

Measurement of drift velocity along the radius of TPC at different Z

Analysis Meeting #19

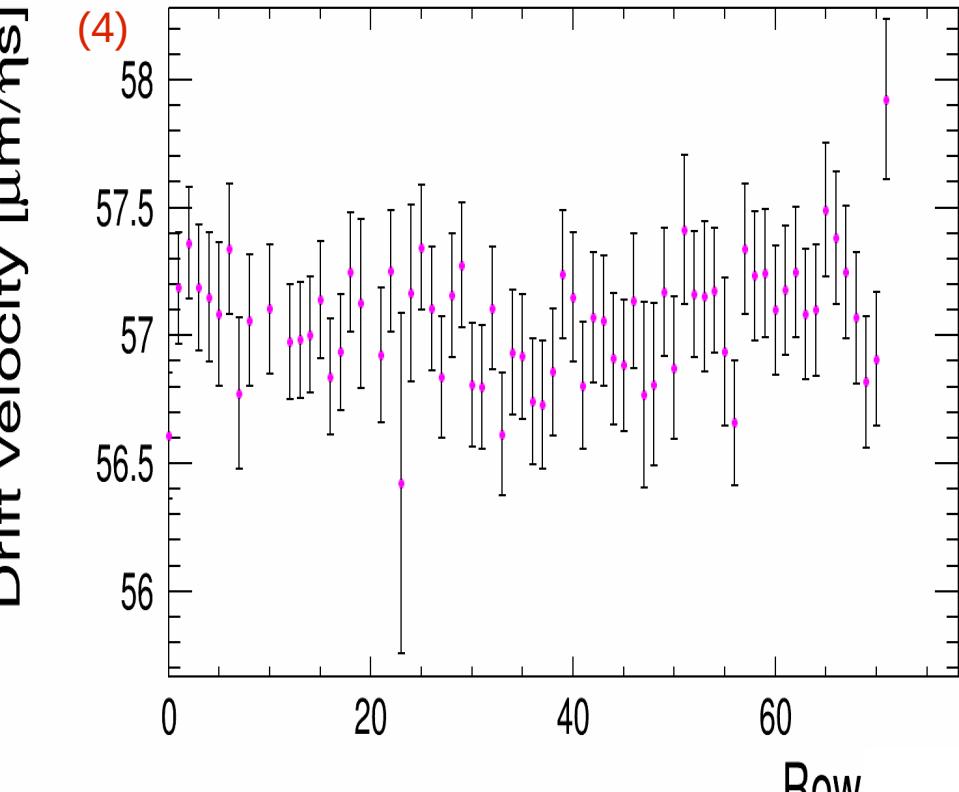
