

# Tests of the irradiated R5 module in the cold box

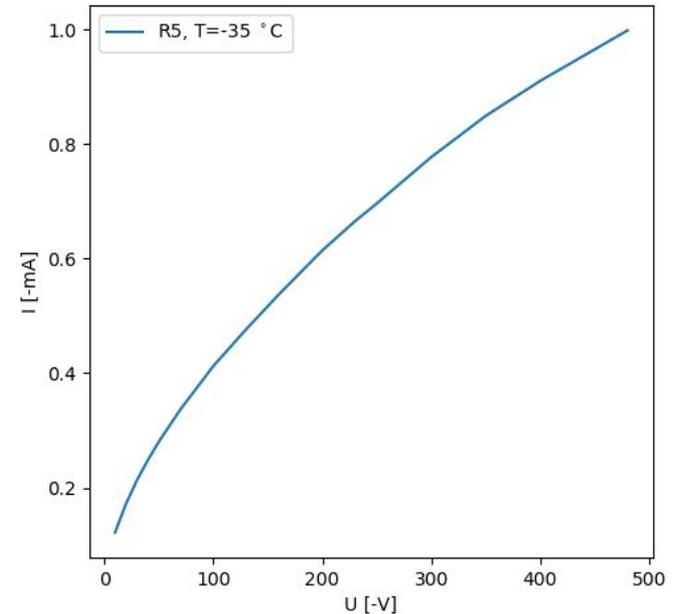
November tests: added PB capacitor and fixed wire bonds

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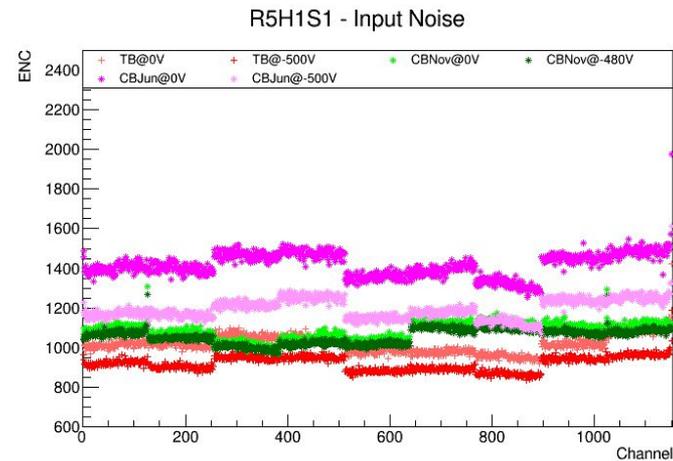
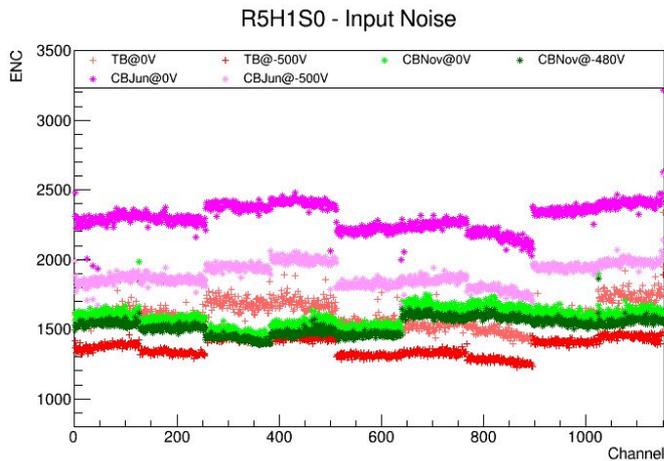
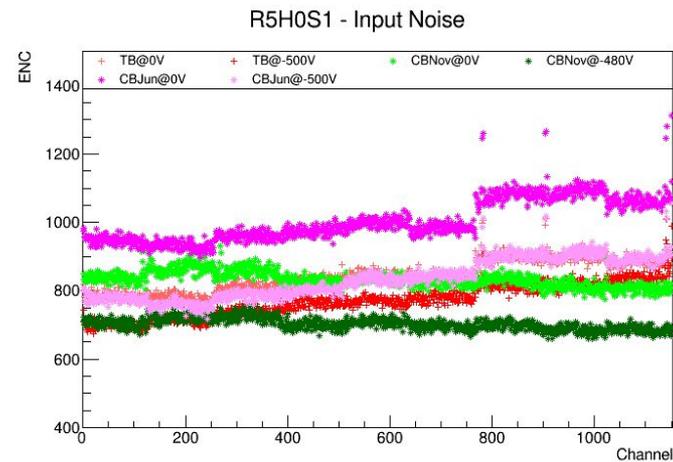
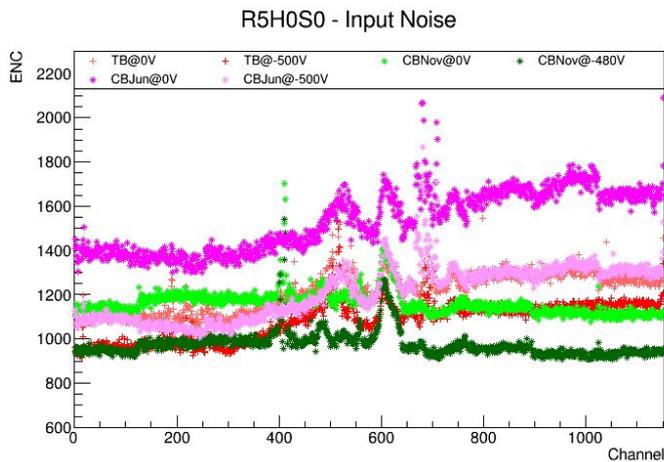
November 04, 2022

