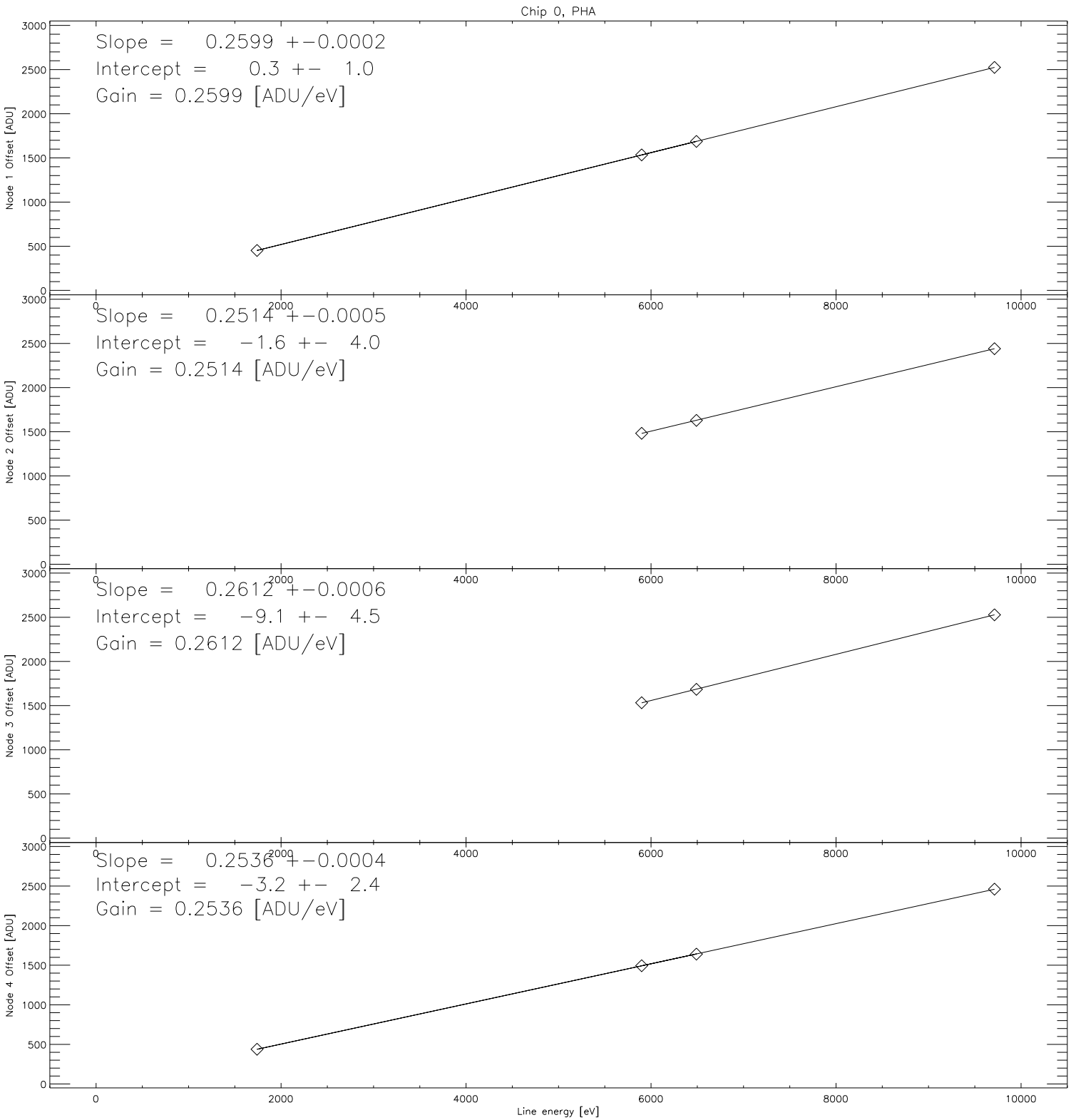
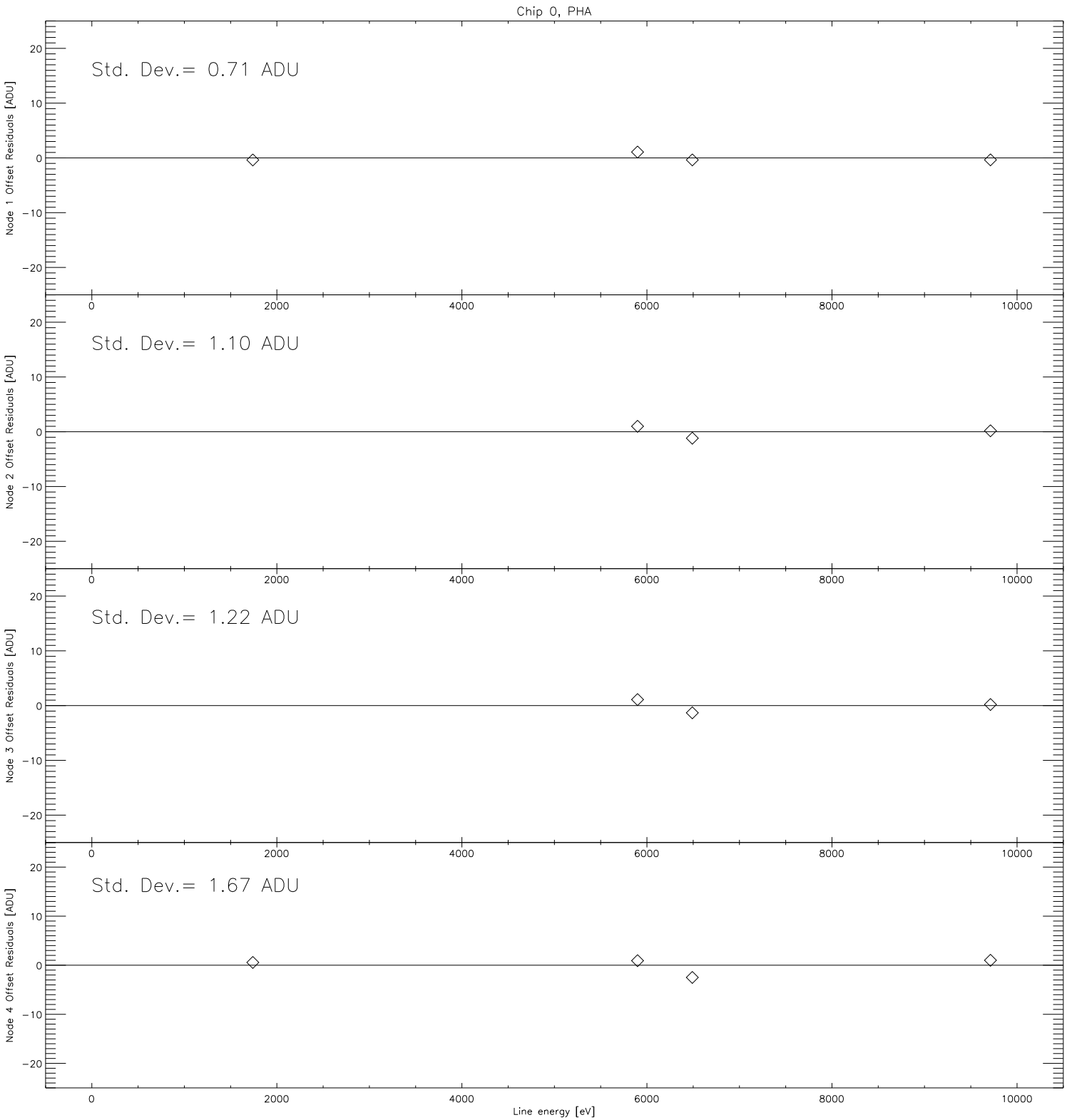
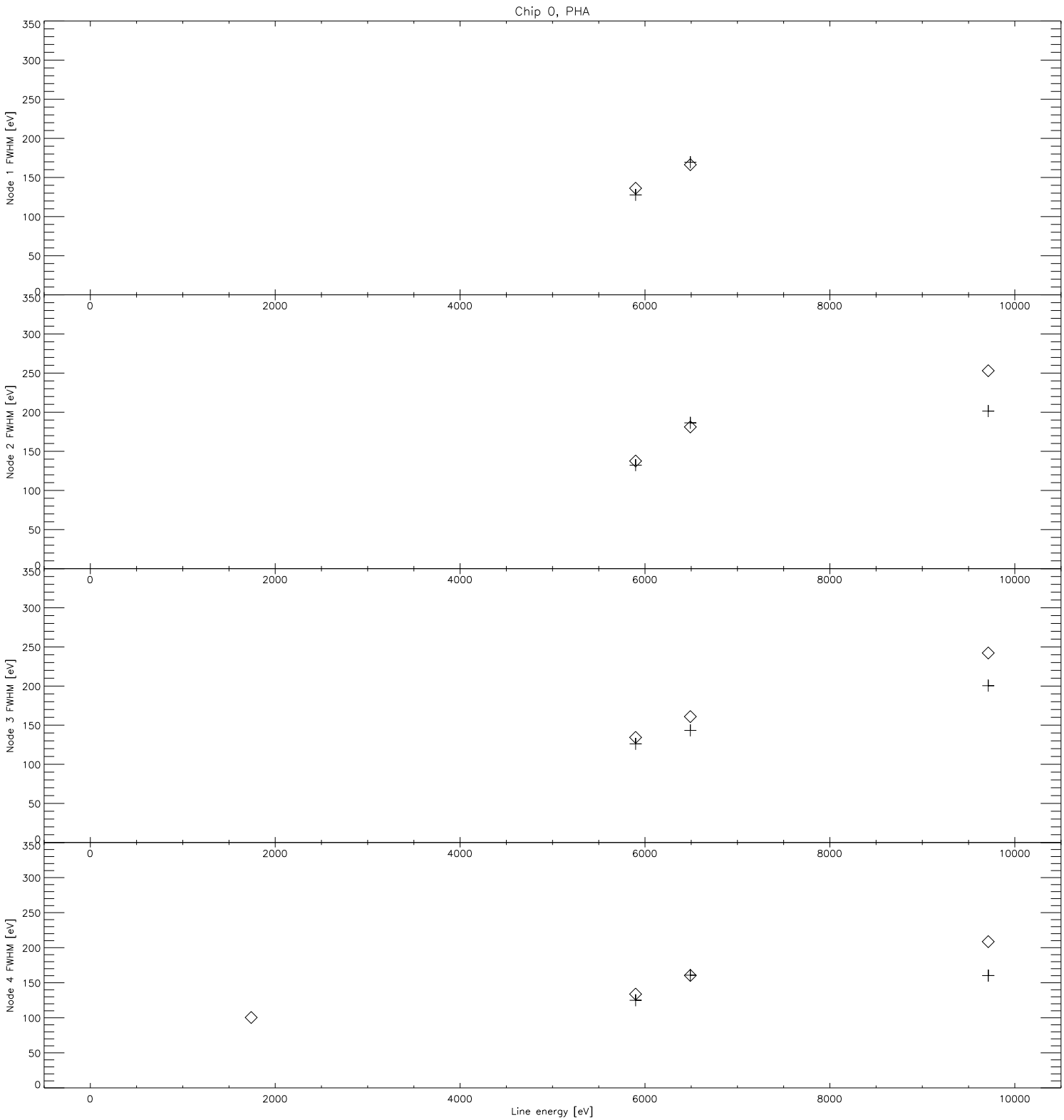
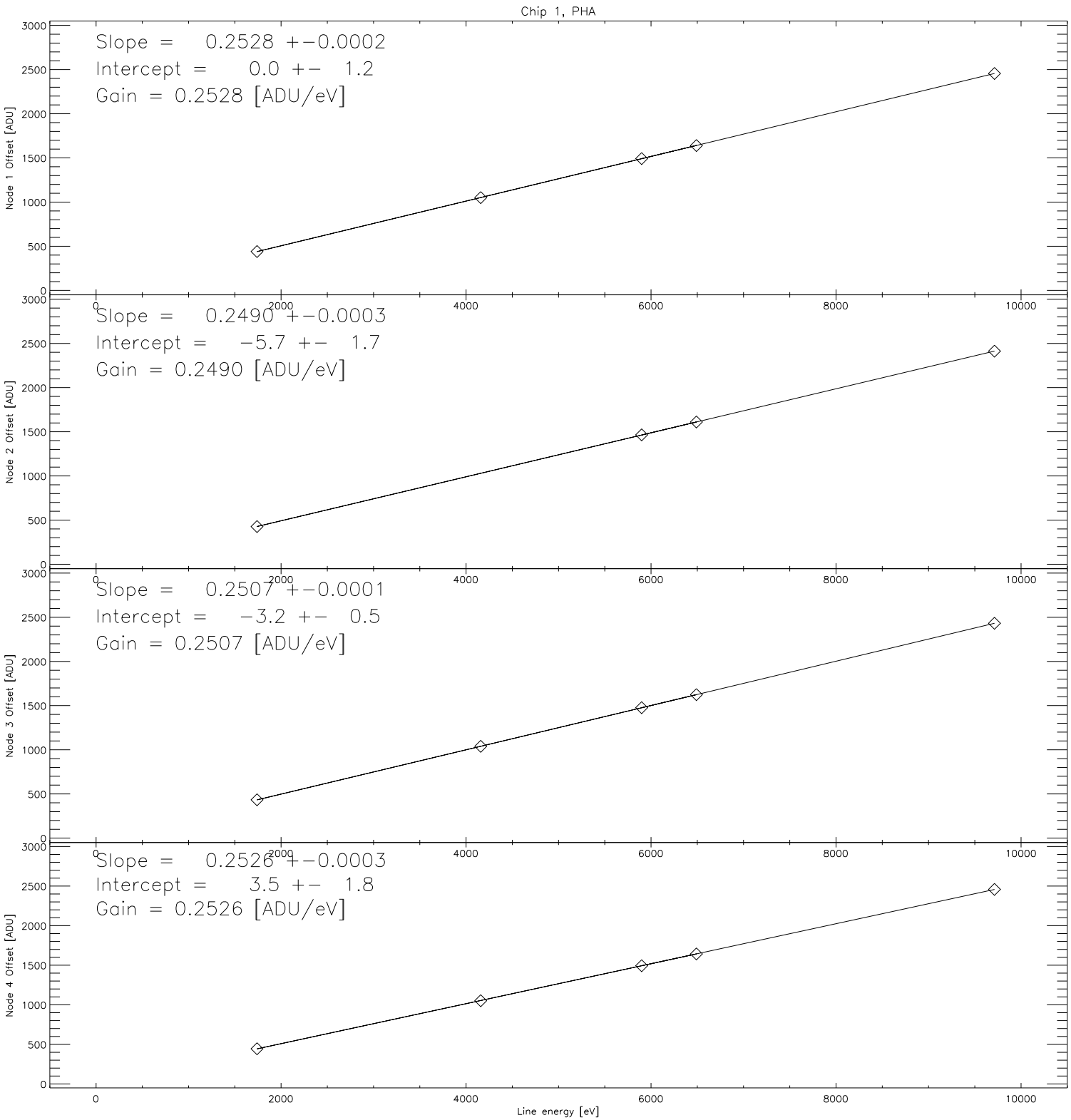
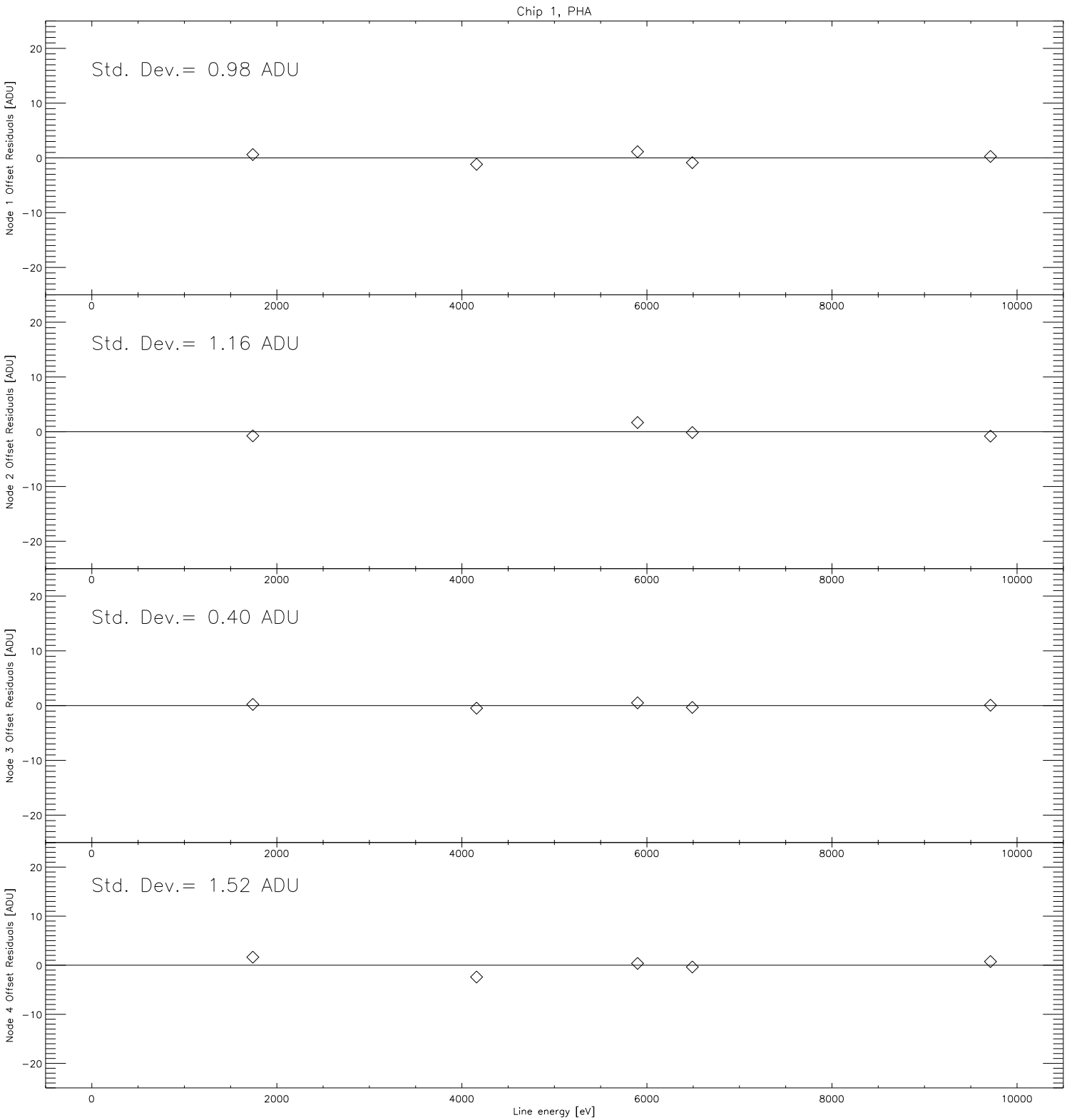
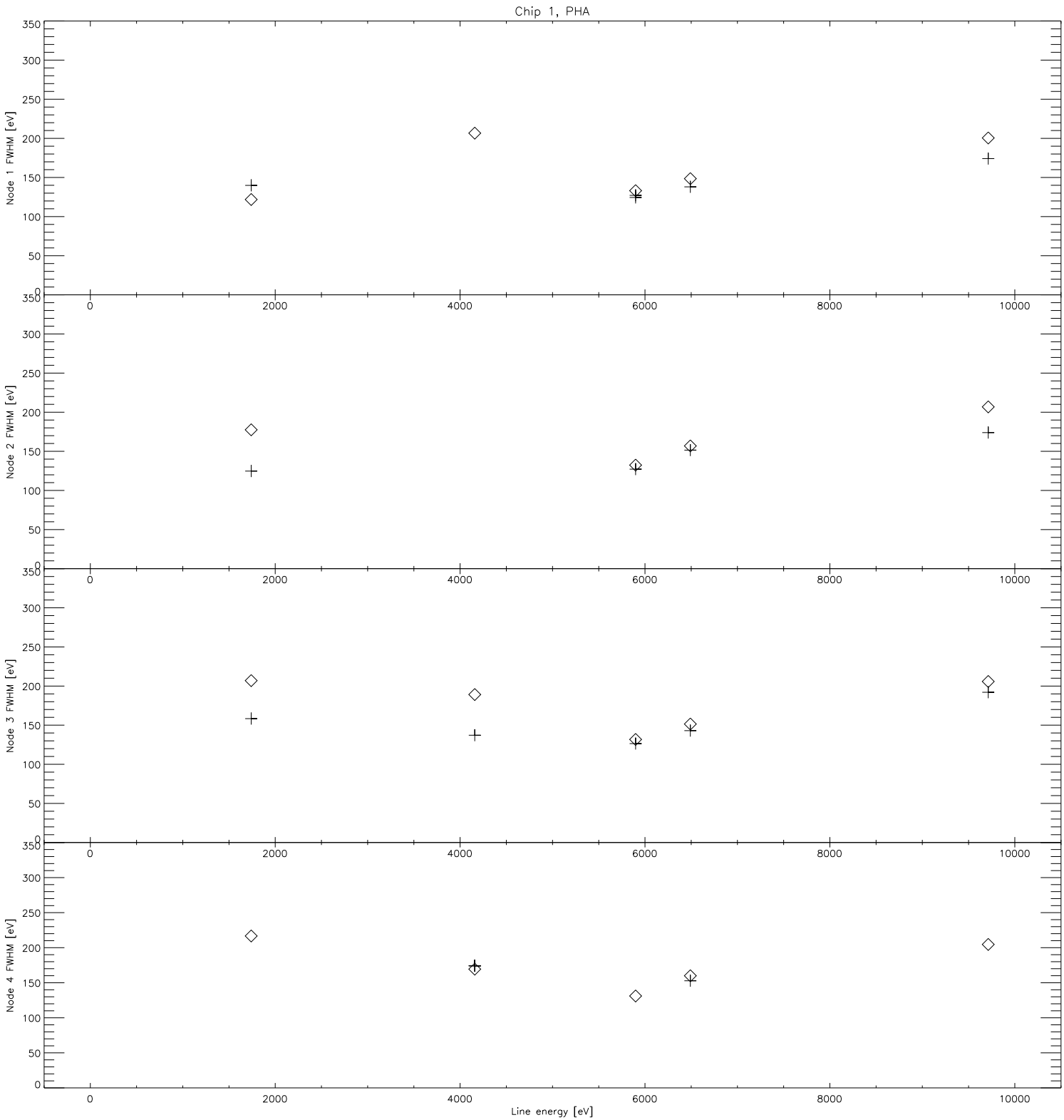

