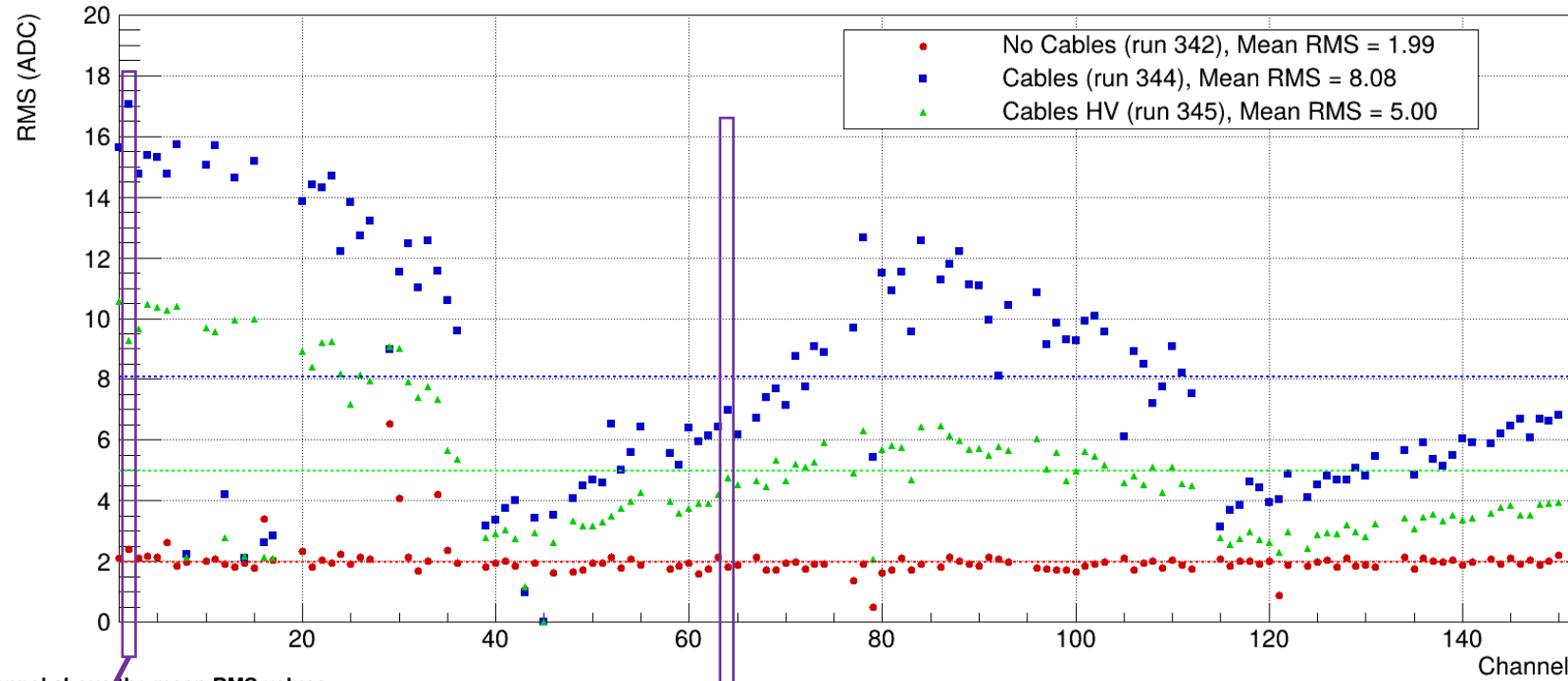


- The following plots show the pedestal RMS of one particular sample of the waveform (sample 2)
- Pedestals are shown for 3 different protoboards and as a function of the channel number for 3 different cases:
 - Protoboards not connected to the sensors: red
 - Protoboards connected to the sensors (but the SiPM are not polarized): blue
 - Protoboards connected and sensors polarized: green

