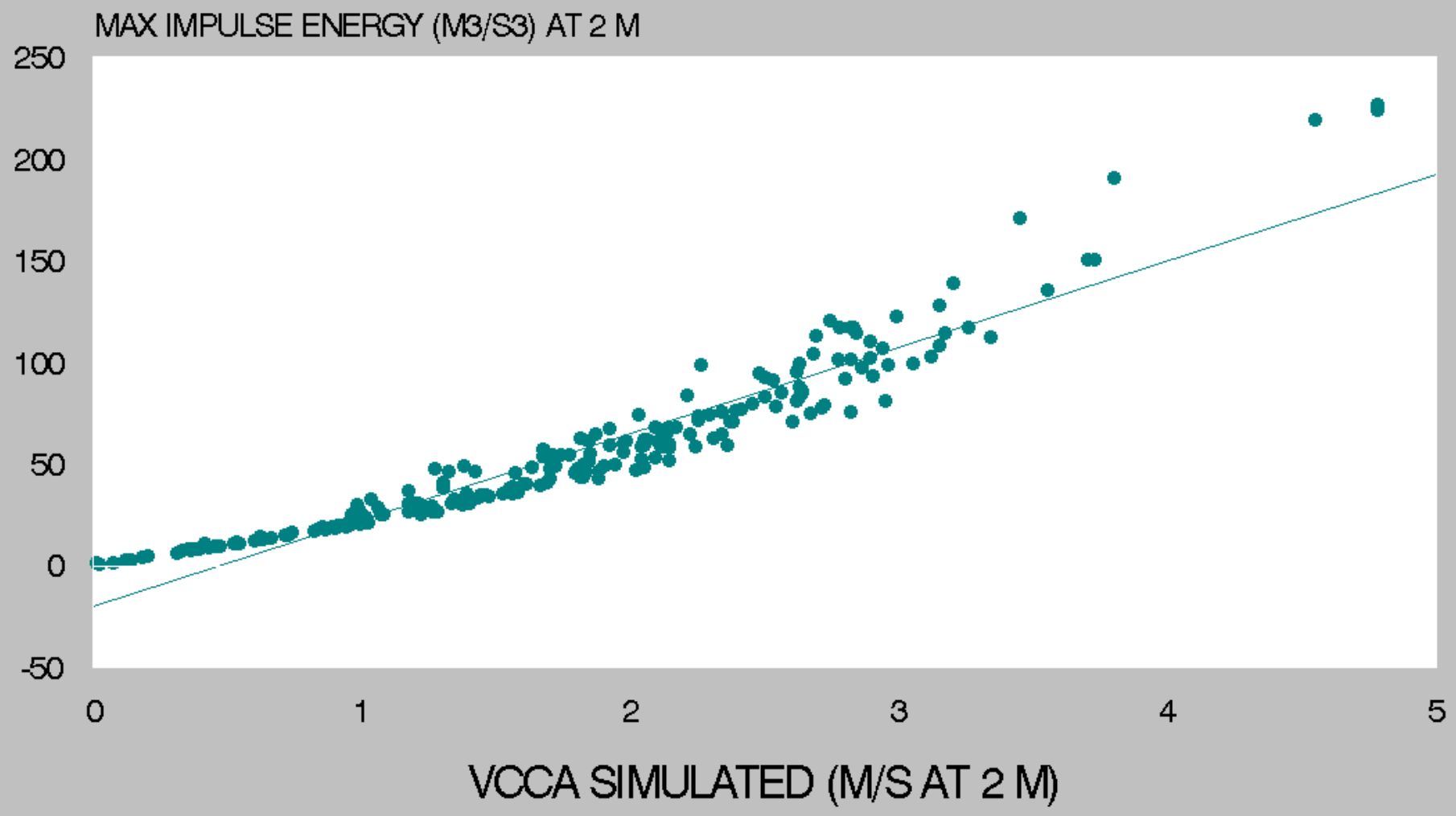
1.38 value

CCA CALIBRATION



MAXIMUM IMPULSE ENERGY