Chip 0, PHA
Slope = 0.2599 +-0.0002
Intercept = 0.3 +- 1.0
Gain = 0.2599 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2514 +-0.0005
Intercept = -1.6 +- 4.0
Gain = 0.2514 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2612 +-0.0006
Intercept = -9.1 +- 4.5
Gain = 0.2612 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2536 +-0.0004
Intercept = -3.2 +- 2.4
Gain = 0.2536 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

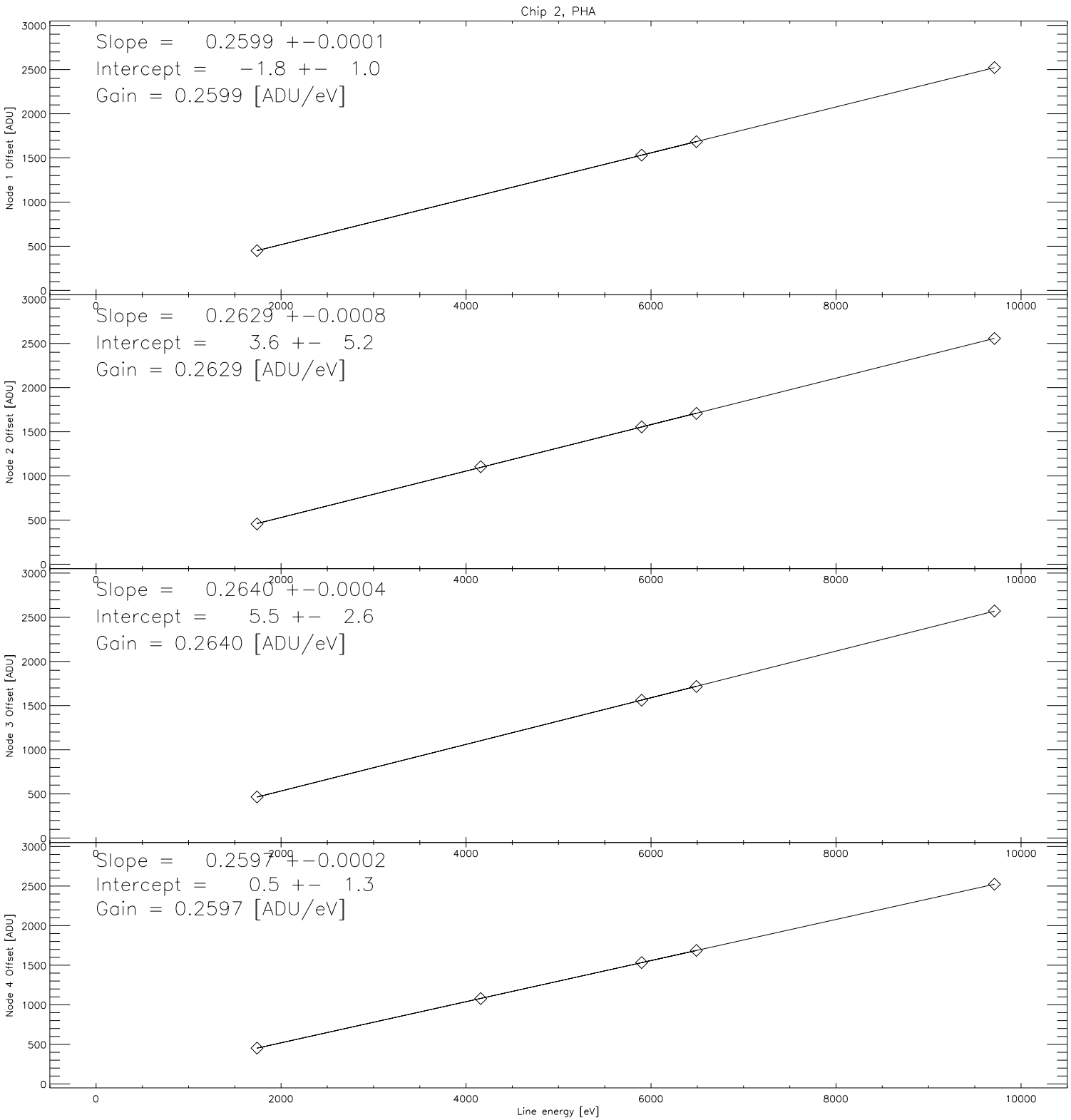

Chip 0, PHA
Std. Dev.= 0.71 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 1.10 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 1.22 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 1.67 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