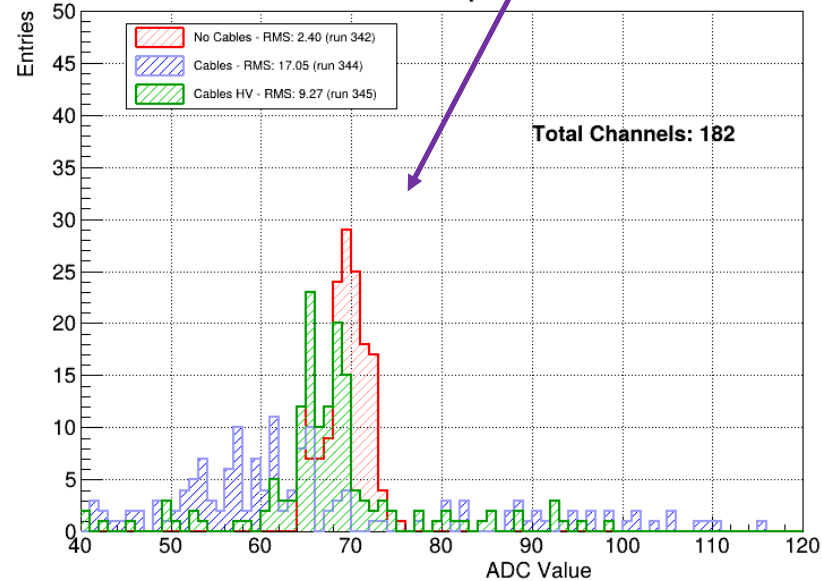
RMS per Channel - ProtoBoard 01



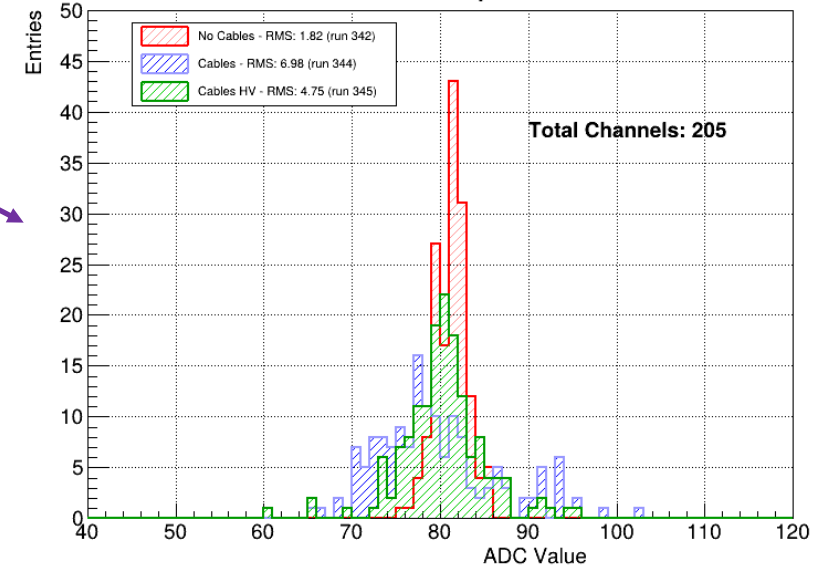
Measurements by
Axel Perez &
Lorena Bucuru
(M2 internship)

Typical channel

Pedestal distribution for a channel above the mean RMS values
Ch 2 in Pb 01 w/o calibration pedestal subtraction

