LED Monitoring Update
Calorimetry meeting Apr 30 2020

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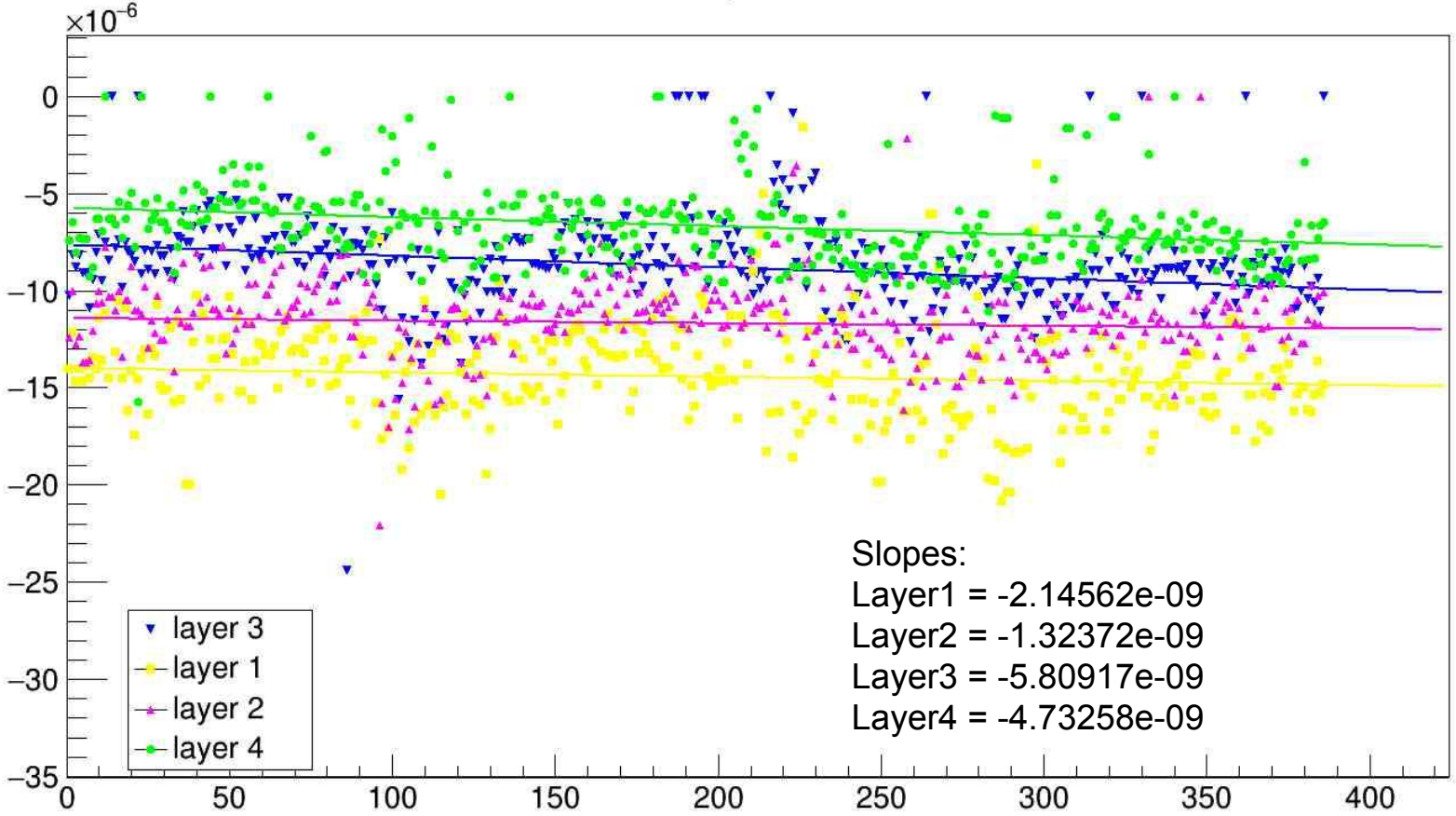
Things done so far..

- The plots having slopes were fitted (Slope of slopes)
- Checked the failed fits
- Checking batch wise (Batch 1 and 2 over)