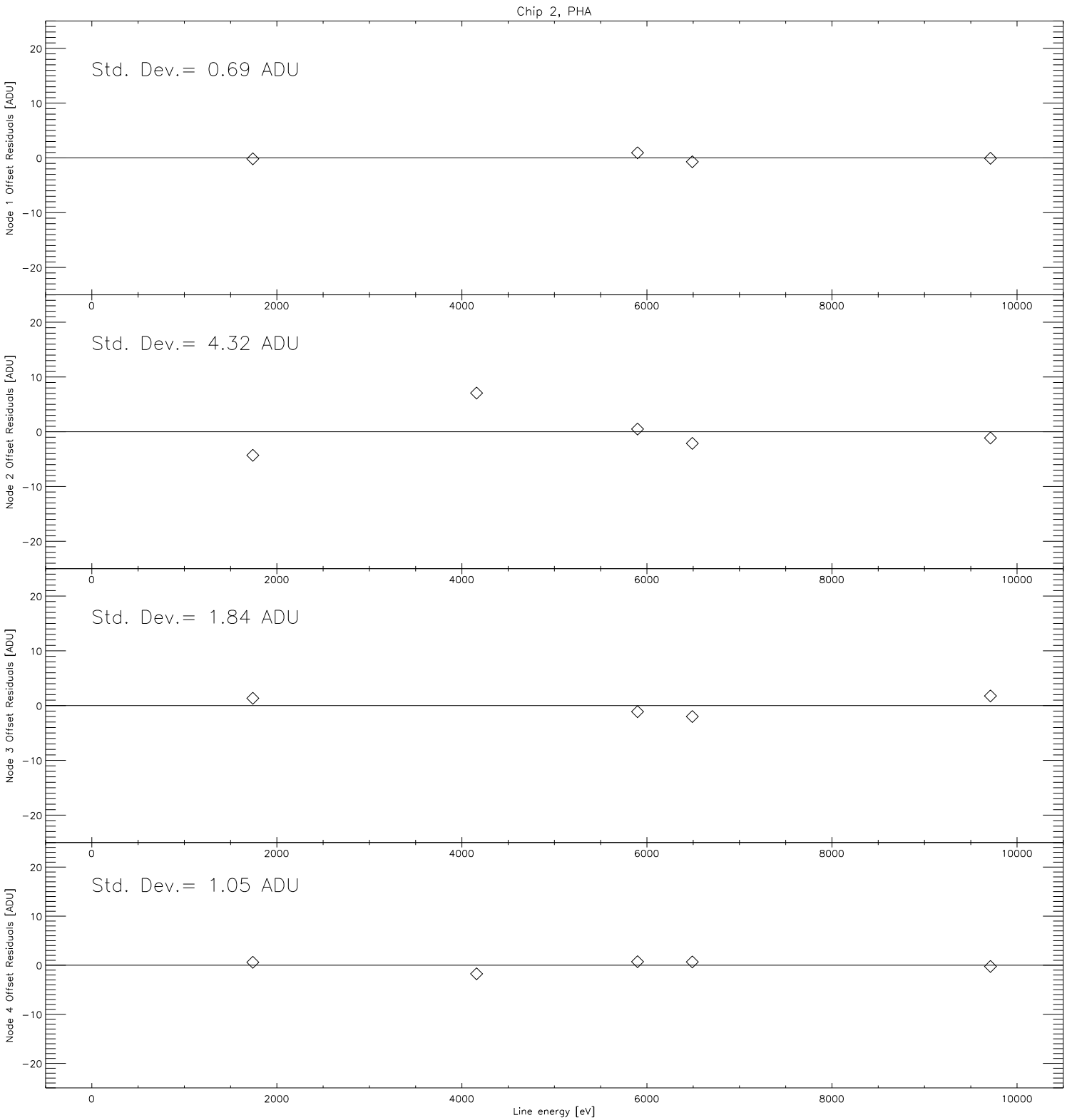

Chip 0, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

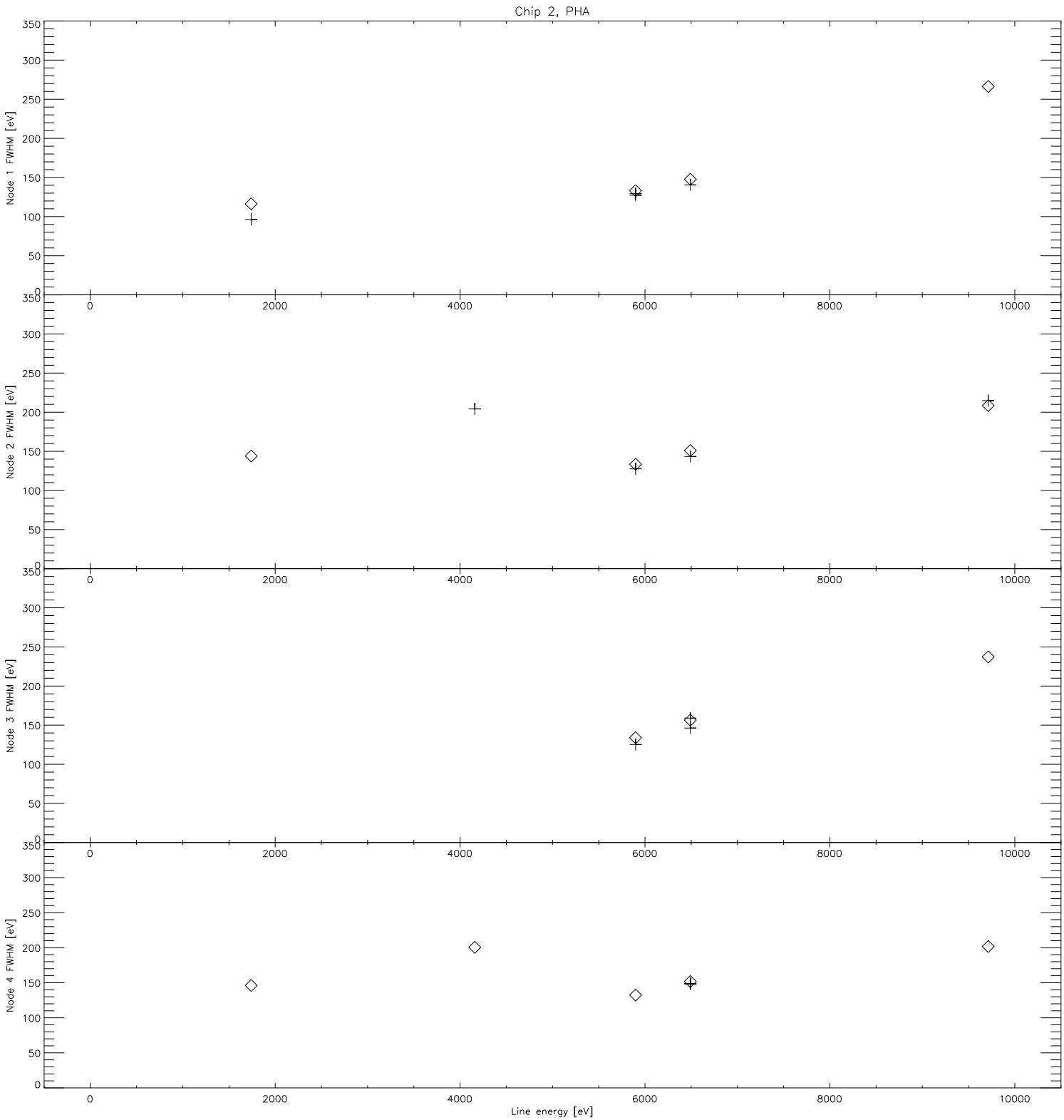

Chip 1, PHA
Slope = 0.2528 +-0.0002
Intercept = 0.0 +- 1.2
Gain = 0.2528 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2490 +-0.0003
Intercept = -5.7 +- 1.7
Gain = 0.2490 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2507 +-0.0001
Intercept = -3.2 +- 0.5
Gain = 0.2507 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2526 +-0.0003
Intercept = 3.5 +- 1.8
Gain = 0.2526 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

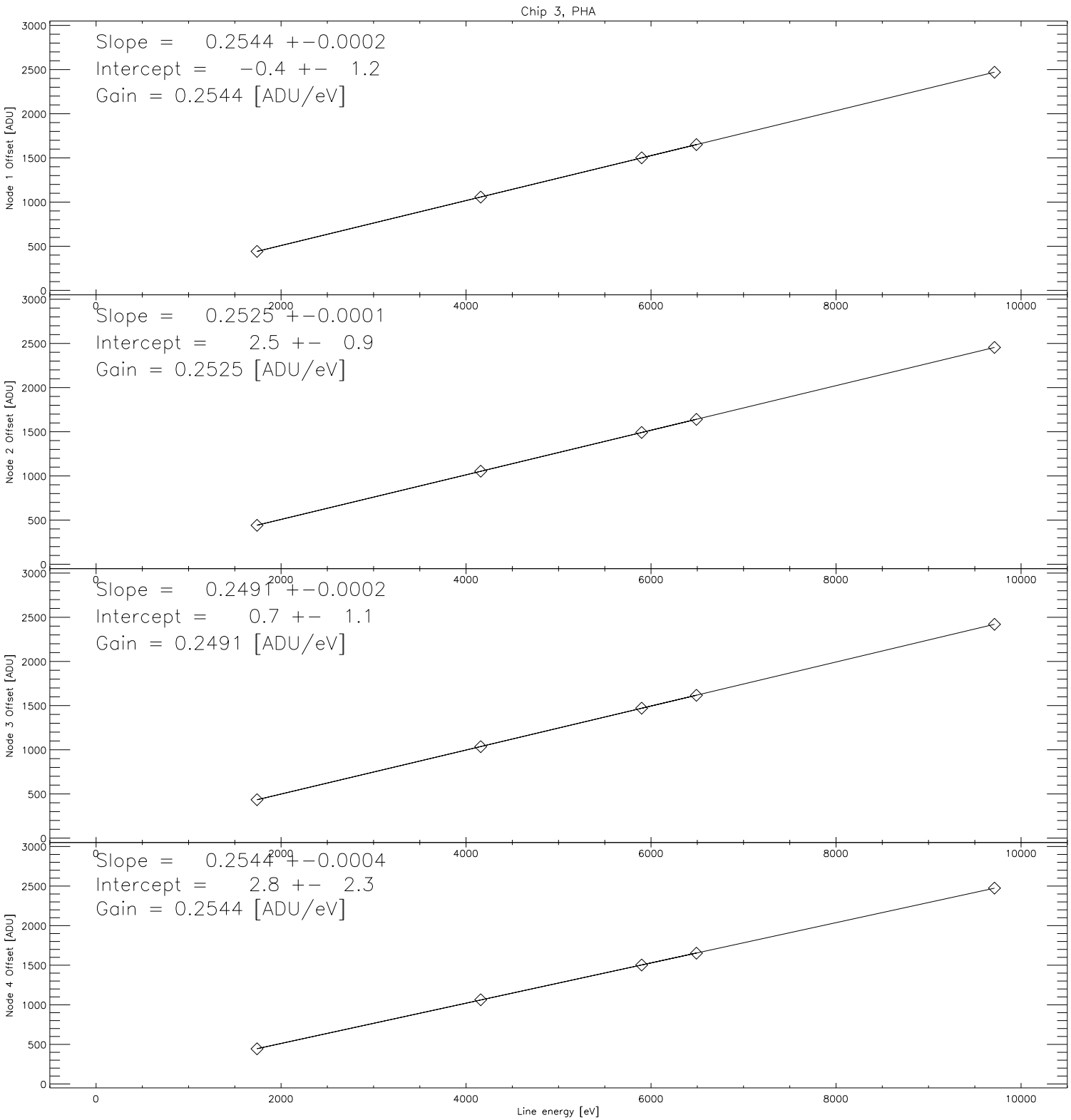

Chip 1, PHA
Std. Dev.= 0.98 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 1.16 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 0.40 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 1.52 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

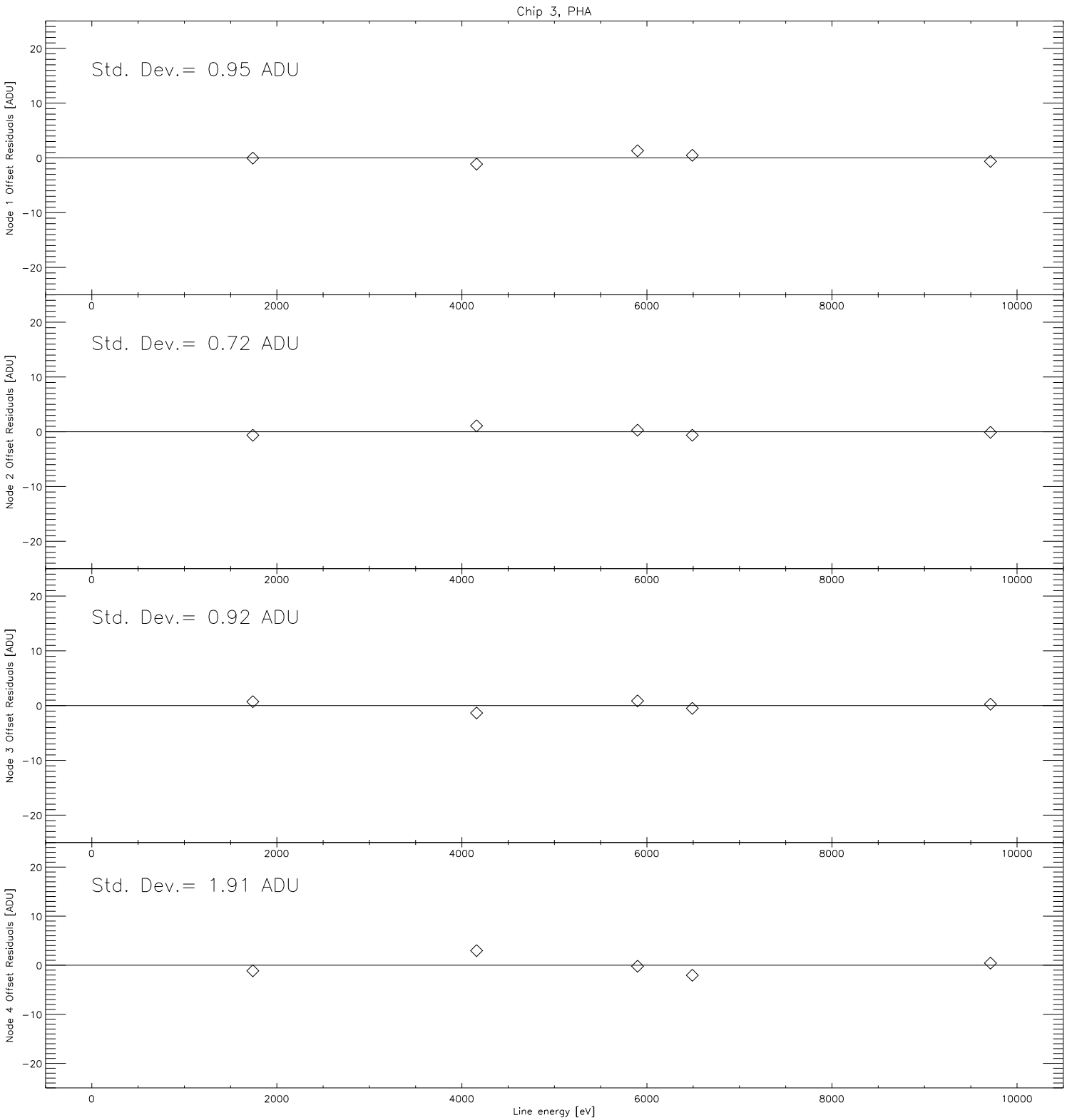

Chip 1, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

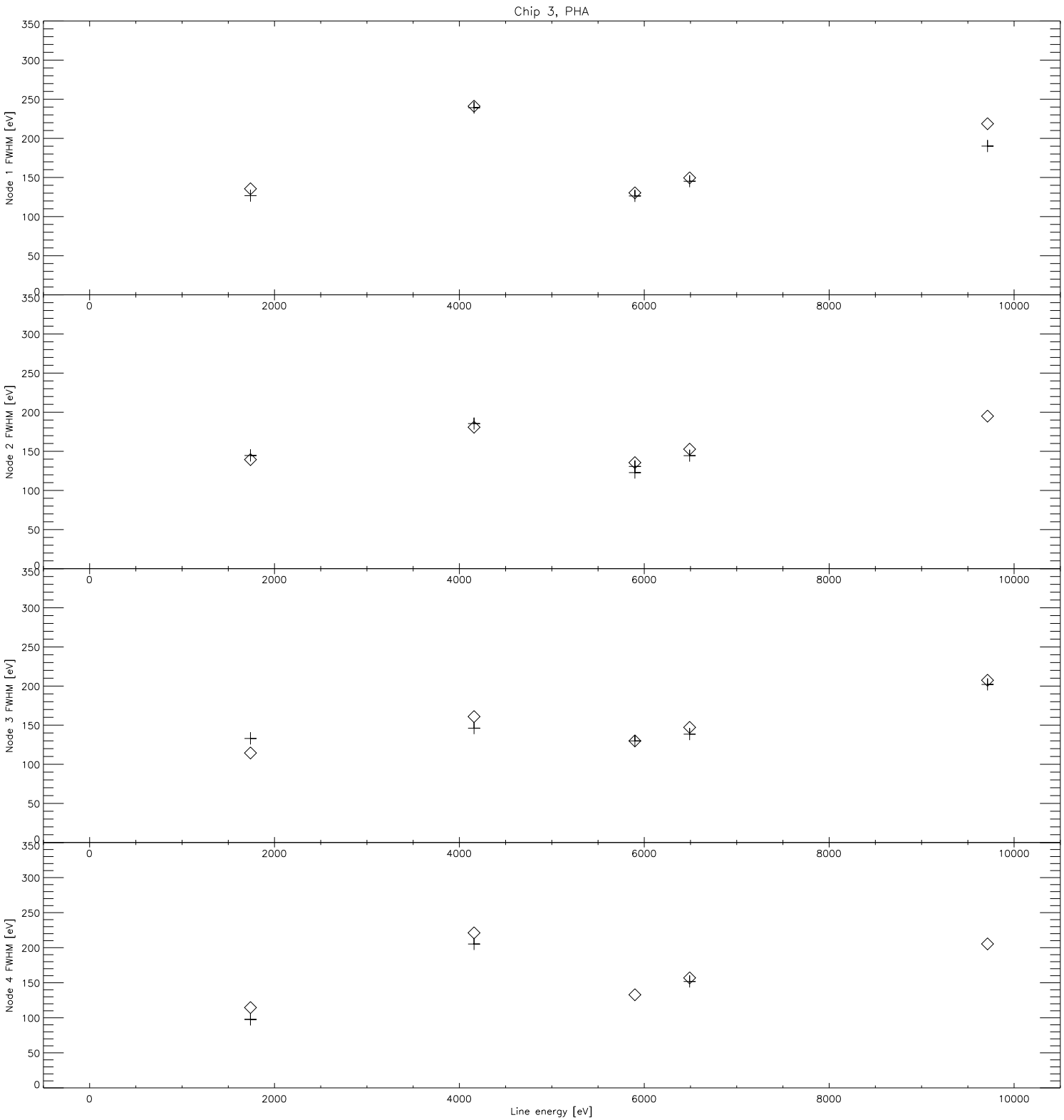

Chip 2, PHA
Slope = 0.2599 +−0.0001
Intercept = −1.8 +− 1.0
Gain = 0.2599 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2629 +−0.0008
Intercept = 3.6 +− 5.2
Gain = 0.2629 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2640 +−0.0004
Intercept = 5.5 +− 2.6
Gain = 0.2640 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2597 +−0.0002
Intercept = 0.5 +− 1.3
Gain = 0.2597 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