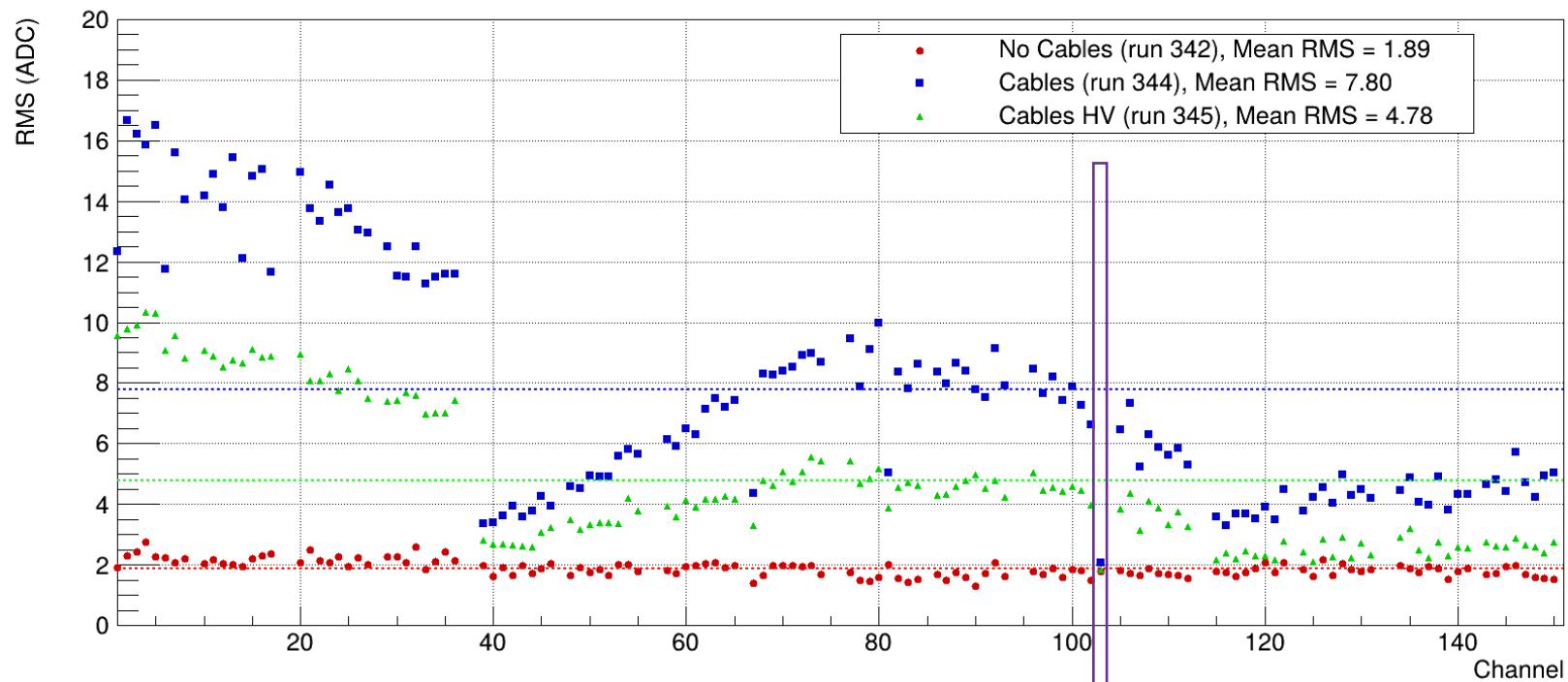


Pedestal distribution for a channel below or equal to the mean RMS values
Ch 64 in Pb 01 w/o calibration pedestal subtraction

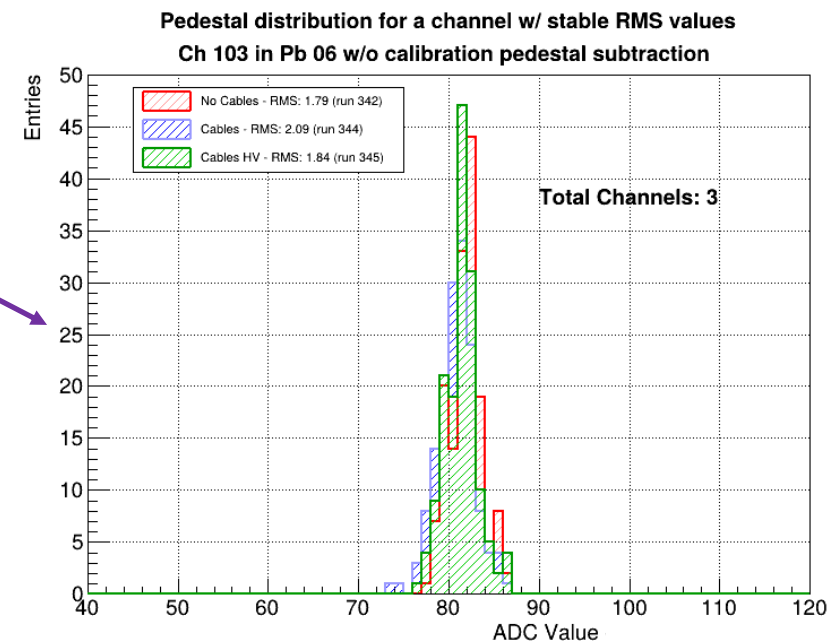


- ProtoBoard non-connected channels:
0, 37, 38, 75, 76, 133, 114 151
- HGCROC calibration channels:
19, 57, 95, 133