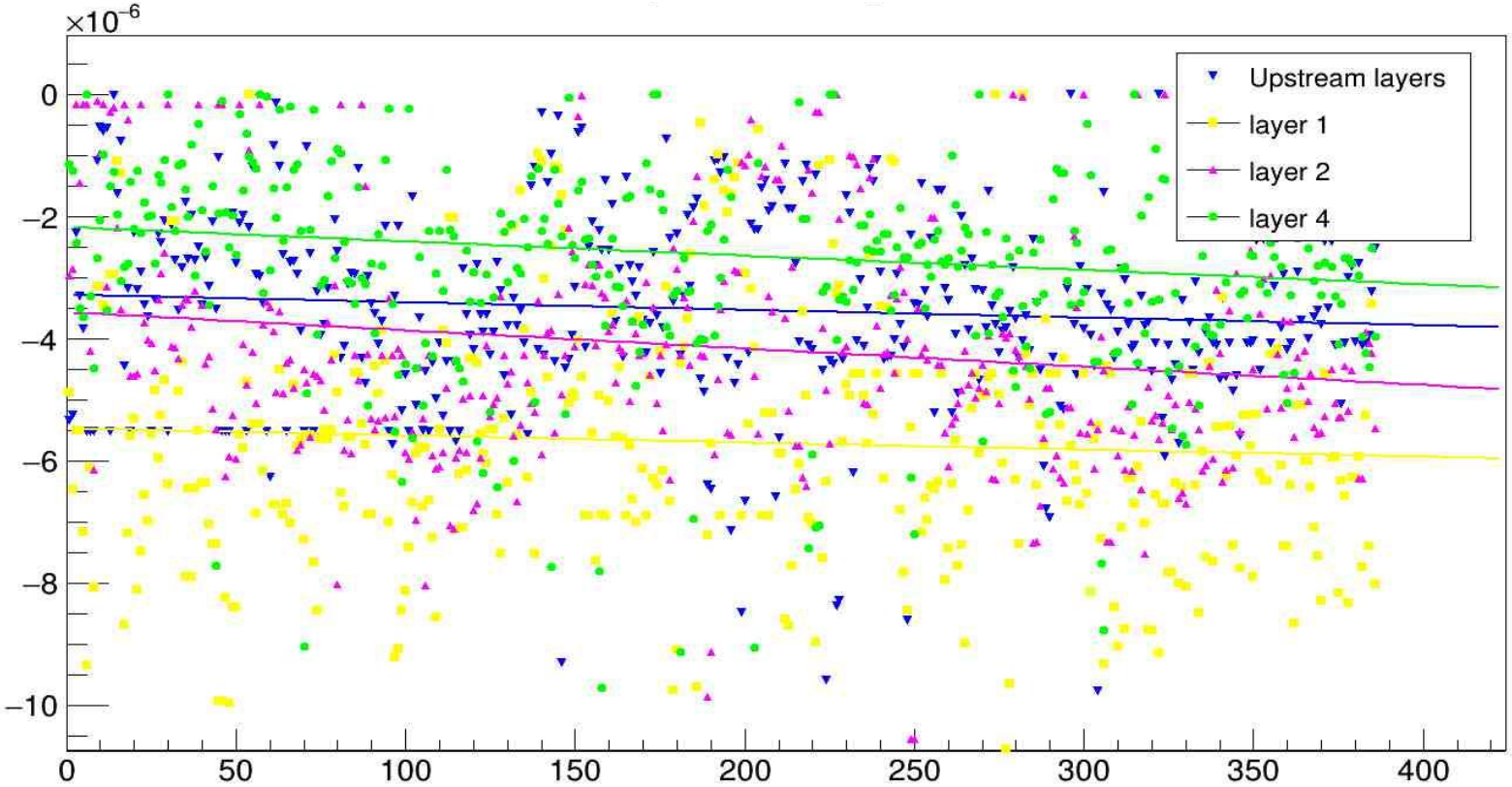
Whole Run period plots

Downstream Layers



192 Channels having two entries each (US LED and DS LED) = **384 entries**

Upstream Layers



Number of channel entries

Slopes
Layer1 = -1.15773e-09
Layer2 = -3.03875e-09
Layer3 = -1.25159e-09
Layer4 = -2.33631e-09