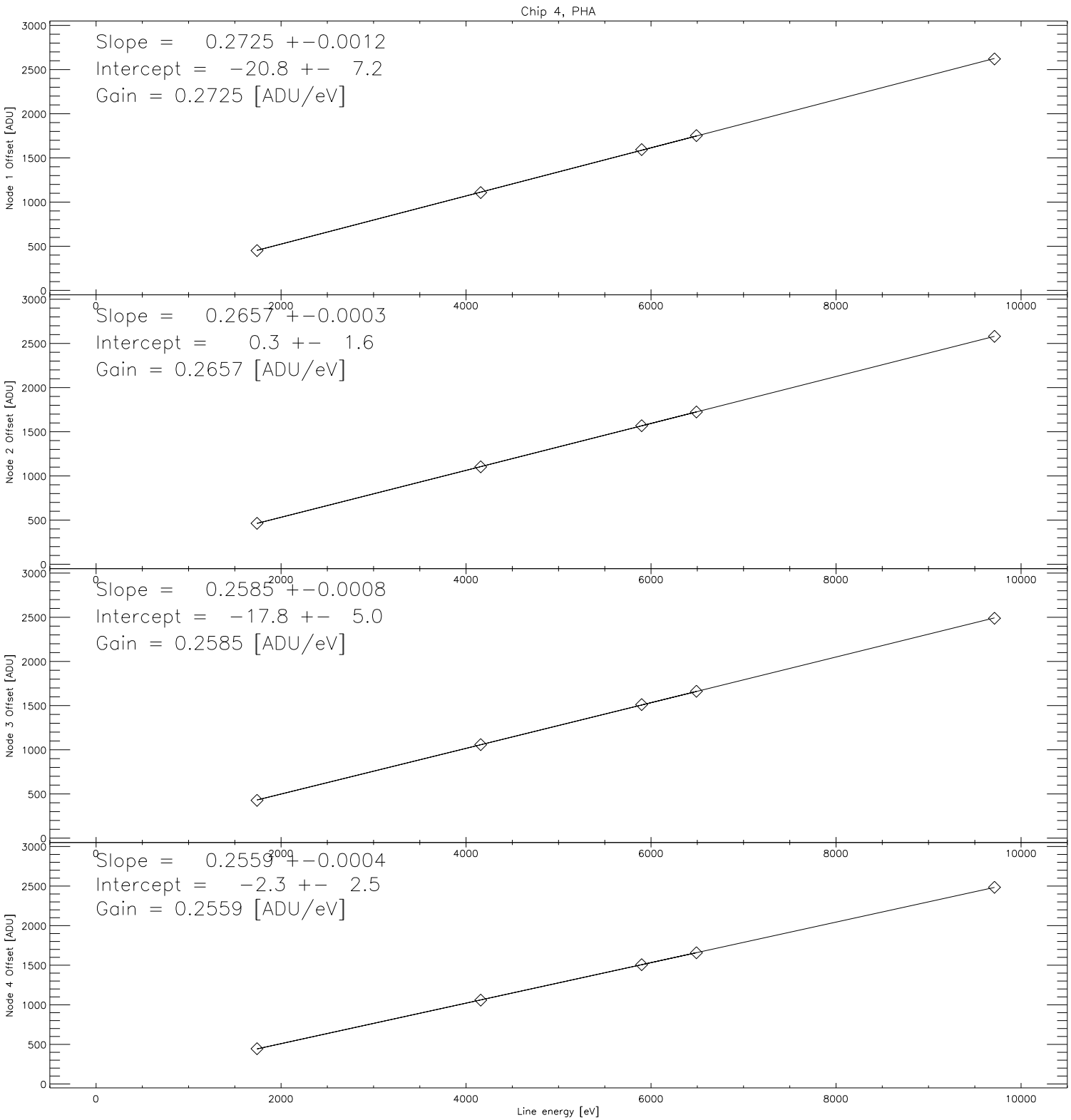

Chip 2, PHA
Std. Dev.= 0.69 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 4.32 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 1.84 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 1.05 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

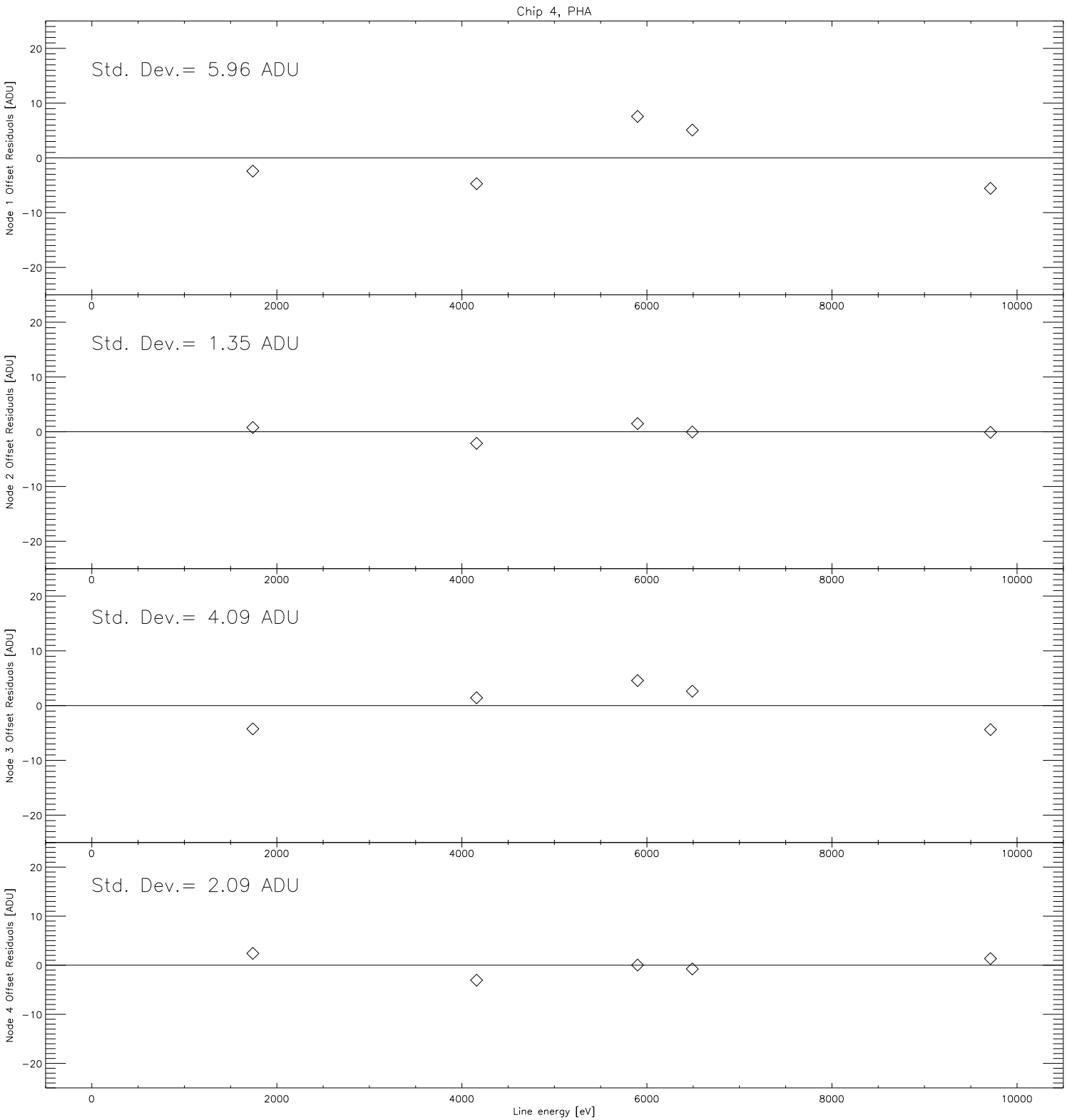

Chip 2, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000
Line energy [eV]

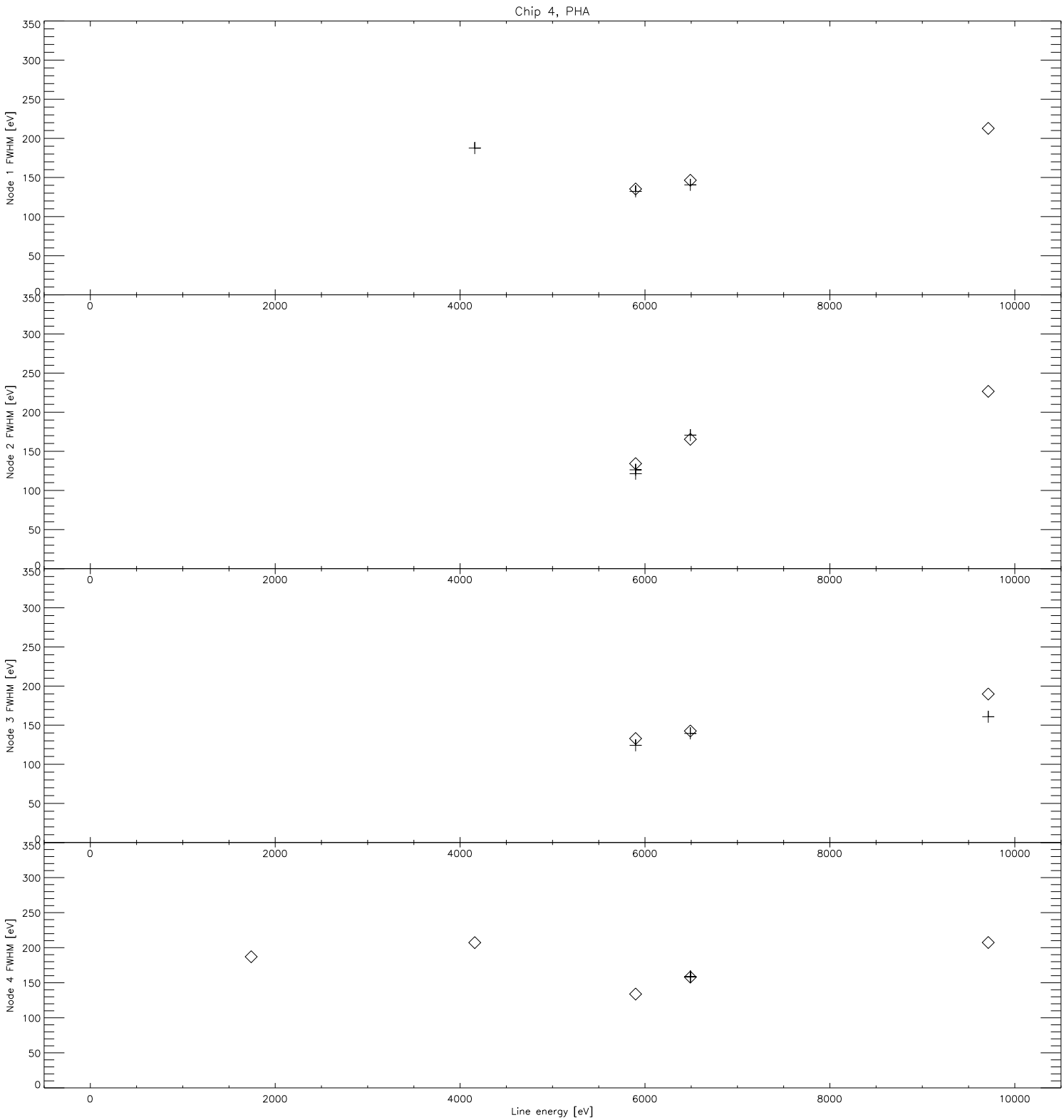

Chip 3, PHA
Slope = 0.2544 +-0.0002
Intercept = -0.4 +- 1.2
Gain = 0.2544 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2525 +-0.0001
Intercept = 2.5 +- 0.9
Gain = 0.2525 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2491 +-0.0002
Intercept = 0.7 +- 1.1
Gain = 0.2491 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2544 +-0.0004
Intercept = 2.8 +- 2.3
Gain = 0.2544 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

