

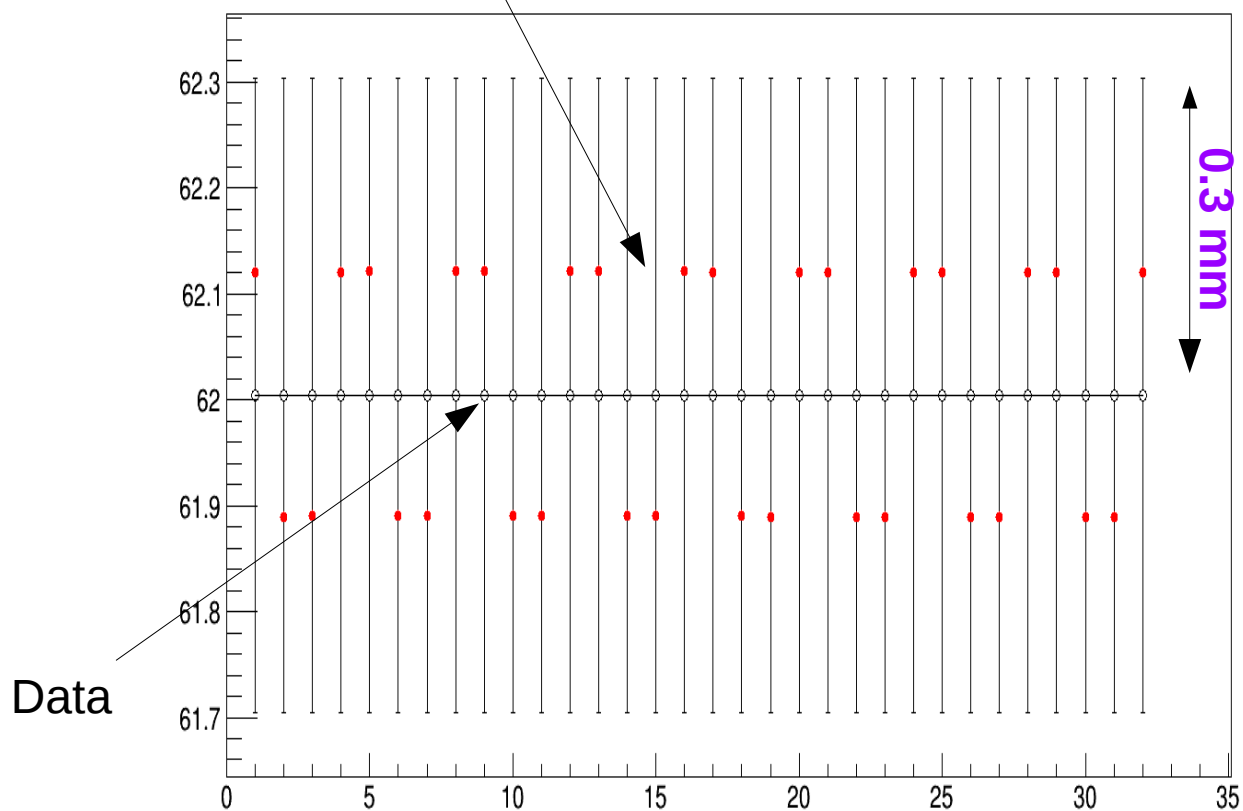
Beam Position minimization

11 May 2017

Test, mock data

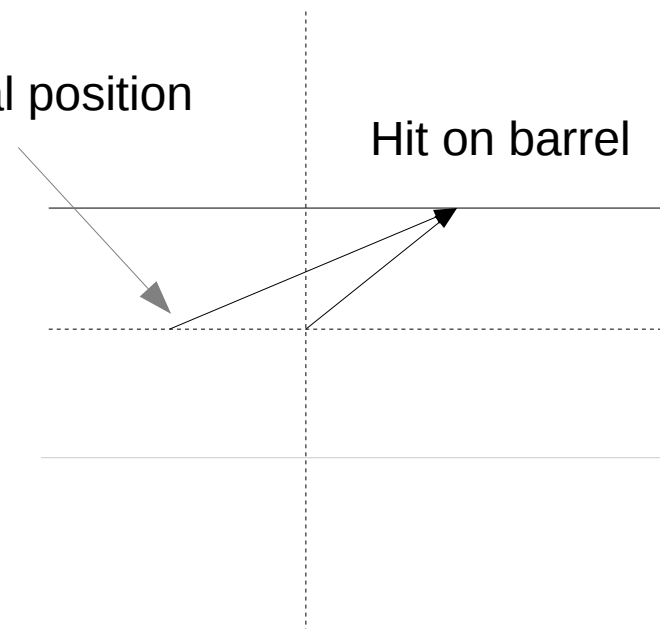
Minimisation

minTheta vs HyperStrip



Real position

Hit on barrel



Input Shift (mm)