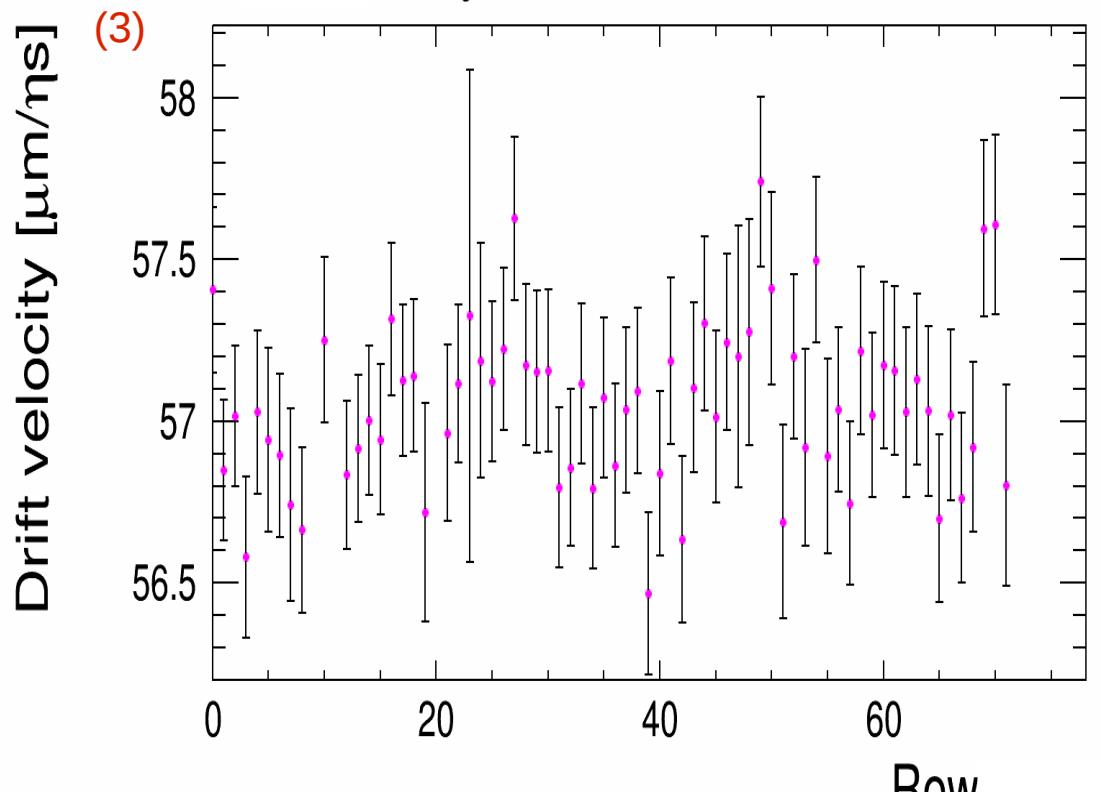
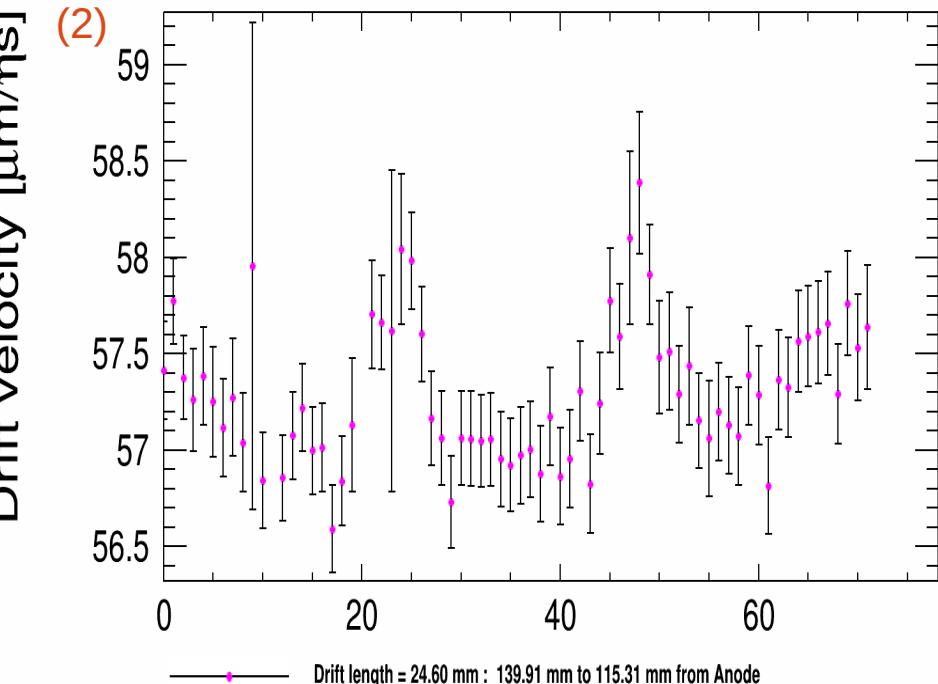
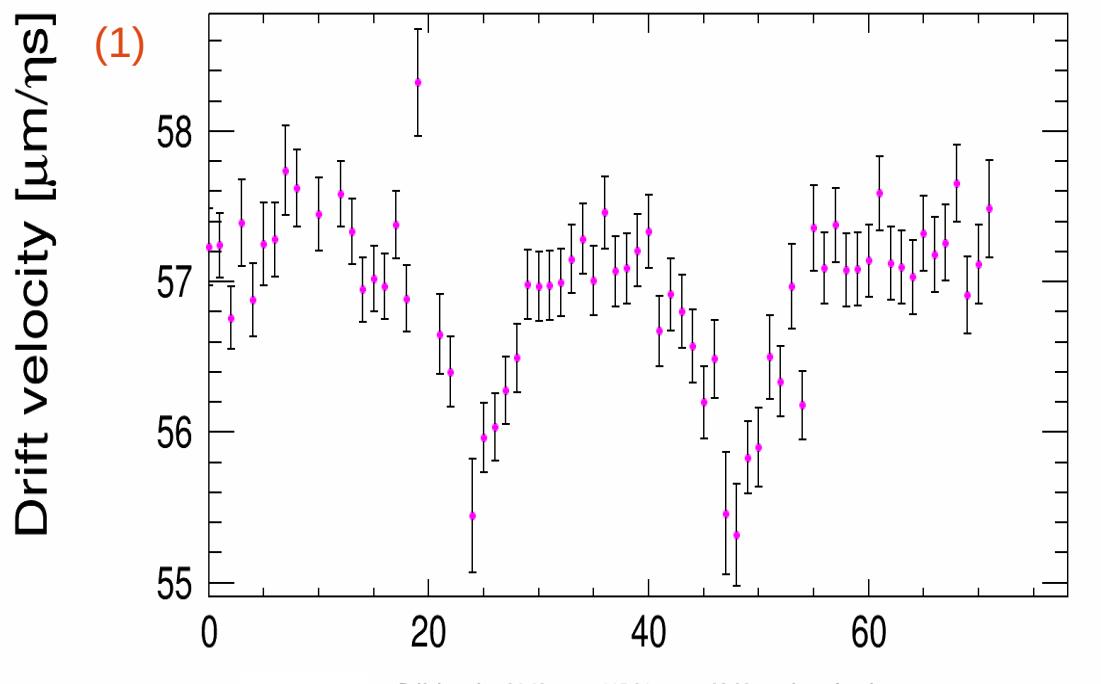
-Deb Sankar Bhattacharya
CEA & SINP
23 April 2014