Batch 1

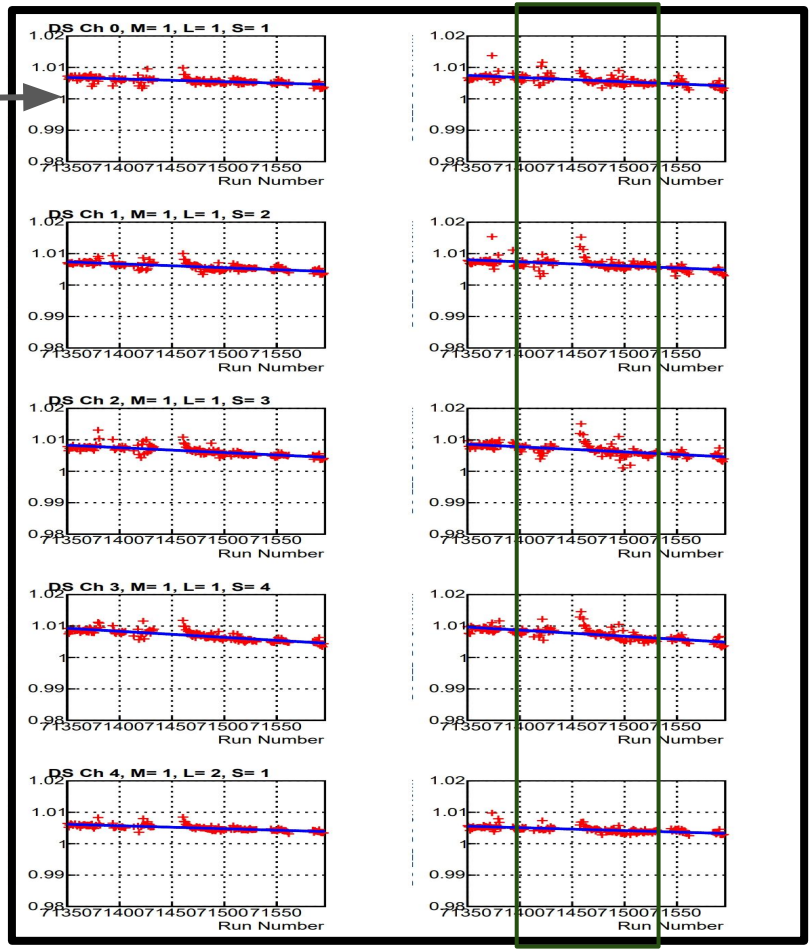
Average over whole run period

US LED

DS LED

Shifted from 1

Y Axis
0.98
To
1.02



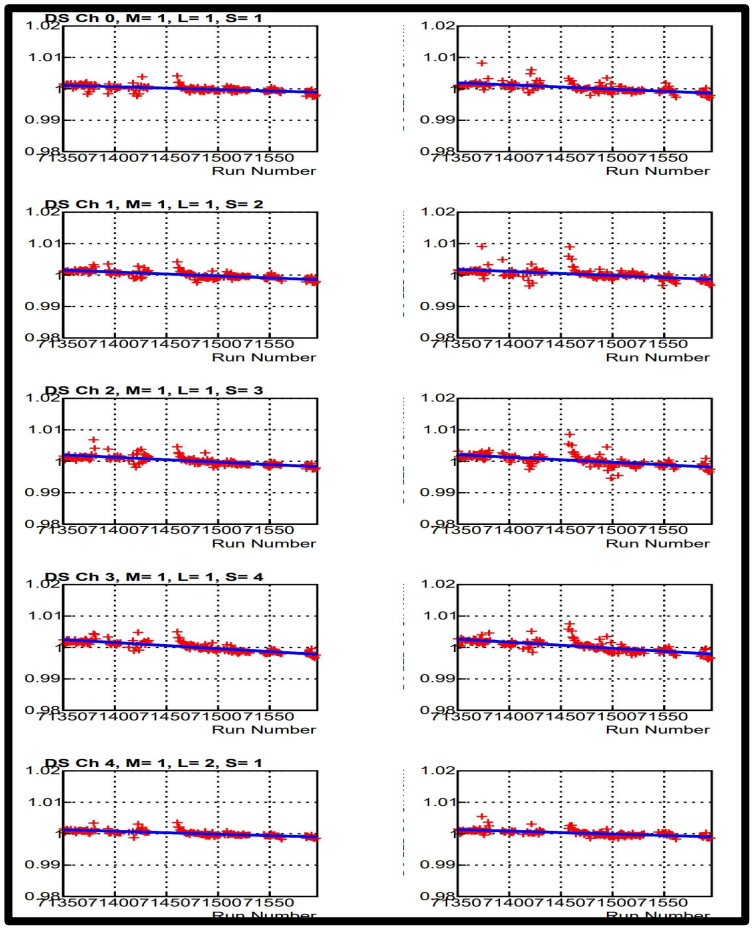
Downstream SiPMs

150 nA to 250 nA (from 71464)

Average over Batch 1

US LED

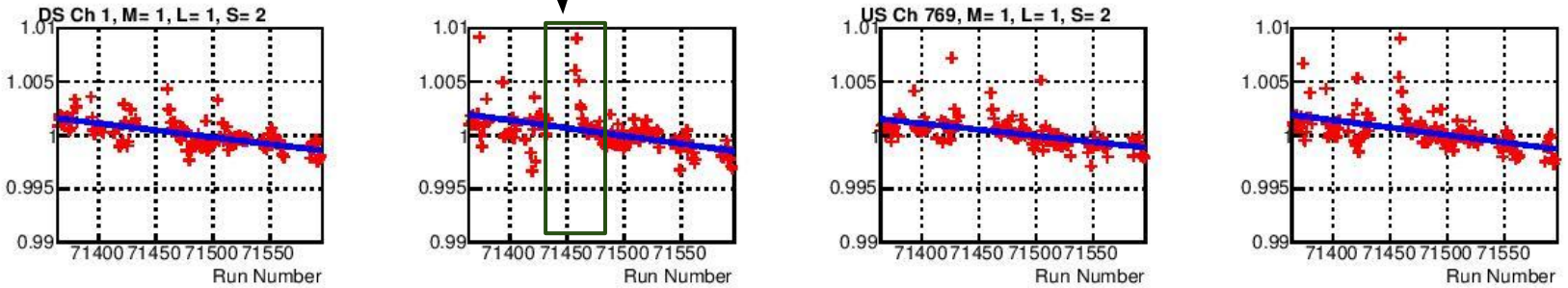
DS LED



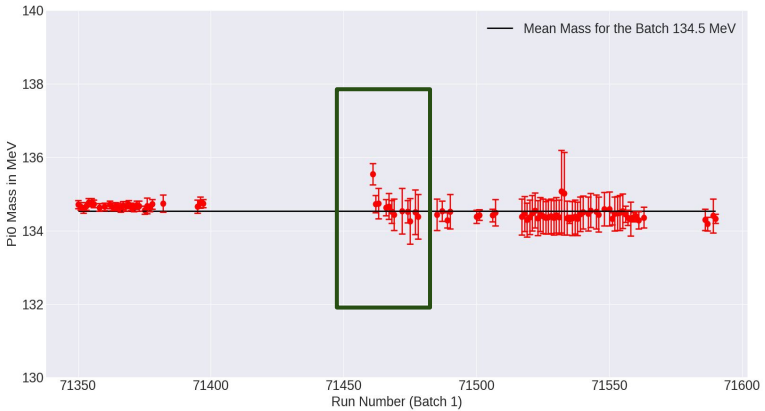
Downstream SiPMs

150 nA(71350-71463) to 250 nA (71464-71591)

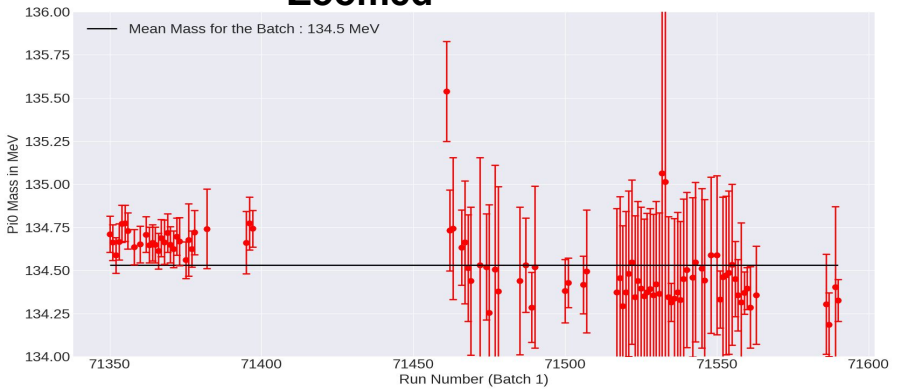
Zoomed plots



Pi0 mass distribution over Run number For Batch 1 (from Karthik)