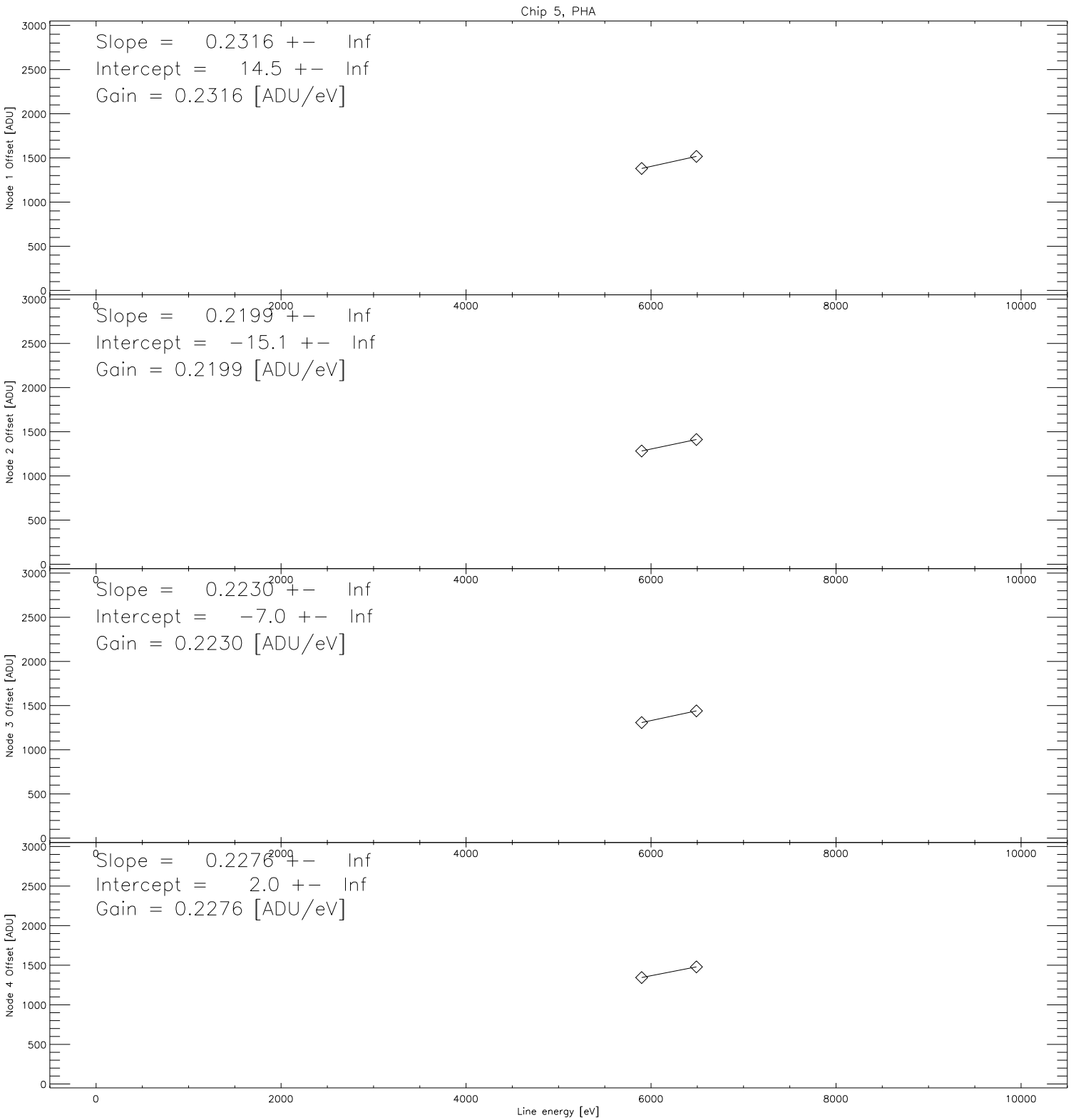

Chip 3, PHA
Std. Dev.= 0.95 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 0.72 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 0.92 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 1.91 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

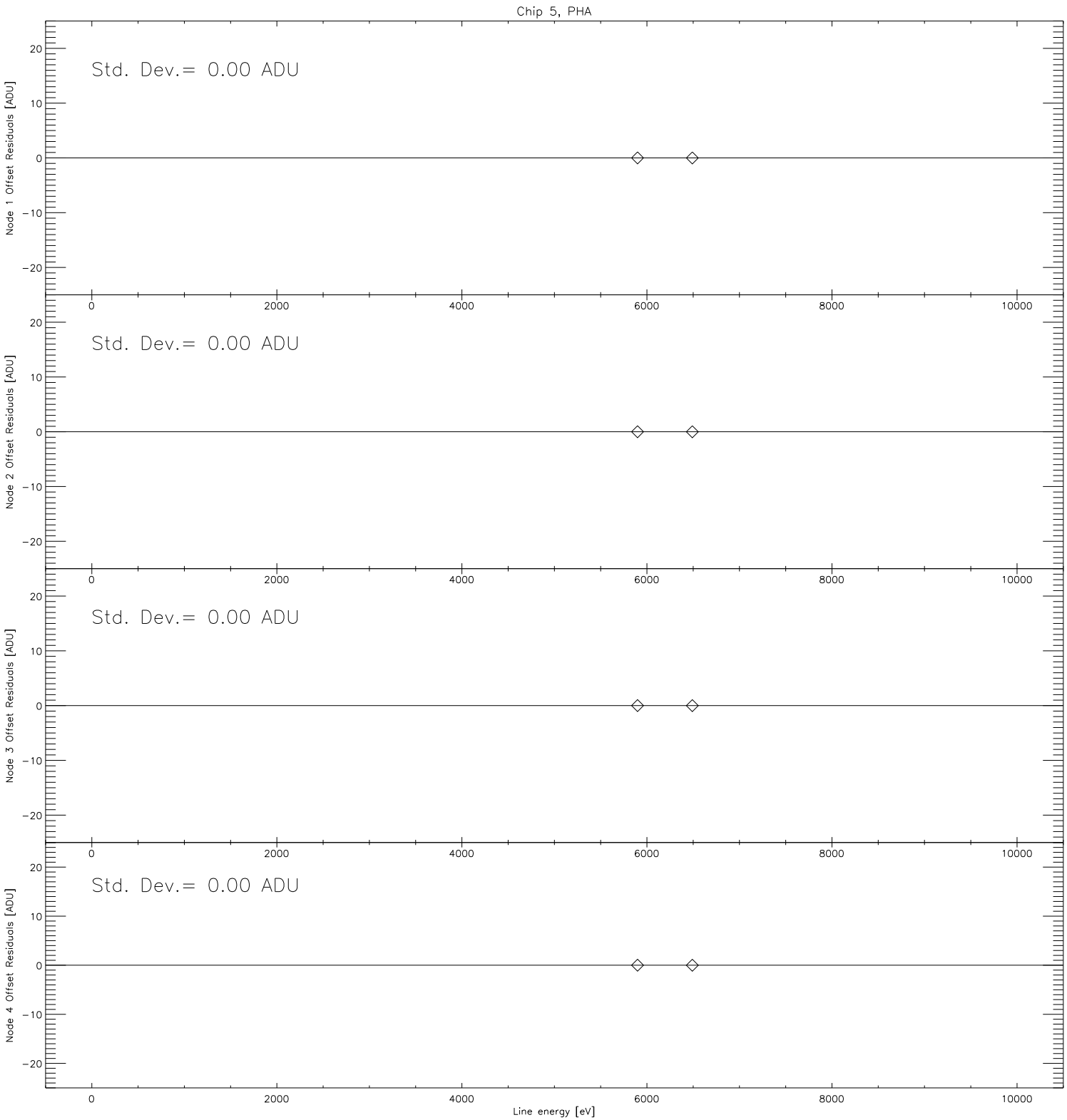

Chip 3, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

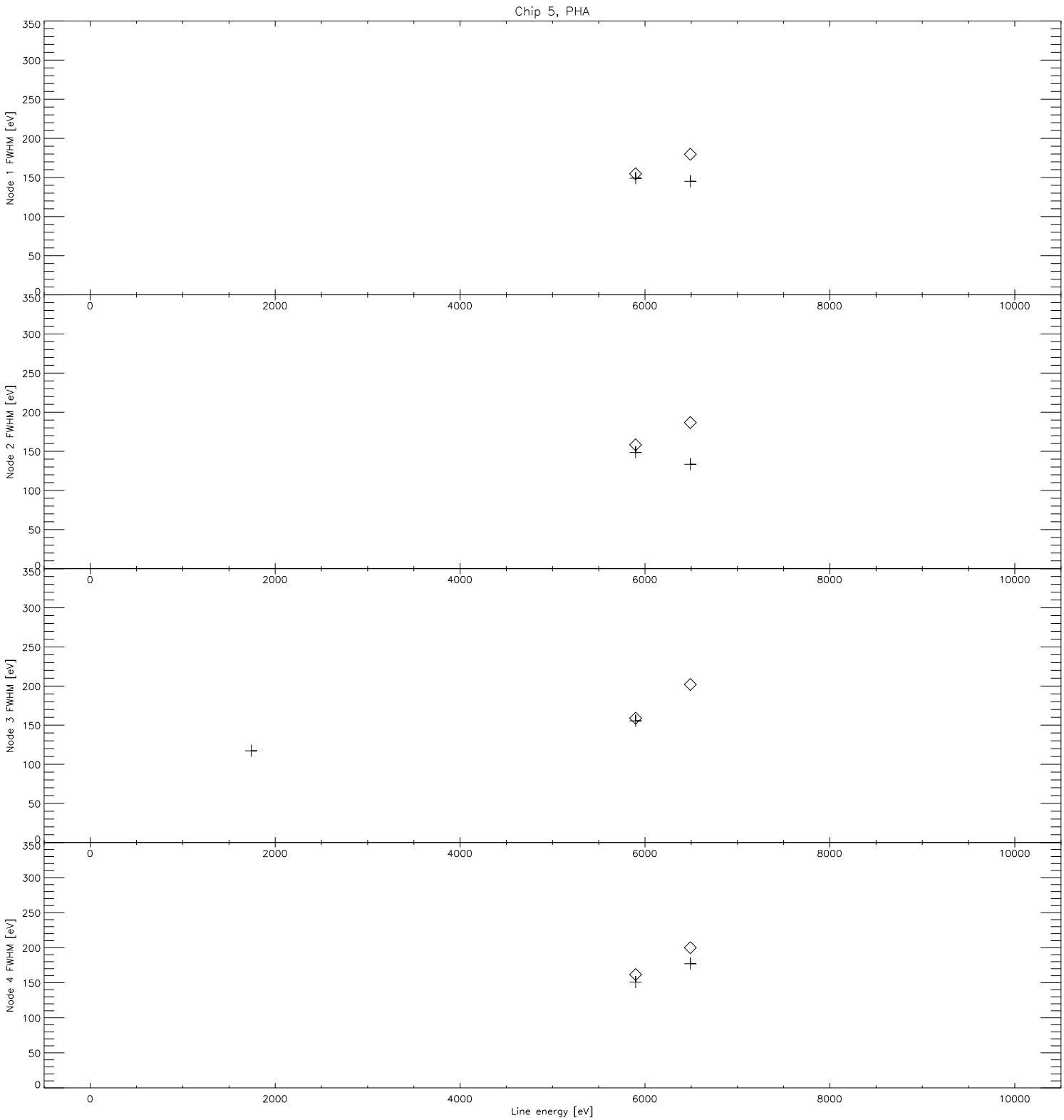

Chip 4, PHA
Slope = 0.2725 +-0.0012
Intercept = -20.8 +- 7.2
Gain = 0.2725 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2657 +-0.0003
Intercept = 0.3 +- 1.6
Gain = 0.2657 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2585 +-0.0008
Intercept = -17.8 +- 5.0
Gain = 0.2585 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2559 +-0.0004
Intercept = -2.3 +- 2.5
Gain = 0.2559 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

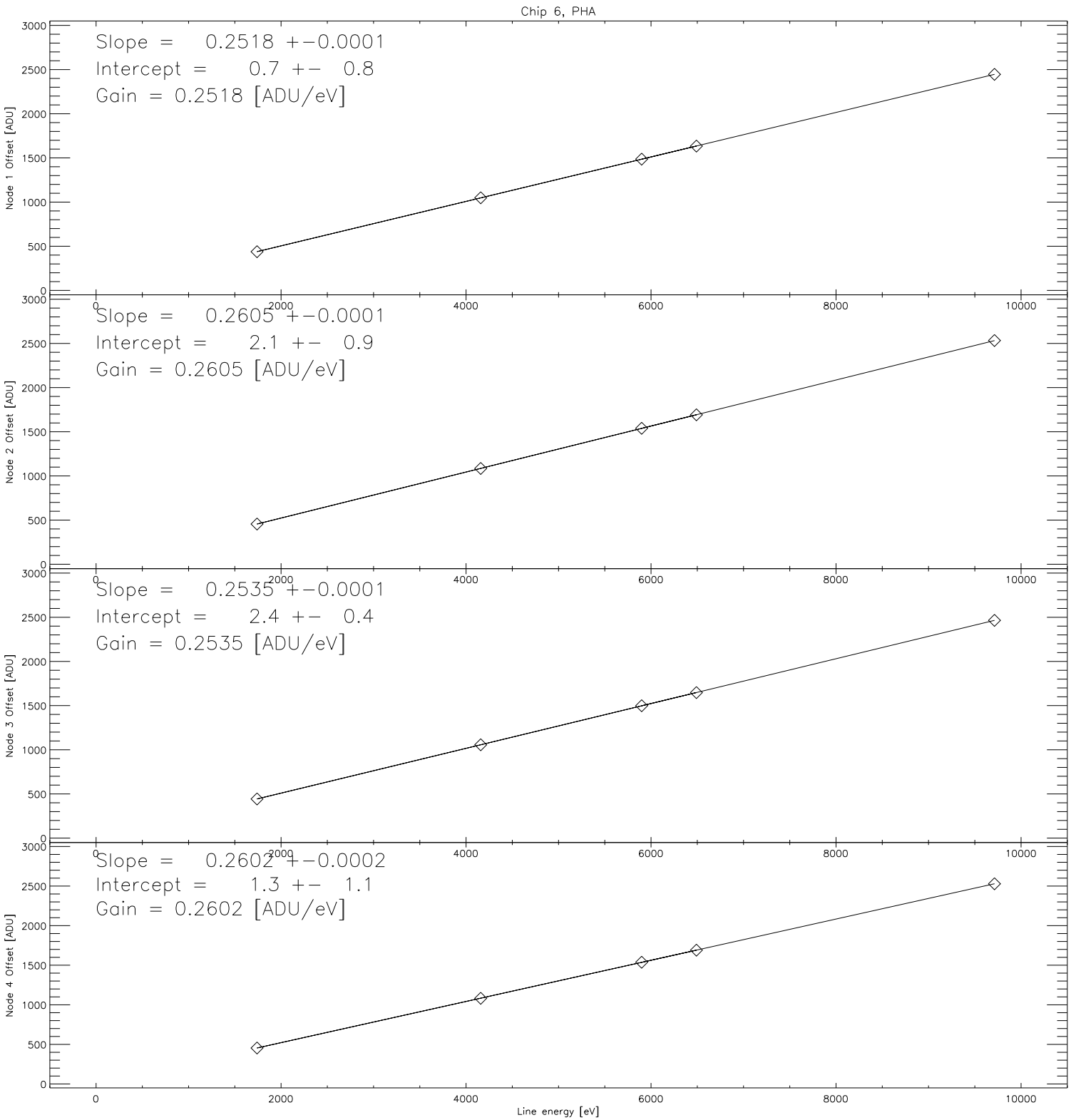

Chip 4, PHA
Std. Dev.= 5.96 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 1.35 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 4.09 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 2.09 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

