

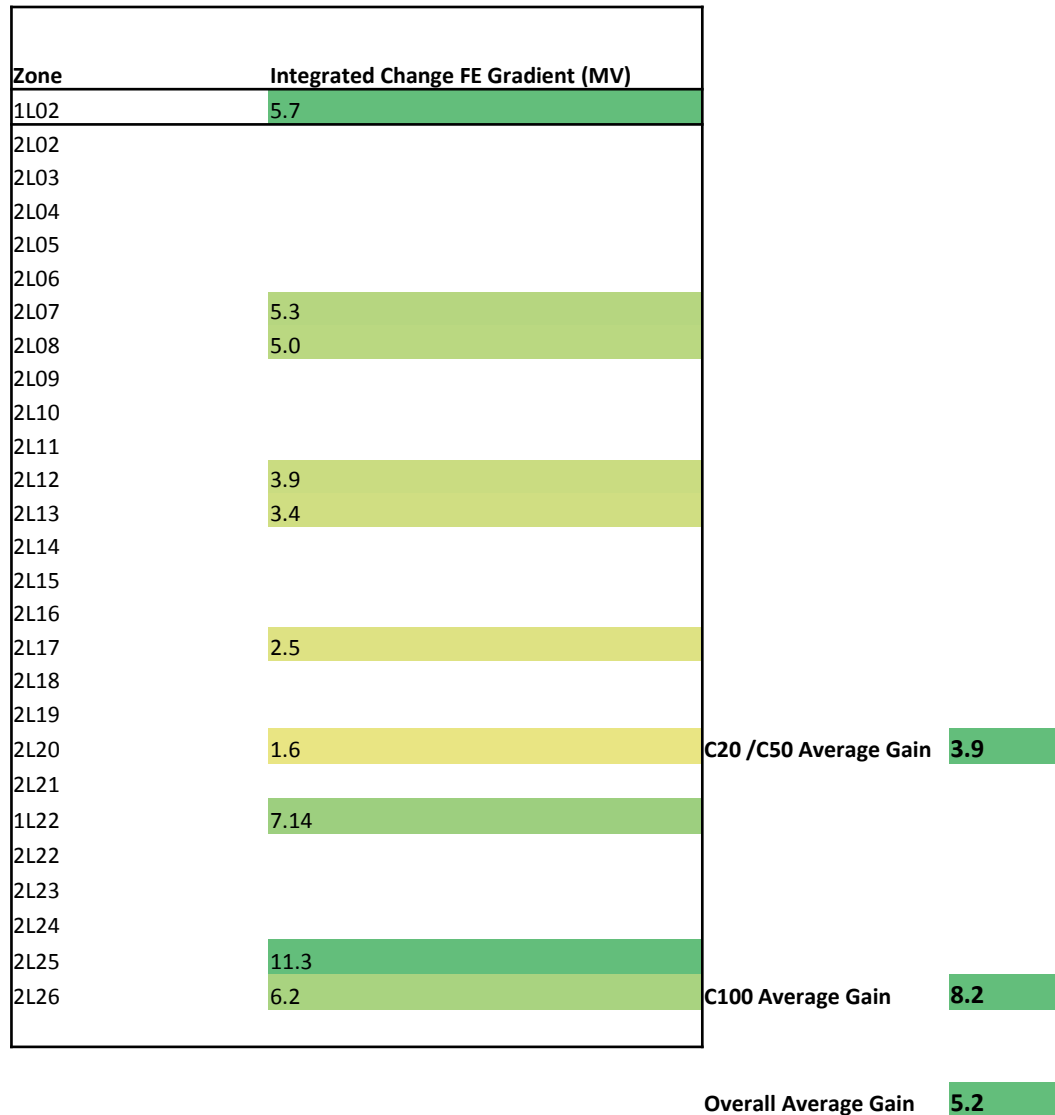
Helium Processing Progress

M. Drury
SRF

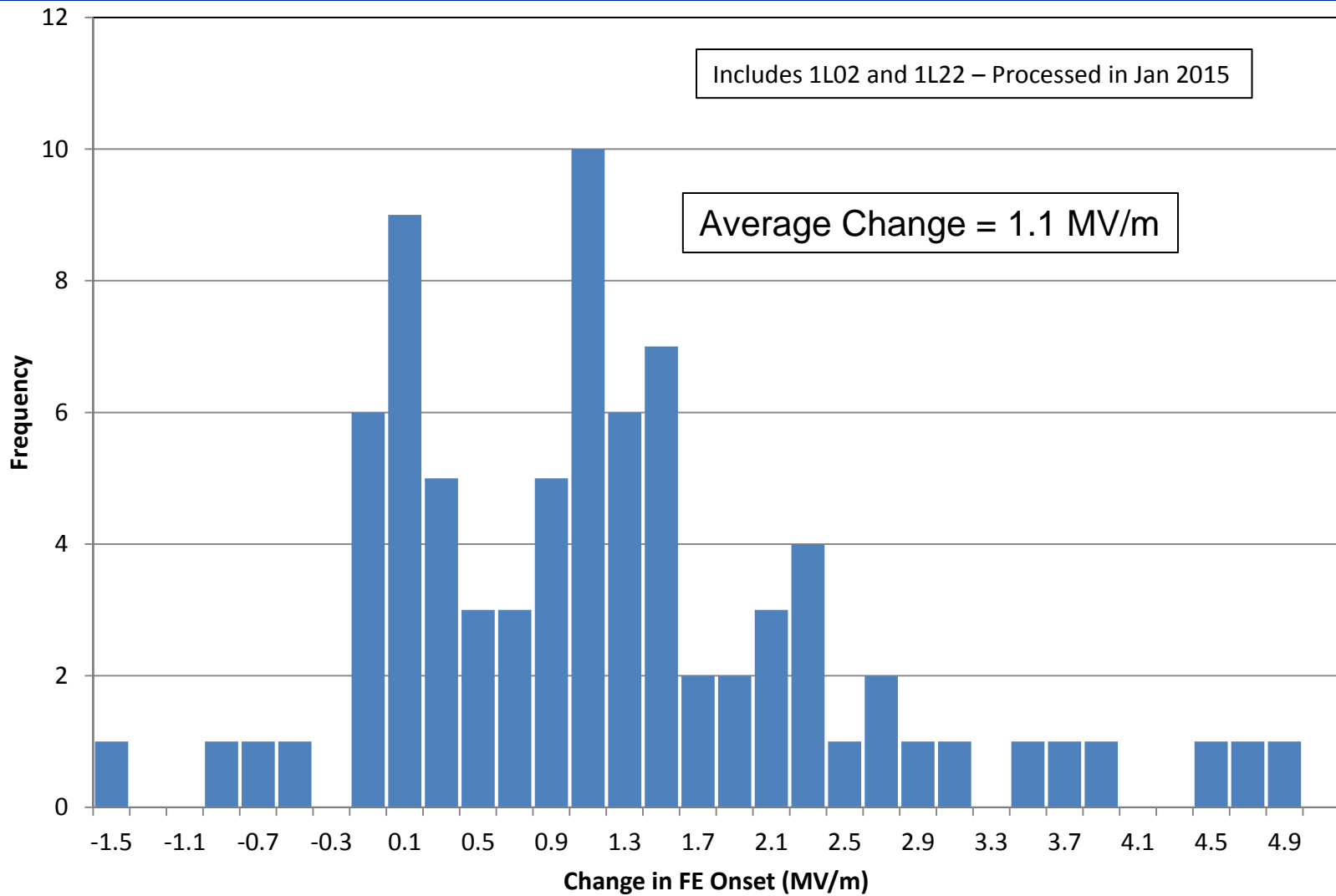
Schedule vs. Actual

Schedule				Actual				
Zone	Baseline Meas	He Proc	Cryocycle	Post Proc Meas	Baseline Meas	He Proc	Cryocycle	Post Proc Meas
1L02								
2L02								
2L03								
2L04					█			
2L05								
2L06	█	█						
2L07	█	█	█	█	█	█	█	█
2L08	█	█	█	█	█	█	█	█
2L09								
2L10								
2L11					█	█		
2L12	█	█	█	█	█	█	█	█
2L13	█	█	█	█	█	█	█	█
2L14	█	█	█	█				
2L15								
2L16					█	█	█	
2L17					█	█	█	█
2L18	█	█	█	█				
2L19	█	█	█	█				
2L20	█	█	█	█	█	█	█	█
2L21								
1L22								
2L22								
2L23					█			
2L24	█	█	█	█	█	█	█	█
2L25	█	█	█	█	█	█	█	█
2L26	█	█	█	█	█	█	█	█