X,Y,Z = 0,0,5.70

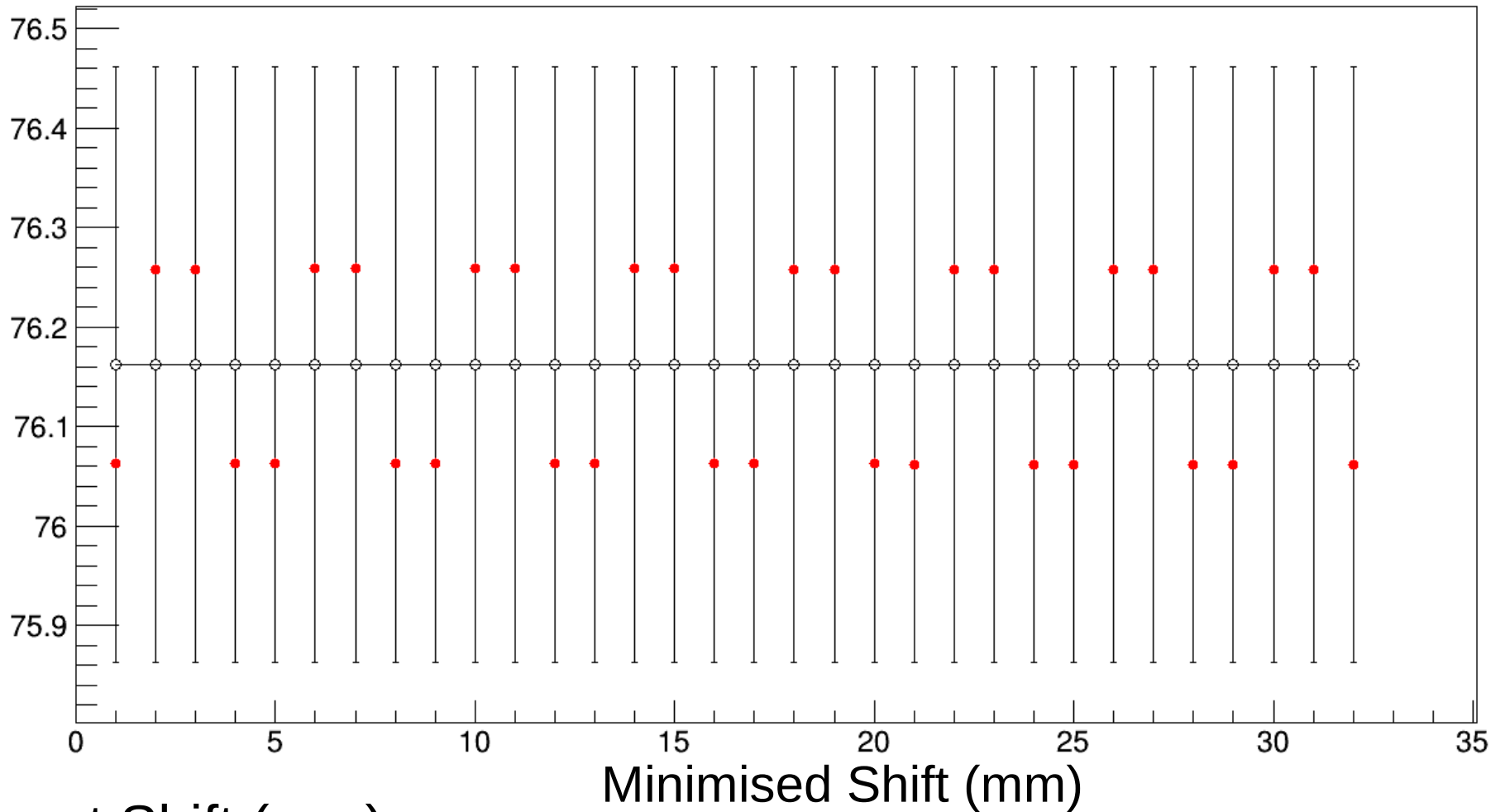
Minimised Shift (mm)