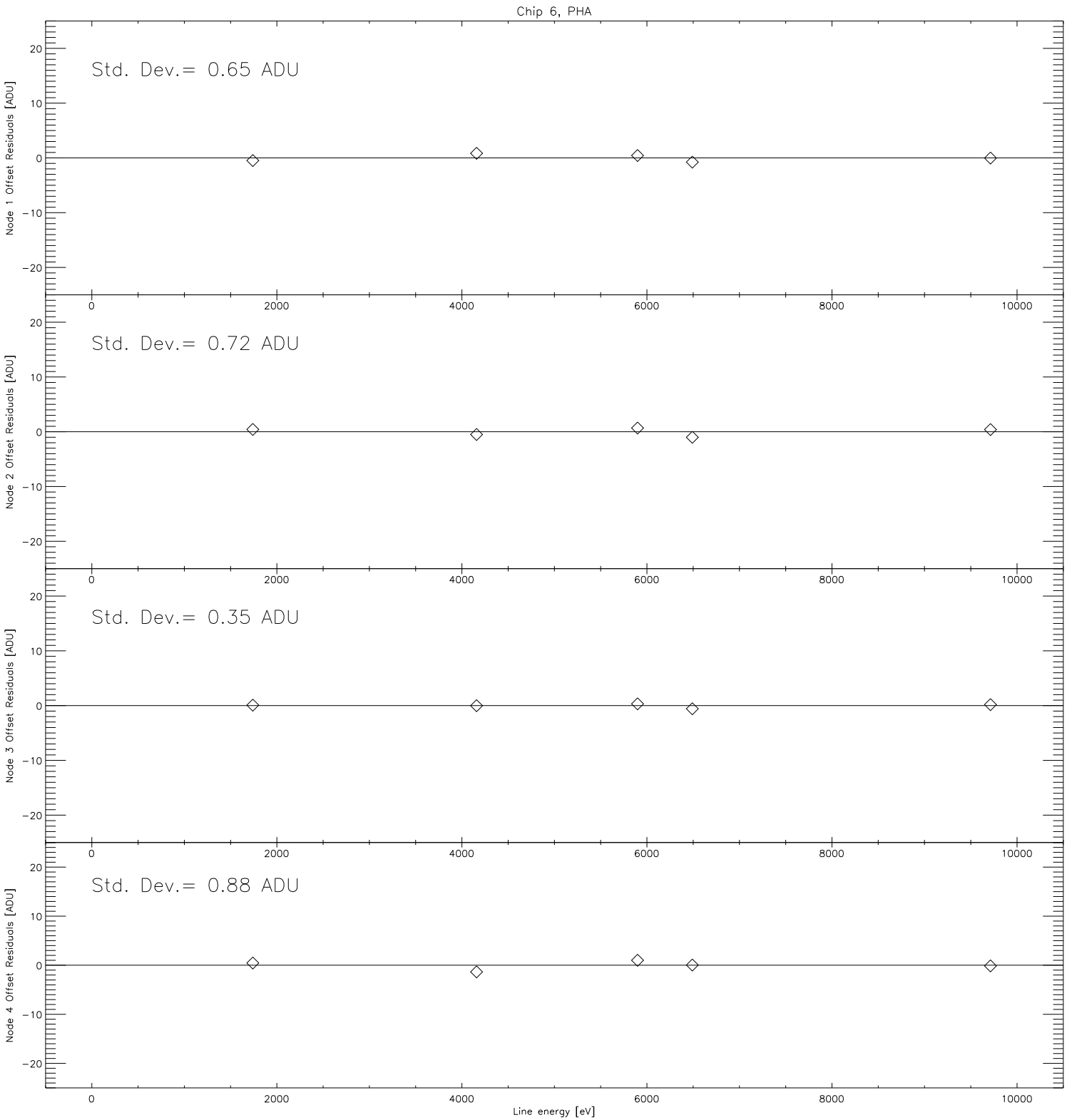

Chip 4, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

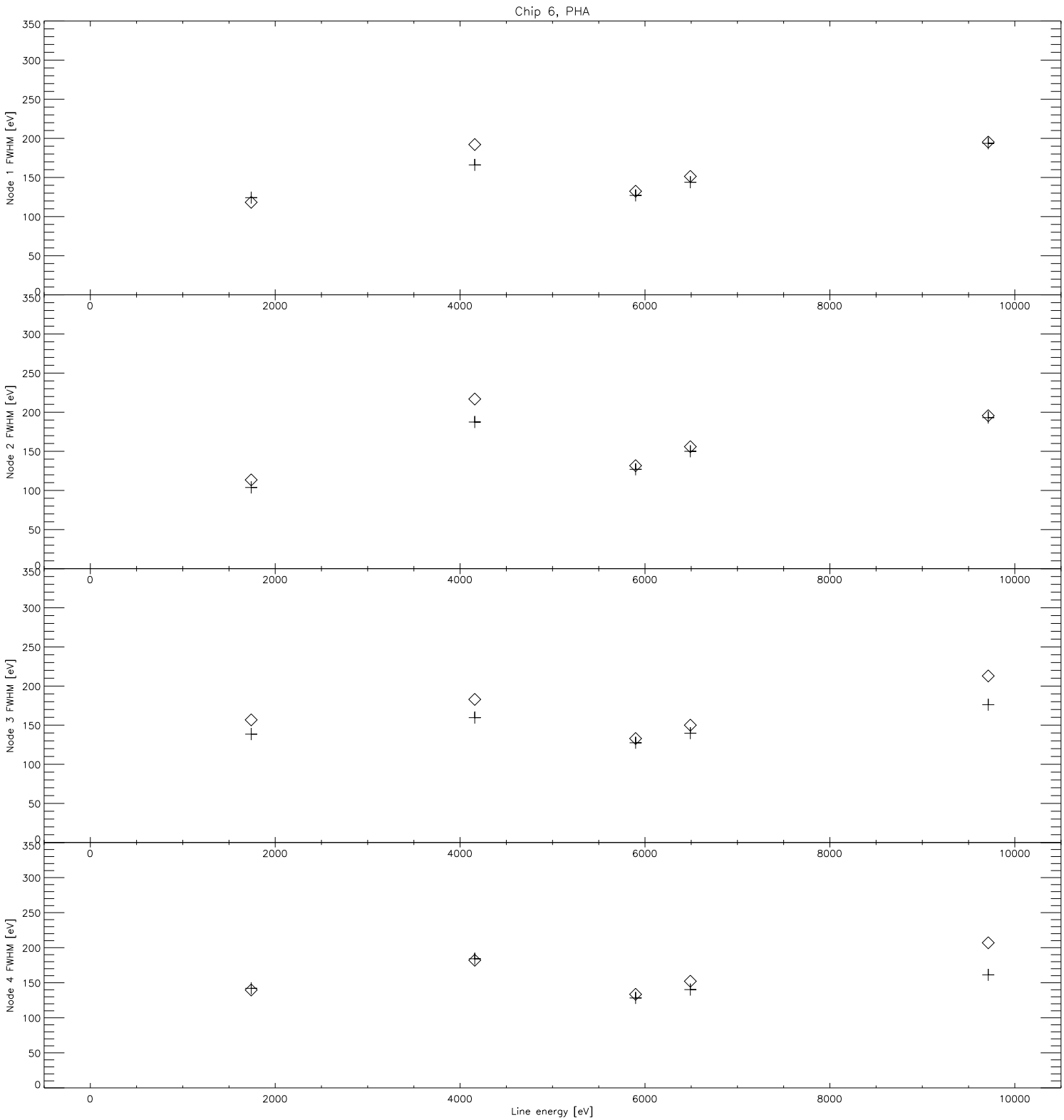

Chip 5, PHA
Slope = 0.2316 +- Inf
Intercept = 14.5 +- Inf
Gain = 0.2316 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2199 +- Inf
Intercept = −15.1 +- Inf
Gain = 0.2199 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2230 +- Inf
Intercept = −7.0 +- Inf
Gain = 0.2230 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2276 +- Inf
Intercept = 2.0 +- Inf
Gain = 0.2276 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

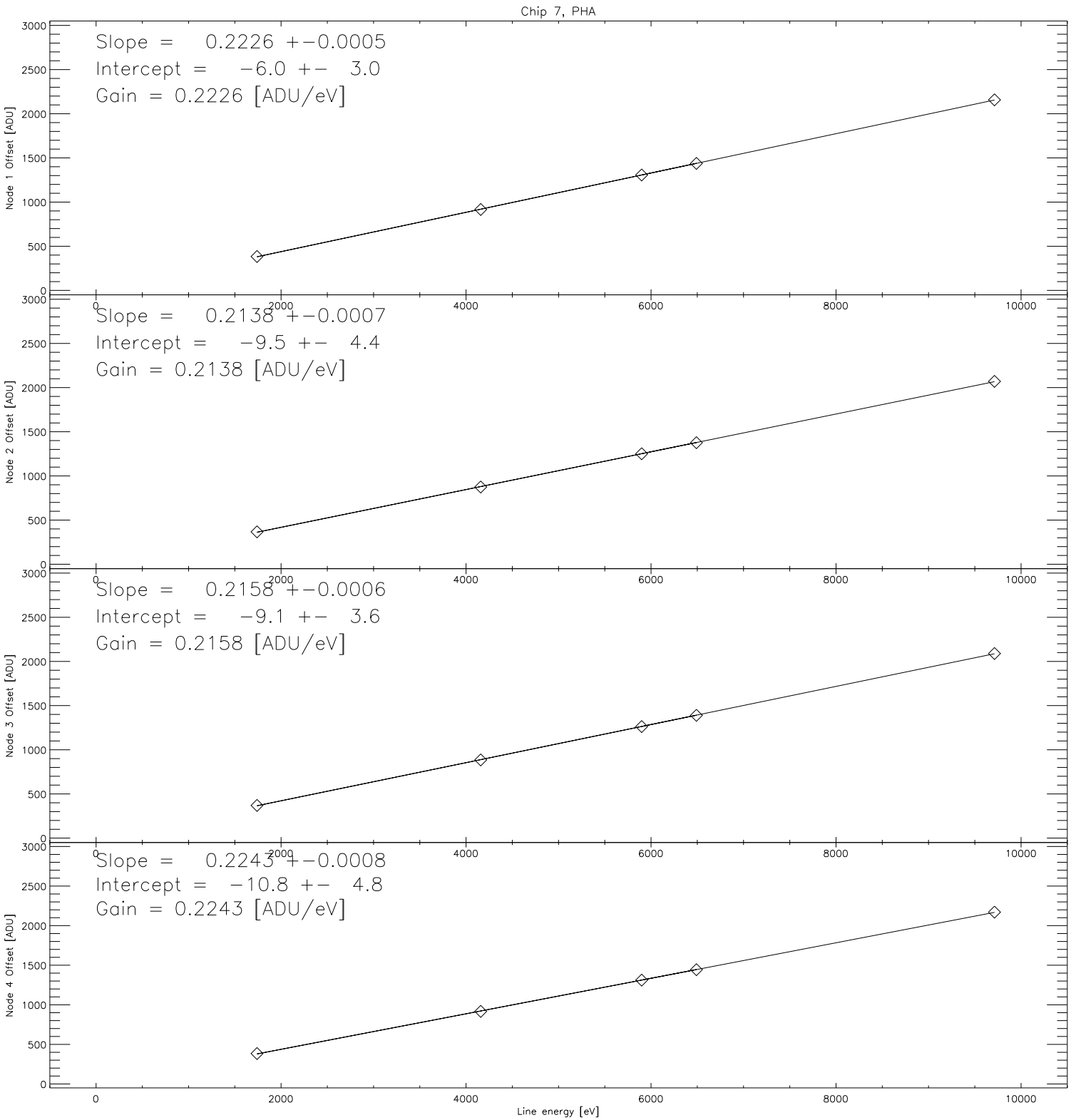

Chip 5, PHA
Std. Dev.= 0.00 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 0.00 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 0.00 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 0.00 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