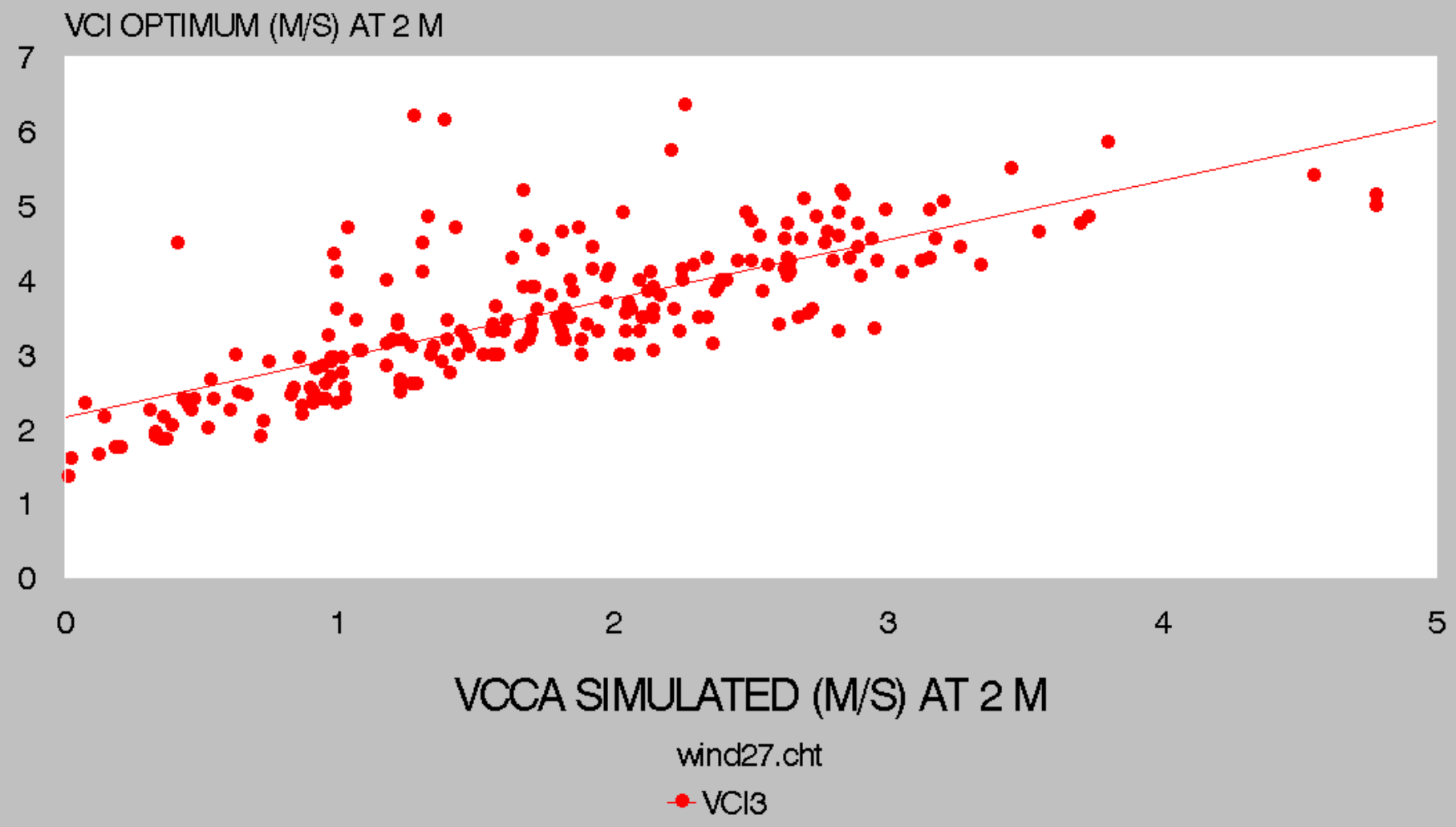
VS CCA READING



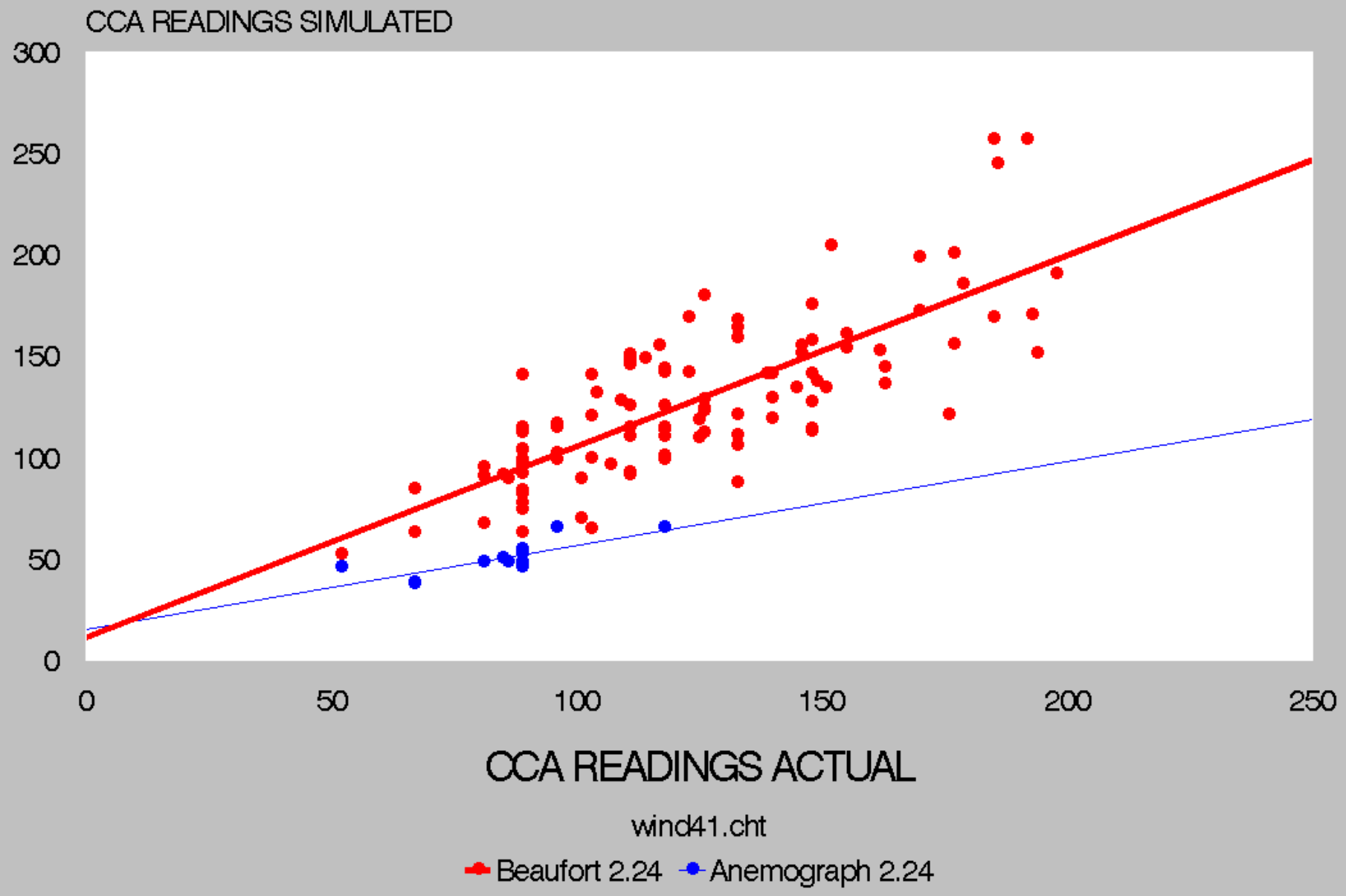
wind26.cht