BeamSpot: -0.00144287 -0.00144287 5.72624

BeamSpotErr: 2.82839 2.82839 0.727976

Test, mock data

minTheta vs HyperStrip



Input Shift (mm)

X,Y,Z = 0,0,-4.0

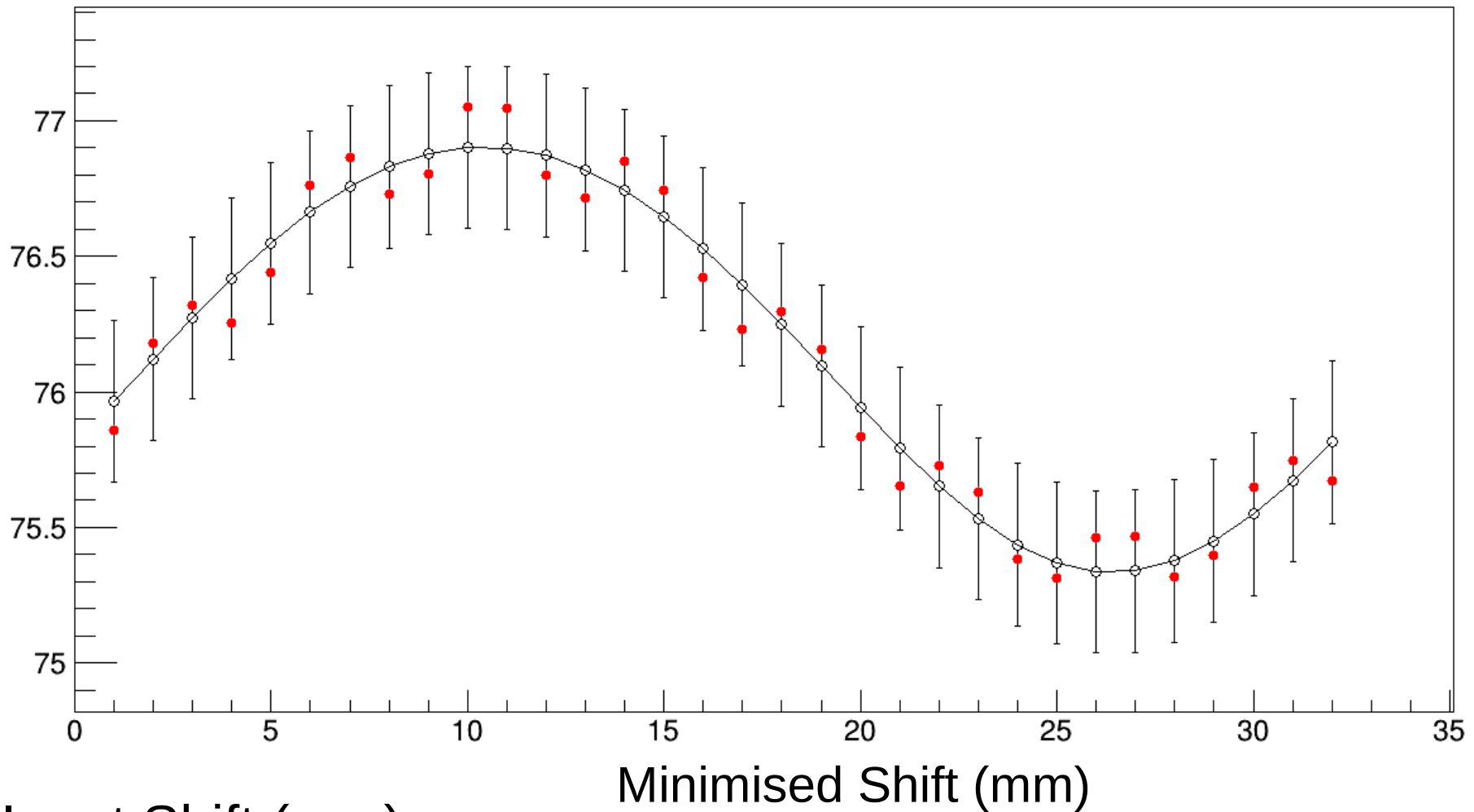
Minimised Shift (mm)