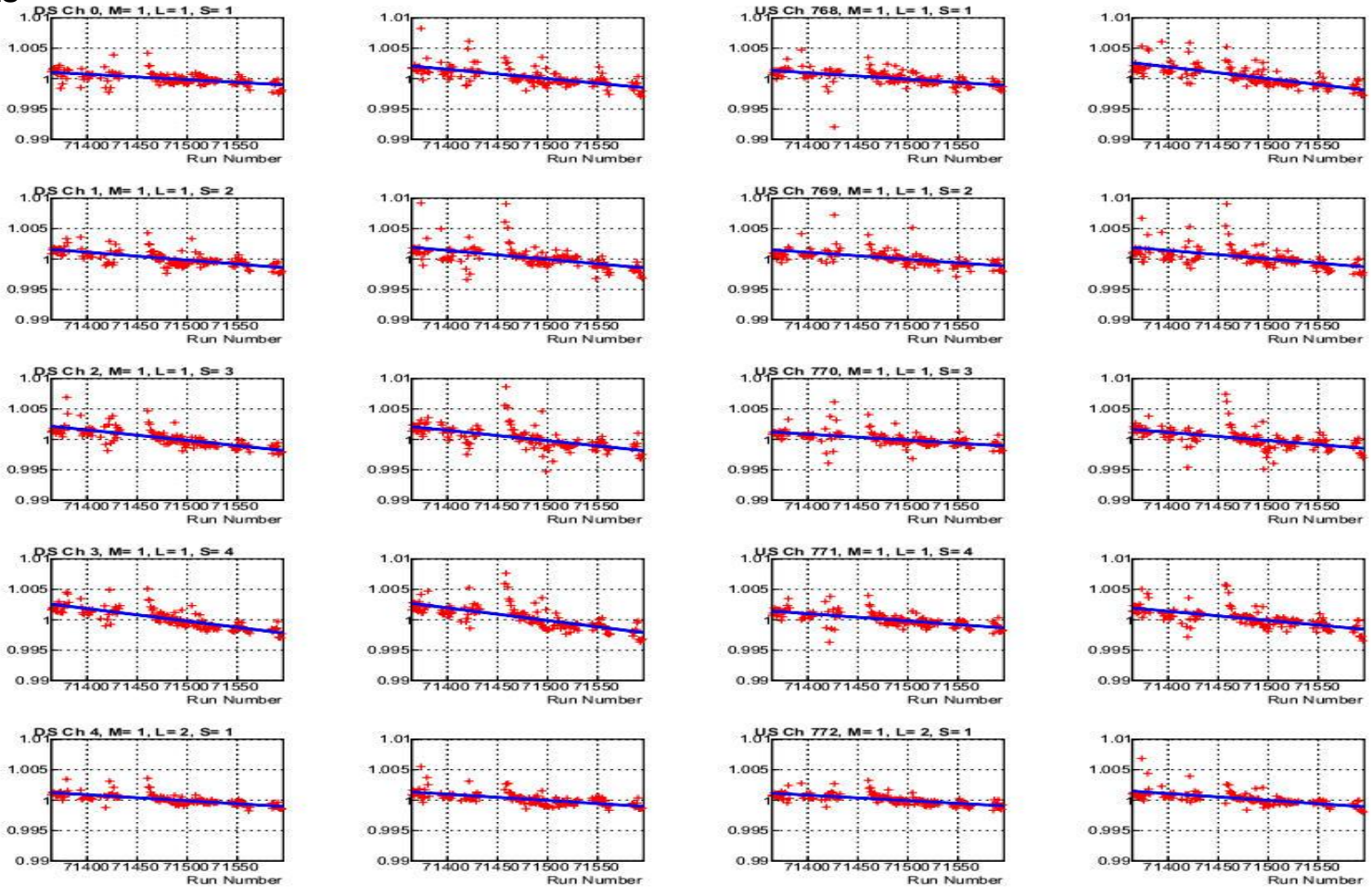
Zoomed



Zoomed plots

Using Updated CCDB constants. Average over the Batch 1

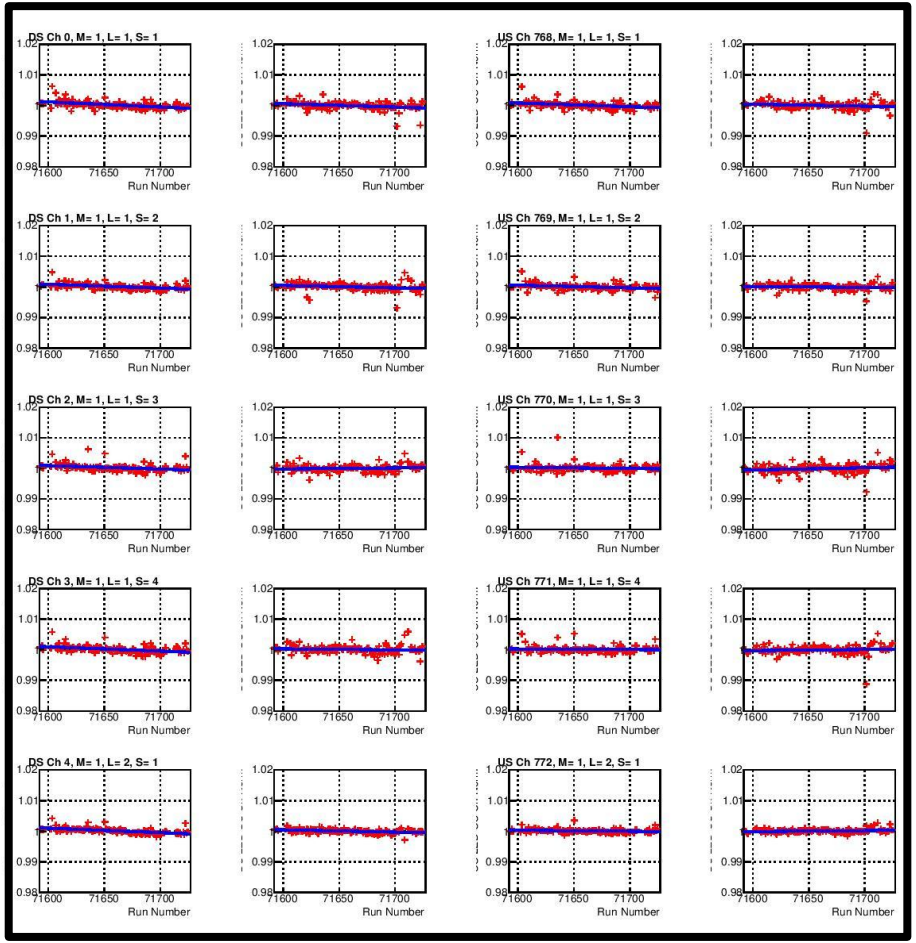
US LED DS LED US LED DS LED



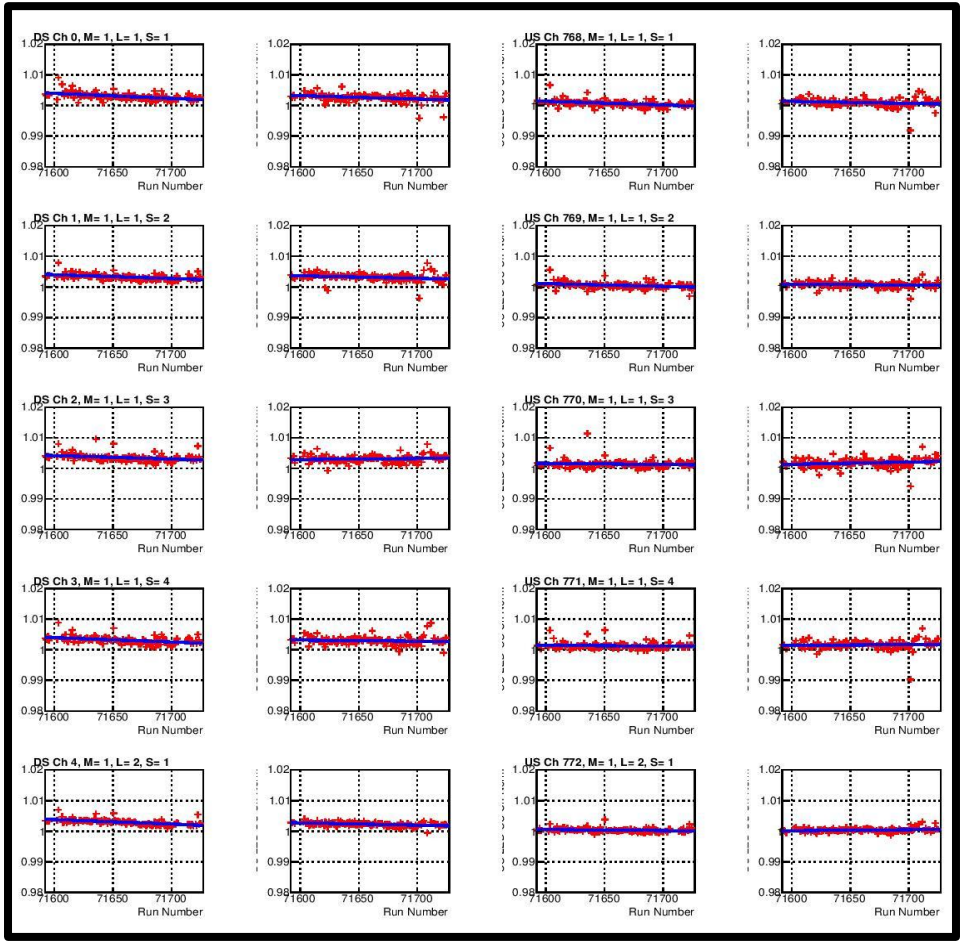
Downstream SiPMs Upstream SiPMs