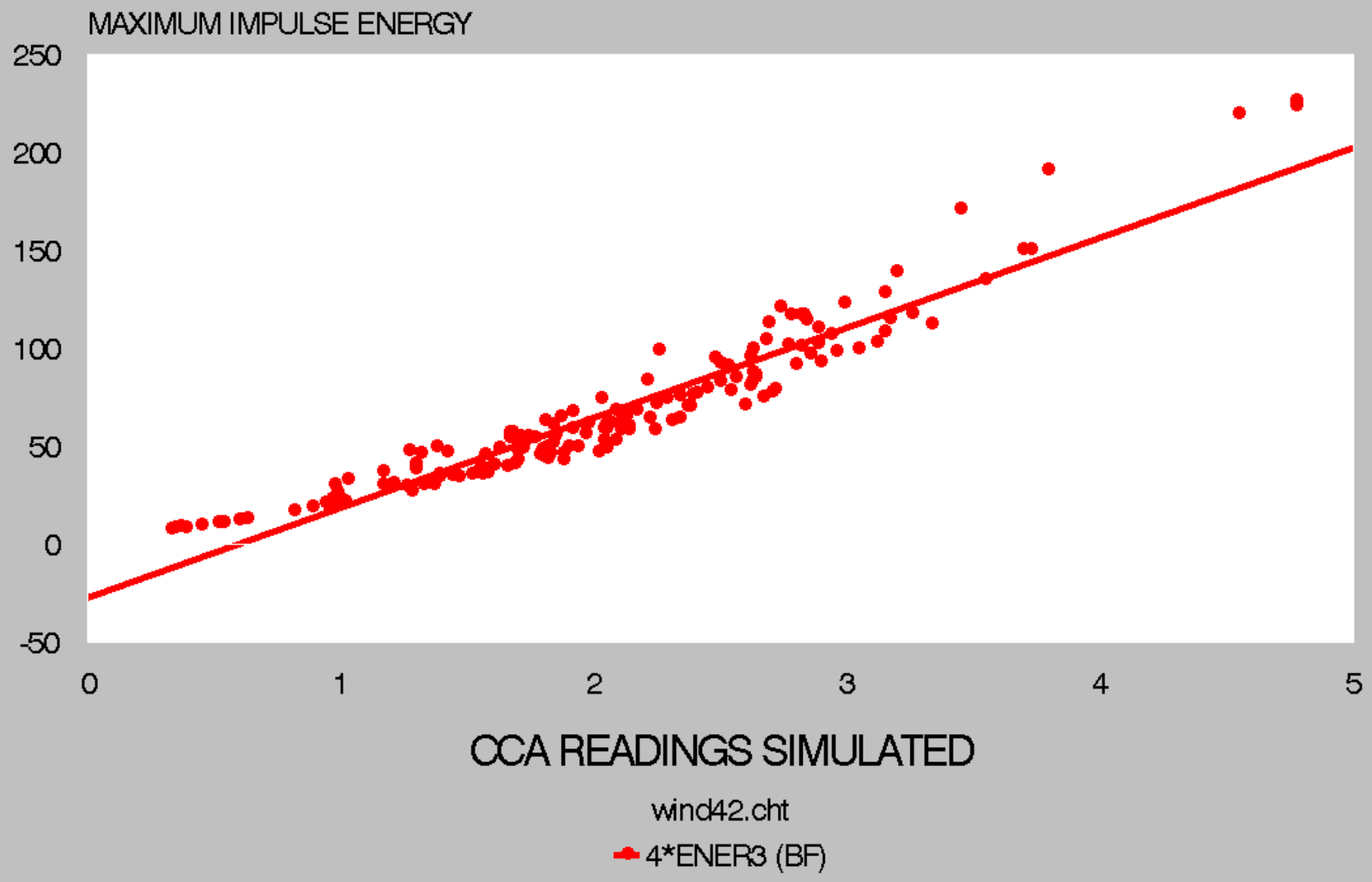
OPTIMAL CUT-IN SPEED

VS CCA READING



VCI = 2.2 + (0.78 * VCCA)