BeamSpot: 0 0 -4.02

BeamSpotErr: 2.34 2.34 0.60

Test, mock data

minTheta vs HyperStrip



Input Shift (mm)

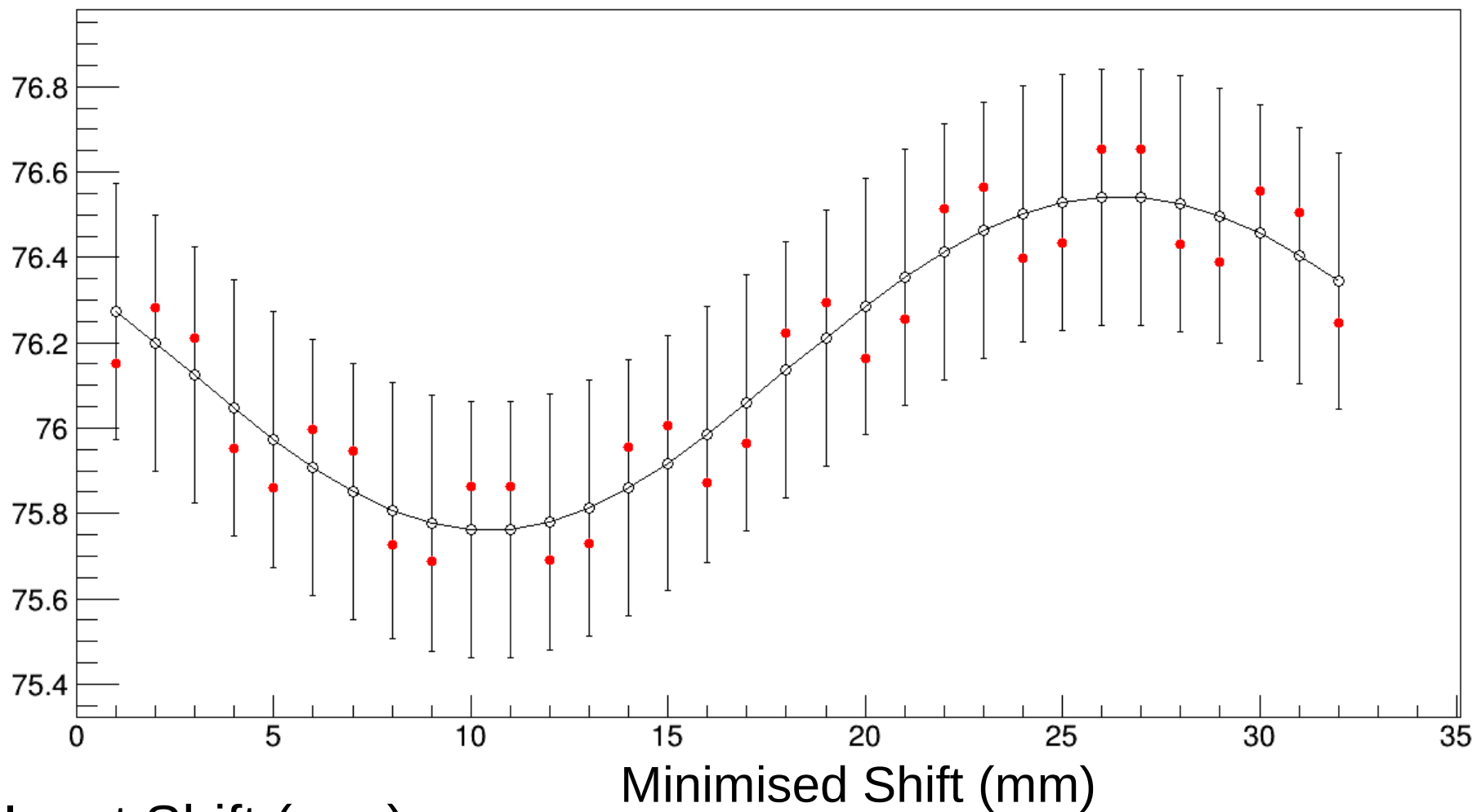
X,Y,Z = 0,2.0,-4.0

BeamSpot: -0.02 1.36 -4.01

BeamSpotErr: 2.34 2.34 0.60

Test, mock data

minTheta vs HyperStrip



Input Shift (mm)