Batch 2

Average over Batch 2

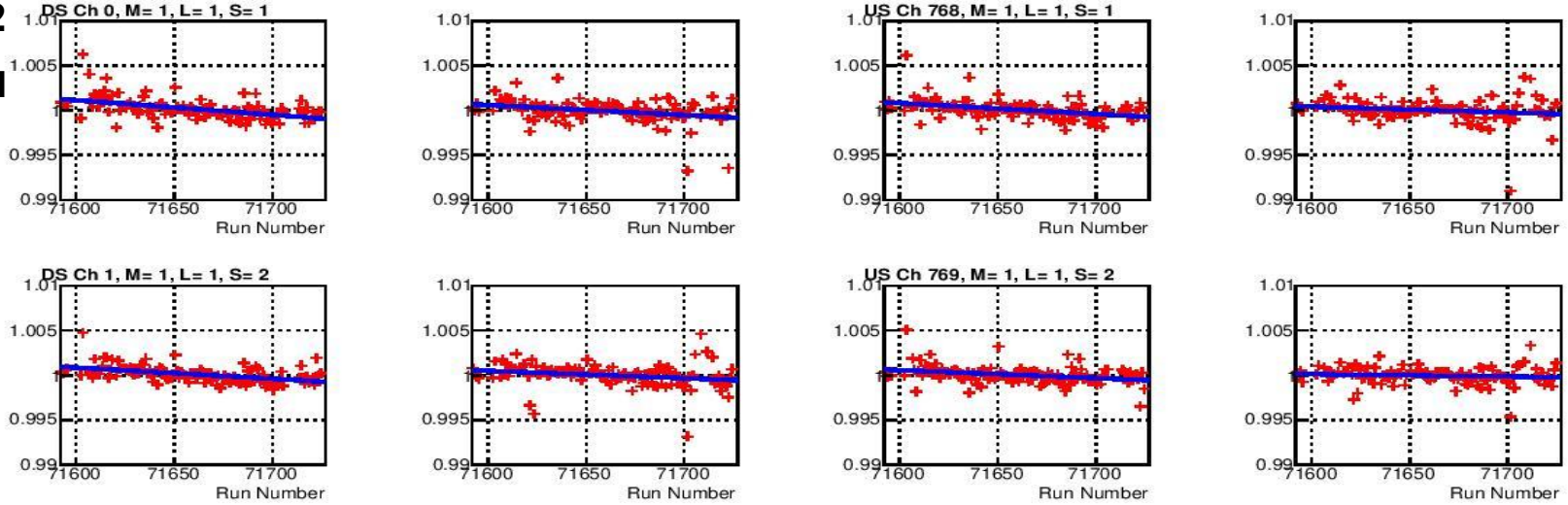


Average over whole run period

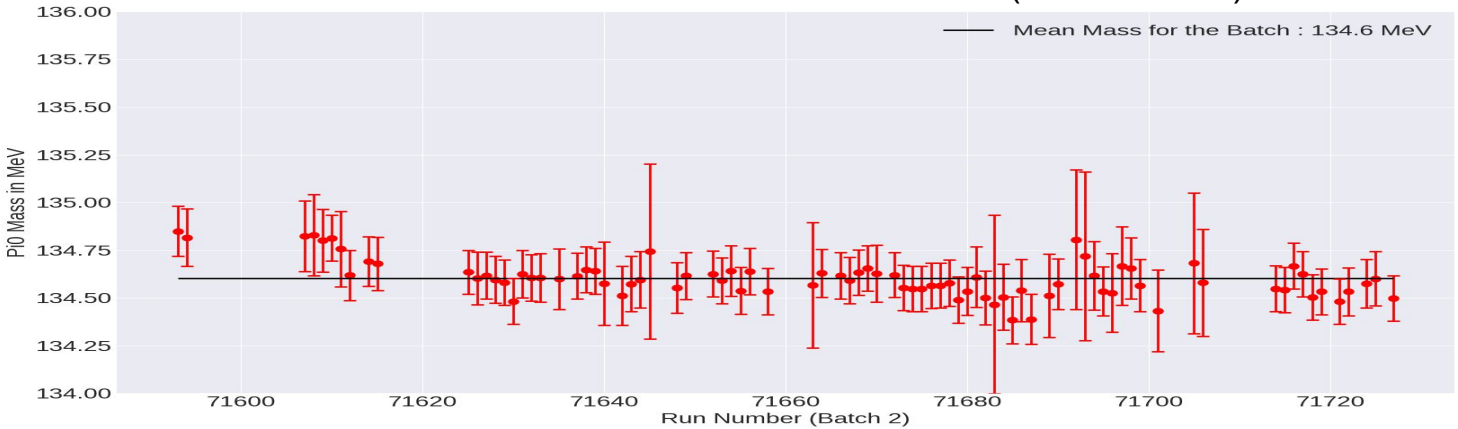


Batch 2

Zoomed plots



Pi0 mass distribution over Run number For Batch 2 (from Karthik)



Next..