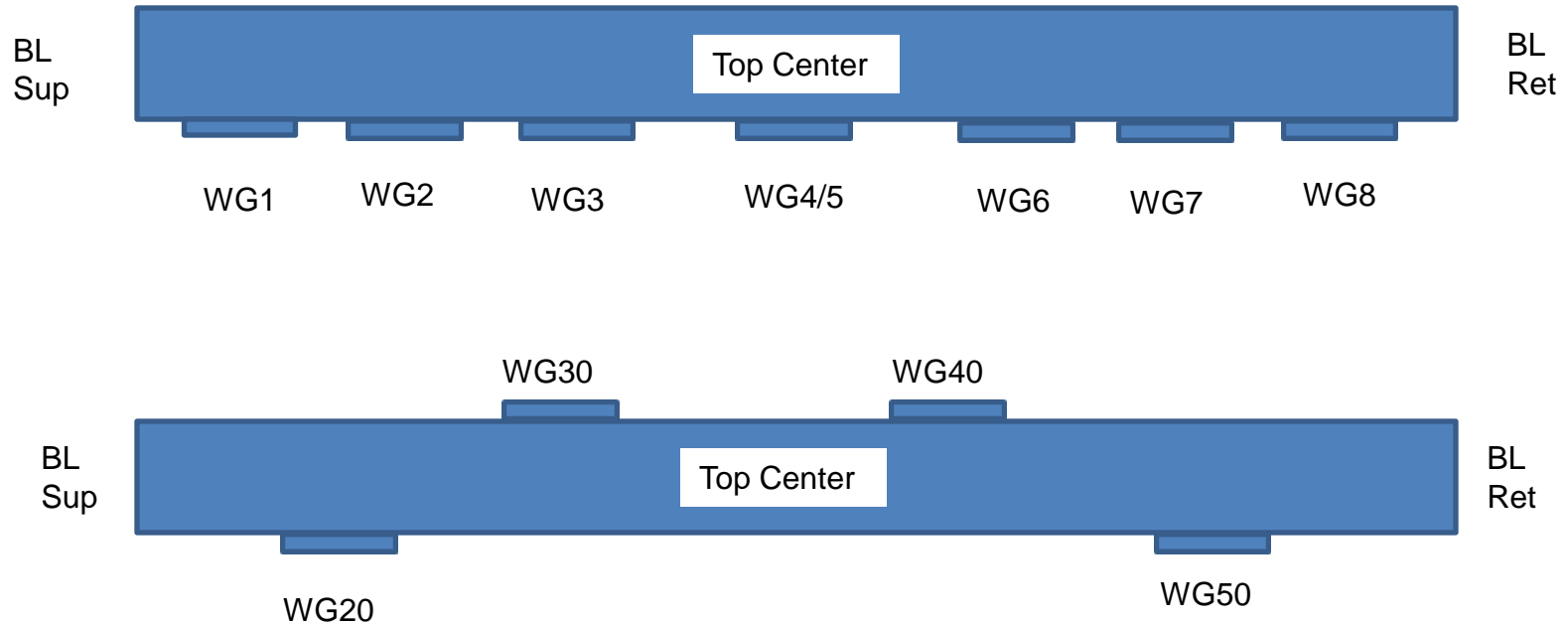
Gain in Field Emission Free Voltage (MV)