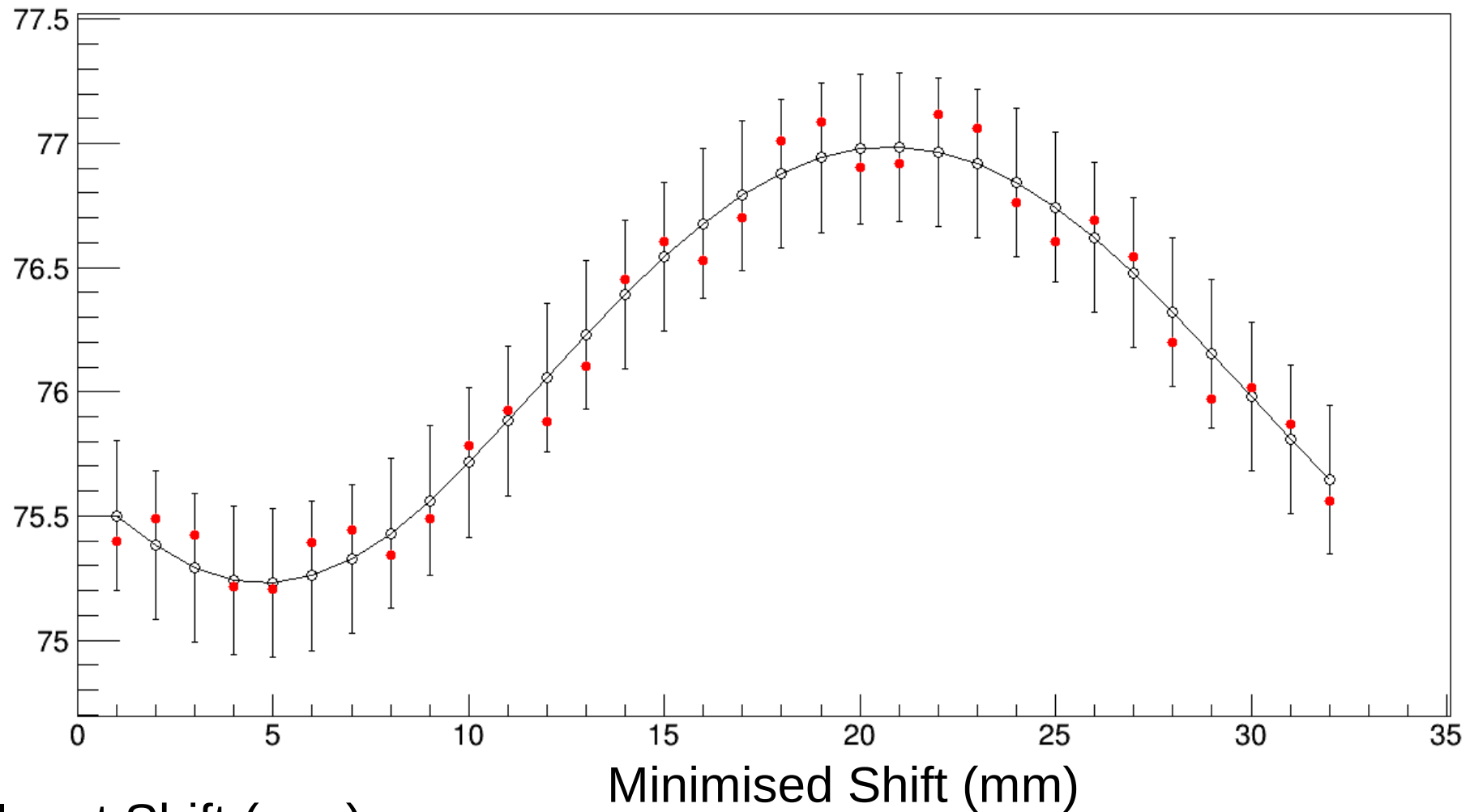
X,Y,Z = 0,-1.0,-4.0

BeamSpot: 0.011 -0.68 -4.02

BeamSpotErr: 2.34 2.34 0.60

Test, mock data

minTheta vs HyperStrip



Input Shift (mm)