- Checking Temperature dependence(& other EPICS variables)
- Other batches

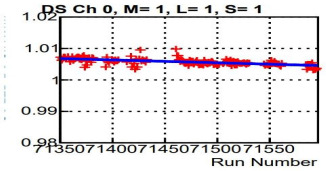
Backup Slides

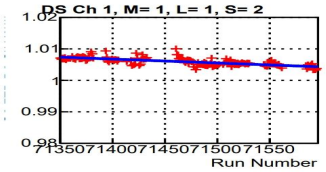
Batch 1

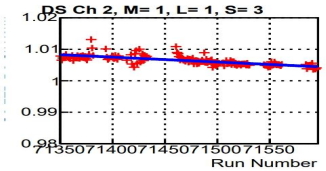
Using Average over whole Run period

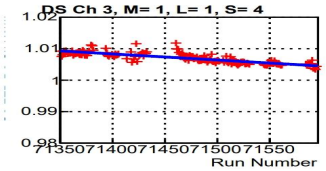
Y Axis
0.98
To
1.02

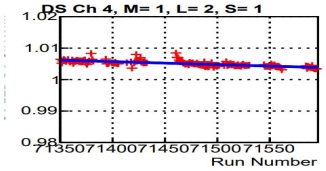
US LED



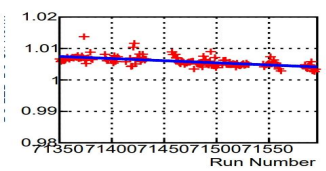


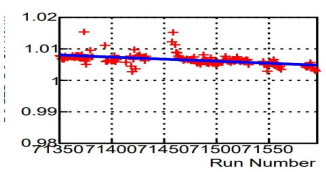


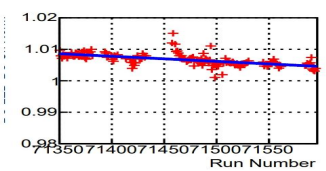


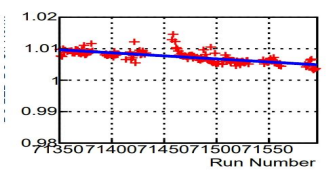


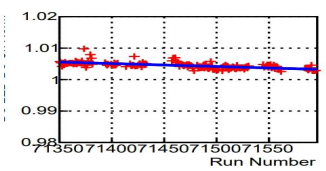
DS LED



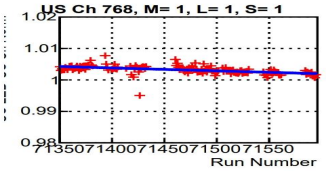