Near Anode

B=0, Field = 140 V/cm

2014

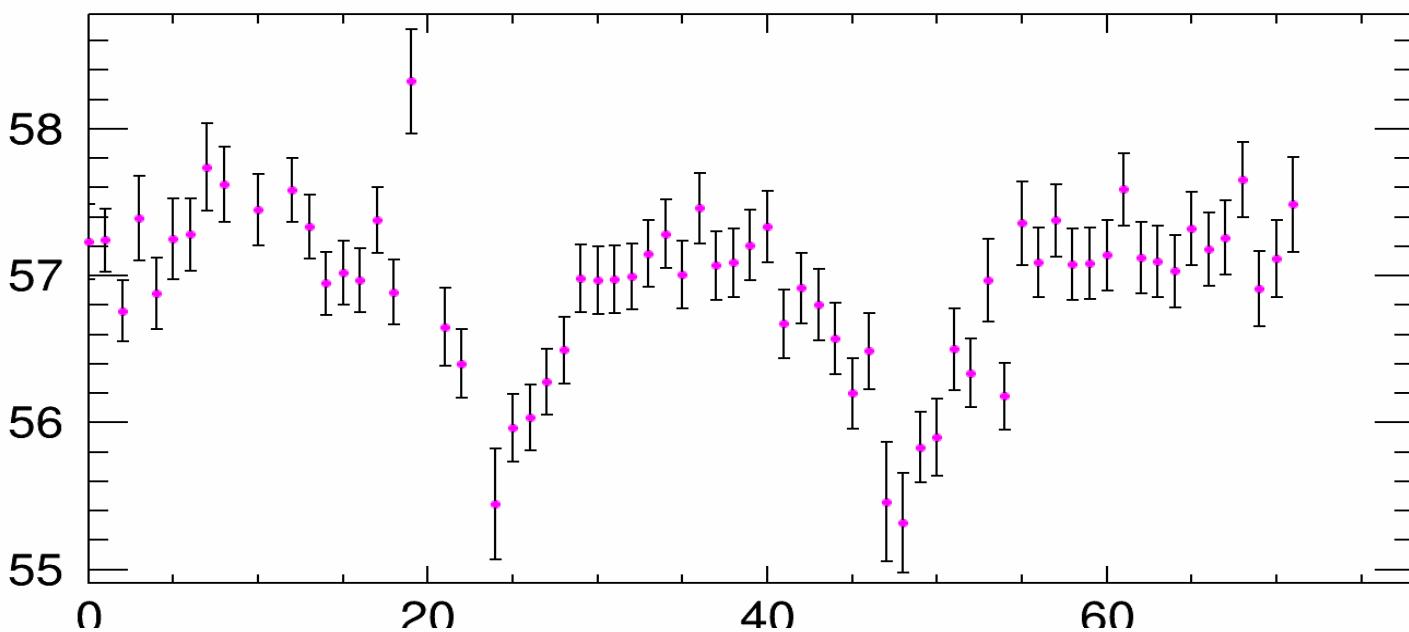


Near Anode

Drift length = 23.84 mm : 66.00 mm to 42.16 mm from Anode

2014

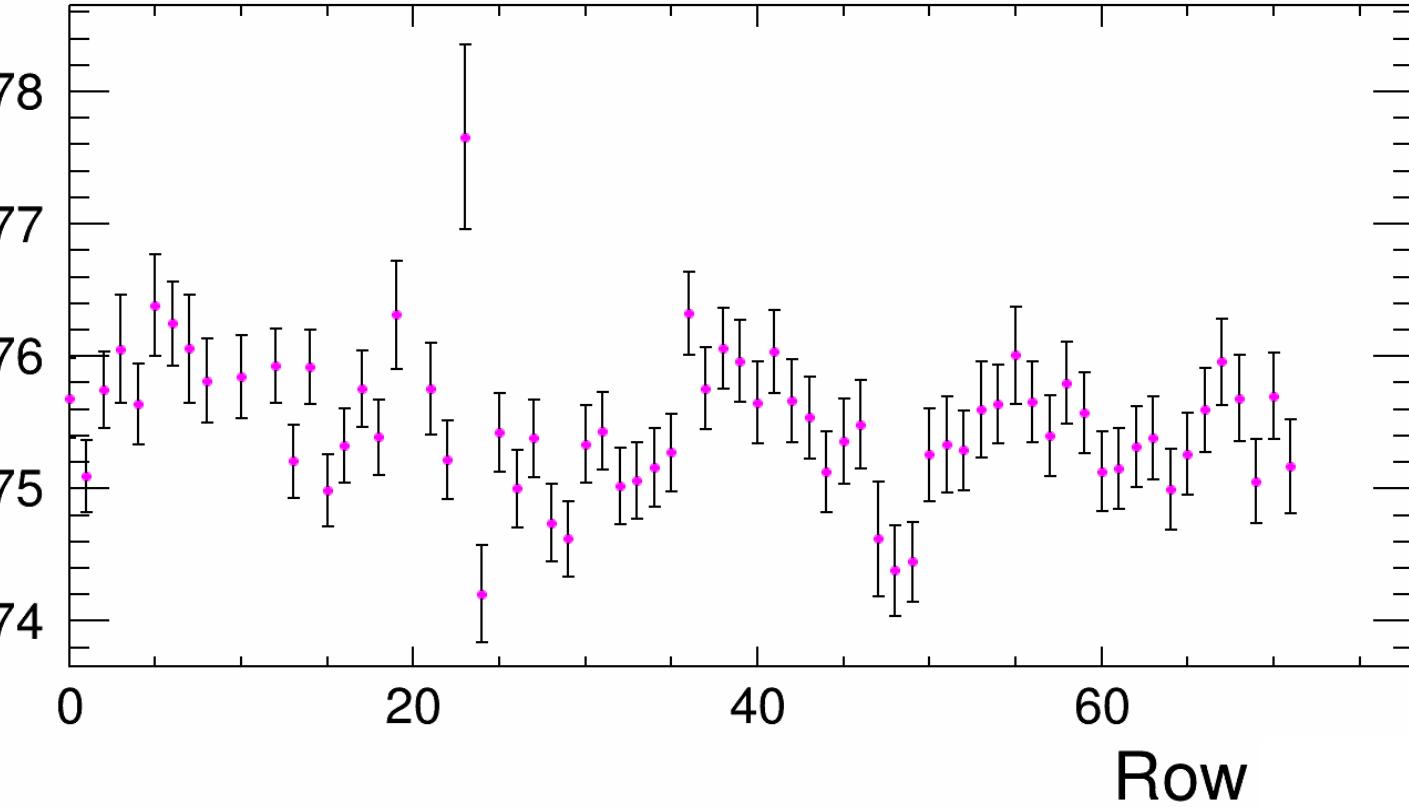
Drift velocity [$\mu\text{m}/\eta\text{s}$]



B=0
Field= 140 V/cm
Modules: 0,3,5

Drift length = 25.01 mm : 79.34 mm to 54.33 mm from Anode

Drift velocity [$\mu\text{m}/\eta\text{s}$]