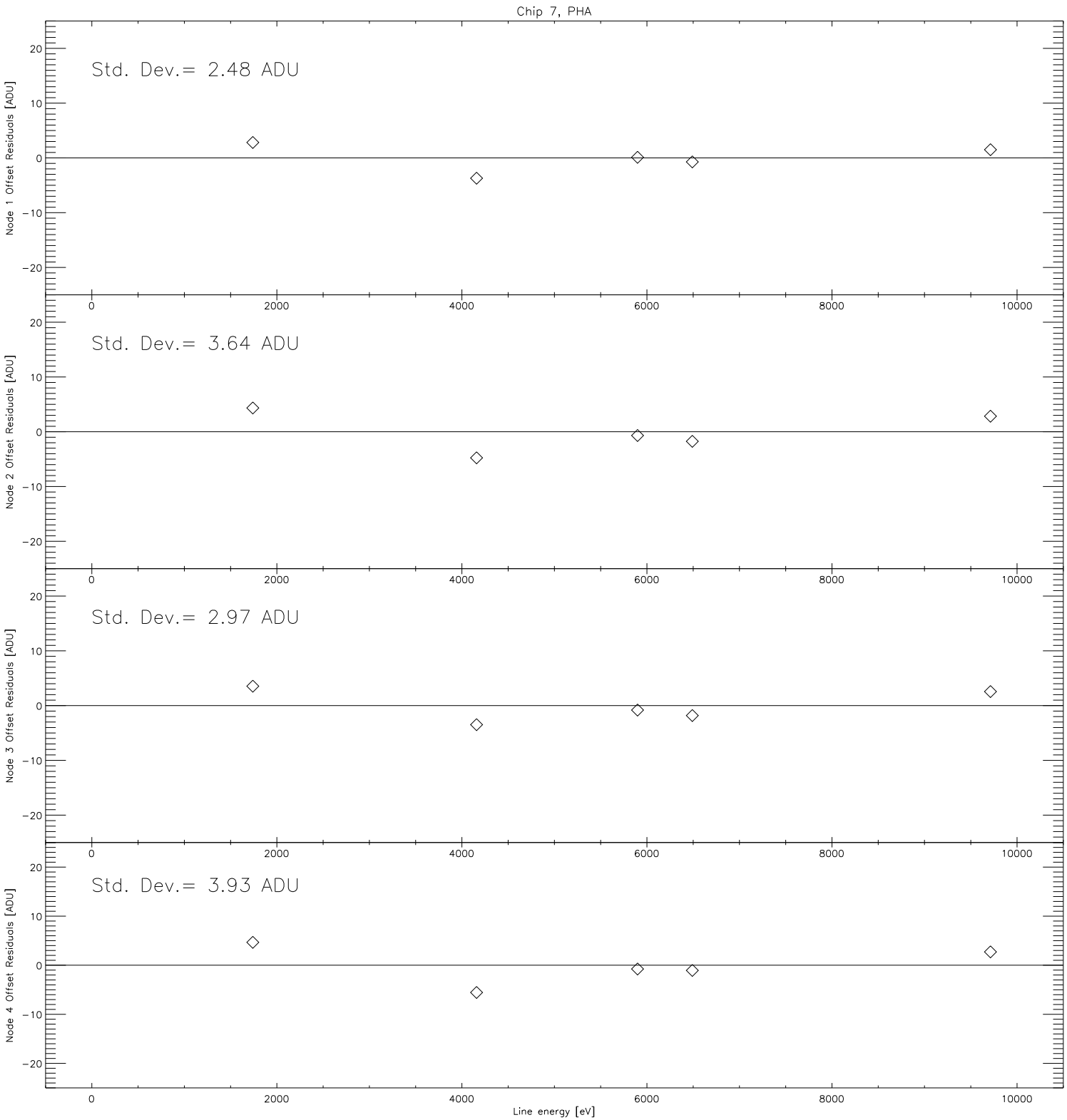

Chip 5, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

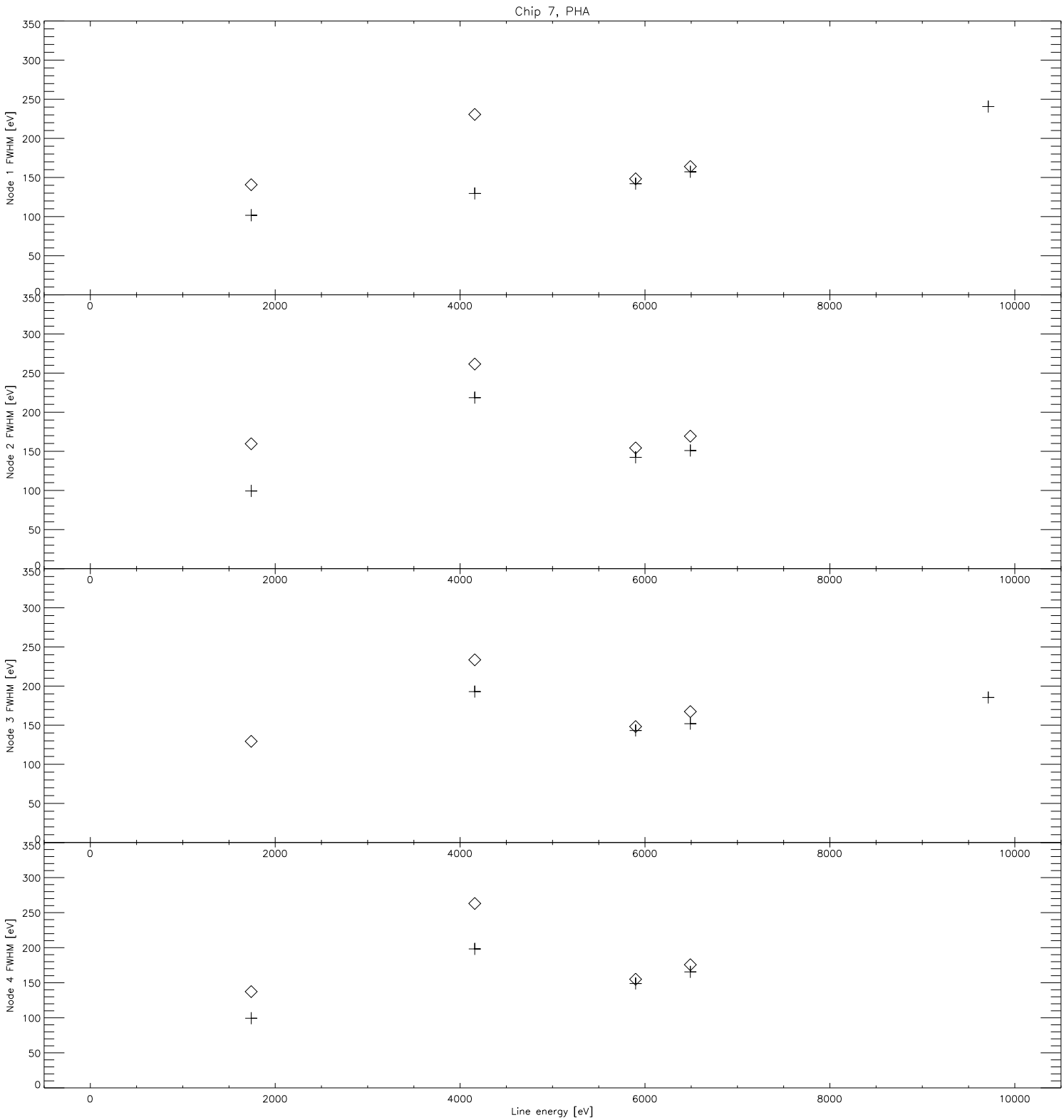

Chip 6, PHA
Slope = 0.2518 +-0.0001
Intercept = 0.7 +- 0.8
Gain = 0.2518 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2605 +-0.0001
Intercept = 2.1 +- 0.9
Gain = 0.2605 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2535 +-0.0001
Intercept = 2.4 +- 0.4
Gain = 0.2535 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2602 +-0.0002
Intercept = 1.3 +- 1.1
Gain = 0.2602 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

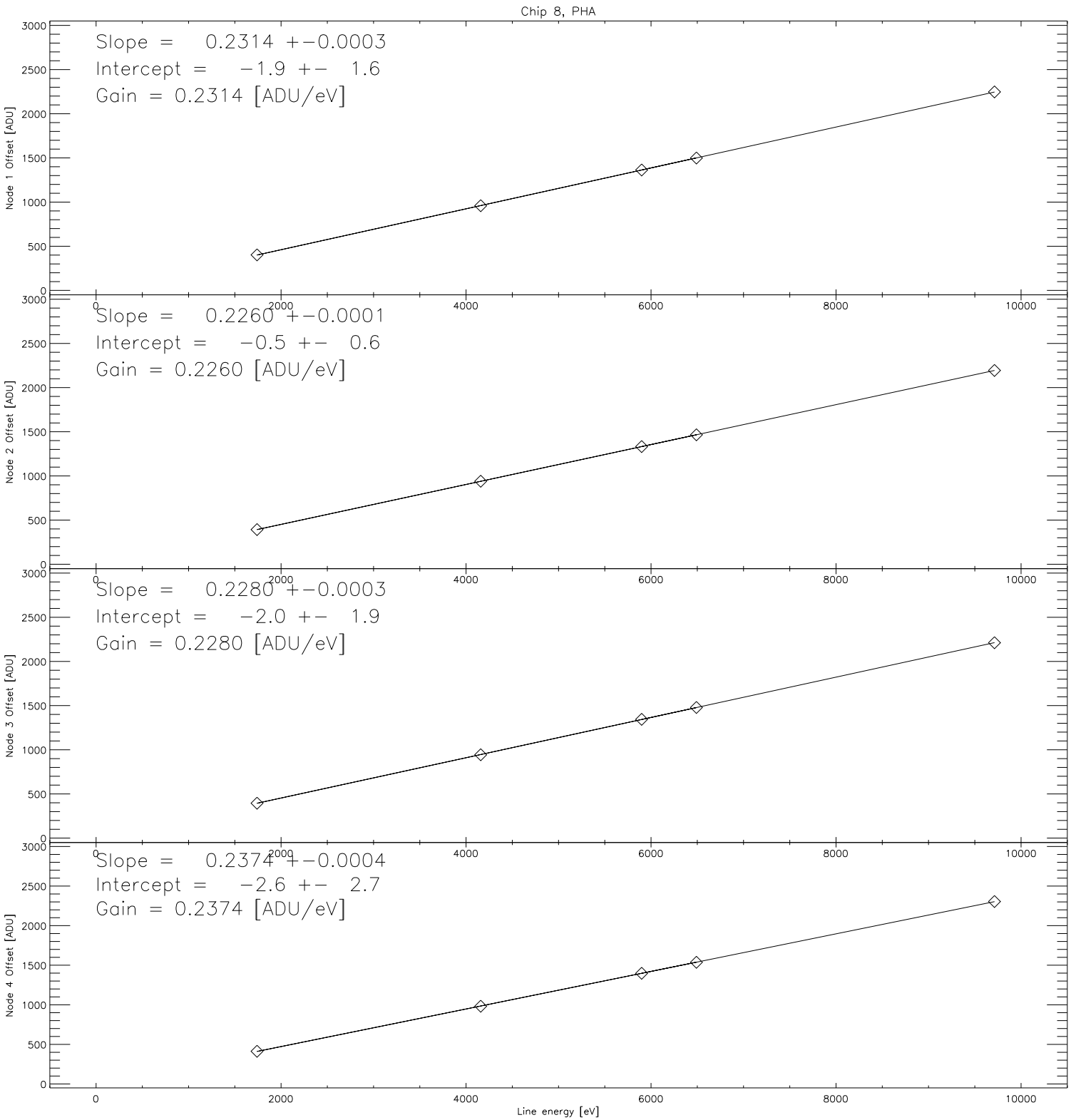

Chip 6, PHA
Std. Dev.= 0.65 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 0.72 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 0.35 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 0.88 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

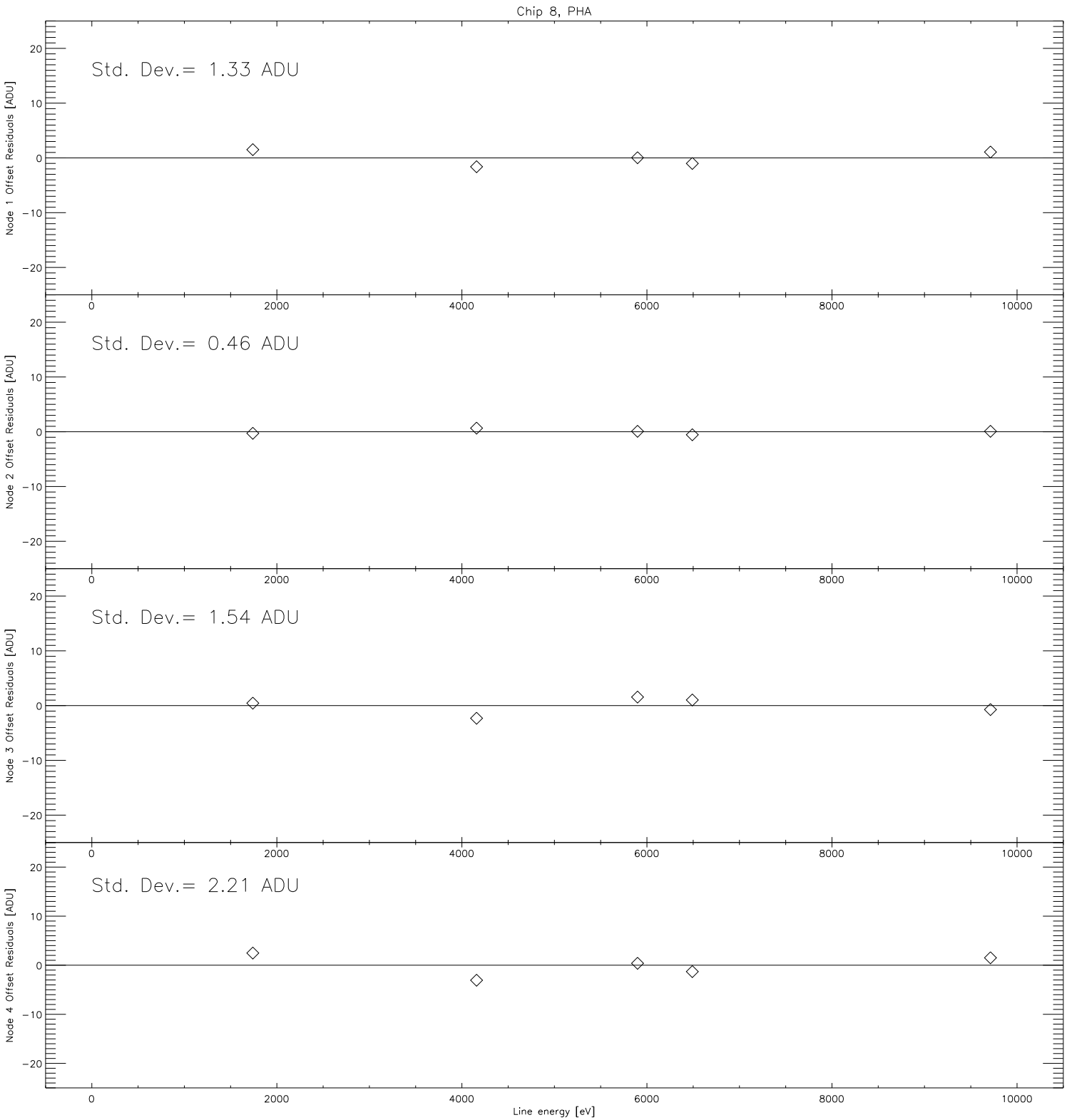

Chip 6, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

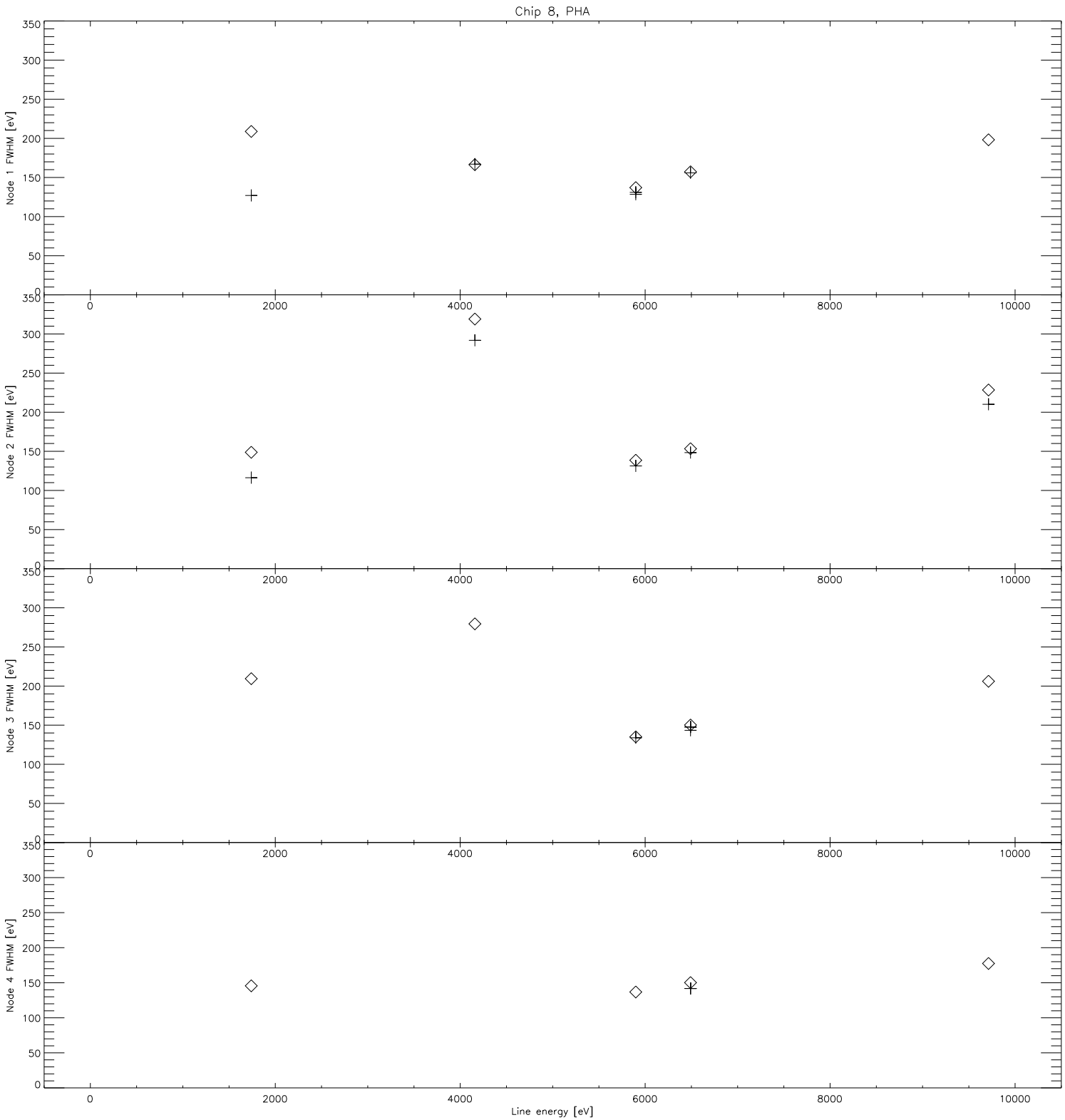

Chip 7, PHA
Slope = 0.2226 +-0.0005
Intercept = -6.0 +- 3.0
Gain = 0.2226 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2138 +-0.0007
Intercept = -9.5 +- 4.4
Gain = 0.2138 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2158 +-0.0006
Intercept = -9.1 +- 3.6
Gain = 0.2158 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2243 +-0.0008
Intercept = -10.8 +- 4.8
Gain = 0.2243 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]