Distribution of FE Onset Deltas

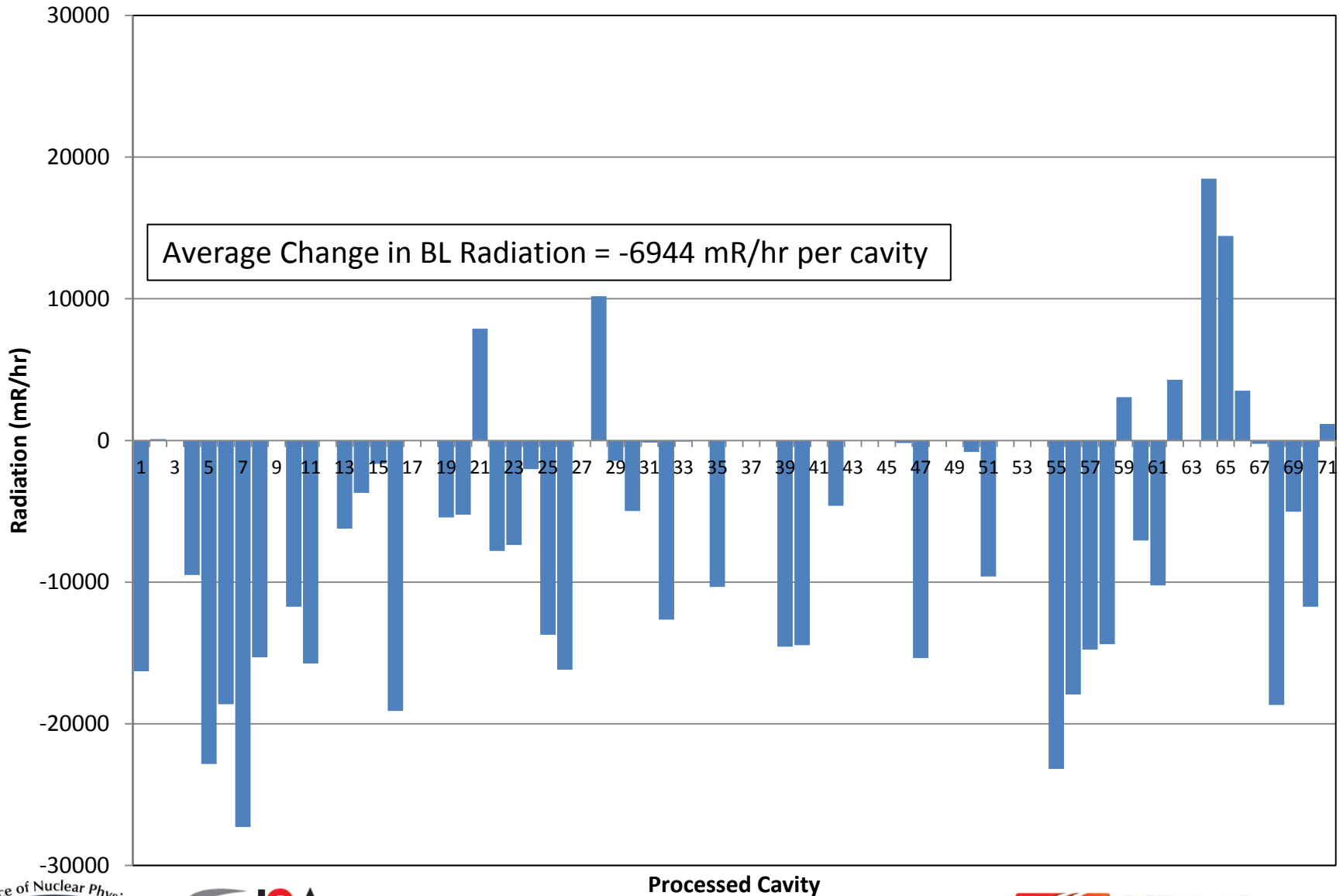


GM Tube Locations

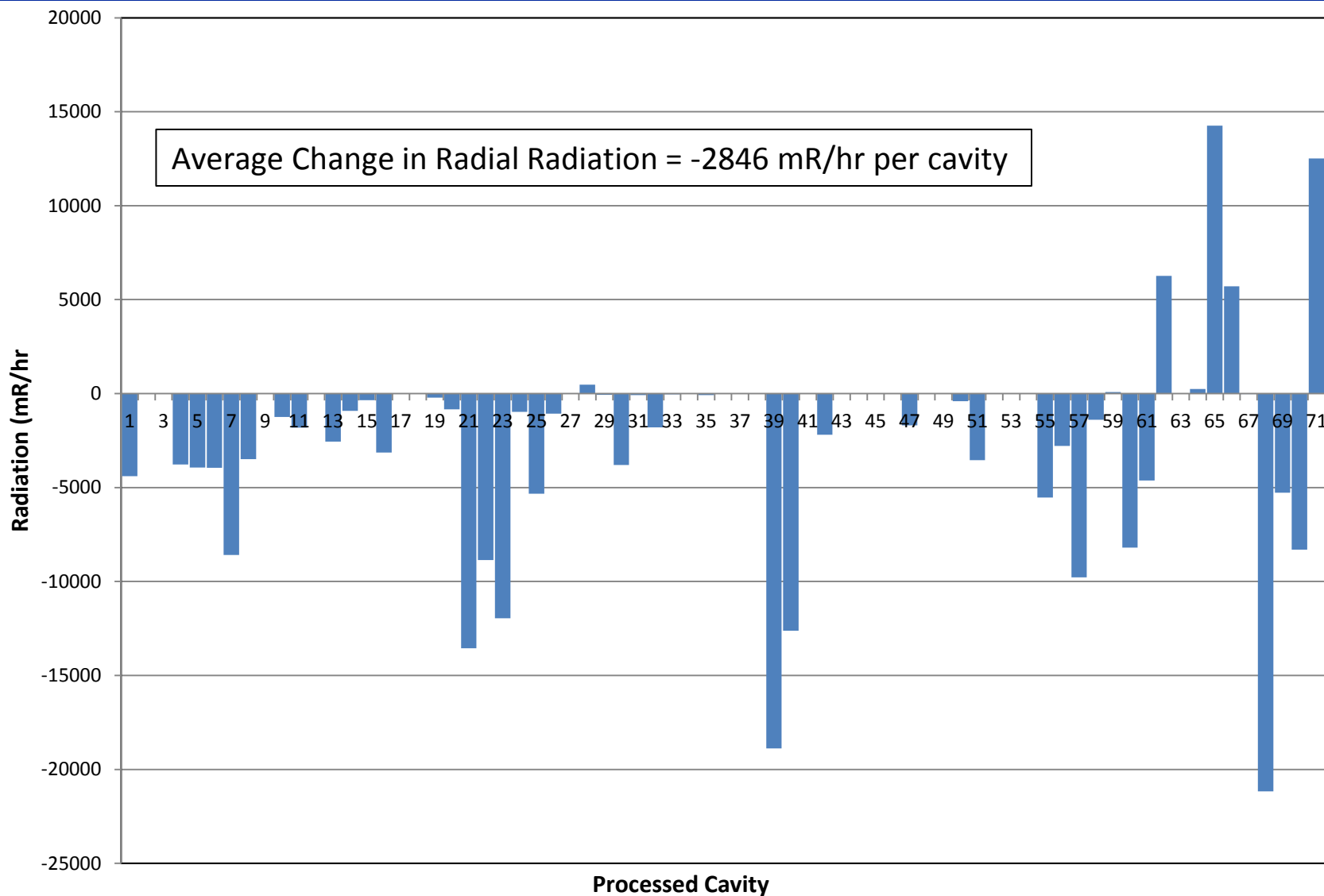


WG tubes and Top Center = Radial
BL Supply and Return = BL

Change in Maximum BL Radiation by Cavity



Change in Maximum Radial Radiation by Cavity



Concerns

- Higher Than Expected Attrition Rate for GM Tubes
- Cold Window Leaks
 - Eight cavities so far not processed as a result
- Several CWWT failures
 - Result is two cavities not processed and another with no final results
- Viewer Replacement work
 - Forced to skip over zones while BL Vacs are recovered to a usable level
 - Causes delays
- 2L24-7 Quench
 - Quench caused Performance Degradation –
 - New Emax ~12 MV/m (Formerly 23 MV/m)
 - High Field Emission at low gradient
 - Quench Detection Circuit did not protect (?)
 - Procedural and software changes aim to prevent a recurrence

Conclusions

- Nine Cryomodules processed since 6/15
 - Data for Eight included here
 - Ten Cavities not processed in this group (14%)
 - Average increase in Field Emission Onset = 1.1 MV/m
 - Average Change in Maximum BL Directed radiation = -6.9 R/hr
 - Average Change in Maximum Radial Directed Radiation = -2.8 R/hr
- Schedule says 11 cryomodules finished - 9 actual
- Work continues