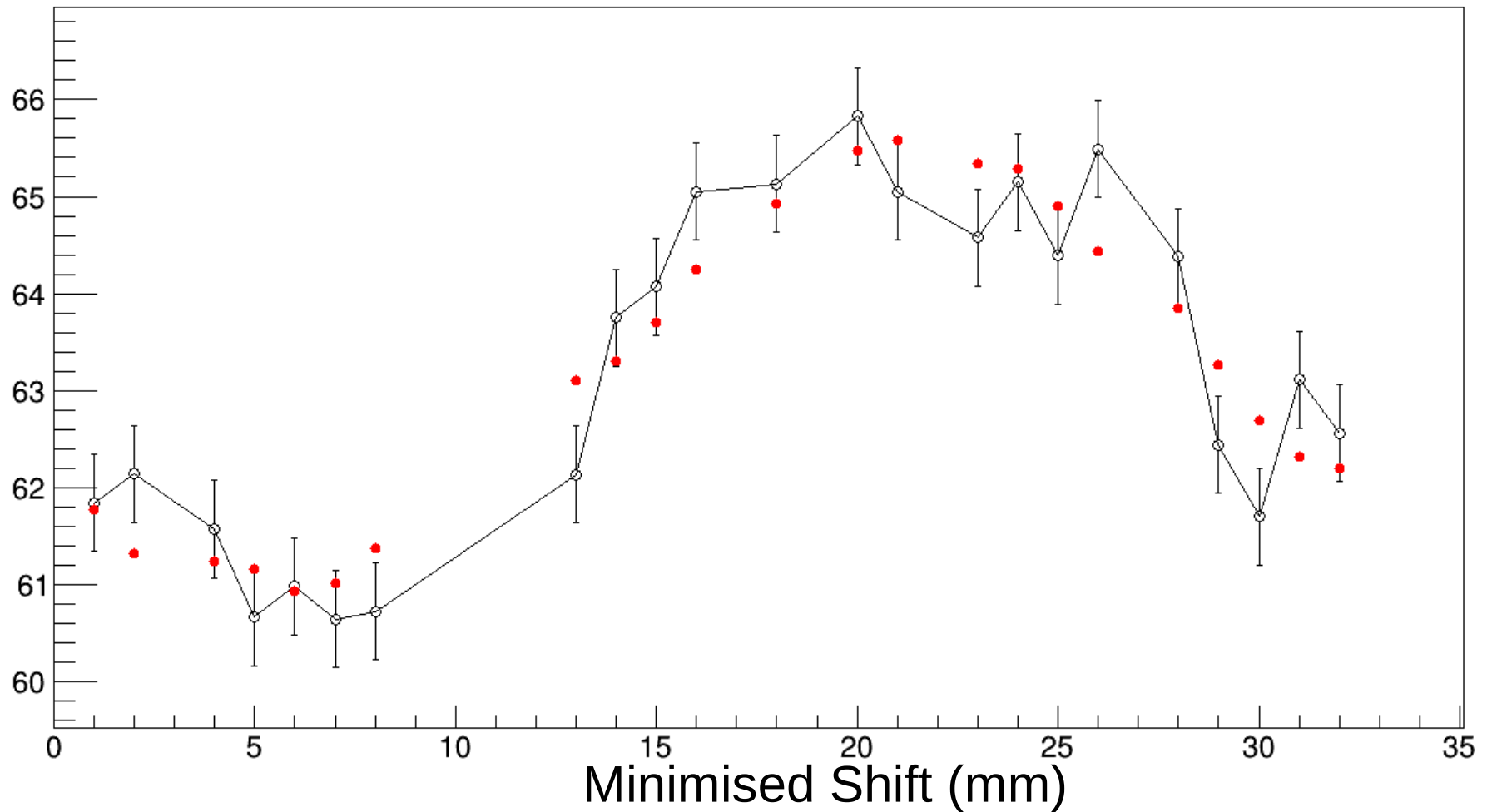
X,Y,Z = 2.0,.-1.0,-4.0

BeamSpot: 1.37 -0.66 -4.01

BeamSpotErr: 2.34 2.34 0.60

Data Mg25

minTheta vs HyperStrip

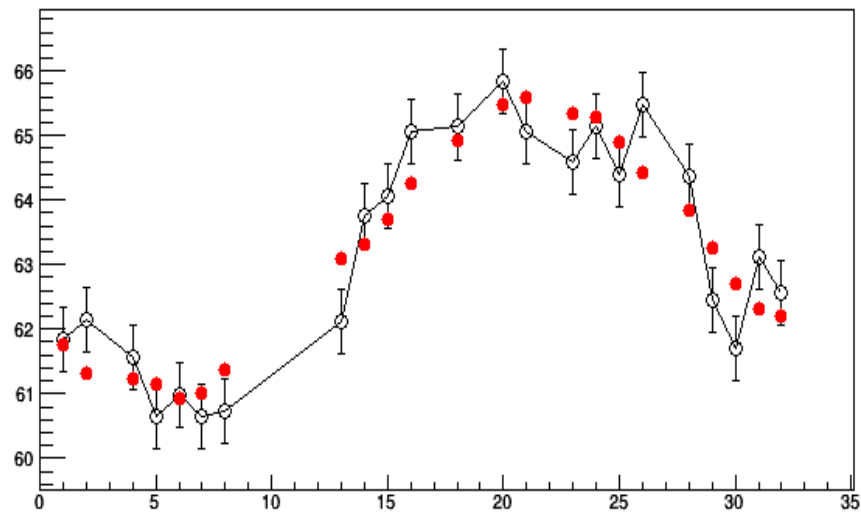


BeamSpot: 3.80 -2.39 4.46