# Introduction

- Confluence page  
<https://confluence.desy.de/display/ITkModuleTesting/2021/12/13/Testing+irradiated+R5+for+December+2021+TB>
- Firmware:  
nexysv\_itsdaq\_vb640\_FDP\_STAR.bit
- Module tested in the cold box at  $-35^{\circ}\text{C}$  (at 0 V and  $-480$  V)  
NTC temperatures:  $-27^{\circ}\text{C}$ ,  $-24^{\circ}\text{C}$ ,  $-9.7^{\circ}\text{C}$
- Compliance of 1 mA reached with  $-480$  V
- Results compared with the cod-box tests from June and the test-beam results from last year.

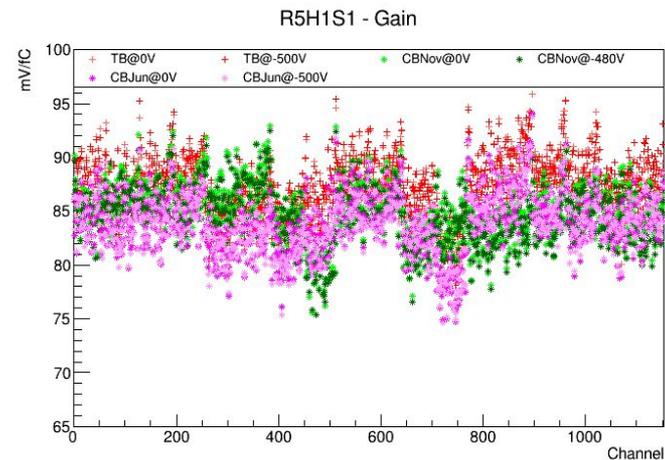
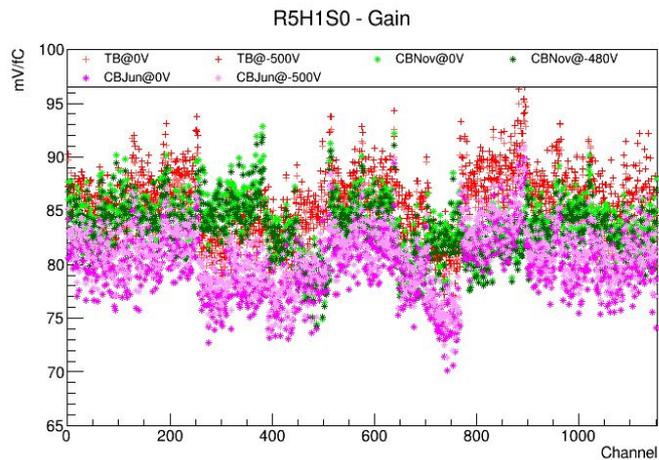
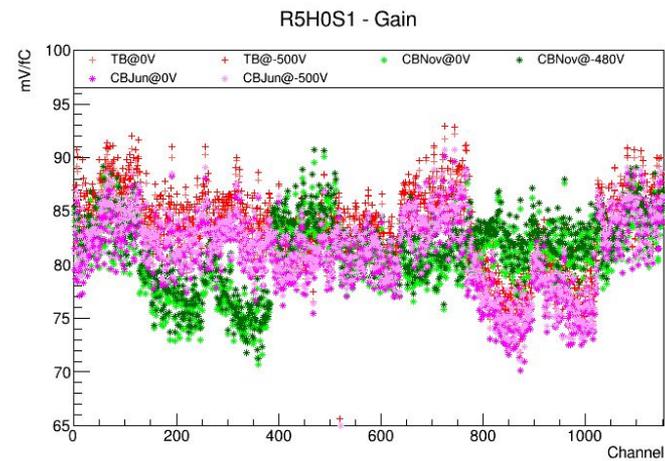
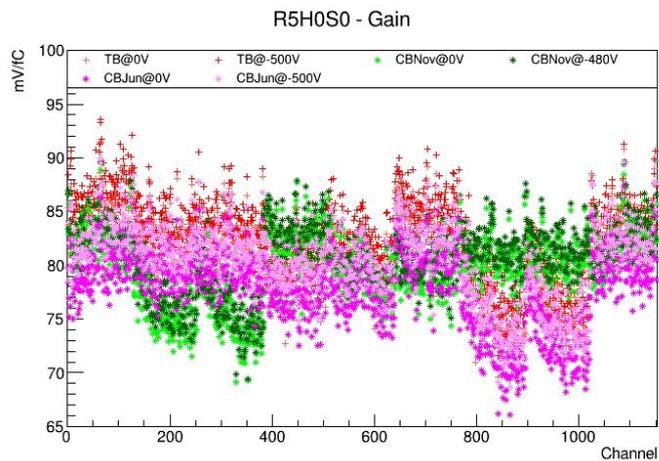


# Noise



Improvements in all cases, especially for the R5M0 side

# Gain



# Vt50

