Hybrid Irradiation at KSU

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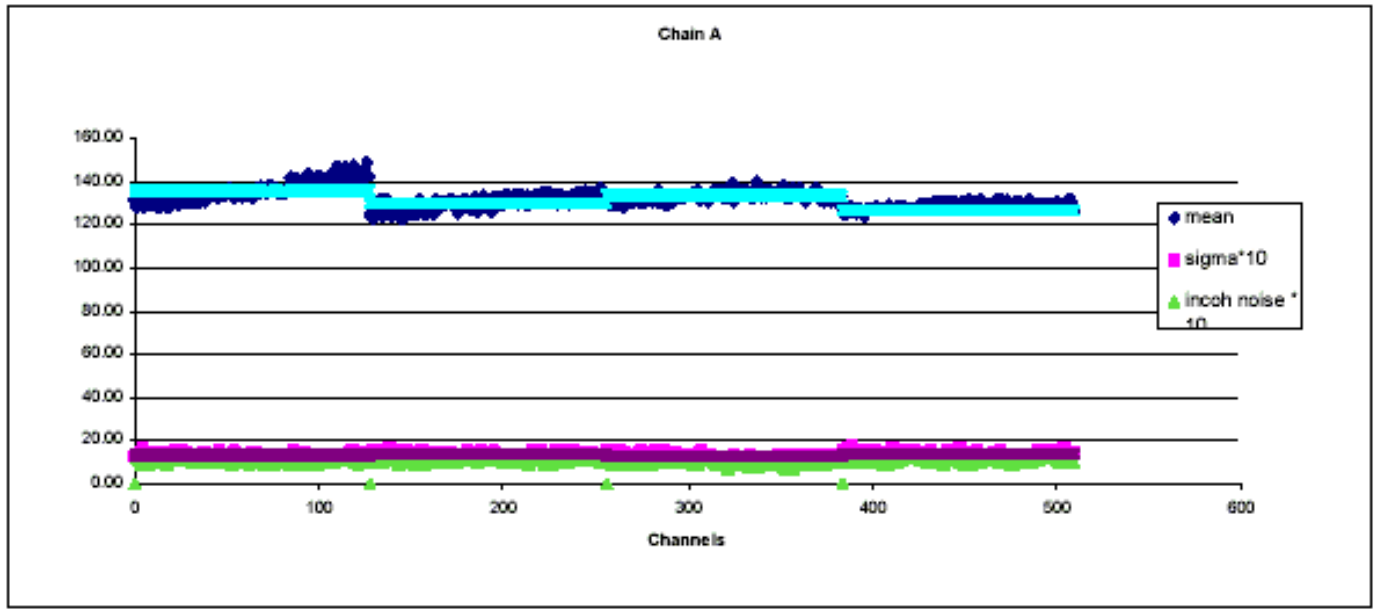
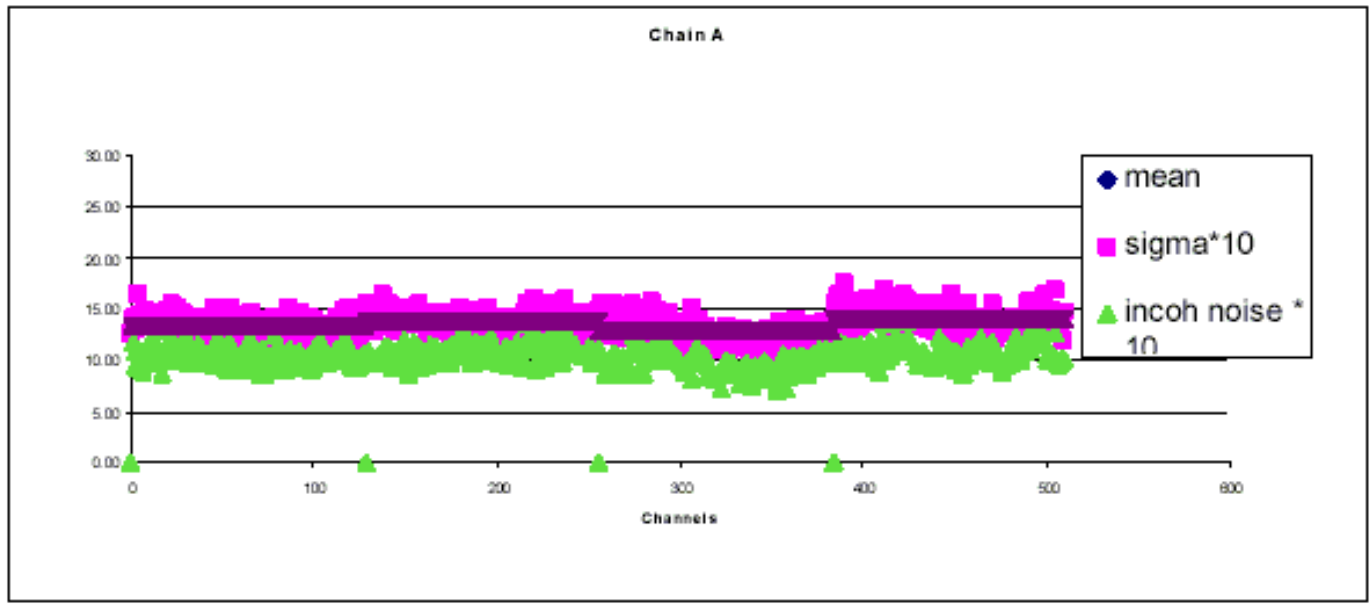
Irradiation: (12.5 + 12.5) Mrad
16 MeV protons at JRM
Hybrid still works,
Performance almost unchanged