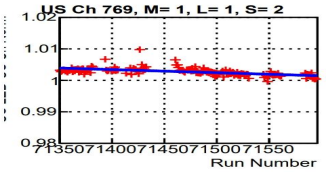


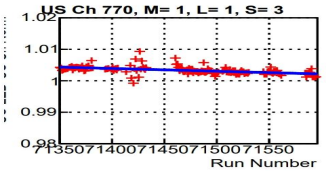


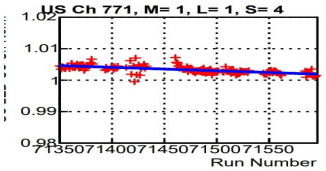


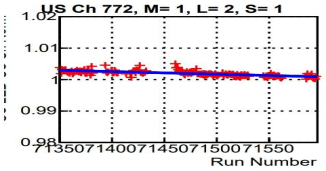
US LED



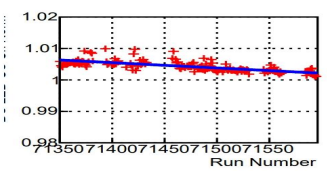


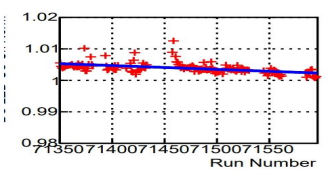


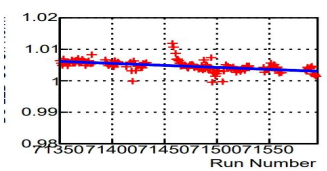


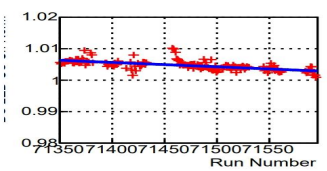


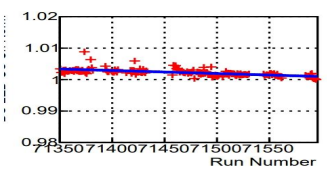
DS LED











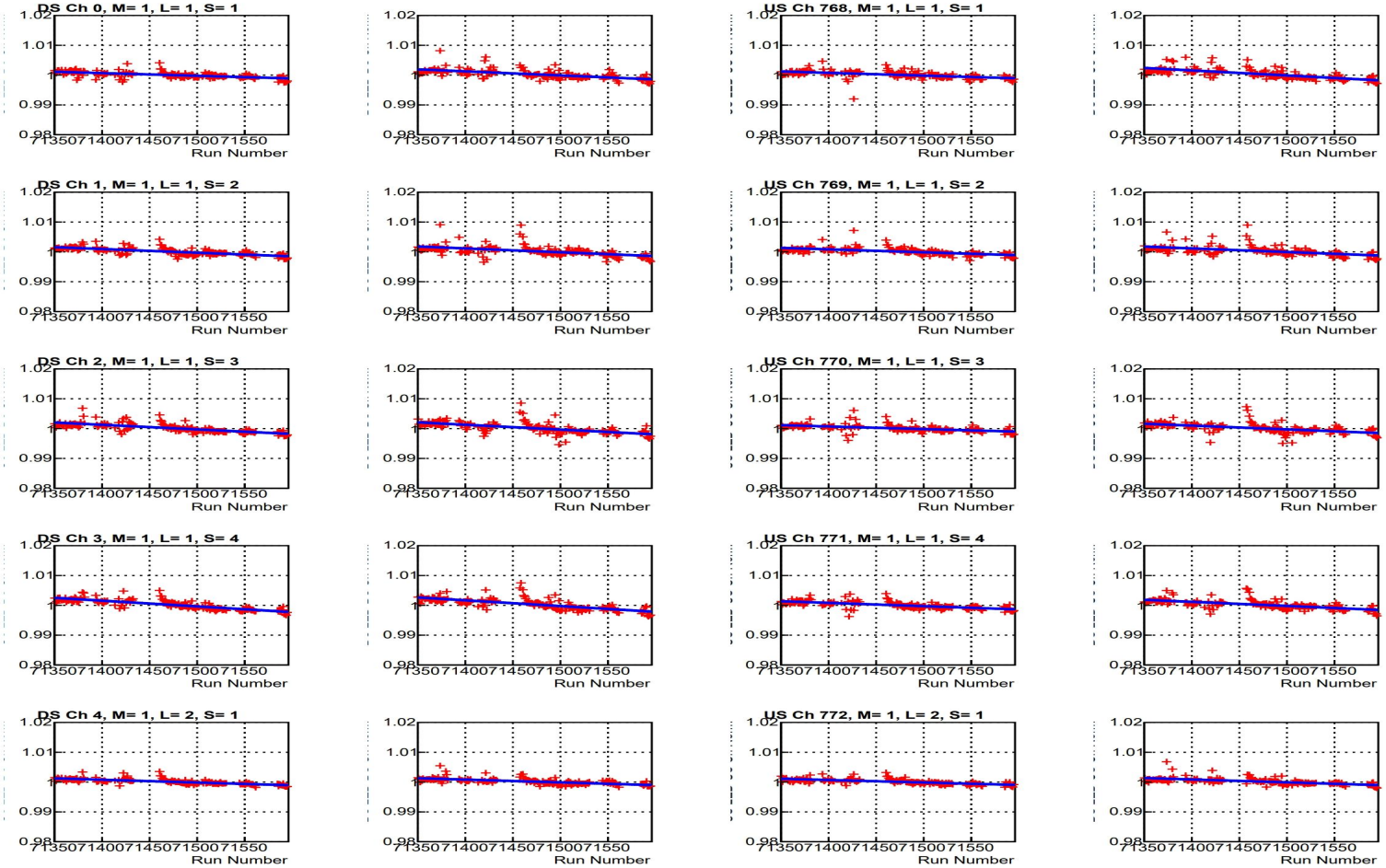
Downstream SiPMs

Upstream SiPMs

Using Average over the Batch 1

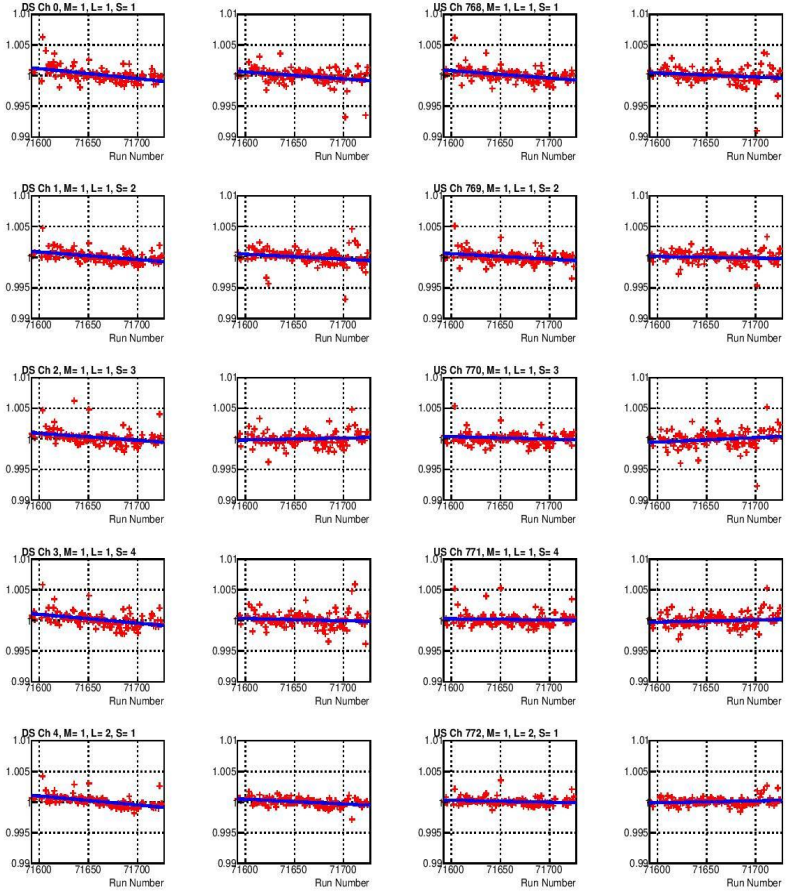
Y Axis
0.98
To
1.02

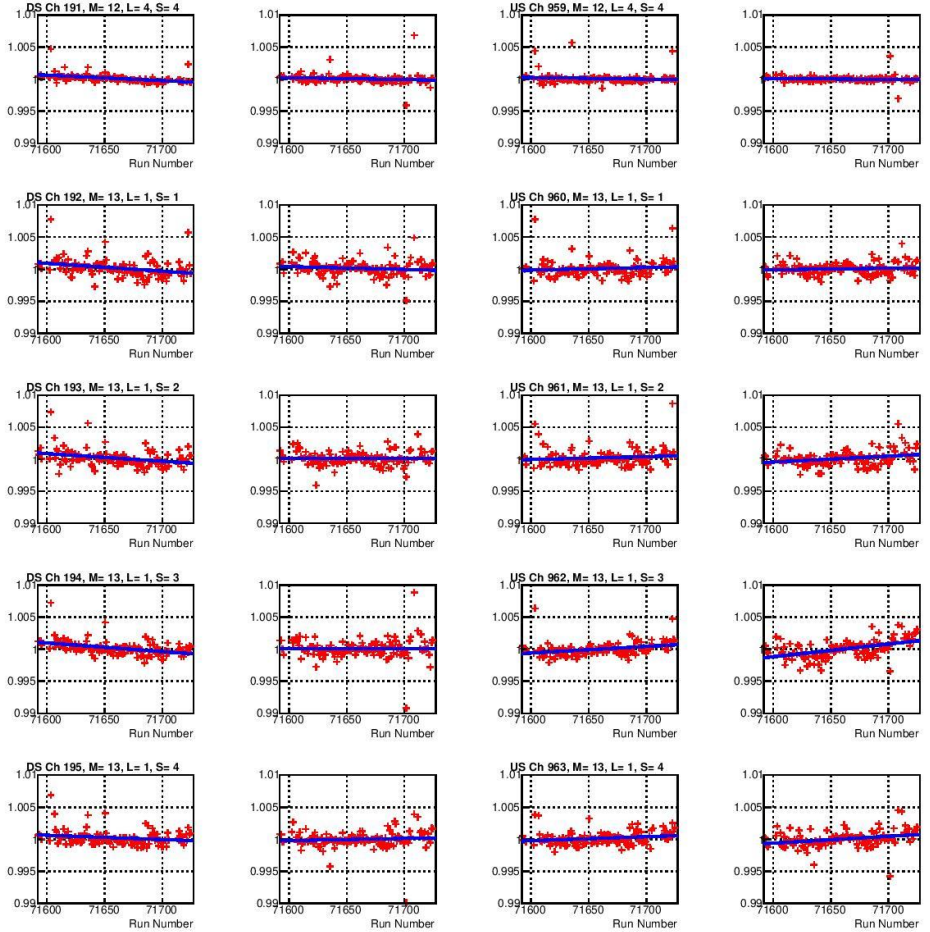
US LED | DS LED | US LED | DS LED



Downstream SiPMs | Upstream SiPMs

Batch 2


DS Ch 0, M= 1, L= 1, S= 1
US Ch 768, M= 1, L= 1, S= 1
DS Ch 1, M= 1, L= 1, S= 2
US Ch 769, M= 1, L= 1, S= 2
DS Ch 2, M= 1, L= 1, S= 3
US Ch 770, M= 1, L= 1, S= 3
DS Ch 3, M= 1, L= 1, S= 4
US Ch 771, M= 1, L= 1, S= 4
DS Ch 4, M= 1, L= 2, S= 1
US Ch 772, M= 1, L= 2, S= 1
Run Number


DS Ch 191, M= 12, L= 4, S= 4
US Ch 959, M= 12, L= 4, S= 4
DS Ch 192, M= 13, L= 1, S= 1
US Ch 960, M= 13, L= 1, S= 1
DS Ch 193, M= 13, L= 1, S= 2
US Ch 961, M= 13, L= 1, S= 2
DS Ch 194, M= 13, L= 1, S= 3
US Ch 962, M= 13, L= 1, S= 3
DS Ch 195, M= 13, L= 1, S= 4
US Ch 963, M= 13, L= 1, S= 4
Run Number