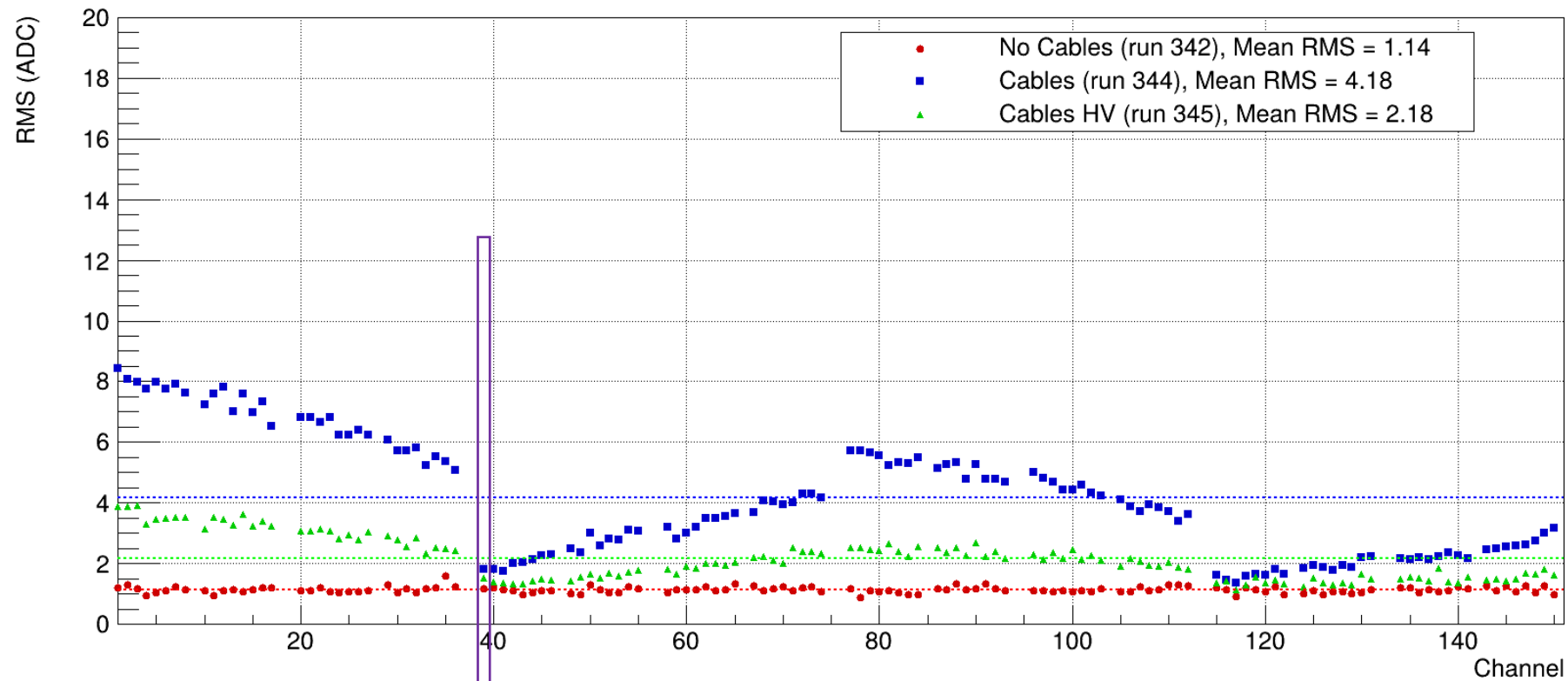
RMS per Channel - Protoboard 06



Ideal but very rare channel:
RMS the same in all 3 configurations (red, blue, green)

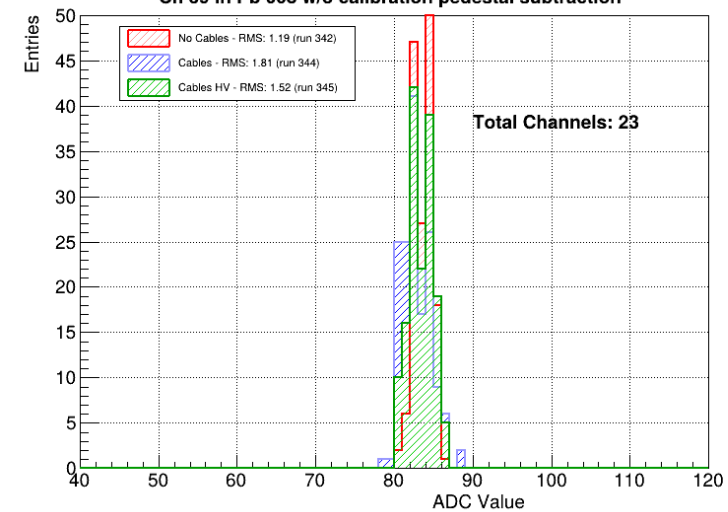


RMS per Channel - Protoboard 008



Very good channel also (but rare)

Pedestal distribution for a channel w/ stable RMS values in Cables and Cables HV
Ch 39 in Pb 008 w/o calibration pedestal subtraction



A few observations:

- Significant increased in the RMS of pedestals when sensors are connected
- Slight decrease when sensor are polarized
- Similar patern in all 3 protoboards as a function of the channel number
- Protoboard 8 is better than protoboard 1 and 6 (for all three cases: without sensors, with sensors connected, with sensors connected and powered)