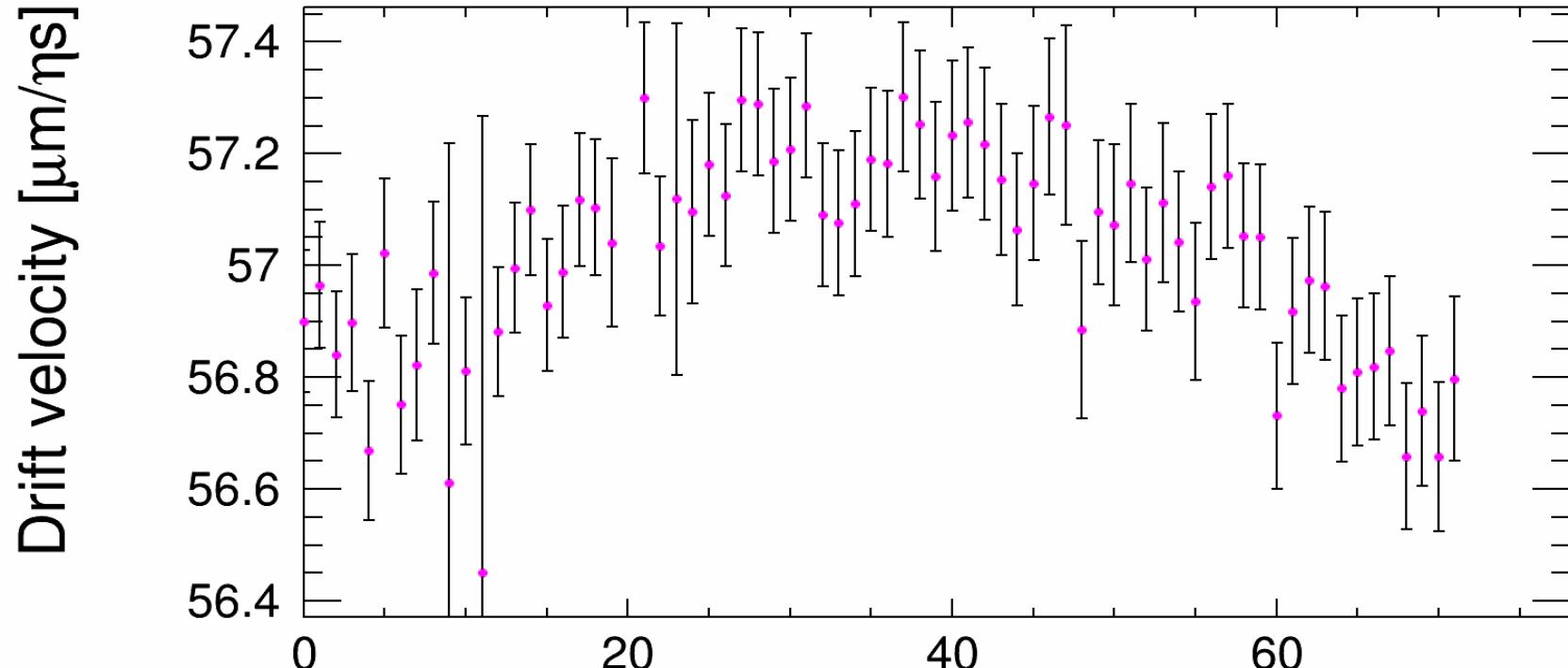


B=0
Field= 230 V/cm
Modules: 0,3,5

Near Middle

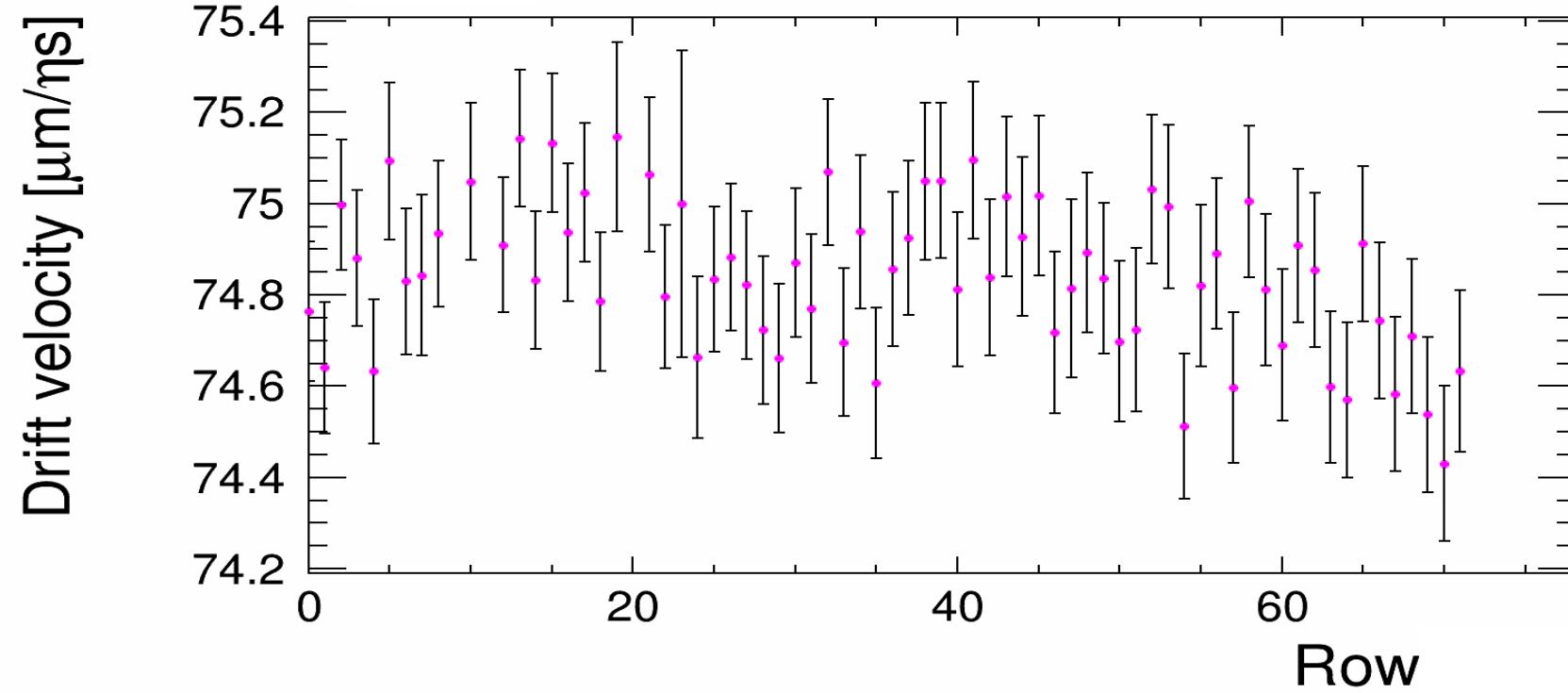
Drift length = 48.78 mm : 311.60 mm to 262.82 mm from Anode