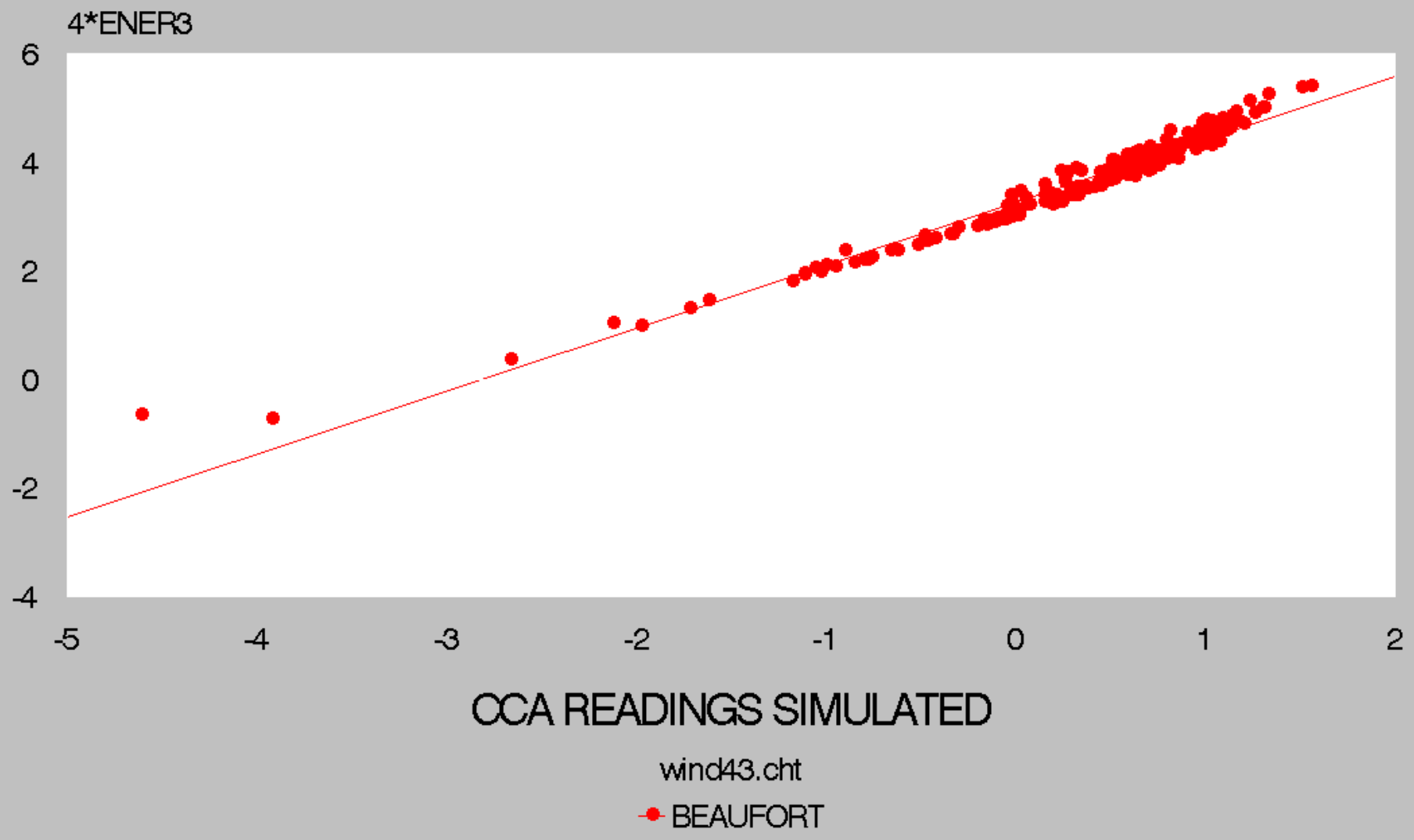

CCA READINGS SIMULATED
300
250
200
150
100
50
0
0
50
100
150
200
250
CCA READINGS ACTUAL
wind41.cht
Beaufort 2.24
Anemograph 2.24