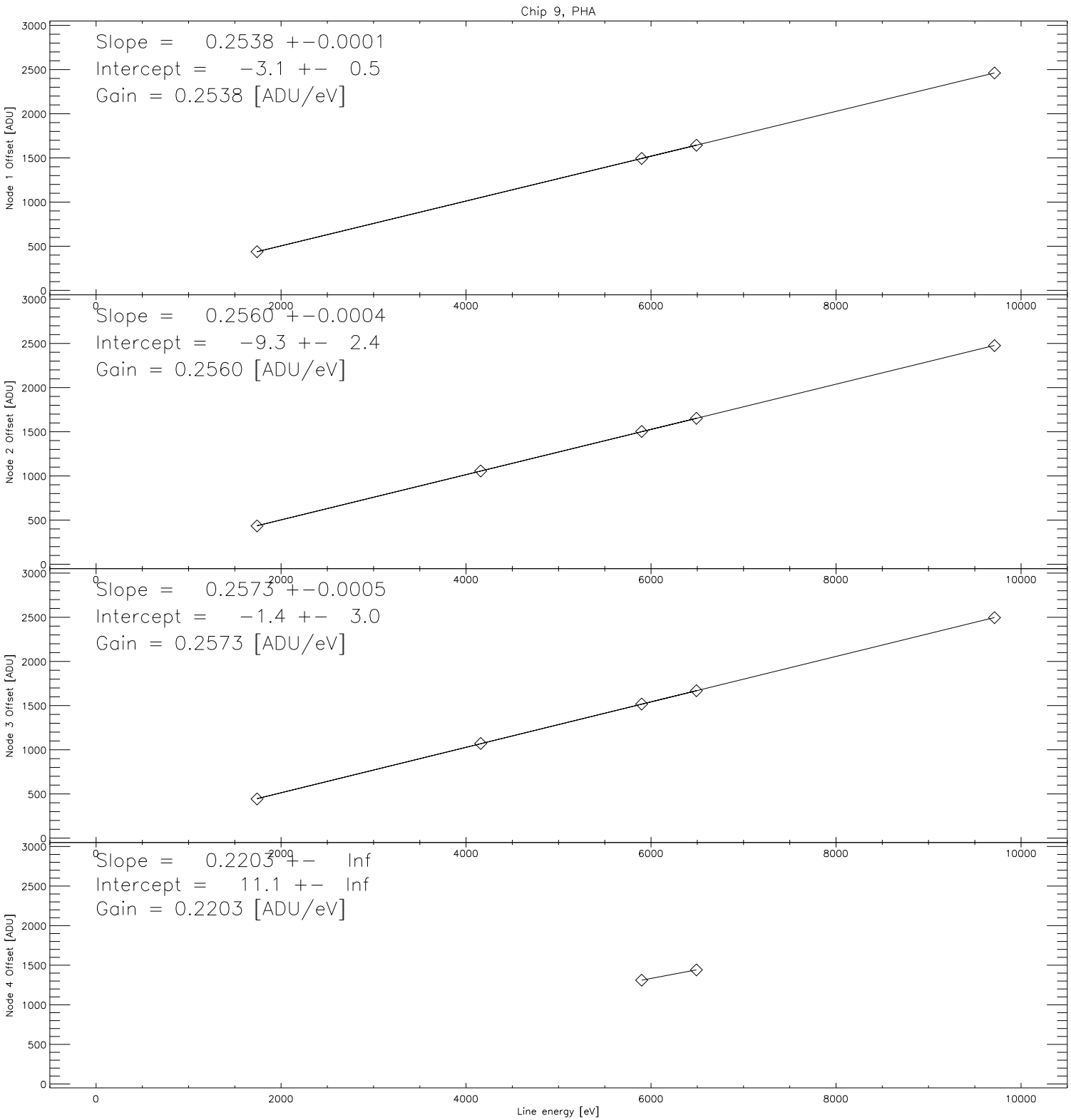

Chip 7, PHA
Std. Dev.= 2.48 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 3.64 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 2.97 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 3.93 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]

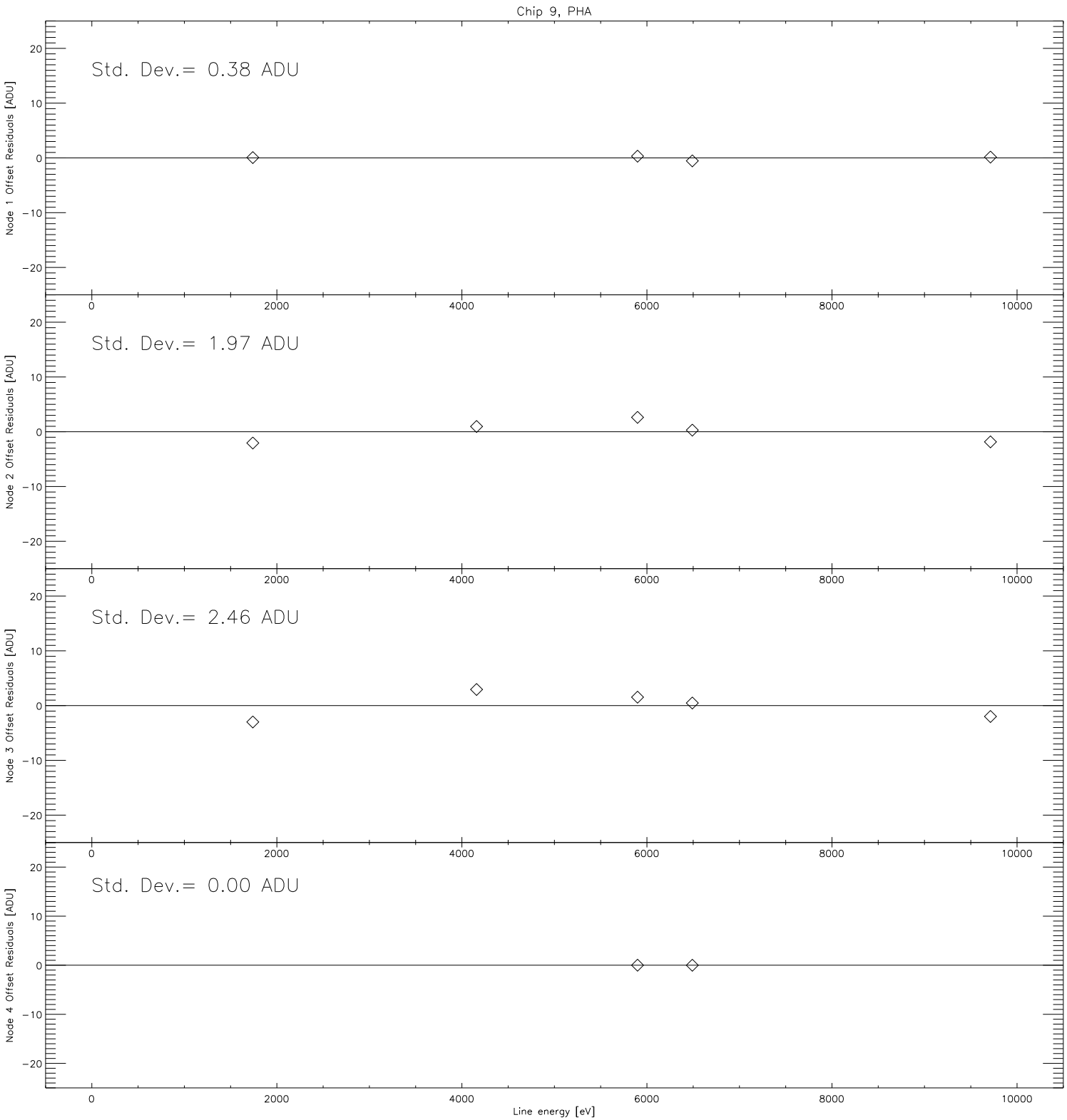

Chip 7, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000

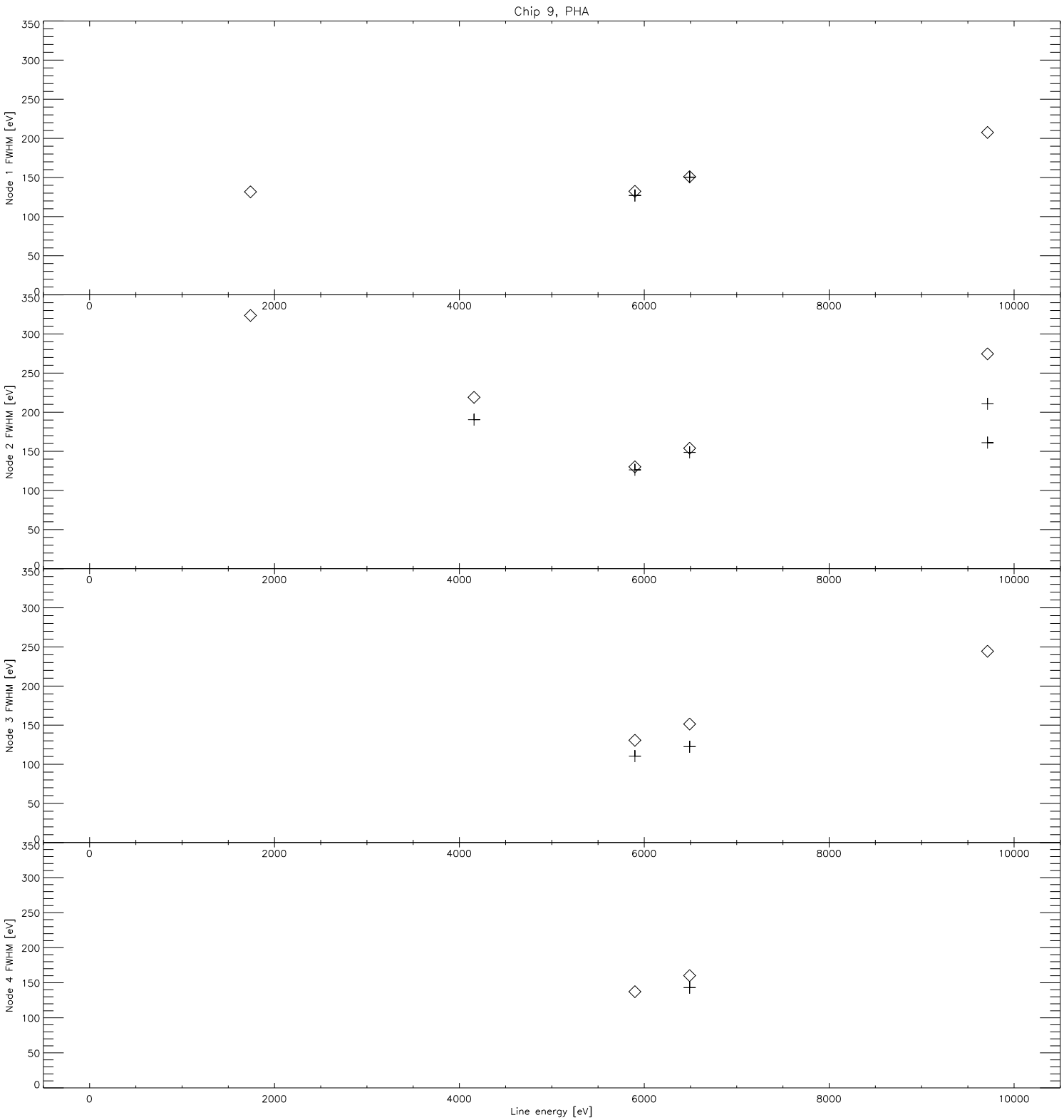

Chip 8, PHA
Slope = 0.2314 +-0.0003
Intercept = -1.9 +- 1.6
Gain = 0.2314 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2260 +-0.0001
Intercept = -0.5 +- 0.6
Gain = 0.2260 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2280 +-0.0003
Intercept = -2.0 +- 1.9
Gain = 0.2280 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2374 +-0.0004
Intercept = -2.6 +- 2.7
Gain = 0.2374 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]


Chip 8, PHA
Std. Dev.= 1.33 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 0.46 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 1.54 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 2.21 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]


Chip 8, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000


Chip 9, PHA
Slope = 0.2538 +-0.0001
Intercept = -3.1 +- 0.5
Gain = 0.2538 [ADU/eV]
Node 1 Offset [ADU]
Slope = 0.2560 +-0.0004
Intercept = -9.3 +- 2.4
Gain = 0.2560 [ADU/eV]
Node 2 Offset [ADU]
Slope = 0.2573 +-0.0005
Intercept = -1.4 +- 3.0
Gain = 0.2573 [ADU/eV]
Node 3 Offset [ADU]
Slope = 0.2203 +- Inf
Intercept = 11.1 +- Inf
Gain = 0.2203 [ADU/eV]
Node 4 Offset [ADU]
0
500
1000
1500
2000
2500
3000
0
2000
4000
6000
8000
10000
Line energy [eV]


Chip 9, PHA
Std. Dev.= 0.38 ADU
Node 1 Offset Residuals [ADU]
Std. Dev.= 1.97 ADU
Node 2 Offset Residuals [ADU]
Std. Dev.= 2.46 ADU
Node 3 Offset Residuals [ADU]
Std. Dev.= 0.00 ADU
Node 4 Offset Residuals [ADU]
20
10
0
−10
−20
0
2000
4000
6000
8000
10000
Line energy [eV]


Chip 9, PHA
Node 1 FWHM [eV]
Node 2 FWHM [eV]
Node 3 FWHM [eV]
Node 4 FWHM [eV]
Line energy [eV]
0
50
100
150
200
250
300
350
0
2000
4000
6000
8000
10000