2014



Drift length = 50.41 mm : 331.40 mm to 280.99 mm from Anode

B=0
Field= 140 V/cm
Modules: 0,3,5



4

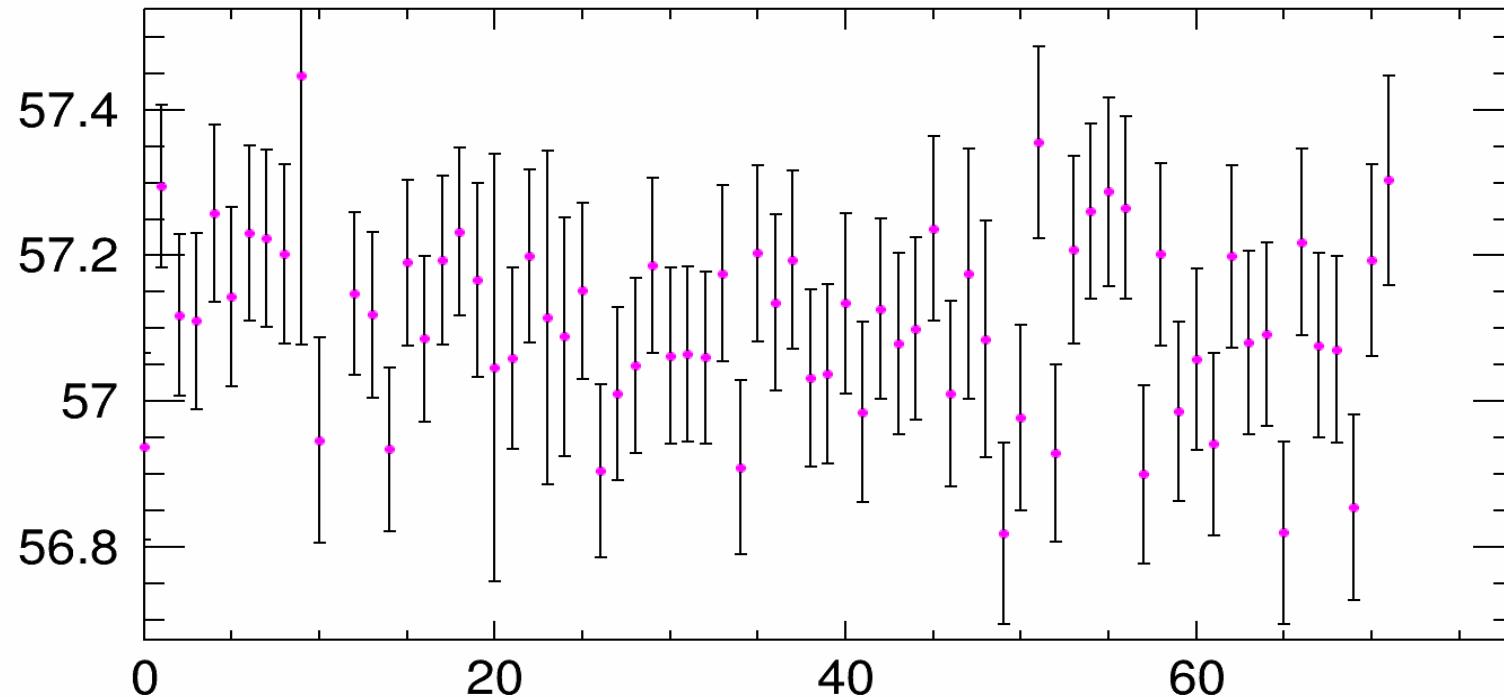
Row

Near Cathode

Drift length = 48.62 mm : 555.41 mm to 506.79 mm from Anode

2014

Drift velocity [$\mu\text{m}/\eta\text{s}$]



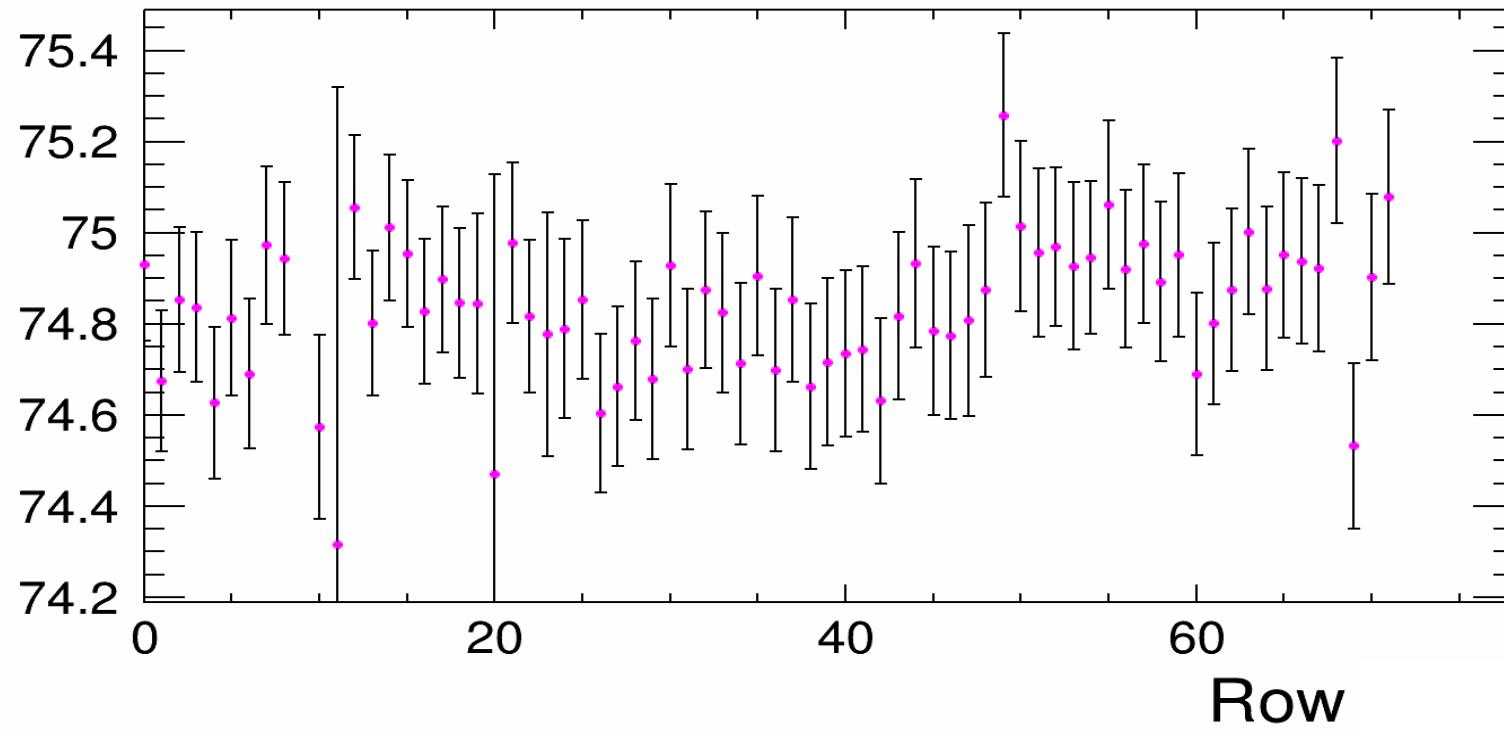
B=0
Field= 140 V/cm
Modules: 0,3,5

Drift velocity [$\mu\text{m}/\eta\text{s}$]

