

# MCC10 Validation

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19 August 2024

MicroBooNE Reconstruction Workshop

The Warwick University logo, featuring a stylized white mountain peak above the word "WARWICK" in a blue, sans-serif font.

WARWICK

- MCC 10 workflows
  - [https://cdcv.sfnal.gov/redmine/projects/uboone-production/wiki/Uboonecode\\_v08\\_00\\_00\\_80](https://cdcv.sfnal.gov/redmine/projects/uboone-production/wiki/Uboonecode_v08_00_00_80)
  - Limited testing so far
  - Tests at the level of “does it run?” with a full production workflow
  - Not yet comparing MCC9 to MCC10
  - Currently BNB MC overlay workflow does not work in MCC10. Fails during generation
    - Note uboonecode tests run the single\_mu gen, which is fine
    - Key: NGenerators does not exist in registry: genie::EventGeneratorListAssembler/Default+CCMEC+NCMEC\_summary
  - NuMI MC overlay tested up to and including reco1 – it runs (using a BNB swizzle file as input)
    - Beam-on, beam-off and , dirt need testing
    - Detector variations have failures (see next slide)
  - Still awaiting Wire-Cell updates, so only looking at Pandora workflows here

# Splitting the work

- BNB fails early, so there's not much to split yet, but once we get through reco1...
  - Beam-On (Runs 4/5)
  - Beam-Off (Runs 4/5)
  - Dirt (Runs 4/5)
  - Overlay (Runs 4/5)
  - Detector Variations: SCE and Recomb2 (Run 1/3/4/5)
  - Detector Variations: LY Attenuation/Down/Rayleigh (Run 3/4/5)
  - Detector Variations: Wire Modifications (Run 1/3/4/5)
- Old NuMI workflow fails during reco1, but after that...
  - Beam-On
  - Beam-Off
  - Dirt
  - Overlay
  - Detector Variations: SCE and Recomb2
    - SCE: Fails at run\_eventweight\_microboone\_sept24\_numi\_fhc\_slim.fcl: Function ppx\_cv requested in fcl file has not been registered!
  - Detector Variations: LY Attenuation / LY Down / LY Rayleigh
    - Atten: Fails at wirecell\_reg4\_LY\_attenuation8m.fcl: Library specification "UBPhotonLibraryPropagation" does not correspond to any library in CET\_PLUGIN\_PATH of type "module"
  - Detector Variations: Wire Modifications