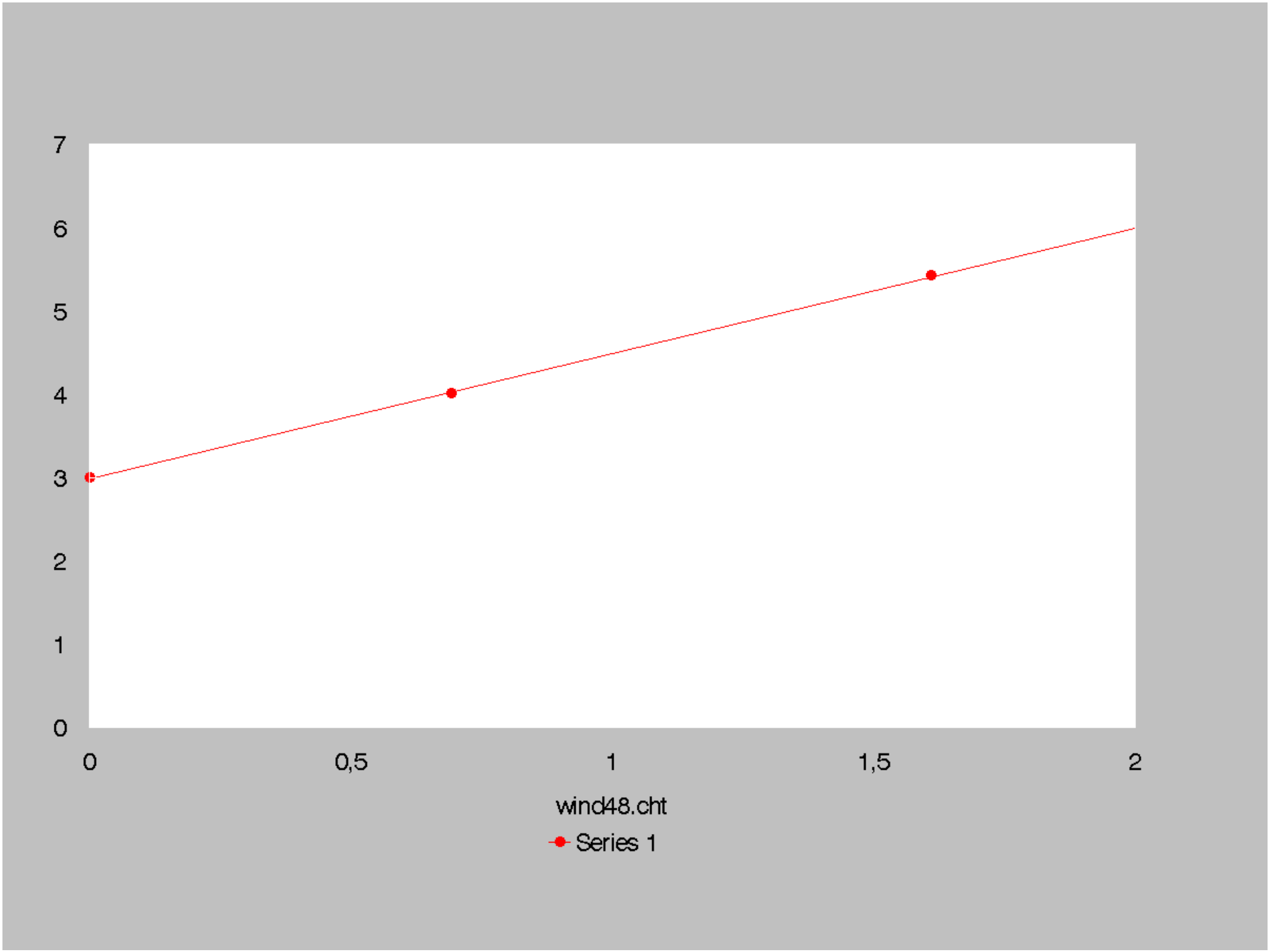

MAXIMUM IMPULSE ENERGY
250
200
150
100
50
0
-50
0
1
2
3
4
5
CCA READINGS SIMULATED
wind42.cht
4*ENER3 (BF)