Drift length = 49.86 mm : 532.29 mm to 482.43 mm from Anode

5

B=0
Field= 230 V/cm
Modules: 0,3,5



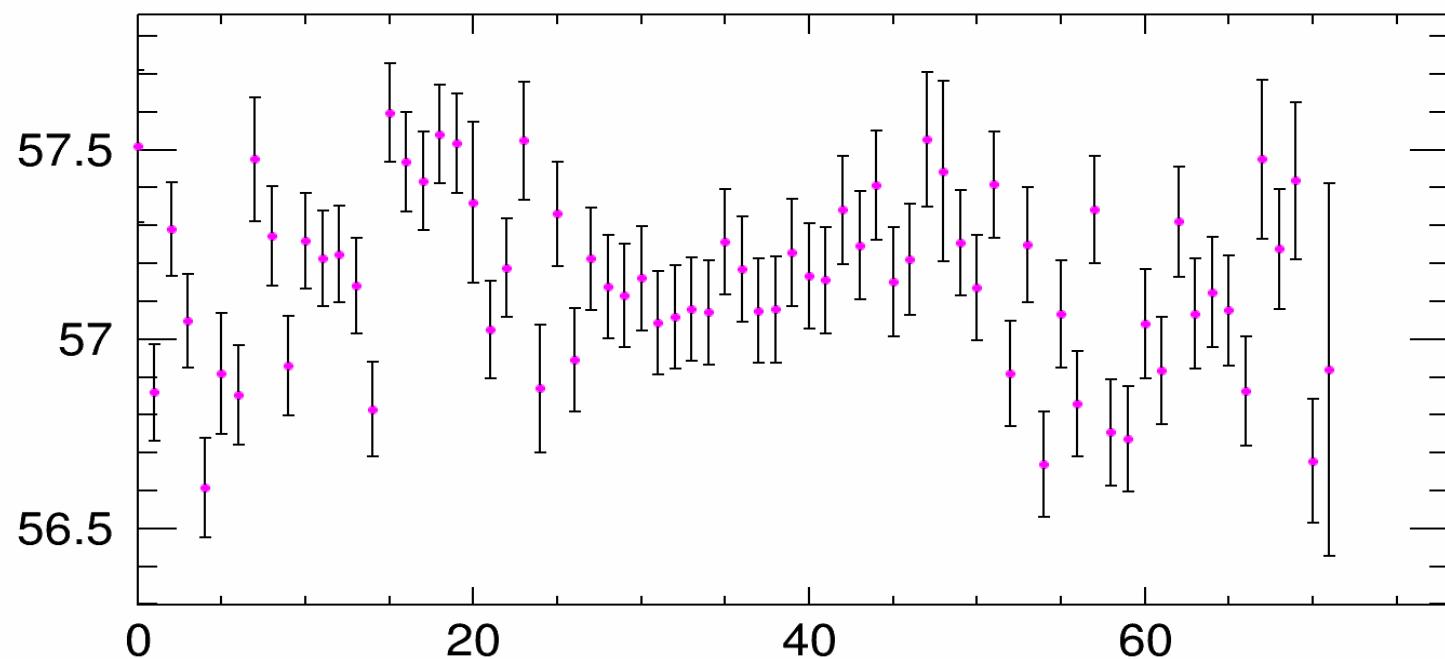
Row

Near Anode

Drift length = 37.64 mm : 103.01 mm to 65.37 mm from Anode

2013

Drift velocity [$\mu\text{m}/\text{\mu s}$]

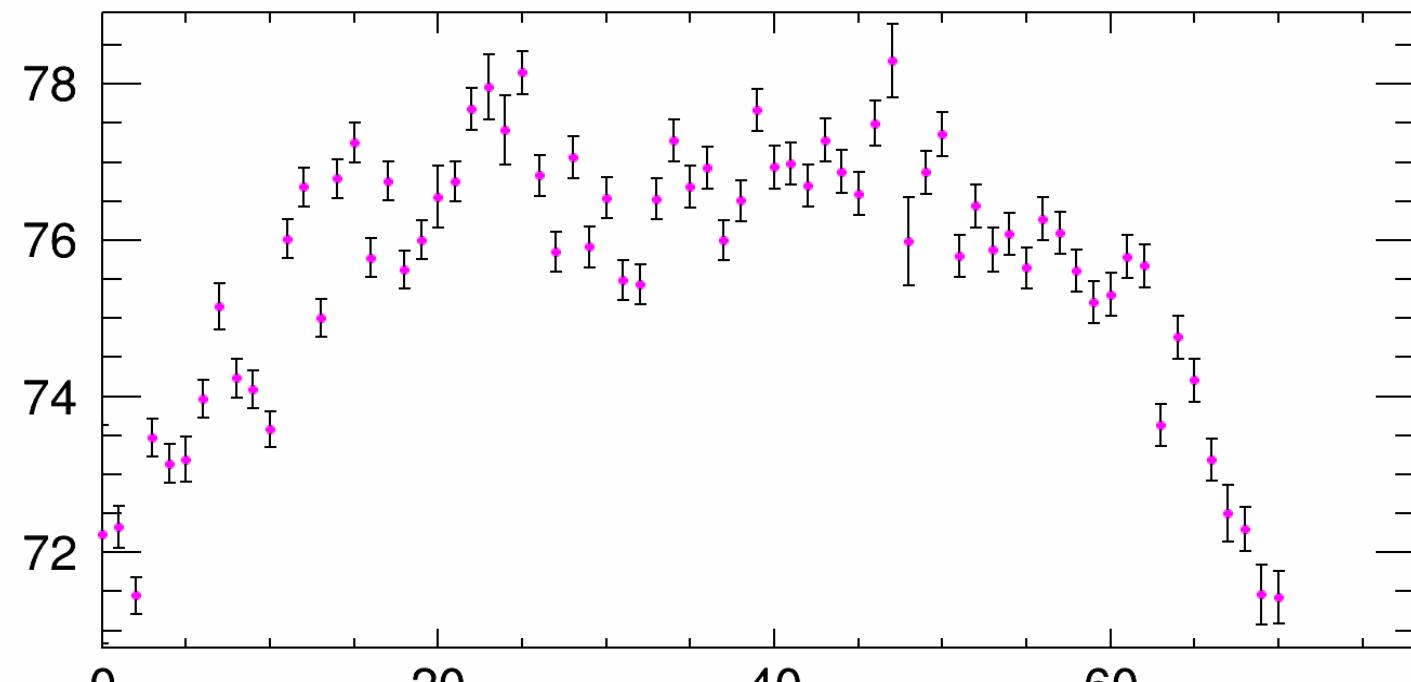


B=0
Field= 140 V/cm
Modules: 0,3,6

Drift velocity [$\mu\text{m}/\text{\mu s}$]