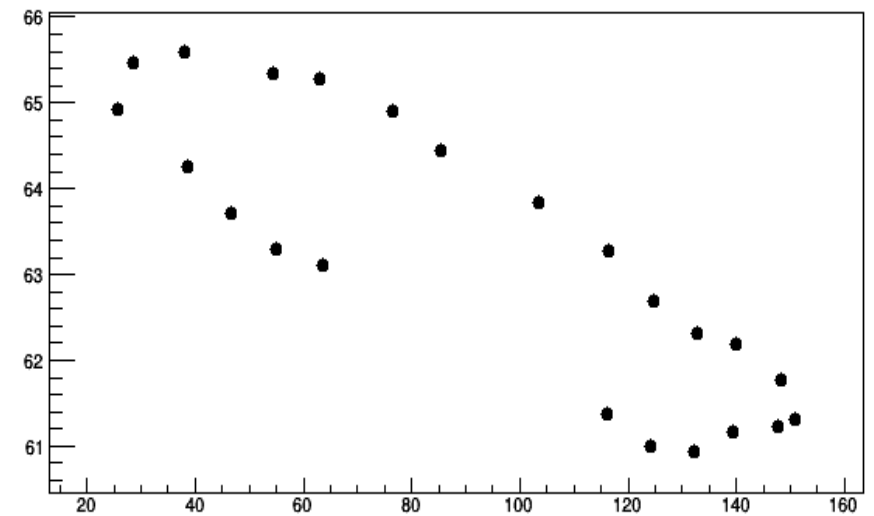
BeamSpotErr: 2.59 2.75 0.71

Data Mg25

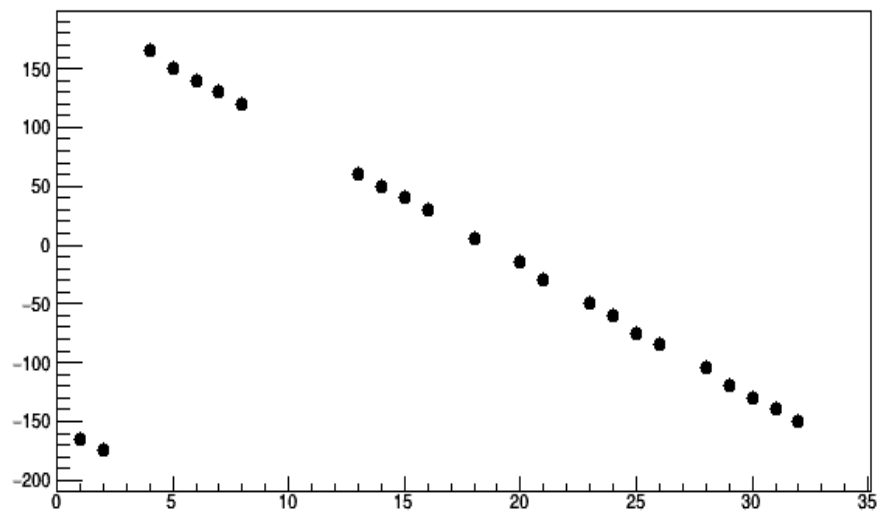
minTheta vs HyperStrip



minTheta vs minPhi



Phi vs HyperStrip



HitPosition(Z) vs HyperStrip