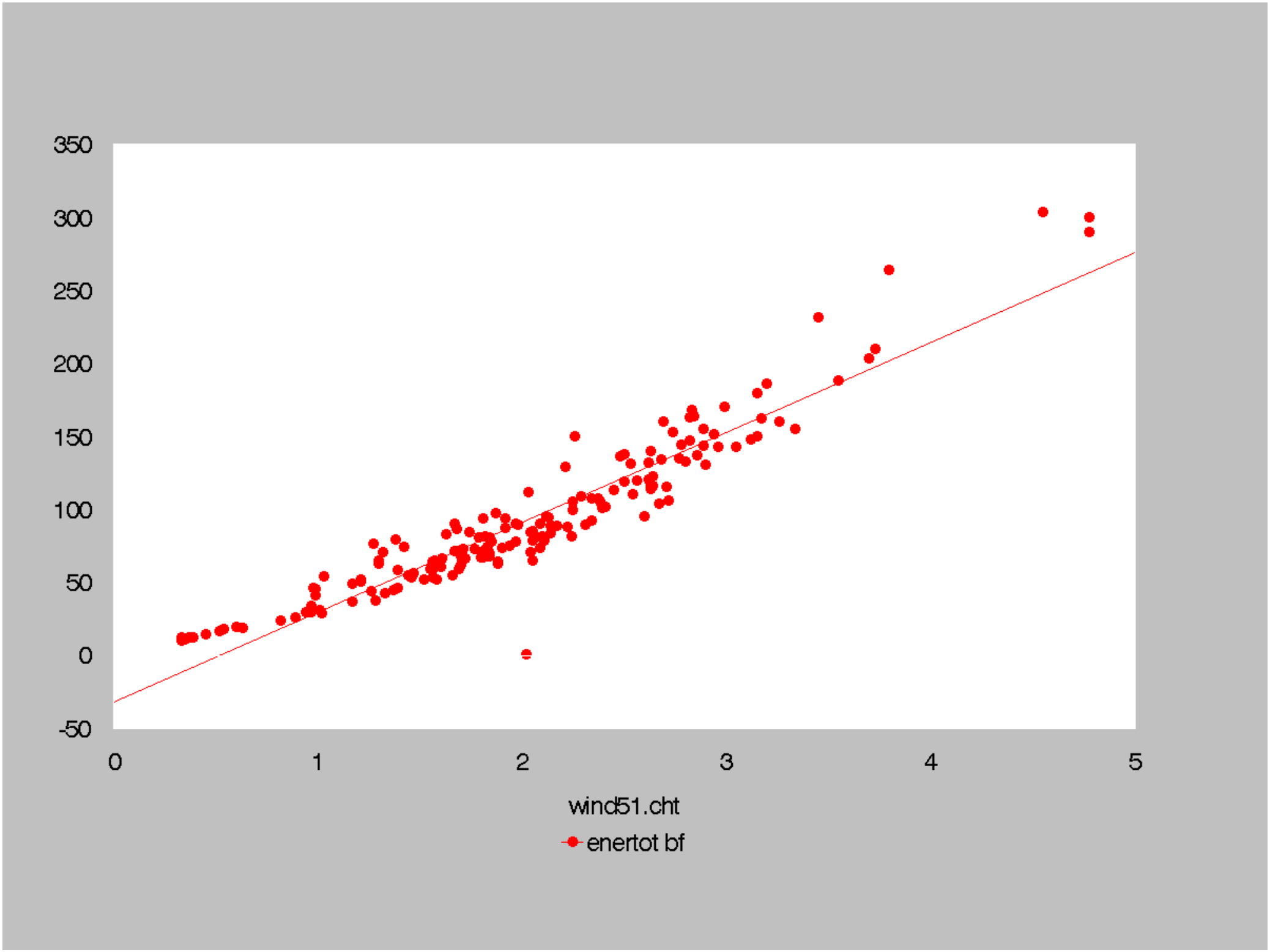
E=20.1*(vcca) ^ 1.5

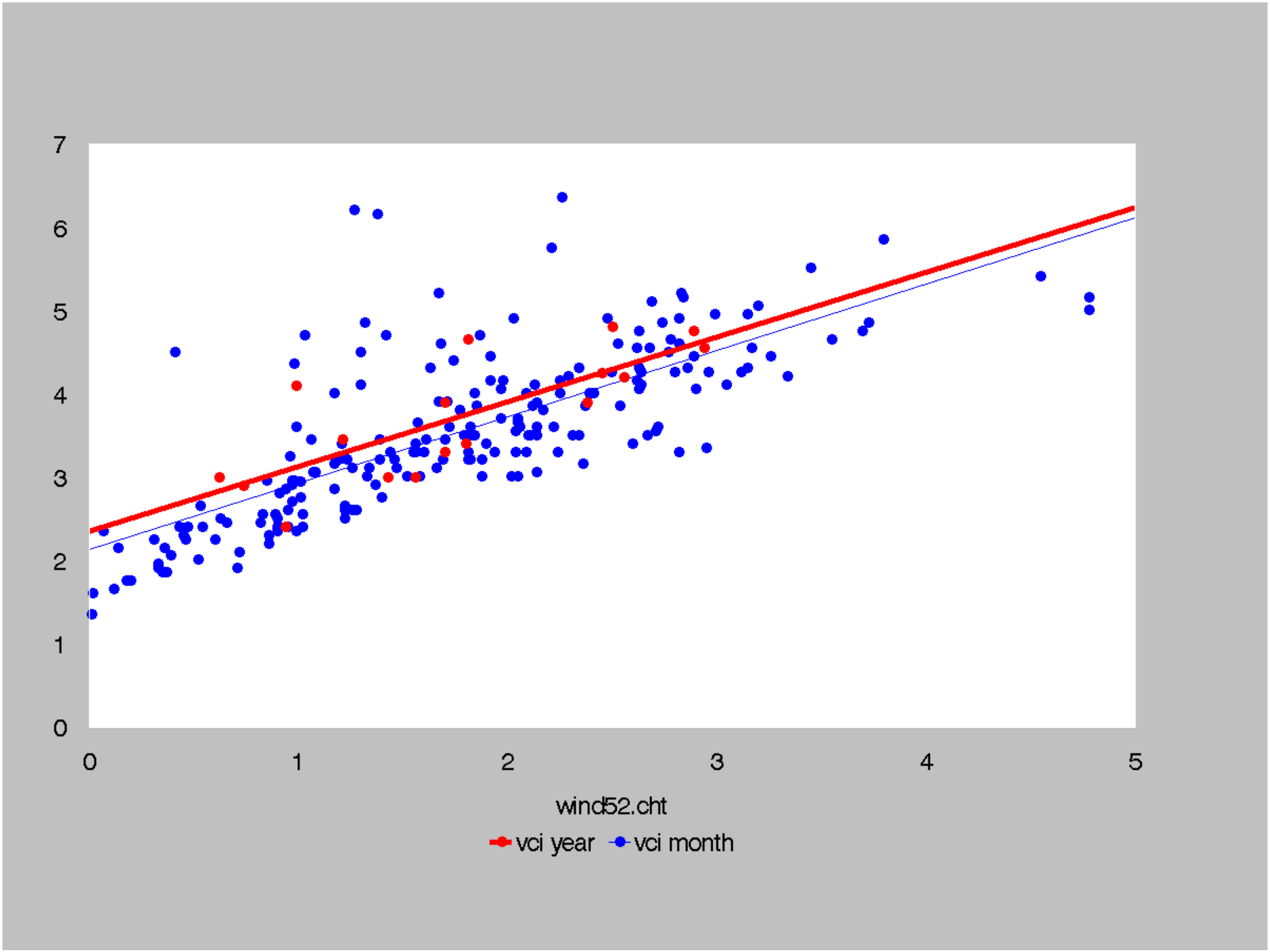
LOG-LOG GRAPH

IMPULSE ENERGY VS CCA