Drift length = 32.70 mm : 98.16 mm to 65.45 mm from Anode

B=0
Field= 230 V/cm
Modules: 0,3,6



Row

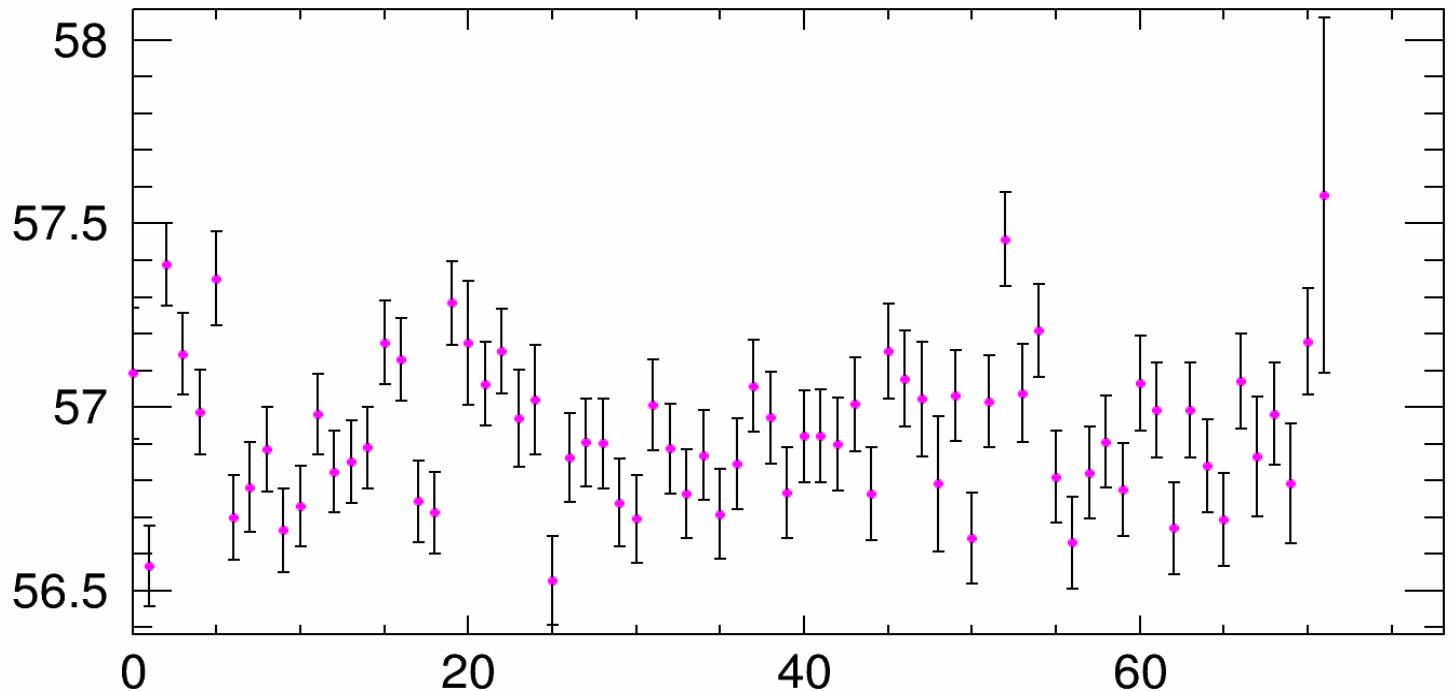
6

Near Middle

Drift length = 37.51 mm : 289.69 mm to 252.18 mm from Anode

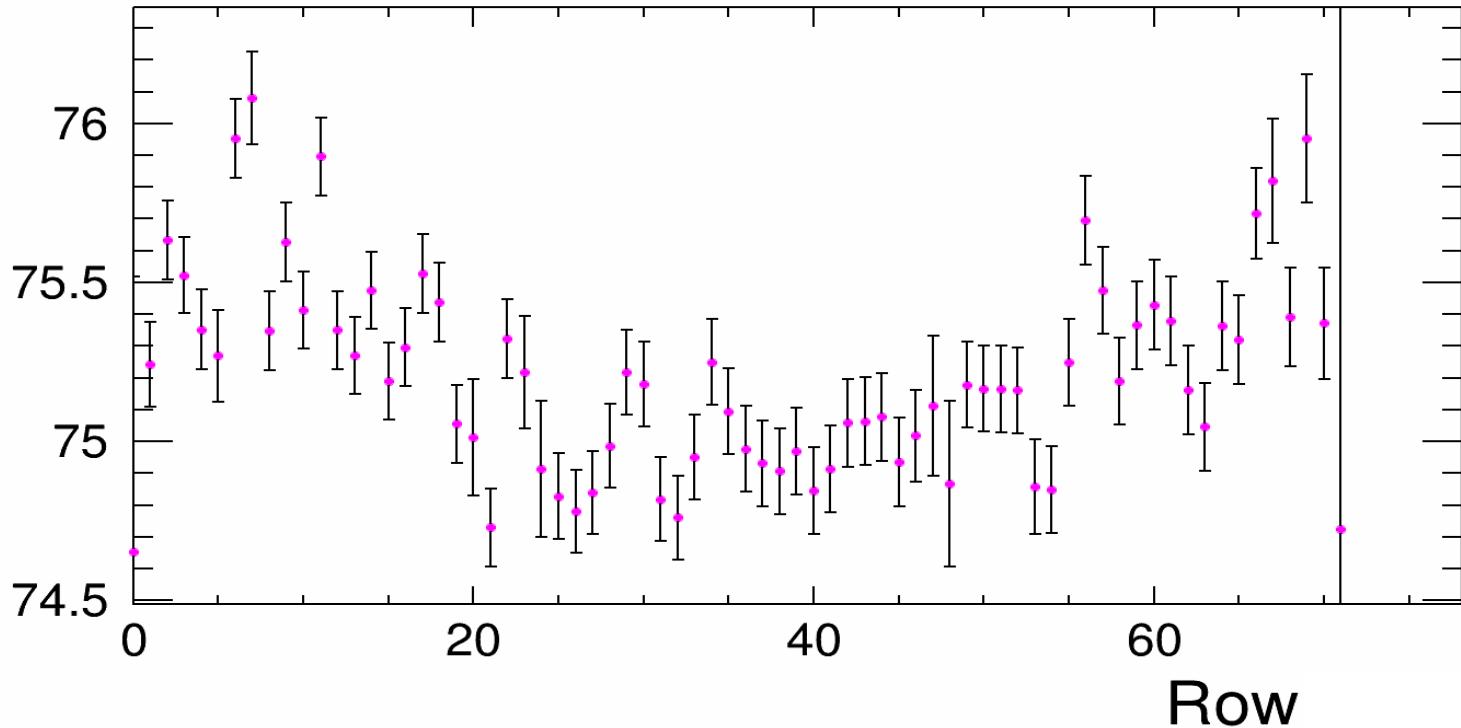
2013

Drift velocity [$\mu\text{m}/\text{ns}$]



B=0
Field= 140 V/cm
Modules: 0,3,6

Drift velocity [$\mu\text{m}/\text{ns}$]