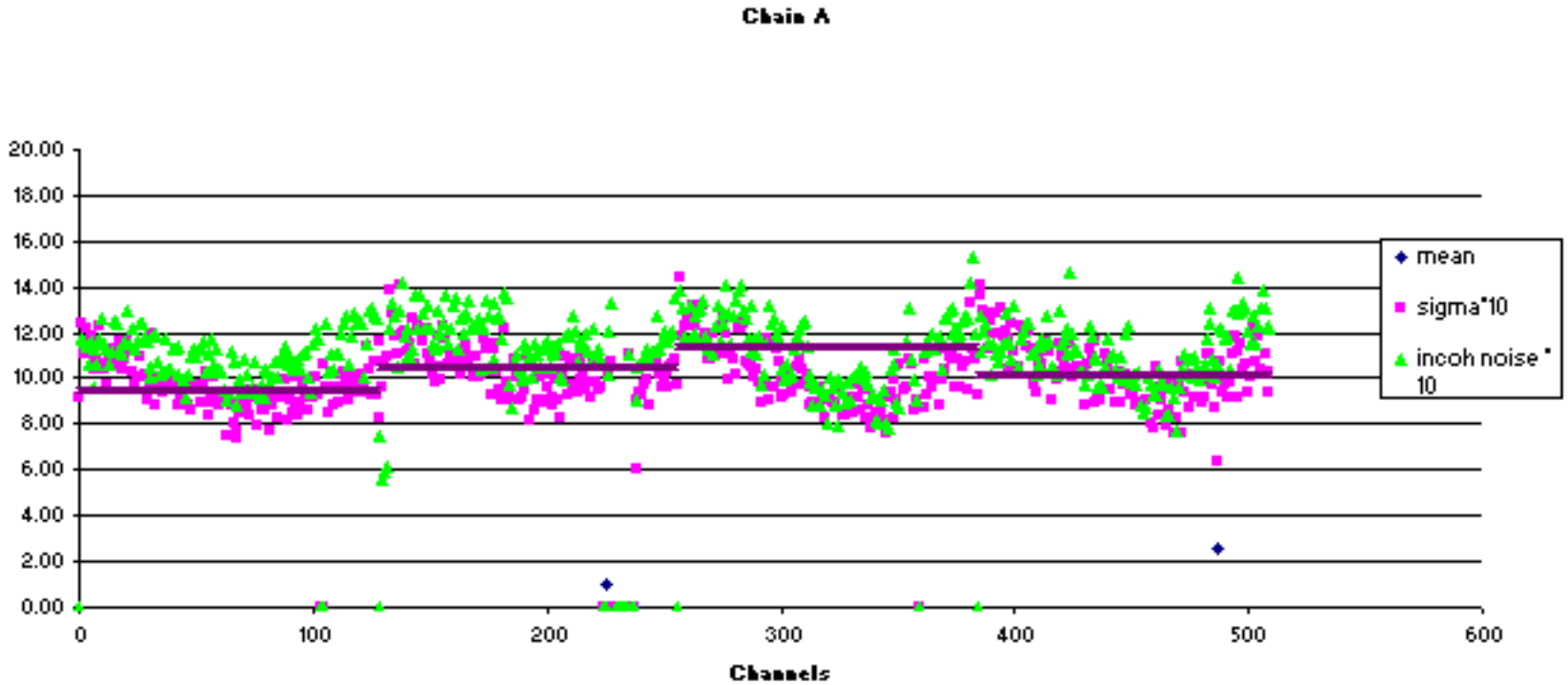
Before Irradiation (Readout at SiDet)