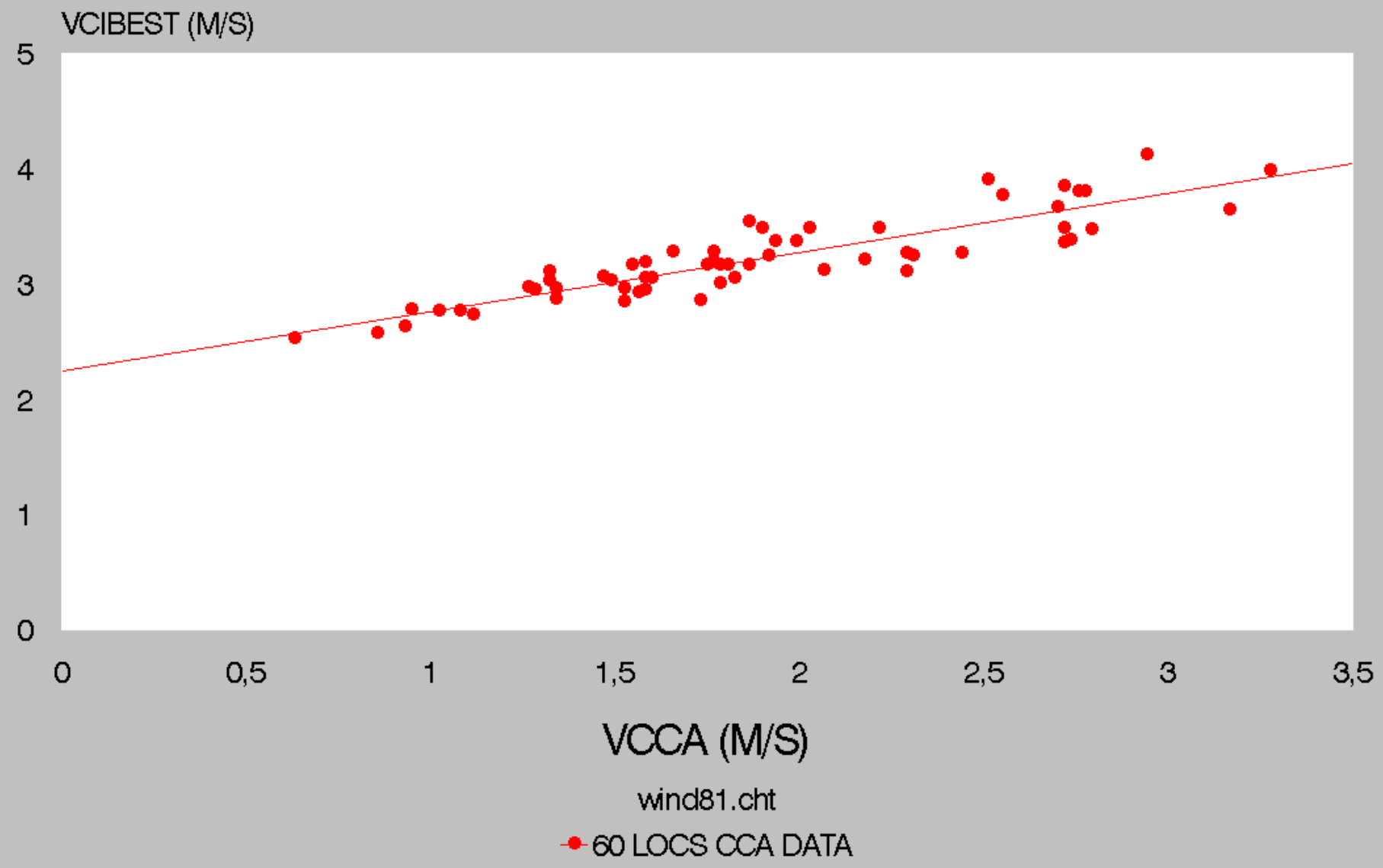



7
6
5
4
3
2
1
0
0
0,5
1
1,5
2
wind48.cht
Series 1


350
300
250
200
150
100
50
0
-50
0
1
2
3
4
5
wind51.cht
enertot bf


7
6
5
4
3
2
1
0
0
1
2
3
4
5
wind52.cht
vci year
vci month

VCIBEST VS VCCA



VCIBEST=2.2+(0.52*VCCA)