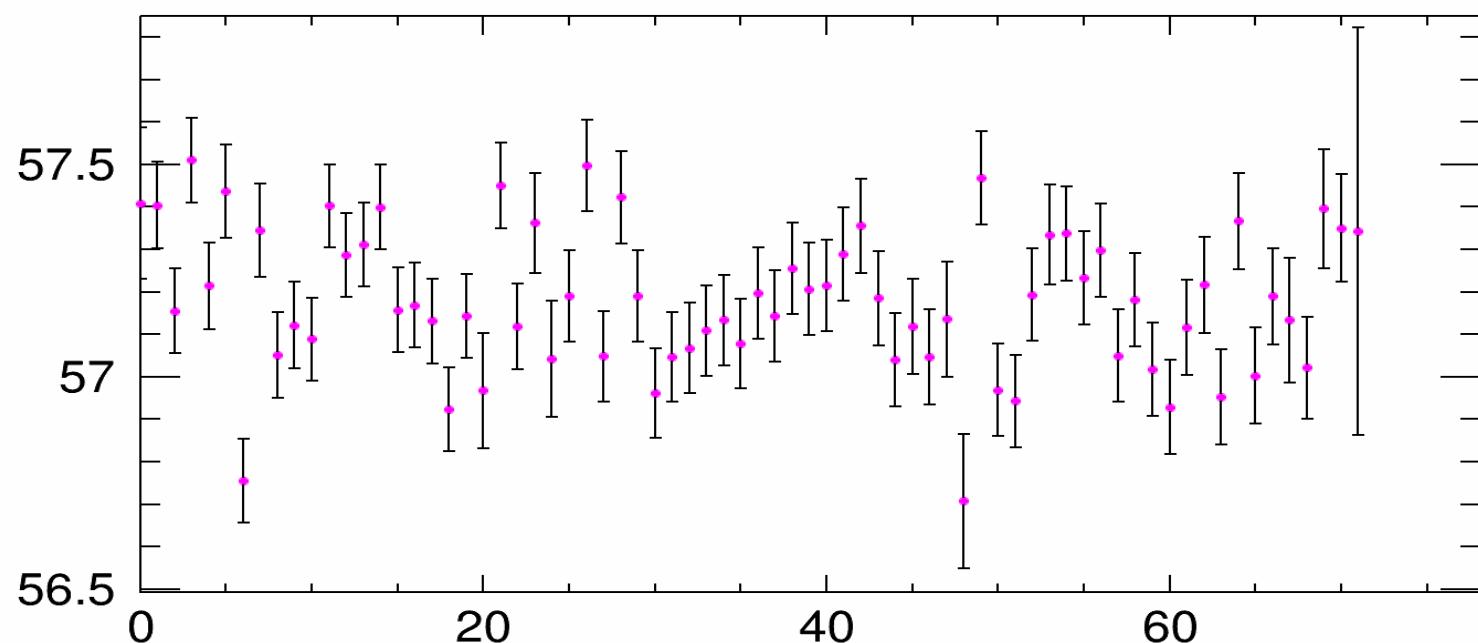
B=0
Field= 230 V/cm
Modules: 0,3,6

Near Cathode

Drift length = 37.64 mm : 401.74 mm to 364.10 mm from Anode

2013

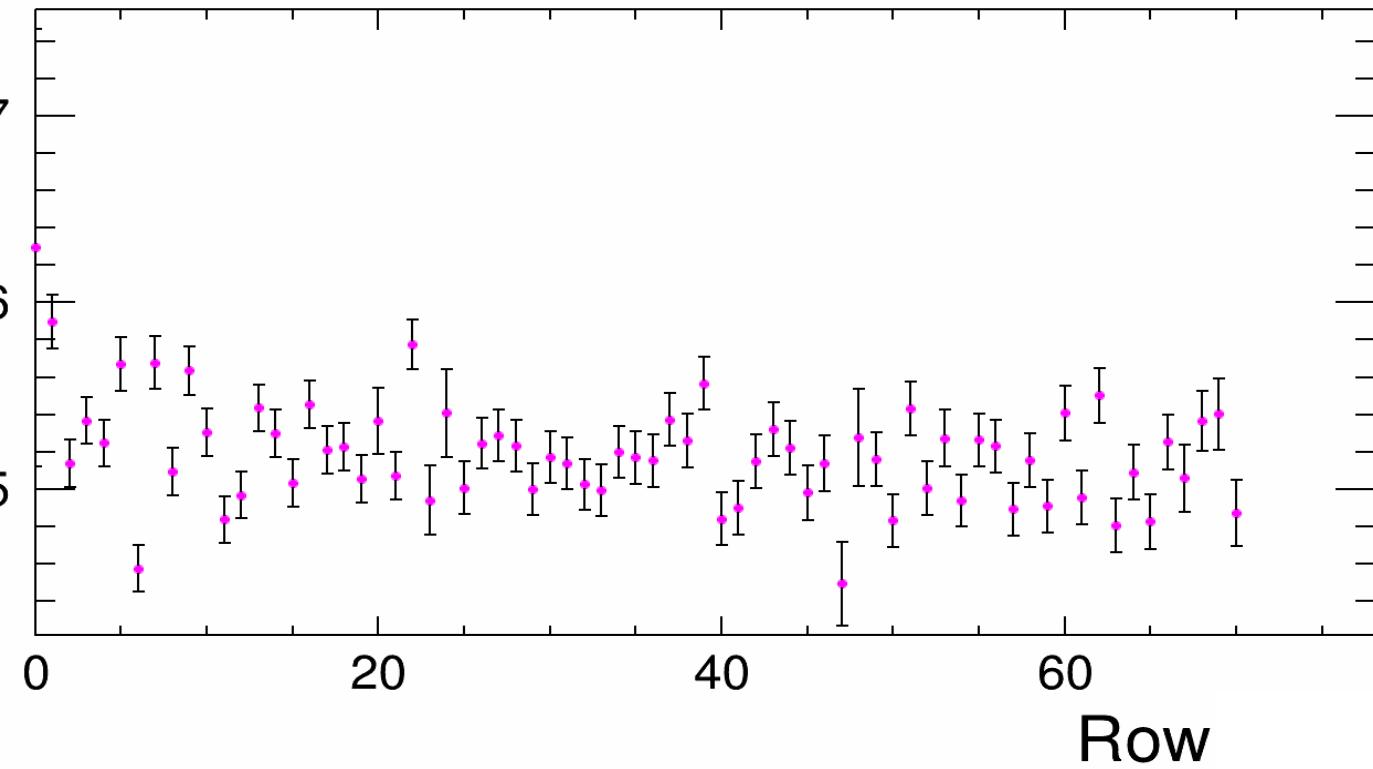
Drift velocity [$\mu\text{m}/\eta\text{s}$]



Drift velocity [$\mu\text{m}/\eta\text{s}$]

Drift length = 63.63 mm : 541.23 mm to 477.60 mm from Anode

B=0
Field= 230 V/cm
Modules: 0,3,6



Thank You