Noise ~1.4 Counts



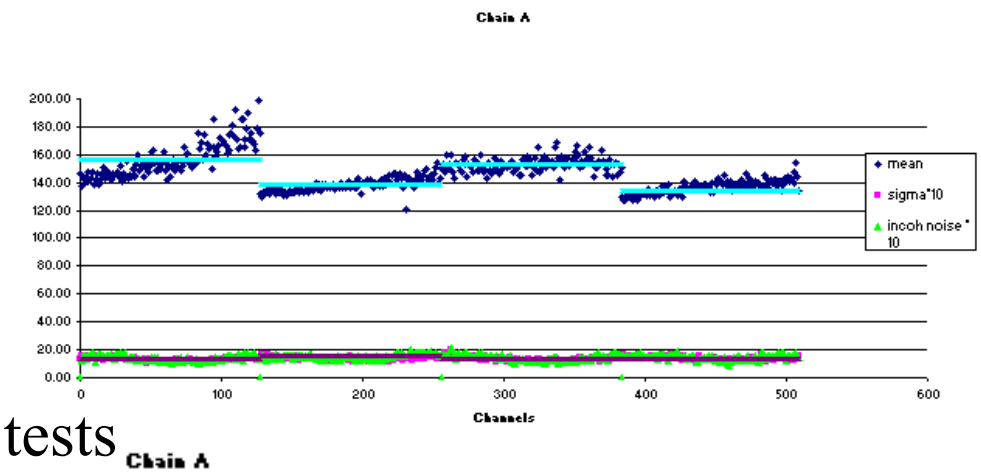
Readout after 12.5 MRad

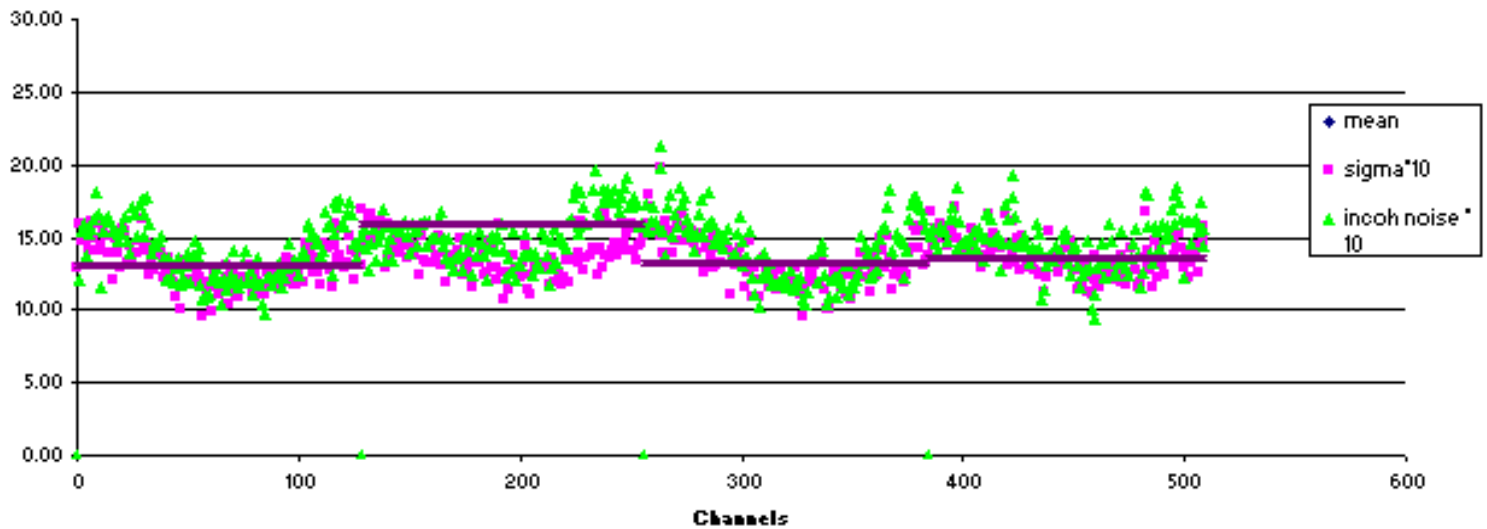


Readout after 25 MRad

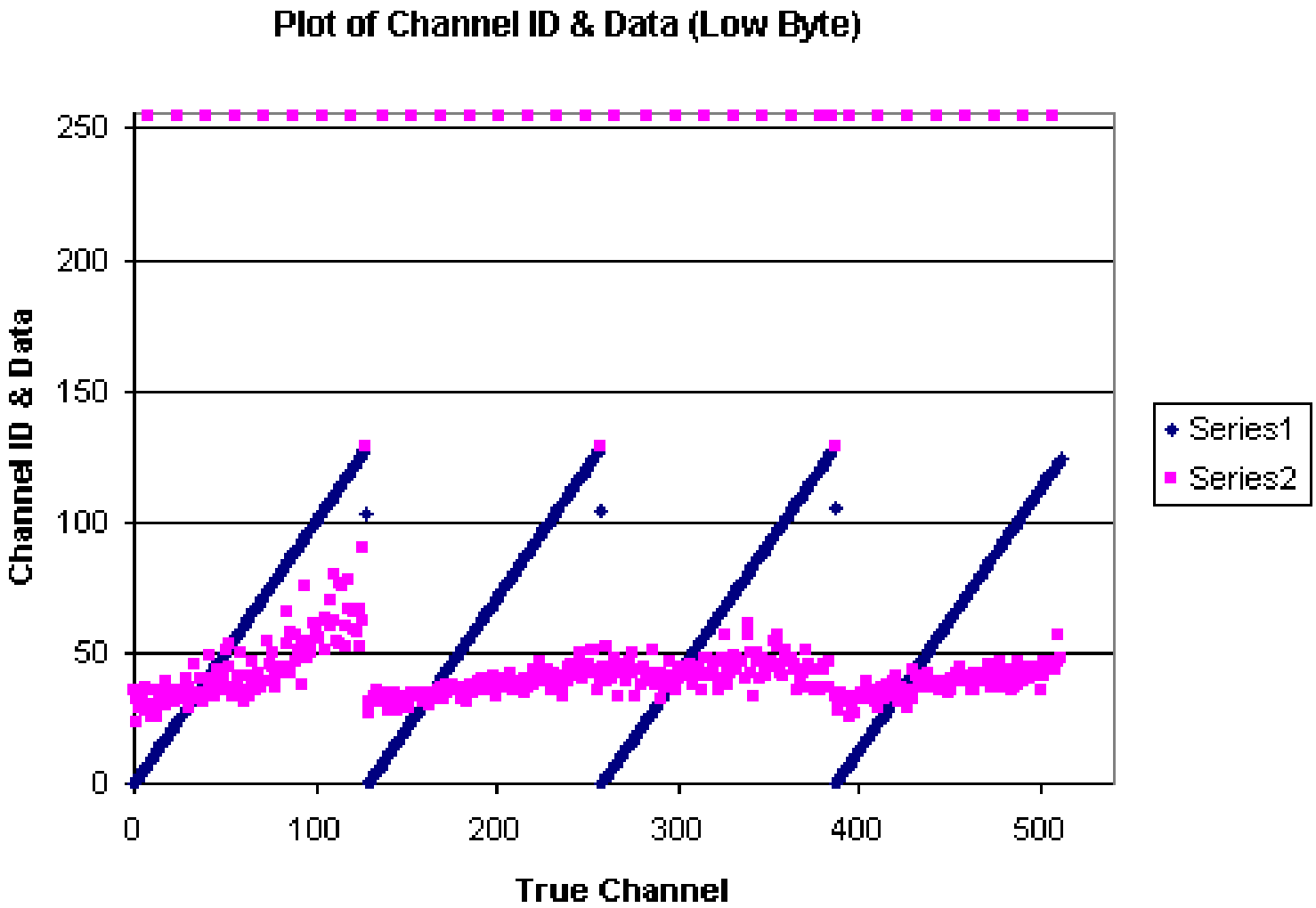
Increased channel-by-channel pedestal scatter

No increase in noise ->
Consistent with SVX4 irradiation tests





Readout after 25 MRad



Summary

- KSU test stand works well
- test results comparable to SiDet
- Hybrid survived 25 MRad
- No significant change in noise performance (result consistent with SVX4 irradiation)
- Slight increase in channel-by-channel scatter of pedestals
    - Pedestal scatter is one of the issues addressed in the next SVX4 version (?)