

Test results of ICEBERG failed FEMBs

- All 10 protoDUNE FEMBs were damaged somehow on 9/17
 - All FE ASIC current draws are abnormally high
- 3 FEMBs from ICEBERG have been tested at BNL
 - Confirmed FE ASIC current draw for all FEMB is abnormally high
 - On 1 FEMB the FE ASICs are drawing too much current to power on with a WIB
 - 2 FEMBs can be powered on but the FE ASICs cannot be configured
 - Input impedance of all FE ASIC channels were checked
 - All collection channels on all 3 FEMB are dead
 - All induction channels appear normal
 - All other current draws are normal
 - 1 FEMB has 8 new FE ASICs, works well at room temperature
- Remainder of FEMBs have been received at BNL and will be tested
- Goal: repair at least 5 protoDUNE FEMBs and return to ICEBERG